Fișa de evaluare CNATDCU

Conf. univ. dr. Octavian Mădălin Bunoiu

întreaga activitate, 2000-2026

https://www.webofscience.com/wos/author/record/504224

1. Activitatea didactică și profesională

A1 - Cărți în edituri internaționale recunoscute *Web of Science* **în calitate de autor**

Nr. crt.	**Titlul**	Autori	Editura, an, link (dacă este cazul)	Punctaj $4/n_i^{ef}$
Punctaj total indicator **A1**				**0**

Editurile recunoscute Web of Science se găsesc pe site-ul Web of Science – Master Book List- Publishers (http://wokinfo.com/mbl/publishers/)

Se acordă $4/n_i^{ef}$ *puncte pentru fiecare carte .*

Documente justificative: Copie în format hard, în format electronic sau link pe pagina web a editurii.

A2 - Capitole de cărți în edituri internaționale recunoscute *Web of Science*, **în calitate de autor/ Review-uri în reviste cotate ISI**

Nr. crt.	**Titlul capitolului - titlul cărții / titlul Review-ului**	Autori	Editura, an / revista, an, pagini, link (dacă este cazul)	Punctaj $1/n_i^{ef}$
1.	Dielectrophoresis Used for Nanoparticle Manipulation in Microfluidic Devices / Nanoparticles' Promises and Risks- Characterization, Manipulation, and Potential Hazards to Humanity and the Environment	Lungu M., Bunoiu M., Neculae A.,	*Springer International Publishing, 2014, pp. 271-301* https://link.springer.com/chapter/10.1007/978-3-319-11728-7_14	0.333
2.	Higher Education Institutions Towards Digital Transformation—The WUT Case	Grosseck G., Malița L., Bunoiu M.	*Springer, 2020, pp. 565-581* https://link.springer.com/chapter/10.1007/978-3-030-56316-5_35	0.333
Punctaj total indicator **A2**				**0.666**

Editurile recunoscute Web of Science se găsesc pe site-ul Web of Science – Master Book List- Publishers (http://wokinfo.com/mbl/publishers/)

Se acordă $1/n_i^{ef}$ *puncte pentru fiecare item.*

Documente justificative: Copie în format hard, în format electronic sau link pe pagina web a editurii / revistei.

A3 - Cărți în edituri internaționale recunoscute *Web of Science* **în calitate de editor**

Nr. crt.	**Titlul**	Editori	Editura, an, link (dacă este cazul)	Punctaj $0.5/n_i^{ef}$
1.	Nanoparticles' Promises and Risks- Characterization, Manipulation, and Potential Hazards to Humanity and the Environment	Lungu M., Neculae A., Bunoiu, M., Biris C.	*Springer International Publishing, 2014* https://link.springer.com/book/10.1007/978-3-319-11728-7	0.125
Punctaj total indicator **A3**				**0.125**

Editurile recunoscute Web of Science se găsesc pe site-ul Web of Science – Master Book List- Publishers (http://wokinfo.com/mbl/publishers/)

Se acordă $0.5/n_i^{ef}$ *puncte pentru fiecare item.*

Documente justificative: Copie în format hard, în format electronic sau link pe pagina web a editurii .

A4 - Cărți, manuale, îndrumătoare de laborator în edituri naționale sau alte edituri internaționale ca autor, note interne, prezentari sustinute pentru aprobarea analizelor de date in cadrul colaborarilor mari

Nr. crt.	**Titlul**	Autori	Editura, an, link (dacă este cazul)	Punctaj $0.5/n_i^{ef}$
1.	Fizică Moleculară și Căldură- Lucrări de laborator (ISBN: 978-973-125-320-6)	Susan-Resiga D., Isvoran A., Bunoiu M.	Editura Universității de Vest, Timișoara, 2008 https://search.worldcat.org/title/895379829	0.166
2.	Metode de obținere și caracterizare a cristalelor, Editura Universității de Vest, Timișoara, 2008 (ISBN: 978-973-125-191-2)	Bunoiu, O.M.	Editura Universității de Vest, Timișoara, 2008 https://search.worldcat.org/title/895407214	0.5
3.	Influența condițiilor termodinamice și hidrodinamice asupra prezenței și distribuției bulelor de gaz în cristalele profilate de safir (ISBN: 978-973-125-190-5)	Bunoiu, O.M.	Editura Universității de Vest, Timișoara, 2008 https://search.worldcat.org/title/895407502	0.5
4.	Elements of Materials Technology in DC Plasma (ISBN: 978-5-94836-485-8)	Bica I, Balasoiu M., Bunoiu M.	Technosphera, Moscow, 2017 https://www.technosphera.ru/lib/book/512	0.166
Punctaj total indicator **A4**				**1.332**

Se acordă $0.5/n_i^{ef}$ *puncte pentru fiecare item.*

Documente justificative: Copie în format hard, în format electronic sau link pe pagina web a editurii .

A5 - Capitole de cărți în edituri naționale sau alte edituri internaționale ca autor

Nr. crt.	**Titlul capitolului - titlul cărții**	Autori	Editura, an, link (dacă este cazul)	Punctaj $0.2/n_i^{ef}$
1.	Applications – The Fundamentals and Challanges of Oxide Materials (ISBN: 1-5275-9166-2 / ISBN: 1-0364-2327-1)	Marin C.N., Lungu M., Bunoiu M., Malaescu I.	Cambridge Scholars Publishing, 2023 https://www.cambridgescholars.com/product/978-1-5275-9166-0	0.05
Punctaj total indicator **A5**				**0.05**

Se acordă $0.2/n_i^{ef}$ *puncte pentru fiecare item.*

Documente justificative: Copie în format hard, în format electronic sau link pe pagina web a editurii .

A6 - Lucrări în extenso (cel puțin 3 pagini) publicate în Proceedings-uri cu ISBN indexate ISI

Nr. crt.	**Titlul**	Autori	Revista, editura, an, link (dacă este cazul)	Punctaj $0.2 / n_i^{ef}$
1.	Segregation coefficient of Pb2+ ions in CaF2 Crystals	Stef M., Bunoiu O., Paraschiva M., Pruna A., Nicoara I.	*AIP Conference Proceedings, Vol. 1131, 112-116, 2009* https://doi.org/10.1063/1.3153429	0.04
2.	Some considerations on the dynamics of nanometric suspensions in fluid media	Lungu M., Neculae A., Bunoiu M.	*AIP Conference Proceedings, Vol. 1131, 164-168, 2009* https://doi.org/10.1063/1.3153440	0.066
3.	Numerical simulation of bioparticle manipulation using dielectrophoresis	Neculae A., Bunoiu O.M., Lungu M.	*AIP Conference Proceedings, Vol. 1262, 144-149, 2010* https://doi.org/10.1063/1.3482222	0.066
4.	Interface shape studies in Bridgman growth of multicrystalline silicon	Bunoiu O., Stef M., Popescu A., Vizman D.	*AIP Conference Proceedings, Vol. 1387, 226-231, 2011* https://doi.org/10.1063/1.3647079	0.05
5.	Numerical study regarding the influence of electrodes' geometry on the dielectrophoretic forces	Neculae A., Lungu M., Nicolici-Schultz T., Bunoiu M.	*AIP Conference Proceedings, Vol. 1387, 270-275, 2011* https://doi.org/10.1063/1.3647086	0.05
6.	Electrohydrodynamic modeling for manipulation of micro/nano particles in microfluidic systems	Neculae A., Lungu M., Bunoiu M., Giugiulan R.	*AIP Conference Proceedings, Vol. 1472, 155-161, 2012* https://doi.org/10.1063/1.4748083	0.05
7.	Influence of growth rate on interface shape and grains structure in multicrystalline silicon growth by Bridgman method	Pupăzan V., Popescu A., Bunoiu O.M., Vizman D.	*AIP Conference Proceedings, Vol. 1472, 210-214, 2012* https://doi.org/10.1063/1.4748090	0.05
8.	Submicron particle trapping using traveling wave dielectrophoresis	Lungu M., Giugiulan R., Bunoiu M., Strambeanu M., Neculae A	*AIP Conference Proceedings, Vol. 1564, 111-116, 2013* https://doi.org/10.1063/1.4832804	0.04
9.	Study of a 3D DEP-based Microfluidic System for Selective Nanoparticle Manipulation	Lungu M., Balasiu S., Bunoiu M.O., Neculae A.	*AIP Conference Proceedings, Vol. 1634, 89-94, 2014* https://doi.org/10.1063/1.4903019	0.05
10.	Segregation coefficient of Yb3+ and Yb2+ Ions in YbF3 Doped BaF2 Crystals	Nicoara I., Buse G., Bunoiu M.	*AIP Conference Proceedings, Vol. 1634, 111-114, 2014* https://doi.org/10.1063/1.4903023	0.066
11.	Nanoparticles trapping from flue gas using dielectrophoresis	Neculae A., Strambeanu M., Lungu A., Bunoiu M., Lungu M.	*AIP Conference Proceedings, Vol. 1694, 040004, 2015* https://doi.org/10.1063/1.4937256	0.04
12.	Promoting an English and Science Summer Programme through Social Media	Craciun D., Oprescu M., Bunoiu M.	*SMART 2014 - Social Media in Academia: Research and Teaching, 119-123, 2015*	0.066
13.	Why Blended Learning Models in Romanian Science Education?	Craciun D., Bunoiu M.	*Rethinking Education by Leveraging the Elearning Pillar of the Digital Agenda for Europe! vol. III of Book*	0.1

			Series: Learning and Software for Education, 460-468, 2015 *https://doi.org/10.12753/2066-026X-15-251*	
14.	Training Teachers for the Knowledge Society: Social Media in Science Education	Craciun D., Bunoiu M.	*Brain-Broad Research in Artificial Intelligence and Neuroscience, vol. 6, 82-83, 2015* *https://brain.edusoft.ro/index.php/brain/article/view/521*	0.1
15.	Digital Storytelling as a Creative Teaching Method in Romanian Science Education	Craciun D., Craciun P., Bunoiu M.	*AIP Conference Proceedings, 1722, 310001, 2016* *https://doi.org/10.1063/1.4944311*	0.066
16.	Augmented Reality in Romanian Science Education – Pros and Cons	Craciun D., Bunoiu M.	*The International Scientific Conference eLearning and Software for Education 3: 193-199. Bucharest: "Carol I" National Defence University, 2016* *https://doi.org/10.12753/2066-026X-16-205*	0.1
17.	Hybrid Magnetorheological Elastomers: Effects of the magnetic field on some electrical properties	Bălășoiu M., Bunoiu M., Chirigiu L., Chirigiu L.M.E., Pascu G., Bica I.	AIP Conference Proceedings, 1916, 040007, 2017 *https://doi.org/10.1063/1.5017446*	0.036
18.	Boosting physics education through mobile augmented reality	Crăciun D., Bunoiu M.	AIP Conference Proceedings, 1916, 050003, 2017 *https://doi.org/10.1063/1.5017456*	0.1
19.	Silicone rubber based magnetorheological elastomer: magnetic structure tested by means of neutron depolarization and magnetic force microscopy methods	Balasoiu M., Kozhevnikov S.V., Nikitenko Yu. V., Iacobescu G.E., Bunoiu M., Bica I.	Journal of Physics: Conference Series, Vol. 848, 012016, 2017 *https://doi.org/10.1088/1742-6596/848/1/012016*	0.036
20.	A study case for the accreditation of doctoral studies. Preliminary approaches	Cojocaru D., Petrescu I., Bunoiu M., Gogu E., Stanciu S., Tanasie A.	EDULEARN Proceedings, 3146-3154, 2018 *https://doi.org/10.21125/edulearn.2018.0832*	0.036
21.	Teacher Training in the Context of Open Science and Science Education	Craciun D., Bunoiu M.	Elearning Challenges and New Horizons, Vol. 4, Book Series: eLearning and Software for Education, pp. 319-326, 2018 *https://doi.org/10.12753/2066-026X-18-259*	0.1
22.	Learning Science outside the Classroom: A Summer School Experience	Craciun D., Bunoiu M.	AIP Conference Proceedings, 2071, 050002, 2019 *https://doi.org/10.1063/1.5090086*	0.1
23.	"Digital Storytelling" in Teaching: Lessons Learned at WUT	Grosseck G., Craciun D., Bunoiu M.	New Technologies and Redesigning Learning Spaces, Vol.II, Book Series: eLearning and Software for Education, pp. 313-322, 2019 *https://doi.org/10.12753/2066-026X-19-114*	0.066

24.	Digital Comics, a Visual Method for Reinvigorating Romanian Science Education	Craciun D., Bunoiu M.	Revista Românească pentru Educație Multidimensională, Vol. 11, No. 4, pp. 321-341, 2019 https://doi.org/10.18662/rem/172	0.1
25.	Magneto-Optical Transmittance Observed in Magnetorheological Suspensions Films	Anitas E., Bica I., Bunoiu M., Malaescu I., Marin C.N., Ercuta A., Balasoiu M., Lungu M., Pascu G.	AIP Conference Proceedings, 2218, 030016, 2020 https://doi.org/10.1063/5.0002485	0.025
26.	Game-Based Storytelling in Non-Formal Romanian Science Education	Craciun D., Grosseck G., Bunoiu M.	AIP Conference Proceedings, 2218, 060009, 2020 https://doi.org/10.1063/5.0005845	0.066
Punctaj total indicator **A6**				**1.665**

Se acordă $0.2/n_i^{ef}$ *puncte pentru fiecare item.*

Documente justificative: Copie în format hard, în format electronic sau link pe pagina web a editurii .

A7 - Brevete de invenție internaționale acordate

Nr. crt.	**Titlul**	Autori	Autoritatea care a acordat brevetul link (dacă este cazul)	Punctaj $3/n_i^{ef}$
Punctaj total indicator **A7**				**0**

Se acordă $3/n_i^{ef}$ *puncte pentru fiecare item.*

Documente justificative: Copie în format hard, în format electronic sau link pe pagina autorității care a acordat brevetul .

A8 - Brevete de invenție naționale acordate

Nr. crt.	**Titlul**	Autori	Autoritatea care a acordat brevetul link (dacă este cazul)	Punctaj $0.5/n_i^{ef}$
Punctaj total indicator **A8**				**0**

Se acordă $0.5/n_i^{ef}$ *puncte pentru fiecare item.*

Documente justificative: Copie în format hard, în format electronic sau link pe pagina autorității care a acordat brevetul .

A9 - Director/ responsabil/ coordonator pentru programe de studii, programe de formare continuă, proiecte educaționale și proiecte de infrastructură (proiectele de cercetare se exclud)

Nr. crt.	**Titlul proiectului sau programului**	Calitatea (director sau responsabil)	Autoritatea contractantă, instituția, link (după cum este cazul)	Punctaj
1.	**Depozit complex de date moleculare pentru protecția mediului, HURO0901/037/2.2.2**	Manager financiar	HURO	0.5
2.	**ICAM – Institutul de Cercetări Avansate de Mediu (Institute of Advanced Environmental Research)**	Manager („manager adjunct proiect"), Responsabil științific	POSCCE	0.5

	POSCCE- 2-2.2.1			
3.	**Noaptea Cercetătorilor în România 2013. Știința: Marea Evadare (Researchers Night in Romania 2013. Science: the Great Escape)** Proiect de tip FP7, Nr. 609771 din 08.05.2013, instituție coordonatoare: Universitatea din Iași „Alexandru Ioan Cuza"; partener: Universitatea de Vest din Timișoara	Responsabil de Proiect	FP7	0.5
4.	**Noaptea cercetătorilor în România. Vorbiți limba științei? (Researchers night in Romania. Do you speak science?)** Proiect tip Horizon 2020, instituție coordonatoare: Universitatea din Iași „Alexandru Ioan Cuza"; partener: Universitatea de Vest din Timișoara: West University of Timișoara	Responsabil de Proiect	H2020	0.5
5.	**Investigarea materialelor inteligente prin intermediul împrăștierii cu neutroni (Intelligent materials investigation by neutron scattering method - Physics school for undergraduate, MSci and PhD students from the physics faculty, West University of Timișoara)** Colaborare JINR-Romania, Proiect Nr. 49 / tema 04-4-1121-2015/2017	Responsabil de Proiect	JINR / IUCN	0.5
6.	**Școală de fizică pentru studenți de licență, master și doctorat. Investigări asupra materialelorinteligente prin metode de împrăștiere cu neutroni (Physics school for undergraduate, Msci and Phd students. Intelligent materials investigation by neutron scattering method)** Colaborare JINR-Romania, Proiect Nr. 68 / tema 04-4-1069-2009/2014	Responsabil de Proiect	JINR / IUCN	0.5
7.	**Dezvoltarea bazei de cercetare aplicativă, de cercetare și creație artistică Poiana Mărului pentru studenții UVT** MARUVT	Director de Proiect	FDI	0.5
8.	**SAPM – Studenții de azi, Profesioniștii de Mâine (Today's Students, Tomorrow's Professionals),** 2014-2015**,** Proiect POSDRU 160/2.1/S/137280	Manager	POSDRU	0.5
9.	**Universitaria – școală didactică universitară și cercetare științifică avasată** POSDRU/157/1.3/S/135590 Director proiect: Marian Ilie	Responsabil („responsabil eveniment sc.bune practici")	POSDRU	0.5
10.	**Începe o carieră de success!** POSDRU/157/1.3/S/135590 Director proiect: Marian Ilie	Coordonator („expert coordonator activități grup țintă")	POSDRU	0.5
11.	**Studiu privind calitatea factorilor de mediu în comuna Zăvoi (intravilan și extravilan), al cărei teritoriu administrativ are parțial inclus situl ROSCI0126 Munții Țarcu și situl ROSCI01217 Retezat suprapus cu aria de protecție specială avifaunistică ROSPA0084 Munții Retezat, ca prim pas înspre planificarea unei dezvoltări sustinute a comunei, care să integreze pe lângă aspectele economice și sociale, și aspectele privind protecția mediului** Contract finanțare nr. 29100/29.11.2016 Director proiect: Nicoleta Ianovici	Membru în echipa de management	Surse private	0.5
12.	**Susținerea și Motivarea Antreprenorilor Responsabili și Talentați- SMART Start Up** POCU/82/3/7105482	Manager („asistent manager")	POCU	0.5

03.06.2026

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	Manager proiect: Vlad Petcu			
13.	**Împreună universități și angajatori. Un sistem integrat de programe educaționale inovative** POCU/320/6/21/121030 Manager proiect: Marian Ilie	Coordonator („coordonator formare cursanți”, „coordonator formare personal didactic”)	POCU	0.5
14.	**Start în carieră prin master didactic** POCU/864/6/21/140783 Director proiect: Marian Ilie	Coordonator („coordonator organizare și furnizare MD”)	POCU	0.5
15.	Grant agreement 101004082 — UNITA EAC-A02-2019 / EAC-A02-2019-1	Responsabil („responsabil proces/teaching and learning”)	ERASMUS	0.5
16.	Grant agreement 101124853 - UNITA - ERASMUS-EDU-2023-EUR-UNIV	Coordonator („coordonator task developing communities”, „coordonator task knowledge-based growth”, („responsabil proces”)	ERASMUS	0.5
17.	**Centrul de Învățare pentru Tehnologie, Artă și Sport** ROSE AG296/SGU CI III Director proiect: Nicoleta Ștefu	Responsabil („responsabil activitati consiliere”)	ROSE	0.5
18.	**Modernizarea și eficientizarea energetică a căminelor studențești și a sălilor de sport ale Universității de Vest din Timișoara** Contract finanțare nr. 14233/17.12.2024 Manager proiect: Laurențiu Georgescu	Responsabil („responsabil GT”)	PNRR	0.5
19.	**Viitor pentru Comunitate!** Proiect cu finanțare nerambursabilă, contract finanțare nr. 6/08.10.2015 Finanțator: Consiliul Județean Timișoara	Responsabil proiect	CJT	0.5
20.	**Gala Premiilor UVT, ediția I** Proiect cu finanțare nerambursabilă, contract finanțare nr. 4/08.10.2015 Finanțator: Consiliul Județean Timișoara	Responsabil proiect	CJT	0.5
21.	**Diaspora în cercetarea științifică și învățământul superior din România** Proiect cu finanțare nerambursabilă, contract finanțare nr. 762/13.04.2016 Finanțator: Primăria Municipiului Timișoara	Responsabil proiect	PMT	0.5
22.	**Gala Premiilor UVT, ediția II** Proiect cu finanțare nerambursabilă, contract finanțare nr. 596/03.11.2016 Finanțator: Consiliul Județean Timișoara	Responsabil proiect	CJT	0.5
23.	**Gala Excelenței Bănățene, ediția III** Proiect cu finanțare nerambursabilă, contract finanțare nr. 571/20.10.2016 Finanțator: Consiliul Județean Timișoara	Responsabil proiect	CJT	0.5
24.	**Gala Premiilor UVT, ediția III** Proiect cu finanțare nerambursabilă, contract finanțare nr. 4698/02.11.2017 Finanțator: Primăria Municipiului Timișoara	Responsabil proiect	PMT	0.5
25.	**Excelență în Educație, ediția III** Proiect cu finanțare nerambursabilă, contract finanțare nr. 222/30.10.2017 Finanțator: Consiliul Județean Timișoara	Responsabil proiect	CJT	0.5
26.	**Excelență în Educație, ediția IV** Proiect cu finanțare nerambursabilă, contract finanțare nr. 143/05.07.2018 Finanțator: Consiliul Județean Timișoara	Responsabil proiect	CJT	0.5
27.	**Gala Premiilor UVT, ediția IV** Proiect cu finanțare nerambursabilă, contract finanțare nr. 2683/26.07.2018 Finanțator: Primăria Municipiului Timișoara	Responsabil proiect	PMT	0.5
28.	**Excelență în Educație, ediția V** Proiect cu finanțare nerambursabilă, contract finanțare nr. 15252/23.07.2019 Finanțator: Consiliul Județean Timișoara	Responsabil proiect	CJT	0.5

[redacted]

29.	**Creative Youth Elite** Proiect cu finanțare nerambursabilă, contract finanțare nr. 2728/12.08.2019 Finanțator: Primăria Municipiului Timișoara	Responsabil proiect	PMT	0.5
30.	**Gala Premiilor UVT, ediția V** Proiect cu finanțare nerambursabilă, contract finanțare nr. 2697/12.08.2019 Finanțator: Primăria Municipiului Timișoara	Responsabil proiect	PMT	0.5
31.	**Gala Premiilor UVT, ediția VI** Proiect cu finanțare nerambursabilă, contract finanțare nr. 2435/04.09.2020 Finanțator: Primăria Municipiului Timișoara	Responsabil proiect	PMT	0.5
32.	**Gala Premiilor UVT, ediția VII** Proiect cu finanțare nerambursabilă, contract finanțare nr. 18309/09.08.2015 Finanțator: Consiliul Județean Timișoara	Responsabil proiect	CJT	0.5
33.	**Fizică Medicală, licență (perioada: 2011-2016)**	Responsabil Program de Studii	UVT	0.5
34.	**Fizică Aplicată în Medicină, master (perioada: 2019-prezent)**	Responsabil Program de Studii	UVT	0.5
Punctaj total indicator **A_9**				**17**

Documente justificative: Copie în format hard sau în format electronic a documentelor de contractare sau link pe pagina autorității contractante sau a instituției unde s-a desfășurat programul.

A10 – Director /responsabil pentru proiecte de cercetare câștigate prin competiție națională sau internațională; proiectele de la punctul A_9 se exclud).

Nr. crt.	Titlul proiectului	Calitatea (director sau responsabil)	Autoritatea contractantă, link (dacă este cazul)	Punctaj $V/100.000$
1.	**Nanocontrol și multifuncționalitate în materiale, microstructuri și arhitecturi cu memorie a formei** Grant CEEX, „Cercetare de Excelență", Program Nr. C14/2005, Finanțare ANCS, Contract nr. 7/2005 Valoare: 92.500 RON (2008) = 25.117 EUR (curs valutar mediu 2008, 1 EUR = 3.6827 RON: https://www.cursbnr.ro/curs-valutar-mediu)	Director de Proiect (din 2008)	ANCS	0.251
2.	**Microstructure investigation of new highly elastic elastomers by means of combined methods (SANS, SAXS, XRD, Raman Spectroscopy)** Colaborare JINR-Romania, Proiect Nr. 90 / tema 04-4-1121-2015/2020 Responsabil JINR: Bălășoiu M. (FNLP) Valoare: 3.800 USD (2017) = 3.371 EUR (curs valutar mediu 2017, 1 EUR = 4.5681 RON: 1 USD = 4.0525 RON https://www.cursbnr.ro/curs-valutar-mediu)	Responsabil de Proiect	JINR / IUCN	0.033

3.	**Investigații de microstructură pentru noi elastomeri foarte elastici folosind metode combinate (Microstructure investigation of new highly elastic elastomers by means of combined methods)** Colaborare JINR-Romania, Proiect Nr. 65 / tema 04-4-1121-2015/2017 Responsabil JINR: Bălășoiu M. (FNLP) Valoare: 2.300 USD (2018) = 1.948 EUR (curs valutar mediu 2018, 1 EUR = 4.6535 RON: 1 USD = 3.9416 RON https://www.cursbnr.ro/curs-valutar-mediu)	Responsabil de Proiect	JINR / IUCN	0.019
4	**Investigation of thermal properties of magnetic elastomers by means of differential scanning calorimetry (DSC)** Colaborare JINR-Romania, Proiect Nr. 91 / tema 04-4-1121-2015/2020 Responsabil JINR: Pawlukojc A. (FNLP) Valoare: 2.500 USD (2018) = 2.117 EUR (curs valutar mediu 2018, 1 EUR = 4.6535 RON: 1 USD = 3.9416 RON https://www.cursbnr.ro/curs-valutar-mediu)	Responsabil de Proiect	JINR / IUCN	0.021
5.	**Development of microstructure investigation of magnetic elastomers with CoFe2O4 nanoparticles by means of combined structural and magnetodielectric methods** Nr. / tema 04-4-1121-2015/2020 Responsabil JINR: Bălășoiu M. (FNLP) Valoare: 4.000 USD (2019) = 3.572 EUR (curs valutar mediu 2019, 1 EUR = 4.7452 RON: 1 USD = 4.2379 RON https://www.cursbnr.ro/curs-valutar-mediu)	Director de proiect	JINR / IUCN	0.035
6.	**Investigation of the local magnetic field distribution in the magnetic elastomers by means of positive muon spectroscopy** Nr. / tema 02-2-1124-2015/2020 Responsabil JINR: Duginov D.N. (DLNP) Valoare: 3.100 USD (2019) = 2.768 EUR (curs valutar mediu 2019, 1 EUR = 4.7452 RON: 1 USD = 4.2379 RON https://www.cursbnr.ro/curs-valutar-mediu)	Director de proiect	JINR / IUCN	0.027
7.	**Cercetare de Excelență în UVT prin Susținerea și Dexvoltarea Centrelor de Cercetare în Universități** Valoare: 372.000 RON (2018) = 79.939 EUR (curs valutar mediu 2018, 1 EUR = 4.6535 RON https://www.cursbnr.ro/curs-valutar-mediu)	Director de proiect	Ministerul Educației, prin CNFIS	0.799

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8.	**„Research For UNITA – Re-UNITA”** Grant amount (EU contribution): 38.250 EUR (pentru WP2)	Responsabil WP2	H2020	0.382
9.	**INNOUNITA - INNOvation capacity building in UNITA** Grant amount (first phase): 67.375 EUR + (second phase): 143.625 EUR	Manager proiect	HEI Capacity Building Initiative / EIT Food GA	2.110
10.	**U InnoVaTe 2024** Valoare: 237.750 RON (2024) = 47.792 EUR (curs valutar mediu 2024, 1 EUR = 4.9746 RON https://www.cursbnr.ro/curs-valutar-mediu)	Coordnator	Ministerul Educației, prin Fondul pentru Situații Speciale	0.477
11.	**Suport pentru dezvoltarea și consolidarea DANUBIUS-RO** Contract nr. 1.D./03.10.2025, nr. ANC 451337/26.09 Valoare: 1.200.000 RON (2025) = 238.024 EUR (curs valutar mediu 2025, 1 EUR = 5.0415 RON https://www.cursbnr.ro/curs-valutar-mediu)	Manager de Proiect	ANC	2.380
Punctaj total indicator $\mathbf{A_{10}}$				**6.577**

Se acordă $V/100.000$ puncte pentru fiecare item, unde V este valoarea contractului în euro. Sumele în lei sau în alte valute se convertesc în euro la cursul mediu din anul respectiv conform www.bnr.ro pentru perioada de după 1999 și la cursul din 1999 pentru perioada anterioară. Responsabilii de proiect sunt cei care conduc o echipă de cercetare, fiind menționați ca atare în proiectul depus; în cazul lor se consideră doar suma aferentă echipei conduse.
Documente justificative: Copie în format hard sau în format electronic dupa devizul postcalcul.

Precizări:

- *n_i^{ef} reprezintă numărul efectiv de autori ai itemului i și ia următoarele valori:*

n_i dacă $n_i \leq 5$, $(n_i+5)/2$ dacă $5 < n_i \leq 15$, $(n_i+15)/3$ dacă $15 < n_i \leq 75$ și $(n_i+45)/4$ dacă $n_i > 75$, unde n_i reprezintă numărul de autori ai articolului i. În cazul publicațiilor HEPP (High Energy Particle Physics) cu număr mare de autori, dacă articolul are la bază o notă internă a experimentului la care candidatul este coautor, atunci $\mathbf{n_i^{ef}}$ poate fi dat de numărul de autori din nota internă.

- *Lucrările de tip “Article. Proceedings paper” pot fi considerate la activitatea de cercetare sau la cea didactică și profesională, o singură dată, la alegerea candidatului.*

Punctaj total obținut pentru activitatea didactică și profesională:

$$A = \sum_{i=1}^{10} A_i = \mathbf{27.372}$$

2. Activitatea de cercetare

2.1 – Articole științifice originale, în extenso, ca autor

Nr. crt.	**Referinţa bibliografică** (Autori, Titlul, Revista, Vol., anul,	AIS_i	n_i	n_i^{ef}	AIS_i / n_i^{ef}

	pag. încep. – pag.sf.				
1.	Bunoiu O., Duffar T., Theodore F., Santailler J.L., Nicoară I., Numerical simulation of the flow field in shaped crystal growth process, Journal of Optoelectronics and Advanced Materials, Vol. 2, No. 5, 474-480, 2000 https://old.joam.inoe.ro/arhiva/pdf2_5/Bunoiu.pdf	*0.03*	*5*	*5*	*0.006*
2.	Bunoiu O., Duffar T., Theodore F., Santailler J.L., Nicoară I., Numerical simulation of the flow field and solute segregation in Edge-defined Film-fed Growth, Crystal Research and Technology, Vol. 36, No. 7, 707-717, 2001 https://doi.org/10.1002/1521-4079%28200108%2936%3A7%3C707%3A%3AAID-CRAT707%3E3.0.CO%3B2-J	*0.3*	*5*	*5*	*0.060*
3.	Barvinschi F., Bunoiu O., Nicoară I., Nicoară D., Santailler J.L., Duffar T., Factors affecting the isotherm shape of semi-transparent BaF2 crystals grown by Bridgman method, Journal of Crystal Growth, Vol. 237-239, Part 3, 1762-1768, 2002 https://doi.org/10.1016/S0022-0248(01)02328-4	*0.7*	*6*	*5.5*	*0.127*
4.	Bunoiu O., Nicoară I., Santailler J.L., Duffar T., Fluid flow and solute segregation in EFG crystal growth process, Journal of Crystal Growth, Vol. 275, 799-805, 2005 https://doi.org/10.1016/j.jcrysgro.2004.11.052	*0.6*	*4*	*4*	*0.150*
5.	Bunoiu O., Defoort F., Santailler J.L., Duffar T., Nicoară I., Thermodynamic analyses of gases formed during the EFG sapphire growth process, Journal of Crystal Growth, Vol. 275, e1707-e1713, 2005 https://doi.org/10.1016/j.jcrysgro.2004.11.249	*0.6*	*5*	*5*	*0.120*
6.	Bunoiu O., Nicoară I., Duffar T., Solute distribution in shaped sapphire crystals obtained by EFG method, Journal of Optoelectronics and Advanced Materials, Vol. 7, Nr. 2, 615-618, 2005 https://old.joam.inoe.ro/arhiva/pdf7_2/Bunoiu.pdf	*0.1*	*3*	*3*	*0.033*
7.	Bunoiu O., Nicoară I., Santailler J.L., Theodore F., Duffar T., On the void distribution and size in shaped sapphire crystals, Crystal Research and Technology, Vol 40, No. 9, 952-859, 2005 https://doi.org/10.1002/crat.200410445	*0.3*	*5*	*5*	*0.060*
8.	Nicoară I., Bunoiu O., Vizman D., Voids engulfment in shaped sapphire crystals, Journal of Crystal Growth, Vol. 287, Nr. 2, 291-295, 2006 https://doi.org/10.1016/j.jcrysgro.2005.11.032	*0.6*	*3*	*3*	*0.200*
9.	Nicoară I., Pecingina-Gârjoaba N., Bunoiu O., Concentration distribution of Yb2+ and Yb3+ ions in YbF3:CaF2 crystals, Journal of Crystal Growth, Vol. 310, No. 7-9, 1476-1481, 2008 https://doi.org/10.1016/j.jcrysgro.2007.11.024	*0.582*	*3*	*3*	*0.194*
10.	Stef M., Bunoiu O., Paraschiva M., Pruna A., Nicoara I., Segregation coefficient of Pb2+ ions in CaF2 Crystals, AIP Conference Proceedings, Vol. 1131, 112-116, 2009 https://doi.org/10.1063/1.3153429	*considerat la criteriul A6, nr.1*			
11.	Lungu M., Neculae A., Bunoiu M., Some considerations on the dynamics of nanometric suspensions in fluid media, AIP Conference Proceedings, Vol. 1131, 164-168, 2009 https://doi.org/10.1063/1.3153440	*considerat la criteriul A6, nr.2*			
12.	Bunoiu O.M., Duffar T., Nicoară I., Gas bubbles in shaped sapphire, Progress in Crystal Growth and Charact. of Materials, Vol. 56, No. 3-4, 123-145, 2010 https://doi.org/10.1016/j.pcrysgrow.2010.09.001	*1.442*	*3*	*3*	*0.480*
13.	Neculae A., Bunoiu O.M., Lungu M., Numerical simulation of bioparticle manipulation using dielectrophoresis, AIP Conference Proceedings, Vol. 1262, 144-149, 2010 https://doi.org/10.1063/1.3482222	*considerat la criteriul A6, nr.3*			
14.	Paraschiva M., Nicoară I., Ștef M., Bunoiu O. M., Distribution of Pb2+ Ions in PbF2-Doped CaF2 Crystals, Acta Physica Polonica A, Vol. 117, Issue: 3, 466-470, 2010 https://doi.org/10.12693/APhysPolA.117.466	*0.117*	*4*	*4*	*0.029*
15.	Munteanu M., Ștef M., Bunoiu O., Nicoară I., Effective segregation coefficient of Er3+ ions in ErF3-doped CaF2 crystals, Physica Scripta, Vol. 81, Issue: 3, Article Number: 035602, 2010 https://doi.org/10.1088/0031-8949/81/03/035602	*0.335*	*4*	*4*	*0.083*
16.	Lungu M., Neculae A., Bunoiu M., Some considerations on the dielectrophoretic manipulation of nanoparticles in fluid media, Journal of Optoelectronics and Advanced Materials, Vol. 12, No. 12, 2423-2426, 2010	*0.113*	*3*	*3*	*0.037*

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	https://joam.inoe.ro/articles/some-considerations-on-the-dielectrophoretic-manipulation-of-nanoparticles-in-fluid-media/				
17.	Lungu M., Neculae A., Bunoiu M., Strambeanu N., Some Considerations on the Nanoparticles Manipulation in Fluid Media Using Dielectrophoresis, Romanian Journal of Physics, Vol. 56, No. 5-6, 749-756, 2011 https://rjp.nipne.ro/2011_56_5-6/0749_0756.pdf	*0.095*	*4*	*4*	*0.023*
18.	Bunoiu O., Stef M., Popescu A., Vizman D., Interface shape studies in Bridgman growth of multicrystalline silicon, AIP Conference Proceedings, Vol. 1387, 226-231, 2011 https://doi.org/10.1063/1.3647079	*considerat la criteriul A6, nr.4*			
19.	Neculae A., Lungu M., Nicolici-Schultz T., Bunoiu M., Numerical study regarding the influence of electrodes' geometry on the dielectrophoretic forces, AIP Conference Proceedings, Vol. 1387, 270-275, 2011 https://doi.org/ 10.1063/1.3647086	*considerat la criteriul A6, nr.5*			
20.	Neculae A., Lungu M., Bunoiu M., Giugiulan R., Electrohydrodynamic modeling for manipulation of micro/nano particles in microfluidic systems, AIP Conference Proceedings, Vol. 1472, 155-161, 2012 https://doi.org/10.1063/1.4748083	*considerat la criteriul A6, nr.6*			
21.	Pupăzan V., Popescu A., Bunoiu O.M., Vizman D., Influence of growth rate on interface shape and grains structure in multicrystalline silicon growth by Bridgman method, AIP Conference Proceedings, Vol. 1472, 210-214, 2012 https://doi.org/10.1063/1.4748090	*considerat la criteriul A6, nr.7*			
22.	Neculae A., Biriș C.G., Bunoiu M., Lungu, M., Numerical analysis of nanoparticle behavior in a microfluidic channel under dielectrophoresis, Journal of Nanoparticle Research, Vol. 14, No. 10, 1154, 2012 https://doi.org/10.1007/s11051-012-1154-4	*0.676*	*4*	*4*	*0.169*
23.	Lungu M., Giugiulan R., Bunoiu M., Strambeanu M., Neculae A., Submicron particle trapping using traveling wave dielectrophoresis, AIP Conference Proceedings, Vol. 1564, 111-116, 2013 https://doi.org/10.1063/1.4832804	*considerat la criteriul A6, nr.8*			
24.	Neculae A., Giugiulan R., Bunoiu M., Lungu M., Effects of fluid flow velocity upon nanoparticle distribution in microfluidic devices under dielectrophoresis, Romanian Reports in Physics, Vol. 66, No. 3, 754-764, 2014 https://rrp.nipne.ro/2014_66_3/A16.pdf	*0.210*	*4*	*4*	*0.052*
25.	Lungu M., Balasiu S., Bunoiu M.O., Neculae A., Study of a 3D DEP-based Microfluidic System for Selective Nanoparticle Manipulation, AIP Conference Proceedings, Vol. 1634, 89-94, 2014 https://doi.org/10.1063/1.4903019	*considerat la criteriul A6, nr.9*			
26.	Nicoara I., Buse G., Bunoiu M., Segregation coefficient of Yb3+ and Yb2+ Ions in YbF3 Doped BaF2 Crystals, AIP Conference Proceedings, Vol. 1634, 111-114, 2014 https://doi.org/10.1063/1.4903023	*considerat la criteriul A6, nr.10*			
27.	Pupazan V., Negrila R., Bunoiu O., Nicoară I., Vizman D., Effects of crucible coating on the quality of multicrystalline silicon grown by a Bridgman technique, Journal of Crystal Growth, Vol. 401, 720-726, 2014 https://doi.org/10.1016/j.jcrysgro.2014.02.038	*0.401*	*5*	*5*	*0.080*
28.	Bica I., Anitas E.M., Bunoiu M., Vatzulik B., Juganaru I., Hybrid magnetorheological elastomer: Influence of magnetic field and compression pressure on its electrical conductivity, Journal of Industrial and Engineering Chemistry, Vol. 20, No. 6, 3994-3999, 2014 https://doi.org/10.1016/j.jiec.2013.12.102	*0.492*	*5*	*5*	*0.098*
29.	Anitas E.M., Bica I., Erhan R.V., Bunoiu M., Kuklin A.I., Structural Properties of Composite Elastomeric Membranes Using Small-Angle Neutron Scattering, Romanian Journal of Physics, Vol. 60, 653-657, 2015 https://rjp.nipne.ro/2015_60_5-6/RomJPhys.60.p653.pdf	*0.173*	*5*	*5*	*0.034*
30.	Neculae A., Strambeanu M., Lungu A., Bunoiu M., Lungu M., Nanoparticles trapping from flue gas using dielectrophoresis, AIP Conference Proceedings, Vol. 1694, 040004, 2015 https://doi.org/10.1063/1.4937256	*considerat la criteriul A6, nr.11*			
31.	Craciun D., Oprescu M., Bunoiu M., Promoting an English and Science Summer Programme through Social Media, SMART 2014 - Social Media in Academia: Research and Teaching, 119-123, 2015	*considerat la criteriul A6, nr.12*			
32.	Craciun D, Bunoiu M., Why Blended Learning Models in Romanian Science Education?, Rethinking Education by Leveraging the Elearning Pillar of the	*considerat la criteriul A6, nr.13*			

	Digital Agenda for Europe! vol. III of Book Series: eLearning and Software for Education, 460-468, 2015 https://doi.org/ 10.12753/2066-026X-15-251				
33.	Bica I., Anitas E.M., Averis L.M.E., Bunoiu M., Magnetodielectric effects in composite materials based on paraffin, carbonyl iron and graphene, Journal of Industrial and Engineering Chemistry, Vol. 21, 1323-1327, 2015 https://doi.org/10.1016/j.jiec.2014.05.048	*0.568*	*4*	*4*	*0.142*
34.	Bica I., Anitas E.M., Chirigiu I., Bunoiu M., Juganaru I., Tatu R.F., Magnetodielectric effects in hybrid magnetorheological suspensions, Journal of Industrial and Engineering Chemistry, Vol. 22, 53-62, 2015 https://doi.org/10.1016/j.jiec.2014.06.024	*0.568*	*6*	*5.5*	*0.103*
35.	Bica I., Bălăşoiu M., Bunoiu M., Iordaconiu L., Cirtina G., Influence of the longitudinal magnetic field on the turning angle of a cylindrical bar-shaped magnetorheological elastomer, Journal of Optoelectronics and Advanced Materials, Vol. 17, 1379-1384, 2015 https://joam.inoe.ro/articles/influence-of-the-longitudinal-magnetic-field-on-the-turning-angle-of-a-cylindrical-bar-shaped-magnetorheological-elastomer/	*0.078*	*5*	*5*	*0.015*
36.	Craciun D, Bunoiu M., Training Teachers for the Knowledge Society: Social Media in Science Education, BRAIN-BROAD RESEARCH IN ARTIFICIAL INTELLIGENCE AND NEUROSCIENCE, vol. 6, 82-83, 2015 https://brain.edusoft.ro/index.php/brain/article/view/521	*considerat la criteriul A6, nr.14*			
37.	Craciun D., Craciun P., Bunoiu M., Digital Storytelling as a Creative Teaching Method in Romanian Science Education, AIP Conference Proceedings, vol. 1722, 310001, 2016 https://doi.org/10.1063/1.4944311	*considerat la criteriul A6, nr.15*			
38.	Bica I., Anitas E.M., Bunoiu M., Iordaconiu L., Bortun C.M., Averis L.M.E., Mechanisms of micropore formation in silicone rubber based membranes, Romanian Journal of Physics, Vol. 61, 464-472, 2016 https://rjp.nipne.ro/2016_61_3-4/RomJPhys.61.p464.pdf	*0.243*	*6*	*5.5*	*0.044*
39.	Bica I., Balasoiu M., Bunoiu M., Iordaconiu L., Microparticles and Electroconductive Magnetorheological Suspensions, Romanian Journal of Physics, Vol. 61, 926-945, 2016 https://rjp.nipne.ro/2016_61_5-6/RomJPhys.61.p926.pdf	*0.243*	*4*	*4*	*0.060*
40.	Neculae A., Bunoiu M., Lungu A., Lungu M., Filtration of flue gas in microfluidic devices using dielectrophoresis, Romanian Journal of Physics, Vol. 61, No. 5-6, 957-969, 2016 https://rjp.nipne.ro/2016_61_5-6/RomJPhys.61.p957.pdf	*0.243*	*4*	*4*	*0.060*
41.	Neculae A., Bunoiu M., Lungu A., Lungu M., Filtration of flue gas by retaining of nanoparticles in microfluidic devices using dielectrophoresis, Romanian Reports in Physics, Vol. 68, No. 3, 2016 https://rrp.nipne.ro/2016_68_3/A15.pdf	*0.242*	*4*	*4*	*0.060*
42.	D. Craciun, M. Bunoiu , Augmented Reality in Romanian Science Education – Pros and Cons, The International Scientific Conference eLearning and Software for Education 3: 193-199. Bucharest: "Carol I" National Defence University, 2016 https://doi.org/10.12753/2066-026X-16-205	*considerat la criteriul A6, nr.16*			
43.	Craciunescu E., Sinescu C., Negrutiu M.L., Popa D.M., Lauer H.C., Rominu M., Hutiu G., Bunoiu M., Duma V.F., Antoniac I., Shear bond strength tests of zirconia veneering ceramics after chipping repair, Journal of Adhesion Science and Technology, Vol. 30, 666-676, 2016 https://doi.org/10.1080/01694243.2015.1117304	*0.252*	*10*	*7.5*	*0.033*
44.	Bunoiu M., Bica I., Magnetorheological elastomer based on silicone rubber, carbonyl iron and Rochelle salt: Effects of alternating electric and static magnetic fields intensities, Journal of Industrial and Engineering Chemistry, Vol. 37, 312–318, 2016 https://doi.org/10.1016/j.jiec.2016.03.047	*0.606*	*2*	*2*	*0.303*
45.	Stoia M., Barvinschi P., Barbu-Tudoran L., Bunoiu M., Influence of polyols on the formation of nanocrystalline nickel ferrite inside silica matrices, Journal of Crystal Growth, Vol.: 457, Special Issue, 294-301, 2017 https://doi.org/10.1016/j.jcrysgro.2016.05.034	*0.358*	*4*	*4*	*0.089*
46.	Barvinschi P., Bunoiu O.M., A finite element method model to simulate the termal response of vascularized tissue to laser irradiation, Romanian Reports in Physics, Vol. 69, No. 3, 610, 2017 https://rrp.nipne.ro/2017/AN610.pdf	*0.255*	*2*	*2*	*0.127*

47.	Bălășoiu M., Bunoiu M., Chirigiu L., Chirigiu L.M.E., Pascu G., Bica I., Magnetodielectric Membranes: Effects of the Magnetic Field on the Dielectric Loss Tangent, AIP Conference Proceedings, 1916, 040007, 2017 https://doi.org/10.1063/1.5017446	*considerat la criteriul A6, nr.17*			
48.	Crăciun D., Bunoiu M., Boosting physics education through mobile augmented reality, AIP Conference Proceedings, 1916, 050003, 2017 https://doi.org/10.1063/1.5017456	*considerat la criteriul A6, nr.18*			
49.	Balasoiu M., Kozhevnikov S.V., Nikitenko Yu. V., Iacobescu G.E., Bunoiu M., Bica I., Silicone rubber based magnetorheological elastomer: magnetic structure tested by means of neutron depolarization and magnetic force microscopy methods, Journal of Physics: Conference Series, Vol. 848, 012016, 2017 https://doi.org/10.1088/1742-6596/848/1/012016	*considerat la criteriul A6, nr.19*			
50.	Bălășoiu M., Lebedev V.T., Raikher Yu.L., Bica I., Bunoiu M., The implicit effect of texturizing field on the elastic properties of magnetic elastomers revealed by SANS, Journal of Magnetism and Magnetic Materials, Vol.: 431, 126-129, 2017 https://doi.org/10.1016/j.jmmm.2016.09.109	*0.466*	*5*	*5*	*0.093*
51.	M. Bunoiu, E.M. Anitas, J. Neamtu, I. Bica, L. Chirigiu, L.M.E. Chirigiu, Generation of Iron Nano-microparticles for Bio-medical Applications Using Plasma Processes, Revista de Chimie, Vol. 68, No. 6, 1204-1209, 2017 https://doi.org/10.37358/RC.17.6.5642	*0.047*	*6*	*5.5*	*0.008*
52.	Bunoiu M., Neamțu J., Chirigiu L., Bălășoiu M., Pascu G., Bica I., Chirigiu L.M.E., Hybrid Magnetorheological Elastomers: Effects of the magnetic field on some electrical properties, Applied Surface Science, Vol. 424, Part 3, Special Issue, 282-289, 2017 https://doi.org/10.1016/j.apsusc.2017.04.087	*0.627*	*7*	*6*	*0.104*
53.	Cojocaru D., Petrescu I., Bunoiu M., Gogu E., Stanciu S., Tanasie A., A study case for the accreditation of doctoral studies. Preliminary approaches, EDULEARN Proceedings, 3146-3154, 2018 https://doi.org/10.21125/edulearn.2018.0832	*considerat la criteriul A6, nr.20*			
54.	Scarlatescu I., Spunei M., Chis A., Negru S., Bunoiu M., Avram N., Experimental dosimetric checkup under positioning errors according to gamma criterion, UPB Scientific Bulletin, Series A: Applied Mathematics and Physics, Vol. 80, No. 1, 271-280, 2018 https://www.scientificbulletin.upb.ro/rev_docs_arhiva/fulld4e_861144.pdf	*0.094*	*6*	*5.5*	*0.017*
55.	Craciun D., Bunoiu M., Teacher Training in the Context of Open Science and Science Education, Elearning Challenges and New Horizons, Vol. 4, Book Series: eLearning and Software for Education, pp. 319-326, 2018 https://doi.org/10.12753/2066-026X-18-259	*considerat la criteriul A6, nr.21*			
56.	Craciun D., Bunoiu M., Learning Science outside the Classroom: A Summer School Experience, AIP Conference Proceedings, 2071, 050002, 2019 https://doi.org/10.1063/1.5090086	*considerat la criteriul A6, nr.22*			
57.	Grosseck G., Craciun D., Bunoiu M., "Digital Storytelling" in Teaching: Lessons Learned at WUT, New Technologies and Redesigning Learning Spaces, Vol.II, Book Series: eLearning and Software for Education, pp. 313-322, 2019 https://doi.org/10.12753/2066-026X-19-114	*considerat la criteriul A6, nr.23*			
58.	Bica I., Bunoiu O.M., Magnetorheological Hybrid Elastomers Based on Silicone Rubber and Magnetorheological Suspensions with Graphene Nanoparticles: Effects of the Magnetic Field on the Relative Dielectric Permittivity and Electric Conductivity, International Journal of Molecular Sciences, Vol. 20, No. 17, Art. no. 4201, pp. 1-9, 2019 https://doi.org/10.3390/ijms20174201	*0.932*	*2*	*2*	*0.466*
59.	Craciun D., Bunoiu M., Digital Comics, a Visual Method for Reinvigorating Romanian Science Education, Revista Românească pentru Educație Multidimensională, Vol. 11, No. 4, pp. 321-341, 2019 https://doi.org/10.18662/rrem/172	*considerat la criteriul A6, nr.24*			
60.	Nabiyev A.A., Olejniczak A., Pawlukojc A., Balasoiu M., Bunoiu M., Maharramov A.M., Nuriyev M.A., Ismayilova R.S., Azhibekov A.K., Kabyshev A.M., Ivankov O.I., Vlase T., Linnik D.S., Shukurova A.A., Ivanshina O.Y., Turchenko V.A., Kuklin A.I., Nano-ZrO2 filled high-density polyethylene composites: Structure, thermal properties, and the influence γ-irradiation, Polymer Degradation and Stability, Vol. 171, Art. No. 109042, 2020 https://doi.org/10.1016/j.polymdegradstab.2019.109042	*0.606*	*17*	*10.666*	*0.056*
61.	Anitas E., Bica I., Bunoiu M., Malaescu I., Marin C.N., Ercuta A., Balasoiu M., Lungu M., Pascu G., Magneto-Optical Transmittance Observed in	*considerat la criteriul A6, nr.25*			

	Magnetorheological Suspensions Films, AIP Conference Proceedings, 2218, 030016, 2020 https://doi.org/10.1063/5.0002485				
62.	Craciun D., Grosseck G., Bunoiu M., Game-Based Storytelling in Non-Formal Romanian Science Education, AIP Conference Proceedings, 2218, 060009, 2020 https://doi.org/10.1063/5.0005845	*considerat la criteriul A6, nr.26*			
63.	Bica I., Anitas E.M., Bunoiu M., Influence of a transverse magnetic field and of hydrostatic pressure on the elasticity state of anisotropic magnetorheological elastomers, Romanian Reports in Physics, Vol. 72, No. 3, 505, 2020 https://rrp.nipne.ro/2020/AN72505.pdf	*0.269*	*3*	*3*	*0.089*
64.	Bunoiu O.M., Matu G., Marin C.N., Malaescu I., Investigation of some thermal parameters of ferrofluids in the presence of a static magnetic field, Journal of Magnetism and Magnetic Materials, Vol. 498, Art. No. 166132, 2020 https://doi.org/10.1016/j.jmmm.2019.166132	*0.429*	*4*	*4*	*0.108*
65.	Lazič D, . Malaescu I., Bunoiu O.M., . Marin I., Popescu F.G., Socoliuc V., Marin C.N., Investigation of therapeutic-like irradiation effect on magnetic hyperthermia characteristics of a water-based ferrofluid with magnetite particles, Journal of Magnetism and Magnetic Materials, Vol. 502, Art. No. 166605, 2020 https://doi.org/10.1016/j.jmmm.2020.166605	*0.429*	*7*	*6*	*0.073*
66.	Vlase D., Diaconescu D., Bunoiu V., Bunoiu M., Vlase G., Sfârloagă P., Vlase T., Analytical investigations of adornment pieces from Susani (Timiş County, Romania), Journal of Thermal Analysis and Calorimetry, Vol. 141, 3, 1067-1074, 2020 https://doi.org/10.1007/s10973-020-09878-3	*0.291*	*7*	*6*	*0.048*
67.	Bunoiu M., Anitas E.M., Pascu G., Chirigiu L.M.E., Bica I., Electrical and Magnetodielectric Properties of Magneto-Active Fabrics for Electromagnetic Shielding and Health Monitoring, International Journal of Molecular Sciences, Vol. 21, No. 13, 4785, 2020 https://doi.org/10.3390/ijms21134785	*0.943*	*5*	*5*	*0.188*
68.	Bajas D., Vlase G., Mateescu M., Grad O.A., Bunoiu M., Vlase T., Avram C., Formulation and Characterization of Alginate-Based Membranes for the Potential Transdermal Delivery of Methotrexate, Polymers, Vol. 13, 161, 2021 https://doi.org/10.3390/polym13010161	*0.612*	*7*	*6*	*0.102*
69.	Marioane C.A., Bunoiu M., Mateescu M., Sfîrloagă P., Vlase G., Vlase T., Preliminary Study for the Preparation of Transmucosal or Transdermal Patches with Acyclovir and Lidocaine, Polymers, Vol. 13, 3596, 2021 https://doi.org/10.3390/polym13203596	*0.612*	*6*	*5.5*	*0.111*
70.	Bunoiu M., Vlase G., Bica I., Balasoiu M., Pascu G., Vlase T., Study of Thermal Stability of Some Magnetorheological Elastomers, Romanian Reports in Physics, Vol. 73, 503, 2021 https://rrp.nipne.ro/2021/AN73503.pdf	*0.202*	*6*	*5.5*	*0.036*
71.	Bălășoiu M., Bunoiu M., Chirigiu L.M.E., Bica I., Electrical Devices based on Hybrid Magnetorheological Suspensions: Realization, Phenomenological Modeling and Technical Characteristics, Romanian Journal of Physics, Vol. 66, 604, 2021 https://rjp.nipne.ro/2021_66_5-6/RomJPhys.66.604.pdf	*0.172*	*4*	*4*	*0.043*
72.	Fannin P.C., Bunoiu O.M., Malaescu I., Marin C.N., Ursu D., Magnetically tuning microwave propagation parameters in ferrofluids, The European Physical Journal E, Vol. 44, Art. No. 83, 2021 https://doi.org/10.1140/epje/s10189-021-00087-w	*0.491*	*5*	*5*	*0.098*
73.	Pascu G., Bunoiu O.M., Bica I., Magnetic Field Effects Induced in Electrical Devices Based on Cotton Fiber Composites, Carbonyl Iron Microparticles and Barium Titanate Nanoparticles, Nanomaterials, Vol. 12, Art. No. 888, 2022 https://doi.org/10.3390/nano12050888	*0.712*	*3*	*3*	*0.237*
74.	Vlase D., Vlase T., Bunoiu M., Sfîrloagă P., Ursuţ A.G., Vlase G., Characteristics of late Neolithic pottery of the Zau culture: analysis of pottery samples from Iernut-Site II (Mures County, Romania), Journal of Thermal Analysis and Calorimetry, Vol. 147, No. 9, 5351-5363, 2022 https://doi.org/10.1007/s10973-022-11261-3	*0.444*	*6*	*5.5*	*0.080*
75.	Bradu I.A., Vlase T., Bunoiu M., Gradinaru M., Pahomi A., Baias D., Budiul M.M., Vlase G., Synthesis and Characterization of Polymer-Based Membranes for Methotrexate Drug Delivery, Polymers, Vol. 15, 4325, 2023 https://doi.org/10.3390/polym15214325	*0.657*	*8*	*6.5*	*0.101*
76.	Bunoiu M., Iacobescu G.E., Pascu G., Chirigiu L., Bica I., Magnetically Active Composites with Relatively Giant Dielectric Permittivity, Romanian Reports in Physics, Vol. 75, 503, 2023	*0.184*	*5*	*5*	*0.036*

	https://doi.org/10.59277/RomRepPhys.2023.75.503				
77.	Iacobescu G.E., Bunoiu M., Bica I., Sfirloaga P., Chirigiu L.M.E., A Cotton Fabric Composite with Light Mineral Oil and Magnetite Nanoparticles: Effects of a Magnetic Field and Uniform Compressions on Electrical Conductivity, Micromachines, Vol. 14, 1113, 2023 https://doi.org/10.3390/mi14061113	*0.490*	*5*	*5*	*0.098*
78.	Malaescu I., Bunoiu M.O., Teusdea A., Marin C.N., Investigations on the Electrical Conductivity and Complex Dielectric Permittivity of a Ferrofluid Subjected to the Action of a Polarizing Magnetic Field, Materials Research Bulletin, Vol. 164, 112281, 2023 https://doi.org/10.1016/j.materresbull.2023.112281	*0.641*	*4*	*4*	*0.160*
79.	Malaescu I., Sfirloaga P., Marin C.N., Bunoiu M.O., Vlazan P., Experimental Investigations on the Electrical Conductivity and Complex Dielectric Permittivity of ZnxMn1−xFe2O4 (x = 0 and 0.4) Ferrites in a Low-Frequency Field, Crystals, Vol. 14, 437, 2024 https://doi.org/10.3390/cryst14050437	*0.394*	*5*	*5*	*0.078*
80.	Bunoiu O.M., Bica I., Anitas E.M., Chirigiu L.M.E., Magnetodielectric and Rheological Effects in Magnetorheological Suspensions Based on Lard, Gelatin and Carbonyl Iron Microparticles, Materials, Vol. 17, No. 16, 3941, 2024 https://doi.org/10.3390/ma17163941	*0.523*	*4*	*4*	*0.130*
81.	Malaescu I., Sfirloaga P., Bunoiu O.M., Marin C.N., A Comparative Analysis of the Electrical Properties of Silicone Rubber Composites with Graphene and Unwashed Magnetite, Materials, Vol. 17, No. 23, Art. No. 6006, 2024 https://doi.org/10.3390/ma17236006	*0.523*	*4*	*4*	*0.130*
82.	Balasoiu M., Lysenko S., Astaf'eva S., Yakusheva D., Kornilitsina E., Ivankov O., Kuklin A., Bunoiu O.M., Lupu N., Small-Angle Scattering Investigation of Colloidal Suspensions with Lamellar Ba Hexaferrite Nanoparticles, Journal of Surface Investigation: X-ray, Synchrotron and Neutron Techniques, Vol. 18, No. 3, 736-744, 2024 http://doi.org/10.1134/S1027451024700393	*0.060*	*9*	*7*	*0.008*
83.	Codrean A.F., Bunoiu O.M., Paulescu M., Identifying the Signature of the Solar UV Radiation Spectrum, Atmosphere, Vol. 16, No. 4, Art. No. 427, 2025 https://doi.org/10.3390/atmos16040427	*0.534*	*3*	*3*	*0.178*
84.	Malaescu I., Fannin P.C., Marin C.N., Bunoiu M.O., Influence of the Polarizing Magnetic Field and Volume Fraction of Nanoparticles in a Ferrofluid on the Specific Absorption Rate (SAR) in the Microwave Range, *Magnetochemistry*, vol. 12, no. 1, art. no. 5, 2025. https://doi.org/10.3390/magnetochemistry12010005	*0.388*	*4*	*4*	*0.097*
85.	Bica I., Anitas E.M., Bunoiu O.M., Chirigiu L., Pascu G., Hybrid Carbonyl Iron/Iron Oxide Microfiber Textile Membranes with Magnetically Tunable Capacitance Under Compressive Loading, *Micromachines*, vol. 17, no. 4, art. no. 478, 2026. https://doi.org/10.3390/mi17040478	*0.502*	*5*	*5*	*0.100*
Punctaj total indicator 2.1					**I = 6.144**

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Nr.	**Referinţa bibliografică** (Autori, Titlul, Revista, Vol., anul, pag.$_{\text{inceput}}$-pag.$_{\text{sfârşit}}$)	AIS_i
1.	Bunoiu O., Duffar T., Theodore F., Santailler J.L., Nicoară I., Numerical simulation of the flow field in shaped crystal growth process, Journal of Optoelectronics and Advanced Materials, Vol. 2, No. 5, 474-480, 2000	*0.03*

03.06.2026

	https://old.joam.inoe.ro/arhiva/pdf2_5/Bunoiu.pdf	
2.	Bunoiu O., Duffar T., Theodore F., Santailler J.L., Nicoară I., Numerical simulation of the flow field and solute segregation in Edge-defined Film-fed Growth, Crystal Research and Technology, Vol. 36, No. 7, 707-717, 2001 https://doi.org/10.1002/1521-4079%28200108%2936%3A7%3C707%3A%3AAID-CRAT707%3E3.0.CO%3B2-J	*0.3*
3.	Bunoiu O., Nicoară I., Santailler J.L., Duffar T., Fluid flow and solute segregation in EFG crystal growth process, Journal of Crystal Growth, Vol. 275, 799-805, 2005 https://doi.org/10.1016/j.jcrysgro.2004.11.052	*0.6*
4.	Bunoiu O., Defoort F., Santailler J.L., Duffar T., Nicoară I., Thermodynamic analyses of gases formed during the EFG sapphire growth process, Journal of Crystal Growth, Vol. 275, e1707-e1713, 2005 https://doi.org/10.1016/j.jcrysgro.2004.11.249	*0.6*
5.	Bunoiu O., Nicoară I., Duffar T., Solute distribution in shaped sapphire crystals obtained by EFG method, Journal of Optoelectronics and Advanced Materials, Vol. 7, Nr. 2, 615-618, 2005 https://old.joam.inoe.ro/arhiva/pdf7_2/Bunoiu.pdf	*0.1*
6.	Bunoiu O., Nicoară I., Santailler J.L., Theodore F., Duffar T., On the voids distribution and size in shaped sapphire crystals, Crystal Research and Technology, Vol 40, No. 9, 952-859, 2005 https://old.joam.inoe.ro/arhiva/pdf7_2/Bunoiu.pdf	*0.3*
7.	Bunoiu O.M., Duffar T., Nicoară I., Gas bubbles in shaped sapphire, Progress in Crystal Growth and Charact. of Materials, Vol. 56, No. 3-4, 123-145, 2010 https://doi.org/10.1016/j.pcrysgrow.2010.09.001	*1.442*
8.	Bunoiu M., Bica I., Magnetorheological elastomer based on silicone rubber, carbonyl iron and Rochelle salt: Effects of alternating electric and static magnetic fields intensities, Journal of Industrial and Engineering Chemistry, vol. 37, 312–318, 2016 https://doi.org/10.1016/j.jiec.2016.03.047	*0.606*
9.	Barvinschi P., Bunoiu O.M., A finite element method model to simulate the termal response of vascularized tissue to laser irradiation, Romanian Reports in Physics, Vol. 69, No. 3, 610, 2017 https://rrp.nipne.ro/2017/AN610.pdf	*0.242*
10.	Bunoiu M., Anitas E.M., Neamtu J., Bica I., Chirigiu L., Chirigiu L.M.E., Generation of Iron Nano-microparticles for Bio-medical Applications Using Plasma Processes, Revista de Chimie, Vol. 68, No. 6, 1204-1209, 2017 https://doi.org/10.37358/RC.17.6.5642	*0.057*
11.	Bunoiu M., Neamțu J., Chirigiu L., Bălășoiu M., Pascu G., Bica I., Chirigiu L.M.E., Hybrid Magnetorheological Elastomers: Effects of the magnetic field on some electrical properties, Applied Surface Science, Vol. 424, Part 3, Special Issue, 282-289, 2017 https://doi.org/10.1016/j.apsusc.2017.04.087	*0.588*
12.	Bica I., Bunoiu O.M., Magnetorheological Hybrid Elastomers Based on Silicone Rubber and Magnetorheological Suspensions with Graphene Nanoparticles: Effects of the Magnetic Field on the Relative Dielectric Permittivity and Electric Conductivity, International Journal of Molecular Sciences, Vol. 20, No. 17, Art. no. 4201, pp. 1-9, 2019 https://doi.org/10.3390/ijms20174201	*0.932*
13.	Bunoiu O.M., Matu G., Marin C.N., Malaescu I., Investigation of some thermal parameters of ferrofluids in the presence of a static magnetic field, Journal of Magnetism and Magnetic Materials, Vol. 498, Art. No. 166132, 2020 https://doi.org/10.1016/j.jmmm.2019.166132	*0.429*
14.	Bunoiu M., Anitas E.M., Pascu G., Chirigiu L.M.E., Bica I., Electrical and Magnetodielectric Properties of Magneto-Active Fabrics for Electromagnetic Shielding and Health Monitoring, International Journal of Molecular Sciences, Vol. 21, No. 13, 4785, 2020 https://doi.org/10.3390/ijms21134785	*0.943*
15.	Bunoiu M., Vlase G., Bica I., Balasoiu M., Pascu G., Vlase T., Study of Thermal Stability of Some Magnetorheological Elastomers, Romanian Reports in Physics, Romanian Reports in Physics, Vol. 73, 503, 2021 https://rrp.nipne.ro/2021/AN73503.pdf	*0.202*
16.	Pascu G., Bunoiu O.M., Bica I., Magnetic Field Effects Induced in Electrical Devices Based on Cotton Fiber Composites, Carbonyl Iron Microparticles and Barium Titanate Nanoparticles, Nanomaterials, Vol. 12, Art. No. 888, 2022 https://doi.org/10.3390/nano12050888	*0.738*
17.	Bunoiu M., Iacobescu G.E., Pascu G., Chirigiu L., Bica I., Magnetically Active Composites with Relatively Giant Dielectric Permittivity, Romanian Reports in Physics, Vol. 75, 503, 2023 https://doi.org/10.59277/RomRepPhys.2023.75.503	*0.184*
18.	Bunoiu O.M., Bica I., Anitas E.M., Chirigiu L.M.E., Magnetodielectric and Rheological Effects in Magnetorheological Suspensions Based on Lard, Gelatin and Carbonyl Iron Microparticles, Materials, Vol. 17, No. 16, 3941, 2024 https://doi.org/10.3390/ma17163941	*0.509*
Punctaj total indicator 2.2		**P = 8.802**

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Nr. publ. citată	Nr. publ. care citează	Referinţa bibliografică a publicaţiei care citează (Autori, Titlul, Revista, Vol., anul, pag.$_{inceput}$ -pag.$_{sfârşit}$)	c_i al publ. citate	n_i^{ef} al publ. citate	Punctaj $\frac{c_i}{n_i^{ef}}$
1.		Bunoiu O., Duffar T., Theodore F., Santailler J.L., Nicoară I., Numerical simulation of the flow field in shaped crystal growth process, Journal of Optoelectronics and Advanced Materials, vol. 2, no. 5, pp. 474-480, 2000 https://www.webofscience.com/wos/woscc/full-record/WOS:000165225700008	1	5	*0.2*
	autocit.	Bunoiu O., Duffar T., Theodore F., Santailler J.L., Nicoară I., Numerical simulation of the flow field and solute segregation in Edge-defined Film-fed Growth, Crystal Research and Technology, vol. 36, no. 7, pp. 707-717, 2001			
	fără IF	Srinivasan M., Ramasamy, P., Study of the Flow Properties using Simulation Modeling for the Melt Growth by Bridgman - Stockbarger Method, AIP Conference Proceedings, vol. 1512, pp. 900-901, 2013			
	1.	Srinivasan M., Ramasamy P., Computational Modelling on Heat Transfer Study of Molten Silicon During Multi-crystalline Silicon Growth Process for PV Applications, Silicon, vol. 9, no.1 (Special issue), pp. 7-16, 2017			
2.		Bunoiu O., Duffar T., Theodore F., Santailler J.L., Nicoară I., Numerical simulation of the flow field and solute segregation in Edge-defined Film-fed Growth, Crystal Research and Technology, vol. 36, no. 7, pp. 707-717, 2001 https://www.webofscience.com/wos/woscc/full-record/WOS:000170826400009	8	5	*1.6*
	autocit.	Bunoiu O., Nicoară I., Santailler J.L., Duffar T., Fluid flow and solute segregation in EFG crystal growth process, Journal of Crystal Growth, vol. 275, no. 1-2, pp. e799-e805, 2005			
	autocit.	Bunoiu O., Nicoară I., Duffar T., Solute distribution in shaped sapphire crystals obtained by EFG method, Journal of Optoelectronics and Advanced Materials, vol. 7, no. 2, pp. 615-618, 2005			
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	autocit.	Nicoară I., Bunoiu O.M., Vizman D., Voids engulfment in shaped sapphire crystals, Journal of Crystal Growth, vol. 287, no. 2, pp. 291-295, 2006			
	1.	Chenghai, X., Songhe, M., Mingfu, Z., Hongbo, Z., Guigen, W., Thermal stresses and cracks during the growth of large-sized sapphire with SAPMAC method, Chinese Journal of Aeronautics, vol. 20, no. 5, pp. 475-480, 2007			
	autocit.	Bunoiu O.M., Duffar T., Nicoară I., Gas bubbles in shaped sapphire, Progress in Crystal Growth and Characterization of Materials, vol. 56, no. 3-4, pp. 123-145, 2010			
	2.	Hur M.-J., Han X.-F., Choi H.-G., Yi K.-W., Crystal front shape control by use of an additional heater in a Czochralski sapphire single crystal growth system, Journal of Crystal Growth, vol. 474, pp. 24-30, 2017			
	3.	Borodin A.V., Borodin V.A., Numerical simulation of the distribution of individual gas bubbles in shaped sapphire crystals, Journal of Crystal Growth, vol. 478, pp. 180-186, 2017			
	4.	Vlad V.I., Baran V., Nicolin A.I., Mihalache D., The First Seventy Volumes of Romanian Reports in Physics: A Brief Survey of the Romanian Physics Community, Romanian Reports in Physics, vol., no. 1, art. no. 101, 2018			
	5.	Dolzhenkova E.F., Voloshin A.V., Lytvynov L.A. et al., Mechanical Characteristics of Sapphire Ribbons Grown Simultaneously by EFG Method, Crystal Research and Technology, Vol. 53, no. 2, art. no. 1700258, 2018			
	6.	Tran Phu Nguyen, Chen, Jyh-Chen, Effect of crucible and crystal rotations on the solute distribution in large size sapphire crystals during Czochralski growth, International Journal Of Heat And Mass Transfer, vol. 130, pp.1307-1321, 2019			
	7.	Wang S.Y., Yin Y.Q., Wang T., Wang N., Zhang J., Jia Z.T., Tao X.T., Anisotropic bubble defects and stress distribution in LuAG single-crystal fibers grown by the laser-heated pedestal growth method, CrystEngComm, vol. 24, no. 19, 3503-3510, 2023			
	8.	Nguyen T.P., Chen J.C., Effect of crucible and crystal rotations on the carbon concentration in large-size sapphire crystals during Czochralski growth, *Results in Engineering*, vol. 28, art. no. 107566, 2025.			

3.	Barvinschi F., Bunoiu O., Nicoară I., Nicoară D., Santailler J.L., Duffar T., Factors affecting the isotherm shape of semi-transparent BaF2 crystals grown by Bridgman method, Journal of Crystal Growth, vol. 237-239, pp. 1762-1768, 2002 https://www.webofscience.com/wos/woscc/full-record/WOS:000176581400026		10	5.5	*1.818*
	1.	Muller G., Friedrich J., Challenges in modeling of bulk crystal growth, Journal of Crystal Growth, vol. 266, no. 1-3, pp. 1-19, 2004			
	2.	Backofen R., Bilz T., Ribalta A., Voigt A., SPN-approximations of internal radiation in crystal growth of optical materials, Journal of Crystal Growth, vol. 266, no. 1-3, pp. 264-270, 2004			
	3.	Goldstein R.J., Eckert E.R.G., Ibele W.E., Patankar S.V., Simon T.W., Kuehn T.H., Strykowski P.J., Tamma K.K., Bar-Cohen A., Heberlein J.V.R., Davidson J.H., Bischof J., Kulacki F.A., Kortshagen, U., Garrick S., Srinivasan V., Heat transfer - A review of 2002 literature, International Journal of Heat and Mass Transfer, vol. 48, no. 5, pp. 819-927, 2005			
	4.	Borjini M.N., Abidi A., Ben Aissia H., Prediction of unsteady natural convection within A horizontal narrow annular space using the control-volume method, Numerical Heat Transfer; Part A: Applications, vol. 48, no. 8, pp. 811-829, 2005			
	5.	Backofen R., Ribalta A., Voigt A., Wulff-Molder D., BaF2 for microlithography applications: Modeling, simulation and optimization of the crystal growth process, Journal of Computational and Applied Mathematics, vol. 203 (Special Issue), pp. 362-375, 2007			
	6.	Stelian C., Numerical modeling of radiative heat transfer in Bridgman solidification of semi-transparent BaF2 crystals, Journal of Crystal Growth, vol. 306, no. 2, pp. 444-451, 2007			
	7.	Churilov A.V., Higgins W.M., Ostrogorsky A.G., Guido Ciampi, Edgar V. van Loef, Shariar Motakef, Matthew R. Overholt, Kanai S. Shah, Modeling and crystal growth of semitransparent rare earth halides, Journal of Crystal Growth, vol. 310, no. 7-9, pp. 2094-2098, 2008			
	8.	Barvinschi F., Stanculescu A., Stanculescu F., Heat transfer process during the crystallization of benzil grown by the Bridgman-Stockbarger method, Journal of Crystal Growth, vol. 317, no. 1, pp. 23-27, 2011			
	fără IF	Simona I., Toader D., Barvinschi F., Modern Education on Renewable Energies by Using Numerical Finite Element Method of a Solar Powered Stirling Engine with Heat Transfer Simulations, 12TH IEEE International Symposium on Electronics and Telecommunications (ISETC'16), pp. 137-140, 2016			
	9.	Ma W., Li L., Role of Internal Radiation in Oxide Crystal Growth by Heat Exchanger Method, Crystals, vol 7., no. 1, p. 18, 2017			
	10.	Buse G., Schornig C., Stef M., Poienar M., Tatomirescu D., Popescu A., Debray J., Motto-Ros V., Pelascini F., Vizman D., Veber P., Single crystal growth by the Bridgman-Stockbarger technique of CaF2-rich – TmF3 solid solutions: Evidence of mixed valence Tm$2+ and Tm3+ cations, Journal of Alloys and Compounds, vol. 1010, art. no. 177784, 2025.			
4.	Bunoiu O., Nicoară I., Santailler J.L., Duffar T., Fluid flow and solute segregation in EFG crystal growth process, Journal of Crystal Growth, vol. 275, pp. e799-e805, 2005 https://www.webofscience.com/wos/woscc/full-record/WOS:000208324600129		12	4	*3*
	autocit.	Nicoara I., Bunoiu O.M., Vizman D., Voids engulfment in shaped sapphire crystals, Journal of Crystal Growth, vol. 287, no. 2, pp. 291-295, 2006			
	fără IF	Niu Xin-huan; Lu Guo-qi; Zhang Wei-lian; et al., Dislocation of Cz-sapphire substrate for GaN growth by chemical etching method, TRANSACTIONS OF NONFERROUS METALS SOCIETY OF CHINA Volume: 16 Special Issue: 1 Pages: S187-S190 Part: A , 2006			
	fără IF	Braescu L., George T.F., Balint S., Evaluation and control of the dopant distribution in a Nd:LiNbO3 fiber grown from the melt by the edge-defined film-fed growth (EFG) method, Proceedings of SPIE - The International Society for Optical Engineering, vol. 6698, art. no. 669803, 2007			
	fără IF	Braescu L, George T.F., On the Critical Marangoni Numbers and Dopant Distribution in Silicon Fiber Grown From the Melt by the EFG Technique, Proceedings of the 10th WSEAS International Conference on Mathematical and Computational Methods in Science and Engineering (MACMESE'08), pp. 57-62, 2008			
	fără IF	George T.F., Braescu L., Sapphire fibers grown from the melt by the EFG technique: Dependence of the impurity distribution on temperature and surface tension gradients, Proceedings of SPIE - The International Society for Optical Engineering, vol. 7056, art. no. 705603, 2008			
	1.	Braescu L., Duffar T., Effect of buoyancy and Marangoni forces on the dopant distribution in a single crystal fiber grown from the melt by edge-defined film-fed growth (EFG) method, Journal of Crystal Growth, vol. 310, no. 2, pp. 484-489, 2008			
	2.	Braescu L., The dependence of the dopant distribution on the pulling rate and on the capillary channel radius in the case of a Nd:YVO4 cylindrical bar grown from the melt by EFG method, Materials Science and Engineering B: Solid-State Materials for Advanced Technology, vol. 146, no. 1-3, pp. 41-44, 2008			
	autocit.	Bunoiu O.M., Duffar T., Nicoara I., Gas bubbles in shaped sapphire, Progress in Crystal Growth and Characterization of Materials, vol. 56, no. 3-4, pp. 123-145, 2010			
	fără IF	Balint A.M., Balint S., Model Based Computation of the Impurity Distribution in a Sheet Grown from the Melt by the Edge-Defined Film-Fed Growth Technique, AIP Conference Proceedings (Proceedings of the TIM 2012 Physics Conferece), vol. 1564, pp. 96-102, 2013			

	3.	Li H., Ghezal E.A., Nehari A., Alombert-Goget G., Brenier A., Lebbou K., Bubbles defects distribution in sapphire bulk crystals grown by Czochralski technique, Optical Materials, vol. 35, pp. 1071-1076, 2013	
	fără IF	Balint A.M., Balint S., Jojart B., Model Based Computation of the Impurity Distribution in the Wall of a Tube Grown From the Melt by the Edge-Defined Film-Fed Growth Technique, AIP Conference Proceedings, vol. 1634, pp. 156-160, 2014	
	4.	Hur M.J., Han X.F., Choi H.G., Yi K.W., Crystal front shape control by use of an additional heater in a Czochralski sapphire single crystal growth system, Journal of Crystal Growth, vol. 474, pp. 24-30, 2017	
	5.	Yokota Y., Tetsuo K., Valery C., Ohashi Y., Kurosawa S., Kamada K., Zenf Z., Kawazoe Y., Yoshikawa A., Improvement of dopant distribution in radial direction of single crystals grown by micro-pulling-down method, Journal of Crystal Growth, vol. 474, pp. 178-182, 2017	
	6.	Mu W., Jia Z., Yin Y., Hu Q., Li Y., Tao X., Growth of homogeneous Nd:LGGG single crystal plates by edge-defined film-fed growth method, Journal of Crystal Growth, vol. 478, pp.17-21, 2017	
	7.	Borodin A.V., Borodin V.A., Numerical simulation of the distribution of individual gas bubbles in shaped sapphire crystals, Journal of Crystal Growth, vol. 478, pp. 180-186, 2017	
	8.	Tran Phu Nguyen, Chen, Jyh-Chen, Effect of crucible and crystal rotations on the solute distribution in large size sapphire crystals during Czochralski growth, International Journal Of Heat And Mass Transfer, vol. 130, pp.1307-1321, 2019	
	9.	Fu, Bo; Jia, Zhitai; Mu, Wenxiang; et al., A review of beta-Ga2O3 single crystal defects, their effects on device performance and their formation mechanism, Journal of Semiconductors, Volume: 40 Issue: 1 Special Issue: SI Article Number: 011804 Published: JAN 2019	
	10.	Wang Donghai; Hou Wentao; Li Na; et al., Defects and Optical Property of Single-crystal Sapphire Fibers Grown by Edge-defined Film-fed Growth Method, JOURNAL OF INORGANIC MATERIALS, Vol. 3 , No. 9, pp. 1053-1058, 2020	
	11.	Wollesen L., Nehari A., Labor S., Alombert-Goget G., Guignier D., Lebbou K., Bubble distribution in shaped sapphire grown from molybdenum crucibles using the micro-pulling down technique, CrystEngComm, vol. 27, no. 4, pp. 497-506, 2025.	
	12.	Nguyen T.P., Chen J.C., Effect of crucible and crystal rotations on the carbon concentration in large-size sapphire crystals during Czochralski growth, *Results in Engineering*, vol. 28, art. no. 107566, 2025.	
5.	Bunoiu O., Defoort F., Santailler J.L., Duffar T., Nicoară I., Thermodynamic analyses of gases formed during the EFG sapphire growth process , Journal of Crystal Growth, 275, e1707-e1713, 2005 https://www.webofscience.com/wos/woscc/full-record/WOS:000208324600276	14	5
	autocit.	Nicoara I., Bunoiu O.M., Vizman D., Voids engulfment in shaped sapphire crystals, Journal of Crystal Growth, vol. 287, no.2, pp. 291-295, 2006	
	1.	Vyshnevskiy S.D., Kryvonosov E.V., Lytvynov L.A.,Ultrasound effect on the Czochralski growth of corundum crystals, Inorganic Materials, vol. 45, no. 9, pp. 009-1012, 2009	
	autocit.	Bunoiu O.M., Duffar T., Nicoara I., Gas bubbles in shaped sapphire, Progress in Crystal Growth and Characterization of Materials, vol. 56, no. 3-4, pp. 123-145, 2010	
	2.	Zhang L., Zuo H., Zhou J., Sun J., Xing D., Han J., Haze in sapphire crystals grown by SAPMAC method, Crystal Research and Technoogy, vol. 46, no. 7, pp. 669 – 675, 2011	
	3.	Cho G.S., Choe K.H., Choi S.Y., Characterization of VPS-W coating layers on molybdenum after heat exposure, Materials Research Bulletin, vol. 48, pp. 5053–5057, 2013	
	4.	Kostomarov D.V., Behavior of the Mo-Al2O3 system in a controlled reducing atmosphere, Inorganic Materials, vol. 52, no. 4, pp. 367-371, 2016	
	5.	Hur M.-J., Han X.-F., Choi H.-G., Yi K.-W., Crystal front shape control by use of an additional heater in a Czochralski sapphire single crystal growth system, Journal of Crystal Growth, vol. 474, pp. 24-30, 2017	*2.8*
	6.	Vlad V.I., Baran V., Nicolin A.I., Mihalache D., The First Seventy Volumes of Romanian Reports in Physics: A Brief Survey of the Romanian Physics Community, Romanian Reports in Physics, vol., no. 1, art. no. 101, 2018	
	7.	Tran Phu Nguyen, Chen, Jyh-Chen, Effect of crucible and crystal rotations on the solute distribution in large size sapphire crystals during Czochralski growth, International Journal Of Heat And Mass Transfer, vol. 130, pp.1307-1321, 2019	
	8.	Yang, X.; Qiao, T.; Zhang, H.; et al., Research on image recognition and detection method of sapphire bubbles, JOURNAL OF INSTRUMENTATION, Volume: 14, Article Number: P12013 , 2019	
	9.	Mishchuk N.A., The effect of water cooling conditions on the mechanisms of porous ice formation, INTERNATIONAL JOURNAL OF HEAT AND MASS TRANSFER, Vol. 165,Part A, Art. No. 120612, 2021	
	10.	Tao YT, Derby JJ, The engulfment of a precipitated particle in a saturated melt during solidification, JOURNAL OF CRYSTAL GROWTH, Vol. 577, Art. No. 126400, 2022	
	11.	Wollesen L., Nehari A., Labor S., Alombert-Goget G., Guignier D., Lebbou K., Bubble distribution in shaped sapphire grown from molybdenum crucibles using the micro-pulling down technique, CrystEngComm, vol. 27, no. 4, pp. 497-506, 2025.	

	12.	Dossa S.S., Derby J.J., The suppression of volatilization via high pressure during melt crystal growth: Analysis via two models of the optical floating zone, *Journal of Crystal Growth*, vol. 668, art. no. 128288, 2025.			
	13.	Huang Y., Xiao X.F., Han X., Li J.H., Zhang Y., Si J.S., Liang S.J., Xu Q.Y., Zhang H., Ma L.L., Yang C., Zhang X.F., Properties of doped sapphire crystals and their optoelectronic applications, *Progress in Crystal Growth and Characterization of Materials*, vol. 71, no. 4, art. no. 100688, 2025.			
	14.	Wollesen L., Nehari A., Labor S., Alombert-Goget G., Guignier D., Lebbou K., Impact of graphite and alumina ceramic thermal insulation on the growth of undoped sapphire plates by micro-pulling down, Materials Research Bulletin, vol. 195, art. no. 113846, 2026.			
6.	Bunoiu O., Nicoară I., Duffar T., Solute distribution in shaped sapphire crystals obtained by EFG method, Journal of Optoelectronics and Advanced Materials, 7, 615-618, 2005 https://www.webofscience.com/wos/woscc/full-record/WOS:000228785700005		3	3	*1*
	autocit.	Nicoara I., Bunoiu O.M., Vizman D., Voids engulfment in shaped sapphire crystals, Journal of Crystal Growth, vol. 287, no. 2, pp. 291-295, 2006			
	autocit.	Bunoiu O.M., Duffar T., Nicoara I., Gas bubbles in shaped sapphire, Progress in Crystal Growth and Characterization of Materials, vol. 56, no. 3-4, pp. 123-145, 2010			
	1.	Lee W.J., Lee Y.C., Jo H.H., Park Y.H., Effect of crucible geometry on melt convection and interface shape during Kyropoulos growth of sapphire single crystal, Journal of Crystal Growth, vol. 324, no. 1, pp. 248.-254, 2011			
	2.	Zhang L., Zuo H., Zhou J., Sun J., Xing D., Han J., Haze in sapphire crystals grown by SAPMAC method, Crystal Research and Technoogy, vol. 46, no. 7, pp. 669 – 675, 2011			
	fără IF	Dallaeva, D.; Ramazanov, S.; Prokopyeva, E.; et al., Local topography of optoelectronic substrates prepared by dry plasma etching process, OPTICS AND MEASUREMENT CONFERENCE 2014 Book Series: Proceedings of SPIE Volume: 9442 Article Number: 944208 Published: 2015			
	3.	Zermout S., Mokhtari F., Nehari A. et al., Numerical study on the effect of additional resistive heating and crystal rotation on sapphire single crystals (Al2O3) grown by the Kyropoulos method, CRYSTENGCOMM, vol. 20, no. 5, pp. 5220-5227, 2018			
7.	Bunoiu O., Nicoară I., Santailler J.L., Theodore F., Duffar T., On the void distribution and size in shaped sapphire crystals, Crystal Research and Technology, 40, 952-859, 2005 https://www.webofscience.com/wos/woscc/full-record/WOS:000232055100005		14	5	*2.8*
	1.	Xu, C.H., Zhang, M.F., Meng, S.H., Temperature field design, process analysis and control of SAPMAC method for the growth of large size sapphire crystals, Crystal Research and Technology, vol. 42, pp. 751-757, 2007			
	2.	Yao T., Han J.-C., Zuo H.-B. et. al., Bubble formation in sapphire single crystals, Journal of Inorganic Materials, vol. 23, pp. 439-442, 2008			
	3.	Borodin A.V., Kamynina V.E., Frantsev D.N. et al., Study of the effect of crystallization parameters on gaseous inclusions in sapphire ribbons grown by the Stepanov method, Crystallography Reports, vol. 54, pp. 669-674, 2009			
	autocit.	Bunoiu O.M., Duffar T., Nicoara I., Gas bubbles in shaped sapphire, Progress in Crystal Growth and Characterization of Materials, vol. 56, no. 3-4, pp. 123-145, 2010			
	4.	Zhang L., Zuo H., Zhou J. et. al., Haze in sapphire crystals grown by SAPMAC method, Crystal Research and Technology, vol. 46, pp. 669 – 675, 2011			
	5.	Ghezal E.A., Li H., Nehari A. et al., Effect of Pulling Rate on Bubbles Distribution in Sapphire Crystals Grown by the Micropulling Down (mu-PD) Technique, Crystal Growth and Design, vol. 12, pp. 4098-4103, 2012			
	6.	Li H., Ghezal E.A., Nehari A., et.al., Bubbles defects distribution in sapphire bulk crystals grown by Czochralski technique, Optical Materials, vol. 35, pp. 1071–1076, 2013			
	7.	Krymov V.M., Nosov Y.G., Bakholdin S.I., Maslov V.N., Shul'pina I.L., Nikolaev V.I., Blocks and residual stresses in shaped sapphire single crystals, Journal of Crystal Growth, vol. 457 (Special Issue), pp. 314-319, 2017			
	8.	Vlad V.I., Baran V., Nicolin A.I., Mihalache D., The First Seventy Volumes of Romanian Reports in Physics: A Brief Survey of the Romanian Physics Community, Romanian Reports in Physics, vol. 70, no. 1, art. no. 101, 2018			
	fără IF	Zhai, J. P.; Jiang, J. W.; Liu, K. G.; et al., Study on the temperature field of large-sized sapphire single crystal furnace, 2nd International Conference On New Material And Chemical Industry (NMCI2017), IOP Conference Series-Materials Science and Engineering, Vol. 292, Article Number: UNSP 012099, 2018			
	fără IF	Liu, B.; Yu, Y.; Bera, S.; et al., Study of the Molten Zone Profile and Defect Formation during Laser Heated Pedestal Growth, SPIE MICRO- AND NANOTECHNOLOGY SENSORS, SYSTEMS, AND APPLICATIONS XI Book Series: Proceedings of SPIE, Volume: 10982, Article Number: 109822K, 2019			
	9.	Yuan, Dongsheng; Villora, Encarnacion G.; Shimamura, Kiyoshi, Regular hexagonal-prism microvoids in CeF3 single crystals, JOURNAL OF CRYSTAL GROWTH, Volume: 5 , Article Number: 126024, 2021			
	10	Liu, X.D., Ma, H.S., Wang, L., Hu, Y.Q., Sun, X.D., Growth of TiO2 single crystals by the Verneuil method at different gas flow ratio, Journal of Crystal Growth, vol. 623, art. no. 127403, 2023.			

03.06.2026

	11	Chen, C.M., Yang, R.X., Sun, N.F., Wang, S.J., Shi, Y.L., Li, X.L., Wang, Y., Shao, H.M., Bu, A.M., Liu, H.S., Zhang, X.D., Jiang, J., Li, Y.Q., Zhao, H.F., Kang, Y., Xue, J., Zhang, X., Gu, W.X., Phosphorus escaping phenomena during the growth of InP crystal by in-situ liquid-encapsulated Czochralski method and P-rich-related defects in InP crystal, Journal of Materials Science-Materials in Electronics, vol. 34, no. 27, art. no. 1851, 2023.			
	12	Dolganova, I.N., Zotov, A.K., Rossolenko, S.N., Shikunova, I.A., Shikunov, S.L., Dolganov, K.B., Zaytsev, K.I., Kurlov, V.N., Manufacturing of Sapphire Crystals with Variable Shapes for Cryosurgical Applications, Crystals, vol. 14, no. 4, art. no. 346, 2024.			
	13.	Wollesen L., Nehari A., Labor S., Alombert-Goget G., Guignier D., Lebbou K., Impact of graphite and alumina ceramic thermal insulation on the growth of undoped sapphire plates by micro-pulling down, *Materials Research Bulletin*, vol. 195, art. no. 113846, 2026.			
	14.	Wang D.Y., Jiang J.W., Liu K.G., Ruan S.C., Zhai J.P., Research on the Effect of Surface Roughness of Molybdenum Shield on the Sapphire Crystal Growth, *Integrated Ferroelectrics*, vol. 242, no. 1, pp. 36–46, 2026.			
8.	Nicoară I., Bunoiu O., Vizman D., Voids engulfment in shaped sapphire crystals, Journal of Crystal Growth, 287, 2006, 291-295 https://www.webofscience.com/wos/woscc/full-record/WOS:000235071600017		15	3	*5*
	fără IF	Fang, H., Zheng, L., Zhang, H., Control of flow pattern and solidification interface shape in an induction heated Czochralski crystal growth system, Proceedings of the ASME/JSME Thermal Engineering Summer Heat Transfer Conference 2007, vol. 3, pp. 159-167, 2007			
	1.	Oliete, P.B., Peña, J.I., Study of the gas inclusions in Al2O3/Y3Al5O12 and Al2O3/Y3Al5O12/Zr O2 eutectic fibers grown by laser floating zone, Journal of Crystal Growth, vol. 304, pp. 514-519, 2007			
	fără IF	Fang, H., Zheng, L., Zhang, H., et. al., A novel method for melt flow control and inclusion suppression in optical crystal growth, Proceedings of the ASME International Mechanical Engineering Congress and Exposition, vol. 8, pp. 1797-1810, 2008			
	2.	Fang H., Zheng L., Zhang H., et. al., Reducing Melt Inclusion by Submerged Heater or Baffle for Optical Crystal Growth, Crystal Growth and Design, vol. 8, pp. 1840–1848, 2008			
	3.	Zhang H., Fang H.S.,.Zheng L.L, et. al. , Nd:YVO4 crystal growth by Czochralski technique with a submerged plate, Journal of Crystal Growth, vol. 31, pp. 4652-4659, 2009			
	4.	Zhang, L., Zuo H., Zhou J., et. al., Haze in sapphire crystals grown by SAPMAC method, Crystal Research and Technology, vol. 46, pp. 669 – 675, 2011			
	5.	Ghezal E.A., Li H., Nehari A., et al., Effect of Pulling Rate on Bubbles Distribution in Sapphire Crystals Grown by the Micropulling Down (mu-PD) Technique, Crystal Growth and Design, vol. 12, pp. 4098-4103, 2012			
	6.	Ghezal E.A., Nehari A., Lebbou K., Duffar T., Observation of gas bubble incorporation during micropulling-down growth of sapphire, Crystal Growth and Design, vol. 12, pp. 5715-5719, 2012			
	7.	Li, H., Ghezal, E.A., Nehari, A., et.al., Bubbles defects distribution in sapphire bulk crystals grown by Czochralski technique, Optical Materials, vol. 35, pp. 1071–1076, 2013			
	8.	Taishi, T., Kobayashi, T., Shinozuka, et. al., Morphology and formation mechanism of metallic inclusions in VB-grown sapphire crystals, Journal of Crystal Growth, vol. 401, pp. 388-391, 2014			
	9.	Hur M.J., Han X.F., Choi H.G., Yi K.W., Crystal front shape control by use of an additional heater in a Czochralski sapphire single crystal growth system, Journal of Crystal Growth, Journal of Crystal Growth, vol. 474, pp. 24-30, 2017			
	fără IF	Zhai, J. P.; Jiang, J. W.; Liu, K. G.; et al., Study on the temperature field of large-sized sapphire single crystal furnace, 2nd International Conference On New Material And Chemical Industry (NMCI2017), IOP Conference Series-Materials Science and Engineering, Vol. 292, Article Number: UNSP 012099, 2018			
	10.	Tao YT, Derby JJ, The engulfment of a precipitated particle in a saturated melt during solidification, JOURNAL OF CRYSTAL GROWTH, Vol. 577, Art. No. 126400, 2022			
	11.	Wang S.Y., Yin Y.Q., Wang T., Wang N., Zhang J., Jia Z.T., Tao X.T., Anisotropic bubble defects and stress distribution in LuAG single-crystal fibers grown by the laser-heated pedestal growth method, CrystEngComm, vol. 24, no. 19, 3503-3510, 2023			
	12.	Argunova, T.S., Kohn, V.G., Lim, J.H., Krymov, V.M., Martyushov, S.Yu., Study of Structural Defects in Sapphire Ribbons using X-Ray Topography and Coherent Imaging in Synchrotron Radiation, Journal of Surface Investigation, vol. 17, suppl. 1, pp. S20-S27, 2023.			
	13.	Wollesen L., Nehari A., Labor S., Alombert-Goget G., Guignier D., Lebbou K., Bubble distribution in shaped sapphire grown from molybdenum crucibles using the micro-pulling down technique, CrystEngComm, vol. 27, no. 4, pp. 497-506, 2025.			
	14.	Wang R.X., Zhang Q.L., Yang M.L., He Y., Wang X.F., Sun Y., Transport of bubbles at the melt/crystal interface during YAG crystal growth, *Optical Materials*, vol. 169, art. no. 117498, 2026.			
	15.	Wollesen L., Nehari A., Labor S., Alombert-Goget G., Guignier D., Lebbou K., Coloration and bubble distribution in ruby fibers grown by the micro-pulling down technique, *Materials Today Communications*, vol. 51, art. no. 114905, 2026.			
9.	Nicoară I., Pecingina-Gârjoaba N., Bunoiu O., Concentration distribution of Yb2+ and Yb3+ ions in YbF3:CaF2 crystals, Journal of Crystal Growth, 310, 2008, 1476-1481 https://www.webofscience.com/wos/woscc/full-record/WOS:000255843200033		22	3	*7.333*

	1.	Kiselev Yu.M., On matrix stabilisation of d- and f-transition metal ions in unstable oxidation states,Russian Chemical Reviews, vol. 78, pp. 1–20, 2009	
	2.	Mouchovski J.T., Temelkov K.A., Vuchkov N.K., The growth of mixed alkaline-earth fluorides for laser host applications, Progress in Crystal Growth and Characterization of Materials, vol. 57, pp. 1-41, 2011	
	3.	Buse, G., Preda, E., Stef, M., Nicoara, I., Influence of Yb3+ ions on the optical properties of double-doped Er,Yb : CaF2 crystals, Physica Scripta, vol. 83, art. no. 025604, 2011	
	4.	Lyberis, A., Patriarche, G., Gredin, P., et. al., Origin of light scattering in ytterbium doped calcium fluoride transparent ceramic for high power lasers, Journal of the European Ceramic Society, vol. 31, pp. 1619-1630, 2011	
	fără IF	Fedorov, P.P., Osiko, V.V., Kuznetsov, S.V., Garibin, E.A., Fluoride laser nanoceramics, Journal of Physics Conference Series, vol. 345, art. no. 012017, 2012	
	5.	Xia, C., Zhou, G., Han, Y., et. al., Luminescence of Yb 2+, Yb 3+ co-doped silica, Optical Materials, vol. 34, pp. 769-771, 2012	
	fără IF	Fedorov, P.P., Fluoride laser ceramics, Handbook of Solid-State Lasers: Materials, Systems and Applications, Book Series: Woodhead Publishing Series in Electronic and Optical Materials, vol. 35, pp. 82-109, 2013	
	6.	Shen, Y., Sheng, Q., Liu, S., et. al., Effect of aluminum co-doping on the formation of Yb2+ in Ytterbium-doped high silica glass, Chinese Optics Letters, vol. 11, art. no. 051601, 2013	
	7.	Shcheulin, A.S., Angervaks, A.E., Semenova, T.S., et. al., Additive colouring of CaF2:Yb crystals: Determination of Yb 2+ concentration in CaF2:Yb crystals and ceramics, Applied Physics B: Lasers and Optics, vol 111, pp. 551-557, 2013	
	8.	Xia, C., Zhou, G., Han, Y., et. al., Investigation on preparation and spectroscopic properties of Yb 2+-doped silica-based glass prepared by the oxyhydrogen flame fusing process, Optical Materials, vol. 35, pp. 2561-2564, 2013	
	autocit.	Nicoara, I., Buse, G., Bunoiu, M., Segregation coefficient of Yb3+ and Yb2+ Ions in YbF3 Doped BaF2 Crystals, AIP Conference Proceedings (TIM 2013 Physics Conference, Timisoara), vol 1634, pp. 111-114, 2014	
	fără IF	Fedorova A.A., Arkhipenko S.Y., Fatula E.R., Chikov N.P., Sorokina N.M., Morozov I.V., The novel method of synthesis of solid solutions Ln(x)Ca(1-x)F(2+x) (Ln=Yb,Nd) using beta-cyclodextrin, Procedia Chemistry (1st International Symposium on Inorganic Fluorides: Chemistry and Technology, ISIF 2014), vol. 11, pp. 20-25, 2014	
	9.	Wang, S., Lou, F., Yu, C., et. al., Influence of Al3+ and P5+ ion contents on the valence state of Yb3+ ions and the dispersion effect of Al3+ and P5+ ions on Yb3+ ions in silica glass, Journal of Materials Chemistry C, vol. 2, pp. 4406-4414, 2014	
	10.	Angervaks, A.E., Shcheulin, A.S., Ryskin, A.I., et. al., Di- and trivalent ytterbium distributions along a melt-grown CaF 2 crystal, Inorganic Materials, vol. 50, 733-737, 2014	
	11.	Bae, Sang-Eun, et al., Investigation of the Electrochemical Behavior of Ytterbium Cations in LiCl-KCl Melt Using Spectro-Electrochemical Methods, Journal of The Electrochemical Society, vol. 163, pp. H115-H118, 2016	
	12.	Hughes-Currie, R.B., Ivanovskikh, K.V., Wells, J.P.R., The determination of dopant ion valence distributions in insulating crystals using XANES measurements, Journal of Physics- Condensed, vol. 28, art. no. 135502, 2016	
	13.	Pavel P. Fedorov, Comment on the paper by T. K. Thirumalaisamy, R. Saravanan, S. Saravanakumar "The redistribution of charge density in CaF2:Yb3+", J. Mater Sci: Mater Electron, v. 26, p. 6683 (2015), Journal of Materials Science: Materials in Electronics, vol. 27, no. 7, pp. 7722–7723, 2016	
	14.	Assadi, A. A.; Herrmann, A.; Damak, K.; et al., Spectroscopic properties of Yb2+ in aluminosilicate glass, International Journal of Applied Glass Science, vol. 8, no. 3 (SI), pp. 322-328, 2017	
	15.	Torimoto, Aya; Masai, Hirokazu; Okada, Go; et al., Emission properties of Ce-doped alkaline earth borate glasses for scintillator applications, Optical Materials, vol. 73, pp. 517-522, 2017	
	16.	Dwiwedi Y., Rai S.B., Multicolour emission from surface crystallized Sm:Yb codoped spherulites rooted in borate matrix, Journal of Luminescence, vol. 194, pp. 401–406, 2018	
	17.	Torimoto A., Masai H., Okada G., et al., Correlation between emission properties, valence states of Ce and chemical compositions of alkaline earth borate glasses, Journal of Luminescence, vol. 197, pp. 98-103, 2018	
	18.	Stef M., Nicoara I., Vizman D., Distribution of Yb3+ and Yb2+ Ions along YbF3-Doped BaF2 Crystals, Crystal Research and Technology, vol. 53, no. 12, art. No. 1800186, 2018	
	19.	Jiang, Binbin; Zheng, Lihe; Jiang, Dapeng; et al., Growth and optical properties of ytterbium and rare earth ions codoped CaF2-SrF2 eutectic solid-solution (RE = Y3+, Gd3+, La3+), JOURNAL OF RARE EARTHS, Volume: 3, Issue: 4, pp. 390-397, 2021	
	20.	Nalumaga H, Schuyt JJ, Breukers RD, Williams GVM, Radiation-induced changes in the photoluminescence properties of NaMgF3:Yb nanoparticles: Yb3+ -> Yb2+ valence conversion and oxygen-impurity charge transfer, MATERIALS RESEARCH BULLETIN, Vol. 145, Art. No. 111562, 2022	
	21.	Khadiev A., Akhmetov N., Korableva S., Morozov O., Nizamutdinov A., Semashko V., Pudovkin M., Gafurov M., The Impact of BiF3 Doping on the Yb3+ to Yb2+ Reduction during the LiYE4:Yb3+ Crystal-Growth Process, vol. 5, no. 4, 1198-1206, 2022	

	22.	Gracie, P.J., Yasmin, Geetha, D., Structural and optical investigations of RE^{3+}: Yb, Er, Sm, Nd, Ce-doped multi-functional silica glasses for photonic applications, Journal of Physics D: Applied Physics, vol. 57, no. 20, art. no. 205101, 2024.			
10.	Stef M., Bunoiu O., Paraschiva M., Pruna A., Nicoara I., Segregation coefficient of Pb2+ ions in CaF2 Crystals, AIP Conference Proceedings, 1131, 2009, 112-116 https://www.webofscience.com/wos/woscc/full-record/WOS:000269972500020		0	5	*0*
11.	Lungu M., Neculae A., Bunoiu M., Some considerations on the dynamics of nanometric suspensions in fluid media, AIP Conference Proceedings, 1131, 2009, 164-168 https://www.webofscience.com/wos/woscc/full-record/WOS:000269972500030		0	3	*0*
	autocit.	Lungu M., Neculae A., Bunoiu M., Strambeanu N., Some Considerations on the Nanoparticles Manipulation in Fluid Media Using Dielectrophoresis, Romanian Journal of Physics, vol. 56, pp. 749-756, 2011			
	autocit.	Lungu M., Neculae A., Bunoiu M., Some considerations on the dielectrophoretic manipulation of nanoparticles in fluid media, Journal of Optoelectronics and Advanced Materials, vol. 12, pp. 2423-2426, 2010			
12.	Bunoiu O.M., Duffar T., Nicoară I., Gas bubbles in shaped sapphire, Progress in Crystal Growth and Charact. of Materials, 56, 2010, 123-145 https://www.webofscience.com/wos/woscc/full-record/WOS:000286083500001		41	3	*11*
	1.	Zhang L., Zuo H., Zhou J., Sun J., Xing D., Han J., Haze in sapphire crystals grown by SAPMAC method, Crystal Research and Technology, vol. 46, pp. 669 – 675, 2011			
	2.	Ghezal E.A., Li H., Nehari A., et al., Effect of Pulling Rate on Bubbles Distribution in Sapphire Crystals Grown by the Micropulling Down (mu-PD) Technique, Crystal Growth and Design, vol. 12, pp. 4098-4103, 2012			
	3.	Ghezal E.A., Nehari A., Lebbou K., Duffar T., Observation of gas bubble incorporation during micropulling-down growth of sapphire, Crystal Growth and Design, vol. 12, pp. 5715-5719, 2012			
	4.	Fang H., Tian J., Zhang Q., et. al., Study of melt convection and interface shape during sapphire crystal growth by Czochralski method, International Journal of Heat and Mass Transfer, vol. 55, pp. 8003-8009, 2012			
	fără IF	Fang H.S., Zheng L.L., Zhang Q.J., Wang S., Pan Y.Y., To control interface shape and to reduce thermal stress during CZ-growth of sapphire single crystal, Proceedings Of The Asme International Mechanical Engineering Congress And Exposition - 2012, vol. 7, pts. A-D, pp. 117-124, 2012			
	5.	Fang H.S., Pan Y.Y., Zheng, L.L, et. al., To investigate interface shape and thermal stress during sapphire single crystal growth by the Cz method, Journal of Crystal Growth, vol. 363, pp. 25–32, 2013			
	6.	Li H., Ghezal E.A., Nehari A., et.al., Bubbles defects distribution in sapphire bulk crystals grown by Czochralski technique, Optical Materials, vol. 35, pp. 1071–1076, 2013			
	7.	Fang, H., Zhang, Z., Jin, Z., et. al., Characteristics of melt convection during kyropoulos sapphire crystal growth, International Journal of Materials Research, vol. 105, pp. 961-967, 2014			
	8.	Li H., Ghezal E.A., Nehari A., et. al., Qualitative and quantitative bubbles defects analysis in undoped and Ti-doped sapphire crystals grown by Czochralski technique, Optical Materials, vol. 37, 132-138, 2014			
	9.	Fang H.S., Zhang Q.J., Tian J., et. al., Study of internal radiation with solute inclusions during Czochralski sapphire crystal growth, International Journal of Heat and Mass Transfer, vol. 79, pp. 783-789, 2014			
	10.	Fang, H.S., Lin, J.Z., Zheng, L.L., Huang, X.M., Analysis and optimization of Czochralski laser oxide crystal growth. International Journal of Heat and Mass Transfer, 85, 2015, 505-512			
	11.	Zhou D., Xia C., Guyot Y., Zhong J., Xu X., Feng S., Lebbou K. Growth and spectroscopic properties of Ti-doped sapphire single-crystal fibers. Optical Materials, vol. 47, pp. 495-500, 2015			
	12.	Tandjaoui A., Cherif M., Carroz L., Sanchez J., Reboud R., Garnier C., Duffar T., Investigation of liquid oxide interactions with refractory substrates via sessile drop method, Journal of Materials Science, HTC 2015, vol. 51, pp. 1701-1712, 2016			
	13.	Iskhakova L.D., Kashin V.V., Lavrishchev S.V., Rusanov S.Y., Seregin V.F., Tsvetkov V.B., Facet Appearance on the Lateral Face of Sapphire Single-Crystal Fibers during LHPG Growth, Crystals, vol. 6, no. 9, art. no. 101, 2016			
	fără IF	Deville S., Understanding the Freezing of Colloidal Suspensions: Crystal Growth and Particle Redistribution, Freezing Colloids: Observations, Principles, Control, and Use: Applications in Materials Science, Life Science, Earth Science, Food Science, and Engineering, Book Series: Engineering Materials and Processes, pp. 91-170, 2017			
	14.	Arhipov P., Tkachenko S., Galenin E., Gerasymov Ia., Sidletskiy O., Kudin K., Lebbou, K., Concentration and composition of gas inclusions in some oxide crystals, Journal of Crystal Growth, vol. 459, pp. 189-193, 2017			
	15.	Hur M.J., Han X.F., Choi H.G., Yi K.W., Crystal front shape control by use of an additional heater in a Czochralski sapphire single crystal growth system, Journal of Crystal Growth, vol 474, pp. 24-30, 2017			
	16.	Borodin A.V., Borodin V.A., Numerical simulation of the distribution of individual gas bubbles in shaped sapphire crystals, Journal of Crystal Growth, vol. 478, pp. 180-186, 2017			

	17.	Dolzhenkova E.F., Voloshin A.V., Lytvynov L.A. et al., Mechanical Characteristics of Sapphire Ribbons Grown Simultaneously by EFG Method, Crystal Research and Technology, Vol. 53, no. 2, art. no. 1700258, 2018	
	18.	Dedovets D.; Monteux C., Deville S., Five-dimensional imaging of freezing emulsions with solute effects, Science, vol. 360, no. 6386, pp. 303-306, 2018	
	19.	Argunova, T. S.; Kohn, V. G., Study of micropores in single crystals by in-line phase contrast imaging with synchrotron radiation, PHYSICS-USPEKHI, Volume: 62 Issue: 6 Pages: 602-616 Published: 2019	
	fără IF	Liu, B.; Yu, Y.; Bera, S.; et al., Study of the Molten Zone Profile and Defect Formation during Laser Heated Pedestal Growth, SPIE MICRO- AND NANOTECHNOLOGY SENSORS, SYSTEMS, AND APPLICATIONS XI Book Series: Proceedings of SPIE Volume: 10982 Article Number: 109822K Published: 2019	
	fără IF	Vasil'ev, M. G.; Bakholdin, S. I.; Krymov, V. M., Study of influence of volumetric radiating overcooling of a melt on the form of front of crystallization by means of numerical modeling processes of heat transfer at growth of sapphire crystals from the melt, Journal of Physics Conference Series, Vol. 1400, Art. no. 044035, 2019	
	20.	Tran Phu Nguyen, Chen, Jyh-Chen, Effect of crucible and crystal rotations on the solute distribution in large size sapphire crystals during Czochralski growth, International Journal Of Heat And Mass Transfer, vol. 130, pp.1307-1321, 2019	
	21.	Yang, X.; Qiao, T.; Zhang, H.; et al., Research on image recognition and detection method of sapphire bubbles, JOURNAL OF INSTRUMENTATION, Volume: 14, Article Number: P12013 , 2019	
	22.	Liu, Yu; Qiao, Tiezhu; Yang, Yi; et al., The MIVD method of optimal seeding state detection using image processing technology for sapphire crystal growth via the Kyropoulos method, MEASUREMENT, Volume: 151, Article Number: 107186, 2020	
	23.	Tyagi S., Monteux C., Deville S., Multiple objects interacting with a solidification front, SCIENTIFIC REPORTS, Vol. 11, No. 1, Art. No. 3513	
	24.	Katyba G.M., Zaytsev K.I., Dolganova I.N., Chernomyrdin N.V., Ulitko V.E., Rossolenko S.N., Shikunova I.A., Kurlov V.N.,Sapphire waveguides and fibers for terahertz applications, PROGRESS IN CRYSTAL GROWTH AND CHARACTERIZATION OF MATERIALS, Vol. 67, No. 3, Art. No. 100523, 2021	
	25.	Tao YT, Derby JJ, The engulfment of a precipitated particle in a saturated melt during solidification, JOURNAL OF CRYSTAL GROWTH, Vol. 577, Art. No. 126400, 2022	
	26.	Wang S.Y., Yin Y.Q., Wang T., Wang N., Zhang J., Jia Z.T., Tao X.T., Anisotropic bubble defects and stress distribution in LuAG single-crystal fibers grown by the laser-heated pedestal growth method, vol. 24, no. 19, 3503-3510, 2023	
	27.	Tyagi S., Monteux C., Deville S., Solute effects on the dynamics and deformation of emulsion droplets during freezing, Soft Mattter, vol. 18, no. 21, 4178-4188, 2022	
	28.	Argunova, T.S., Kohn, V.G., Krymov, V.M., Study of defects in shaped sapphire crystals by synchrotron X-ray phase contrast imaging, St. Petersburg Polytechnic University Journal: Physics and Mathematics, vol. 16, no. 1, part 1, pp. 146-152, 2023.	
	29.	Chen, C.M., Yang, R.X., Sun, N.F., Wang, S.J., Shi, Y.L., Li, X.L., Wang, Y., Shao, H.M., Bu, A.M., Liu, H.S., Zhang, X.D., Jiang, J., Li, Y.Q., Zhao, H.F., Kang, Y., Xue, J., Zhang, X., Gu, W.X., Phosphorus escaping phenomena during the growth of InP crystal by in-situ liquid-encapsulated Czochralski method and P-rich-related defects in InP crystal, Journal of Materials Science-Materials in Electronics, vol. 34, no. 27, art. no. 1851, 2023.	
	30.	Meijer J.G., Rocha D., Linnenbank A.M., Diddens C., Lohse D., Enhanced bubble growth near an advancing solidification front, Journal of Fluid Mechanics, vol. 996, article no. A22, 2024.	
	31.	Bai J.Y., Xu M.X., Liu H.J., Wei L.N., Liu B.A., Zhang L.S., Ren H.K., Wang S.L., Xu X.G., Sun X., The characteristics of "hair" inclusions in large aperture KDP/DKDP crystals and their impact on laser damage, Optics and Laser Technology, vol. 181, part B, art. no. 111889, 2025.	
	32.	Wollesen L., Nehari A., Labor S., Alombert-Goget G., Guignier D., Lebbou K., Bubble distribution in shaped sapphire grown from molybdenum crucibles using the micro-pulling down technique, CrystEngComm, vol. 27, no. 4, pp. 497-506, 2025.	
	33.	Xuan, L.L., Duffar, T., The growth of titanium doped sapphire for laser application, Progress in Crystal Growth and Characterization of Materials, vol. 71, no. 2, Art. No. 100666, 2025	
	34.	Wang Y.B., Tang S.Y., Wang Z.D., Ding Y.F., Fiadziushkin H., Ghiami A., Hoffmann-Eifert S., Heuken M., Vescan A., Kalisch H., Water-assisted multistep MOCVD for wafer-scale layer-by-layer growth of WSe_2, *MRS Bulletin*, vol. 50, no. 11, pp. 1283–1295, 2025.	
	35.	Nguyen T.P., Chen J.C., Effect of crucible and crystal rotations on the carbon concentration in large-size sapphire crystals during Czochralski growth, *Results in Engineering*, vol. 28, art. no. 107566, 2025.	
	36.	Huang Y., Xiao X.F., Han X., Li J.H., Zhang Y., Si J.S., Liang S.J., Xu Q.Y., Zhang H., Ma L.L., Yang C., Zhang X.F., Properties of doped sapphire crystals and their optoelectronic applications, *Progress in Crystal Growth and Characterization of Materials*, vol. 71, no. 4, art. no. 100688, 2025.	
	37.	Wollesen L., Nehari A., Labor S., Alombert-Goget G., Guignier D., Lebbou K., Impact of graphite and alumina ceramic thermal insulation on the growth of undoped sapphire plates by micro-pulling down, *Materials Research Bulletin*, vol. 195, art. no. 113846, 2026.	

	38.	Wollesen L., Nehari A., Labor S., Alombert-Goget G., Guignier D., Lebbou K., Coloration and bubble distribution in ruby fibers grown by the micro-pulling down technique, *Materials Today Communications*, vol. 51, art. no. 114905, 2026.			
	39.	Pruneau N., Mokhtari F., Nehari A., Jandot R., Nouri A., Boucheikha O., Lebbou K., Bubble behavior in titanium doped sapphire crystals: from micro to macro scale, *CrystEngComm*, vol. 28, no. 14, 2026.			
	40.	Mokhtari F., Wollesen L., Nehari A., Lebbou K., Experimental and Numerical Analysis on Bubble Behavior in Sapphire Rods grown by Micro-Pulling-Down, *Materials Research Bulletin*, vol. 197, art. no. 113933, 2026.			
	41	Isabella B., Monteux C., Deville S., Coupled gas and bubble dynamics at the solidification front, *Materialia*, vol. 47, art. no. 102749, 2026.			
13.	Neculae A., Bunoiu O.M., Lungu M., Numerical simulation of bioparticle manipulation using dielectrophoresis, AIP Conference Proceedings, 1262, 2010, 144-149 https://www.webofscience.com/wos/woscc/full-record/WOS:000287169800022		0	3	*0*
14.	Paraschiva M., Nicoară I., Ștef M., Bunoiu O. M., Distribution of Pb2+ Ions in PbF2-Doped CaF2 Crystals, Acta Physica Polonica A, 117, 2010, 466-470 https://www.webofscience.com/wos/woscc/full-record/WOS:000276776200007		8	4	*2*
	1.	Huang C.H., Chen T.M., Cheng B.M., Luminescence investigation on ultraviolet-emitting rare-earth-doped phosphors using synchrotron radiation, Inorganic Chemistry, vol. 50, pp. 6552-6556, 2011			
	autocit.	Nicoara I., Buse G., Bunoiu M., Segregation coefficient of Yb3+ and Yb2+ Ions in YbF3 Doped BaF2 Crystals, AIP Conference Proceedings (TIM 2013 Physics Conference, Timisoara), vol. 1634, pp. 111-114, 2014			
	2.	Asadian M., Saeedi H., Yadegari M., Shojaee M., Determinations of equilibrium segregation, effective segregation and diffusion coefficients for Nd+3doped in molten YAG, Journal of Crystal Growth, vol. 396, pp. 61-65, 2014			
	3.	Yildiz E., Erdogmus E., Investigation of luminescence properties of Pb2+-doped Sr2B2O5 phosphor, International Journal of Applied Ceramic Technology, vol. 15, no. 5, pp. 1287-1291, 2018			
	4.	Erdogmus, E.; Yildiz, E., Structural and Luminescence Properties of Pb2+-DOPED Li6Gd(BO3)(3), JOURNAL OF APPLIED SPECTROSCOPY, Vol. 87, No. 4, pp. 615-620, 2020			
	5.	Buse, G., Stef, M., Nicoara, I., Spectroscopic Properties of Pb^{2+}-Doped BaF_2 Crystals, Crystals, vol. 13, no. 4, art. no. 659, 2023.			
	6.	Asadian, M., Zabihi, F., Saeedi, H., Segregation and constitutional supercooling in Nd:YAG Czochralski crystal growth, Journal of Crystal Growth, vol. 630, art. no. 127605, 2024.			
	7.	Buse G., Schornig C., Stef M., Poienar M., Tatomirescu D., Popescu A., Debray J., Motto-Ros V., Pelascini F., Vizman D., Veber P., Single crystal growth by the Bridgman-Stockbarger technique of CaF2-rich – TmF3 solid solutions: Evidence of mixed valence Tm$2+ and Tm3+ cations, Journal of Alloys and Compounds, vol. 1010, art. no. 177784, 2025.			
	8.	Kuznetsov, V.N., Chizhov, Y.V., Glazkova, N.I., Mikhaylov, R.V., Ryabchuk, V.K., Emeline, A.V., Serpone, N., Origin of the absorption edge fine structure in Pb-based organic-inorganic 1D perovskites, Physical Chemistry Chemical Physics, vol. 27, no. 25, pp. 13534–13542, 2025.			
15.	Munteanu M., Ștef M., Bunoiu O., Nicoară I., Effective segregation coefficient of Er3+ ions in ErF3-doped CaF2 crystals, Physica Scripta, 81, 2010, 035602 https://www.webofscience.com/wos/woscc/full-record/WOS:000275223000021		2	4	*0.5*
	1.	Buse G., Preda E., Stef M., Nicoara I., Influence of Yb3+ ions on the optical properties of double-doped Er,Yb : CaF2 crystals, Physica Scripta, vol 83, art. no. 025604, 2011			
	autocit.	Nicoara I., Buse G., Bunoiu M., Segregation coefficient of Yb3+ and Yb2+ Ions in YbF3 Doped BaF2 Crystals, AIP Conference Proceedings (TIM 2013 Physics Conference, Timisoara), vol. 1634, pp. 111-114, 2014			
	2.	Nicoara, Irina; Stef, Marius; Buse, Gabriel; et al., Growth and characterization of ErF3 doped BaF2 crystals, JOURNAL OF CRYSTAL GROWTH, Vol. 54 , Art. no. 125817, 2020			
16.	Lungu M., Neculae A., Bunoiu M., Some considerations on the dielectrophoretic manipulation of nanoparticles in fluid media, Journal of Optoelectronics and Advanced Materials, 12, 2010, 2423-2426 https://www.webofscience.com/wos/woscc/full-record/WOS:000286043000013		2	3	*0.666*
	autocit.	Neculae A., Lungu M., Bunoiu M., Giugiulan R., Electrohydrodynamic modeling for manipulation of micro/nano particles in microfluidic systems, AIP Conference Proceedings, vol. 1472, pp. 155-161, 2012			
	autocit.	Neculae A., Biriș C.G., Bunoiu M., Lungu M., Numerical analysis of nanoparticle behavior in a microfluidic channel under dielectrophoresis, Journal of Nanoparticle Research, vol. 14, pp. 1154, 2012			
	autocit.	Lungu M., Giugiulan R., Bunoiu M., Strambeanu M., Neculae A., Submicron particle trapping using traveling wave dielectrophoresis, AIP Conference Proceedings, vol. 1564, pp. 111-116, 2013			
	autocit.	Neculae A., Giugiulan R., Bunoiu M., Lungu M., Effects of fluid flow velocity upon nanoparticle distribution in microfluidic devices under dielectrophoresis, Romanian Reports in Physics, vol. 66, pp. 754-764, 2014			
	autocit.	Lungu M., Balasiu S., Bunoiu M.O., Neculae A., Study of a 3D DEP-based Microfluidic System for Selective Nanoparticle Manipulation, AIP Conference Proceedings, vol. 1634, pp. 89-94, 2014			
	autocit.	Neculae A., Strambeanu M., Lungu A., Bunoiu M., Lungu M., Nanoparticles trapping from flue gas using dielectrophoresis, AIP Conference Proceedings, vol. 1694, art. no. 040004, 2015			

	fără IF	Neculae A.; Lungu A., Strambeanu N., Lungu M., Recovery of Nanoparticles from Flue Gas using Dielectrophoresis, Proceedings of the 24th International Mining Congress and Exhibition of Turkey, IMCET 2015, pp. 1382-1388, 2015			
	autocit.	Neculae A., Bunoiu M., Lungu A., Lungu M., Filtration of flue gas in microfluidic devices using dielectrophoresis, Romanian Journal of Physics, vol. 61, no. 5-6, pp. 957-969, 2016			
	autocit.	Neculae A., Bunoiu M., Lungu A., Lungu M., Filtration of flue gas by retaining of nanoparticles in microfluidic devices using dielectrophoresis, Romanian Reports in Physics, vol. 68, no. 3, 2016			
	fără IF	Lungu M., Neculae A., Lungu A., et al., Study on nanoparticles flow reduction tests to hwi plants using numerical simulations, 20th International Symposium on The Environment and the Industry (SIMI 2017), pp. 99-111, 2017			
	1.	Lee, K., Mishra, R., Kim, T., Review of micro/nanofluidic particle separation mechanisms: Toward combined multiple physical fields for nanoparticles, Sensors and Actuators A: Physical, vol. 363, art. no. 114688, 2023.			
	2.	del Río J.S., Son Y., Park J., Sunkara V., Cho Y.K., Microfluidic dielectrophoretic purification of extracellular vesicles from plasma lipoproteins, Langmuir, vol. 40, no. 49, pp. 25772-25784, 2024.			
17.	Lungu M., Neculae A., Bunou M., Strambeanu N., Some Considerations on the Nanoparticles Manipulation in Fluid Media Using Dielectrophoresis, Romanian Journal of Physics, 56, 2011, 749-756 https://www.webofscience.com/wos/woscc/full-record/WOS:000292678100014		2	4	*0.5*
	1.	Dash, S., Mohanty S., Dielectrophoretic separation of micron and submicron particles: A review, Electrophoresis, vol. 35, pp. 2656-2672, 2014			
	2.	Purnell M.C., Skrinjar T.J., The Dielectrophoretic Disassociation of Chloride Ions and the Influence on Diamagnetic Anisotropy in Cell Membranes, Discovery Medicine, vol. 22, no. 122, pp. 257-273, 2016			
18.	Bunoiu O., Stef M., Popescu A., Vizman D., Interface shape studies in Bridgman growth of multicrystalline silicon, AIP Conference Proceedings, 1387, 2011, 226-231 https://www.webofscience.com/wos/woscc/full-record/WOS:000301176200033		0	4	*0*
	autocit.	Pupăzan V., Popescu A., Bunoiu O.M., Vizman D., Influence of growth rate on interface shape and grains structure in multicrystalline silicon growth by Bridgman method, AIP Conference Proceedings, vol. 1472, pp. 210-214, 2012			
19.	Neculae A., Lungu M., Nicolici-Schultz T., Bunoiu M., Numerical study regarding the influence of electrodes' geometry on the dielectrophoretic forces, AIP Conference Proceedings, 1387, 2011, 270-275 https://www.webofscience.com/wos/woscc/full-record/WOS:000301176200040		0	4	*0*
	autocit.	Neculae A., Lungu M., Bunoiu M., Giugiulan R., Electrohydrodynamic modeling for manipulation of micro/nano particles in microfluidic systems, AIP Conference Proceedings, vol. 1472, pp. 155-161, 2012			
20.	Neculae A., Lungu M., Bunoiu M., Giugiulan R., Electrohydrodynamic modeling for manipulation of micro/nano particles in microfluidic systems, AIP Conference Proceedings, 1472, 2012, 155-161 https://www.webofscience.com/wos/woscc/full-record/WOS:000309525800023		0	4	*0*
21.	Pupăzan V., Popescu A., Bunoiu O.M., Vizman D., Influence of growth rate on interface shape and grains structure in multicrystalline silicon growth by Bridgman method, AIP Conference Proceedings, 1472, 2012, 210-214 https://www.webofscience.com/wos/woscc/full-record/WOS:000309525800030		0	4	*0*
	fără IF	Nakajima K., High performance (HP) cast method, CRYSTAL GROWTH OF SI INGOTS FOR SOLAR CELLS USING CAST FURNACES, pp. 195-223, 2020			
22.	Neculae A., Biriș C.G., Bunoiu M., Lungu, M., Numerical analysis of nanoparticle behavior in a microfluidic channel under dielectrophoresis, Journal of Nanoparticle Research, 14, 2012, 1154 https://www.webofscience.com/wos/woscc/full-record/WOS:000309341200018		9	4	*2.25*
	autocit.	Lungu M., Giugiulan R., Bunoiu M., Strambeanu M., Neculae A., Submicron particle trapping using traveling wave dielectrophoresis, AIP Conference Proceedings, vol. 1564, pp. 111-116, 2013			
	autocit.	Neculae A., Giugiulan R., Bunoiu M., Lungu M., Effects of fluid flow velocity upon nanoparticle distribution in microfluidic devices under dielectrophoresis, Romanian Reports in Physics, vol. 66, pp. 754-764, 2014			
	autocit.	Lungu M., Balasiu S., Bunoiu M.O., Neculae A., Study of a 3D DEP-based Microfluidic System for Selective Nanoparticle Manipulation, AIP Conference Proceedings, vol. 1634, pp. 89-94, 2014			
	fără IF	Marchis A., Neculae A., Numerical Simulation of Bioparticle Separation by Dielectrophoretic Field-Flow-Fractionation (DEP-FFF), AIP Conference Proceedings, vol. 1634, pp. 161-167, 2014			
	1.	Y. Wang, F. Du, , M. Baune, J. Thöming, Predicting and eliminating Joule heating constraints in large dielectrophoretic IDE separators, Chemical Engineering Science, vol. 137, pp. 235–242, 2015			
	2.	Lungu M., Neculae A., Lungu A., Positive dielectrophoresis used for selective trapping of nanoparticles from flue gas in a gradient field electrodes device, Journal of Nanoparticle Research, vol. 17, pp. 1-14, 2015			

03.06.2026

[redacted]

	3.	Mathew B., Alazzam A., Abutayeh M., Gawanmeh A., Khashan S., Modeling the trajectory of microparticles subjected to dielectrophoresis in a microfluidic device for field flow fractionation, Chemical Engineering Science, vol. 138, pp. 266-280, 2015			
	4.	Dash S., Mohanty S., Pradhan S., Mishra B.K., CFD design of a microfluidic device for continuous dielectrophoretic separation of charged gold nanoparticles, Journal of the Taiwan Institute of Chemical Engineers, vol. 58, pp. 39-48, 2016			
	5.	Gawanmeh A., Alazzam A., Mathew B., Design and Verification of a Blood Cell Separation Microfluidic Device, International Journal of Online Engineering, vol. 13, no. 6, pp. 105-112, 2017			
	fără IF	Lungu M., Neculae A., Lungu A. et al., Study on nanoparticles flow reduction tests to hwi plants using numerical simulations, 20th International Symposium on The Environment and the Industry (SIMI 2017), pp. 99-111, 2017			
	6.	Kazemi, Bahar; Darabi, Jeff, Numerical simulation of dielectrophoretic particle separation using slanted electrodes, Physics Of Fluids, vol. 30, no. 10, Article Number: 102003, 2018			
	7.	Xie, Yuliang; Rufo, Joseph; Zhong, Ruoyu; et al., Microfluidic Isolation and Enrichment of Nanoparticles, ACS NANO, Volume: 14, Issue: 12, pp. 16220-16240, 2020			
	8.	Lee, K., Mishra, R., Kim, T., Review of micro/nanofluidic particle separation mechanisms: Toward combined multiple physical fields for nanoparticles, Sensors and Actuators A: Physical, vol. 363, art. no. 114688, 2023.			
	9.	Liu W.B., Chen X.L., Qi P.F., Liu X.M., Wang Y., Continuous Separation of Lithium Iron Phosphate and Graphite Microparticles via Coupled Electric and Magnetic Fields, *Micromachines*, vol. 16, no. 10, art. no. 1094, 2025.			
23.	Lungu M., Giugiulan R., Bunoiu M., Strambeanu M., Neculae A., Submicron particle trapping using traveling wave dielectrophoresis, AIP Conference Proceedings, 1564, 2013, 111-116 https://www.webofscience.com/wos/woscc/full-record/WOS:000327454500017		1	5	*0.2*
	1.	Seon J.-Y., Yoon Y.J., Kim C.-Y., et al., Manipulation of TiO2 Nanotubes in a Transparent Dielectrophoretic Device, Journal of Nanoscience and Nanotechnology, vol. 16, pp. 1711-1714, 2016			
24.	Neculae A., Giugiulan R., Bunoiu M., Lungu M., Effects of fluid flow velocity upon nanoparticle distribution in microfluidic devices under dielectrophoresis, Romanian Reports in Physics, 66, 2014, 754-764 https://www.webofscience.com/wos/woscc/full-record/WOS:000342035600016		2	4	*0.5*
	autocit.	Neculae A., Strambeanu M., Lungu A., Bunoiu M., Lungu M., Nanoparticles trapping from flue gas using dielectrophoresis, AIP Conference Proceedings, vol. 1694, art. no. 040004, 2015			
	1.	Dash S., Mohanty S., Pradhan S., Mishra B.K., CFD design of a microfluidic device for continuous dielectrophoretic separation of charged gold nanoparticles, Journal of the Taiwan Institute of Chemical Engineers, vol. 58, pp. 39-48, 2016			
	2.	Vlad V.I., Baran V., Nicolin A.I., Mihalache D., The First Seventy Volumes of Romanian Reports in Physics: A Brief Survey of the Romanian Physics Community, Romanian Reports in Physics, vol., no. 1, art. no. 101, 2018			
25.	Lungu M., Balasiu S., Bunoiu M.O., Neculae A., Study of a 3D DEP-based Microfluidic System for Selective Nanoparticle Manipulation, AIP Conference Proceedings, 1634, 2014, 89-94 https://www.webofscience.com/wos/woscc/full-record/WOS:000346066100014		0	4	*0.*
26.	Nicoara I., Buse G., Bunoiu M., Segregation coefficient of Yb3+ and Yb2+ Ions in YbF3 Doped BaF2 Crystals, AIP Conference Proceedings, 1634, 2014, 111-114 https://www.webofscience.com/wos/woscc/full-record/WOS:000346066100018		2	3	*0.666*
	1.	Khadiev A., Akhmetov N., Korableva S., Morozov O., Nizamutdinov A., Semashko V., Pudovkin M., Gafurov M., The Impact of BiF3 Doping on the Yb3+ to Yb2+ Reduction during the LiYE4:Yb3+ Crystal-Growth Process, vol. 5, no. 4, 1198-1206, 2022			
	2.	Buse G., Schornig C., Stef M., Poienar M., Tatomirescu D., Popescu A., Debray J., Motto-Ros V., Pelascini F., Vizman D., Veber P., Single crystal growth by the Bridgman-Stockbarger technique of CaF2-rich – TmF3 solid solutions: Evidence of mixed valence Tm$2+ and Tm3+ cations, Journal of Alloys and Compounds, vol. 1010, art. no. 177784, 2025.			
27.	Pupazan V., Negrila R., Bunoiu O., Nicoară I., Vizman D., Effects of crucible coating on the quality of multicrystalline silicon grown by a Bridgman technique, Journal of Crystal Growth, 401, 2014, 720-726 https://www.webofscience.com/wos/woscc/full-record/WOS:000340001800152		7	5	*1.4*
	fără IF	Srinivasan, M.; Ramasamy, P., Numerical Modeling Of Heat Transfer In Molten Silicon During Directional Solidification Process, PROCEEDINGS OF THE 59TH DAE SOLID STATE PHYSICS SYMPOSIUM 2014 (SOLID STATE PHYSICS) Book Series: AIP Conference Proceedings Volume: 1665 Article Number: 110005 Published: 2015			
	fără IF	Li Z.Y., Liu L.J., Qi X.F., Zhong G.X., Zhou G.S., Iron contamination and reusability of seed crystal for quasi-single crystalline silicon ingots for solar cells, 2015 China Semiconductor Technology International Conference, 2015			
	1.	Han K. M., Cho J. S., Yoo J., Enhanced performance of EFG silicon solar cells by using vapor texturing process, Vacuum, vol. 115, pp. 46-49, 2015			
	2.	Ekstrøm K.E., Undheim E., Stokkan G., Arnberg L., di Sabatino M., Beta-Si3N4 particles as nucleation sites in multicrystalline silicon, vol. 109, pp. 267-274, 2016			

	3.	Paulescu M., Stefu N., Calinoiu D., Paulescu E., Pop N., Boata R., Mares O., Angstrom-Prescott equation: Physical basis, empirical models and sensitivity analysis, Renewable & Sustainable Energy Reviews, vol. 62, pp. 495-506, 2016			
	4.	Peng L.H., Qin S., Gu X.B., Effects of melting parameters and quartz purity on silica glass crucible produced by arc method, ENGINEERING RESEARCH EXPRESS, Vol. 2, No. 1, Art. No. 015046, 2020			
	5.	Camel, D.; Cierniak, E.; Drevet, B.; et al., Directional solidification of photovoltaic silicon in re-useable graphite crucibles, SOLAR ENERGY MATERIALS AND SOLAR CELLS, Vol. 215, Art. No. 110637, 2020			
	6.	Kurus, Aleksey; Lobanov, Sergey; Grazhdannikov, Sergey; et al., LiGaS2 crystal growth under low temperature gradient conditions by the modified Bridgman method, MATERIALS SCIENCE AND ENGINEERING B-ADVANCED FUNCTIONAL SOLID-STATE MATERIALS, Vol. 262, Art. no. 114715, 2020			
	7.	Duan, S.Z., Wu, X.W., Wang, Y.F., Feng, J., Hou, S.Y., Huang, Z.H., Shen, K., Chen, Y.X., Liu, H.B., Kang, F.Y., Recent progress in the research and development of natural graphite for use in thermal management, battery electrodes and the nuclear industry,*New Carbon Materials, vol. 38, no. 1, pp. 73-95, 2023.			
28.	Bica I., Anitas E.M., Bunoiu M., Vatzulik B., Juganaru I., Hybrid magnetorheological elastomer: Influence of magnetic field and compression pressure on its electrical conductivity, Journal of Industrial and Engineering Chemistry, Vol. 20, No. 6, 3994-3999, 2014 https://www.webofscience.com/wos/woscc/full-record/WOS:000343690600007		92	5	*18.4*
	1.	Mietta J.L., Jorge G., Martín Negri R., A flexible strain gauge exhibiting reversible piezoresistivity based on an anisotropic magnetorheological polymer, Smart Materials and Structures, vol. 23, art. no. 085026, 2014			
	2.	Piao S.H., Bhaumik M., Maity A., Choi H.J., Polyaniline/Fe composite nanofiber added softmagnetic carbonyl iron microsphere suspension and its magnetorheology, Journal of Materials Chemistry C, vol. 3, pp. 1861-1868, 2015			
	3.	Ahn W.J., Jung H.S., Choi H.J., Pickering emulsion polymerized smart magnetic poly(methyl methacrylate)/Fe2O3 composite particles and their stimulus-response, RSC Advances, vol. 5, pp. 23094-23100, 2015			
	4.	Park D.E., Chae H.S., ChoiH.J., Maity A., Magnetite–polypyrrole core–shell structured microspheres and their dual stimuli-response under electric and magnetic fields, Journal of Material Chemistry C, vol. 3, pp. 3150-3158, 2015			
	5.	Jang D.S., Liu Y.D, Kim J.H., Choi H.J., Enhanced magnetorheology of soft magnetic carbonyl iron suspension with hard magnetic γ-Fe2O3 nanoparticle additive, Colloid and Polymer Science, vol. 293, pp. 641-647, 2015			
	6.	Ruiz M.M., Marchi M.C., Perez O.E., Jorge G.E., Structured elastomeric submillimeter films displaying magneto and piezo resistivity, Journal of Polymer Science Part B: Polymer Physics, vol. 53, pp. 574-586, 2015			
	7.	Kwon S.H., Hong C.H., Do P.X., Choi S.B, Choi H.J., Magnetorheology of a Carbonyliron Microsphere Suspension with a Halloysite Additive and Its Damping Force Characteristics, Industrial and Engineering Chemical Research, vol. 54, pp. 4655–4663, 2015			
	8.	Anitas E.M., A structural model for scattering intensities with multiple fractal regions, Journal of Optoelectronics and Advanced Materials, vol. 17, pp. 1122-1127, 2015			
	9.	Bica I., Anitas E.M., Averis L.M.E., Influence of magnetic field on dispersion and dissipation of electric field of low and medium frequencies in hybrid magnetorheological suspensions, Journal of Industrial and Engineering Chemistry, vol. 27, pp. 334-340, 2015			
	10.	Sim B., Chae H. S., Choi H. J., Fabrication of polyaniline coated iron oxide hybrid particles and their dual stimuli-response under electric and magnetic fields, Express Polymer Letters, vol. 9, pp. 736-743, 2015			
	11.	Bica I., Anitas E.M., Averis L.M.E., Tensions and deformations in composites based on polyurethane elastomer and magnetorheological suspension: Effects of the magnetic field, Journal of Industrial and Engineering Chemistry, vol. 28, pp. 86-90, 2015			
	autocit.	Bica I., Bălăşoiu M., Bunoiu M., Iordaconiu L., Cirtina G., Influence of the longitudinal magnetic field on the turning angle of a cylindrical bar-shaped magnetorheological elastomer, Journal of Optoelectronics and Advanced Materials, vol. 17, pp. 1379-1384, 2015			
	12.	Chae H.S., Piao S.H., Choi H.J., Fabrication of spherical Fe3O4 particles with a solvothermal method and their magnetorheological characteristics, Journal of Industrial and Engineering Chemistry, vol. 29, pp. 129-133, 2015			
	fără IF	Dong S., Wang R., Wang X.J., Alignment of carbon iron into polydimethylsiloxane to create conductive composite with low percolation threshold and high piezoresistivity, Proceedings of SPIE (Sensors and Smart Structures Technologies for Civil, Mechanical, and Aerospace Systems 2016), vol. 9803, art. no. UNSP 98031A, 2016			
	13.	Balasoiu M., Bica I., Composite magnetorheological elastomers as dielectrics for plane capacitors: Effects of magnetic field intensity, Results in Physics, vol. 6, 199–202, 2016			
	14.	Wang Y., et al., Stimuli dependent impedance of conductive magnetorheological elastomers, Smart Materials and Structures, vol. 25, art. no. 025003, 2016			

	15.	Jung H.S., Kwon S.H., Choi H.J., Jung J.H., Kim Y.G., Magnetic carbonyl iron/natural rubber composite elastomer and its magnetorheology, Composite Structures, vol. 136, pp. 106–112, 2016	
	16.	Liu Z.Y., Zhao T.L., Liu R.K., Jia J.H., Du C.W., Li X.G., Influence factors on stress corrosion cracking of P110 tubing steel under CO2 injection well annulus environment, Journal of Central South University, vol. 23, pp. 757-764, 2016	
	autocit.	Bunoiu M., Bica I., Magnetorheological elastomer based on silicone rubber, carbonyl iron and Rochelle salt: Effects of alternating electric and static magnetic fields intensities, Journal of Industrial and Engineering Chemistry, vol. 37, pp. 312–318, 2016	
	17.	Ubaidillah, Choi H.J., Mazlan S.A., Imaduddin F., Harjana, Fabrication and viscoelastic characteristics of waste tire rubber based magnetorheological elastomer, Smart Materials and Structures, vol. 25, no. 11, art. no. 115026, 2016	
	18.	Ubaidillah, Imaduddin F., Li Y.C., Mazlan S.A., Sutrisno J. Koga T., Yahya I., Choi S.B., A new class of magnetorheological elastomers based on waste tire rubber and the characterization of their properties, Smart Materials and Structures, vol. 25, no. 11, art. no. 115002, 2016	
	autocit.	Bălășoiu M., Bunoiu M., Chirigiu L., Chirigiu L.M.E., Pascu G., Bica I., Magnetodielectric Membranes: Effects of the Magnetic Field on the Dielectric Loss Tangent, AIP Conference Proceedings, vol. 1916, art. no. 040007, 2017	
	autocit.	Balasoiu M., Kozhevnikov S.V., Nikitenko Yu. V., Iacobescu G.E., Bunoiu M., Bica I., Silicone rubber based magnetorheological elastomer: magnetic structure tested by means of neutron depolarization and magnetic force microscopy methods, Journal of Physics: Conference Series, vol. 848, art. no. 012016, 2017	
	29.	An J.S., Kwon S.H., Choi H.J., Jung J.H., Kim Y.G., Modified silane-coated carbonyl iron/natural rubber composite elastomer and its magnetorheological performance, Composite Structures, vol. 160, pp. 1020-1026, 2017	
	20.	Perales-Martínez A., Palacios-Pineda L.M., Lozano-Sánchez L.M., Martínez-Romero O., Puente-Cordova J.G., Elías-Zúñiga A., Enhancement of a magnetorheological PDMS elastomer with carbonyl iron particles, Polymer Testing, vol. 57, pp. 78-86, 2017	
	21.	Sasaki S., Tsujiei Y., Kawai M., Mitsumata T., Electric Conductivity and Dielectric-Breakdown Behavior for Polyurethane Magnetic Elastomers, Journal of Physical Chemistry B, vol. 121, no. 7, pp 1740–1747, 2017	
	22.	Ruan X., Wang Y., Xuan S., Gong X., Magnetic field dependent electric conductivity of the magnetorheological fluids: the influence of oscillatory shear, Smart Materials and Structures, vol. 26, no. 3, art. no. 035067, 2017	
	23.	Dong S., Wang, X., Alignment of carbon iron into polydimethylsiloxane to create conductive composite with low percolation threshold and high piezoresistivity: experiment and simulation, Smart Materials and Structures, vol. 26, no. 4, art. no. 045027, 2017	
	24.	Yang X., Huang Y., Hou Y., Wu H., Xu R., Chu P.K., An experimental study of magnetorheological fluids on electrical conductivity property, Journal of Materials Science: Materials in Electronics, vol. 28, no. 11, pp. 8130-8135, 2017	
	autocit.	Bunoiu M., Anitas E.M., Neamtu J., Bica I., Chirigiu L., Chirigiu L.M.E., Generation of Iron Nano-microparticles for Bio-medical Applications Using Plasma Processes, Revista de Chimie, vol. 68, no. 6, pp. 1204-1209, 2017	
	25.	Cvek M.; Moucka R., Sedlacik M. et al., Enhancement of radio-absorbing properties and thermal conductivity of polysiloxane-based magnetorheological elastomers by the alignment of filler particles, Smart Materials and Structures, vol. 26, no. 9, art. no. 095005, 2017	
	26.	Bica I., Anitas E. M., Magnetic field intensity and graphene concentration effects on electrical and rheological properties of MREs-based membranes, Smart Materials and Structures, vol. 26, no. 10, art. no. 105038, 2017	
	27.	Palacios-Pineda L.M.; Perales-Martinez I.A., Lozano-Sanchez L.M., et al.,Experimental Investigation of the Magnetorheological Behavior of PDMS Elastomer Reinforced with Iron Micro/Nanoparticles, Polymers, vol. 9, no. 12, art. no. 696, 2017	
	28.	Poojary U.R., Hegde S., Gangadharan K.V., Experimental investigation on the effect of carbon nanotube additive on the field-induced viscoelastic properties of magnetorheological elastomer, Journal of Materials Science, vol. 53, no. 6, pp. 4229-4241, 2018	
	fără IF	Moucka, R.; Sedlacik, M.; Kutalkova, E., Magnetorheological Elastomers: Electric Properties versus Microstructure, Recent Advances on Environment, Chemical Engineering and Materials, Book Series: AIP Conference Proceedings Volume: 2022, Article Number: 020017-1, 2018	
	39.	Schuemann M., Morich J., Kaufhold T., et al., A mechanical characterisation on multiple timescales of electroconductive magnetorheological elastomers, Journal of Magnetism and Magnetic Materials, vol. 453, pp. 198-205, 2018	
	30.	Volpe V., D'Auria V., Sorrentino L, et. al., Injection molding of magneto-sensitive polymer composites, vol. 15, pp. 280-287, 2018	
	31.	Kwon, S.H.; Lee J.H.; Choi H.J., Magnetic Particle Filled Elastomeric Hybrid Composites and Their Magnetorheological Response, Materials, vol. 11, no. 6, art. no. 1040, 2018	
	32.	Aziz, S.A.A., Ubaidillah, Mazlan S.A., et al., Implementation of functionalized multiwall carbon nanotubes on magnetorheological elastomer, Journal of Materials Science, vol. 53, no. 14, pp. 10122-10134, 2018	

	33.	Hu T.; Xuan S., Ding L., et al., Stretchable and magneto-sensitive strain sensor based on silver nanowire-polyurethane sponge enhanced magnetorheological elastomer, Materials & Design, vol. 156, pp. 528-537, 2018	
	34.	Cvek, Martin; Mrlik, Miroslav; Sevcik, Jakub; et al., Tailoring Performance, Damping, and Surface Properties of Magnetorheological Elastomers via Particle-Grafting Technology, Polymers, vol. 10, no. 12, art. no. 1411, 2018	
	35.	Maslowski M., Miedzianowska J., Strzelec K., Reinforced, Extruded, Isotropic Magnetic Elastomer Composites: Fabrication and Properties, Advances in Polymer Technology, Vol. 2019, Art. No. 3517430, 2019	
	fără IF	Mikhasev, Gennadi I.; Altenbach, Holm, Equivalent Single Layer Model for Thin Laminated Cylindrical Shells, Thin-Walled Laminated Structures: Buckling, Vibrations And Their Suppression, Book Series: Advanced Structured Materials, Volume: 106, Pages: 29-84, 2019	
	36.	Cirtina, L. M.; Bica, I.; Chirigiu, L.; et al., Electrical Capacitors Based On Magnetorheological Elastomers: Effects Of The Static And Pulsating Magnetic Field On Electrical Properties, Romanian Reports In Physics, Volume: 71, Issue: 4, Article Number: 509, 2019	
	fără IF	Bica, I; Cirtina, L.; Cirtina, D.; et al., Magnetorheological gel-based magnetoresistor: Effects of a static and a periodic time-varying magnetic field on the electrical resistance, Journal of Physics Conference Series, Vol. 139 , Art. no. 012091, 2019	
	fără IF	Yu M., Enhanced magnetic-sensing characteristics for application of magnetorheological elastomer, in Magnetorheological Materials and Their Applications, edited by Choi S.B. and Li W., IET Materials Circuits and Devices Series, vol. 58, pp. 221-248, 2019.	
	37.	Gavrilovici, A. M.; Anitas, E. M.; Chirigiu, L.; et al., Magnetodielectric Effects in Magnetorheological Elastomers Based on Polymer Fabric, Silicone Rubber, and Magnetorheological Suspension, Advances In Polymer Technology, Volume: 2019, Article Number: 1983547, 2019	
	38.	Shabdin, Muhammad Kashfi; Rahman, Mohd Azizi Abdul; Mazlan, Saiful Amri; et al., Material Characterizations of Gr-Based Magnetorheological Elastomer for Possible Sensor Applications: Rheological and Resistivity Properties, Materials, vol. 12, no. 3, Article Number: 391, 2019	
	39.	Zhao, Ruike; Kim, Yoonho; Chester, Shawn A.; et al., Mechanics of hard-magnetic soft materials, Journal Of The Mechanics And Physics Of Solids, Volume: 124 Pages: 244-263, 2019	
	40.	Ubaidillah; Purnomo, Endra Dwi; Ismail, Hanafi; et al., Swelling, Thermal, and Shear Properties of a Waste Tire Rubber Based Magnetorheological Elastomer, Frontiers In Materials, vol. 6, Article Number: 47, 2019	
	41.	Lee, Jin Yong; Kumar, Vineet; Lee, Dong-Joo, Compressive properties of magnetorheological elastomer with different magnetic fields and types of filler, Polymers For Advanced Technologies, vol. 30 Issue: 4 Pages: 1106-1115, 2019	
	42.	Bica, Ioan; Anitas, Eugen M.; Averis, Larisa Marina Elisabeth; et al., Magnetostrictive and viscoelastic characteristics of polyurethane-based magnetorheological elastomer, Journal Of Industrial And Engineering Chemistry, Volume: 73, pp. 128-133, 2019	
	43.	Xu, Zhiqiang; Wang, Qiuliang; Zhu, Kejun; et al., Preparation and characterization of magnetorheological elastic polishing composites, Journal Of Intelligent Material Systems And Structures, Volume: 30, Issue: 10, Pages: 1481-1492, 2019	
	44.	Hellebrekers T., Kroemer O., Majidi C., Soft Magnetic Skin for Continuous Deformation Sensing, Advanced Intelligent Systems*, vol. 1, no. 4, art. no. 1900025, 2019.	
	45.	Nedjari A., Aguib S., Djedid T., Nour A., Meloussi M., Measurements and identification of smart magnetomechanical elastomer composite materials properties in shear mode, Materials Research Express, Vol. 6, No. 8, 2019, Art. No. 085707	
	autocit.	Bica I., Bunoiu O.M., Magnetorheological Hybrid Elastomers Based on Silicone Rubber and Magnetorheological Suspensions with Graphene Nanoparticles: Effects of the Magnetic Field on the Relative Dielectric Permittivity and Electric Conductivity, International Journal of Molecular Sciences, Vol. 20, No. 17, Art. no. 4201, pp. 1-9, 2019	
	46.	Bica, I.; Anitas, E. M., Magnetodielectric effects in hybrid magnetorheological suspensions based on beekeeping product, Journal Of Industrial And Engineering Chemistry, Volume: 77, Pages: 385-392, 2019	
	47.	Mikhasev, Gennadi, I; Eremeyev, Victor A.; Wilde, Krzysztof; et al., Assessment of dynamic characteristics of thin cylindrical sandwich panels with magnetorheological core, Journal Of Intelligent Material Systems And Structures, Volume: 30, Issue: 18-19, Pages: 2748-2769, 2019	
	48.	Bica, I; Anitas, E. M., Magnetorheological suspension-based magnetoresistor: influence of temperature and magnetic field intensity on electrical resistance and apparent viscosity, Romanian Reports in Physics, Volume 7 , Issue , Article Number: 501, 2020	
	autocit.	Anitas E., Bica I., Bunoiu M., Malaescu I., Marin C.N., Ercuta A., Balasoiu M., Lungu M., Pascu G., Magneto-Optical Transmittance Observed in Magnetorheological Suspensions Films, AIP Conference Proceedings, 2218, 030016, 2020	
	49.	Monkman, Gareth J.; Striegl, Birgit; Prem, Nina; et al., Electrical Properties of Magnetoactive Boron-Organo-Silicon Oxide Polymers, MACROMOLECULAR CHEMISTRY AND PHYSICS Article Number: 1900342, 2020	

	50.	Hooshiar, Amir; Alkhalaf, Ali; Dargahi, Javad , Development and assessment of a stiffness display system for minimally invasive surgery based on smart magneto-rheological elastomers, MATERIALS SCIENCE & ENGINEERING C-MATERIALS FOR BIOLOGICAL APPLICATIONS Volume: 108, Article Number: 110409, 2020	
	51.	Shabdin, Muhammad Kashfi; Zainudin, Afiq Azri; Mazlan, Saiful Amri; et al.,Tunable low range Gr induced magnetorheological elastomer with magnetically conductive feedback, SMART MATERIALS AND STRUCTURES Volume: 29 , Issue: 5, Article Number: 057001, 2020	
	52.	Alkhalaf, Ali; Hooshiar, Amir; Dargahi, Javad, Composite magnetorheological elastomers for tactile displays: Enhanced MR-effect through bi-layer composition, COMPOSITES PART B-ENGINEERING, Volume: 1, Article Number: 107888, 2020	
	53.	Chen, Lu; Liu, Shaogang; Zhao, Dan; et al., Magnetic properties of polyurethane magnetorheological elastomer based on carbon nanotubes, MATERIALS RESEARCH EXPRESS, Vol. 7, No. 7, Art. No. 076104, 2020	
	54.	Shademani, Ali; Chiao, Mu , Analytical and Experimental Study of Magnetomechanical Properties of Magnetic Porous PDMS Sponge Under Non-Uniform Magnetic Fields, JOURNAL OF APPLIED MECHANICS-TRANSACTIONS OF THE ASME, Vol. 8 , No. 8, Art. No. 081008, 2020	
	55.	Cvek, Martin; Kutalkova, Erika; Moucka, Robert; et al., Lightweight, transparent piezoresistive sensors conceptualized as anisotropic magnetorheological elastomers: A durability study By: INTERNATIONAL JOURNAL OF MECHANICAL SCIENCES, Vol.183, Art. no. 105816, 2020	
	56.	Zhao, Dan; Cui, Jin; Dai, Xinying; et al., Magneto-piezoresistive characteristics of graphene/room temperature vulcanized silicon rubber-siliconrubber magnetorheological elastomer, JOURNAL OF APPLIED POLYMER SCIENCE, Vol. 138, No. 12 , Art. no. e50051, 2021	
	57.	Hu, Shenghan; Abd El-Aty, Ali; Cheng, Cheng; et al., The influence of the MRE forming medium and axial feeding on the forming quality of thin-walled Inconel 718 bellow manufactured by a bulging process: finite element simulation and experimentation, INTERNATIONAL JOURNAL OF ADVANCED MANUFACTURING TECHNOLOGY early access icon, Early Access: NOV 2020	
	58.	Bastola, Anil K.; Paudel, Milan; Li, Lin; et al., Recent progress of magnetorheological elastomers: a review, SMART MATERIALS AND STRUCTURES, Vol. 2 , No. 12 , Art. No. 123002, 2020	
	59.	Arslan Hafeez, Muhammad; Usman, Muhammad; Umer, Malik Adeel; et al., Recent Progress in Isotropic Magnetorheological Elastomers and Their Properties: A Review, POLYMERS, Vol.12 , No. 12, Art. No. 3023, 2020	
	60.	Akbari, E.; Khajehsaeid, H., A continuum magneto-mechanical model for magnetorheological elastomers, SMART MATERIALS AND STRUCTURES, Volume: 30,Issue: 1, Article Number: 015008, 2020	
	61.	Wang, Bochao; Kari, Leif, Constitutive Model of Isotropic Magneto-Sensitive Rubber with Amplitude, Frequency, Magnetic and Temperature Dependence under a Continuum Mechanics Basis, POLYMERS, Volume: 13, Issue: 3, Article Number: 472, 2021	
	62.	Diez, Ander Garcia; Tubio, Carmen Rial; Etxebarria, Jon Gutierrez; et al., Magnetorheological Elastomer-Based Materials and Devices: State of the Art and Future Perspectives, ADVANCED ENGINEERING MATERIALS, Article Number: 2100240, early access, 2021	
	63.	Liu M.Z., Zhang M., Zhang J.T., Qiao Y.L., Zhai P.C., Experimental Investigation on the Effect of Graphene Oxide Additive on the Steady-State and Dynamic Shear Properties of PDMS-Based Magnetorheological Elastomer, POLYMERS, Vol. 3, No. 11, Art. No. 1777, 2021	
	64.	Barreto D.D., Saxena S., Kumar A., A magnetoelastic theory for Kirchhoff rods having uniformly distributed paramagnetic inclusions and its buckling, INTERNATIONAL JOURNAL OF SOLIDS AND STRUCTURES, Vol. 234, Art. No. 111147, 2022	
	65.	Kwon H., Song Y., Park J.E., Kim Y.K., A standalone tunable vibration absorber with self-sensing magnetorheological elastomer, SMART MATERIALS AND STRUCTURES, Vol. 30, No. 11, Art. No. 115010, 2021	
	66.	Bai J.Y. Wang X.J., Zhang M.L., Zhang J., Chen X.L., An Y.A., Guan R.G., A CuNi-Loaded Porous Magnetic Soft Material: Preparation, Characterization and Magnetic Field-Controlled Modulus, MATERIALS, Vol. 15, No. 4, Art. No. 1412, 2022	
	67.	Bica I., Anitas E.M., Electrical devices based on hybrid membranes with mechanically and magnetically controllable, resistive, capacitive and piezoelectric properties, SMART MATERIALS AND STRUCTURES, Vol. 31, No. 4, Art. No. 045011, 2022	
	68.	Yang J., Sun S.S., Yang X.Y., Ma Y.F., Yun G.L., Chang R.Z., Tang S.Y., Nakano M., Li Z.X., Du H.P., Equipping New SMA Artificial Muscles With Controllable MRF Exoskeletons for Robotic Manipulators and Grippers, IEEE-INST ELECTRICAL ELECTRONICS ENGINEERS INC, doi: 10.1109/TMECH.2022.3157329, early access, 2022	
	69.	Zhao X. Chen G.R., Zhou Y.H., Nashalian A., Xu J., Tat T., Song Y., Libanori A., Xu S.L., Li S., Giant Magnetoelastic Effect Enabled Stretchable Sensor for Self-Powered Biomonitoring, ACS Nano, vol. 16, no. 4, 6013-6022, 2022	
	70.	Ju B.X., Wang X.L., Magnetic field-dependent inductance properties based on magnetorheological elastomer, JOURNAL OF CENTRAL SOUTH UNIVERSITY, vol. 29, no. 4, 1075-1084, 2022	

	71.	Pham T.N., Dinh N.X., Tien V.M., Ong V.H., Das R., Nguyen T.L., Tran Q.H., Tran D.T., Vu D.L., Le A.T., Advances in magnetic field-assisted electrolyte's physicochemical properties and electrokinetic parameters: A case study on the response ability of chloramphenicol on Fe3O4@carbon spheres-based electrochemical nanosensor, Analytica Chemica ACta, vol. 1229, art. no. 340398, 2022			
	autocit.	Bunoiu M., Iacobescu G.E., Pascu G., Chirigiu L., Bica I., Magnetically Active Composites with Relatively Giant Dielectric Permittivity, Romanian Reports in Physics, vol. 75, no. 3, art. no. 503, 2023			
	72.	Li P.Y., Dong X.M., Wang K.X., Ran J.C., Yang B.L., Characteristic analysis of magnetorheological fluid porous fabric composite with a novel constitute model, Smart Materials and Structures, vol. 32, no 2, art. no. 025002, 2023			
	73.	Wang L.Z., Chen Z.B., Jiang L.K., Cheng L., Magneto-mechanical properties of anisotropic magnetorheological elastomers with tilt angle of magnetic chain under compression mode, Journal of Magnetism and Magnetic Materials, vol. 570, art. no. 170441, 2023			
	74.	Xing Z.C., Yong H.D., Numerical study on the instabilities of hard-magnetic soft materials with viscoelastic effects, Mechanics of Materials, vol. 179, art. no. 104602, 2023			
	75.	Alam Z., Padmanabhan S., Sharma A.K., Magnetically tunable longitudinal wave band gaps in hard-magnetic soft laminates, International Journal of Mechanical Sciences, vol. 249, art. no. 108262, 2023			
	76.	Abbasi A., Sano T.G., Yan D., Reis P.M., Snap buckling of bistable beams under combined mechanical and magnetic loading, Philosophical Transactions of the Royal Society A-Mathematical Physical and Engineering Sciences, vol. 381, no. 2244, art. no. 20220029, 2023			
	77.	Ribag K., Houmad M., Laamara R.A., Benyoussef A., El Kenz A., Strain enhances the electrical and photocatalytic properties of tetragonal boron nitride, Optik, vol. 283, art. no. 170872, 2023			
	78.	Feng Y.Y., Yang X.J., Liu J.G., Chen Z.Q., Mechanical investigations of local fractional magnetorheological elastomers model on Cantor sets, Physica A-Statistical Mechanics and Its Applications, vol. 621, art. no. 128789, 2023			
	79.	Li P.Y., Dong X.M., Yan H., Wang K.X., Ran J.C., Yang R., Performance evaluation of magnetorheological fluid porous fabric composite based on a novel constitute model, Composite Structures, vol. 322, art. no. 117363, 2023			
	80.	Poojary U.R., Kiran K., Hegde S., Gangadharan K.V., An experimental investigation on the matrix dependent rheological properties of MRE, Journal of Intelligent Material Systems and Structures, vol. 35, no. 1, pp. 81-98, 2024			
	81.	Brizzi S., Cavozzi C., Storti F., Smart materials for experimental tectonics: Viscous behavior of magnetorheological silicones, Tectonophysics, vol. 867, art. no. 230038, 2023			
	82.	Stepanov G.V., Bakhtiiarov A.V., Lobanov D.A., Storozhenko P.A., Magnetoresistivity and piezoresistivity of magnetoactive elastomers, Journal of Magnetism and Magnetic Materials, vol. 587, art. no. 171313, 2023			
	83.	Costi L., Georgopoulou A., Mondal S., Iida F., Clemens F., 3D Printable Self-Sensing Magnetorheological Elastomer, Macromolecular Materials and Engineering, vol 309, no. 2, art. no. 2300294, 2023			
	84.	Qin X.B., Zhang J.T., Guo X., Zhang M., Zhai P.C., Magnetorheological effect and sensing performance of graphite sheet filled PDMS based magnetorheological elastomer under compression, Smart Materials and Structures, vol. 33, no. 1, art. no. 015017, 2024			
	85.	Wang Y.C., Qin Y.F., Luo K., Tian Q., Hu H.Y., Dynamic modeling and simulation of hard-magnetic soft beams interacting with environment via high-order finite elements of ANCF, International Journal of Engineering Science, vol. 202, art. no. 104102, 2024			
	86.	Ding W., Wang L.Z., Chen Z.B., Ao H.R., Yan H., An Adaptive Elastic Support Seat-Based Magnetorheological Elastomer for Human Body Vibration Reduction, Materials, vol. 17, no. 13, art. no. 3330, 2024			
	87.	Sul O., Choo S.J., Jee I.S., Kim J., Kim H.J., A pressure sensor based on the interaction between a hard magnet magnetorheological elastomer and a Hall effect structure, Micromachines, vol. 15, no. 10, article no. 1221, 2024.			
	88.	Nadzharyan T.A., Kramarenko E.Y., The effect of particle-matrix interface on the local mechanical properties of filled polymer composites: Simulations and theoretical analysis, Polymers, vol. 17, no. 1, article no. 111, 2025.			
	89.	Mazlum U., Celik I., Experimental determination of the compression behavior of RTV silicone rubber-based magnetorheological (MR) materials under static loading, *Journal of Magnetism and Magnetic* Materials, vol. 614, article no. 172698, 2025.			
	90.	Zhang, S.Z., Zhang, Z.Q., Magnetically tunable band gaps and defect states of longitudinal waves in hard magnetic soft phononic crystal beams, European Journal of Mechanics A-Solids, vol. 111, Art. no. 105575, 2025			
	91.	Mahmoud D.S., Koriem A.A., El-Sabbagh S.H., Salem S.R., Versatile NBR/EPDM reinforced Cu-Al-Zn alloy composites with inherent soft magnetic behavior, Journal of Materials Science: Materials in Electronics, vol. 37, no. 3, art. no. 231, 2026.			
	92.	Mondal S., Spolenak R., Clemens F., Magnetoactive soft elastomers-materials design, processing and applications, *Reports on Progress in Physics*, vol. 89, no. 3, art. no. 036502, 2026.			
29.	Anitas E.M., Bica I., Erhan R.V., Bunoiu M., Kuklin A.I., Structural Properties of Composite Elastomeric Membranes Using Small-Angle Neutron Scattering, Romanian Journal of Physics, 60, 2015, 653-657		4	5	*0.8*

	https://www.webofscience.com/wos/woscc/full-record/WOS:000358454700003				
	autocit.	Bica I., Bălăşoiu M., Bunoiu M., Iordaconiu L., Cirtina G., Influence of the longitudinal magnetic field on the turning angle of a cylindrical bar-shaped magnetorheological elastomer, Journal of Optoelectronics and Advanced Materials, vol. 17, pp. 1379-1384, 2015			
	autocit.	Bica I., Anitas E.M., Bunoiu M., Iordaconiu L., Bortun C.M., Averis L.M.E., Mechanisms of micropore formation in silicone rubber based membranes, Romanian Journal of Physics, vol. 61, pp. 464-472, 2016			
	1.	Badita C.R., Aranghel D., Radulescu A., Anitas E.M., Investigation of multilevel structure of low viscosity sodium alginate by small-angle neutron scattering, Romanian Reports in Physics, vol. 68, no. 3, pp. 1115-1122, 2016			
	2.	Anitas E.M., Convex and concave successions of power-law decays in small-angle scattering, Journal of Physics Conference Series, vol. 738, art. no. UNSP 012022, 2016			
	autocit.	Bunoiu M., Bica I., Magnetorheological elastomer based on silicone rubber, carbonyl iron and Rochelle salt: Effects of alternating electric and static magnetic fields intensities, Journal of Industrial and Engineering Chemistry, vol. 37, pp. 312–318, 2016			
	3.	Cirtina, L. M.; Bica, I.; Chirigiu, L.; et al., Electrical Capacitors Based On Magnetorheological Elastomers: Effects Of The Static And Pulsating Magnetic Field On Electrical Properties, Romanian Reports In Physics, Volume: 71, Issue: 4, Article Number: 509, 2019			
	fără IF	Bica, I; Cirtina, L.; Cirtina, D.; et al., Magnetorheological gel-based magnetoresistor: Effects of a static and a periodic time-varying magnetic field on the electrical resistance, Journal of Physics Conference Series, Vol. 139 , Art. no. 012091, 2019			
	autocit.	Bunoiu M., Vlase G., Bica I., Balasoiu M., Pascu G., Vlase T., STUDY OF THERMAL STABILITY OF SOME MAGNETORHEOLOGICAL ELASTOMERS, ROMANIAN REPORTS IN PHYSICS, Vol. 73, No. 2, Art. No. 503, 2021			
	4.	Anitas, E. M., Scattering from hierarchical multi-phase fractals: analysis of the crossover between fractal regimes, Romanian Reports in Physics, vol. 73, no. 1, art. no. 104, 2021			
30.	Neculae A., Strambeanu M., Lungu A., Bunoiu M., Lungu M., Nanoparticles trapping from flue gas using dielectrophoresis, AIP Conference Proceedings, 1694, 2015, 040004 https://www.webofscience.com/wos/woscc/full-record/WOS:000366573900030		0	5	*0*
31.	Craciun, D., Oprescu, M., Bunoiu, M., Promoting an English and Science Summer Programme through Social Media, SMART 2014 - SOCIAL MEDIA IN ACADEMIA: RESEARCH AND TEACHING, 2015, 119-123 https://www.webofscience.com/wos/woscc/full-record/WOS:000367888300019		0	3	*0*
32.	Craciun D, Bunoiu M., Why Blended Learning Models in Romanian Science Education? Rethinking Education by Leveraging the Elearning Pillar of the Digital Agenda for Europe! vol. III of Book Series: eLearning and Software for Education, 460-468, 2015 https://www.webofscience.com/wos/woscc/full-record/WOS:000384471300071		0	2	*0*
33.	Bica I., Anitas E.M., Averis L.M.E., Bunoiu M., Magnetodielectric effects in composite materials based on paraffin, carbonyl iron and graphene, Journal of Industrial and Engineering Chemistry 21, 2015, 1323–1327 https://www.webofscience.com/wos/woscc/full-record/WOS:000350079800179		29	4	*7.25*
	1.	Ahn W.J., Jung H.S., Choi H.J., Pickering emulsion polymerized smart magnetic poly(methyl methacrylate)/Fe2O3 composite particles and their stimulus-response, RSC Advances, vol. 5, pp. 23094-23100, 2015			
	2.	Anitas E.M., Microscale Fragmentation and Small-Angle Scattering from Mass Fractals, Advances in Condensed Matter Physics, vol. 2015, art. no. 501281, 2015			
	3.	Bica I., Anitas E.M., Averis L.M.E., Tensions and deformations in composites based on polyurethane elastomer and magnetorheological suspension: Effects of the magnetic field, Journal of Industrial and Engineering Chemistry, vol. 28, pp. 86-90, 2015			
	4.	Piao S.H., Chae H.S., Choi H.J., Carbonyl Iron suspension with Core-shell Structured Fe3O4@SiO2 Nanoparticle Additives and Its Magnetorheological Property, IEEE Transactions on Magnetics, vol. 51, no. 11, art. no. 4600704, 2015			
	5.	Zhang, K., Piao, S.H., Choi, H.J., Hollow Structured Magnetic Particles of CoFe2O4 and Their Magnetorheological Characteristics, IEEE Transactions on Magnetics 51, art. no. 2005904, 2015			
	6.	Cirtina, G., Balasoiu, M., Anitas, E.M., et al., Silicone rubber membranes: Influence of the electric field of medium frequency on the dielectric properties, Journal of Optoelectronics and Advanced Materials, vol. 17, pp. 1891-1895, 2015			
	fără IF	Anitas E.M., Convex and concave successions of power-law decays in small-angle scattering, Journal of Physics Conference Series, vol. 738, art. no. UNSP 012022, 2016			
	7.	Kim Y.H., Ahn W.J., Choi H.J., Seo Y., Fabrication and magnetic stimuli-response of polydopamine-coated core–shell structured carbonyl iron microspheres, Colloid and Polymer Science, vol. 294, pp. 329-337, 2016			
	8.	Jung H.S., Kwon S.H., Choi H.J., Jung J.H., Kim Y.G., Magnetic carbonyl iron/natural rubber composite elastomer and its magnetorheology, Composite Structures, vol. 136, pp. 106–112, 2016			
	9.	Halake K., Birajdar M., Lee J., Structural implications of polyphenolic antioxidants, Journal of Industrial and Engineering Chemistry, vol. 35, pp. 1-7, 2016			

	10.	Chae H.S., Kim S.D., Piao S.H., et al., Core-shell structured Fe3O4@SiO2 nanoparticles fabricated by sol-gel method and their magnetorheology, Colloid and Polymer Science, vol. 294, 647-655, 2016	
	autocit.	Bunoiu M., Bica I., Magnetorheological elastomer based on silicone rubber, carbonyl iron and Rochelle salt: Effects of alternating electric and static magnetic fields intensities, Journal of Industrial and Engineering Chemistry, vol. 37, pp. 312–318, 2016	
	11.	Moon I.J., Kim M.W., Choi H.J., Kim N., You C.-Y., Fabrication of dopamine grafted polyaniline/carbonyl iron core-shell typed microspheres and their magnetorheology, Colloids and Surfaces A: Physicochemical and Engineering Aspects, vol. 500, pp. 137–145, 2016	
	12.	Martins P., Silva D., Silva M.P., Lanceros-Mendez S., Improved magnetodielectric coefficient on polymer based composites through enhanced indirect magnetoelectric coupling, Applied Physics Letters, vol. 109, no. 11, art. no. 112905, 2016	
	13.	Kim M.W., Han W.J., Kim Y.H. Choi H.J., Effect of a hard magnetic particle additive on rheological characteristics of microspherical carbonyl iron-based magnetorheological fluid, Colloids and Surfaces A-Physicochemical and Engineering Aspects, vol. 506, pp. 812-820, 2016	
	14.	Wang G.S., Ma Y.Y., Tong Y., Dong X.F., Development of manganese ferrite/graphene oxide nanocomposites for magnetorheological fluid with enhanced sedimentation stability, Journal of Industrial and Engineering Chemistry, vol. 48, pp. 142-150, 2017	
	15.	Gao C.Y., Piao S.H., Choi H.J., Pickering emulsion polymerized magnetite-poly(methyl methacrylate) composite particles and their magnetorheology, Colloid and Polymer Science, vol. 295, no. 6, pp. 959-966, 2017	
	16.	Dong Y.Z., Piao S.H., Zhang K., et al., Effect of CoFe2O4 nanoparticles on a carbonyl iron based magnetorheological suspension, Colloids and Surfaces A-Physicochemical and Engineering Aspects, vol. 537, pp. 102-108, 2018	
	fără IF	Mikhasev, Gennadi I.; Altenbach, Holm, Equivalent Single Layer Model for Thin Laminated Cylindrical Shell, Thin-Walled Laminated Structures: Buckling, Vibrations And Their Suppression Book Series: Advanced Structured Materials, Volume: 106, Pages: 29-84, Published: 2019	
	17.	Gao, Chun Yan; Lu, Qi; Choi, Hyoung Jin; et al., Fabrication of Magnetite Nanoparticle-embedded Polystyrene Composites and Their Additive Role on the Dynamic Properties of Carbonyl Iron-based Magneto-rheological Fluids, Journal of Magnetics, Vol. 24, No. 1, pp. 162-167, 2019	
	18.	Isaev D., Semisalova A., Alekhina Y., Simulation of Magnetodielectric Effect in Magnetorheological Elastomers, International Journal of Molecular Science, Vol. 20, No. 6, Art. No. 1457, 2019	
	19.	Chen, Yuwei; Liu, Yuhong; Yang, Jiying; et al., Fabrication of high dielectric permittivity polymer composites by architecting aligned micro-enhanced-zones of ultralow content graphene using electric fields, Materials Today Communications, Volume: 21, Article Number: 100649, 2019	
	20.	He, Mingyue; Zeng, Yingzhe; Zhou, Fei; et al., MnFe2O4 nanoparticles anchored on the surface of MgAl-layered double hydroxide nanoplates for stable magnetorheological fluids, JOURNAL OF MOLECULAR LIQUIDS, Vol. 319, Art. no. 114098, 2020	
	21.	Choi, Hyung-Yoon; Choi, Jin-Yeong; Park, Hyun-Ho; et al., Effect of reduced graphene oxide and MnFe2O4 nanoparticles on carbonyl iron for magnetorheological fluids, JOURNAL OF INDUSTRIAL AND ENGINEERING CHEMISTRY, vol. 98, pp.140-147, 2021	
	22.	Teusdea A., Malaescu I., Sfirloaga P., Marin C.N., Electric and Dielectric Properties in Low-Frequency Fields of Composites Consisting of Silicone Rubber and Al Particles for Flexible Electronic Devices, Materials, vol. 15, no. 6, art. no. 2309, 2022	
	23.	Kariganaur A.K., Kumar H., Arun M., Influence of temperature on magnetorheological fluid properties and damping performance, Smart Materials and Structures, vol. 31, no. 5, art. no. 055018, 2022	
	24.	Kariganaur A.K., Kumar H., Arun M., Impact of increased particle concentration on magnetorheological fluid properties and their damping performance, KOREA-AUSTRALIA RHEOLOGY JOURNAL, vol. 34, no. 3, 223-238, 2022	
	25.	Zhang C.J., Liu S.G., Wei F.M., Dong L.Q., Zhao D., Ou Y.Q., Magnetodielectric Properties of Ordered Microstructured Polydimethylsiloxane-Based Magnetorheological Elastomer with Fe3O4@rGO Nanoparticles, Polymers, vol. 15, no. 4, art. no. 941, 2023	
	26.	Kariganaur A.K., Kadam S., Kumar H., Arun M., Effect of reduced geometric dimensions on torque generation in two plate rotor magnetorheological brake with in-house magnetorheological fluid, Smart Materials and Structures, vol. 32, no. 3, art. no. 035026, 2023	
	27.	Stepanov G.V., Bakhtiiarov A.V., Lobanov D.A., Storozhenko P.A., Magnetoresistivity and piezoresistivity of magnetoactive elastomers, Journal of Magnetism and Magnetic Materials, vol. 587, art. no. 171313, 2023	
	28.	Marin C.N., Malaescu I., The Effect of Magnetically Induced Local Structure and Volume Fraction on the Electromagnetic Properties of Elastomer Samples with Ferrofluid Droplet Inserts, Magnetochemistry, vol. 10, no. 1, art. no. 4, 2024	
	autocit.	Bunoiu O.M., Bica I., Anitas E.M., Chirigiu L.M.E., Magnetodielectric and rheological effects in magnetorheological suspensions based on lard, gelatin, and carbonyl iron microparticles, Materials, vol. 17, no. 16, article no. 3941, 2024.	
	29.	Kurimsky J., Rajnak M., Sarpataky M., Cimbala R., Paulovicová K., Krbal M., Kopcansky P., Analysis of impulse withstand voltage of ester-based nanofluids, Surfaces and Interfaces, vol. 53, article no. 105032, 2024.	

34.		Bica I, Anitas E.M., Chirigiu I., Bunoiu M., Juganaru I., Tatu R.F., Magnetodielectric effects in hybrid magnetorheological suspensions, Journal of Industrial and Engineering Chemistry, 22, 2015, 53-62 https://www.webofscience.com/wos/woscc/full-record/WOS:000355234800007	26	5.5	*4.727*
	autocit.	Bica I., Bălăşoiu M., Bunoiu M., Iordaconiu L., Cirtina G., Influence of the longitudinal magnetic field on the turning angle of a cylindrical bar-shaped magnetorheological elastomer, Journal of Optoelectronics and Advanced Materials, vol. 17, pp. 1379-1384, 2015			
	1.	Cirtina, G., Balasoiu, M., Anitas, E.M., et al., Silicone rubber membranes: Influence of the electric field of medium frequency on the dielectric properties, Journal of Optoelectronics and Advanced Materials, vol. 17, pp. 1891-1895, 2015			
	2.	Halake K., Birajdar M., Lee J., Structural implications of polyphenolic antioxidants, Journal of Industrial and Engineering Chemistry, vol. 35, pp. 1-7, 2016			
	3.	Lee D.W., Yoo B.R., Advanced silica/polymer composites: Materials and applications, Journal of Industrial and Engineering Chemistry, vol. 38, pp. 1-12, 2016			
	4.	Moon I.J., Kim M.W., Choi H.J., Kim N., You C.-Y., Fabrication of dopamine grafted polyaniline/carbonyl iron core-shell typed microspheres and their magnetorheology, Colloids and Surfaces A: Physicochemical and Engineering Aspects, vol. 500, pp. 137–145, 2016			
	5.	Halake K., Kim H.J., Birajdar M, et. al., Recently developed applications for natural hydrophilic polymers, Journal of Industrial Engineering Chemistry, vol. 40, pp. 16-22, 2016			
	6.	Kim M.W., Han W.J., Kim Y.H. Choi H.J., Effect of a hard magnetic particle additive on rheological characteristics of microspherical carbonyl iron-based magnetorheological fluid, Colloids and Surfaces A-Physicochemical and Engineering Aspects, vol. 506, pp. 812-820, 2016			
	autocit.	Bălăşoiu M., Bunoiu M., Chirigiu L., Chirigiu L.M.E., Pascu G., Bica I., Magnetodielectric Membranes: Effects of the Magnetic Field on the Dielectric Loss Tangent, AIP Conference Proceedings, vol. 1916, art. no. 040007, 2017			
	7.	Katiyar A.; Dhar P., Nandi T., et al., Role of Fibrillation on the Magnetorheological and Viscoelastic Effects in Fe, Ni, and Co Nanocolloids, IEEE Transactions on Magnetics, vol. 53, no. 8, art. no. 4800108, 2017			
	8.	Oh, Jong-Seok; Choi, Seung-Bok, State of the art of medical devices featuring smart electro-rheological and magneto-rheological fluids, Journal Of King Saud University Science, Volume: 29, Issue: 4, Pages: 390-400, 2017			
	9.	Bica I., Anitas E. M., Magnetic field intensity and graphene concentration effects on electrical and rheological properties of MREs-based membranes, Smart Materials and Structures, vol. 26, no. 10, art. no. 105038, 2017			
	autocit.	M. Bunoiu, J. Neamțu, L. Chirigiu, M. Bălăşoiu, G. Pascu, I. Bica, L.M.E. Chirigiu, Hybrid Magnetorheological Elastomers: Effects of the magnetic field on some electrical properties, Applied Surface Science, vol. 424, pt. 3 (SI), pp. 282-289, 2017			
	10.	Bica I., Anitas E.M., Chirigiu L., Magnetic field intensity effect on plane capacitors based on hybrid magnetorheological elastomers with graphene nanoparticles, Journal of Industrial and Engineering Chemistry, vol. 56, pp. 407-412, 2017			
	11.	Bica, I, Influence Of Magnetic Field On The Electrical Properties Of Membranes Based On Magnetorheological Bio-Suspensions, Romanian Journal Of Physics, Volume: 63, Issue: 9-10, Article Number: 704, 2018			
	12.	Dong Y.Z., Piao S.H., Zhang K., et al., Effect of CoFe2O4 nanoparticles on a carbonyl iron based magnetorheological suspension, Colloids and Surfaces A-Physicochemical and Engineering Aspects, vol. 537, pp. 102-108, 2018			
	13.	Alias N.F., Muthalif A.G.A., Arpan K.A.M., et al., Experimental Investigation of Static Properties of Magnetorheological Elastomer, Iranian Journal of Science and Technology-Transactions of Mechanical Engineering, vol. 42, no. 2, pp. 185-197, 2018			
	14.	Bica I., Anitas E.M., Chirigiu L., et al., Hybrid magnetorheological suspension: effects of magnetic field on the relative dielectric permittivity and viscosity, Colloid and Polymer Science, vol. 296, no. 8, pp. 1373-1378, 2018			
	15.	Bica I., Anitas E.M., Magnetic field intensity effect on electrical conductivity of magnetorheological biosuspensions based on honey, turmeric and carbonyl iron, Journal of Industrial and Engineering Chemistry, vol. 64, pp. 276-283, 2018			
	16.	Bica I., Anitas E.M., Lu Q., et al., Effect of magnetic field intensity and gamma-Fe2O3 nanoparticle additive on electrical conductivity and viscosity of magnetorheological carbonyl iron suspension-based membranes, Smart Materials and Structures, vol. 27, no. 9, art. no. 095021, 2018			
	17.	Bica, I.; Anitas, E.M., Magnetic field intensity and gamma - Fe2O3 concentration effects on the dielectric properties of magnetodielectric tissues, Materials Science And Engineering B-Advanced Functional Solid-State Materials, vol. 236, pp. 125-131, 2018			
	18.	Bica I., Anitas E. M., Magnetodielectric effects in membranes based on magnetorheological bio-suspensions, Materials & Design, vol. 155, pp. 317-324, 2018			
	19.	Bica, I; Anitas, E. M., Effects Of Magnetic Field On The Light Transmittance Through Magnetorheological Suspensions Based Films, Romanian Journal Of Physics, Volume: 64, Issue: 7-8, Article Number: 604, 2019			

	20.	Hui, Liu Xu; Tian, Guo Tian; Guang, Yang; et al., Effect of nanomagnetic particle on mechanics performance of magneto-rheological fluid, Soft Materials, vol. 17, no. 2, pp. 119-125, 2019			
	21.	Bica, I.; Anitas, E. M., Magnetodielectric effects in hybrid magnetorheological suspensions based on beekeeping products, Journal Of Industrial And Engineering Chemistry, Volume: 77, Pages: 385-392, 2019			
	22.	Bica, Ioan; Anitas, Eugen Mircea, Graphene Platelets-Based Magnetoactive Materials with Tunable Magnetoelectric and Magnetodielectric Properties, NANOMATERIALS, Vol. 10, No. 9, Art. No. 1783, 2020			
	23.	Aruna, M. N.; Rahman, M. R.; Joladarashi, Sharnappa; et al., Influence of different fumed silica as thixotropic additive on carbonyl particles magnetorheological fluids for sedimentation effects, Journal of Magnetism and Magnetic Materials, vol. 529, art. no. 167910, 2021			
	24.	Bica I., Balasoiu M., Sfirloaga P., Effects of electric and magnetic fields on dielectric and elastic properties of membranes composed of cotton fabric and carbonyl iron microparticles, Results in Physics, vol. 35, art. no. 105332, 2022			
	25.	Bica I., Iacobescu G.E., Magneto-Dielectric Effects in Polyurethane Sponge Modified with Carbonyl Iron for Applications in Low-Cost Magnetic Sensors, Polymers, vol. 14, no 10, art. no. 2062, 2022			
	26.	Kostrov S.A., Dolmatov A.V., Kramarenko E.Y., The Effect of the Silicon Shell of Magnetic Microparticles on the Viscoelastic Properties of Magnetoactive Silicone Elastomers and Their Response to an External Magnetic Field, *Polymer Science Series A*, vol. 67, no. 6, art. no. 25, 2026.			
35.	Bica I., Bălășoiu M., Bunoiu M., Iordaconiu L., Cirtina G., Influence of the longitudinal magnetic field on the turning angle of a cylindrical bar-shaped magnetorheological elastomer, Journal of Optoelectronics and Advanced Materials, 17, 2015, 1379-1384 https://www.webofscience.com/wos/woscc/full-record/WOS:000364600400024		2	5	*0.4*
	autocit.	M. Bunoiu, J. Neamțu, L. Chirigiu, M. Bălășoiu, G. Pascu, I. Bica, L.M.E. Chirigiu, Hybrid Magnetorheological Elastomers: Effects of the magnetic field on some electrical properties, Applied Surface Science, vol. 424, pt. 3 (SI), pp. 282-289, 2017			
	autocit.	Balasoiu M., Kozhevnikov S.V., Nikitenko Yu. V., Iacobescu G.E., Bunoiu M., Bica I., Silicone rubber based magnetorheological elastomer: magnetic structure tested by means of neutron depolarization and magnetic force microscopy methods, Journal of Physics: Conference Series, vol. 848, art. no. 012016, 2017			
	1.	Cirtina, L. M.; Bica, I.; Chirigiu, L.; et al., Electrical Capacitors Based On Magnetorheological Elastomers: Effects Of The Static And Pulsating Magnetic Field On Electrical Properties, Romanian Reports In Physics, Volume: 71, Issue: 4, Article Number: 509, 2019			
	2.	Bica I., Balasoiu M., Sfirloaga P., Effects of electric and magnetic fields on dielectric and elastic properties of membranes composed of cotton fabric and carbonyl iron microparticles, Results in Physics, vol. 35, art. no. 105332, 2022			
	autocit.	Bunoiu M., Iacobescu G.E., Pascu G., Chirigiu L., Bica I., Magnetically Active Composites with Relatively Giant Dielectric Permittivity, Romanian Reports in Physics, vol. 75, no. 3, art. no. 503, 2023			
36.	Craciun D, Bunoiu M., Training Teachers for the Knowledge Society: Social Media in Science Education, BRAIN-BROAD RESEARCH IN ARTIFICIAL INTELLIGENCE AND NEUROSCIENCE, vol. 6, 82-83, 2015 https://www.webofscience.com/wos/woscc/full-record/WOS:000376294800006		2	2	*1*
	fără IF	Tan A.-L., Tan S.C., Science Teachers' Engagement with ICT in Singapore: Different Perspectives, Conference: 25th International Conference on Computers in Education (ICCE) - Technology and Innovation - Computer-Based Educational Systems for the 21st Century, Christchurch, New Zealand, Dec. 2017, pp. 937-945, 2017			
	fără IF	Maris, Simina; Maris, Stefan-Alfred; Dungan, Luisa; et al., Re-shaping Education: Role of Internet Resources in Increasing the Efficiency of the Educational Process, Brain-Broad Research In Artificial Intelligence And Neuroscience, vol. 9, no. 1, pp. 132-137, 2018			
	autocit.	Craciun D., Bunoiu M., Teacher Training in the Context of Open Science and Science Education, Elearning Challenges and New Horizons, Vol. 4, Book Series: eLearning and Software for Education, pp. 319-326, 2018			
	autocit.	Craciun D., Bunoiu M., Digital Comics, a Visual Method for Reinvigorating Romanian Science Education, Revista Românească pentru Educație Multidimensională, Vol. 11, No. 4, pp. 321-341, 2019			
	fără IF	Tan, Aik-Ling; Tan, Seng Chee, Science Teachers' Engagement with ICT in Singapore: Different Perspectives, 25TH INTERNATIONAL CONFERENCE ON COMPUTERS IN EDUCATION (ICCE 2017): TECHNOLOGY AND INNOVATION: COMPUTER-BASED EDUCATIONAL SYSTEMS FOR THE 21ST CENTURY, pp. 937-945, 2017			
	1.	Que E.N., Sustaining Successful ICT Integration in Remote Rural Schools, Pertanika Journal of Social Science and Humanities, vol. 29, no. 3, pp. 1487-1506, 2021			
	fără IF	Santos F., Suárez F., Gairín J., Leveraging geographic research, web applications and surveys in the construction of educational strategies in Ecuador, in Yang X.S., Sherratt S., Dey N., Joshi A. (eds.), Proceedings of Ninth International Congress on Information and Communication Technology, vol. 8, ICICT 2024, Lecture Notes in Networks and Systems, vol. 1004, pp. 185-202, 2024.			
	2.	Ferguson, D.G., Campbell, C., Nolen, Z.L., Daniel, K.L., Considering and measuring student perceptions on the role of using social media as an educational tool in science courses, Computers and Education Open, vol. 8, Art. no. 100250, 2025.			

37.	Bica I., Anitas E.M., Bunoiu M., Iordaconiu L., Bortun C.M., Averis L.M.E., Mechanisms of micropore formation in silicone rubber based membranes, Romanian Journal of Physics, Vol. 61, 464-472, 2016 https://www.webofscience.com/wos/woscc/full-record/WOS:000376474500015		1	5.5	*0.181*
	1.	Przybyłek M., Bakar M., Mendrycka M., Kosikowska U., Malm A., Worzakowska M., Szymborski T., Kędra-Królik K., Rubber elastomeric nanocomposites with antimicrobial properties, Materials Science and Engineering: C, vol. 76, pp. 269-277, 2017			
	autocit.	Bunoiu M., Vlase G., Bica I., Balasoiu M., Pascu G., Vlase T., STUDY OF THERMAL STABILITY OF SOME MAGNETORHEOLOGICAL ELASTOMERS, ROMANIAN REPORTS IN PHYSICS, Vol. 73, No. 2, Art. No. 503, 2021			
38.	Bica I., Balasoiu M., Bunoiu M., Iordaconiu L., Microparticles and Electroconductive Magnetorheological Suspensions, Romanian Journal of Physics, Vol. 61, 926-945, 2016 https://www.webofscience.com/wos/woscc/full-record/WOS:000381898000015		12	4	*3*
	autocit.	Balasoiu M., Kozhevnikov S.V., Nikitenko Yu. V., Iacobescu G.E., Bunoiu M., Bica I., Silicone rubber based magnetorheological elastomer: magnetic structure tested by means of neutron depolarization and magnetic force microscopy methods, Journal of Physics: Conference Series, vol. 848, art. no. 012016, 2017			
	autocit.	Bălășoiu M., Bunoiu M., Chirigiu L., Chirigiu L.M.E., Pascu G., Bica I., Magnetodielectric Membranes: Effects of the Magnetic Field on the Dielectric Loss Tangent, AIP Conference Proceedings, vol. 1916, art. no. 040007, 2017			
	1.	Yang X., Huang Y., Hou Y., Wu H., Xu R., Chu P.K., An experimental study of magnetorheological fluids on electrical conductivity property, Journal of Materials Science: Materials in Electronics, vol. 28, no. 11, pp. 8130-8135, 2017			
	2.	Katiyar A.; Dhar P., Nandi T., et al., Role of Fibrillation on the Magnetorheological and Viscoelastic Effects in Fe, Ni, and Co Nanocolloids, IEEE Transactions on Magnetics, vol. 53, no. 8, art. no. 4800108, 2017			
	3.	Bica I., Anitas E. M., Magnetic field intensity and graphene concentration effects on electrical and rheological properties of MREs-based membranes, Smart Materials and Structures, vol. 26, no. 10, art. no. 105038, 2017			
	4.	Bica I., Anitas E.M., Chirigiu L., Magnetic field intensity effect on plane capacitors based on hybrid magnetorheological elastomers with graphene nanoparticles, Journal of Industrial and Engineering Chemistry, vol. 56, pp. 407-412, 2017			
	5.	Bica, I, Influence Of Magnetic Field On The Electrical Properties Of Membranes Based On Magnetorheological Bio-Suspensions, Romanian Journal Of Physics, Volume: 63, Issue: 9-10, Article Number: 704, 2018			
	6.	Mihalache, D.; Baran, V; Constantinescu, B.; et al., The Founders Of Modern Physics In Romania As Seen From The Archive Of Revue Roumaine De Physique, Romanian Journal Of Physics, Volume: 63, Issue: 9-10, Article Number: 113, 2018			
	7.	Bica I., Anitas E.M., Chirigiu L., et al., Hybrid magnetorheological suspension: effects of magnetic field on the relative dielectric permittivity and viscosity, Colloid and Polymer Science, vol. 296, no. 8, pp. 1373-1378, 2018			
	8.	Park I.H., Choi H.J., Fabrication of p-aminobenzoic acid grafted carbonyl iron/polyindole composite particles and their magnetorheological response, Journal of Industrial and Engineering Chemistry, vol. 64, pp. 102-106, 2018			
	9.	Bica I., Anitas E.M., Lu Q., et al., Effect of magnetic field intensity and gamma-Fe2O3 nanoparticle additive on electrical conductivity and viscosity of magnetorheological carbonyl iron suspension-based membranes, Smart Materials and Structures, vol. 27, no. 9, art. no. 095021, 2018			
	10.	Bica, I; Anitas, E. M., Effects Of Magnetic Field On The Light Transmittance Through Magnetorheological Suspensions Based Films, Romanian Journal Of Physics, Volume: 64, Issue: 7-8, Article Number: 604, 2019			
	11.	Cirtina, L. M.; Bica, I.; Chirigiu, L.; et al., Electrical Capacitors Based On Magnetorheological Elastomers: Effects Of The Static And Pulsating Magnetic Field On Electrical Properties, Romanian Reports In Physics, Volume: 71, Issue: 4, Article Number: 509, 2019			
	fără IF	Bica, I; Cirtina, L.; Cirtina, D.; et al., Magnetorheological gel-based magnetoresistor: Effects of a static and a periodic time-varying magnetic field on the electrical resistance, Journal of Physics Conference Series, Vol. 139 , Art. no. 012091, 2019			
	autocit.	Anitas E., Bica I., Bunoiu M., Malaescu I., Marin C.N., Ercuta A., Balasoiu M., Lungu M., Pascu G., Magneto-Optical Transmittance Observed in Magnetorheological Suspensions Films, AIP Conference Proceedings, 2218, 030016, 2020			
	autocit.	Balasoiu M., Bunoiu M., Chrigiu L.M.E., Bica I., ELECTRICAL DEVICES BASED ON HYBRID MAGNETORHEOLOGICAL SUSPENSIONS: REALIZATION, PHENOMENOLOGICAL MODELING AND TECHNICAL CHARACTERISTICS, ROMANIAN JOURNAL OF PHYSICS, Vol. 66, No. 5-6. Art. No. 604, 2021			
	autocit.	Bunoiu M., Vlase G., Bica I., Balasoiu M., Pascu G., Vlase T., STUDY OF THERMAL STABILITY OF SOME MAGNETORHEOLOGICAL ELASTOMERS, ROMANIAN REPORTS IN PHYSICS, Vol. 73, No. 2, Art. No. 503, 2021			

	12.	Bica I., Balasoiu M., Sfirloaga P., Effects of electric and magnetic fields on dielectric and elastic properties of membranes composed of cotton fabric and carbonyl iron microparticles, Results in Physics, vol. 35, art. no. 105332, 2022			
39.		Craciun D., Craciun P., Bunoiu M., Digital Storytelling as a Creative Teaching Method in Romanian Science Education, AIP Conference Proceedings, vol. 1722, 310001, 2016 https://www.webofscience.com/wos/woscc/full-record/WOS:000375923300192	1	3	*0.333*
	fără IF	Felea, Cristina; Stanca, Liana, Digital Storytelling for Teaching Romanian for Academic Purposes - An Optimal Method for Developing Employability Skills?, ELEARNING CHALLENGES AND NEW HORIZONS, VOL 4, Book Series: eLearning and Software for Education, Pages: 163-170, 2018			
	autocit.	Craciun D., Bunoiu M., Digital Comics, a Visual Method for Reinvigorating Romanian Science Education, Revista Românească pentru Educație Multidimensională, Vol. 11, No. 4, pp. 321-341, 2019			
	1.	Gemelli E., Olmedo-Moreno E., Ubeda-Sanchez A.M., Rodriguez-Sabiote C., Bibliometric Study of Scientific Output Between 2011 and 2020 Regarding Teaching-Learning of the Sciences Through Comic Books, SAGE Open, vol. 14, no. 1, art. no. 21582440231220107, 2024			
40.		Neculae A., Bunoiu M., Lungu A., Lungu M., Filtration of flue gas in microfluidic devices using dielectrophoresis, Romanian Journal of Physics, Vol. 61, No. 5-6, 957-969, 2016 https://www.webofscience.com/wos/woscc/full-record/WOS:000381898000017	0	4	*0*
41.		Neculae A., Bunoiu M., Lungu A., Lungu M., Filtration of flue gas by retaining of nanoparticles in microfluidic devices using dielectrophoresis, Romanian Reports in Physics, Vol. 68, No. 3, 2016 https://www.webofscience.com/wos/woscc/full-record/WOS:000383829000015	0	4	*0*
42.		D. Craciun, M. Bunoiu, Augmented Reality in Romanian Science Education – Pros and Cons, The International Scientific Conference eLearning and Software for Education 3: 193-199. Bucharest: "Carol I" National Defence University, 2016 https://www.webofscience.com/wos/woscc/full-record/WOS:000385397100028	0	2	*0*
	autocit.	Crăciun D., Bunoiu M., Boosting physics education through mobile augmented reality, AIP Conference Proceedings, vol. 1916, art. no. 050003, 2017			
	fără IF	Craciun, Dana, Class Orchestration in an Augmented Reality Based Environment, International Conference Beliefs And Behaviours In Education And Culture, Pages: 108-118, 2018			
	fără IF	Liu, Zhi-Jiang; Levina, Vera; Frolova, Yuliya, Information Visualization in the Educational Process: Current Trends, INTERNATIONAL JOURNAL OF EMERGING TECHNOLOGIES IN LEARNING, Vol. 15, No. 13, pp. 49-62, 2020			
43.		Craciunescu E., Sinescu C., Negrutiu M.L., Popa D.M., Lauer H.C., Rominu M., Hutiu G., Bunoiu M., Duma V.F., Antoniac I. Shear bond strength tests of zirconia veneering ceramics after chipping repair, Journal of Adhesion Science and Technology, Vol. 30, 666-676, 2016 https://www.webofscience.com/wos/woscc/full-record/WOS:000366836000008	34	7.5	*4.857*
	1.	de Carvalho R.F., Özcan M., Louzada F., Monteiro E., Bottino M.A., de Melo R.M., Valandro L.F., Comparison of methanol/hydrochloric, ferric chloride acid versus tribochemical silica coating for adhesion of resin cement to zirconium dioxide, Journal of Adhesion Science and Technology, vol. 30, no. 24, 2690-2698, 2016			
	2.	Buyukhatipoglu I.K., Secilmis A., Ergun G., Effects of surface treatments on the shear bond strength of luting cements to zirconia, Journal of Adhesion Science and Technology, vol. 30, no. 22, 2439-2452, 2016			
	3.	Antoniac, I., Sinescu, C., Antoniac, A., Adhesion aspects in biomaterials and medical devices, Journal of Adhesion Science and Technology, vol. 30, no. 16 (SI), 1711-1715, 2016			
	4.	Ferreira Zanatta R., Lacerda Rangel Esper M.A., Pucci C.R., Bühler Borges A., Gomes Torres C.R., Effects of different surface treatments of zirconia on the bond strength of self-adhesive resinous cement, Journal of Adhesion Science and Technology, vol. 31, no. 1, 21-30, 2017			
	5.	Vohra F., Bin Ismail, I.H., Al-Rifaiy, M.Q., et al., Influence of veneering technique and veneer-coping thickness on fracture toughness of implant retained veneered Y-TZP zirconia crowns, Journal of Adhesion Science and Technology, vol. 31, no. 16, pp. 1758-1767, 2017			
	6.	Sinescu C., Bradu A., Duma V.-F., et al., Effects of Temperature Variations during Sintering of Metal Ceramic Tooth Prostheses Investigated Non-Destructively with Optical Coherence Tomography, Applied Sciences-Basel, vol. 7, no. 6, art. no. 552, 2017			
	7.	Maroiu A.C., Sinescu C., Negru R., et al., Evaluation of the Adhesion of a Novel Design of Veneers to Dental Materials, Revista de Chimie, vol. 68, no. 9, pp. 2125-2128, 2017			
	8.	Jang Y.-S., Noh H.-R., Lee M.-H., et al., Effect of Lithium Disilicate Reinforced Liner Treatment on Bond and Fracture Strengths of Bilayered Zirconia All-Ceramic Crown, Materials, vol. 11, no. 1, art. no. 77, 2018			
	Fără IF	Sinescu C., Bradu A., Duma V-F, et al., Temperature variations in sintering ovens for metal ceramic dental prostheses. Non-destructive assessment using OCT, Proceedings of SPIE (Conference: Conference on Lasers in Dentistry XXIV, San Francisco, 2018), vol. 10473, art. no. UNSP 104730C, 2018			

	9.	Moldovan, Horatiu; Plopeanu, Elisa; Dan, Gheorghe; et al., Contributions On Biodegradability Of Mg-Ca Alloys For Orthopedic Implants, University Politehnica Of Bucharest Scientific Bulletin Series B-Chemistry And Materials Science, vol. 80, no. 4, pp. 229-246, 2018	
	10.	Benea H.R.C., Earar K., Lattanzi W., et al., Collagen Scaffold and Lipoaspirate Fluid - derived Stem Cells for the Treatment of Cartilage Defects in a Rabbit Model, Revista de Chimie, vol. 69, no. 2, pp. 515-520, 2018	
	11.	Baciu S., Berece C., Florea A. et al., Comparison of Two Evaluating Methods for Establishing the Marginal Fit on Four Heat - Pressed Resin Inlays, Revista de Chimie, vol. 69, no.4, pp. 890-893, 2018	
	12.	Rivis M., Pricop M., Talpos S., et al., Influence of the Bone Cements Processing on the Mechanical Properties in Cranioplasty,By: Revista de Chimie, vol. 69, no. 4, pp. 990-993, 2018	
	13.	Manole M., Burde A.V., Milea C., et al., Implementation of Holographic Research in Periodontal Disease, Revista de Chimie, vol. 69, no. 7, pp. 1791-1795, 2018	
	14.	Moldovan H., Gheorghita D., Antoniac I., et al., Bioadhesives Used in Cardiovascular Surgery, Revista de Chimie, vol. 69, no. 10, pp. 2799-2803, 2018	
	15.	Earar, Kamel; Porumb, Anca; Matei, Ruxandra; et al., The Glass Ionomer Cement Reinforced with Silver- Premise in Choosing the Teeth Proposed for Orthodontic Purpose Extraction, Revista De Chimie, vol. 70, no. 1, pp. 324-326, 2019	
	16.	Almasi, Adrian; Antoniac, Iulian; Focsaneanu, Sergiu; et al., Design Improvement of Y-TZP Three Unit Bridges by Predicted Stress Concentration Using FEA and Experimental Failure Modes after Three Point Bending Test, Revista de Chimie, vol. 70, no. 1, pp. 336-342, 2019	
	17.	Manolea, Horia Octavian; Matei, Ionela Madalina; Nistor, Cristiana Marga Luiza; et al., A microscopic insight of the morphological changes induced by dental zirconia prosthetic structures, Romanian Journal Of Morphology And Embryology, Volume: 60 Issue: 3, Pages: 875-881, 2019	
	18.	Pantea M., Antoniac I.; Trante O., et al., Correlations between connector geometry and strength of zirconia-based fixed partial dentures, Materials Chemistry and Physics, vol. 222, pp. 96-109, 2019	
	19.	Duma V.F., Sinescu C., Bradu A., Podoleanu A., Optical Coherence Tomography Investigations and Modeling of the Sintering of Ceramic Crowns, Materials, Vol. 12, No. 6, Art. No. 947, 2019	
	20.	Yildirim, Bengisu; Kumbuloglu, Ovul; Saracoglu, Ahmet; et al., An investigation of atomic force microscopy, surface topography and adhesion of luting cements to zirconia: effect of silica coating, zirconia primer and laser, Journal Of Adhesion Science And Technology, Volume: 33, Issue: 18, Pages: 2047-2060, 2019	
	21.	Deac, Larisa Simona; Earar, Kamel; Burtea, Adela Loredana Colceriu; et al., Two Adhesive Systems-effect on Adhesion to Tooth Structure, Revista De Chimie, Volume: 70, Issue: 7, Pages: 2608-2613, 2019	
	22.	do Nascimento Januario, Ana Beatriz; Duarte Moura, Dayanne Monielle; Medeiros de Araujo, Arthur Magno; et al., Effect of temporary cement removal methods from human dentin on zirconia-dentin adhesion, Journal Of Adhesion Science And Technology, Volume: 33, Issue: 19, Pages: 2112-2127, 2019	
	23.	Kwon, Sung-Min; Min, Bong Ki; Kim, Young Kyung; et al., Influence of Sandblasting Particle Size and Pressure on Resin Bonding Durability to Zirconia: A Residual Stress Study, materials, vol. 13, no. 24, art. no. 5629, 2020	
	24.	Manole M., Dinu C., Inchingolo A.D., Rada S., Bordea I.R., Inchingolo A.M., Malcangi G., Marinelli G., D'Oria M.T., Scarano A., Stabilized zirconia ceramics for dental applications, Journal of Biological Regulators and Homeostatic Agents, vol. 35, no. 2, 241-251, 2021	
	25.	Jakovac M., Klaser T., Radatovic B., Skoko Z., Pavic L., Zic M., Impact of Sandblasting on Morphology, Structure and Conductivity of Zirconia Dental Ceramics Material, MATERIALS, Vol. 14, No. 1, Art. No. 2834, 2021	
	26.	Mostovei M., Solomon O., Chele N., Sinescu C., Duma V.F., Mostovei A., Electromyographic Evaluation of Muscle Activity in Patients Rehabilitated with Full Arch Fixed Implant-Supported Prostheses, Medicina-Lithuania, vol. 59, no. 2, art. no. 299, 2023	
	27.	Bors A., Szekely M., Veres Z.B., Corneschi I., Ciocoiu R., Antoniac A., Enachescu C.I., Characterization of innovative dental resin reinforced with zirconia nanoparticles obtained by 3D printing, University Politehnica of Bucharest Scientific Bulletin Series B-Chemistry and Materials Science, vol. 86, no. 2, pp. 289-299, 2024	
	28.	Todor R., Craciunescu E.L., Novac A.C., Tanase A.D., Sinescu C., Caplar B.D., Zaharia C., Pop D.M., Romînu M., Negrutiu M.L., Assessment of dental ceramic sintered at different temperatures, Romanian Journal of Oral Rehabilitation, vol. 16, no. 1, pp. 401-409, 2024	
	29.	Labetic A., Klaser T., Skoko Z., Jakovac M., Zic M., Flexural strength and morphological study of different multilayer zirconia dental materials, Materials, vol. 17, no. 5, art. no. 1143, 2024	
	30.	Necsulescu D.A., Ciurdas M., Robu A., Studies and research on the materials used in the manufacture of clutch discs, University Politehnica of Bucharest Scientific Bulletin, Series B: Chemistry and Materials Science, vol. 86, no. 4, pp. 269-280, 2024.	
	31.	Tatia C.I., Iancu M.M., Antoniac A., Necsulescu A., Robu A., Vasilescu M.L., Corneschi I., Fratila A.M., Comparative analysis of the surface properties of different dental implants, University Politehnica of Bucharest Scientific Bulletin, Series B: Chemistry and Materials Science, vol. 86, no. 4, pp. 245-256, 2024.	

	32.	Sallai, M.A., Petrescu, E.L., Sinescu, C., Negrutiu, M.L., Novac, A.C., Manole, M., Marginal fit of full coverage crowns, inlays & onlays. A systematic & literature review of 5 years, Romanian Journal of Oral Rehabilitation, vol. 17, no. 1, pp. 46–55, 2025.	
	33.	Ileana A., Popescu L., Robu A., Antoniac I., Antoniac A., Evaluation of Surface Characteristics of Dental Guides Fabricated Through 3D Printing, *University Politehnica of Bucharest Scientific Bulletin Series B: Chemistry and Materials Science*, vol. 87, no. 4, pp. 365–380, 2025.	
	34.	Laptoiu S.A., Miculescu M., Enescu D., Antoniac I., Miculescu F., Formation and Characterization of Ti-Al Intermetallic and Oxide Layers on Ti6Al4V as Interlayers for Hydroxyapatite Coatings, *Metals*, vol. 15, no. 10, art. no. 1159, 2025.	
44.	Bunoiu M., Bica I., Magnetorheological elastomer based on silicone rubber, carbonyl iron and Rochelle salt: Effects of alternating electric and static magnetic fields intensities, Journal of Industrial and Engineering Chemistry, vol. 37, 312–318, 2016 https://www.webofscience.com/wos/woscc/full-record/WOS:000377737100040	34	2
	1.	Halake K., Kim H.J., Birajdar M, et. al., Recently developed applications for natural hydrophilic polymers, Journal of Industrial Engineering Chemistry, vol. 40, pp. 16-22, 2016	
	2.	Wang Y., Xuan, S., Ge L., et al., Conductive magnetorheological elastomer: fatigue dependent impedance-mechanic coupling properties, Smart Materials and Structures, vol. 26, no. 1, art. no. 015004, 2017	
	autocit.	Bălășoiu M., Bunoiu M., Chirigiu L., Chirigiu L.M.E., Pascu G., Bica I., Magnetodielectric Membranes: Effects of the Magnetic Field on the Dielectric Loss Tangent, AIP Conference Proceedings, vol. 1916, art. no. 040007, 2017	
	autocit.	Balasoiu M., Kozhevnikov S.V., Nikitenko Yu. V., Iacobescu G.E., Bunoiu M., Bica I., Silicone rubber based magnetorheological elastomer: magnetic structure tested by means of neutron depolarization and magnetic force microscopy methods, Journal of Physics: Conference Series, vol. 848, art. no. 012016, 2017	
	3.	Chen Y.K., Huang X.H., Gong Z., Xu C.H., Mou W.J., Fabrication of high performance magnetic rubber from NBR and Fe3O4 via in-situ compatibilization with zinc dimethacrylate, Industrial & Engineering Chemistry Research, vol. 56, no. 1, pp 183–190, 2017	
	4.	Perales-Martínez A., Palacios-Pineda L.M., Lozano-Sánchez L.M., Martínez-Romero O., Puente-Cordova J.G., Elías-Zúñiga A., Enhancement of a magnetorheological PDMS elastomer with carbonyl iron particles, Polymer Testing, vol. 57, pp. 78-86, 2017	
	5.	Gao, C.Y., Piao S.H., Choi H.J., Pickering emulsion polymerized magnetite-poly(methyl methacrylate) composite particles and their magnetorheology, Colloid and Polymer Science, vol. 295, no. 6, pp. 959-966, 2017	
	autocit.	M. Bunoiu, E.M. Anitas, J. Neamtu, I. Bica, L. Chirigiu, L.M.E. Chirigiu, Generation of Iron Nano-microparticles for Bio-medical Applications Using Plasma Processes, Revista de Chimie, Vol. 68, no. 6, pp. 1204-1209, 2017	
	6.	Gong X., Wang Y.; Hu T., et al., Mechanical property and conductivity of a flax fibre weave strengthened magnetorheological elastomer, Smart Materials and Structures, vol. 26, no. 7, art. no. 075013, 2017	
	7.	Przybyłek M., Bakar M., Mendrycka M., Kosikowska U., Malm A., Worzakowska M., Szymborski T., Kędra-Królik K., Rubber elastomeric nanocomposites with antimicrobial properties, Materials Science and Engineering: C, vol. 76, pp. 269-277, 2017	
	8.	Bica I., Anitas E.M., Magnetic field intensity and graphene concentration effects on electrical and rheological properties of MREs-based membranes, Smart Materials and Structures, vol. 26, no. 10, art. no. 105038, 2017	
	autocit.	M. Bunoiu, J. Neamțu, L. Chirigiu, M. Bălășoiu, G. Pascu, I. Bica, L.M.E. Chirigiu, Hybrid Magnetorheological Elastomers: Effects of the magnetic field on some electrical properties, Applied Surface Science, vol. 424, pt. 3 (SI), pp. 282-289, 2017	
	9.	Lian C., Lee K.-H., An J.-W., Lee C.-H., Effect of stick-slip on magneto-rheological elastomer with a magnetic field, Friction, vol. 5, no. 4, pp. 383-391, 2017	
	10.	Bica I., Anitas E.M., Chirigiu L., Magnetic field intensity effect on plane capacitors based on hybrid magnetorheological elastomers with graphene nanoparticles, Journal of Industrial and Engineering Chemistry, vol. 56, pp. 407-412, 2017	
	11.	Tong Y., Dong X., Qi M., Improved tunable range of the field-induced storage modulus by using flower-like particles as the active phase of magnetorheological elastomers, Soft Matter, vol. 14, no. 18, pp. 3504-3509, 2018	
	12.	Kwon S.H., Lee J.H., Choi H.J., Magnetic Particle Filled Elastomeric Hybrid Composites and Their Magnetorheological Response, Materials, vol. 11, no. 6, art. no. 1040, 2018	
	13.	Lee C.J., Kwon S.H., Choi H.J., et al., Enhanced magnetorheological performance of carbonyl iron/natural rubber composite elastomer with gamma-ferrite additive, Colloid and Polymer Science, vol. 296, no. 9, pp. 1609-1613, 2018	
	14.	Samal, Sneha; Kolinova, Marcela; Blanco, Ignazio, The Magneto-Mechanical Behavior of Active Components in Iron-Elastomer Composite, JOURNAL OF COMPOSITES SCIENCE, Vol. 2, No. 3, Art. no. 54, 2018	

17

	15.	Dong, Longlei; Zhao, Ruigang; Luo, Baomin; et al., Design of a new damper based on magnetorheological fluids, International Journal Of Applied Electromagnetics And Mechanics, vol. 59, no. 1, pp. 357-366, 2019	
	16.	Cirtina, L. M.; Bica, I.; Chirigiu, L.; et al., Electrical Capacitors Based On Magnetorheological Elastomers: Effects Of The Static And Pulsating Magnetic Field On Electrical Properties, Romanian Reports In Physics, Volume: 71, Issue: 4, Article Number: 509, 2019	
	fără IF	Bica, I; Cirtina, L.; Cirtina, D.; et al., Magnetorheological gel-based magnetoresistor: Effects of a static and a periodic time-varying magnetic field on the electrical resistance, Journal of Physics Conference Series, Vol. 139 , Art. no. 012091, 2019	
	17.	Lee, Jin Yong; Kumar, Vineet; Lee, Dong-Joo, Compressive properties of magnetorheological elastomer with different magnetic fields and types of filler, Polymers For Advanced Technologies, vol. 30, no. 4, pp. 1106-1115, 2019	
	18.	Samal, Sneha; Skodova, Marcela; Blanco, Ignazio, Effects of Filler Distribution on Magnetorheological Silicon-Based Composites, Materials, Volume: 12, Issue: 18, Article Number: 3017, 2019	
	autocit.	Bica I., Bunoiu O.M., Magnetorheological Hybrid Elastomers Based on Silicone Rubber and Magnetorheological Suspensions with Graphene Nanoparticles: Effects of the Magnetic Field on the Relative Dielectric Permittivity and Electric Conductivity, International Journal of Molecular Sciences, Vol. 20, No. 17, Art. no. 4201, pp. 1-9, 2019	
	19.	Song, Xincheng; Wang, Wenju; Yang, Fufeng; et al., The study of enhancement of magnetorheological effect based on natural rubber/thermoplastic elastomer SEBS hybrid matrix, Journal Of Intelligent Material Systems And Structures, Article Number: UNSP 1045389X19888790, 2019	
	fără IF	Barman, Hrishikesh; Hegde, Sriharsha, Comprehensive review of parameters influencing the performance of magnetorheological elastomers embedded in beams, MATERIALS TODAY-PROCEEDINGS, Vol. 26, pp. 2130-2135, 2020	
	fără IF	Samal, Sneha; Kolinova, Marcela; Blanco, Ignazio; et al., Magnetorheological Elastomer Composites: The Influence of Iron Particle Distribution on the Surface Morphology, MACROMOLECULAR SYMPOSIA, Volume: 38 , Issue: 1, Special Issue: SI, Article Number: 1900053, 2020	
	20.	Mao, Runsong; Wang, Huixing; Zhang, Guang; et al., Magneto-induced rheological properties of magnetorheological gel under quasi-static shear with large deformation, RSC ADVANCES, Vol. 10, No. 53, pp. 31691-31704, 2020	
	21.	Bica, Ioan; Anitas, Eugen Mircea, Graphene Platelets-Based Magnetoactive Materials with Tunable Magnetoelectric and Magnetodielectric Properties, NANOMATERIALS, Vol. 1 , No. 9, Art. No. 1783, 2020	
	22.	Kang, Sung Soon; Choi, Kisuk; Nam, Jae-Do; et al., Magnetorheological Elastomers: Fabrication, Characteristics, and Applications, MATERIALS, vol. 13, No. 20, Art. No. 4597, 2020	
	23.	Alam, Md Najib; Kumar, Vineet; Ryu, Sang-Ryeoul; et al. , Magnetic response properties of natural-rubber-based magnetorhelogical elastomers with different-structured iron fillers, JOURNAL OF MAGNETISM AND MAGNETIC MATERIALS, Vol. 51 , Art. no. 167106, 2020	
	24.	Bastola, Anil K.; Paudel, Milan; Li, Lin; et al., Recent progress of magnetorheological elastomers: a review, SMART MATERIALS AND STRUCTURES, Vol. 29, No. 12, Art. no. 123002, 2020	
	25.	Arslan Hafeez, Muhammad; Usman, Muhammad; Umer, Malik Adeel; et al., Recent Progress in Isotropic Magnetorheological Elastomers and Their Properties: A Review, POLYMERS , Vol. 12, No. 12, Art. No. 3023, 2020	
	autocit.	Bunoiu M., Vlase G., Bica I., Balasoiu M., Pascu G., Vlase T., STUDY OF THERMAL STABILITY OF SOME MAGNETORHEOLOGICAL ELASTOMERS, ROMANIAN REPORTS IN PHYSICS, Vol. 73, No. 2, Art. No. 503, 2021	
	26.	Marin C.N., Malaescu I., Sfirloaga P., Teusdea A., Electric and magnetic properties of a composite consisting of silicone rubber and ferrofluid, JOURNAL OF INDUSTRIAL AND ENGINEERING CHEMISTRY, Vol. 101, 405-413 (2021)	
	27.	Bica I., Anitas E.M., Electrical devices based on hybrid membranes with mechanically and magnetically controllable, resistive, capacitive and piezoelectric properties, SMART MATERIALS AND STRUCTURES, Vol. 31, No. 4, Art. No. 045011, 2022	
	28.	Cestarollo L., Smolenski S., El-Ghazaly A., Nanoparticle-Based Magnetorheological Elastomers with Enhanced Mechanical Deflection for Haptic Displays, ACS APPLIED MATERIALS & INTERFACES, vol. 14, no 16, 19002-19011, 2022	
	autocit.	Bunoiu M., Iacobescu G.E., Pascu G., Chirigiu L., Bica I., Magnetically active composites with relatively giant dielectric permittivity, Romanian Reports in Physics, vol. 75, no. 3, art. no. 503, 2023	
	29.	Zhao J.Q., Li D.L., Sun B.J., Jiang L., Zhou Y.F., Wen S.P., Jerrams S., Ma J.W., Chen S.J., Surface modification of carbonyl iron particles using dopamine and silane coupling agent for high-performance magnetorheological elastomers, Polymer Testing, vol. 119, no. 107935, 2023	
	30.	Stepanov G.V., Bakhtiiarov A.V., Lobanov D.A., Storozhenko P.A., Magnetoresistivity and piezoresistivity of magnetoactive elastomers, Journal of Magnetism and Magnetic Materials, vol. 587, art. no. 171313, 2023	

	31.	Marin C.N., Malaescu I., The effect of magnetically induced local structure and volume fraction on the electromagnetic properties of elastomer samples with ferrofluid droplet inserts, Magnetochemistry, vol. 10, no. 1, art. no. 4, 2024			
	32.	Kumar A., Pandey P.M., Kuldeep, Jha S., Basheed G.A., Banerjee S.S., Magnetorheological and magnetic actuation behaviour of solvent cast 4D printed styrene-ethylene-butylene-styrene block copolymer-based magnetorheological elastomeric materials, Journal of Magnetism and Magnetic Materials, vol. 610, art. no. 172551, 2024.			
	33.	Cestarollo, L., Utomo, N., Htet, H.W., Chen, Y.L., Archer, L.A., El-Ghazaly, A., Amplifying magneto-mechanical performance of magnetorheological elastomers through surface functionalization of iron nanoparticles, ACS Applied Materials & Interfaces, vol. 17, no. 10, pp. 15849–15858, 2025.			
	34.	Ali M.M., Habeeb S.A., Al-Maamori M.H., Enhanced thermo-magnetic and mechanical performance of EPDM composites reinforced with Fe_2O_3:NiO nanoparticles under magnetic field-assisted vulcanization, *Physics Open*, vol. 25, art. no. 100319, 2025.			
45.	Stoia, Marcela; Barvinschi, Paul; Barbu-Tudoran, Lucian; et al., Influence of polyols on the formation of nanocrystalline nickel ferrite inside silica matrices, Journal of Crystal Growth, Vol. 457 (SI), pp. 294-301, 2017 https://www.webofscience.com/wos/woscc/full-record/WOS:000389590700052		1	4	*0.25*
	1.	Hamdaoui, Nejeh; Azizian-Kalandaragh, Yashar; Khlifi, Mouadh; et al., Structural, magnetic and dielectric properties of Ni0.6Mg0.4Fe2O4 ferromagnetic ferrite prepared by sol gel method, Ceramics International, Volume: 45 Issue: 13 Pages: 16458-16465 Published: SEP 2019			
	autocit.	Bunoiu M., Vlase G., Bica I., Balasoiu M., Pascu G., Vlase T., STUDY OF THERMAL STABILITY OF SOME MAGNETORHEOLOGICAL ELASTOMERS, ROMANIAN REPORTS IN PHYSICS, Vol. 73, No. 2, Art. No. 503, 2021			
46.	Barvinschi, P., Bunoiu, O.M., A finite element method model to simulate the termal response of vascularized tissue to laser irradiation, Romanian Reports in Physics, Vol. 69, No. 3, 610, 2017 https://www.webofscience.com/wos/woscc/full-record/WOS:000402495900014		4	2	*2*
	1.	Oane M., Ticos D., Ristoscu C., et al., Analytical and Semi-Analytical Heat Transfer Models for Strong Laser-Optical Windows Weak Interaction Using Integral Transform Technique, Romanian Journal of Physics, vol. 63, no. 3-4, art. no. 501, 2018			
	2.	Saeed, Fatima H.; Khalaf, San'a K., Theoretical Model for Temperature Distribution Resulting from CW-Laser Radiation Heats up Tumor Tissues, International Journal Of Nanoelectronics And Materials Volume: 12 Issue: 4 Pages: 375-384, 2019			
	fără IF	Chine, Chiara; Sala, Fernando; Wu, Qiang; et al., A study on the heat distribution and oxidative modification of aged dammar films upon Er:YAG laser irradiation, Journal of the Institute of Conservation, Vol. 43, No. 1 (SI), pp. 59-72, 2020			
	3.	Kosir J., Vella D., Lukac M., Jezersek M., Biomedical Optics Express, Vol. 12, No. 7, 4530-4543, 2021			
	4.	Zhao, X.L., Qiu, P.T.Y., Xie, E.C., Zhang, C.X., Wang, G.Y., Fu, B., Temperature distribution and damage of thrombus induced by pulsed laser, Infrared Physics & Technology, vol. 148, Art. No. 105880, 2025			
47.	Crăciun D., Bunoiu M., Boosting physics education through mobile augmented reality, AIP Conference Proceedings, 1916, 050003, 2017 https://www.webofscience.com/wos/woscc/full-record/WOS:000423868800036		5	2	*2.5*
	fără IF	Daineko, Yevgeniya; Ipalakova, Madina; Tsoy, Dana; et al., Development of Practical Tasks in Physics with Elements of Augmented Reality for Secondary Educational Institutionsy: AUGMENTED REALITY, VIRTUAL REALITY, AND COMPUTER GRAPHICS, AVR 2018, PT I Book Series: Lecture Notes in Computer Science Volume: 10850 Pages: 404-412, 2018			
	fără IF	Trocaru, Sorin; Bartos-Elekes, Istvan, A simple physics experiment with unexpected results revealed by using the of augmented reality tool and methods, PROCEEDINGS OF THE 13TH INTERNATIONAL CONFERENCE ON VIRTUAL LEARNING, ICVL 2018 Book Series: Proceedings of the International Conference on Virtual learning Pages: 355-360, 2018			
	fără IF	Cidota M.A., Datcu D., Remote Assistance System in Augmented Reality for Early School Dropout Prevention, ADJUNCT PROCEEDINGS OF THE 2020 IEEE INTERNATIONAL SYMPOSIUM ON MIXED AND AUGMENTED REALITY (ISMAR-ADJUNCT 2020), IEEE COMP SOC, 321-325, 2020			
	1.	Bezen S., Bayrak C ., TEACHING MECHANICAL WAVES BY INQUIRY-BASED LEARNING, JOURNAL OF BALTIC SCIENCE EDUCATION, VOl. 19, No. 6, 875-892, 2020			
	fără IF	Tsichouridis C., Batsila M., Vavougios D., Ioannidis G., Virtual and Augmented Reality in Science Teaching and Learning, IMPACT OF THE 4TH INDUSTRIAL REVOLUTION ON ENGINEERING EDUCATION, ICL2019, VOL 1, Book Series: Advances in Intelligent Systems and Computing, vol. 1134, 193-205, 2020			
	2.	Lin X.F., Hwang G.J., Wang J., Zhou Y., Li W.Y., Liu J.C., Liang Z.M., Effects of a contextualised reflective mechanism-based augmented reality learning model on students' scientific inquiry learning performances, behavioural patterns, and higher order thinking, Interactive Learning Environments, doi:10.1080/10494820.2022.2057546, early access, 2022			

	3.	Koumpouros Y., Revealing the true potential and prospects of augmented reality in education, Smart Learning Environments, vol. 11, no. 1, art. no. 2, 2024			
	4.	Criollo-C, S., Guerrero-Arias, A., Samala, A.D., Arif, Y.M., Luján-Mora, S., Enhancing the educational model using mixed reality technologies with Meta Quest 3: A usability analysis using IBM-CSUQ, IEEE Access, vol. 13, pp. 56930–56945, 2025.			
	5.	Son P.N., Thuan N.T., Prioritizing Digital Skills for Secondary School Teachers: An Analytical Hierarchy Process Approach, *TEM Journal: Technology, Education, Management, Informatics*, vol. 15, no. 1, pp. 716–727, 2026.			
48.	Balasoiu M., Kozhevnikov S.V., Nikitenko Yu. V., Iacobescu G.E., Bunoiu M., Bica I., Silicone rubber based magnetorheological elastomer: magnetic structure tested by means of neutron depolarization and magnetic force microscopy methods, Journal of Physics: Conference Series, Vol. 848, 012016, 2017 https://www.webofscience.com/wos/woscc/full-record/WOS:000432376800015		2	5.5	*0.363*
	1.	Syam, Thaer M. I.; Muthalif, Asan G. A.; Salem, Ayman M. H.; et al. , 3D numerical modelling and analysis of a magnetorheological elastomer (MRE), JOURNAL OF VIBROENGINEERING, Vol. 22, No. 5, pp. 1251-1265, 2020			
	2.	Syam T.M.I., Muthalif A.G.A., Magnetorheological Elastomer based torsional vibration isolator for application in a prototype drilling shaft, JOURNAL OF LOW FREQUENCY NOISE VIBRATION AND ACTIVE CONTROL, DOI10.1177/14613484211044627, in press, 2022			
49.	Bălășoiu M., Bunoiu M., Chirigiu L., Chirigiu L.M.E., Pascu G., Bica I., Magnetodielectric Membranes: Effects of the Magnetic Field on the Dielectric Loss Tangent, AIP Conference Proceedings, 1916, 040007, 2017 https://www.webofscience.com/wos/woscc/full-record/WOS:000423868800026		0	5.5	*0*
50.	Bălășoiu M., Lebedev V.T., Raikher Yu.L., Bica I., Bunoiu M., The implicit effect of texturizing field on the elastic properties of magnetic elastomers revealed by SANS, Journal of Magnetism and Magnetic Materials, Vol.: 431, 126-129, 2017 https://www.webofscience.com/wos/woscc/full-record/WOS:000399598600032		3	5	*0.6*
	autocit.	M. Bunoiu, J. Neamțu, L. Chirigiu, M. Bălășoiu, G. Pascu, I. Bica, L.M.E. Chirigiu, Hybrid Magnetorheological Elastomers: Effects of the magnetic field on some electrical properties, Applied Surface Science, vol. 424, pt. 3 (SI), pp. 282-289, 2017			
	autocit.	Balasoiu M., Kozhevnikov S.V., Nikitenko Yu. V., Iacobescu G.E., Bunoiu M., Bica I., Silicone rubber based magnetorheological elastomer: magnetic structure tested by means of neutron depolarization and magnetic force microscopy methods, Journal of Physics: Conference Series, vol. 848, art. no. 012016, 2017			
	1.	Wypych, George, Functional Fillers Electrical And Magnetic Properties, Functional Fillers: Chemical Composition, Morphology, Performance, Applications, pp. 59-99, 2018			
	2.	Cirtina, L. M.; Bica, I.; Chirigiu, L.; et al., Electrical Capacitors Based On Magnetorheological Elastomers: Effects Of The Static And Pulsating Magnetic Field On Electrical Properties, Romanian Reports In Physics, Volume: 71, Issue: 4, Article Number: 509, 2019			
	autocit.	Bica I., Bunoiu O.M., Magnetorheological Hybrid Elastomers Based on Silicone Rubber and Magnetorheological Suspensions with Graphene Nanoparticles: Effects of the Magnetic Field on the Relative Dielectric Permittivity and Electric Conductivity, International Journal of Molecular Sciences, Vol. 20, No. 17, Art. no. 4201, pp. 1-9, 2019			
	autocit.	Bunoiu M., Vlase G., Bica I., Balasoiu M., Pascu G., Vlase T., STUDY OF THERMAL STABILITY OF SOME MAGNETORHEOLOGICAL ELASTOMERS, ROMANIAN REPORTS IN PHYSICS, Vol. 73, No. 2, Art. No. 503, 2021			
	3.	Belyaeva I.A., Klepp J., Lemmel H., Shamonin M., Feasibility of Probing the Filler Restructuring in Magnetoactive Elastomers by Ultra-Small-Angle Neutron Scattering, APPLIED SCIENCES-BASEL, Vol. 11, No. 10, Art. No. 4470, 2021			
51.	Bunoiu M., Anitas E.M., Neamtu J., Bica I., Chirigiu L., Chirigiu L.M.E., Generation of Iron Nano-microparticles for Bio-medical Applications Using Plasma Processes, Revista de Chimie, Vol. 68, No. 6, 1204-1209, 2017 https://www.webofscience.com/wos/woscc/full-record/WOS:000408702900012		2	5.5	*0.363*
	1.	Bechir, Edwin Sever; Bechir, Farah; Vladila, Bogdan, Effects of Electromagnetic Field Use on Jaw Bone Densification, Revista De Chimie, vol. 69, no. 12, pp. 3705-3709, 2018			
	2.	Malaeru, Teodora; Patroi, Eros Alexandru; Marinescu, Virgil; et al., Preparation and Characterization of Fe3O4 Magnetic Nanofluid in Vegetable Oil, Revista De Chimie, vol. 70, no. 2, pp. 459-464, 2019			
52.	M. Bunoiu, J. Neamțu, L. Chirigiu, M. Bălășoiu, G. Pascu, I. Bica, L.M.E. Chirigiu, Hybrid Magnetorheological Elastomers: Effects of the magnetic field on some electrical properties, Applied Surface Science, Vol. 424, Part 3 (SI), 282-289, 2017 https://www.webofscience.com/wos/woscc/full-record/WOS:000410609000006		14	6	*2.333*
	autocit.	Bălășoiu M., Bunoiu M., Chirigiu L., Chirigiu L.M.E., Pascu G., Bica I., Magnetodielectric Membranes: Effects of the Magnetic Field on the Dielectric Loss Tangent, AIP Conference Proceedings, vol. 1916, art. no. 040007, 2017			
	1.	Bastola A.K., Paudel M., Li L., Development of hybrid magnetorheological elastomers by 3D printing, Polymer, vol. 149, pp. 213-228, 2018			

	2.	Aguib, Salah; Nedjar, Ali; Zerrouni, Nassim; et al., Experimental identification of the magneto-mechanical behavior and mathematical modeling of the interaction force between the micro size ferromagnetic particles, International Journal Of Applied Electromagnetics And Mechanics, Volume: 61, Issue: 1, Pages: 73-85, 2019			
	3.	Cirtina, L. M.; Bica, I.; Chirigiu, L.; et al., Electrical Capacitors Based On Magnetorheological Elastomers: Effects Of The Static And Pulsating Magnetic Field On Electrical Properties, Romanian Reports In Physics, Volume: 71, Issue: 4, Article Number: 509, 2019			
	4.	Nedjar, Ali; Aguib, Salah; Djedid, Toufik; et al., Analysis of the Dynamic Behavior of Magnetorheological Elastomer Composite: Elaboration and Identification of Rheological Properties, Silicon, Volume: 11, Issue: 3, Pages: 1287-1293, 2019			
	5.	Nedjari, Ali; Aguib, Salah; Djedid, Toufik; et al., Measurements and identification of smart magnetomechanical elastomer composite materials properties in shear mode, Materials Research Express, Vol. 6, No. 8, Art. No. 085707, 2019			
	6.	Aguib, Salah; Nour, Abdelkader; Djedid, Toufik, A mechanical characterization of electroconductive magnetorheological elastomer and semi-analytical modeling of magnetic force, International Journal Of Modern Physics B, Volume: 33, Issue: 25, Article Number: 1950290, 2019			
	7.	Bastola, Anil K.; Paudel, Milan; Li, Lin; et al., Recent progress of magnetorheological elastomers: a review, SMART MATERIALS AND STRUCTURES, Vol. 2 , No. 12 , Art. No. 123002, 2020			
	autocit.	Bunoiu M., Vlase G., Bica I., Balasoiu M., Pascu G., Vlase T., STUDY OF THERMAL STABILITY OF SOME MAGNETORHEOLOGICAL ELASTOMERS, ROMANIAN REPORTS IN PHYSICS, Vol. 73, No. 2, Art. No. 503, 2021			
	8.	Zhu, Qianqian; Wang, Zhenhao; Zeng, Hui; et al., Effects of graphene on various properties and applications of silicone rubber and silicone resin, COMPOSITES PART A-APPLIED SCIENCE AND MANUFACTURING, vol. 142, art. no. 106240, 2021			
	9.	Merkulov D.I., Pelevina D.A., Turkov V.A., Vinogradova A.S., Naletova V.A., Mobile robots with magnetizable materials in alternating uniform inclined magnetic fields, ACTA ASTRONAUTICA, Vol. 181, 579-584, 2021			
	10.	Alam M.N., Kumar V., Ryu S.R., Ko T.J., Lee D.J., Choi J., SYNERGISTIC MAGNETORHEOLOGICAL NR-NBR ELASTOMER BLEND WITH ELECTROLYTIC IRON PARTICLES, RUBBER CHEMISTRY AND TECHNOLOGY, Vol. 94, No. 4, 642-656, 2021			
	11.	Zhang C.J., Liu S.G., Zhao D., Yang S., Ou Y.Q., Liu Y.X., Pressure sensing properties for the dielectric layer of graphene/silicone rubber-based magnetorheological elastomer, POLYMER INTERNATIONAL, DOI10.1002/pi.6383, in press, 2022			
	12.	Walid B., Salah A., Noureddine C., Abdelkader N., Toufik D., Lallia K., Mounir M., Dynamic characterization of the magnetomechanical properties of off axis anisotropic magnetorheological elastomer, Journal of Polymer Engineering, vol. 42, no. 8, 714-724, 2022			
	13.	Stepanov G.V., Semerenko D.A., Raikher Y.L., Bakhtiiarov A.V., Lobanov D.A., Storozhenko P.A., Anomalous transient conductivity of magnetic elastomer under the action of strain and magnetic field, Smart Materials and Structures, vol. 33, no. 11, art. no. 115001, 2024.			
	14.	Ding R.Q., Wang Q.Y., Hua D.Z., Shen Y.R., Zhang T., Wu J., Yang F., Liu X.H., A high-sensitivity flexible pressure sensor based on graphite-modified magnetorheological elastomer, *Smart Materials and Structures*, vol. 35, no. 5, art. no. 055037, 2026.			
53.	Cojocaru D., Petrescu I., Bunoiu M., Gogu E., Stanciu S., Tanasie A., A study case for the accreditation of doctoral studies. Preliminary approaches, EDULEARN18: 10TH International Conference on Education and New Learning Technologies, EDULEARN Proceedings, 3146-3154, 2018 https://www.webofscience.com/wos/wosccc/full-record/WOS:000530893703039		0	5.5	*0*
54.	Scarlatescu I., Spunei M., Chis A., Negru S., Bunoiu M., Avram N., Experimental dosimetric checkup under positioning errors according to gamma criterion, UPB Scientific Bulletin, Series A: Applied Mathematics and Physics, Vol. 80, No. 1, 271-280, 2018 https://www.webofscience.com/wos/wosccc/full-record/WOS:000427816900025		2	5.5	*0.363*
	1.	Al Dream, Johara; Zequine, Camila; Siam, K.; et al., Electrochemical Properties of Graphene Oxide Nanoribbons/Polypyrrole Nanocomposites, C-JOURNAL OF CARBON RESEARCH Volume: 5, Issue: 2, Article Number: UNSP 18, 2019			
	2.	Panahi-Sarmad, Mahyar; Abrisham, Mahbod; Noroozi, Mina; et al., Deep focusing on the role of microstructures in shape memory properties of polymer composites: A critical review, European Polymer Journal, Volume: 117, Pages: 280-303, 2019			
55.	Craciun D., Bunoiu M., Teacher Training in the Context of Open Science and Science Education, Elearning Challenges and New Horizons, Vol. 4, Book Series: eLearning and Software for Education, pp. 319-326, 2018 https://www.webofscience.com/wos/wosccc/full-record/WOS:000468620000045		0	2	*0*
56.	Craciun D., Bunoiu M., Learning Science outside the Classroom: A Summer School Experience, AIP Conference Proceedings, 2071, 050002, 2019 https://www.webofscience.com/wos/wosccc/full-record/WOS:000468231600039		0	2	*0*
57.	Grosseck G., Craciun D., Bunoiu M., "Digital Storytelling" in Teaching: Lessons Learned at WUT, New Technologies and Redesigning Learning Spaces, Vol.II, Book Series: eLearning and Software for Education, pp. 313-322, 2019		0	3	*0*

	https://www.webofscience.com/wos/woscc/full-record/WOS:000473324400044			
58.	Bica I., Bunoiu O.M., Magnetorheological Hybrid Elastomers Based on Silicone Rubber and Magnetorheological Suspensions with Graphene Nanoparticles: Effects of the Magnetic Field on the Relative Dielectric Permittivity and Electric Conductivity, International Journal of Molecular Sciences, Vol. 20, No. 17, Art. no. 4201, pp. 1-9, 2019 https://www.webofscience.com/wos/woscc/full-record/WOS:000486888400133	16	2	*8*
	1. Kukla, Mateusz; Wargula, Lukasz; Talaska, Krzysztof; et al., Magnetorheological Elastomer Stress Relaxation Behaviour during Compression: Experiment and Modelling By: Materials, Vol. 13, No. 21, Art. No. 4795, 2020			
	2. Zhao, Dan; Cui, Jin; Dai, Xinying; et al., Magneto-piezoresistive characteristics of graphene/room temperature vulcanized silicon rubber-siliconrubber magnetorheological elastomer, JOURNAL OF APPLIED POLYMER SCIENCE, VOl. 138, No. 2, Art. No. e50051, 2021			
	3. Kang, Sung Soon; Choi, Kisuk; Nam, Jae-Do; et al., Magnetorheological Elastomers: Fabrication, Characteristics, and Applications, Materials, Vol. 13, No. 20, Art. No. 4597, 2020			
	autocit. Bunoiu M., Anitas E.M., Pascu G., Chirigiu L.M.E., Bica I., Electrical and Magnetodielectric Properties of Magneto-Active Fabrics for Electromagnetic Shielding and Health Monitoring, International journal of Molecular Sciences, Vol. 21, No. 13, 4785, 2020			
	4. Iacobescu, Gabriela-Eugenia; Bica, Ioan, Application of Atomic Force Microscopy for Magnetic and Mechanical Investigation of New Magnetorheological Elastomers, University Politehnica of Bucharest Scientific Bulletin - Series A - Applied Mathematics and Physics, Vol. 82, No. 4, pp. 259-268, 2020			
	autocit. Bica I., Anitas E.M., Bunoiu M., Influence of a transverse magnetic field and of hydrostatic pressure on the elasticity state of anisotropic magnetorheological elastomers, Romanian Reports in Physics, Vol. 72, No. 3, 505, 2020			
	5. Iacobescu G.E., Bica I., Chirigiu L.M.E., Physical Mechanisms of Magnetic Field Effects on the Dielectric Function of Hybrid Magnetorheological Suspensions, MATERIALS, Vol. 14, No. 21, 2021			
	autocit. Pascu G., Bunoiu O.M., Bica I., Magnetic Field Effects Induced in Electrical Devices Based on Cotton Fiber Composites, Carbonyl Iron Microparticles and Barium Titanate Nanoparticles, Nanomaterials, Vol. 12, Art. No. 888, 2022			
	6. Zhang C.J., Liu S.G., Zhao D., Yang S., Ou Y.Q., Liu Y.X., Pressure sensing properties for the dielectric layer of graphene/silicone rubber-based magnetorheological elastomer, POLYMER INTERNATIONAL, in press, DOI10.1002/pi.6383, 2022			
	7. Bica I., Anitas E.M., Electrical devices based on hybrid membranes with mechanically and magnetically controllable, resistive, capacitive and piezoelectric properties, SMART MATERIALS AND STRUCTURES, Vol. 31, No. 4, Art. no. 045001, 2022			
	8. Zhang C.J., Liu S.G., Wei F.M., Dong L.Q., Zhao D., Ou Y.Q., Magnetodielectric properties of ordered microstructured polydimethylsiloxane-based magnetorheological elastomer with Fe3O4@rGO nanoparticles, Polymers, vol. 15, no. 4, art. no. 941, 2023			
	9. Bernat J., Gajewski P., Kolota J., Marcinkowska A., Review of soft actuators controlled with electrical stimuli: IPMC, DEAP, and MRE, Applied Sciences-Basel, vol. 13, no. 3, art. no. 1651, 2023			
	10. Nguyen X.B., Komatsuzaki T., Truong H.T., Properties of inhomogeneous-type magnetorheological elastomer formed in the presence of a magnetic field with tilted angles, Journal of Magnetism and Magnetic Materials, vol. 584, art. no. 171065, 2023			
	11. Stepanov G.V., Bakhtiiarov A.V., Lobanov D.A., Storozhenko P.A., Magnetoresistivity and piezoresistivity of magnetoactive elastomers, Journal of Magnetism and Magnetic Materials, vol. 587, art. no. 171313, 2023			
	12. Dhiman N.K., Salodkar S.M., Gagandeep C., Susheel C., Advances in modeling and control of magnetorheological elastomers for engineering applications, Archives of Computational Methods in Engineering, vol. 31, no. 3, pp. 1823-1865, 2024			
	13. Zhang Y.L., Li Y.Y., Implementing nonlinear least squares approach to simulate the dynamic response of laminated nanocomposite arch with magnetorheological elastomer matrix, Engineering Analysis with Boundary Elements, vol. 166, art. no. 105859, 2024			
	14. Dhiman N.K., Salodkar S.M., Sharma G., Susheel C.K., Dynamic rheological behavior and ANN model with Bayesian optimization for elastosil-based magnetorheological elastomers, Korea-Australia Rheology Journal, Vol. 36, Issue 4, pp. 351-374, 2024.			
	15. Ding R.Q., Wang Q.Y., Hua D.Z., Shen Y.R., Zhang T., Wu J., Yang F., Liu X.H., A high-sensitivity flexible pressure sensor based on graphite-modified magnetorheological elastomer, Smart Materials and Structures, vol. 35, no. 5, art. no. 055037, 2026.			
	16. Anitas E.M., Bica I., Wang S.Z., Choi H.J., Advanced electro-magnetorheological hybrid materials: physical processes, synthesis, and multifunctional applications, *Rivista del Nuovo Cimento*, 2026.			
59.	Craciun D., Bunoiu M., Digital Comics, a Visual Method for Reinvigorating Romanian Science Education, Revista Românească pentru Educație Multidimensională, Vol. 11, No. 4, pp. 321-341, 2019	5	2	*2.5*

	https://www.webofscience.com/wos/woscc/full-record/WOS:000500934200020				
	fără IF	Ilie A.S., Dulama M.E., Racasan B.S., Ilovan O.R., Magdas I., Educational films in understanding the relations of organisms with their living environment, in Proceedings of the 15th International Conference on Virtual Learning (ICVL-2020), edited by Vlada M., Albeanu G., Adascalitei A., Popovici M., pp. 101-110, Proceedings of the International Conference on Virtual Learning, 2020			
	1.	Frolova, Elena V.; Rogach, Olga V.; Ryabova, Tatyana M., Digitalization of Education in Modern Scientific Discourse: New Trends and Risks Analysis, European Journal of Contemporary Education, Vol. 9, No. 2, pp. 313-336, 2020			
	2.	Frolova, Elena, V; Rogach, Olga, V; Tyurikov, Alexander G.; et al., Online Student Education in a Pandemic: New Challenges and Risks, EUROPEAN JOURNAL OF CONTEMPORARY EDUCATION, vol. 10, no. 1, pp. 43-52, 2021			
	3.	Nikolenko K., Dovzhuk V., Voropayeva T., Boiko S., Honcharuk O., EDUCATIONAL ACTIVITIES IN THE CONTEXT OF THE REALITIES OF THE INFORMATION SOCIETY: PROBLEMS, PROSPECTS, Wisdom, vol. 22, no. 2, p. 138, 2022			
	4.	Litina S., Rubene Z., The effect of digital school culture on science education and scientific literacy: A scoping review, Journal of Education Culture and Society, vol. 15, no. 1, pp. 41-55, 2024			
	5.	Gemelli E., Olmedo-Moreno E., Ubeda-Sanchez A.M., Rodriguez-Sabiote C., Bibliometric study of scientific output between 2011 and 2020 regarding teaching-learning of the sciences through comic books, SAGE Open, vol. 14, no. 1, art. no. 21582440231220107, 2024			
	6.	Cotiangco E.N.C., Huraño N.J.B., Sodoso E.R.G., Sumagang M.G.P., Jumao-as J.J.C., Canoy J.H., Picardal M.T., Sanchez J.M.P., Android-based audio-visual comics in enhancing conceptual understanding and motivation of chemistry concepts, Orbital-The Electronic Journal of Chemistry, vol. 16, no. 2, pp. 125-135, 2024			
	7.	Tekin, E., Ilhan, G.O., The use of digital comics in foreign language teaching: Experiences of Erasmus students, European Journal of Education, vol. 60, no. 2, Art. No. e70090, 2025.			
60.	Nabiyev A.A., Olejniczak A., Pawlukojc A., Balasoiu M., Bunoiu M., Maharramov A.M., Nuriyev M.A., Ismayilova R.S., Azhibekov A.K., Kabyshev A.M., Ivankov O.I., Vlase T., Linnik D.S., Shukurova A.A., Ivanshina O.Y., Turchenko V.A., Kuklin A.I., Nano-ZrO2 filled high-density polyethylene composites: Structure, thermal properties, and the influence γ-irradiation, Polymer Degradation and Stability, Vol. 171, Art. No. 109042, 2020 https://www.webofscience.com/wos/woscc/full-record/WOS:000509622300004		29	10.666	*2.718*
	1.	Tikhani, Farimah; Hadavand, Behzad Shirkavand; Bafghi, Hamed Fakharizadeh; et al., Polyurethane/Silane-Functionalized ZrO2 Nanocomposite Powder Coatings: Thermal Degradation Kinetics, COATINGS, Volume: 10,Issue: 4, Article Number: 413, 2020			
	2.	Kumar, K. V. Aneesh; Raghavendra, M.; Hegde, Vinayakprasanna N.; et al., Gamma irradiation induced microstructural modification and electrical conductivity of bakelite resistive plate chamber material, JOURNAL OF RADIOANALYTICAL AND NUCLEAR CHEMISTRY, vol. 327, no. 2, pp. 821-829, 2021			
	3.	Salari, Mahdieh; Khiabani, Mahmoud Sowti; Mokarram, Reza Rezaei; et al., Use of gamma irradiation technology for modification of bacterial cellulose nanocrystals/chitosan nanocomposite film, Carbohydrate Polymers, vol. 253, art. no. 117144, 2021			
	4.	Kuklin, A., I; Ivankov, I.; Rogachev, A., V; et al., Small-Angle Neutron Scattering at the Pulsed Reactor IBR-2: Current Status and Prospects, Crystallography Reports, vol. 66, n0. 2, pp. 231-241, 2021			
	5.	Prasad, Shiv Govind; Lal, Chhagan; Sahu, Kriti Ranjan; et al., Spectroscopic Investigation of Degradation Reaction Mechanism in gamma-Rays Irradiation of HDPE, Biointerface Research in Applied Chemistry, vol. 11, no. 2, pp. 9405-9419, 2021			
	6.	Nayak C., Balani K., Effects of reinforcements and gamma-irradiation on wear performance of ultra-high molecular weight polyethylene as acetabular cup liner in hip-joint arthroplasty: A review, Vol. 138, No. 43, Art. No. 51275, 2021			
	7.	Marin C.N., Malaescu I., Sfirloaga P., Teusdea A., Electric and magnetic properties of a composite consisting of silicone rubber and ferrofluid, JOURNAL OF INDUSTRIAL AND ENGINEERING CHEMISTRY, Vol. 101, 405-413 (2021)			
	8.	Nabiyev A.A., Olejniczak A., Islamov A.K., Pawlukojc A., Ivankov O.I., Balasoiu M., Zhigunov A., Nuriyev M.A., Guliyev F.M., Soloviov D.V., Azhibekov A.K., Doroshkevich A.S., Ivanshina O.Y., Kuklin A.I., Composite Films of HDPE with SiO2 and ZrO2 Nanoparticles: The Structure and Interfacial Effects, NANOMATERIALS, Vol. 11, No. 10, Art. No. 2673, 2021			
	9.	Mizera A., Manas M., Stoklasek P., Effect of Temperature Ageing on Injection Molded High-Density Polyethylene Parts Modified by Accelerated Electrons, MATERIALS, Vol 15, No. 3, Art. No. 742, 2022			
	10.	Mizera A., Krstulovic-Opara L., Krempl N., Karhankova M., Manas M., Sanek L., Stoklasek P., Grebo A., Dynamic Behavior of Thermally Affected Injection-Molded High-Density Polyethylene Parts Modified by Accelerated Electrons, Polymers, vol. 14, no. 22, art. no. 4970, 2022			

	11.	Sharma S., Acharya A.D., Thakur Y.S., Bhawna, Controlled synthesis of hierarchical BiOCl nanostructure with exposed {010} facets to yield enhanced photocatalytic performance for PMMA deterioration, Journal of Polymer Research, vol. 29, no. 11, art. no. 466, 2022			
	12.	Gao W., Li Y.F., Zhao J.T., Zhang Z., Tang W.W., Influence of surface modification of zinc oxide on physical properties of high density polyethylene, Colloids and Surfaces A-Physicochemical and Engineering Aspects, vol. 653, art. no. 130000, 2022			
	13.	Arcos C., Muñoz L., Cordova D., Muñoz H., Walter M., Azócar M.I., Leiva A., Sancy M., Rodríguez-Grau G., The effect of the addition of copper particles in high-density recycled polyethylene matrices by extrusion, Polymers, vol. 14, no. 23, art. no. 5220, 2022			
	14.	Channe S.S., Singh R., Kulkarni S.G., Effect of metal oxide nanoparticles on thermal behavior of polyvinyl alcohol, Polymer Bulletin, vol. 81, no. 4, pp. 3403-3438, 2024			
	15.	Paladugu S.R.M., Sreekanth P.S.R., Effect of γ irradiation and Vitamin-E on the thermal and mechanical properties of graphene/nanodiamond reinforced hybrid UHMWPE nanocomposites, Results in Engineering, vol. 20, art. no. 101562, 2023			
	16.	Gadzhieva N.N., Akhmedova G.B., Mammadov R.A., Structures of HDPE/GaAs and HDPE/GaAs<Te> composites irradiated with gamma quanta, Problems of Atomic Science and Technology, no. 4, pp. 20-22, DOI: 10.46813/2024-152-020, 2024.			
	17.	da Silveira F.Z., Fiori M.A., Frizon T.E.A., Ribeiro L.F.B., Colpani G.L., Riella H.G., Study of the nucleating effect of nanozirconia obtained by green synthesis on low-density polyethylene (LDPE), Materials Research-Ibero-American Journal of Materials, vol. 27, art. no. e20240102, 2024.			
	18.	Rani P., Deshmukh K., Pandey M., Thangamani G., NambiRaj N.A., Murthy V.R.K., Pasha S.K.K., Dielectric and impedance spectroscopy analysis of nano-zirconia encapsulated Poly(vinylidene fluoride-hexafluoropropylene) nanocomposites, Ferroelectrics, vol. 618, no. 2, pp. 548-560, 2024			
	19.	Qian B.B., Dai Y.D., Xin L.F., Yao C.Q., Wang G.H., Chang S.Q., Mechanical and thermal stability properties improvement of polyethylene wax-coated tungsten carbide/high-density polyethylene γ-rays shielding composites through irradiation-induced crosslinking, Radiation Physics and Chemistry, vol. 226, art. no., 2025.			
	20.	Bayramov M.N., Nabiev A.A., Aliyev N.Sh., Nuriev M.A., Effect of Fe3O4 iron oxide nanoparticles on the structure and thermal properties of high-density polyethylene-based nanocomposites, Inorganic Materials-Applied Research, vol. 15, no. 5, pp. 1367-1373, 2024.			
	21.	Richhariya V., Tripathy A., Carvalho O., Gomes J., Nine M.J., Silva F.S., Capillary-enhanced biomimetic adhesion on icy surfaces for high-performance antislip shoe-soles, ACS Applied Materials & Interfaces, vol. 17, no. 1, pp. 2450-2461, 2024.			
	22.	Suhas, K., Murthy, B.R.N., Hiremath, A., Fabrication and characterization approach to enhance the mechanical performance of zirconia-coated multi-walled carbon nanotubes reinforced high density polyethylene composites, Polymer Composites, vol. 46, no. 9, pp. 8686–8699, 2025			
	23.	Nabiyev A.A., Mustafayev I.I., Mehdiyeva R.N., Nuriyev M.A., Andreev E.V., Ponomareva O.Y., Azhibekov A.K., Doroshkevich A.S., Elmekawy A.H.A., Mirzayev M.N., Kuklin A.I., Post-γ-irradiation effects in nano-SiO_2 particle reinforced high-density polyethylene composite films: Structure-property relationships, thermal stability and degradation, *Polymer Composites*, vol. 46, suppl. 3, pp. S44–S62, 2025.			
	24.	Olesik P., HDPE composite with hybrid reinforcement as wear-resistant material for 3D printing, *Composites Theory and Practice*, vol. 25, no. 4, pp. 268–275, 2025.			
	25.	Gadzhieva N.N., Akhmedova G.B., Mammadov R.A., Gamma irradiation induced structural modifications of HDPE polymer and HDPE/GaAs <Te> composite films, *Problems of Atomic Science and Technology*, no. 5, pp. 28–32, 2025.			
	26.	Biron D.D., Beltrami M., Da Cruz B.M.A., Pisanu L., Poletto M., Ornaghi H.L. Jr., Piazza D., Zattera A.J., Effect of graphene nanoplatelets and microparticulated zirconium oxide on the properties of HDPE-based composite film, *Journal of Reinforced Plastics and Composites*, 2025.			
	27.	Sun X.P., Wu Y., Pan X.Q., Xu R., Jing H., Xia S., Sun H.X., Yan L.W., Liang M., Zhou S.T., Fabrication of highly thermally conductive, flame-retardant, and nuclear shielding UHMWPE-based composites, *Polymer Degradation and Stability*, vol. 244, art. no. 111810, 2026.			
	28.	Nuriyev M.A., Nabiyev A.A., Gasimova A.I., Shukurova A.A., Vershinina T.N., Ponamareva O.Y., Effect of gamma irradiation on the structural and thermophysical properties of PVA/CdS composites, Materials Chemistry and Physics, vol. 350, art. no. 131931, 2026.			
	29.	Nabiyev A.A., Ivankov O.I., Azhibekov A.K., Elmekawy A.H.A., Popov E., Samadov S.F., Trung N.V.M., Mutali A.K., Sidorin A.A., Orlov O.S., Kuklin A.I., High-dose gamma irradiation effects on HDPE/SiO_2 nanocomposite films: Structure, crystallinity, defects, radiation endurance, dispersion, and interfacial behavior, *Polymer Degradation and Stability*, vol. 245, art. no. 111851, 2026.			
61.	Anitas E., Bica I., Bunoiu M., Malaescu I., Marin C.N., Ercuta A., Balasoiu M., Lungu M., Pascu G., Magneto-Optical Transmittance Observed in Magnetorheological Suspensions Films, AIP Conference Proceedings, Vol. 2218, Art. No. 030016, 2020 https://www.webofscience.com/wos/woscc/full-record/WOS:000539152000043		0	7	*0*
62.	Craciun D., Grosseck G., Bunoiu M., Game-Based Storytelling in Non-Formal Romanian Science Education, AIP Conference Proceedings, Vol. 2218, Art. No. 060009, 2020 https://www.webofscience.com/wos/woscc/full-record/WOS:000539152000044		0	3	*0*

63.	Bica I., Anitas E.M., Bunoiu M., Influence of a transverse magnetic field and of hydrostatic pressure on the elasticity state of anisotropic magnetorheological elastomers, Romanian Reports in Physics, Vol. 72, No. 3, 505, 2020 https://www.webofscience.com/wos/woscc/full-record/WOS:000562620700012		2	3	*0.666*
	1.	Zhang C.J., Liu S.G., Zhao D., Yang S., Ou Y.Q., Liu Y.X., Pressure sensing properties for the dielectric layer of graphene/silicone rubber-based magnetorheological elastomer, Polymer International, vol. 71, no. 8, pp. 999-1008, 2022			
	2.	Bica I., Anitas E.M., Magnetic field and microstructural effects on the electrical capacitance and resistance of a quadrupolar electrical capacitor based on cotton fabrics and carbonyl iron microparticles, Smart Materials and Structures, vol. 31, no. 12, art. no. 125018, 2022			
	autocit.	Bunoiu M., Iacobescu G.-E., Pascu G., Chirigiu L., Bica I., Magnetically active composites with relatively giant dielectric permittivity, Romanian Reports in Physics, vol. 75, no. 3, art. no. 503, 2023			
64.	Bunoiu O.M., Matu G., Marin C.N., Malaescu I., Investigation of some thermal parameters of ferrofluids in the presence of a static magnetic field, Journal of Magnetism and Magnetic Materials, Vol. 498, Art. No. 166132, 2020 https://www.webofscience.com/wos/woscc/full-record/WOS:000504845300078		12	4	*3*
	1.	Socoliuc, V; Popescu, L.B., Determination of the statistics of magnetically induced particle chains in concentrated ferrofluids, JOURNAL OF MAGNETISM AND MAGNETIC MATERIALS, Volume: 502, Article Number: 166532, 2020			
	2.	Li, Qian; Zhao, Juying; Jin, Licong; et al., Experimental Study on Thermal Conductivity and Magnetization Behaviors of Kerosene-Based Ferrofluid Loaded with Multiwalled Carbon Nanotubes, ACS OMEGA, Vol. 5, No. 22, pp. 13052-13063, 2020			
	3.	Hajmohammadi, M. R.; Gholamrezaie, S.; Ahmadpour, A.; et al., Effects of applying uniform and non-uniform external magnetic fields on the optimal design of microchannel heat sinks, International Journal of Mechanical Sciences, Vol. 186, Art. no. 105886, 2020			
	4.	Sonia L.C., Phanjoubam S., Structural and magnetic studies of cobalt substituted magnetite ferrofluids, JOURNAL OF MAGNETISM AND MAGNETIC MATERIALS, Vol. 544, Art. No. 168675, 2022			
	5.	Farbod M., Ahangarpour A., A New Modified Hamilton-Crosser and Nan Models for Thermal Conductivity of Different Lengths Carbon Nanotubes Water-based Nanofluids, JOURNAL OF APPLIED AND COMPUTATIONAL MECHANICS, Vol. 8, No. 3, 831-837, 2022			
	6.	Varma V.B., Cheekati S.K., Pattanaik M.S., Ramanujan R.V., A magnetic nanofluid device for excellent passive cooling of light emitting diodes, Energy Reports, vol. 8, 7401-7419, 2022			
	7.	Singh, R., Pathak, S., Jain, K., Noorjahan, Kim, S.K., Correlating the Dipolar Interactions Induced Magneto-Viscoelasticity and Thermal Conductivity Enhancements in Nanomagnetic Fluids, Small, vol. 19, no. 39, art. no. 202205741, 2023			
	8.	Khan H.A., Goharzadeh A., Jarrar F., Effect of a Uniform Magnetic Field on a Two-Phase Air-Ferrofluid Slug Flow, Journal of Magnetism and Magnetic Materials, vol. 580, art. no. 170944, 2023			
	9.	Abbas K., Wang X.H., Rasool G., Sun T., Yin G.F., Razzaq I., Recent Developments in the Application of Ferrofluids with an Emphasis on Thermal Performance and Energy Harvesting, Journal of Magnetism and Magnetic Materials, vol. 587, art. no. 171311, 2023			
	10.	Mehrez Z., Maaoui W., Najjari M., Recent Advancements in Enhancing the Efficiency of Solar Energy Systems Through the Utilization of Ferrofluids and Magnetic Fields, Energy Conversion and Management, vol. 307, art. no. 118353, 2024			
	11.	Rehman T.U., Park C.W., Advances in nanofluids for tubular heat exchangers: Thermal performance, environmental effects, economics and outlook, Energy, vol. 308, art. no. 132732, 2024.			
	12.	Jin, L.C., Yang, J.X., Li, Q., Tian, X., Li, D.C., Experimental study on thermal conductivity of hybrid magnetic fluids under external magnetic field, Magnetochemistry, vol. 11, no. 4, Art. No. 30, 2025			
	autocit.	Malaescu I., Fannin P.C., Marin C.N., Bunoiu M.O., Influence of the Polarizing Magnetic Field and Volume Fraction of Nanoparticles in a Ferrofluid on the Specific Absorption Rate (SAR) in the Microwave Range, Magnetochemistry, vol. 12, no. 1, art. no. 5, 2025.			
65.	Lazič D, Malaescu I., Bunoiu O.M., Marin I., Popescu F.G., Socoliuc V., Marin C.N., Investigation of therapeutic-like irradiation effect on magnetic hyperthermia characteristics of a water-based ferrofluid with magnetite particles, Journal of Magnetism and Magnetic Materials, vol. 502, art. no. 166605, 2020 https://www.webofscience.com/wos/woscc/full-record/WOS:000521826900096		7	6	*1.166*
	1.	Yang, Chuncheng; Liu, Zhong; Yu, Mengchun; et al., The influence of thixotropy on the magnetorheological property of oil-based ferrofluid, Journal of Molecular Liquids, Vol. 320, Art. no. 114425, 2020			
	2.	Hardon S., Kudelcik J., Rajnak M., Kubovcikova M., STUDY OF STRUCTURAL CHANGES IN BIOCOMPATIBLE FLUID BY THE ACOUSTIC SPECTROSCOPY, ROMANIAN REPORTS IN PHYSICS, Vol. 73,No. 4, Art. No. 603, 2021			

	3.	Chau N.T.T., Koh E.S., Lee S.J., Rui Z., Yang S.Y., Functional Polyelectrolyte Coatings on Polymeric and Magnetic Colloidal Particles for Antifouling and Non-Toxic Bioconjugate Nanoparticles, MACROMOLECULAR RESEARCH, Vol. 29, No. 12, 843-846, 2021			
	4.	Pattanaik M.S., Varma V.B., Cheekati S.K., Chaudhary V., Ramanujan R.V., Optimal ferrofluids for magnetic cooling devices, SCIENTIFIC REPORTS, Vol. 11, No. 1, Art. No. 24167, 2021			
	5.	Kudelcik J., Hardon S., Hockicko P., STUDY OF STRUCTURAL CHANGES IN WATER-BASED MAGNETIC-FLUID BY ACOUSTIC SPECTROSCOPY, Romanian Journal of Physics, vol. 67, no. 7-8, art. no. 608, 2022			
	6.	Gontijo R.G., Guimaraes A.B., Langevin Dynamic Simulations of Magnetic Hyperthermia in Rotating Fields, Journal of Magnetism and Magnetic Materials, vol. 565, art. no. 170171, 2023			
	7.	Oliveira A.F., de Sousa E.M.B., Synthesis and Characterization of MSN/Fe3O4/Gd2O3 Nanocomposite as Theranostic Systems, Journal of Nanoparticle Research, vol. 25, no. 6, art. no. 115, 2023			
66.	Vlase D., Diaconescu D., Bunoiu V., Bunoiu M., Vlase G., Sfârloagă P., Vlase T., Analytical investigations of adornment pieces from Susani (Timiș County, Romania), Journal of Thermal Analysis and Calorimetry, Vol. 141, No. 3, 1067-1074, 2020 https://www.webofscience.com/wos/woscc/full-record/WOS:000539163600001		3	6	*0.5*
	1.	Vlase D., Vlase G., Ursut G., Sfirloaga P., Manea F., Budiul M., Rotaru A., Vlase T., Creanga I., The In-Depth Study of Romanian Prehistoric Ceramics: Late Neolithic/Eneolithic Pottery and Clay Materials from the Foeni Tell-Orthodox Cemetery in Timis County, Ceramics International, vol. 49, no. 9, pp. 14941-14956, 2023			
	2.	Stavila A., Floca C., Tracing Late Bronze Age transitions in the Eastern Carpathian Basin: insights from a new Cruceni-Belegiš type settlement from Dumbrăvita-Parohia Ortodoxă III (Timiș County, Romania), *Bulgarian e-Journal of Archaeology*, vol. 15, no. 2, pp. 177–209, 2025.			
	3.	Ursut G., Vlase D., Vlase G., Cioponea A., Pahomi A., Sfirloaga P., Barbat I.A., Manea F., Potinteu I.A., Pitulice L., Multiple technique analysis of pottery and clay samples from the Neolithic settlement Șoimuș-Teleghi (Romania), *Journal of Thermal Analysis and Calorimetry*, 2026. DOI10.1007/s10973-026-15429-z			
67.	Bunoiu M., Anitas E.M., Pascu G., Chirigiu L.M.E., Bica I., Electrical and Magnetodielectric Properties of Magneto-Active Fabrics for Electromagnetic Shielding and Health Monitoring, International Journal of Molecular Sciences, Vol. 21, No. 13, 4785, 2020 https://www.webofscience.com/wos/woscc/full-record/WOS:000550234700001		11	5	*2.2*
	1.	Iacobescu G.E., Bica I., Application of Atomic Force Microscopy for Magnetic and Mechanical Investigation of New Magnetorheological Elastomers, University Politehnica of Bucharest Scientific Bulletin-Series A-Applied Mathematics and Physics, 82, 2590268, 2020			
	2.	Safarik I., Prochazkova J., Schroer M.A., Garamus V.M., Kopcansky P., Timko M., Rajnak M., Karpets M., Ivankov O.I., Avdeev M.V., Petrenko V.I., Bulavin L., Pospiskova K., Cotton Textile/Iron Oxide Nanozyme Composites with Peroxidase-like Activity: Preparation, Characterization, and Application, ACS Applied Materials & Interfaces, Vol. 18, No. 20, 23627-23637, 2021			
	3.	Shevchenko V.G., Stepanov G.V., Kramarenko E.Y., Dielectric Spectroscopy of Hybrid Magnetoactive Elastomers, Vol. 13, No. 12, Art. No. 2002, 2021			
	4.	Zhang S.S., Huang F.L., Zhong M.Q., Fan P., PVA/GO films with alternating layer structure: thermal, transparency and dielectric properties, Journal of Materials Science - Materials in Electronics, early access, 2021, 10.1007/s10854-021-06298-3			
	5.	Iacobescu G.E., Bica I., Chirigiu L.M.E., Physical Mechanisms of Magnetic Field Effects on the Dielectric Function of Hybrid Magnetorheological Suspensions, Materials, Vol. 14, No. 21, Art. No. 6498, 2021			
	6.	Bica I., Iacobescu G.E., Magneto-Dielectric Effects in Polyurethane Sponge Modified with Carbonyl Iron for Applications in Low-Cost Magnetic Sensors, Polymers, vol. 14, no 10, art. no. 2062, 2022			
	7.	Hong X.H., Sun W., Peng T., Qian J.N., Zhang Z.F., Zhu C.Y., Cai G.M., Manganese Waste Liquid Derived MnFe2O4/RGO Fabric for Microwave Blocking, High Stable Strain and Temperature Sensing, Journal of Industrial Textiles, vol. 52, art. no. 15280837221121969, 2022			
	autocit.	Bunoiu M., Iacobescu G.E., Pascu G., Chirigiu L., Bica I., Magnetically Active Composites with Relatively Giant Dielectric Permittivity, Romanian Reports in Physics, Vol. 75, No. 3, Art. No. 503, 2023			
	8.	Bica I., Anitas E.M., Sfirloaga P., Magnetizable Membranes Based on Cotton Microfibers, Honey, Carbonyl Iron, and Silver Nanoparticles: Effects of Static Magnetic Fields and Medium-Frequency Electric Fields on Electrical Properties, Magnetochemistry, vol. 9, no. 1, art. no. 19, 2023			
	9.	Safarik I., Prochazkova J., Pospiskova K.Z., Copper-chitosan-modified magnetic textile as a peroxidase-mimetic catalyst for dye removal, Separations, vol. 11, no. 11, article no. 325, 2024.			
	10.	Cheng W.P., Dong J., Sun R.J., Magnetically responsive intelligent fibers: nano-engineered materials and multifunctional integration for advanced applications, Materials Horizons, vol. 12, no. 23, pp. 9870–9892, 2025.			
	11.	Anitas E.M., Bica I., Wang S.Z., Choi H.J., Advanced electro-magnetorheological hybrid materials: physical processes, synthesis, and multifunctional applications, *Rivista del Nuovo Cimento*, 2026.			

68.	Bajas D., Vlase G., Mateescu M., Grad O.A., Bunoiu M., Vlase T., Avram C., Formulation and Characterization of Alginate-Based Membranes for the Potential Transdermal Delivery of Methotrexate Polymers, Vol. 13, 161, 2021 https://www.webofscience.com/wos/woscc/full-record/WOS:000606133900001		43	6	*7.166*
	autocit.	Marioane C.A., Bunoiu M., Mateescu M., Sfirloagă P., Vlase G., Vlase T., Preliminary Study for the Preparation of Transmucosal or Transdermal Patches with Acyclovir and Lidocaine, Polymers, Vol. 13, 3596, 2021			
	1.	Nornberg A.B., Martins C.C., Cervi V.F., Sari M.H.M., Cruz L., Luchese C., Wilhelm E.A., Fajardo A.R., Transdermal release of methotrexate by cationic starch/poly(vinyl alcohol)-based films as an approach for rheumatoid arthritis treatment, INTERNATIONAL JOURNAL OF PHARMACEUTICS, Vol. 611, Art. No. 121285, 2022			
	2.	Yerlan G.Y., Tyussyupova B.B., Tazhibayeva S.M., Musabekov K.B., Balabushevich N.G., Kokanbayev A.K., Encapsulation of Insulin in Biodegradable Polymers, Eurasian Chemico-Technological Journal, vol. 24, no. 4, pp. 351-361, 2022			
	3.	Madeo L.F., Sarogni P., Cirillo G., Vittorio O., Voliani V., Curcio M., Shai-Hee T., Buchner B., Mertig M., Hampel S., Curcumin and Graphene Oxide Incorporated into Alginate Hydrogels as Versatile Devices for the Local Treatment of Squamous Cell Carcinoma, Vol. 15, N0. 5, Art. No. 1648, 2022			
	4.	Rutkowski M., Krzeminska-Fiedorowicz L., Khachatryan G., Bulski K., Kolton A., Khachatryan K., Biodegradable Silver Nanoparticles Gel and Its Impact on Tomato Seed Germination Rate in In Vitro Cultures, APPLIED SCIENCES-BASEL, Vol. 12, No. 5, Art. No. 2722, 2022			
	5.	Shafiq A., Madni A., Khan S., Sultana H., Sumaira, Shah H.S., Khan S., Rehman S., Nawaz M., Core-shell Pluronic F127/chitosan based nanoparticles for effective delivery of methotrexate in the management of rheumatoid arthritis, International Journal of Biological Macromolecules, vol. 213, 465-467, 2022			
	6.	Minh N., Huong L.M., Dat N.T., Thinh D.B., Trinh D.N., Giang N.T.H., Phong M.T., Hieu N.H., Synthesis of hygroscopic sodium alginate-modified graphene oxide: Kinetic, isotherm, and thermodynamic study, European Polymer Journal, vol. 174, art. no. 111333, 2022			
	7.	Osorio-Alvarado C.E., Ropero-Vega J.L., Farfan-Garcia A.E., Florez-Castillo J.M., Immobilization Systems of Antimicrobial Peptide Ib-M1 in Polymeric Nanoparticles Based on Alginate and Chitosan, Polymers, vol. 14, no. 15, art. no. 3149, 2022			
	8.	Angan A., Sambudi N.S., Synthesis of Alginate/Hydroxyapatite Beads for Acetaminophen Delivery, Makara Journal of Science, vol. 26, no. 3, pp. 182-189, 2022			
	9.	Phan K.S., Le T.T.H., Nguyen T.M., Mai T.T.T., Hoang P.H., To X.T., Nguyen T.T., Pham K.D., Ha P.T., Co-delivery of Doxycycline, Florfenicol and Silver Nanoparticles using Alginate/Chitosan Nanocarriers, CHEMISTRYSELECT, vol. 7, no. 33, art. no. 202201954, 2022			
	10.	Okolisan D., Vlase G., Vlase T., Avram C., Preliminary Study of kappa-Carrageenan Based Membranes for Anti-Inflammatory Drug Delivery, Polymers, vol. 14, no. 20, art. no. 4275, 2022			
	11.	Han Y., Jin Z.Y., Zhang D.S., Hu B.B., Li Z.Q., Jing Y.S., Sun S.G., Application of Polymers in Promoting Transdermal Absorption, Materials Today Chemistry, vol. 26, art. no. 101204, 2022			
	12.	de Souza J.F., da Silva E.C., Biajoli A.F.P., Bonemann D.H., Ribeiro A.S., Fajardo A.R., Alginate/Phosphine-Functionalized Chitosan Beads Towards the Removal of Harmful Metal Ions from Aqueous Medium, Journal of Polymers and the Environment, Vol. 31, Issue 1, pp. 249-263, 2023			
	13.	Fahmy H.M., Fouda M.M.G., Amr A., Abou-Okei A., Fabrication of bioactive wound dressing containing carbopol, hyaluronic acid, and Na-alginate, Egyptian Journal of Chemistry, vol. 67, no. 1, pp. 343-352, 2023.			
	14.	Liu B.X., Yu X.Y., Formulation and Pharmacological Evaluation of Novel Herbal Bioscaffold Sponges for Wound Healing Activity, Latin American Journal of Pharmacy, vol. 42, no. 11, pp. 2368-2374, 2023			
	15.	Derakhshankhah H., Eskandani M., Nakhjavani S.A., Tasoglu S., Vandghanooni S., Jaymand M., Electro-conductive Silica Nanoparticles-Incorporated Hydrogel Based on Alginate as a Biomimetic Scaffold for Bone Tissue Engineering Application, International Journal of Polymeric Materials and Polymeric Biomaterials, vol. 73, no. 4, pp. 266-278, 2024			
	16.	Ghilan A., Croitoriu A., Chiriac A.P., Nita L.E., Bercea M., Rusu A.G., Injectable Networks Based on a Hybrid Synthetic/Natural Polymer Gel and Self-Assembling Peptides Functioning as Reinforcing Fillers, Polymers, vol. 15, no. 3, art. no. 636, 2023			
	17.	Sathiyaseelan A., Zhang X., Wang M.H., Enhancing the Antioxidant, Antibacterial, and Wound Healing Effects of Melaleuca alternifolia Oil by Microencapsulating It in Chitosan-Sodium Alginate Microspheres, Nutrients, vol. 15, no. 6, art. no. 1319, 2023			
	18.	Mateescu M., Vlase G., Budiul M.M., Cernusca B.D., Vlase T., Preliminary Study for Preparation and Characterization of Medicated Jelly Based on Ibuprofen or Ambroxol, Journal of Thermal Analysis and Calorimetry, vol. 148, no. 10, pp. 4601-4614, 2023			
	19.	Teng C., Campanella O.H., A Plant-Based Animal Fat Analog Produced by an Emulsion Gel of Alginate and Pea Protein, Gels, vol. 9, no. 5, art. no. 393, 2023			

	20.	Manna S., Gupta P., Nandi G., Jana S., Recent Update on Alginate Based Promising Transdermal Drug Delivery Systems, Journal of Biomaterials Science-Polymer Edition, vol. 34, no. 16, pp. 2291-2318, 2023	
	21.	Senturk E., Bilici C., Afghah F., Khan Z., Celik S., Wu C.T., Koc B., 3D Bioprinting of Tyramine Modified Hydrogels Under Visible Light for Osteochondral Interface, Biofabrication, vol. 15, no. 3, art. no. 034102, 2023	
	22.	Khaliq M., Hanif M.A., Bhatti I.A., Mushtaq Z., A Novel Study for Producing Complexed and Encapsulated Nutrients at Nanometric Scale to Enhance Plant Growth, Scientific Reports, vol. 13, no. 1, art. no. 11100, 2023	
	23.	El-Refaie W.M.M., Ghazy M.S.S., Ateyya F.A.A., Sheta E., Shafek M.Y.Y., Ibrahim M.S.S., Ismail M.M.A., Gowayed M.A.A., Rhein Methotrexate-Decorated Solid Lipid Nanoparticles Altering Adjuvant Arthritis Progression Through Endoplasmic Reticulum Stress-Mediated Apoptosis, Inflammopharmacology, vol. 31, no. 6, pp. 3127-3142, 2023	
	24.	Anugrah D.S.B., Darmalim L.V., Sinanu J.D., Pramitasari R., Subali D., Prasetyanto E.A., Cao X.T., Development of Alginate-Based Film Incorporated with Anthocyanins of Red Cabbage and Zinc Oxide Nanoparticles as Freshness Indicator for Prawns, International Journal of Biological Macromolecules, vol. 251, art. no. 126203, 2023	
	25.	Adel I.M., ElMeligy M.F., Amer M.S., Elkasabgy N.A., Polymeric Nanocomposite Hydrogel Scaffold for Jawbone Regeneration: The Role of Rosuvastatin Calcium-Loaded Silica Nanoparticles, International Journal of Pharmaceutics-X, vol. 6, art. no. 100213, 2023	
	autocit.	Bradu I.A., Vlase T., Bunoiu M., Gradinaru M., Pahomi A., Baias D., Budiul M.M., Vlase G., Synthesis and Characterization of Polymer-Based Membranes for Methotrexate Drug Delivery, Polymers, Vol. 15, Art. No. 4325, 2023.	
	26.	Bazán J.M.N., Chagas V.L., Silva R.G., Silva I.S.S., Araujo J.G.N., Araujo G.N., Silva L.D., Batista K.L.R., Silva R.R.D., Correia M.T.D., Sousa J.C.D., Monteiro C.D., Tofanello A., Garcia W., Carvalho E.M., Teixeira C.S., da Silva L.C.N., Development and Characterization of Alginate-Derived Bioadhesive Films Incorporated with Anti-Infective Lectins for Application in the Treatment of Oral Candidiasis, Journal of Drug Delivery Science and Technology, vol. 90, art. no. 105114, 2023	
	27.	Boonprakong P., Phasuksom K., Morarad R., Sakunpongpitiporn P., Parinyanitikul N., Sirivat A., Polyindole:Poly(4-Styrenesulfonic Acid) Loaded Agarose Hydrogel for Methotrexate Sodium Transdermal Delivery via Iontophoresis, European Polymer Journal, vol. 202, art. no. 112607, 2024	
	28.	Hussein A.M., Hussein-Al-Ali S.H., Development and Evaluation of Methotrexate Nanocomposites Using B-Cyclodextrins/Alginate Polymers and Response Surface Methodology, Digest Journal of Nanomaterials and Biostructures, vol. 19, no. 1, pp. 213-228, 2024	
	29.	Grumezescu V., Gherasim O., Galateanu B., Hudita A., Antitumoral-Embedded Biopolymeric Spheres for Implantable Devices, Pharmaceutics, vol. 16, no. 6, art. no. 754, 2024	
	30.	Keten S., Gönülkirmaz F., Karacan P., Ceylan D., Abdurrahmanoglu S., Synergetic Effect of the Crosslinker Size and Polysaccharide Type on the Acrylamide Networks, Journal of Applied Polymer Science, vol. 141, no. 35, art. no. 55900, 2024	
	31.	Pandey S., Sekar H., Gundabala V., Development and characterization of bilayer chitosan/alginate cling film reinforced with essential oil-based nanocomposite for red meat preservation, International Journal of Biological Macromolecules, vol. 279, part 4, art. no. 135524, 2024.	
	32.	Haroon M., Nasim M., Nawaz A., Khan N.U., Rashid S.A., Khan D.H., Shah M.K.A., Alfaifi M.Y., Elbehairi S.E.I., Shati A.A., Iqbal H., Simultaneous delivery of dual anticancer agents via pH-responsive polymeric nanoparticles for enhanced therapeutic efficacy against breast cancer cells, Journal of Cluster Science, vol. 35, no. 8, pp. 2823-2836, 2024.	
	33.	Solovieva A., Kopylov A., Cherkasova A., Shershnev I., Kaplin V., Timofeeva V., Akovantseva A., Savko M., Gulin A., Zarkhina T., Aksenova N., Timashev P., Methylene blue solid alginate gels for photodynamic therapy: The peculiarities of production and controlled release of the dye, Polymers, vol. 16, no. 19, art. no. 2819, 2024.	
	34.	Abdullah, S., Altwaijry, N., Alnakhli, M., ALenezi, G., Al-Masud, A.A., Henidi, H., Jamous, Y.F., Novel methotrexate long-acting system using ambroxol coating and hydroxypropyl methylcellulose encapsulation for preferential and enhanced lung cancer efficiency, PLOS ONE, vol. 20, no. 1, art. no. e0314941, 2025	
	35.	Xu, M., Zhu, X.Y., Bioscaffold sponge with Hippophae rhamnoides L accelerates burn wound repair: in vitro and in vivo studies, International Journal of Morphology, vol. 43, no. 2, pp. 351–359, 2025.	
	36.	Kumar, D., Pandey, S., Shivhare, B., Bala, M., Kumar, M., Kumar, P., Gupta, J., Natural polysaccharide-based nanodrug delivery systems for targeted treatment of rheumatoid arthritis: A review, International Journal of Biological Macromolecules, vol. 310, part 3, art. no. 143408, 2025.	
	37.	Okolisan D., Vlase G., Budiul M.M., Matica M.A., Vlase T., Amygdalin-Doped Biopolymer Composites as Potential Wound Dressing Films: In Vitro Study on *E. coli* and *S. aureus*, *Gels*, vol. 11, no. 8, art. no. 609, 2025.	
	38.	Gul R., Khalid W., Sarfraz M., Bin Jardan Y.A., Ikram M., Bashir H., Ahmad N., Khan L., Siddiqui B., Nazir I., Jiang Y.S., Amirzada M.I., Human plasma-derived exosomal gel: a	

		biomimetic cargo for the transdermal delivery of methotrexate, *Journal of Drug Targeting*, vol. 34, no. 3, pp. 408–423, 2026.			
	39.	Öner E., Sahin T., Eliuz E.E., Gumuscu N., Demirhan I., Kiliç Ö., Yalin S., Saha S., Preparation, characterization, and tyrosinase enzyme inhibition activity of biocompatible antibacterial *Astragalus campylosema*-loaded sodium alginate hydrogel, *Letters in Drug Design & Discovery*, vol. 22, no. 11, art. no. 100240, 2025.			
	40.	Moghaddam M.M., Imani R., Jooybar E., Tyramine-modified hydrogels for tissue engineering: characterizations, crosslinking methods, and applications-a review, *Biomedical Materials*, vol. 20, no. 6, art. no. 062002, 2025.			
	41.	Shershnev I., Solovieva A., Kopylov A., Cherkasova A., Kaplin V., Rachev S., Kuryanova A., Aksenova N., Timofeeva V., Akovantseva A., Zarkhina T., Shantarovich V., Bekeshev V., Bikmulina P., Huang R.L., Li Q.F., Timashev P., Photosensitizing systems based on alginate aerogels and methylene blue for controlled release of dye for antimicrobial photodynamic therapy, Frontiers in Chemistry, vol. 13, art. no. 1702876, 2025.			
	42.	Wathoni N., Herginto A.S., Suhandi C., Elamin K.M., Mohammed A.F.A., Mahmoud S.A., Febriyanti R.M., Wilar G., Advancements in Alginate-Based Biomaterials for Enhanced Skin Regeneration: A Comprehensive Review, *International Journal of Polymer Science*, vol. 2026, no. 1, art. no. 8996702, 2026.			
	43.	Ferroudj H., Benmahdi F., Ferah A., Harkat H., Mouni L., Unmodified calcium alginate beads from *Sargassum muticum* brown algae: A high-capacity, reusable adsorbent for methylene blue with mechanistic insights, *International Journal of Biological Macromolecules*, vol. 355, art. no. 151568, 2026.			
69.	Marioane C.A., Bunoiu M., Mateescu M., Sfîrloagă P., Vlase G., Vlase T., Preliminary Study for the Preparation of Transmucosal or Transdermal Patches with Acyclovir and Lidocaine, Polymers, Vol. 13, 3596, 2021 https://www.webofscience.com/wos/woscc/full-record/WOS:000715457400001		9	5.5	*1.636*
	1.	Okolisan D., Vlase G., Vlase T., Avram C., Preliminary Study of kappa-Carrageenan Based Membranes for Anti-Inflammatory Drug Delivery, Polymers, vol. 14, no. 20, art. no. 4275, 2022			
	2.	Dubashynskaya N.V., Skorik Y.A., Patches as Polymeric Systems for Improved Delivery of Topical Corticosteroids: Advances and Future Perspectives, International Journal of Molecular Sciences, vol. 23, no. 21, art. no. 12980, 2022			
	3.	Kobryn J., Raszewski B., Zieba T., Musial W., Modified Potato Starch as a Potential Retardant for Prolonged Release of Lidocaine Hydrochloride from Methylcellulose Hydrophilic Gel, Pharmaceutics, vol. 15, no. 2, art. no. 387, 2023			
	4.	Ozon E.A., Sarbu I., Popovici V., Mitu M.A., Musuc A.M., Karampelas O., Velescu B.S., Three-Dimensional Printing Technologies in Oral Films Manufacturing—A Minireview, Processes, vol. 11, no. 9, art. no. 2628, 2023			
	5.	Hassan A.A.A., Kristó K., Ibrahim Y.H.-E.Y., Regdon G. Jr., Sovány T., Quality by Design-Guided Systematic Development and Optimization of Mucoadhesive Buccal Films, Pharmaceutics, vol. 15, no. 10, art. no. 2375, 2023			
	6.	El Hani O., García-Guzmán J.J., Palacios-Santander J.M., Digua K., Amine A., Cubillana-Aguilera L., Molecularly Imprinted Alginate-PVP Membrane for the Selective Fluorescence Detection of Flavonoids in Foods: A Practical Case for Rutin, Sensors and Actuators B-Chemical, vol. 403, art. no. 135232, 2024			
	7.	Budiul M.M., Vlase G., Negru D., Okolisan D., Bradu I.A., Tasala A., Pahomi A., Vlase T., Jumanca D., Galuscan A., Sfirloaga P., Caraba N., Popescu R., Matichescu A., Dental Biopolymer Composites with Antibiotics, Bisphosphonate, and Hydroxyapatite for Possible Use in Bone Tissue Regeneration, Journal of Chemistry, vol. 2024, art. no. 6614044, 2024			
	8.	Silva A.C.Q., Mendes M., Vitorino C., Montejo U., Alonso-Varona A., Silvestre A.J.D., Vilela C., Freire C.S.R., Trilayered Nanocellulose-Based Patches Loaded with Acyclovir and Hyaluronic Acid for the Treatment of Herpetic Lesions, International Journal of Biological Macromolecules, vol. 277, part 1, art. no. 133843, 2024			
	9.	Bebawy G., Sokar M.S., Abdallah O.Y., Buccal lidocaine mucoadhesive patches for pediatrics' teething pain: Overcoming possible hazards of oral gels, Pharmaceutical Development and Technology, vol. 29, no. 8, pp. 805-813, 2024.			
70.	Bunoiu M., Vlase G., Bica I., Balasoiu M., Pascu G., Vlase T., Study of Thermal Stability of Some Magnetorheological Elastomers, Romanian Reports in Physics, Vol. 73, Art. No. 503, 2021 https://www.webofscience.com/wos/woscc/full-record/WOS:000656884000016		1	5.5	*0.181*
	1.	W. Wibowo, B.W. Lenggana, U. Ubaidillah, D. Ariawan, F. Imaduddin, S.A. Mazlan, S.B. Choi, Declining Performance of Silicone-Based Magnetorheological Elastomers after Accelerated Weathering, Materials, Vol. 14, No. 21, Art. No. 6389, 2021			
71.	Bălăşoiu M., Bunoiu M., Chirigiu L.M.E., Bica I., Electrical Devices based on Hybrid Magnetorheological Suspensions: Realization, Phenomenological Modeling and Technical Characteristics, Romanian Journal of Physics, Vol. 66, 604, 2021 https://www.webofscience.com/wos/woscc/full-record/WOS:000680832200015		4	4	*1*

	1.	Kudelcik J., Hardon S., Hockicko P., STUDY OF STRUCTURAL CHANGES IN WATER-BASED MAGNETIC-FLUID BY ACOUSTIC SPECTROSCOPY, Romanian Journal of Physics, vol. 67, no. 7-8, art. no. 608, 2022			
	2.	Bica I., Balasoiu M., Sfirloaga P., Effects of electric and magnetic fields on dielectric and elastic properties of membranes composed of cotton fabric and carbonyl iron microparticles, Results in Physics, vol. 35, art. no. 105332, 2022			
	3.	Bica I., Iacobescu G.E., Magneto-Dielectric Effects in Polyurethane Sponge Modified with Carbonyl Iron for Applications in Low-Cost Magnetic Sensors, Polymers, vol. 14, no 10, art. no. 2062, 2022			
	4.	Lu Q., Balasoiu M., Choi H.J., Anitas E.M., Bica I., Cirigiu L.M.E., Magneto-dielectric and viscoelastic characteristics of iron oxide microfiber-based magnetoreological suspension, Journal of Industrial and Engineering Chemistry, vol. 112, 58-66, 2022			
72.	Fannin P.C., Bunoiu O.M., Malaescu I., Marin C.N., Ursu D., Magnetically tuning microwave propagation parameters in ferrofluids, The European Physical Journal E, Vol. 44, Art. No. 83, 2021 https://www.webofscience.com/wos/woscc/full-record/WOS:000691471100002		7	5	*1.4*
	1.	Segneanu A.E., Marin C.N., Vlase G., Cepan C., Mihailescu M., Muntean C., Grozescu I., Highly efficient engineered waste eggshell-fly ash for cadmium removal from aqueous solution, Scientific Reports, vol. 12, no. 1, art. no. 9676, 2022			
	2.	Turkin S., Dikansky Y., Zakinyan A., Drops deformation influence on the microwaves interaction with a magnetodielectric emulsion, Journal of Microwave Power and Electromagnetic Energy, vol. 56, no. 4, 268-285, 2022			
	3.	Turkin S., Zakinyan A., Semyonova S., Kunikin S., Electromagnetic Wave Absorption by Magnetic Colloids with Conductive Filler in the Centimeter Range, Applied Physics A-Materials Science & Processing, vol. 130, no. 4, art. no. 244, 2024			
	4.	Turkin S., Zakinyan A., Bozhenko S., Absorption Spectrum of Magnetically Structured Emulsions in the Centimeter Range, Physica Scripta, vol. 99, no. 4, art. no. 045507, 2024			
	5.	Marin C.N., Fannin P.C., Malaescu I., Polarizing magnetic field effect on some electrical properties of a ferrofluid in microwave field, Magnetochemistry, vol. 10, no. 11, art. no. 88, 2024.			
	6.	Kurilov A.D., Klochkov A.A., Gubareva A., Modeling of Dielectric Properties in Magnetic Fluids with Anisotropic Internal Structures, *Liquid Crystals and their Application*, vol. 25, no. 4, pp. 54–63, 2025.			
	7.	Turkin S., Bozhenko S., Chernyshov A., Zakinyan A., Magnetodielectric emulsion as a tunable microwave-absorbing material, *Colloids and Surfaces A: Physicochemical and Engineering Aspects*, vol. 742, part 1, art. no. 140418, 2026.			
73.	Pascu G., Bunoiu O.M., Bica I., Magnetic Field Effects Induced in Electrical Devices Based on Cotton Fiber Composites, Carbonyl Iron Microparticles and Barium Titanate Nanoparticles, Nanomaterials, Vol. 12, Art. No. 888, 2022 https://www.webofscience.com/wos/woscc/full-record/WOS:000771492600001		7	3	*2.333*
	1.	Bica I., Composite Materials Based on Polymeric Fibers Doped with Magnetic Nanoparticles: Synthesis, Properties and Applications, vol. 12, no. 13, art. no. 2240, 2022			
	2.	Bica I., Iacobescu G.E., Chirigiu L.M.E., Magneto-Tactile Sensor Based on a Commercial Polyurethane Sponge, vol. 12, no. 18, art. no. 3231, 2022			
	3.	Alnaim N., Ibrahim S.S., AC conductivity, dielectric and thermal properties of three-phase hybrid composite: PVA/Bi2O3/cotton microfiber composite, vol. 9, no. 12, art. no. 125307, 2022			
	autocit.	Bunoiu M., Iacobescu G.E., Pascu G., Chirigiu L., Bica I., Magnetically Active Composites with Relatively Giant Dielectric Permittivity, Romanian Reports in Physics, Vol. 75, No. 3, Art. No. 503, 2023			
	4.	Bica I., Anitas E.M., Sfirloaga P., Magnetizable Membranes Based on Cotton Microfibers, Honey, Carbonyl Iron, and Silver Nanoparticles: Effects of Static Magnetic Fields and Medium-Frequency Electric Fields on Electrical Properties, Magnetochemistry, vol. 9, no. 1, art. no. 19, 2023			
	5.	Alamer F.A., Alqwaizani E., Althagafy K., Revolutionizing Capacitor Technology: Conductive Cotton Fabrics Based Graphite as Supercapacitor Capacitors, Carbon Letters, vol. 34, no. 1, pp. 95-107, 2024			
	6.	Ke L., Kumi M., Tao X.M., Pu J.H., Magnetic Textiles: A Review of Materials, Fabrication, Properties, and Applications, *Advanced Materials Technologies*, 2026.			
	7.	Anitas E.M., Bica I., Wang S.Z., Choi H.J., Advanced electro-magnetorheological hybrid materials: physical processes, synthesis, and multifunctional applications, *Rivista del Nuovo Cimento*, 2026. DOI10.1007/s40766-026-00081-y			
74.	Vlase D., Vlase T., Bunoiu M., Sfirloaga P., Ursut A.G., Vlase G., Characteristics of late Neolithic pottery of the Zau culture: analysis of pottery samples from Iernut-Site II (Mures County, Romania), Journal of Thermal Analysis and Calorimetry, vol. 147, no. 9, 5351-5363, 2022 https://www.webofscience.com/wos/woscc/full-record/WOS:000770513600001		4	5.5	*0.727*
	1.	Vlase D., Vlase G., Ursut G., Sfirloaga P., Manea F., Budiul M., Rotaru A., Vlase T., Creanga I., The In-Depth Study of Romanian Prehistoric Ceramics: Late Neolithic/Eneolithic Pottery and Clay			

		Materials from the Foeni Tell-Orthodox Cemetery in Timis County, Ceramics International, vol. 49, no. 9, pp. 14941-14956, 2023			
	2.	He X., Wen J.Q., He Z., Go I., Liu N.T., Guo H., Exploring Pottery Origin by Composition and Technique Comparison: A Case Study at the Daqu Burial Site, Beijing, China, Heritage Science, vol. 12, no. 1, art. no. 126, 2024			
	3.	Xia, L.Y., Li, Y.H., Zhang, G., Li, J.L., Jaang, L., Compositional analysis of Longshan period pottery and ceramic raw materials in the Yongcheng Region, Henan Province, Materials, vol. 18, no. 12, art. no. 2681, 2025			
	4.	Ursut G., Vlase D., Vlase G., Cioponea A., Pahomi A., Sfirloaga P., Barbat I.A., Manea F., Potinteu I.A., Pitulice L., Multiple technique analysis of pottery and clay samples from the Neolithic settlement Șoimuș-Teleghi (Romania), *Journal of Thermal Analysis and Calorimetry*, 2026. DOI10.1007/s10973-026-15429-z			
75.	Bradu I.A., Vlase T., Bunoiu M., Gradinaru M., Pahomi A., Baias D., Budiul M.M., Vlase G., Synthesis and Characterization of Polymer-Based Membranes for Methotrexate Drug Delivery, Polymers, Vol. 15, 4325, 2023 https://www.webofscience.com/wos/woscc/full-record/WOS:001100546900001		4	6.5	*0.615*
	1.	Karaca, B., Sakarya, D., Siyah, P., Senisik, A.M., Kaptan, Y., Çavusoglu, F.C., Mansuroglu, D.S., Öztürk, S., Bayazit, S.S., Barlas, F.B., Dual-functioning metal-organic frameworks: Methotrexate-loaded gadolinium MOFs as drug carriers and radiosensitizers, Chemistry – A European Journal, vol. 31, no. 24, article no. e202404106, 2025			
	2.	Okolisan D., Vlase G., Budiul M.M., Matica M.A., Vlase T., Amygdalin-Doped Biopolymer Composites as Potential Wound Dressing Films: In Vitro Study on *E. coli* and *S. aureus*, *Gels*, vol. 11, no. 8, art. no. 609, 2025.			
	3.	Aguilar-Ruiz A.L., Madera-Santana T.J., Sánchez-Duarte R.G., Villegas-Peralta Y., Aguilar-Ruiz A.A., Orozco-Carmona V.M., Development of Chitosan Polymer Membranes with Potential Use in Filtration Processes, *Membranes*, vol. 16, no. 1, art. no. 31, 2026.			
	4.	Khan A., Fareed M., Shah M.K.A., Nawaz A., Shahzad M.F., Abd Jalil M.F., Sofian Z.M., Nordin M.L., Evaluation of Chitosan-Methotrexate Nanoparticles Loaded in Alginate Beads for Controlled Drug Delivery Against Breast Cancer, *Journal of Pharmaceutical Innovation*, vol. 21, no. 4, art. no. 328, 2026.			
76.	Bunoiu M., Iacobescu G.E., Pascu G., Chirigiu L., Bica I., Magnetically Active Composites with Relatively Giant Dielectric Permittivity, Romanian Reports in Physics, Vol. 75, 503, 2023 https://www.webofscience.com/wos/woscc/full-record/WOS:001089004000004		0	5	*0*
77.	Iacobescu G.E., Bunoiu M., Bica I., Sfirloaga P., Chirigiu L.M.E., A Cotton Fabric Composite with Light Mineral Oil and Magnetite Nanoparticles: Effects of a Magnetic Field and Uniform Compressions on Electrical Conductivity, Micromachines, Vol. 14, 1113, 2023 https://www.webofscience.com/wos/woscc/full-record/WOS:001014922200001		5	5	*1*
	1.	Anosov A.A., Smirnova E.Yu., Sukhova V.I., Borisova E.D., Morgunov R.B., Taranov I.V., Grigoryan I.V., Cherepenin V.A., Khomutov G.B., Effect of colloidal magnetite (Fe3O4) nanoparticles on the electrical characteristics of the azolectin bilayer in a static inhomogeneous magnetic field, Biochimica et Biophysica Acta – Membranes, Vol. 1866, Issue 7, Art. no. 184352, 2024			
	2.	Bica I., Anitas E.M., Iacobescu G.E., Electrical Capacitors Based on Silicone Oil and Iron Oxide Microfibers: Effects of the Magnetic Field on the Electrical Susceptance and Conductance, Micromachines, Vol. 15, Issue 8, Art. no. 953, 2024			
	3.	Bica, I., Anitas, E.M., Sfirloaga, P., Chirigiu, L., Gavrilovici, A.M., Hybrid magneto-responsive composites made from recyclable components: Tunable electrical properties under magnetic and mechanical fields, Journal of Composites Science, vol. 9, no. 5, art. no. 219, 2025			
	4.	Huo X.Q., Liu B., Wu Z.Y., Recent Advances of Flexible Pressure Tactile Sensors: Sensing Mechanisms, Performance Breakthroughs, and Intelligent Applications, *Advanced Materials Technologies*, vol. 11, no. 5, 2026.			
	5.	Bica I., Anitas E.M., Bunoiu O.M., Chirigiu L., Pascu G., Hybrid Carbonyl Iron/Iron Oxide Microfiber Textile Membranes with Magnetically Tunable Capacitance Under Compressive Loading, Micromachines, vol. 17, no. 4, art. no. 478, 2026.			
78.	Malaescu I., Bunoiu M.O., Teusdea A., Marin C.N., Investigations on the Electrical Conductivity and Complex Dielectric Permittivity of a Ferrofluid Subjected to the Action of a Polarizing Magnetic Field, Materials Research Bulletin, Vol. 164, 112281, 2023 https://www.webofscience.com/wos/woscc/full-record/WOS:001008943900001		6	4	*1.5*
	1.	Rajnak M., Paulovicova K., Kurimsky J., Tóthová J., Cimbala R., Kónyová K., Dzida M., Timko M., Kopcansky P., Comparison of Physical Properties of Ferrofluids Based on Mineral Transformer Oil and Bio-Degradable Gas-to-Liquid Oil, Journal of Magnetism and Magnetic Materials, vol. 589, art. no. 171628, 2024			
	2.	Marin C.N., Malaescu I., The effect of magnetically induced local structure and volume fraction on the electromagnetic properties of elastomer samples with ferrofluid droplet inserts, Magnetochemistry, vol. 10, no. 1, art. no. 4, 2024			

	3.	El Hafidi, E., Mortadi, A., Chahid, E., Laasri, S., Effect of trichloroisocyanuric acid concentration on the electrical properties of swimming pool water, Scientific Reports, vol. 15, no. 1, art. no. 5223, 2025.			
	4.	Oliveira, B.M., Batalioto, F., Chand, M., Campos, A.F.C., Barbero, G., Neto, A.M.F., Electrical conductivity in kerosene-based ferrofluid under DC potential, Journal of Applied Physics, vol. 137, no. 13, art. no. 134701, 2025			
	5.	Rahman M., Turkyilmazoglu M., Haq T.F., Effects of multiple shapes of the nanoparticles on the hybrid nanofluid flow of Al_2O_3-Cu/kerosene oil plus transformer oil over a vertical cylinder with stagnation point, *Pramana - Journal of Physics*, vol. 99, no. 3, art. no. 88, 2025.			
	6.	Wilczynska A., Ruchomski L., Lakomski M., Goral-Kowalczyk M., Surowiec Z., Miaskowski A., Chitosan-Coated Fe_3O_4 Nanoparticles for Magnetic Hyperthermia, *Materials*, vol. 18, no. 24, art. no. 5629, 2025.			
79.	Malaescu I., Sfirloaga P., Marin C.N., Bunoiu M.O., Vlazan P., Experimental Investigations on the Electrical Conductivity and Complex Dielectric Permittivity of ZnxMn1−xFe2O4 (x = 0 and 0.4) Ferrites in a Low-Frequency Field, Crystals, Vol. 14, 437, 2024 https://www.webofscience.com/wos/woscc/full-record/WOS:001233436800001		8	5	*1.6*
	1.	Malaescu I., Sfirloaga P., Marin C.N., Experimental Investigations of the AC-Conductivity in $NaTaO_3$ Ceramic Materials Doped with Cu and Al Metal Ions, Metals, vol. 14, no. 7, art. no. 793, 2024			
	2.	Ahmad, E., Yousef, R., Alzoubi, A., Aldin, N.S., Structural, electrical and sensing properties of $ZnFe_2O_4$ nanoceramics synthesized by solid-state reaction method, Baghdad Science Journal, vol. 22, no. 4, 2025			
	3.	Malaescu, I., Poienar, M., Marin, C.N., Investigation of the electrical properties of polycrystalline crednerite $CuMn_{1-x}Mg_xO_2$ (x = 0–0.06)-type materials in a low-frequency field, Crystals, vol. 15, no. 2, article no. 184, 2025			
	4.	Marin, C.N., Poienar, M., Lungu, A., Casut, C., Sfirloaga, P., Malaescu, I., Study of the electrical conduction mechanism in low-frequency field for $CuMnO_2$ crednerite-type materials obtained by microwave-assisted hydrothermal synthesis, Crystals, vol. 15, no. 6, art. no. 497, 2025			
	5.	Wang L.L., Ding J.J., Chen T.C., Huang T.A., Guo K.X., Study on microwave absorbing properties of $Mn_{0.5}Zn_{0.5}Fe_2O_4$, *Next Materials*, vol. 9, art. no. 101084, 2025.			
	6.	Mazurenko J., Kaykan L., Mokliak V., Marzec M.M., Matzui L., Vovchenko L., Yakovenko O., Study of charge transfer mechanisms in cobalt-substituted copper ferrites, Journal of Materials Science: Materials in Electronics, vol. 36, no. 33, art. no. 2092, 2025.			
	7.	Mahmood A., Maqsood A., Tayyab S., Ali M., Ul Abideen Z., Effect of cadmium on the fabrication and thermally tailoring electrical transport properties of zinc ferrite nanoparticles, *Ceramics International*, vol. 52, no. 7, pp. 8280–8298, 2026.			
	8.	Biswal G., Ojha B., Purohit V., Sahoo R.R., Behera D., Biswal S., Compositional Engineering of Mg-Mn-Cu-Er Ferrite Ceramics: Functional Behaviour Toward High-Performance Microwave Absorbers, Journal of Inorganic and Organometallic Polymers and Materials, 2026.			
80.	Bunoiu O.M., Bica I., Anitas E.M., Chirigiu L.M.E., Magnetodielectric and Rheological Effects in Magnetorheological Suspensions Based on Lard, Gelatin and Carbonyl Iron Microparticles, Materials, Vol. 17, No. 16, 3941, 2024 https://www.webofscience.com/wos/woscc/full-record/WOS:001305203500001		3	4	*0.75*
	1.	Bica, I., Anitas, E.M., Sfirloaga, P., Chirigiu, L., Gavrilovici, A.M., Hybrid magneto-responsive composites made from recyclable components: Tunable electrical properties under magnetic and mechanical fields, Journal of Composites Science, vol. 9, no. 5, art. no. 219, 2025			
	2.	Campilho R.D.S.G., Experimental Testing, Manufacturing and Numerical Modelling of Composite and Sandwich Structures (Second Edition), *Materials*, vol. 18, no. 18, art. no. 4372, 2025.			
	autocit.	Bica I., Anitas E.M., Bunoiu O.M., Chirigiu L., Pascu G., Hybrid Carbonyl Iron/Iron Oxide Microfiber Textile Membranes with Magnetically Tunable Capacitance Under Compressive Loading, *Micromachines*, vol. 17, no. 4, art. no. 478, 2026.			
	3.	Anitas E.M., Bica I., Wang S.Z., Choi H.J., Advanced electro-magnetorheological hybrid materials: physical processes, synthesis, and multifunctional applications, *Rivista del Nuovo Cimento*, 2026. DOI10.1007/s40766-026-00081-y			
81.	Malaescu I., Sfirloaga P., Bunoiu O.M., Marin C.N., A Comparative Analysis of the Electrical Properties of Silicone Rubber Composites with Graphene and Unwashed Magnetite, Materials, Vol. 17, No. 23, Art. No. 6006, 2024 https://www.webofscience.com/wos/woscc/full-record/WOS:001377209800001		3	4	*0.75*
	1.	Makhno, S., Wan, X.P., Lisova, O., Gorbyk, P., Wang, D.X., Tang, H., Shi, Y.L., Kartel, M., Ivanenko, K., Hozhdzinskyi, S., Zaitseva, G., Stetsenko, M., Sementsov, Y., Conducting rubber anisotropy of electrophysical and mechanical properties, Polymers, vol. 17, no. 4, article no. 492, 2025			
	2.	Wei, S.Q., Tian, X.Y., Rao, Z., Wang, C.X., Tang, R., He, Y., Luo, Y., Fan, Q., Fan, W.F., Hu, Y., The potential of MN_4-GPs (M = Mn, Fe, Co, Ni, Cu, Mo) as adsorbents for the efficient separation of CH_4 from CO_2 and H_2S, Materials, vol. 18, no. 12, art. no. 2907, 2025			

	3.	Roesdiono C., Garniwa I.M.K., Setiabudy R., Review of Dielectric Properties Optimization of RTV Silicone Rubber Using Coal Fly Ash Filler with the Backpropagation Neural Network-Genetic Algorithm Method, *Multiscale and Multidisciplinary Modeling, Experiments and Design*, vol. 9, no. 1, art. no. 62, 2025.			
82.	Balasoiu M., Lysenko S., Astaf'eva S., Yakusheva D., Kornilitsina E., Ivankov O., Kuklin A., Bunoiu O.M., Lupu N., Small-Angle Scattering Investigation of Colloidal Suspensions with Lamellar Ba Hexaferrite Nanoparticles, Journal of Surface Investigation: X-ray, Synchrotron and Neutron Techniques, Vol. 18, No. 3, 736-744, 2024 https://www.webofscience.com/wos/woscc/full-record/WOS:001277999100026		0	7	*0*
83.	Codrean A.F., Bunoiu O.M., Paulescu M., Identifying the Signature of the Solar UV Radiation Spectrum, Atmosphere, Vol. 16, No. 4, Art. No. 427, 2025 https://www.webofscience.com/wos/woscc/full-record/WOS:001474709500001		1	3	*0.333*
	1.	Navarro-Espinoza S., Meza-Figueroa D., Grijalva-Noriega F., Silva-Campa E., Alvarez-Bajo O., Sarabia-Sainz A., Acosta-Elias M., Burgara-Estrella A., Bojorquez-Baltierrez B., Vibrational analysis of polystyrene photodegradation and its implications for microplastic formation in arid zones, Environmental Pollution, vol. 386, art. no. 127274, 2025.			
84.	Malaescu I., Fannin P.C., Marin C.N., Bunoiu M.O., Influence of the Polarizing Magnetic Field and Volume Fraction of Nanoparticles in a Ferrofluid on the Specific Absorption Rate (SAR) in the Microwave Range, *Magnetochemistry*, vol. 12, no. 1, art. no. 5, 2025. https://www.webofscience.com/wos/woscc/full-record/WOS:001670838700001		0	4	*0*
85.	Bica I., Anitas E.M., Bunoiu O.M., Chirigiu L., Pascu G., Hybrid Carbonyl Iron/Iron Oxide Microfiber Textile Membranes with Magnetically Tunable Capacitance Under Compressive Loading, *Micromachines*, vol. 17, no. 4, art. no. 478, 2026. https://www.webofscience.com/wos/woscc/full-record/WOS:001750062800001		0	5	*0*
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