

Lista lucrărilor publicate

Lect. univ. dr. Andrei Dornik

(i) Lista a maximum 10 lucrări considerate a fi cele mai relevante pentru realizările profesionale proprii și pentru domeniul disciplinelor postului, precum cărți de autor, articole/studii/capitole, volume editate, lucrări;

1. **Dornik A.**, Chețan M-A., Crișan T.E., Heciko R., Gora A., Drăguț L., Panagos P., 2024, *Geospatial evaluation of the agricultural suitability and land use compatibility in Europe's temperate continental climate region*, **International Soil and Water Conservation Research** (IF 7.3; AIS 1.371; **Q1**), <https://doi.org/10.1016/j.iswcr.2024.01.002> – încadrat în categoria **Hot paper (WoS)**, între martie-mai 2025
2. **Dornik A.**, Chețan M-A., Drăguț L., Iliuță A., Dicu D.D., 2022, *Importance of the mapping unit on the land suitability assessment for agriculture*, **Computers and Electronics in Agriculture** (IF 8.3; AIS 1.049; **Q1**; Rank 1/58 in AGRICULTURE, MULTIDISCIPLINARY), 201: 107305, <https://doi.org/10.1016/j.compag.2022.107305>
3. **Dornik A.**, Chețan M-A., Drăguț L., Dicu D.D., Iliuță A., 2022, *Optimal scaling of predictors for digital mapping of soil properties*, **Geoderma** (IF 6.1; AIS 1.221; **Q1**), 405:115453, [10.1016/j.geoderma.2021.115453](https://doi.org/10.1016/j.geoderma.2021.115453)
4. **Dornik A.**, Drăguț L., Oguchi T., Hayakawa Y., Micu M., 2022, *Influence of sampling design on landslide susceptibility modeling in lithologically heterogeneous areas*, **Scientific Reports** (IF 4.6; AIS 1.129; **Q2**), 12:2106, <https://doi.org/10.1038/s41598-022-06257-w>
5. **Dornik A.**, Ion M. C., Chețan M-A., Pârvulescu L., 2021, *Soil-Related Predictors for Distribution Modelling of Four European Crayfish Species*, **Water** (IF 3.53; AIS 0.523; **Q3**), 13:16, 2280, <https://doi.org/10.3390/w13162280>
6. Chețan, M-A., **Dornik, A.**, 2021, *20 years of landscape dynamics within the world's largest multinational network of protected areas*, **Journal of Environmental Management** (IF 8.910; AIS 1.115; **Q1**), 280, 111712, <https://doi.org/10.1016/j.jenvman.2020.111712>
7. **Dornik, A.**, Drăguț, L., Urdea, P., 2018, *Classification of Soil Types Using Geographic Object-Based Image Analysis and Random Forest*, **Pedosphere** (IF 3.188; AIS 0.559; **Q2**), 28:6, 913-925, [https://doi.org/10.1016/S1002-0160\(17\)60377-1](https://doi.org/10.1016/S1002-0160(17)60377-1)
8. **Dornik, A.**, 2017, *Analiza geografică orientată-obiect pentru cartografierea digitală a solurilor în sud-vestul României*, Editura Universității de Vest, ISBN: 978-973-125-566-8, 214 p.
9. **Dornik, A.**, Drăguț, L., Urdea, P., 2016, *Knowledge-based soil type classification using terrain segmentation*, **Soil Research** (IF 1.606; AIS 0.455; **Q3**), 54:7, 809-823, <https://doi.org/10.1071/SR15210>
10. Drăguț, L., **Dornik, A.**, 2016, *Land-surface segmentation as a method to create strata for spatial sampling and its potential for digital soil mapping*, **International Journal of Geographical Information Science** (IF 2.5; AIS 0.584; **Q1**), 30:7, 1359-1376, <https://doi.org/10.1080/13658816.2015.1131828>

(ii) Titlul tezei de doctorat;

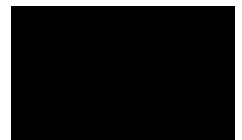
1. *Analiza geografică orientată-obiect pentru cartografierea digitală a solurilor în sud-vestul României*

(iii) Lista cărților de autor și a volumelor editate și publicate;

1. **Dornik, A.**, 2017, *Analiza geografică orientată-obiect pentru cartografierea digitală a solurilor în sud-vestul României*, Editura Universității de Vest, ISBN: 978-973-125-566-8, 214 p.

(iv) Lista articolelor / studiilor in extenso, publicate în reviste din fluxul științific internațional principal;

1. **Dornik A.**, Chețan M-A., Crișan T.E., Heciko R., Gora A., Drăguț L., Panagos P., 2024, *Geospatial evaluation of the agricultural suitability and land use compatibility in Europe's temperate continental climate region*, **International Soil and Water Conservation Research** (IF 7.3; AIS 1.371; **Q1**), <https://doi.org/10.1016/j.iswcr.2024.01.002>
2. **Dornik A.**, Chețan M-A., Drăguț L., Iliuță A., Dicu D.D., 2022, *Importance of the mapping unit on the land suitability assessment for agriculture*, **Computers and Electronics in Agriculture** (IF 8.3; AIS 1.049; **Q1**; Rank **1/58** in AGRICULTURE, MULTIDISCIPLINARY), 201: 107305, <https://doi.org/10.1016/j.compag.2022.107305>
3. **Dornik A.**, Chețan M-A., Drăguț L., Dicu D.D., Iliuță A., 2022, *Optimal scaling of predictors for digital mapping of soil properties*, **Geoderma** (IF 6.1; AIS 1.221; **Q1**), 405:115453, [10.1016/j.geoderma.2021.115453](https://doi.org/10.1016/j.geoderma.2021.115453)
4. **Dornik A.**, Drăguț L., Oguchi T., Hayakawa Y., Micu M., 2022, *Influence of sampling design on landslide susceptibility modeling in lithologically heterogeneous areas*, **Scientific Reports** (IF 4.6; AIS 1.129; **Q2**), 12:2106, <https://doi.org/10.1038/s41598-022-06257-w>
5. **Dornik A.**, Ion M. C., Chețan M-A., Pârvolescu L., 2021, *Soil-Related Predictors for Distribution Modelling of Four European Crayfish Species*, **Water** (IF 3.53; AIS 0.523; **Q3**), 13:16, 2280, <https://doi.org/10.3390/w13162280>
6. Chețan, M-A., **Dornik, A.**, 2021, *20 years of landscape dynamics within the world's largest multinational network of protected areas*, **Journal of Environmental Management** (IF 8.910; AIS 1.115; **Q1**), 280, 111712, <https://doi.org/10.1016/j.jenvman.2020.111712>
7. Chețan, M-A., **Dornik, A.**, Ardelean, F., Georgievski, G., Hagemann, S., Romanovsky, V.E., Onaca, A., Drozdov, D.S., 2020, *35 Years of Vegetation and Lake Dynamics in the Pechora Catchment, Russian European Arctic*, **Remote Sensing** (IF 4.848; AIS 0.933; **Q1**), 12:11, 1863, <https://doi.org/10.3390/rs12111863>
8. Ardelean, F., Onaca, A., Chețan, M-A., **Dornik, A.**, Georgievski, G., Hagemann, S., Timofte, F., Berzescu, O., 2020, *Assessment of Spatio-Temporal Landscape Changes from VHR Images in Three Different Permafrost Areas in the Western Russian Arctic*, **Remote Sensing** (IF 4.848; AIS 0.933; **Q1**), 12:23, 3999, <https://doi.org/10.3390/rs12233999>
9. **Dornik, A.**, Drăguț, L., Urdea, P., 2018, *Classification of Soil Types Using Geographic Object-Based Image Analysis and Random Forest*, **Pedosphere** (IF 3.188; AIS 0.559; **Q2**), 28:6, 913-925, [https://doi.org/10.1016/S1002-0160\(17\)60377-1](https://doi.org/10.1016/S1002-0160(17)60377-1)
10. Chețan, M-A., **Dornik, A.**, Urdea, P., 2018, *Analysis of recent changes in natural habitat types in the Apuseni Mountains (Romania), using multi-temporal Landsat satellite imagery (1986–2015)*, **Applied Geography** (IF 3.068; AIS 0.859; **Q1**), 97, 161-175, <https://doi.org/10.1016/j.apgeog.2018.06.007>
11. Chețan, M., A., **Dornik, A.**, Urdea, P., 2017, *Comparison of Object and Pixel-based Land Cover Classification through three Supervised Methods*, **ZfV - Zeitschrift für Geodäsie, Geoinformation und Landmanagement**, 142(5):265, DOI: 10.12902/zfv-0165-2017
12. **Dornik, A.**, Drăguț, L., Urdea, P., 2016, *Knowledge-based soil type classification using terrain segmentation*, **Soil Research** (IF 1.606; AIS 0.455; **Q3**), 54:7, 809-823, <https://doi.org/10.1071/SR15210>



13. Drăguț, L., **Dornik, A.**, 2016, *Land-surface segmentation as a method to create strata for spatial sampling and its potential for digital soil mapping*, *International Journal of Geographical Information Science* (IF 2.5; AIS 0.584; Q1), 30:7, 1359-1376, <https://doi.org/10.1080/13658816.2015.1131828>

(v) Lista publicațiilor științifice in extenso, apărute în lucrări ale principalelor conferințe internaționale de specialitate;

1. **Dornik A.**, Draguț L., Chetan M. A., Oguchi T., Hayakawa Y., Micu M., 2020, Towards a consistent set of land-surface variables for landslide modelling, *Extended abstract, Geomorphometry Conference Proceedings*, Perugia, Italy, DOI: 10.30437/GEOMORPHOMETRY2020_44
2. Drăguț, L., **Dornik, A.**, 2013, Evaluation of land-surface segmentation as support for soil sampling, *Extended abstract, Geomorphometry Conference*, Nanjing, China.

(vi) Alte lucrări și contribuții științifice sau, după caz, din domeniul creației artistice.

1. **Dornik A.**, Chețan M.A., Crișan T.E., Heciko R., Gora A., Drăguț L., Panagos P., 2024, Assessing environmental limitations of agricultural suitability in Europe's temperate continental climate region: a geospatial evaluation, *ESA Symposium on Earth Observation for Soil Protection and Restoration*, 6-7 March 2024, Frascati, Italy
2. **Dornik A.**, Chețan M.A., Crișan T.E., Heciko R., Gora A., Drăguț L., Panagos P., 2023, Mapping land suitability for agriculture in Europe's humid continental climate, *Wageningen Soil Conference 2023*, August 28 - September 1, Wageningen, the Netherlands
3. **Dornik A.**, Chețan M.A., Drăguț L., Iliuță A., Dicu D.D., 2023, Digital mapping of soil properties with optimally scaled predictors, *European Geosciences Union 2023*, 23-28.04.2023, Vienna, Austria
4. **Dornik A.**, Chețan M.A., Drăguț L., Iliuță A., Dicu D.D., 2023, Delineation of mapping units for land suitability assessment using land-surface parameters, *Geomorphometry2023*, July 10 – 14, Iasi, Romania
5. Oguchi T., Dragut L., Hayakawa Y.S., Micu M., **Dornik A.**, Sirbu F., Iizuka K., Ionita A., Lungu M., Kasai M., Chetan M., 2023, Japan–Romania collaborative research on landslides and terrain analysis, *Regional Conference on Geomorphology Cappadocia*, 12-14 September 2023
6. **Dornik A.**, Chețan M.A., Drăguț L., Dicu D.D., Iliuță A., 2022, Digital rating of land suitability to crops and land use in Romania, *22nd World Congress of Soil Science (WCSS 2022)*, 31 July – 5 August 2022, Glasgow, UK
7. **Dornik A.**, Chețan M.A., Drăguț L., Iliuță A., Dicu D.D., 2022, Geographic Object-Based Image Analysis to delineate mapping units for land suitability assessment, *The Fourteenth International Conference on Advanced Geographic Information Systems, Applications, and Services - GEOProcessing 2022*, June 26-30, Porto, Portugal
8. **Dornik A.**, Chețan M.A., Drăguț L., Dicu D.D., Iliuță A., 2021, Importance of multiscale predictors for digital mapping of soil properties, *THE 2nd INTERNATIONAL CONFERENCE: GEOGRAPHICAL SCIENCES AND FUTURE OF EARTH, GeoEarth 2021*, November 22, Bucharest, Romania
9. **Dornik A.**, Chețan M.A., Drăguț L., Iliuță A., Dicu D.D., 2021, Optimal Scaling of Predictors for Digital Mapping of Soil Properties, *The Thirteenth International Conference on Advanced Geographic Information Systems, Applications, and Services, GEOProcessing 2021*, July 18-22, Nice, France
10. **Dornik A.**, Draguț L., Chetan M. A., Oguchi T., Hayakawa Y., Micu M., 2021, Towards a consistent set of land-surface variables for landslide modelling, *Geomorphometry Conference*, September 13-17, Perugia, Italy
11. Chetan M, **Dornik A.**, 2020, Analysis of human impact within Natura 2000 protected areas using remote sensing data, *SPIE Remote Sensing Digital Forum 2020*, 21 - 25 September 2020

- 12.Ardelean F., Onaca A., **Dornik A.**, Chețan M., 2020, Assessment of spatio-temporal landscape changes from VHR satellite images in three different permafrost areas from West Siberia, *22nd International Symposium on Symbolic and Numeric Algorithms for Scientific Computing (SYNASC)*, Timișoara, 01-04.09.2020
- 13.**Dornik A.**, Drăguț L., Oguchi T., Hayakawa Y., Micu M., 2020, Altitude as an indicator of biased sampling design in landslide prediction, *EGU2020: Sharing Geoscience Online*, 04-08.05.2020
- 14.Chețan M., **Dornik A.**, 2020, 20 years of forest change in Natura 2000 protected areas network, *EGU2020: Sharing Geoscience Online*, 04-08.05.2020
- 15.Ardelean F., Chețan M., **Dornik A.**, Onaca A., Georgievski G., Drozdov D., Romanovsky V., Hagemann S., Nicolsky D., Sein D., 2020, Recent landscape changes assessed by remotely sensed data in Pechora Region, *EGU2020: Sharing Geoscience Online*, 04-08.05.2020
- 16.Georgievski G., Hagemann S., Sein D., Drozdov D., Gravis A., Romanovsky V., Nicolsky D., Onaca A., Ardelean F., Chețan M., **Dornik A.**, 2020, Climate extremes relevant for permafrost degradation, *EGU2020: Sharing Geoscience Online*, 04-08.05.2020
- 17.Ardelean, F., **Dornik, A.**, Chețan, M., Onaca, A., 2019, Assessment of recent vegetation changes in permafrost areas from West Siberia using Google Earth Engine, *"Geographia Napocensis" Conference*, Cluj-Napoca, Romania, 03-06.10.2019
- 18.Chețan, M., Ardelean, F., **Dornik, A.**, Onaca, A., Berzescu, O., Hegyi, A., 2019, Assessing landscape changes using Google Earth Engine in different permafrost areas from West Siberia, *21st International Symposium on Symbolic and Numerical Algorithms for Scientific Computing (SYNASC)*, Timișoara, 04-07.09.2019
- 19.Onaca, A., Ardelean, F., Chețan, M., **Dornik, A.**, Hegyi, A., Urdea, P., 2019, Quantifying recent landscape changes using multi-temporal satellite images in permafrost areas from Western Siberia, *17th International Symposium on Geo-disaster Reduction*, 19-23.08.2019, Issyk Kul, Kyrgyzstan
- 20.**Dornik A.**, Chețan M., Drăguț L., Cacovean H., 2019, A geographic information system for assessing the suitability of Romanian land to crops and land use, *United Nations/Romania International Conference on Space Solutions for Sustainable Agriculture and Precision Farming*, Cluj-Napoca, Romania, 06-10 May
- 21.Ion, C.M., **Dornik A.**, Pârvulescu L., 2018, Are Soil Properties Good Predictors in Distribution Modelling for Three European Crayfish?, *International Association of Astacology (IAA) 22th Symposium*, Pittsburgh, USA, 9-13 July
- 22.**Dornik A.**, Chețan, M.A., 2018, Soil type mapping using geographic object-based image analysis, *Soil Classification and Education Conference*, Toruń, Poland, 18-20 May
- 23.Keshavarzi A., **Dornik A.**, Bottega E. L., Rodrigo-Comino J., 2018, Comparison of Statistical and Geostatistical Methods to Assess the Soil Pollution in Iran: A Critical Review, *4th International Conference on Environmental Engineering*, May 2018, Teheran, Iran.
- 24.Chețan, M.A., **Dornik, A.**, 2017, Recent changes of habitat types in the Natura 2000 site Apuseni-Vlădeasa Mountains, *3rd Workshop on Geoinformatics, 19th International Symposium on Symbolic and Numeric Algorithms for Scientific Computing (SYNASC 2017)*, September 21 – 24, Timisoara, Romania.
- 25.**Dornik, A.**, 2016, A new methodology for digital soil mapping using geographic object-based image analysis and Random Forests, *European Society for Soil Conservation Conference "Soil - Our Common Future"*, June 15-18, Cluj-Napoca, Romania.
- 26.**Dornik, A.**, 2015, A comparison of pixel-based and geographic object-based image analysis for the classification of soil types, *1st Workshop on Geoinformatics in the framework of SYNASC 2015, 17th International Symposium on Symbolic and Numeric Algorithms for Scientific Computing*, September 21 – 24, 2015, Timisoara, Romania.



27. **Dornik, A.**, 2015, Object based image analysis and data-driven techniques for soil type mapping, *Methodological challenges in Geography, International Conference of Geography*, 15-16 May 2015, Timisoara, Romania.
28. **Dornik, A.**, Drăguț, L., Urdea, P., 2014, An object-oriented methodology based on expert-knowledge for soil type prediction, *1st Workshop on GIS and Hydrologic Modeling in the framework of 16th International Symposium on Symbolic and Numeric Algorithms for Scientific Computing*, 22-25 September 2014, Timisoara, Romania.
29. Drăguț, L., **Dornik, A.**, 2013, Land-Surface Segmentation as sampling framework for soil mapping, *Geomorphometry 2013 Conference*, October 16-20, 2013, Nanjing, China.
30. Drăguț, L., Csillik, O., Ardelean, F., **Dornik, A.**, 2012, Partitioning a DEM into fundamental surface elements with land-surface segmentation, IAG/AIG International Workshop on “*Objective Geomorphological Representation Models: Breaking through a New Geomorphological Mapping Frontier*”, Salerno, Italia, 15 – 19 octombrie 2012.
31. Drăguț, L., Csillik, O., **Dornik, A.**, Ardelean, F., Zisu, I., 2012, Fundamental surface elements on digital elevation models, 2nd Forum Carpaticum “*From data to knowledge, from knowledge to action*”, Stara Lesna, Slovakia, 30 mai – 2 iunie 2012.
32. Drăguț, L., Csillik, O., Zisu, I., **Dornik, A.**, Ardelean, F., 2012, Fundamental surface elements on digital elevation models, GIS Ostrava 2012 „*Surface models for geosciences*”, Ostrava, Cehia, 23 – 25 ianuarie 2012.
33. Zisu, I., **Dornik, A.**, 2014, Lugoj Hills agricultural land quality and its current utilization, *International Conference, Academic Geography of Timisoara at the 55th Anniversary*, 16-17 May 2014.

