

Lista Publicațiilor Științifice

1. A. Andriesei, D. Plesca, Roxana Capu, R.M. Stan, R. Tanasa, C. Enachescu “Disentangling between static and kinetic effects in the hysteresis of spin crossover molecular magnets”, Romanian Reports in Physics **75**, 502 (2023)

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2. Roxana Gaina, S. Sarkar, M. Soulier, J. Khmaladze, E. Perret, A. Tcakaev, V. Hinkov, M. Bonura, E. Weschke, and C. Bernhard, “Magnetic-field dependence of the copper charge density wave order in a $\text{YBa}_2\text{Cu}_3\text{O}_7/\text{Nd}_{0.65}(\text{Ca}_{0.7}\text{Sr}_{0.3})_{0.35}\text{MnO}_3$ superlattice”, Physical Review B **104**, 174513 (2021)

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3. Roxana Gaina, C.W. Nicholson, M. Rumo, S. Sarkar, J. Khmaladze, E. Paris, Y. Tseng, W. Zhang, T.C. Asmara, D. McNally, C. Piamonteze, E. Weschke, T. Schmitt, C. Monney, C. Bernhard, “Long-ranged Cu-based order with dz² orbital character at a $\text{YBa}_2\text{Cu}_3\text{O}_7$ / manganite interface”, npj Quantum Materials **6**, 12 (2021).

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4. S Jenkins, WJ Fan, Roxana Gaina, RW Chantrell, T Klemmer, RFL Evans “Atomistic origin of exchange anisotropy in noncollinear γ - IrMn_3 - CoFe bilayers”, Physical Review B **102** (14), 140404 (2020).

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6. Roberto de Andrés Prada, Roxana Gaina, N Biškup, M Varela, J Stahn, Christian Bernhard, “Controlling the strength of ferromagnetic order in $\text{YBa}_2\text{Cu}_3\text{O}_7/\text{La}_{2/3}\text{Ca}_{1/3}\text{MnO}_3$ Multilayers”, Physical Review B **100** (11), 115129 (2019).

<https://journals.aps.org/prb/abstract/10.1103/PhysRevB.100.115129>

7. E. Perret, C. Monney, S. Johnston, J. Khmaladze, F. Lyzwa, Roxana Gaina, M. Dantz, J. Pellicciari, C. Piamonteze, B.P.P. Mallett, M. Minola, B. Keimer, T. Schmitt & C. Bernhard “Coupled Cu and Mn charge and orbital orders in $\text{YBa}_2\text{Cu}_3\text{O}_7/\text{Nd}_{0.65}(\text{Ca}_{1-y}\text{Sr}_y)_{0.35}\text{MnO}_3$ multilayers”- Communications Physics **45**, 1 (2018)

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8. Roxana Gaina, Cristian Enachescu, “Nucleation in spin transition molecular magnets: a parallel between Ising-like and Mechanoelastic Models”, Proceedings of the Romanian Academy, Series A, **18**, 3, pp.215-222 (2017)

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9. R.M. Stan, Roxana Gaina, T. Radu, C. Enăchescu, A. Stancu, R. Bronisz- "Kinetic effects on double hysteresis in spin crossover molecular magnets analyzed with FORC diagram technique " – J.APPL PHYS. **117**, 17B323 (2015)

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10. Subhrangsu Sarkar, Roxana Capu, Yurii Paskevich, Jonas Knobel, Abhishek Nag, Davide Betto, Kurt Kummer, Roberto Sant, Christopher W Nicholson, Jarji Khmaladze, Ke-Jin Zhou, Nick Brooks, Claude Monney, Christian Bernhard, "Resonant inelastic X-ray spectroscopy study of the magnetic exchange coupling and orbital order at the $\text{YBa}_2\text{Cu}_3\text{O}_7/\text{Nd}_{0.65}(\text{Ca}_{0.7}\text{Sr}_{0.3})\text{MnO}_3$ interface", in evaluare la PNAS Nexus 2023.

Titlul tezei de doctorat: "Resonant X-ray diffraction/absorption and polarized neutron reflectivity studies of electronic and magnetic interface and proximity effects $\text{YBa}_2\text{Cu}_3\text{O}_7$ /manganite multilayers" – Conducator de doctorat: Prof. Dr. Christian Bernhard – Universitatea din Fribourg, Elvetia.

