

Listă lucrări

Candidata **dr. ing. Șonher Ramona Bianca**, înscrisă la concursul pentru ocuparea postului de **Șef lucrări** la Facultatea de Construcții, Departamentul de Construcții Civile și Management, pozitia 24.

A. Lista 10 articole ISI relevante:

1. **R.B. Sonher**, M. Nasui, M.S. Gabor, T. Petrisor Jr., L. Ciontea, T. Petrisor, Effect of glycerol on the thermal decomposition behavior of nickel propionate-based precursor, *Journal of Analytical and Applied Pyrolysis* 159 (2021) 105289 (Q1);
2. M. Nasui, **R.B. Sonher**, E. Ware, A. Daniel, T. Petrisor Jr., M.S. Gabor, L. Ciontea, Morphological and structural evolution of chemically deposited epitaxially LaNiO₃ thin films, *Coatings* 11 (2021) 1376 (corresponding author, Q2);
3. **R.B. Sonher**, R.A. Varga, M. Nasui, T. Petrisor Jr., M.S. Gabor, M. Senila, A. Rufoloni, T. Petrisor, L. Ciontea, Single source precursor for PAD-LaMnO₃ thin films, *Crystals* 10 (2020) 851 (Q2);
4. **R.B. Mos**, T. Petrisor Jr, M. Nasui, A. Mesaros, M.S. Gabor, M. Senila, E. Ware, L. Ciontea, T. Petrisor, Epitaxial La_{0.7}Sr_{0.3}MnO₃ nanostructures obtained by polymer-assisted surface decoration (PASD), *Materials Letters* 171 (2016) 281–284 (Q2);
5. **R.B. Mos**, M. Nasui, T. Petrisor Jr., A. Mesaros, L. Ciontea, T. Petrisor, The thermal decomposition of metal-organic precursors for epitaxial growth of SrZrO₃ thin films, *Journal of Analytical and Applied Pyrolysis* 115 (2015) 255–261 (Q1);
6. A. Mesaros, **R.B. Mos**, M. Nasui, T. Petrisor Jr., D. Toloman, O.R. Vasile, F. Goga, L. Ciontea, T. Petrisor, Insights into the europium-doped yttrium oxalate thermal decomposition mechanism, *Journal of Analytical and Applied Pyrolysis* 116 (2015) 96-101 (corresponding author, Q1);
7. **R.B. Mos**, T. Petrisor Jr., M. Nasui, A. Calleja, T. Puig, L. Ciontea, T. Petrisor, Enhanced structural and morphological properties of Gd-doped CeO₂ thin films obtained by polymer-assisted deposition, *Materials Letters* 124 (2014) 306-309 (Q2);
8. **R.B. Mos**, T. Petrisor Jr., M.S. Gabor, A. Mancini, A. Rufoloni, G. Celentano, A. Falqui, A. Genovese, R. Ruffilli, L. Ciontea, T. Petrisor, Epitaxial growth and characterization of La₂Zr₂O₇ multilayers on biaxially textured NiW substrate by chemical solution deposition under highly reducing conditions, *Thin Solid Films* 51 (2013) 491-498 (Q3);
9. **R.B. Mos**, M. Nasui, T. Petrisor Jr., M.S. Gabor, R.A. Varga, L. Ciontea, Synthesis, crystal structure and thermal decomposition of Zr₆O₄(OH)₄(CH₃CH₂COO)₁₂, *Journal of Analytical and Applied Pyrolysis* 97 (2012) 137-142 (Q1);

10. **R.B. Mos**, M. Nasui, T. Petrisor Jr., M.S. Gabor, R.A. Varga, L. Ciontea, T. Petrisor, Synthesis, crystal structure and thermal decomposition study of a new barium acetato-propionate complex *Journal of Analytical and Applied Pyrolysis* 92 (2011) 445-449 (Q1).

B. Teza de doctorat

Titlul tezei de doctorat: *Filme oxidice epitaxiale multifuncționale utilizate la fabricarea benzilor supraconductoare de generația a II-a*, Universitatea Tehnică din Cluj-Napoca, 2011

([PhD Thesis Bianca Mos.pdf \(utcluj.ro\)](#))

Conducător de doctorat: Prof. Dr. Ing. Lelia CIONTEA

C. Brevet de invenție

Metodă chimică de obținere a filmelor epitaxiale de manganit de lantan dopat cu stronțiu $La_{0.66}Sr_{0.33}MnO_3$ (LSMO), Mircea NASUI, Traian PETRIȘOR Jr, **Ramona Bianca MOȘ**, Amalia MESAROȘ, Mihai Sebastian GABOR, Lelia CIONTEA, Traian PETRIȘOR, cod OSIM RO131325-B1.

D. Cărți și capitole de cărți

Sinteza și caracterizarea materialelor ceramice multifuncționale, Mircea Năsui, **Ramona Bianca Șonher**, Amalia Mesaroș, UTPRESS Cluj-Napoca, 2022 ISBN 978-606-737-594-7.

E. Articole științifice cotate ISI

1. A. Daniel, M. Nasui, T. Petrisor Jr., R.B. Sonher, A. Augieri, C. Pop, A. Palau, A. Vannozzi, G. Celentano, L. Ciontea, T. Petrisor, Investigation of diethanolamine (DEA) as a chelating agent in the fabrication of fluorine-free propionate route $YBa_2Cu_3O_7$ (YBCO) thin films, *Superconducting Science and Technology* 35 (2022) 054010;

2. **R.B. Sonher**, M. Nasui, M.S. Gabor, T. Petrisor Jr., L. Ciontea, T. Petrisor, Effect of glycerol on the thermal decomposition behavior of nickel propionate-based precursor, *Journal of Analytical and Applied Pyrolysis* 159 (2021) 105289;
3. M. Nasui, **R.B. Sonher**, E. Ware, A. Daniel, T. Petrisor Jr., M.S. Gabor, L. Ciontea, Morphological and structural evolution of chemically deposited epitaxially LaNiO₃ thin films, *Coatings* 11 (2021) 1376;
4. D. Ourdani, Y. Roussigne, **R.B. Mos**, M. Nasui, S.M. Cherif, M.S. Gabor, M. Belmeguenai, Hf thickness dependence of perpendicular magnetic anisotropy, damping and interfacial dzyaloshinskii-moriya interaction in Pt/CoFe/Hf/HfO₂, *Physical review Materials* 5 (2021) 084404;
5. **R.B. Sonher**, R.A. Varga, M. Nasui, T. Petrisor Jr., M.S. Gabor, M. Senila, A. Rufoloni, T. Petrisor, L. Ciontea, Single source precursor for PAD-LaMnO₃ thin films, *Crystals* 10 (2020) 851;
6. A.A. Armenio, L. Piperno, T. petrisor jr., A. Vannozzi, V. Pinto, F. Rizzo, A. Augieri, Mancini, A. Rufoloni, R.B. Mos, L. Ciontea, T. Petrisor Jr., T. Petrisor, G. Sotgiu, G. Celentano, Nanostructured templates for critical current density enhancement in YBa₂Cu₃O_{7-x} films, *Superconductor Science and Technology* 33(2020) 094003;
7. I. Benguettat-El Mokhtari, D. Ourdani, Y. Roussigné, **R.B. Mos**, M. Nasui, S.M. Cherif, A. Stachkevich, M.S. Gabor, M. Belmeguenai, Investigation of the correlation between perpendicular magnetic anisotropy, spin mixing conductance and interfacial Dzyaloshinskii-Moriya interaction in CoFeB-based systems, *Journal of Physics D: Applied Physics* 53 (2020) 505003;
8. I. Benguettat-El Mokhtari, D. Ourdani, Y. Roussigné, **R.B. Mos**, M. Nasui, F. kali, L. Chahed, S.M. Cherif, A. Stachkevich, M.S. Gabor, M. Belmeguenai, _Perpendicular magnetic anisotropy and interfacial Dzyaloshinskii-Moriya interaction in as grown and annealed X/Co/Y ultrathin systems, *Journal of Physics Condensed Matter* 32 (2020) 495802;
9. M. Nasui, **R.B. Sonher**, T. Petrisor Jr., S. Varodi, L. Ciontea, T. Petrisor, Development of a fluorine-free polymer-assisted-deposition route for YBa₂Cu₃O_{7-x} superconducting films, *Coatings* 10 (2020) 1-9;
10. L. Piperno, A.A. Armenio, A. Vannozzi, A. Mancini, F. Rizzo, A. Augieri, V. Pinto, A. Rufoloni, **R.B. Mos**, L. Ciontea, T. Petrisor Jr., T. Petrisor, G. Sotgiu, G. Celentano, Polymer-assisted surface decoration for critical current enhancement in YBa₂Cu₃O_{7-x} films, *Applied Surface Science* 484 (2019) 237-244;
11. A.A. Armenio, L. Piperno, D.M. Gianluca, V. Pinto, A. Mancini, F. Rizzo, A. Vannozzi, A. Rufoloni, A. Augieri, **R.B. Mos**, L. Ciontea, T. Petrisor Jr., T. Petrisor, G. Celentano, G. Sotgiu, Stranger APCs: Study of Surface Decoration Material for YBCO Films, *IEEE Transactions on*

- Applied superconductivity* 29 (2019) 8002605;
12. L. Piperno, A.A. Armenio, A. Vannozi, V. Galluzzi, V. Pinto, F. Rizzo, A. Augieri, A. Mancini, A. Rufoloni, G. Celentano, **R.B. Mos**, L. Ciontea, M. Nasui, M. Gabor, T. Petrisor, G. Sotgiu, Surface decoration as a prospective artificial pinning strategy in superconducting $\text{YBa}_2\text{Cu}_3\text{O}_{7-x}$ films, *IEEE Transactions on Applied superconductivity* 28 (2018) 6601405;
 13. M. Belmeguenai, F. Zighem, M.S. Gabor, T. Petrisor Jr., **R.B. Mos**, C. Tiusan, Investigation of the annealing temperature dependence of the spin pumping in $\text{Co}_{20}\text{Fe}_{60}\text{B}_{20}/\text{Pt}$ systems, *Journal of Applied Physics* 123 (2018) 113905;
 14. T. Petrişor Jr., A. Meledin, A. Boulle **R.B. Mos**, M.S. Gabor, L. Ciontea, T. Petrişor, Ordered misfit dislocations in epitaxial Gd doped CeO_2 thin films deposited on (001)YSZ single crystal substrates, *Applied Surface Science* 433 (2018) 668-673;
 15. M. Belmeguenai, M.S. Gabor, Y. Roussigné, T. Petrisor jr, **R.B. Mos**, A. Stashkevich, S.M. Chérif, C. Tiusan, Interfacial Dzyaloshinskii-Moriya interaction sign in $\text{Ir}/\text{Co}_2\text{FeAl}$ systems by Brillouin light scattering, *Physical Review B* 97 (2018) 054425;
 16. M. Belmeguenai, M.S. Gabor, F. Zighem, N. Challab, T. Petrisor Jr, **R.B. Mos**, C. Tiusan, Ferromagnetic-resonance-induced spin pumping in $\text{Co}_{20}\text{Fe}_{60}\text{B}_{20}/\text{Pt}$ systems: damping investigation, *Journal of Physics D: Applied Physics* 51 (2018) 045002;
 17. M. Belmeguenai, M.S. Gabor, Y. Roussigné, S.M. Chérif, A. Stashkevich, T. Petrisor, Jr., **R.B. Mos**, C. Tiusan, Characterization of the interfacial Dzyaloshinskii–Moriya interaction in $\text{Pt}/\text{Co}_2\text{FeAl}_{0.5}\text{Si}_{0.5}$ ultrathin films by Brillouin Light Scattering, *IEEE Transactions on Magnetism*, 53 (2017) 1000405;
 18. M.S. Gabor, T. Petrisor Jr, **R.B. Mos**, M. Nasui, C. Tiusan, T. Petrisor, Interlayer exchange coupling in perpendicularly magnetized $\text{Pt}/\text{Co}/\text{Ir}/\text{Co}/\text{Pt}$ structures, *Journal of Physics D: Applied Physics* 50 (2017) 465004;
 19. M. Nasui, **R.B. Mos**, M.S.Gabor, T. Petrisor, A. Tomolea, E. Ware, F. Goga, A. Mesaros, L. Ciontea, New versatile synthesis for low dimension superparamagnetic $\text{YBa}_2\text{Cu}_3\text{O}_{7-x}$ nanoparticles, *Ceramics International* 43 (2017) 8845–8849
 20. K. Torokhtii, N.Pompeo, A. Frolova, V. Pinto, A.A. Armenio, L. Piperno, G. Celentano, T. Petrisor, L. Ciontea, **R.B. Mos**, M. Nasui, G. Sotgiu, E. Silva, Microwave Measurements of Pinning Properties in Chemically Deposited YBCO/BZO Film, *IEEE Transactions on Applied Superconductivity* 27 (2017) 7763761;
 21. **R.B. Mos**, T. Petrisor Jr, M. Nasui, A. Mesaros, M.S. Gabor, M. Senila, E. Ware, L. Ciontea, T. Petrisor, Epitaxial $\text{La}_{0.7}\text{Sr}_{0.3}\text{MnO}_3$ nanostructures obtained by polymer-assisted surface decoration (PASD), *Materials Letters* 171 (2016) 281–284;
 22. M.S. Gabor, T. Petrisor Jr, **R.B. Mos**, A. Mesaros, M. Nasui, M. Belmeguenai, F. Zighem, C. Tiusan, Spin–orbit torques and magnetization switching in $\text{W}/\text{Co}_2\text{FeAl}/\text{MgO}$ structures, *Journal of Physics D: Applied Physics* 49 (2016) 365003;

23. **R.B. Mos**, M. Nasui, T. Petrisor Jr., A. Mesaros, L. Ciontea, T. Petrisor, The thermal decomposition of metal-organic precursors for epitaxial growth of SrZrO₃ thin films, *Journal of Analytical and Applied Pyrolysis* 115 (2015) 255–261;
24. A. Mesaros, **R.B. Mos**, M. Nasui, T. Petrisor Jr., D. Toloman, O.R. Vasile, F. Goga, L. Ciontea, T. Petrisor, Insights into the europium-doped yttrium oxalate thermal decomposition mechanism, *Journal of Analytical and Applied Pyrolysis* 116 (2015) 96-101;
25. A. Mesaros, D. Toloman, M.Nasui, **R.B. Mos**, T. Petrisor, B. S. Vasile, V. A. Surdu, I. Perhaita, A. Biris, O. Pana, A valence states approach for luminescence enhancement by low dopant concentration in Eu-doped ZnO nanoparticles, *Journal of Materials Science* 50 (2015) 6075-6086;
26. M. Nasui, T. Petrisor. Jr, **R.B. Mos**, M.S. Gabor, A. Mesaros, F. Goga, L. Ciontea, T. Petrisor, Fluorine-free propionate route for the chemical solution deposition of YBa₂Cu₃O_{7-x} superconducting films, *Ceramics International* 41 (2015) 4416–4421;
27. T. Petrisor Jr., **R.B. Mos**, M. Nasui, M. S. Gabor, A. Augieri, G. Celentano, D. De Felicis, E. Bemporad, L. Ciontea, T. Petrisor, The vortex path model analysis of the field angle dependence of the critical current density in nanocomposite YBa₂Cu₃O_{7-x}-BaZrO₃ films obtained by low fluorine chemical solution deposition, *Journal of Superconductivity and Novel Magnetism* 27 (2014) 2493–2500;
28. **R.B. Mos**, T. Petrisor Jr., M. Nasui, A. Calleja, T. Puig. L. Ciontea, T. Petrisor, Enhanced structural and morphological properties of Gd-doped CeO₂ thin films obtained by polymer-assisted deposition, *Materials Letters* 124 (2014) 306-309;
29. M. Nasui, T. Petrisor Jr., **R.B. Mos**, A. Mesaros, R.A. Varga, B.S.Vasile, T. Ristoiu, L. Ciontea, T. Petrisor, Synthesis, crystal structure and thermal decomposition kinetics of yttrium propionate, *Journal of Analytical Applied Pyrolysis* 106 (2014) 92–98;
30. **R.B. Mos**, T. Petrisor Jr., M.S. Gabor, A. Mancini, A. Rufoloni, G. Celentano, A. Falqui, A. Genovese, R. Ruffilli, L. Ciontea, T. Petrisor, Epitaxial growth and characterization of La₂Zr₂O₇ multilayers on biaxially textured NiW substrate by chemical solution deposition under highly reducing conditions, *Thin Solid Films* 51 (2013) 491-498;
31. L. Ciontea, T. Ristoiu, **R.B. Mos**, M. Nasui, T. Petrisor Jr., M.S. Gabor, A. Mancini, A. Rufoloni, G. Celentano, T. Petrisor, Epitaxial growth of CeO₂ thin film on cube textured NiW substrate using a propionate-based metalorganic deposition (MOD) method, *Materials Chemistry and Physics* 133 (2012) 772-778;
32. **R.B. Mos**, M. Nasui, T. Petrisor Jr., M.S. Gabor, R. Varga, L. Ciontea, Synthesis, crystal structure and thermal decomposition of Zr₆O₄(OH)₄(CH₃CH₂COO)₁₂, *Journal of Analytical and Applied Pyrolysis* 97 (2012) 137-142;
33. M. Nasui, **R.B. Mos**, T. Petrisor Jr., M.S. Gabor, R.A. Varga, L. Ciontea, T. Petrisor, Synthesis, crystal structure and thermal decomposition of a new copper propionate [Cu(CH₃CH₂COO)₂] × 2H₂O, *Journal of Analytical and Applied Pyrolysis* 92 (2011) 439–444;

34. **R.B. Mos**, M. Nasui, T. Petrisor Jr., M.S. Gabor, R.A. Varga, L. Ciontea, T. Petrisor, Synthesis, crystal structure and thermal decomposition study of a new barium acetato-propionate complex, *Journal of Analytical and Applied Pyrolysis* 92 (2011) 445–449;
35. C. Badea, **R.B. Mos**, L. Ciontea, I. Ardelean, Low-Field Nuclear Magnetic Resonance Relaxometry as a Tool in Monitoring the Aging of Coating Solutions (Case Study: Barium Propionate Precursor Coating Solution), *Applied Magnetic Resonance* 39 (2010) 365–372;
36. L. Ciontea, M. Nasui, T. Petrisor Jr., **R.B. Mos**, M.S. Gabor, R.A. Varga, T. Petrisor, Synthesis, crystal structure and thermal decomposition of $[\text{La}_2(\text{CH}_3\text{CH}_2\text{COO})_6(\text{H}_2\text{O})_3] \cdot 3.5\text{H}_2\text{O}$ precursor for high-k La_2O_3 thin films deposition, *Materials Research Bulletin* 45 (2010) 1203–1208;
37. **R.B. Mos**, M.S. Gabor, M. Nasui, T. Petrisor Jr., C. Badea, A. Rufoloni, L. Ciontea, T. Petrisor, Synthesis of epitaxial BaZrO_3 thin films by chemical solution deposition, *Thin Solid Films* 518 (2010) 4714–4717;
38. M. Nasui, T. Petrisor Jr., **R.B. Mos**, M.S. Gabor, T. Ristoiu, A. Rufoloni, L. Ciontea, T. Petrisor, Precursor chemistry for the solution deposition of epitaxial $\text{La}_{0.66}\text{Sr}_{0.33}\text{MnO}_3$ (LSMO) thin films, *Thin Solid Films* 518 (2010) 4753–4756.

F. Articole apărute în lucrări ale conferințelor de specialitate

1. A. Calleja, **R.B. Mos**, P. Roura, J. Farjas, J. Arbiol, L. Ciontea, X. Obradors, T. Puig, “Growth of epitaxial CeO_2 buffer layers by polymer assisted deposition” MRS Proceedings, 1449 (2012) 31-39
2. T. Ristoiu, T. Petrisor Jr, M. S. Gabor, M. Nasui, **B. Mos**, L. Ciontea T. Petrisor, Atomic force microscopy study of nanocrystalline ceria thin films, *Journal of Physics: Conference Series*, 182 (2009)

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08.06.2023

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