

Lista completă de lucrări

Lucrări publicate în reviste cotate ISI:

1. S. A. Irimiciuc, G. Bulai, S. Gurlui, M. Agop, M. , On the separation of particle flow during pulse laser deposition of heterogeneous materials - A multi-fractal approach, (2018) Powder Technology, 339, pp. 273-280;
2. S. Irimiciuc, G. Bulai (autor corespondent), M. Agop, S. Gurlui, Influence of laser-produced plasma parameters on the deposition process: in situ space- and time-resolved optical emission spectroscopy and fractal modeling approach (2018) Applied Physics A: Materials Science and Processing, 124 (9), art. no. 615;
3. A. Cocean, I. Cocean, M. M. Cazacu, G. Bulai, F. Iacomi, S. Gurlui, Atmosphere self-cleaning under humidity conditions and influence of the snowflakes and artificial light interaction for water dissociation simulated by the means of COMSOL (2018) Applied Surface Science, 443, pp. 83-90;
4. G. Bulai, O. Rusu, M. M. Cazacu, F. Tudorache, B. Chazallon, C. Focsa, S. Gurlui, Structural, magnetic and humidity sensing properties of rare earth doped cobalt ferrite thin films synthesized by pulsed laser deposition (2018) Journal of Ovonic Research, 14 (2), pp. 119-128;
5. S. A. Irimiciuc, S. Gurlui, G. Bulai, P. Nica, M. Agop, C. Focsa, Langmuir probe investigation of transient plasmas generated by femtosecond laser ablation of several metals: Influence of the target physical properties on the plume dynamics, Applied Surface Science, 417 (2017), pp. 108-118;
6. S. Irimiciuc, R. Boidin, G. Bulai (autor corespondent), S. Gurlui, P. Nemec, V. Nazabal, C. Focsa, Laser ablation of $(\text{GeSe}_2)_{100-x}(\text{Sb}_2\text{Se}_3)_x$ chalcogenide glasses: Influence of the target composition on the plasma plume dynamics, Applied Surface Science, 418 (2017), pp. 594-600;
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8. Caraman, L. Dmiloglo, I. Evtodiev, L. Leontie, D. Untila, S. Hamzaoui, M. Zerdali, O. Şuşu, G. Bulai, S. Gurlui, Optical properties of ZnO thin films obtained by heat treatment of Zn thin films on amorphous SiO_2 substrates and single crystalline GaSe lamellas, Thin Solid Films, 617 (2016), pp.: 103-107;
9. E. V. Gafton, G. Bulai, O. F. Caltun, S. Cervera, S. Macé, M. Trassinelli, S. Steydl, D. Vernhet, Structural and magnetic properties of zinc ferrite thin films irradiated by 90 keV neon ions, Applied Surface Science, 379 (2016), pp.: 171-178;
10. N. Cimpoeşu, L. C. Trincă, G. Dascălu, S. Stanciu, S. O. Gurlui, D. Mareci, Electrochemical characterization of a new biodegradable FeMnSi alloy coated with hydroxyapatite-zirconia by PLD technique, Journal of Chemistry (2016), art. no. 9520972;
11. G. Bulai, I. Dumitru, M. Pinteala, C. Focsa, S. Gurlui, Magnetic nanoparticles generated by laser ablation in liquid, Digest Journal of Nanomaterials and Biostructures, 11 (2016), pp. 283-291;
12. C. Virlan, G. Bulai, O. F. Caltun, R. Hempelmann, A. Pui, Rare earth metals' influence on the heat generating capability of cobalt ferrite nanoparticles, Ceramics International, Ceramics International, 42 (2016) pp. 11958-11965;
13. G. Bulai, L. Diamandescu, I. Dumitru, S. Gurlui, M. Feder, O.F. Caltun, Effect of rare earth substitution in cobalt ferrite bulk materials, Journal of Magnetism and Magnetic Materials, 390 (2015) pp. 123-131;
14. G. Bulai, S. Gurlui, O. F. Caltun, C. Focsa, Pure and rare earth doped cobalt ferrite laser ablation: Space and time resolved optical emission spectroscopy, Digest Journal of Nanomaterials and Biostructures, 10 (2015) pp.: 1043-1053;

15. Stirbu, P. Vizureanu, R. Cimpoesu, G. Dascalu, S. O. Gurlui, M. Bernevig, M. Benchea, N. Cimpoesu, P. Postolache. Advanced metallic materials response at laser excitation for medical applications, Journal of Optoelectronics and Advanced Materials, 17 (2015) pp.: 1179 – 1185;
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18. G. Dascalu, G. Pompilian, B. Chazallon, O. F. Caltun, S. Gurlui, C. Focsa, Femtosecond pulsed laser deposition of cobalt ferrite thin films, Applied Surface Science, 278 (2013) pp. 38-42;
19. G. Dascalu, T. Popescu, M. Feder, O. F. Caltun, Structural, electric and magnetic properties of $\text{CoFe}_{1.8}\text{RE}_{0.2}\text{O}_4$ (RE=Dy, Gd, La) bulk materials, Journal of Magnetism and Magnetic Materials, 333 (2013) pp. 69-74;
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21. G. Dascalu, D. Durneata, O. F. Caltun, Magnetic measurements of RE-doped cobalt ferrite thin films, IEEE Transactions on Magnetics, 49 (2013) pp. 46-49;
22. G. Dascalu, O. G. Caltun, CoFe_2O_4 thin films deposited by PLD with in situ heating and post annealing, Journal of Optoelectronics and Advanced Materials, 13 (2011) pp. 1145-1148.

Teza de doctorat:

Titlu: Contribuții la studiul straturilor subțiri de ferită de cobalt depuse prin ablație laser, conducator de doctorat: prof. univ. dr. Ovidiu Florin CĂLȚUN

Alte lucrări:

1. F. G. Hușanu, M. M. Cazacu, G. Bulai, S. Gurlui, E. Pettinelli, Laboratory measurements for the characterization of the physical parameters of geomaterials and planetary analogues, Buletinul Institutului Politehnic din Iași (indexat BDI), Vol. 64, Nr. 1, 2018;
2. E.-V. Gafton, F. Haque, F. Hușanu, M. M. Cazacu, G. Bulai, S. Gurlui, Hydrogen passivation effect On ZnO powder, Buletinul Institutului Politehnic din Iași (indexat BDI), Vol. 63, Nr. 2, 2017;
3. G. Dascalu, I. Mihaila, O. F. Caltun, G. Popa, „The influence of the thermal treatment on the microstructures of thin cobalt ferrite films”, Journal of Advanced Research in Physics 1(1) (2010) 011002.

Capitole de carte:

1. Co-autor capitol de carte, Capitolul IV "Filme subțiri. Obținerea filmelor subțiri de ferită de cobalt", B. Negulescu, G. Dascalu, O.F. Caltun din "Ferite de cobalt magnetostrictive", coordonator Ovidiu Florin Caltun, Ed. Alexandru Ioan Cuza Iasi, 2009. (pp.: 131-173);
2. Advanced optical remote sensors for airborne and spaceborne platforms, M. M. Cazacu, A. Timofte, G. Bulai, S. Gurlui, D. Nicolae, A. Nemuc. L. Belegante, C. Radu, Capitol din cartea, "Romanian projects and initiatives in support of Earth Observation", Editor D. Nicolae, Editura Tehnopress, ISBN 978-606-687-281-2, 2016 (pp.: 37-40).