

ARTICOLE 2021

1. Prepelita, P; Garoi, F; Craciun, V, Structural and optical characteristics determined by the sputtering deposition conditions of oxide thin films, BEILSTEIN JOURNAL OF NANOTECHNOLOGY, Volume: 12 Pages: 354-365, Published: APR 19 2021
2. Tiss, B, Benfraj, M, Bouguila, N, Kraini, M, Alaya, S, Cristea, D, Croitoru, C, Craciun, V, Craciun, D, Prepelita, P, Velicu, IL, Tiron, V, Moura, C, Cunha, L, The effect of vacuum and air annealing in the physical characteristics and photocatalytic efficiency of In₂S₃:Ag thin films produced by spray pyrolysis, MATERIALS CHEMISTRY AND PHYSICS, Volume 270, Article Number 124838, Published SEP 15 2021
3. Irniciuc, SA, Chertopalov, S, Bulir, J, Fekete, L, Vondracek, M, Novotny, M, Craciun, V, Lancok, J, In situ optical and electrical analysis of transient plasmas generated by ns-laser ablation for Ag nanostructured film production VACUUM, Volume 193, Article Number 110528, Published NOV 2021
4. Malinovschi, V, Marin, A, Ducu, C, Andrei, V, Coaca, E, Craciun, V, Lungu, M, Influence of sodium aluminate concentration and process duration on microstructure, mechanical and electrochemical behavior of PEO coatings formed on CP-Ti, SURFACE & COATINGS TECHNOLOGY, Volume 418, Article Number 127240, DOI 10.1016/j.surfcoat.2021.127240, Published JUL 25 2021
5. Hsu, SM, Alsafadi, M, Vasconez, C, Fares, C, Craciun, V, O'Neill, E, Ren, F, Clark, A, Esquivel-Upshaw, J, Qualitative Analysis of Remineralization Capabilities of Bioactive Glass (NovaMin) and Fluoride on Hydroxyapatite (HA) Discs: An In Vitro Study, MATERIALS, Volume 14, Issue 14, Article Number 3813, Published JUL 2021
6. Irniciuc, SA, Chertopalov, S, Lancok, J, Craciun, V Langmuir Probe Technique for Plasma Characterization during Pulsed Laser Deposition Process COATINGS, Volume 11, Issue 7, Article Number 762, Published JUL 2021
7. Mogildea, M ; Mogildea, G; Craciun, V; Zgura, SI The Effects Induced by Microwave Field upon Tungsten Wires of Different Diameters MATERIALS, Volume: 14 Issue: 4, Article Number: 1036, DOI: 10.3390/ma14041036, Published: FEB 2021
8. Irniciuc, SA, Agop, M Multifractal Model for Transient Phenomena Analysis in Laser Produced Plasmas SYMMETRY-BASEL 13 (10) 1968 (2021)
9. Irniciuc, S, More-Chevalier, J, Chertopalov, S, Fekete, L, Novotny, M, Havlova, S, Poupon, M, Zikmund, T, Kusova, K, Lancok, J, In-situ plasma monitoring by optical emission spectroscopy during pulsed laser deposition of doped Lu₂O₃:Yb APPLIED PHYSICS B-LASERS AND OPTICS 127 (10) 140
10. Konrad-Soare, CT, Enescu, F, Dimitriu, DG, Dobromir, M, Teodorescu-Soare, EG, Mazzanti, F, Irniciuc, SA, Ionita, C, Schrittwieser, R, Concentric double hollow grid cathode discharges. Spectral investigations and phenomenological approach, PLASMA SOURCES SCIENCE AND TECHNOLOGY 30(8), 085006 (2021).
11. Irniciuc, SA, Zala, A, Dimitriu, D, Himiniuc, LM, Agop, M, Toma, BF, Gavril, LG, Vasincu, D, Eva, L, Novel Approach for EEG Signal Analysis in a Multifractal Paradigm of Motions. Epileptic and Eclamptic Seizures as Scale Transitions SYMMETRY-BASEL 13 (6) 1024 (2021).

12. Marin, L; Popa, M; Anisiei, A; Irimiciuc,; Agop, M; Petrescu, TC ; Vasincu, D; Himiniuc, L, A Theoretical Model for Release Dynamics of an Antifungal Agent Covalently Bonded to the Chitosan, *MOLECULES* Volume: 26 Issue: 7 Article Number: 2089 Published: APR 2021
13. Agop, M; Irimiciuc, SA; Ghenadi, A; Bibire, L; Toma, S; Petrescu, TC; Vaideanu, D; Rusu, CM; Gavrilut, A; Vasincu, D, The Role of Information in Managing Interactions from a Multifractal Perspective, *ENTROPY* Volume: 23 Issue: 2 Article Number: 148 Published: FEB 2021
14. Ailincai, D; Agop, M; Marinas, IC; Zala, A; Irimiciuc, SA; Dobreci, L; Petrescu, TC; Volovat, C, Theoretical model for the diclofenac release from PEGylated chitosan hydrogels, *DRUG DELIVERY* Volume: 28 Issue: 1 Pages: 261-271 Published: JAN 1 2021
15. Agop, M; Irimiciuc, S; Dimitriu, D; Rusu, CM ; Zala, A; Dobreci, L; Cotirlet, AV; Petrescu, TC; Ghizdovat, V; Eva, L, Vasincu D, Novel Approach for EKG Signals Analysis Based on Markovian and Non-Markovian Fractalization Type in Scale Relativity Theory, *SYMMETRY-BASEL* Volume: 13 Issue: 3 Article Number: 456 Published: MAR 2021
16. Budei, DV; Vaireanu, DI; Prepelita, P; Popescu-Pelin, G; Mincu, M, Ciobotaru, IA, A comparative morphological study of titanium dioxide surface layer dental implants, *Open Chemistry* Vol.19, Issue 1, 189–198 Feb 2021
17. Dinca, MC, Sava, BA, Galca, AC, Kuncser, V, Iacob, N , Stan, GE, Boroica, L, Filip, AV, Elisa, M, Magneto-optical properties of borophosphate glasses co-doped with Tb³⁺ and Dy(3+) ions, *Journal of Non-Crystalline Solids* 568, 120967, 1-7 (2021) <https://doi.org/10.1016/j.jnoncrysol.2021.120967>
18. Elisa, M, Vasiliu, IC Sava, BA, Boroica, L, Filip, AV, Dinca, MC, Bartha, C, Phase and structural characterization of phosphate-tellurite crystalline materials/*Journal of Optoelectronics and Advanced Materials* 23, 5-6, 257 - 263 (2021)
19. Elisa, M; Iordache, SM, Iordache, AM; Vasiliu, IC; Grigorescu, CEA; Sava, BA; Boroica, L; Filip, AV; Dinca, MC; Bartha, C, Peculiarities of the structural and optical properties of rare-earth-doped phosphate glasses for temperature sensing applications, *Journal of Non-Crystalline Solids*, 556, 15 martie 2021, 120569, 1-11. <https://doi.org/10.1016/j.jnoncrysol.2020.120569>
20. Sava, BA; Filip, AV; Boroica, L; Eftimie, M; Dinca, MC; Soroaia, A; Trefilov, AMI; Filipescu, M; Brajnicov, S; Moldovan, A; Iordache, AM; Elisa, M, Dy³⁺ and Tb³⁺ co-doped boro-phosphate sol-gel vitreous thin films/*J Sol-Gel Sci Technol* (2021) 97:39–47. <https://doi.org/10.1007/s10971-020-05427-4>
21. Irimiciuc S A, Chertopalov S, Novotný M, Valentin Craciun, and Jan Lancok, On the Dynamics of Transient Plasmas Generated by Nanosecond Laser Ablation of Several Metals *MATERIALS*, Volume14, Issue23, Article Number7336, DOI10.3390/ma14237336, PublishedDEC 2021
22. Taleb, A, Motto-Ros, V, Carru, MJ, Axente, E, Craciun, V, Pelascini, F, Hermann, J, Measurement error due to self-absorption in calibration-free laser-induced breakdown spectroscopy, *ANALYTICA CHIMICA ACTA*, Volume1185, Article Number339070, DOI10.1016/j.aca.2021.339070, PublishedNOV 15 2021
23. Gavrilut, G, Topliceanu, L Girtu, M Rotundu, AM Irimiciuc, SA Agop, M Assessment of Complex System Dynamics via Harmonic Mapping in a Multifractal Paradigm, *MATHEMATICS* 9(24) 3298 (2021).

24. Novotny, M , Remsa, J Havlova, S More-Chevalier, J Irimiciuc, SA Chertopalov, S Pisarik, P Volfova, L Fitl, P Kmjec, T Vrnata, M Lanok, J, In Situ Monitoring of Pulsed Laser Annealing of Eu-Doped Oxide Thin Films, Materials Vol14, Issue24, Article 7576, 2021
25. Irimiciuc, SA, Chertopalov, S, Novotny, M, Craciun, V, Lancok, J, Understanding pulsed laser deposition process of copper halides via plasma diagnostics techniques, JOURNAL OF APPLIED PHYSICS, Volume130, Issue24, Article Number243302, DOI10.1063/5.0077082, Published DEC 28 2021
26. Novotný, M; Fitl, P; Irimiciuc, SA; Bulíř, J; More-Chevalier, J; Fekete, L; Hruška, P; Chertopalov, S; Vrňat, M; Lančok J, In-situ monitoring of electrical resistivity and plasma during pulsed laser deposition growth of ultra-thin silver films; JOURNAL OF APPLIED PHYSICS, 130 (8) 085301 (2021).
27. Ion Sandu, · Claudiu Teodor Fleacă, · Florian Dumitrache, · Bogdan Sava, · Iuliana Urzică, · Marius Dumitru, From thin “coffee rings” to thick colloidal crystals, through drop spreading inhibition by the substrate edge/Applied Physics A Materials Science & Processing, 127, 325, 1-9 (2021).
28. Ion Sandu, Claudiu Teodor Fleaca, Florian Dumitrache, Bogdan Alexandru Sava*, Iuliana Urzica, Iulia Antohe, Simona Brajnicov, Marius Dumitru*, Shaping in the Third Direction; Synthesis of Patterned Colloidal Crystals by Polyester Fabric-Guided Self-Assembly/Polymers 13(23), 4081 (1-16) (2021); <https://doi.org/10.3390/polym13234081>