

Lista articole publicate, acceptate sau trimise în 2018:

Publicate:

1. *Triggering surface ferroelectric order in Pb(Zr,Ti)O<sub>3</sub>(001) by deposition of platinum*, I.C. Bucur, L.C. Tănase, L.E. Abramiuc, G.A. Lungu, C. Chirilă, L. Trupină, N.G. Apostol, R.M. Costescu, R.F. Negrea, L. Pintilie, C.M. Teodorescu, **Applied Surface Science** **432**, 27–33 (2018). **JIF: 4.439; AIS: 0.627.**
2. *Polarization orientation in lead zirco-titanate (001) thin films driven by the interface with the substrate*, L.C. Tănase, L.E. Abramiuc, D.G. Popescu, A.-M. Trandafir, N.G. Apostol, I.C. Bucur, L. Hrib, L. Pintilie, I. Pasuk, L. Trupină, C.M. Teodorescu, **Physical Review Applied** **10**, 034020(1–19) (2018). **JIF: 4.782; AIS: 2.124.**
3. *From glucose direct to succinic acid: an optimized recyclable bi-functional Ru@MNP-MWCNT catalyst*, I. Podolean, B. Cojocaru, H. Garcia, C. Teodorescu, V.I. Parvulescu, S.M. Coman, **Topics in Catalysis** **61**, 1866–1876 (2018). **JIF: 2.439; AIS: 0.602.**
4. *Room temperature ferromagnetism and its correlation to ferroelectricity of manganese embedded in lead zirco-titanate*, I.C. Bucur, N.G. Apostol, L.E. Abramiuc, L.C. Tănase, C.A. Tache, G.A. Lungu, R.M. Costescu, C.F. Chirilă, L. Trupină, L. Pintilie, C.M. Teodorescu, **Thin Solid Films** **669**, 440–449 (2019). **JIF: 1.939; AIS: 0.356.**
5. *Growth of Ag(111) on Si(111) with nearly flat band and abrupt interface*, A.E. Bocîrnea, R.M. Costescu, N.G. Apostol, C.M. Teodorescu, **Applied Surface Science** **473**, 433–441 (2019). **JIF: 4.439; AIS: 0.627. (Q1)**
6. *Graphene growth by molecular beam epitaxy: an interplay between desorption, diffusion and intercalation of elemental C species on islands*, F. Presel, H. Tetlow, L. Bignardi, P. Lacovig, C.A. Tache, S. Lizzit, L. Kantorovich, A. Baraldi, **Nanoscale** **10**, 7396-7406 (2018). **JIF: 7.233; AIS: 1.704.**
7. *Review of ultracompact polarization components for infrared imaging systems: from wire-grid structured surfaces to reconfigurable metasurfaces*, C. Cotirlan-Simioniuc, A. Rizea, C. Marin, **Journal of Optoelectronics and Advanced Materials** **20**, 5-6 (2018). **JIF: 0.390; AIS: 0,055.**
8. *Orbital Ordering of the Mobile and Localized Electrons at Oxygen-Deficient LaAlO<sub>3</sub>/SrTiO<sub>3</sub> Interfaces*, A. Chikina, F. Lechermann, M. A. Husanu, M. Caputo, C. Cancellieri, X.Q. Wang, T. Schmitt, M. Radovic, V. N. Strocov, **ACS Nano** **12**, 7927-7935 (2018) **JIF: 13,709; AIS: 4.045.**
9. *k-Space imaging of anisotropic two-dimensional electron gas in GaN-based HEMT heterostructures*, L. L. Lev, I. O. Maiboroda, M.-A. Husanu, E. S. Grichuk, N. K. Chumakov, I. S. Ezubchenko, X.Wang, T. Schmitt, M. L. Zhaneskin, V. G. Valeyev, V. N. Strocov, **Nature Communications** **9**, 2653 (2017). **JIF: 12,124; AIS: 5,735.**
10. *New bio-active, antimicrobial and adherent coatings of nanostructured carbon double-reinforced with silver and silicon by Matrix-Assisted Pulsed Laser Evaporation for medical applications*, L. Duta, C. Ristoscu, G. E. Stan, M. A. Husanu, C. Besleaga, M.C. Chifiriuc, V. Lazar, C. Bleotu, F. Miculescu, N. Mihailescu, E. Axente, M. Badiceanu, D. Bociaga, I. N. Mihailescu, **Applied Surface Science** **441**, 871-883 (2018), **JIF: 4.439; AIS: 0.627.**
11. *Highly Efficient, Easily Recoverable, and Recyclable Re-SiO<sub>2</sub>-Fe<sub>3</sub>O<sub>4</sub> Catalyst for the*

*Fragmentation of Lignin*, M. Tudorache, C. Opris, B. Cojocaru, N.G. Apostol, A. Tirsoaga, S.M. Coman, V.I. Parvulescu, B. Duraki, F. Krumeich, J.A. van Bokhoven, **ACS Sustainable Chemistry & Engineering** **6**, 9606-9618 (2018). **JIF: 6.140; AIS: 1.142.**

12. *Epitaxial growth of single-orientation high-quality MoS<sub>2</sub> monolayers*, H. Bana, E. Travaglia, L. Bignardi, P. Lacovig, C.E. Sanders, M. Dendzik, M. Michiardi, M. Bianchi, D. Lizzit, F. Presel, D. De Angelis, N. Apostol, P.K. Das, J. Fujii, I. Vobornik, R. Larciprete, A. Baraldi, P. Hofmann, S. Lizzit, **2D Materials** **5**, 035012(1-9) (2018). **JIF: 7.042; AIS: 2.646.**

13. *The adsorption of silicon on an iridium surface ruling out silicene growth*, M. Satta, P. Lacovig, N. Apostol, M. Dalmiglio, F. Orlando, L. Bignardi, H. Bana, E. Travaglia, A. Baraldi, S. Lizzit, R. Larciprete, **Nanoscale** **10**, 7085-7094 (2018). **JIF: 7.233; AIS: 1.704.**

14. *Spirobifluorene-based porous organic polymers as efficient porous support for Pd and Pt for the selective hydrogenations*, M. Trandafir, L. Pop, N. D. Hadade, I. Hristea, C.M. Teodorescu, F. Krumeich, J. A. van Bokhoven, I. Grosu, V. I. Parvulescu, **ChemCatChem** **11**, 538-549 (2019). **JIF: 4.674; AIS: 1.055.**

15. *Large positive linear magnetoresistance in the two-dimensional t(2g) electron gas at the EuO/SrTiO<sub>3</sub> interface*, K. J. Kormondy, L. Y. Gao, X. Li, S. R. Lu, A. B. Posadas, S. D. Shen, M. Tsoi, M. C. McCartney, D. J. Smith, J. S. Zhou, L. L. Lev, M. A. Husanu, V. N. Strocov, A. A. Demkov, **Scientific Reports** **8**, 7721(1-9) (2018). **JIF: 4.122; AIS: 1.356.**

16. *An X-ray photoelectron spectroscopy depth profile study on the InGeNi/(110) cleaved GaAs structure*, C. C. Negrila, M. F. Lazarescu, C. Logofatu, R. V. Ghita, C. Cotirlan, **Materials Science in Semiconductor Processing** **82**, 62–66, (2018). **JIF: 2.593; AIS: 0.379.**

17. *Development of Zinc-Doped Hydroxyapatite by Sol-Gel Method for Medical Applications*, C. C. Negrila, M. V. Predoi, S. L. Iconaru, D. Predoi, **Molecules** **23**, 2986, (2018). **JIF: 3.098; AIS: 0.631.**

18. *Surface States-and Field-Effects at GaAs(100) Electrodes in Sodium Dodecyl Sulfate Acid Solution*, M. Enache, C. Negrila, M. Anastasescu, G. Dobrescu, M. F. Lazarescu, V. Lazarescu, **Journal of The Electrochemical Society**, **165 (4)**, H3008-H3017, (2018). **JIF: 3.662; AIS: 0.726.**

19. *The improvement of SiO<sub>2</sub> nanotubes electrochemical behavior by hydrogen atmosphere thermal treatment*, N. Spataru, C. Anastasescu, M. M. Radu, I. Balint, C. Negrila, T. Spataru, A. Fujishima, **Applied Surface Science** **444**, 216–223, (2018). **JIF: 4.439; AIS: 0.627.**

20. *Investigation of sol-gel derived BaCl<sub>2</sub>:Eu<sup>2+</sup> luminescent nanophosphor and the corresponding PVP@BaCl<sub>2</sub>:Eu<sup>2+</sup> polymer nanocomposite*, C. E. Secu, C. Negrila, M. Secu, **J. Phys. D: Appl. Phys.** **51**, 305302, (2018). **JIF: 2.373; AIS: 0.696.**

21. *Ambiguous Role of Growth-Induced Defects on the Semiconductor to-Metal Characteristics in Epitaxial VO<sub>2</sub>/TiO<sub>2</sub> Thin Films*, C. N. Mihailescu, E. Symeou, E. Svoukis, R. F. Negrea, C. Ghica, V. Teodorescu, L. C. Tanase, C. Negrila, J. Giapintzakis, **ACS Appl. Mater. Interfaces** **10**, 14132–14144, (2018). **JIF: 8.097; AIS: 1.634.**

22. *Photocatalytic activity of wool fabrics deposited at low temperature with ZnO or TiO<sub>2</sub> nanoparticles: Methylene blue degradation as a test reaction*, L. Frunza, L. Diamandescu, I. Zgura, S. Frunza, C. P. Ganea, C. C. Negrila, M. Enculescu, M. Birzu, **Catalysis Today** **306**, 251–259, (2018). **JIF: 4.667; AIS: 0.868.**

23. *Functional properties improvement of Ag-ZnO thin films using Inconel 600 interlayer produced by electron beam evaporation technique*, M. V. Lungu, A. Sobetkii, A. A. Sobetkii, D. Pătroi, P. Prioteasa, I. Iona, C. C. Negrilă, M. C. Chifiriuc, **Thin Solid Films** **667**, 76–87, (2018). **JIF: 1.939; AIS: 0.356.**
24. *Influence of Mn content on the catalytic properties of Cu-(Mn)-Zn-Mg-Al mixed oxides derived from LDH precursors in the total oxidation of methane*, M. Raciulete, G. Layrac, F. Papa, C. Negrilă, D. Tichit, I. C. Marcu, **Catalysis Today** **306**, 276–286, (2018). **JIF: 4.667; AIS: 0.868.**
25. *Particularities of photocatalysis and formation of reactive oxygen species on insulators and semiconductors: cases of SiO<sub>2</sub>, TiO<sub>2</sub> and their composite SiO<sub>2</sub>-TiO<sub>2</sub>*, C. Anastasescu, C. Negrilă, D.G. Angelescu, I. Atkinson, M. Anastasescu, N. Spataru, M. Zaharescu, I. Balint, **Catalysis Science & Technology**, 8 (21), 5657-5668, (2018). **JIF: 5.365; AIS:1.105.**
26. *Enhanced UV- and visible-light driven photocatalytic performances and recycling properties of graphene oxide/ZnO hybrid layers*, E. György, C. Logofatu, Á. I. P. del Pino, A. Datcu, O. Pascu, R. Ivan, **Ceramics International** **44**, 1826–1835 (2018). **JIF: 3.057; AIS: 0.437.**
27. *Synthesis of graphene-based photocatalysts for water splitting by laser-induced doping with ionic liquids*, A. P. del Pino, A. Gonzalez-Campo, S. Giraldo, J. Peral, E. Gyorgy, C. Logofatu, A. J. deMello, J. Puigmartí-Luis, **Carbon** **130**, 48-58 (2018) **JIF: 7.082; AIS: 1.390.**
28. *Low energy electron irradiation of carbon thin films*, O. Pacala, I. Ciuca, C. Logofatu, S. Polosan, **Mater. Res. Express** **5**, 055607(1-6) (2018). **JIF: 1.151; AIS: 0,239.**
29. *Reactive laser synthesis of nitrogen doped hybrid graphene-based electrodes for energy storage*, A. P. del Pino, A. M. Villarroya, A. Chuquitarqui, C. Logofatu, D. Tonti, E. Gyorgy, **J. Mater. Chem. A** **6**, 16074-16086 (2018). **JIF: 9.931; AIS: 1.868.**
30. *Reduced graphene oxide/iron oxide nanohybrid flexible electrodes grown by laser-based technique for energy storage applications*, A. Queraltó, A. Pérez del Pino, C. Logofatu, A. Datcu, R. Amade, E. Bertran-Serrad, E. György, **Ceramics International** **44**, 20409–20416 (2018). **JIF: 3.057; AIS: 0.437.**
31. *Enhanced photoconductivity of SiGe nanocrystals in SiO<sub>2</sub> driven by mild Annealing*, M. T. Sultana, A. Manolescu, J. T. Gudmundsson, K. Torfason, G. A. Nemnes, I. Stavarache, C. Logofatu, V. S. Teodorescu, M. L. Ciurea, H. G. Svavarsson, **Applied Surface Science** **469**, 870–878, (2019) **JIF: 4.439; AIS: 0.627.**
32. *UV–vis light induced photocatalytic activity of TiO<sub>2</sub>/graphene oxide nanocomposite coatings*, A. Datcu, M.L. Mendoza, A. Pérez del Pino, C. Logofatu, E. György, **Catalysis Today** **81**, 321–322 (2019). **JIF: 4.667; AIS: 0.868.**
33. *Laser-induced synthesis and photocatalytic properties of hybrid organic–inorganic composite layers*, R. Ivan, C. Popescu, A. P. del Pino, I. Yousef, C. Logofatu, E. Gyorgy, **Journal of Materials Science** **54**, 3927-3941 (2019). **JIF: 2.993; AIS: 0.554.**
34. *The Cu and Zn-complexes catalyzed methanolysis of the chemical warfare agents soman, sarin and VX*, N. Petrea, R. Petre, A. Pretorian, C.N. Toader, V. Somoghi, F. Neatu, M. Florea, S. Neatu, **Comptes Rendus Chimie** **21**, 339-345 (2018). **JIF: 1.877; AIS: 0.290.**

35. *Selective catalytic oxidation reaction of p-xylene on manganese-iron mixed oxide materials*, S. Nicolae, F. Neatu, M. Florea, **Comptes Rendus Chimie** **21**, 354-361 (2018). **JIF: 1.877; AIS: 0.290.**
36. *Doped ceria prepared by precipitation route for solid oxide fuel cells operated on methane*, M. Florea, F. Matei-Rutkovska, G. Postole, A. Urda, F. Neatu, V. I. Parvulescu, P. Gelin, **Catalysis Today** **306**, 166-171 (2018). **JIF: 4.667; AIS: 0.868.**
37. *Influence of Gd and Pr doping on the properties of ceria: Texture, structure, redox behaviour and reactivity in CH<sub>4</sub>/H<sub>2</sub>O reactions in the presence of H<sub>2</sub>S*, M. Florea, G. Postole, F. Matei-Rutkovska, A. Urda, F. Neatu, L. Massin, P. Gelin, **Catalysis Science & Technology** **8**, 1333-1348 (2018). **JIF: 5.365; AIS: 1.105.**
38. *Thermal behaviour of sym-octahydroacridines and their corresponding N(10)-oxides*, M. Marinescu, F. Potmischil, M. Florea, C. Constantinescu, **Journal of Thermal Analysis and Calorimetry** **131**, 117-125 (2018). **JIF: 2.209; AIS: 0.279.**
39. *Alternative valorization of red mud waste as functional materials with catalytic activity for sulfide oxidation in wastewater*, A. Cruceanu, R. Zăvoianu, O. D. Pavel, M. Florea, L. Mara, **International Journal of Environmental Science and Technology** **15**, 895-908 (2018). **JIF: 2.037; AIS: 0.374.**
40. *Heavy doping ceria by wet impregnation: A viable alternative to bulk doping approaches*, M. Florea, D. Avram, A. Maraloiu, B. Cojocar, C. Tiseanu, **Nanoscale** **10**, 18043-18054 (2018). **JIF: 7.233; AIS: 1.704.**
41. *Engineering active sites on reduced graphene oxide by hydrogen plasma irradiation: mimicking bifunctional metal/supported catalysts in hydrogenation reactions*, A. Primo, A. Franconetti, M. Magureanu, N. B. Mandache, C. Bucur, C. Rizescu, B. Cojocar, V. I. Parvulescu, H. Garcia, **Green Chemistry** **20**, 2611-2623 (2018). **JIF: 8.586; AIS: 1.581.**
42. *Efficient glucose dehydration to HMF onto Nb-BEA catalysts*, N. Candu, M. El Fergani, M. Verziu, B. Cojocar, B. Jurca, N. Apostol, C. Teodorescu, V.I. Parvulescu, S.M. Coman, **Catalysis Today**, *accepted* (2018). DOI: 10.1016/j.cattod.2018.08.004. **JIF: 4.667; AIS: 0.868.**
43. *Next frontiers in cleaner synthesis: 3D printed graphene-supported CeZrLa mixed-oxide nanocatalyst for CO<sub>2</sub> utilisation and direct propylene carbonate production*, V. Middelkoop, T. Slater, M. Florea, F. Neatu, S. Danaci, V. Onyenkeadi, K. Boonen, B. Saha, I. -A. Baragau, S. Kellici, **Journal of Cleaner Production** **214**, 606-614 (2019). **JIF: 5.651; AIS: 0.815.**
44. *Near infrared emission properties of Er doped cubic sesquioxides under near-infrared up-conversion and X-ray excitation*, D. Avram, I. Tiseanu, B. S. Vasile, M. Florea, C. Tiseanu, **Scientific Reports** **8**, 18033 (2018). **JIF: 4.122; AIS: 1.356.**
45. *Bimodal mesoporous NiO/CeO<sub>2-δ</sub>-YSZ with enhanced carbon tolerance in catalytic partial oxidation of methane - potential IT-SOFCs anode*, S. Somacescu, N. Cioatera, P. Osiceanu, J. M. Calderon-Moreno, C. Ghica, F. Neatu, M. Florea, **Applied Catalysis B-Environmental** **241**, 393-406, (2019). **JIF: 7.233; AIS: 1.704. (Q1)**

Capitol Carte:

*Characteristics Of Metals Thin Film Deposition On III-V Semiconductor Compounds*, Rodica V. Ghita, Constantin-Catalin Negrila, Constantin Logofatu, Daniela Predoi, **Advances in Microelectronics Reviews Vol 2**, IFSA Publishing, S.L. (Barcelona, Spain) (2018), *in print*

Brevete:

1. *Metoda si dispozitiv de masurare a proprietatilor optice ale straturilor subtiri depuse pe suprafete sau interfete cu reflexie totala interna*, C. Cotirlan-Simioniuc, M. F. Lazarescu, B.I. 128062/2018, OSIM.

2. *Senzor cu suprafata nanostructurata pentru tehnici rezonante de detectie monomoleculara*, C. Cotirlan-Simioniuc. B.I. 129117/2018, OSIM.

3. *Ochelari cu metasuprafete active pentru imbunatatirea perceptiei imaginilor in conditii dificile de vizibilitate*, C. Cotirlan-Simioniuc, Cerere de brevet A/00815/18.10.2018, OSIM.

4. *Procedeu de pasivare a suprafetelor semiconductoare din compusi III-V si obtinerea unei structuri senzitive de tip GaCl<sub>3</sub>-Sb<sub>2</sub>S<sub>3</sub>/GaSb*, R. Ghita, F. Florica, C. Logofatu, D. Predoi, C. C. Negrila, L. Trupina, Brevet acordat prin Hotarare Nr. 3/170 din 30.10.2018, OSIM.

5. *Procedeu de oxidare selectiva a p-cimenului din surse regenerabile in prezenta de catalizatori eterogeni oxizi micsti pe baza de cobalt*, F. Neatu, S. Neatu, M. Florea, Cerere brevet A00242/04.04.2018, OSIM.