Universitatea Națională de Știință și Tehnologie POLITEHNICA Bucureşti
Facultatea: **de Inginerie Chimică și Biotehnologii**
Departamentul: **Știința și Ingineria Materialelor Oxidice și Nanomateriale**
Nume Prenume: **Ianculescu Adelina-Carmen**
Gradul didactic: **Profesor**

L I S T A
lucrărilor ştiinţifice în domeniul disciplinelor din postul didactic

A. Teza de doctorat

***Ceramica dielectrică de tip M^{II} – M^{IV}– O şi asemănătoare cu permitivitate înaltă*"**, 1997, autor: **Adelina-Carmen Ianculescu**, conducător ştiinţific: **Prof. Dr. Doc. Ing. Ion Teoreanu**

B. Cărţi si capitole în cărţi publicate în ultimii 10 ani

(a) Cărţi:

1. Maria Crişan, **Adelina Ianculescu**, Ines Niţoi, Petruţa Oancea, Nicolae Drăgan, Dorel Crișan, Ligia Todan, Simona Şomăcescu, "Nanomateriale fotocatalitice pe bază de TiO_2 cu utilizări în degradarea avansată a compuşilor xenobiotici din apă", Ed. Maria Crişan, Adelina Ianculescu, Editura Politehnica Press, Bucureşti, 2021, ISBN-978-606-515-970-9.

(b) Capitole în cărţi:

2. Maria Crişan, **Adelina Ianculescu**, Ines Niţoi, Petruţa Oancea, Dorel Crişan, Nicolae Drăgan, Chap. 10. *Fe-doped TiO_2 nanomaterials for water depollution*, pp. 265-313 in „Nanotechnology in the Beverage Industry: Fundamentals and Applications" (2 editions), Elsevier, 2020, Ed. Tuan Anh Nguyen, ISBN: 978-0-12-819941-1; DOI: 10.1016/B978-0-12-819941-1.00010-9.

3. R. Dumitru, F. Manea, C. Pacurariu, L. Lupa, A. Pop, A. Cioabla, A. Surdu, **A. Ianculescu**, *Synthesis, Characterization of Nanosized $ZnCr_2O_4$ and its Photocatalytic Performance in the Degradation of Humic Acid from Drinking Water*, pp. 230-245 in "Nanomaterials for Environmental Purification and Energy Conversion" (2 editions), MDPI, 2019, Basel, Switzerland, Ed. Ewa Kowalska, Agata Markowska-Szczupak, Marcin Janczarek, ISBN: 978-3-03921-814-1 (Pbk), ISBN: 978-3-03921-815-8 (PDF); DOI: 10.3390/books978-3-03921-815-8.

4. **Adelina-Carmen Ianculescu**, Cătălina-Andreea Stanciu, Chap. 8. *Nanosized $BaTiO_3$-based systems*, pp. 153-200, in „Magnetic, Ferroelectric, and Multiferroic Metal Oxides" (3 editions), Part. 1, Section II, Elsevier, 2018, Ed. Biljana Stoianović, Ghenadii Korotcenkov, ISBN: 978-0-12-811180-2; DOI: 10.1016/B978-0-12-811180-2.00008-6.

5. **Adelina-Carmen Ianculescu**, Ioana Pintilie, Lucian Pintilie**,** Chap. 10. *Compositionally-graded ferroelectric ceramics and multilayers for electronic and sensing applications*, pp. 223-232, in „Magnetic, Ferroelectric, and Multiferroic Metal Oxides" (3 editions), Part. 1, Section III, Elsevier, 2018, Ed. Biljana Stoianović, Ghenadii Korotcenkov, ISBN: 978-0-12-811180-2; DOI: 10.1016/B978-0-12-811180-2.00010-4.

6. **Adelina Ianculescu**, Daniela C. Berger, Catalina A. Vasilescu, Marius Olariu, Bogdan S. Vasile, Lavinia P. Curecheriu, Andreja Gajović, Roxana Truşcă, Chap. 1. *Incorporation mechanism and functional properties of Ce-doped $BaTiO_3$ ceramics derived from nanopowders prepared by the modified-Pechini method*, pp. 13-43, in „Nanoscale Ferroelectrics and Multiferroics: Key Processing and Characterization Issues, and Nanoscale Effects" (9 editions), vol. 1, John Wiley & Sons, Ltd, 2016, Ed. Miguel Algueró, Marty Gregg, L. Mitoseriu, Print ISBN: 978-1-118-93575-0; Online ISBN: 978-1-118-935743; DOI: 10.1002/9781118935743.

C. Lucrări indexate ISI/BDI publicate în ultimii 10 ani

1. R. E. Pătru, C. A. Stanciu, V. A. Surdu, E. M. Soare, R. D. Truşcă, B. S. Vasile, A. I. Nicoară, L. Trupină, I. Pasuk, M. Botea, N. Horchidan, L. Mitoşeriu, L. Pintilie, I. Pintilie, **A. C. Ianculescu**✉, *Downscaling grain size toward the nanometre range – a key-factor for tuning the crystalline structure, phase transitions, dielectric and ferroelectric behaviour in $Ba_{0.8}Sr_{0.2}TiO_3$ ceramics*, Progress in Solid State Chemistry, 74 (2024), 100457, Elsevier, ISSN: 0079-6786; https://doi.org/10.1016/j.progsolidstchem.2024.100457; WOS:001256843800001
2. V. L. Ene, V. R. Lupu, C. V. Condor, R. E. Patru , L. M. Hrib, L. Amarande, A. I. Nicoara, L. Pintilie, **A.-C. Ianculescu**✉, *Influence of Grain Size on Dielectric Behavior in Lead-Free 0.5 $Ba(Zr_{0.2}Ti_{0.8})O_3$–0.5 $(Ba_{0.7}Ca_{0.3})TiO_3$ Ceramics*, Nanomaterials, *13* [22] (2023), art. no. 2934, MDPI, ISSN: **2079-4991;** https://doi.org/10.3390/nano13222934; WOS:001114617800001
3. V.-A. Surdu, M.-A. Marinică, R.-E. Pătru, O.-C. Oprea, A. I., Nicoară, B. Ş. Vasile, R. Truşcă, **A.-C. Ianculescu**✉, High-Entropy Lead-Free Perovskite $Bi_{0.2}K_{0.2}Ba_{0.2}Sr_{0.2}Ca_{0.2}TiO_3$ Powders and Related Ceramics: Synthesis, Processing, and Electrical Properties, Nanomaterials, *13* [22] (2023), art. no. 2974, MDPI, ISSN: **2079-4991;** https://doi.org/10.3390/nano13222934; https://doi.org/10.3390/nano13222974; WOS:001119352900001
4. L. Todan, L. Predoana, G. Petcu, S. Preda, D. C. Culita, A. Baran, R.-D. Trusca, V.-A. Surdu, B. S. Vasile, **A.-C. Ianculescu**, *Comparative Study of MgO Nanopowders Prepared by Different Chemical Methods*, Gels, 9 [8] (2023), art. no. 624, MDPI, ISSN: **2310-2861**; https://doi.org/10.3390/gels9080624; WOS:001055254700001
5. M. G. Alexandru, **A.-C. Ianculescu**✉, O. Carp, D. C. Culita, S. Preda, C. D. Ene, B. S. Vasile, V.-A. Surdu, A. Nicoara, F. Neatu, I. Pintilie, D. Visinescu, Deciphering the role of water and a zinc-doping process in a polyol-based approach for obtaining Zn/Co/Al-based spinels: toward "green" mesoporous inorganic pigments, Dalton Transactions, 52 (2023), 10386 - 10401, Royal Society of Chemistry, ISSN: 1477-9234; https://doi.org/10.1039/d3dt00972f; WOS:001023112500001
6. L. Predoană, G. Petcu, S. Preda, J. Pandele-Cuşu, S. V. Petrescu, A. Băran, N. G. Apostol, R. M. Costescu, V.-A. Surdu, B. Ş. Vasile, **A.-C. Ianculescu**, *Copper-/Zinc-Doped TiO_2 Nanopowders Synthesized by Microwave-Assisted Sol–Gel Method*, *Gels*, *9* [4] (2023), art. no. 267, MDPI, ISSN: **2310-2861;** https://doi.org/10.3390/gels9040267; WOS:000979378000001
7. R.-E. Pătru, C. A.Stanciu, E. M. Soare, V.-A. Surdu, R. D. Truşcă, A. Ionuţ Nicoară, B. Ş. Vasile, G. Boni, L. Amarande, N. Horchidan, L. P. Curecheriu, L. Mitoşeriu, L. Pintilie, I. Pintilie, **A.-C. Ianculescu**✉, *Grain size-driven effect on the functional properties in $Ba_{0.6}Sr_{0.4}TiO_3$ ceramics*

consolidated by spark plasma sintering, Journal of the European Ceramic Society, 43 [8] (2023), 3250-3265, Elsevier, ISSN (print): 0955-2219; ISSN (online): 1873-619X; https://doi.org/10.1016/j.jeurceramsoc.2023.02.013; WOS:000955303500001

8. L. Predoană, E. M. Ciobanu, G. Petcu, S. Preda, J. Pandele-Cusu, E. M. Anghel, S. V. Petrescu, D. C. Culita, A. Baran, V.-A. Surdu, B. S. Vasile, **A. C. Ianculescu**, *Photocatalytic Performance of Sn–Doped TiO_2 Nanopowders for Photocatalytic Degradation of Methyl Orange Dye*, Catalysts, 13 [3] (2023), art. no. 534, MDPI, ISSN: 2073-4344; https://doi.org/10.3390/catal13030534; WOS:000957850700001
9. C. Gheorghiu, A. Ionescu, M.-I. Zai, D. Iancu, I. Burducea, G. Velisa, B. S. Vasile, **A. C. Ianculescu**, M. Bobeica, D. Popa, V. Leca, *Nanoscale Control of Structure and Composition for Nanocrystalline Fe Thin Films Grown by Oblique Angle RF Sputtering*, *Materials***,** 15 [17] (2022), art. no. 6134; MDPI, ISSN: 1996-1944; https://doi.org/10.3390/ma15176134; WOS:000851708900001;
10. Gingasu, I. Mindru, **A.-C. Ianculescu**, L. Diamandescu, V.-A. Surdu, G. Marinescu, C. Bartha, S. Preda , M. Popa, M. C. Chifiriuc, *Soft Chemistry Synthesis and Characterization of $CoFe_{1.8}RE_{0.2}O_4$ (RE^{3+} = Tb^{3+}, Er^{3+}) Ferrite*, *Magnetochemistry, 8 [*2] (2022), art. no. 12; MDPI, ISSN: 2312-7481; https://doi.org/10.3390/magnetochemistry8020012; WOS:000763037000001
11. C. D. Ene, P. Cucos, **A. Ianculescu**, D. C. Culita, E. M. Anghel, A. Cucos, I. Atkinson, M. C. Chifiriuc, J. M. Calderón-Moreno, O. Carp, *Benign by design: porous spherical ZnO-alginate family via a dual-template synthesis*, Applied Surface Science, 580 (2022), art. no. 152231; Elsevier, ISSN: 0169-4332; https://doi.org/10.1016/j.apsusc.2021.152231; WOS:000736662300004
12. M. Botea, I. Pintilie, V.-A. Surdu, C.-A. Stanciu, R.-D. Truşcă, B. Ş. Vasile, R. Patru, **A.-C. Ianculescu**✉, L. Pintilie, *Structural, functional properties and enhanced thermal stability of bulk graded (Ba,Sr)TiO_3 structures obtained by spark plasma sintering*, Journal of Materials Research and Technology-JMR&T, 12 (2021), 2085-2103; Elsevier, ISSN: 2238-7854; https://doi.org/10.1016/j.jmrt.2021.06.001; WOS:000677666400002
13. D. Gingasu, I. Mindru, D. C. Culita, G. Marinescu, S. Somacescu, **A. Ianculescu**, V.-A. Surdu, S. Preda, O. Oprea, B. S. Vasile, *Mentha piperita-mediated synthesis of cobalt aluminate nanoparticles and their photocatalytic activity*, Journal of Materials Science-Materials in Electronics, 32 [8] (2021), 11220-11231; Springer, ISSN: 0957-4522 (Print) 1573-482X (Online); https://doi.org/10.1007/s10854-021-05791-z; WOS:000637470500003
14. R. Dumitru (Vodă), S. Negrea, C. Pacurariu, A. Surdu, **A. Ianculescu**, A. Pop, F. Manea, *$CuBi_2O_4$ Synthesis, Characterization, and Application in Sensitive Amperometric/Voltammetric Detection of Amoxicillin in Aqueous Solutions*, Nanomaterials, 11 [3] (2021), art. no. 740**;** MDPI, ISSN: 2079-4991; https://doi.org/10.3390/nano11030740; WOS:000633984500001
15. L. Curecheriu, C. Harnagea, M. T. Buscaglia, I. Pallecchi, B. S. Vasile, V.-A. Surdu, **A.-C. Ianculescu**✉, A. Pignolet, F. Rosei, L. Mitoseriu, V. Buscaglia, *Four-Fold Multifunctional Properties in Self-Organized Layered Ferrite*, Ceramics International, 46 [18], Part A, (2020), 28621-28630, Elsevier, ISSN: 0272-8842; https://doi.org/10.1016/j.ceramint.2020.08.021; WOS:000582503700078

16. R. Dumitru, S. Negrea, **A. Ianculescu**, C. Păcurariu, B. Vasile, A. Surdu, F. Manea, *Lanthanum ferrite ceramic powders: synthesis, characterization and electrochemical detection application*, Materials, 13 [9] (2020), art. no. 2061; MDPI, ISSN 1996-1944; https://doi.org/10.3390/ma13092061; WOS:000535941100055
17. R. E. Pătru, C. P. Ganea, C.-A. Stanciu, V.-A. Surdu, R. Truşcă, A.-C. **Ianculescu✉,** I. Pintilie, L. Pintilie**,** *(Ba,Sr)TiO_3 solid solutions sintered from sol-gel derived powders: An insight into the composition and temperature dependent dielectric behavior*, Ceramics International, 46 [4] (2020), 4180-4190**,** Elsevier, ISSN: 0272-8842; https://doi.org/10.1016/j.ceramint.2019.10.136; WOS:000512219600018
18. C. A. Stanciu, I. Pintilie, A. V. Surdu, R. Truşcă, B. S. Vasile, M. A. Eftimie, **A.-C. Ianculescu✉**, *Influence of sintering strategy on the characteristics of sol-gel $Ba_{1-x}Ce_xTi_{1-x/4}O_3$ ceramics*, Nanomaterials, 9 [12] (2019), art. no. 1675 (1-22), MDPI, ISSN: 2079-4991; https://doi.org/10.3390/nano9121675; WOS:000506675800031
19. D. Gingasu, I. Mindru, **A. Ianculescu**, S. Preda, C. Negrilă, M. Secu, *Photoluminescence and thermoluminescence properties of the $Sr_3Al_2O_6:Eu^{3+}/Eu^{2+},Tb^{3+}$ persistent phosphor*, Journal of Luminescence, 214 (2019), art. no. 116540, Elsevier, ISSN (print): 0022-2313; ISSN (online): 1872-7883**;**
20. V.-A. Surdu, R. D. Truşcă, B. Ş. Vasile, O. C. Oprea, E.Tanasă, L. Diamandescu, E. Andronescu, **A. C. Ianculescu✉**, *$Bi_{1-x}Eu_xFeO_3$ powders: synthesis, characterization, magnetic and photoluminescence properties*, Nanomaterials, 9 [10] (2019), art. no. 1465, MDPI, ISSN: 2079-4991; https://doi.org/10.3390/nano9101465; WOS:000495666800120
21. I. Mîndru, D. Gingasu, L. Patron, **A. Ianculescu**, V.-A. Surdu, D. C. Culita, S. Preda, C.-D. Negut, O. Oprea, *A new approach: Synthesis of cobalt aluminate nanoparticles using tamarind fruit extract*, Materials Science and Engineering-B-Advanced Functional Solid-State, 246 (2019), 42-48, Elsevier, ISSN: 0921-5107; https://doi.org/10.1016/j.mseb.2019.05.031; WOS:000481562900007
22. R. Dumitru, **A. Ianculescu**, C. Păcurariu, L. Lupa, A. Pop, B. Vasile, A. Surdu, F. Manea, *$BiFeO_3$ - synthesis, characterization and its photocatalytic activity towards doxorubicin degradation from water*, Ceramics International, 45 [2], Part B, (2019), 2789-2802; Elsevier, ISSN: 0272-8842; https://doi.org/10.1016/j.ceramint.2018.07.298; WOS:000453491400012
23. M. Crişan, D. Mardare, **A. Ianculescu✉**, N. Drăgan, I. Niţoi, D. Crişan, M. Voicescu, L. Todan, P. Oancea, C. Adomniţei, M. Dobromir, M. Gabrovska, B. Vasile, *Iron doped TiO_2 films and their photoactivity in nitrobenzene removal from water*, Applied Surface Science, 455 (2018), 201-215, Elsevier, ISSN (print): 0169-4332, ISSN (online): 1873-5584; https://doi.org/10.1016/j.apsusc.2018.05.124; WOS:000438578700024
24. B. Bajac, M. Milanovic, Z. Cvejic, **A. Ianculescu**, P. Postolache, L. Mitoseriu, V. V. Srdic, *Magnetic properties of multilayer $BaTiO_3/NiFe_2O_4$ thin films prepared by solution deposition technique*, Ceramics International, 44 [13] (2018), 15965-15971, Elsevier, ISSN (print): 0272-8842; ISSN (online): 1873-3956; https://doi.org/10.1016/j.ceramint.2018.06.023; WOS:000442057800138
25. D. Gingasu, I. Mindru, L. Patron, **A. Ianculescu**, E. Vasile, G. Marinescu, S. Preda, L. Diamandescu, O. Oprea, M. Popa, C. Saviuc, M. Carmen Chifiriuc, *Synthesis and*

Characterization of Chitosan-Coated Cobalt Ferrite Nanoparticles and Their Antimicrobial Activity, Journal of Inorganic and Organometallic Polymers and Materials, 28 [5] (2018), 1932-1941, Springer Nature, ISSN (print): 1574-1443; ISSN (online): 1574-1451; https://doi.org/10.1007/s10904-018-0870-3; WOS:000440784000025

26. R. Dumitru, F. Manea, C. Pacurariu, L. Lupa, A. Pop, A. Cioabla, A. Surdu, **A. Ianculescu**, *Synthesis, Characterization of Nanosized $ZnCr_2O_4$ and its Photocatalytic Performance in the Degradation of Humic Acid from Drinking Water*, Catalysts, 8 [5] (2018), art. no. 210; MDPI, ISSN: 2073-4344; https://doi.org/10.3390/catal8050210; WOS:000435191500039
27. D. Gingasu, I. Mindru, L. Patron, **A. Ianculescu**, Vasile-Adrian Surdu, Daniela C. Culita, Silviu Preda, Ovidiu Oprea, *Synthesis of cobalt aluminate nanoparticles by combustion methods using cinnamon bark extract*, Revue Roumaine de Chimie, 63 [5-6] (2018), 459-466, Roumanian Academy, **ISSN: 0035-3930**; WOS:000452555100011
28. D. Crişan, N. Drăgan, M. Crişan, **A. Ianculescu**, L. Todan, J. C. Védrine, D. Filkova, M. Gabrovska, R. Edreva Kardjieva, *Structural study of the MO-Nd_2O_3 system obtained by a sol-gel procedure*, Comptes Rendus Chimie, 21 [3-4] (2018), 232-246, Elsevier, ISSN (print): 1631-0748; ISSN (online): 1878-1543; https://doi.org/10.1016/j.crci.2016.11.010; WOS:000428095300009
29. Velciu, **A. C. Ianculescu**, A. Melinescu, V. Marinescu, M. Preda, *Study on the formation mechanism and sinterability of $La_{1-x}Sr_xCoO_{3-\delta}$ (x = 0.1 - 0.3) prepared by mechanical activation*, Revista de Chimie, 68 [9] (2017), 2043-2047, ISSN: 0034-7752; WOS:000416748800019
30. M. Pop, N. Horchidan, **A. Ianculescu**, L. Mitoseriu, *Frequency mixing application based on $BaTiO_3$ ceramic: design and functional characterization*, International International Journal of Applied Ceramic Technology, 14 [4] (2017), 593-603; Wiley, ISSN (print): 1546-542X, ISSN (online); 1744-7402; https://doi.org/10.1111/ijac.12707; WOS:000404887200010
31. R. Dumitru, F. Manea, L. Lupa, C. Păcurariu, **A. Ianculescu**, A. Baciu, S. Negrea, *Synthesis, characterization of nanosized $CoAl_2O_4$ and its electrocatalytic activity for enhanced sensing application*, Journal of Thermal Analysis and Calorimetry, 128 (2017), 1305-1312; Springer, ISSN: 1388-6150 (print version); ISSN: 1588-2926 (electronic version); https://doi.org/10.1007/s10973-016-6045-y; WOS:000401349800007
32. O. Carp, A. Tîrşoagă, R. Ene, **A. Ianculescu**, R. F. Negrea, P. Chesler, G. Ioniţă, R. Birjega, *Facile, high yield ultrasound mediated protocol for ZnO hierarchical structures synthesis: formation mechanism, optical and photocatalytic properties*, Ultrasonics Sonochemistry, 36 (2017) 326-335, Elsevier, ISSN: 1350-4177; https://doi.org/10.1016/j.ultsonch.2016.12.005; WOS:000392770100039
33. Z. Ghizdăveţ, I. M. Stanciu, A. Melinescu, **A. Ianculescu**, *Correlations composition - Processing - Microstructure - Properties for Ceria - Based Solid Electrolytes*, Revista de Chimie, 68 [5] (2017), 1044-1050**;** ISSN: 0034-7752; WOS:000405816300033
34. D. Gingasu, I. Mindru, O. C. Mocioiu, S. Preda, N. Stanica, L. Patron, **A. Ianculescu**, O. Oprea, S. Nita, I. Paraschiv, M. Popa, C. Saviuc, C. Bleotu, M. C. Chifiriuc, *Synthesis of nanocrystalline cobalt ferrite through soft chemistry methods: A green chemistry approach using sesame seed extract*, Materials Chemistry and Physics, 182 (2016) 219-230, Elsevier, ISSN

(print): 0254-0584, ISSN (online): 1879-3312; https://doi.org/10.1016/j.matchemphys.2016.07.026; WOS:000383524900028

35. **A. Ianculescu**, I. Pintilie, C. A. Vasilescu, M. Botea, A. Iuga, A. Melinescu, N. Drăgan, L. Pintilie, *Intrinsic pyroelectric properties of thick, coarse grained* $Ba_{1-x}Sr_xTiO_3$ *ceramics*, Ceramics International, 42 [8] (2016), 10338-10348, Elsevier, ISSN (online): 1873-3956**;** https://doi.org/10.1016/j.ceramint.2016.03.152; WOS:000374811600135
36. **A.-C. Ianculescu**, C.-A. Vasilescu, L. Trupină, B. S. Vasile, R. Truşcă, M. Cernea, L. Pintilie, A. Nicoară, *Characteristics of* Ce^{3+}*-doped barium titanate nanoshell tubes prepared by template-mediated colloidal chemistry*, Journal of the European Ceramic Society, 36 [7] (2016), 1633-1642, Elsevier, ISSN (print): 0955-2219; ISSN (online): 1873-619X; https://doi.org/10.1016/j.jeurceramsoc.2016.01.045; WOS:000372381300012
37. M. Crişan, N. Drăgan, D. Crişan, **A. Ianculescu**, I. Niţoi, P. Oancea, L. Todan, C. Stan, N. Stănică, *The effects of Fe, Co and Ni dopants on* TiO_2 *structure of sol-gel nanopowders used as photocatalysts for environmental protection: A comparative study*, Ceramics International, 42 [2] Part B, (2016), 3088-3095, Elsevier, ISSN (print): 0272-8842**;** ISSN (online):1873-3956;https://doi.org/10.1016/j.ceramint.2015.10.097;WOS:000367277100021
38. M. Cernea, **A. C. Ianculescu**, B. S. Vasile, C. A. Vasilescu, *Nanotubes of* $Ba_{0.95}Ce_{0.05}Ti_{0.9875}O_3$ *prepared by sol-gel chemistry*, University Politehnica of Bucharest Scientific Bulletin Series B-Chemistry and Materials Science, 78 [1] (2016), 51-58, ISSN: 1454-2331; WOS:000417051900005
39. Velciu, A. Melinescu, V. Marinescu, M. Preda, **A. C. Ianculescu**, T. Zaharescu, *Comparative study on sintering behaviour of* $LaCoO_3$ *ceramics obtained by mechanical activation with single- and two-step firing*, University Politehnica of Bucharest Scientific Bulletin Series B-Chemistry and Materials Science, 78 [4], (2016), 109-120, ISSN: 1454-2331; WOS:000417053700012
40. V. Kalyani, B. S. Vasile, **A. Ianculescu**, A. Testino, A. Carino, M. T. Buscaglia, V. Buscaglia, P. Nanni, *Hydrothermal Synthesis of* $SrTiO_3$*: Role of Interfaces*, Crystal Growth & Design, 15 [12] (2015), 5712-5725, ACS Publications, ISSN (printed): 1528-7483. ISSN (electronic): 1528-7505; https://doi.org/10.1021/acs.cgd.5b00770; WOS:000365930300012
41. C. A. Vasilescu, L. Trupina, B. S. Vasile, R. Trusca, M. Cernea, **A. C. Ianculescu**, *Characteristics of 5 mol%* Ce^{3+}*-doped barium titanate nanowires prepared by a combined route involving sol-gel chemistry and polycarbonate membrane-templated process*, Journal of Nanoparticle Research, 17 [11] (2015), art. no. 434(1-8), Springer, ISSN: 1388-0764 (print); 1572-896X (electronic); https://doi.org/10.1007/s11051-015-3241-9; WOS:000370143800002
42. M. Crişan, M. Răileanu, N. Drăgan, D. Crişan, **A. Ianculescu**✉, I. Niţoi, P. Oancea, S. Şomăcescu, N. Stănică, B. Vasile, C. Stan, *Sol-gel iron-doped* TiO_2 *nanopowders with photocatalytic activity*, Applied Catalysis A-General, 504 (2015), 130-142; Elsevier, ISSN (print): 0926-860X; ISSN (online): 1873-3875; https://doi.org/10.1016/j.apcata.2014.10.031; WOS:000362604200016
43. **A. C. Ianculescu**, C. A. Vasilescu, M. Crisan, M. Raileanu, B. S. Vasile, M. Calugaru, D. Crisan, N. Dragan, L. Curecheriu, L. Mitoseriu, *Formation mechanism and characteristics of lanthanum-doped* $BaTiO_3$ *powders and ceramics prepared by the sol–gel process*, Materials

Characterization, 106 (2015), 195-207, Elsevier, ISSN (print): 1044-5803, ISSN (online): 1873-4189; https://doi.org/10.1016/j.matchar.2015.05.022; WOS:000360417200023

44. M. Răileanu, L. Todan, M. Voicescu, N. Drăgan, D. Crişan, M. Maganu, D. M. Vuluga, **A. Ianculescu**, D. C. Culiţă, *Sol-gel zirconia-based nanopowders with potential applications for sensors*, Ceramics International, 41 [3] (2015), 4381-4390; Elsevier, ISSN (print): 0272-8842, ISSN (online): 1873-3956; https://doi.org/10.1016/j.ceramint.2014.11.128; WOS:000350180600015
45. O. Carp, A. Tîrşoagă, B. Jurcă, R. Ene, S. Şomăcescu, **A. Ianculescu**, *Biopolymer starch mediated synthetic route of multi-spheres and donut ZnO structures*, Carbohydrate Polymers, 115 (2015), 285-293, Elsevier, ISSN (print): 0144-8617, ISSN (online): 1879-1344; https://doi.org/10.1016/j.carbpol.2014.08.061; WOS:000344869800038
46. A. Stan, C. Munteanu, A. M. Musuc, R. Birjega, R. Ene, **A. Ianculescu**, I. Raut, L. Jecu, M. Badea Doni, E. M. Anghel, O. Carp, *A general, eco-friendly synthesis procedure of self-assembled ZnO-based materials with multifunctional properties*, Dalton Transactions, 44 [17] (2015), 7844-7853, The Royal Society of Chemistry (RSC) Publishing, ISSN (print): 1477-9226, ISSN (online): 1477-9234; https://doi.org/10.1039/c5dt00707k; WOS:000353642800020
47. C. A. Vasilescu, L. P. Curecheriu, L. Mitoseriu, **A. C. Ianculescu**, *Phase formation, microstructure and functional properties of some $BaTi_{1-x}Zr_xO_3$ ceramics*, University Politehnica of Bucharest Scientific Bulletin Series B-Chemistry and Materials Science, 77 [1] (2015), 95-105; WOS:000417043900009.

D. Lucrări publicate în ultimii 10 anii în reviste şi volume de conferinţe cu referenţi (neindexate)

1. N. Drăgan, D. Crişan, **A. Ianculescu**, M. Crişan, L. Todan, *Grade 4 trinomial for the phenomenological model of strains anisotropy for powders. A mathematical treatment*, International Journal of Research and Analytical Reviews (IJRAR), 10 [1] (2023), 935-951.

E. Brevete obţinute în întreaga activitate

1. **Adelina-Carmen Ianculescu**, Cătălina-Andreea Stanciu, Bogdan Ştefan Vasile, Roxana Truşcă, Adrian Ionuţ Nicoară, Mihai Alexandru Eftimie, Vasile-Adrian Surdu, *Procedeu de obţinere a unor nanostructuri unidimensionale de $BaTiO_3$ dopat cu ceriu cu caracteristici feroelectrice şi piezoelectrice (Preparation of trivalent cerium-doped unidimensional nanostructure of barium titanate used as transducer, involves producing nanowires and nanotubes using e.g. barium acetate and titanium isopropoxide, depositing on substrate, and calcining)*, RO133773-B1, eliberat la data de 28.12.2021, Derwent Primary Accession Number: 2020-01884J.
2. **Adelina-Carmen Ianculescu**, Liliana Mitoşeriu, Lavinia Petronela Curecheriu, Florin Mihai Tufescu, Florin Tufescu, *Procedeu de obţinere a unui material ceramicde tip BST (Process for obtaining a BST-type ceramic material)*, Brevet de inventie nr. RO125528-B1 eliberat la data de 28.12.2012, Derwent Primary Accession Number: 2010-J60045.
3. **Adelina-Carmen Ianculescu**, Liliana Mitoşeriu, Lavinia Petronela Curecheriu, Florin Mihai Tufescu, Florin Tufescu, *Metodă de măsurare a tunabilităţii penru materiale ceramice (Method*

for measuring tunability of ceramic materials), Brevet de inventie nr. RO125567-B1, eliberat la data de 30.05.2011, Derwent Primary Accession Number: 2011-B47458.

4. **Adelina-Carmen Ianculescu**, Liliana Mitoşeriu, Lavinia Petronela Curecheriu, Florin Mihai Tufescu, Florin Tufescu, *Dispozitiv cu ceramică de tip BST pentru măsurarea tensiunilor electrice înalte prin separare galvanică (BST ceramic device for measuring high voltages by galvanic separation*), Brevet de inventie nr. RO125566-B1, eliberat la data de 30.05.2011, Derwent Primary Accession Number: 2010-J60045.
5. **Adelina-Carmen Ianculescu**, Georgeta Voicu, Daniela-Cristina Berger, Liliana Mitoşeriu, Felicia Prihor *Procedeu de preparare prin tehnologie ceramică a soluţiilor solide de $BiFeO_3$-$BaTiO_3$ de înaltă puritate, cu pierderi dielectrice mici şi caracteristici feromagnetice la temperatura camerei (Process of preparation by ceramic technology of high purity $BiFeO_3$-$BaTiO_3$ solid solutions, with low dielectric losses and ferromagnetic characteristics at room temperature),* Brevet de invenţie nr. RO123236-B1 eliberat la data de 30.03.2011, Derwent Primary Accession Number: 2011-E11079.
6. Lucian Pintilie, Ioana Pintilie, **Adelina-Carmen Ianculescu**, *Ceramică masivă feroelectrică cu proprietăţi îmbunătăţite pentru detecţia piroelectrică prin gradient de concentraţie (Massive ferroelectric ceramics with improved properties for pyroelectric detection by concentration gradient)*, Brevet de invenţie nr. RO132197-B1 eliberat la data de 30.06.2020, Derwent Primary Accession Number: 2017-73426G.
7. Maria Crişan, Mălina Cristi Sultana Răileanu, Dorel Crişan, Nicolae Drăgan, Ines Niţoi, **Adelina Ianculescu**, Mihai Anastasescu, Virgil Marinescu, *Procedeu de obţinere a unui fotocatalizator de dioxid de titan sub formă de film sau pulbere şi fotocatalizatorul astfel obţinut (Water purifying photocatalyst and its preparation process, in which the photocatalyst is presented as a titanium dioxide thin film or powder)*, Brevet de invenţie nr. RO125151-B1 eliberat la data de 26.02.2016, Derwent Primary Accession Number: 2010-J59792.
8. Oana Carp, Diana Beatrice Vişinescu, Greta Mihaela Socoteanu, Alina Jurcă, Mădălina Tudose, Bogdan Jurcă, Claudiu Octavian Mazilu, Carmen Ştefanescu, A. Cucoş, Petru Budrugeac, **Adelina-Carmen Ianculescu**, *Procedeu de obtinere a oxizilor metalici simpli si complecşi (Process for preparing simple and complex metal oxides)*, Brevet de invenţie nr. RO126757-B1, eliberat la data de 30.07.2013, Derwent Primary Accession Number: 2011-Q12852.
9. Ines Nițoi, Cristiana Cosma, Laurențiu Răzvan Dinu, Maria Crișan, Petruța Oancea, **Adelina Carmen Ianculescu**, Lucian Alexandru Constantin, Nicolae Ionuț Cristea,, *Procedeu de epurare avansată a apelor reziduale impurificate cu 2,4,6 - trinitrotoluen (Process for advanced purification of waste water polluted with 2,4,6-trinitrotoluene)*, RO132482-A2, Derwent Primary Accession Number: 2018-33448T
10. Ion Poeată, Alexandru Chiriac, Ion Mihăilescu, Gabriel Socol, Liviu Duţă, Andrei Popescu, Felix Sima, Marimona Miroiu, George Stan, Ştefana Petrescu, **Adelina-Carmen Ianculescu,** *Mesa de Ti cu suprafaţa biofuncţionalizata cu straturi subţiri nanostructurate de hidroxiapatită pentru cranioplastie (Mesh made of Ti with biofunctionalized surface with nanostructured hydroxyapatite thin films for cranioplasty)*, Brevet de invenţie nr. RO128190-B1 eliberat la data de 30.04.2014, Derwent Primary Accession Number: 2013-F59993.

11. L. Pintilie, I. Pintilie, M. Botea, A. Iuga, M. Cioca, **A. C. Ianculescu**, D. V. Ofrim, D. M. Ofrim. B. Ofrim, *Detector piroelectric pe baza de ceramica cu gradient planar de concentratie si amplificator universal de semnal piroelectric pentru modul de lucru in tensiune (Pyroelectric detector based on ceramics with planar concentration gradient and universal pyroelectric signal amplifier for voltage mode)*, Brevet de invenţie nr. RO132446-B1; eliberat la data de 28.06.2024, Derwent Primary Accession Number: 2018-247017.