

## LISTA COMPLETĂ DE LUCRĂRI

### (1) lista celor maximum 10 lucrări considerate de candidat a fi cele mai relevante

1. Marius Andrei Olariu, Tudor Alexandru Filip, Catalina Anisoara Peptu and **Ina Turcan**, *Screen-printed interdigitated microelectrodes employment in dielectrophoretic manipulation of MWCNTs*, Microchim Acta 2023, 190, 453, ISSN: 0026-3672. **F.I. = 5,7 (Q1) (autor corespondent)**  
<https://doi.org/10.1007/s00604-023-06023-3>
2. Marius Andrei Olariu, Catalin Tucureanu, Tudor Alexandru Filip, Iuliana Caras, Aurora Salageanu, Valentin Vasile, Marioara Avram, Bianca Tincu, and **Ina Turcan**, *HT-29 Colon Cancer Cell Electromanipulation and Assessment Based on Their Electrical Properties*, Micromachines 2022, 13, 1833, ISSN: 2072-666X. **F.I. = 3,4 (Q2) (autor corespondent)**  
<https://doi.org/10.3390/mi13111833>
3. **Ina Turcan**, Iuliana Caras, Thomas Gabriel Schreiner, Catalin Tucureanu, Aurora Salageanu, Valentin Vasile, Marioara Avram, Bianca Tincu, and Marius Andrei Olariu, *Dielectrophoretic and Electrical Impedance Differentiation of Cancerous Cells Based on Biophysical Phenotype*, Biosensors 2021, 11, 401, ISSN: 2079-6374. **F.I. = 5,743 (Q1)**  
<https://doi.org/10.3390/bios11100401>
4. Tiberiu Roman, Daniel Ghercă, Adrian-Iulian Borhan, Marian Grigoraş, George Stoian, Nicoleta Lupu, **Ina Turcan**, Nicanor Cimpoesu, Bogdan Istrate, Ioana Radu, Raluca-Ştefania Dănilă, Aurel Pui, *Nanostructured quaternary  $Ni_{1-x}Cu_xFe_{2-y}Ce_yO_4$  complex system: Cerium content and copper substitution dependence of cation distribution and magnetic-electric properties in spinel ferrites*, Ceramics International, Volume 47, 2021, 13, 18177-18187, ISSN: 0272-8842. **F.I. = 5,532 (Q1)**  
<https://doi.org/10.1016/j.ceramint.2021.03.136>
5. Abd Elmadjid, Khiat, Felicia Gheorghiu, Mokhtar Zerdali, **Ina Turcan**, and Saad Hamzaoui, *Structural, Magnetic, Dielectric and Piezoelectric Properties of Multiferroic  $PbTi_{1-x}Fe_xO_{3-\delta}$  Ceramics*, Materials 2021, 14, 927, ISSN: 1996-1944. **F.I. = 3,748 (Q1)**  
<https://doi.org/10.3390/ma14040927>
6. **Ina Turcan** and Marius Andrei Olariu, *Dielectrophoretic Manipulation of Cancer Cells and Their Electrical Characterization*, ACS Combinatorial Science 2020, 22 (11), 554-578, ISSN: 2156-8944. **F.I. = 3,784 (Q1)**  
<https://doi.org/10.1021/acscombsci.0c00109>
7. Vlad Alexandru Lukacs, **Ina Turcan**, Leontin Padurariu, Lavinia Curecheriu, Adrian Cernescu, George Stoian, Cristina Elena Ciomaga, Florin Tufescu, Nicoleta Lupu, Liliana Mitoseriu, *Nonlinear dielectric properties of  $BaTiO_3$  - Silver composites: The role of microstructure*, Journal of Alloys and Compounds, Volume 817, 2020, 153336, ISSN: 0925-8388. **F.I. = 5,316 (Q1) (prim autor, specificat în articol)**  
<https://doi.org/10.1016/j.jallcom.2019.153336>
8. Cristina E. Ciomaga, Mirela Airimioaei, **Ina Turcan**, Alexandru V. Lukacs, Sorin Tascu, Marian Grigoras, Nicoleta Lupu, Juras Banys, Liliana Mitoseriu, *Functional properties of*

*percolative CoFe<sub>2</sub>O<sub>4</sub>-PbTiO<sub>3</sub> composite ceramics*, Journal of Alloys and Compounds, Volume 775, 2019, 90-99, ISSN: 0925-8388. F.I. = 4,65 (Q1)

<https://doi.org/10.1016/j.jallcom.2018.10.088>

9. Ina Turcan, Vlad Alexandru Lukacs, Lavinia Curecheriu, Leontin Padurariu, Cristina Elena Ciomaga, Mirela Airimioaei, George Stoian, Nicoleta Lupu, Liliana Mitoseriu, *Microstructure and dielectric properties of Ag-BaTiO<sub>3</sub> composite ceramics*, Journal of the European Ceramic Society, Volume 38, 16, 2018, 5420-5429, ISSN: 0955-2219. F.I. = 4,029 (Top 1)  
<https://doi.org/10.1016/j.jeurceramsoc.2018.08.002>
10. Oana Condurache, Ina Turcan, Lavinia Curecheriu, Cristina Ciomaga, Petronel Postolache, Gabriela Ciobanu, Liliana Mitoseriu, *Towards novel functional properties by interface reaction in mixtures of BaTiO<sub>3</sub>-Fe<sub>2</sub>O<sub>3</sub> composite ceramics*, Ceramics International, Volume 43, 1, 2017, 1098-1105, ISSN: 0272-8842. F.I. = 3,057 (Q1)  
<https://doi.org/10.1016/j.ceramint.2016.10.047>

**(2) teza de doctorat**

1. *Ceramici compozite cu proprietăți multifuncționale*, 2021, 154 pag., Universitatea “Alexandru Ioan Cuza” din Iași, coordonator științific: Prof. univ. dr. Liliana Mitoșeriu

**(3) brevete de invenție și alte titluri de proprietate industrială**

1. Olariu Marius Andrei, Turcan Ina, Scarlatache Vlad-Andrei, *Platformă microfluidică și procedeu de electromanipulare și caracterizare a celulelor cancerioase pe baza proprietăților electrice*, Cerere de brevet nr. A/00598/30.09.2021 depusă la OSIM  
[https://www.osim.ro/images/Publicatii/Inventii/2023/inv\\_03\\_2023.pdf](https://www.osim.ro/images/Publicatii/Inventii/2023/inv_03_2023.pdf)

**(4) articole/studii in extenso, publicate în reviste cotate ISI cu factor de impact**

1. Marius Andrei Olariu, Tudor Alexandru Filip, Catalina Anisoara Peptu and Ina Turcan, *Screen-printed interdigitated microelectrodes employment in dielectrophoretic manipulation of MWCNTs*, Microchim Acta 2023, 190, 453, ISSN: 0026-3672 (WOS:001087886700001). F.I. = 5,7 (Q1) (autor corespondent)  
<https://doi.org/10.1007/s00604-023-06023-3>
2. Diana Serbezeanu, Cornelius Hameciuc, Tăchiță Vlad-Bubulac, Alina-Mirela Ipate, Gabriela Lisa, Ina Turcan, Marius Andrei Olariu, Ion Anghel, and Dana Maria Preda, *Flame-Resistant Poly(vinyl alcohol) Composites with Improved Ionic Conductivity*, Membranes 2023, 13, 636, ISSN: 2077-0375 (WOS:001038925500001). F.I. = 4,2 (Q2)  
<https://doi.org/10.3390/membranes13070636>
3. Marius Andrei Olariu, Catalin Tucureanu, Tudor Alexandru Filip, Iuliana Caras, Aurora Salageanu, Valentin Vasile, Marioara Avram, Bianca Tincu, and Ina Turcan, *HT-29 Colon Cancer Cell Electromanipulation and Assessment Based on Their Electrical Properties*, Micromachines 2022, 13, 1833, ISSN: 2072-666X (WOS:000881209100001). F.I. = 3,4 (Q2) (autor corespondent)  
<https://doi.org/10.3390/mi13111833>

4. Ioana Radu, **Ina Turcan**, Alexandru V. Lukacs, Tiberiu Roman, Georgiana-Andreea Bulai, Marius Andrei Olariu, Ioan Dumitru, Aurel Pui, *Structural, dielectric and gas sensing properties of gadolinium (Gd<sup>3+</sup>) substituted zinc-manganese nanoferrites*, Polyhedron, Volume 221, 2022, 115893, ISSN: 0277-5387 (WOS:000800442100007). F.I. = 2,6 (Q3)  
<https://doi.org/10.1016/j.poly.2022.115893>
5. Schreiner, Thomas Gabriel, **Ina Turcan**, Marius Andrei Olariu, Romeo Cristian Ciobanu, and Maricel Adam, *Liquid Biopsy and Dielectrophoretic Analysis—Complementary Methods in Skin Cancer Monitoring*, Appl. Sci. 2022, 12, 3366, ISSN: 2076-3417 (WOS:000782006000001). F.I. = 2,7 (Q3)  
<https://doi.org/10.3390/app12073366>
6. **Ina Turcan**, Iuliana Caras, Thomas Gabriel Schreiner, Catalin Tucureanu, Aurora Salageanu, Valentin Vasile, Marioara Avram, Bianca Tincu, and Marius Andrei Olariu, *Dielectrophoretic and Electrical Impedance Differentiation of Cancerous Cells Based on Biophysical Phenotype*, Biosensors 2021, 11, 401, ISSN: 2079-6374 (WOS:000714126300001). F.I. = 5,743 (Q1)  
<https://doi.org/10.3390/bios11100401>
7. Tiberiu Roman, Daniel Ghercă, Adrian-Iulian Borhan, Marian Grigoraş, George Stoian, Nicoleta Lupu, **Ina Turcan**, Nicanor Cimpoesu, Bogdan Istrate, Ioana Radu, Raluca-Ştefania Dănilă, Aurel Pui, *Nanostructured quaternary Ni<sub>1-x</sub>Cu<sub>x</sub>Fe<sub>2-y</sub>Ce<sub>y</sub>O<sub>4</sub> complex system: Cerium content and copper substitution dependence of cation distribution and magnetic-electric properties in spinel ferrites*, Ceramics International, Volume 47, 2021, 13,18177-18187, ISSN: 0272-8842 (WOS:000656553200005). F.I. = 5,532 (Q1)  
<https://doi.org/10.1016/j.ceramint.2021.03.136>
8. Abd Elmadjid, Khiat, Felicia Gheorghiu, Mokhtar Zerdali, **Ina Turcan**, and Saad Hamzaoui, *Structural, Magnetic, Dielectric and Piezoelectric Properties of Multiferroic PbTi<sub>1-x</sub>Fe<sub>x</sub>O<sub>3-δ</sub> Ceramics*, Materials 2021, 14, 927, ISSN: 1996-1944 (WOS:000624084700001). F.I. = 3,748 (Q1)  
<https://doi.org/10.3390/ma14040927>
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<https://doi.org/10.1021/acscombsci.0c00109>
10. Vlad Alexandru Lukacs, **Ina Turcan**, Leontin Padurariu, Lavinia Curecheriu, Adrian Cernescu, George Stoian, Cristina Elena Ciomaga, Florin Tufescu, Nicoleta Lupu, Liliana Mitoseriu, *Nonlinear dielectric properties of BaTiO<sub>3</sub> - Silver composites: The role of microstructure*, Journal of Alloys and Compounds, Volume 817, 2020, 153336, ISSN: 0925-8388 (WOS:000506166400120). F.I. = 5,316 (Q1) (prim autor, specificat în articol)  
<https://doi.org/10.1016/j.jallcom.2019.153336>

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11. Cristina E. Ciomaga, Mirela Airimioaei, **Ina Turcan**, Alexandru V. Lukacs, Sorin Tascu, Marian Grigoras, Nicoleta Lupu, Juras Banys, Liliana Mitoseriu, *Functional properties of percolative CoFe<sub>2</sub>O<sub>4</sub>-PbTiO<sub>3</sub> composite ceramics*, Journal of Alloys and Compounds, Volume 775, 2019, 90-99, ISSN: 0925-8388 (WOS:000450981100011). F.I. = 4,65 (Q1)  
<https://doi.org/10.1016/j.jallcom.2018.10.088>
12. **Ina Turcan**, Vlad Alexandru Lukacs, Lavinia Curecheriu, Leontin Padurariu, Cristina Elena Ciomaga, Mirela Airimioaei, George Stoian, Nicoleta Lupu, Liliana Mitoseriu, *Microstructure and dielectric properties of Ag-BaTiO<sub>3</sub> composite ceramics*, Journal of the European Ceramic Society, Volume 38, 16, 2018, 5420-5429, ISSN: 0955-2219 (WOS:000447117700019). F.I. = 4,029 (Q1)  
<https://doi.org/10.1016/j.jeurceramsoc.2018.08.002>
13. Oana Condurache, **Ina Turcan**, Lavinia Curecheriu, Cristina Ciomaga, Petronel Postolache, Gabriela Ciobanu, Liliana Mitoseriu, *Towards novel functional properties by interface reaction in mixtures of BaTiO<sub>3</sub>-Fe<sub>2</sub>O<sub>3</sub> composite ceramics*, Ceramics International, Volume 43, 1, 2017, 1098-1105, ISSN: 0272-8842 (WOS:000390737100026). F.I. = 3,057 (Q1)  
<https://doi.org/10.1016/j.ceramint.2016.10.047>

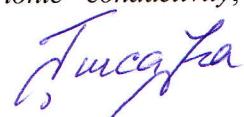
**(5) publicații în extenso, apărute în lucrări/volume ale principalelor conferințe internaționale de specialitate**

1. Tudor Alexandru Filip, **Ina Turcan**, Vlad-Andrei A Scarlatache, Alin Dragomir, Marius Andrei Olariu, *Electric Field Numerical Modeling and Simulation of V-Shaped Interdigitated Microelectrodes*, 2022 International Conference on Engineering and Emerging Technologies (ICEET), Kuala Lumpur, Malaysia, 2022, pp. 1-4  
<https://ieeexplore.ieee.org/document/10007144>

**(6) alte lucrări și contribuții științifice**

**a) Participări la conferințe internaționale**

1. Tudor-Alexandru Filip, **Ina Turcan**, Cosmin-Constantin Simota, Dragos Astanei, Marius Andrei Olariu, *Fabrication and preliminary evaluation of flexible screen-printed resistive voltage divider*, 9th International Conference on Engineering and Emerging Technologies (ICEET 2023), Octombrie 2023, Istanbul, Turcia (prezentare poster)
2. Tudor Alexandru Filip, Tăchiță Vlad-Bubulac, **Ina Turcan**, Marius Olariu, *Dielectrophoretic manipulation of MXenes flakes*, The Twenty-Fourth Annual Conference Yucomat 2023, 4-8 Septembrie 2023, Herceg Novi, Muntenegru (prezentare poster)
3. **Ina Turcan**, Tudor-Alexandru Filip and Marius Andrei Olariu, *Screen-printing interdigitated microelectrodes for dielectrophoretic alignment MWCNT-based flexible gas sensors*, 2<sup>nd</sup> International Conference on Sustainable Chemical & Environmental Engineering, Iunie 2023, Limassol, Cipru (prezentare poster)
4. Tudor-Alexandru Filip, C. Hamciuc, Tăchiță Vlad-Bubulac, Ina Turcan, M. Olariu, *Dielectric properties of polyvinyl alcohol composites with improved ionic conductivity*, 23rd



Conference on Material Science, YUCOMAT 2022, Herceg Novi, Montenegro (prezentare poster)

5. Ina Turcan, Tudor-Alexandru Filip and Marius Andrei Olariu, *Optimal geometrical conceptualization of IDEs for biosensors development based on multiphysics modeling and simulation*, 14th International Conference on Physics of Advanced Materials (ICPAM-14), 8-15 Septembrie 2022, Dubrovnik, Croatia (prezentare poster)
6. Tudor-Alexandru Filip, Ina Turcan, Vlad Andrei Scarlatache, Marius Andrei Olariu, *In-depth critical review on importance of optimal design parametrization of CE vs. WE dimensional ratio*, 5th International Conference of the Doctoral School, 18 – 20 mai 2022, "Gheorghe Asachi" Technical University of Iasi, Romania (prezentare orală)
7. Ina Turcan, Marius Olariu, *Dielectrophoretic manipulation and electrical characterization of cancer cells*, IEEE Magnetics Society Chapter of the Romania Section, 21-22 iulie 2021, Iasi, România (prezentare poster)
8. Thomas Schreiner, Ina Turcan, Marius Olariu, "Evaluation of dielectric parameters of biological cells on the basis of broadband dielectric spectroscopy", 4th International Conference of the Doctoral School, May 19 - 21, 2021, "Gheorghe Asachi" Technical University of Iasi, Romania (prezentare orală)
9. Ina Turcan, Catalin Tucureanu, Iuliana Caras, Nita I, Valentin Vasile, Aurora Sălăgeanu, Olariu Marius Andrei, *Optimizing dielectrophoresis for circulating tumor cells analysis: influence of suspending medium*, 2nd World Congress on Biosensors and Bioelectronics, Biosensors 2019, 27 November 27-28, Singapore City (prezentare poster)
10. Ina Turcan, Lavinia Curecheriu, Leontin Padurariu and Liliana Mitoseriu, *Ag-BaTiO<sub>3</sub> composite ceramics with multiple percolative behavior*, 13th Conference for Young Sciences in Ceramics (CYSC-2019), 16-19 Octombrie 2019, Novi Sad, Serbia (prezentare orală);
11. Leontin Padurariu, Ina Turcan, Alexandru Lukacs, Adrian Cernescu, Lavinia Curecheriu, Cristina Ciomaga, George Stoian, Nicoleta Lupu, Liliana Mitoseriu, *The role of composition on the dielectric and ferroelectric properties of Ag-BaTiO<sub>3</sub> composites: experiment and modeling*, Joint ISAF-ICE-EMF-IWPM-PFM Conference - 2019 f2cπ2, 14-19 iulie 2019, Lausanne, Elveția (prezentare poster)
12. Ina Turcan, Vlad Alexandru Lukacs, Lavinia Curecheriu, Leontin Padurariu, Cristina Elena Ciomaga, Liliana Mitoseriu, *Exploiting the critical grain size and silver inclusions for enhancing permittivity in BaTiO<sub>3</sub> ceramics*, 16th European Inter-Regional Conference on Ceramics (CIEC16), 09-11 septembrie 2018, Torino, Italia (prezentare orală)
13. Liliana Mitoseriu, Leontin Padurariu, Lavinia Curecheriu, Cristina Ciomaga, Ina Turcan, *Local field engineering for tailoring electrical properties in ferroelectric-metallic particles composites*, Electroceramics XVI, Hasselt University, Belgia, 9-12 iulie 2018 (prezentare orală)
14. Ina Turcan, Vlad Alexandru Lukacs, Lavinia Curecheriu and Liliana Mitoseriu, *Enhanced permittivity in BaTiO<sub>3</sub> composites as result of silver addition and critical grain size ~1μm*,



- European Conference on Applications of Polar Dielectrics (ECAPD-2018), 25-28 iunie 2018, Moscova, Federația Rusă (prezentare orală)
- 15. Vlad-Alexandru Lukacs, **Ina Turcan**, Mirela Airimioaei, Lavinia Curecheriu, Liliana Mitoseriu, *Grain size effect on dielectric properties of submicron ranged BaTiO<sub>3</sub> ceramics*, European Conference on Applications of Polar Dielectrics (ECAPD-2018), 25-28 iunie 2018, Moscova, Federația Rusă (prezentare poster)
  - 16. Lavinia Curecheriu, **Ina Turcan**, Vlad Alexandru Lukacs, Leontin Padurariu, Cristina Elena Ciomaga, George Stoian, Nicoleta Lupu and Liliana Mitoseriu, *Preparation and dielectric properties of Ag-BaTiO<sub>3</sub> composite ceramics*, 7th International Congress on Ceramics (ICC7-2018), 17-21 iunie 2018, Foz do Iguaçu, Brazilia (prezentare poster)
  - 17. **Ina Turcan**, Vlad Alexandru Lukacs, Lavinia Curecheriu, Cristina Ciomaga, Petronel Postolache, Liliana Mitoseriu, S. Balciunas and Juras Banys, *Novel functional properties of BaTiO<sub>3</sub>-ferrite magnetoelectric composites*, 12th Conference for Young Sciences in Ceramics (CYSC-2017), 18-21 octombrie 2017, Novi Sad, Serbia (prezentare orală)
  - 18. **Ina Turcan**, Vlad Alexandru Lukacs, Lavinia Curecheriu, Cristina Ciomaga, Petronel Postolache, Liliana Mitoseriu, S. Balciunas and Juras Banys, *Towards novel functional properties by interface reaction in BaTiO<sub>3</sub>-ferrite magnetoelectric composites*, The 2017 TO-BE Fall Meeting Towards oxide-based electronics, 11- 13 septembrie 2017, Riga, Letonia (prezentare poster)

**b) Participări la conferințe naționale**

- 1. Lidia Amarandi, Adina Breaban, Andrei Ceban, **Ina Turcan**, Cristina Ciomaga, Sorin Tascu, Lavinia Curecheriu, *Prepararea si investigarea proprietăților dielectrice și feroelectrice ale ceramicelor nanocompozite de Ag-BaTiO<sub>3</sub>*, Conferința Națională Fizica și Tehnologiile Educaționale Moderne, ediția XLVIII (FTEM 2019), 25 mai 2019, Iași, Romania (prezentare orală)
- 2. **Ina Turcan**, Vlad-Alexandru Lukacs, Lavinia Curecheriu, Leontin Padurariu, Cristina Elena Ciomaga, Liliana Mitoseriu, *Effect of silver filler on the sintering behavior and dielectric properties of BaTiO<sub>3</sub>*, Conferința Națională Fizica și Tehnologiile Educaționale Moderne, ediția XLVII (FTEM 2018), 19 mai 2018, Iași, Romania (prezentare poster)
- 3. Vlad-Alexandru Lukacs, Mirela Airimioaei, Lavinia Curecheriu, **Ina Turcan**, Liliana Mitoseriu, *Grain size influence on dielectric properties of dense BaTiO<sub>3</sub> ceramics*, Conferința Națională Fizica și Tehnologiile Educaționale Moderne, ediția XLVII (FTEM 2018), 19 mai 2018, Iași, Romania (prezentare orală)
- 4. **Ina Turcan**, Lavinia Petronela Curecheriu, Liliana Mitoșeriu, *Efectul microstructurii asupra proprietăților funcționale ale compozitului ceramic Ag-BaTiO<sub>3</sub>*, Pentagonul facultăților de fizică 2017, 24-28 iulie 2017, Oradea, România (prezentare orală – Premiul II)
- 5. **Ina Turcan**, Vlad-Alexandru Lukacs, Lavinia Curecheriu, Liliana Mitoseriu, Juras Banys, “Functional properties of BaTiO<sub>3</sub>-ferrite multiferroic composite ceramics”, Conferința Națională Fizica și Tehnologiile Educaționale Moderne, 20 mai 2017, Iași, România (prezentare poster)



Ina Turcan

6. **Ina Turcan**, Liliana Mitoseriu and Juras Banys, *Study of functional properties of  $Fe_2O_3$ - $BaTiO_3$  multiferroic composite ceramics*, 6th National Conference of Applied Physics, 26-27 noiembrie 2016, Iași, România (prezentare poster);
7. **Ina Turcan**, Vlad-Alexandru Lukacs, Liliana Mitoșeriu și Juras Banys, *Studiul proprietăților funcționale ale compozitelor multiferroice  $Fe_2O_3$ - $BaTiO_3$* , Sesiune de comunicări științifice studențești – FARPHYS 2016, 29 octombrie 2016, Iași, România (prezentare poster)
8. Roxana Stanculescu, **Ina Turcan**, Carmen Galassi și Liliana Mitoseriu, *Temperature dependence of the dielectric properties in porous ceramics*, Conferința Fizica și Tehnologiile Educaționale Moderne, organizată de Facultatea de Fizică, Universitatea “Alexandru Ioan Cuza” Iași, România, 16 – 17 mai 2014 (prezentare orală– Premiul I).

10. 01. 2024

*Turcan*