

ПРИЛОЗИ:

1. Копија дипломе о стеченом научном називу-*доктор наука-физичке науке*
2. Одлука о стицању научног звања-*научни сарадник*
3. Извештај о цитираности радова
4. Позивна писма и докази о одржаним предавањима по позиву
 - 4.1. International Conference: „International Conference of Experimental and Numerical Investigations and New Technologies“ CNN TECH 2023
 - 4.2. Позивно писмо за предавање на семинару из керамичких материјала у Универзитету у Штутгарту (University of Stuttgart IFKB)
5. Потврде за рецензије у међународним часописима
 - 5.1.Science of Sintering
 - 5.2.Ceramics International
 - 5.3.Materials Science & Engineering B
6. Чланство у научном, организационом и техничком одбору (уредништву) међународних конференција
 - 6.1.Научни одбор International Conference: „International Conference of Experimental and Numerical Investigations and New Technologies“ CNN TECH 2024
 - 6.2. Организациони одбор и технички уредник „Serbian Ceramic Society Conference/ ADVANCED CERAMICS AND APPLICATION“ и члан Српског керамичког друштва.
 - 6.3.Технички уредник књиге апстраката „Serbian Ceramic Society Conference/ ADVANCED CERAMICS AND APPLICATION“
7. Председавање на научном скупу „Serbian Ceramic Society Conference/ ADVANCED CERAMICS AND APPLICATION“ 2023.
8. Потврда о чланству у друштвима „ The American Ceramic Society“
9. Потврда о усменом излагању
10. Потврде о учешћу на пројектним задацима
 - 10.1. Пројекта ОИ 172057
 - 10.2. Билатералне сарадње са Савезном Републиком Немачком
11. Захвалнице у докторским дисертацијама
 - 11.1. Дисертација др Дарка Косановића
 - 11.2. Дисертација др Сузане Филиповић
 - 11.3. Дисертација др Јелене Живојиновић
12. Уредништво у међународном часопису
13. Међународна сарадња



Република Србија
Универзитет у Београду

Оснивач: Република Србија

Дозволу за рад број 612-00-02666/2010-04 од 12. октобра 2011.
іодине је издало Министарство просвете и науке Републике Србије

Физички факултет, Београд

Оснивач: Република Србија

Дозволу за рад број 612-00-02409/2014-04 од 8. септембра 2014. іодине је издало
Министарство просвете, науке и технолошкој развоја Републике Србије

УБ



Диплома

Адриана, Предрај, Пелеи Тагић

рођена 1. авіуіста 1984. іодине, Београд, Република Србија, уіисана ішолске
2012/2013. іодине, а дана 1. октобра 2020. іодине завршила је докторске
академске студије, шрећеі стіейена, на студијском іроіраму Физика, обима
180 (стіо осамдесеті) догова ЕСПБ са іросечном оценом 10,00 (десеті и 0/100).

Наслов докторске дисертације је: „Полимерни нанокотіозитіи на бази PVDF и механички
активіованоі іпраха ZnO, каракітеризација и іримена у MEMS ітехнолоіјама“.

На основу ішоіа издаје јој се ова дипломa о стіеченом научном називу

доктор наука - физичке науке

Број: 12666100

У Београду, 6. октобра 2021. іодине

Декан
Проф. др Иван Белча

Иван Белча

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Проф. др Владан Ђокић

Владан Ђокић

Република Србија
МИНИСТАРСТВО ПРОСВЕТЕ,
НАУКЕ И ТЕХНОЛОШКОГ РАЗВОЈА
Матични научни одбор за хемију

Број: 660-01-00002/2020-14/60

22.12.2020. године

Београд

На основу члана 27. став 1 тачка 1) и члана 76. став 5. Закона о науци и истраживањима („Службени гласник Републике Србије”, бр. 49/2019) и Правилника о поступку, начину вредновања и квантитативном исказивању научноистраживачких резултата истраживача („Службени гласник Републике Србије”, број 24/16, 21/17 и 38/17) и захтева који је поднео

Институт техничких наука САНУ

Матични научни одбор за хемију на седници одржаној 22.12.2020. године, донео је

**ОДЛУКУ
О СТИЦАЊУ НАУЧНОГ ЗВАЊА**

Др Адриана Пелеш Тадић

стиче научно звање

Научни сарадник

у области природно-математичких наука - хемија

О Б Р А З Л О Ж Е Њ Е

Институт техничких наука САНУ

утврдио је предлог број 351/1 од 17.11.2020. године на седници Научног већа и поднео захтев Матичном научном одбору за хемију број 366/1 од 27.11.2020. године за доношење одлуке о испуњености услова за избор у научно звање **Научни сарадник**.

Матични научни одбор за хемију на седници одржаној 22.12.2020. године разматрао је захтев и утврдио да именована испуњава услове из члана 76. став 5. Закона о науци и истраживањима („Службени гласник Републике Србије”, бр. 49/2019) и Правилника о поступку, начину вредновања и квантитативном исказивању научноистраживачких резултата истраживача („Службени гласник Републике Србије”, број 24/16, 21/17 и 38/17) за избор у научно звање **Научни сарадник** па је одлучио као у изреци ове одлуке.

Доношењем ове одлуке именована стиче сва права која јој на основу ње по закону припадају.

Одлуку доставити подносиоцу захтева, именованој и архиви Министарства просвете, науке и технолошког развоја у Београду.

МИНИСТАР

МАТИЧНИ НАУЧНИ ОДБОР ЗА ХЕМИЈУ

Бранко Ружић

ПРЕДСЕДНИК

Проф. др Живослав Тешић

Извештај о цитираности радова др Адриане Пелеш Тадић

на основу база података *Web of Science* и *Scopus*, 21. априла 2025.

Укупно цитата: 120

Хетероцитата: 86

H-индекс = 7

1. Peleš, A.; Aleksić, O.; Pavlović, V. P.; Djoković, V.; Dojčilo, R.; Nikolić, Z.; Marinković, F.; Mitrić, M.; Blagojević, V.; Vlahović, B.; Pavlović, V. B. Structural and Electrical Properties of Ferroelectric Poly(Vinylidene Fluoride) and Mechanically Activated ZnO Nanoparticle Composite Films. *Physica Scripta* **2018**, 93 (10). <https://doi.org/10.1088/1402-4896/aad749>.

Хетероцитати

1. Saha, S.; Chakraborty, T.; Saha, A.; Das, S.; Pramanik, G.; Pradhan, A. K.; Chakraborty, C.; Das, S.; Sutradhar, S. A Multi-Layer Design of Hexaferrite Decorated Graphene Derivatives Incorporated PVDF Nanocomposite Films; Understanding the Role of GO/rGO for Outstanding Electromagnetic Wave Absorption at Microwave Frequencies. *Carbon* **2024**, 220. <https://doi.org/10.1016/j.carbon.2024.118829>.
2. Lavanya Rath, P.; Ponraj, B.; Deepa, S. Absorption-Dominant Microwave Shielding Properties of Sn0.2Fe2.8O4-Graphite-PVDF Ternary Nanocomposite Films. *Journal of Physics D: Applied Physics* **2022**, 55 (9). <https://doi.org/10.1088/1361-6463/ac38e2>.
3. Mondal, S.; Maiti, S.; Paul, T.; Sahoo, A.; Bhattacharjee, S.; Das, N. S.; Chattopadhyay, K. K. All-Inorganic Halide Perovskite Tuned Robust Mechanical-Energy Harvester: Self Driven Posture Monitor and Power Source for Portable Electronics. *Applied Materials Today* **2022**, 26. <https://doi.org/10.1016/j.apmt.2022.101385>.
4. Meng, R. Application of Fractional Calculus to Modeling the Nonlinear Behaviors of Ferroelectric Polymer Composites: Viscoelasticity and Dielectricity. *Membranes* **2021**, 11 (6). <https://doi.org/10.3390/membranes11060409>.
5. Kornienko, V. S.; Tsipotan, A. S.; Aleksandrovsky, A. S.; Slabko, V. V. Brownian Dynamics of the Self-Assembly of Complex Nanostructures in the Field of Quasi-Resonant Laser Radiation. *Photonics and Nanostructures - Fundamentals and Applications* **2019**, 35. <https://doi.org/10.1016/j.photonics.2019.100707>.
6. Thakur, V. N.; Han, J. I. Combined Triboelectric and Piezoelectric Effect in ZnO/PVDF Hybrid-Based Fiber-Structured Nanogenerator with PDMS:Carbon Black Electrodes. *Polymers* **2022**, 14 (20). <https://doi.org/10.3390/polym14204414>.
7. Antipova, V. N.; Savin, V. V.; Ershov, P. A.; Turusheva, D. K.; Vorontsov, P. A.; Panina, L. V.; Levada, E. V.; Rodionova, V. V. Effect of Surface Properties of PVDF-Based Nanocomposites on the Viability of Mesenchymal Stem Cells. *Journal of Surface Investigation* **2024**, 18 (Suppl 1), S166–S173. <https://doi.org/10.1134/S102745102470201X>.
8. John, F. A.; Thomas, P.; Jacob, G.; Jose, A. J. Effective Interactions and Dielectric Study of Polymer Nanocomposite Thin Films of Polyvinylidene Fluoride and Graphene Oxide. *Composite Interfaces* **2024**, 31 (1), 77–97. <https://doi.org/10.1080/09276440.2023.2232979>.

9. Chacko, S. K.; Rahul, M. T.; Raneesh, B.; Vinodan, K.; Jose, J. K.; Kalarikkal, N. Enhanced Electroactive Phase, Dielectric Properties and Tuning of Bandgap in Ho³⁺ Modified PVDF-HFP Composite Films. *Journal of Polymer Research* **2022**, 29 (11). <https://doi.org/10.1007/s10965-022-03318-6>.
10. Vembuli, T.; Thiripuranthagan, S.; Kumaravel, S. Enhanced Removal of Hazardous Organic Contaminants with Advanced Visible Light-Active F-Doped TiO₂/rGO/PVDF Photocatalytic Membranes. *Journal of Alloys and Compounds* **2024**, 1005. <https://doi.org/10.1016/j.jallcom.2024.175997>.
11. Rath, R.; Kumar, P.; Unnikrishnan, L.; Mohanty, S.; Nayak, S. K. Fabrication of Highly Selective SPVDF-Co-HFP/APTES-SiO₂/Nafion Nanocomposite Membranes for PEM Fuel Cells. *Journal of Polymer Research* **2023**, 30 (4). <https://doi.org/10.1007/s10965-023-03509-9>.
12. Verma, K.; Kumar, A.; Sharma, R. Fabrication of Lead-Free PVDF/KNLTs/MWCNT Piezoelectric Nanogenerator: Role of MWCNT in the Piezoelectric Performance of Nanogenerator for Energy-Harvesting Application. *Journal of Electronic Materials* **2024**, 53 (12), 7574–7592. <https://doi.org/10.1007/s11664-024-11463-5>.
13. Singh, G.; Sharma, M.; Vaish, R. Flexible Ag@LiNbO₃/PVDF Composite Film for Piezocatalytic Dye/Pharmaceutical Degradation and Bacterial Disinfection. *ACS Applied Materials and Interfaces* **2021**, 13 (19), 22914–22925. <https://doi.org/10.1021/acsami.1c01314>.
14. Pisarenko, T.; Holečková, J. Flexible Nanofiber Separator Based on a Zinc Metal-Organic Framework; 2024; Vol. 2024, pp 308–312.
15. Mondal, S.; Paul, T.; Maiti, S.; Das, B.; Chattopadhyay, K. Human Motion Interactive Mechanical Energy Harvester Based on All Inorganic Perovskite-PVDF. *NANO ENERGY* **2020**, 74. <https://doi.org/10.1016/j.nanoen.2020.104870>.
16. Borzutzki, K.; Dong, K.; Nair, J. R.; Wolff, B.; Hausen, F.; Eichel, R.-A.; Winter, M.; Manke, I.; Brunklaus, G. Lithium Deposition in Single-Ion Conducting Polymer Electrolytes. *Cell Reports Physical Science* **2021**, 2 (7). <https://doi.org/10.1016/j.xcrp.2021.100496>.
17. Sharma, M.; Singh, G.; Vaish, R. Piezocatalysis in Ferroelectric Ba_{0.85}Ca_{0.15}Zr_{0.1}Ti_{0.9}O₃/Polyvinylidene Difluoride (PVDF) Composite Film. *Journal of Applied Physics* **2021**, 130 (8). <https://doi.org/10.1063/5.0060106>.
18. Al-Gharabli, S.; Flanc, Z.; Pianka, K.; Terzyk, A. P.; Kujawski, W.; Kujawa, J. Porcupine Quills-like-Structures Containing Smart PVDF/Chitosan Hybrids for Anti-Fouling Membrane Applications and Removal of Hazardous VOCs. *Chemical Engineering Journal* **2023**, 452. <https://doi.org/10.1016/j.cej.2022.139281>.
19. Pedroso Silva Santos, B.; Rubio Arias, J. J.; Elias Jorge, F.; Értola Pereira de Deus Santos, R.; da Silva Fernandes, B.; da Silva Candido, L.; Cesar de Carvalho Peres, A.; Gervasoni Chaves, E.; Vieira Marques, M. D. F. Preparation, Characterization and Permeability Evaluation of Poly(Vinylidene Fluoride) Composites with ZnO Particles for Flexible Pipelines. *Polymer Testing* **2021**, 94. <https://doi.org/10.1016/j.polymertesting.2021.107064>.
20. Hussein, M. M.; Saafan, S. A.; Abosheisha, H. F.; Zhou, D.; Tishkevich, D. I.; Abmiotka, N. V.; Trukhanova, E. L.; Trukhanov, A. V.; Trukhanov, S. V.; Hossain, M. K.; Darwish, M. A. Preparation, Structural, Magnetic, and AC Electrical Properties of Synthesized CoFe₂O₄ Nanoparticles and Its PVDF Composites. *Materials Chemistry and Physics* **2024**, 317. <https://doi.org/10.1016/j.matchemphys.2024.129041>.
21. Lim, W.; Joshi, B.; Ojha, D. P.; Samuel, E.; Huh, J.; Aldalbahi, A.; Periyasami, G.; An, S.; Yoon, S. S. Strain Gradient Effect in ZnWO₄-Nanorod/PVDF Piezoelectric Nanogenerators Prepared by Supersonic Cold Spraying. *Journal of Alloys and Compounds* **2025**, 1021. <https://doi.org/10.1016/j.jallcom.2025.179644>.
22. Hashemi Kachabi, G.; Noormohammadi, M.; Almasi Kashi, M.; Mohammadalizadeh, M. Structure, Morphology and Crystallization Behavior of PVDF/Co Nanowire Nanocomposites under Horizontal and Vertical Magnetic Fields. *Colloids and Surfaces A: Physicochemical and Engineering Aspects* **2025**, 705. <https://doi.org/10.1016/j.colsurfa.2024.135734>.

23. Sedlak, P.; Sobola, D.; Gajdos, A.; Dallaev, R.; Nebojsa, A.; Kubersky, P. Surface Analyses of PVDF/NMP/[EMIM][TFSI] Solid Polymer Electrolyte. *Polymers* **2021**, *13* (16). <https://doi.org/10.3390/polym13162678>.
24. Khaleel, A. K.; Abbas, L. K. Synthesis and Characterization of PVDF/PMMA/ZnO Hybrid Nanocomposite Thin Films for Humidity Sensor Application. *Optik* **2023**, 272. <https://doi.org/10.1016/j.ijleo.2022.170288>.
25. Popa, A.; Toloman, D.; Stan, M.; Stefan, M.; Radu, T.; Vlad, G.; Ulinici, S.; Baisan, G.; Macavei, S.; Barbu-Tudoran, L.; Pana, O. Tailoring the RhB Removal Rate by Modifying the PVDF Membrane Surface through ZnO Particles Deposition. *Journal of Inorganic and Organometallic Polymers and Materials* **2021**, *31* (4), 1642–1652. <https://doi.org/10.1007/s10904-020-01795-0>.
26. Sahoo, R.; Mishra, S.; Ramadoss, A.; Mohanty, S.; Mahapatra, S.; Nayak, S. K. Temperature-Dependent Dielectric Properties of Metal-Doped ZnO Nanofiller Reinforced PVDF Nanocomposites. *Materials Research Bulletin* **2020**, 132. <https://doi.org/10.1016/j.materresbull.2020.111005>.
27. Selvaraj, A.; Jeyadharman, J. Versatile Performance of Hydrophilic PVDF/CuO Nanocomposite Membranes for TDS Removal in RO Reject. *Energy Sources, Part A: Recovery, Utilization and Environmental Effects* **2024**, *46* (1), 12913–12932. <https://doi.org/10.1080/15567036.2024.2403719>.

Коцитати

28. Filipović, S.; Obradović, N.; Corlett, C.; Fahrenholtz, W. G.; Rosenschon, M.; Füglein, E.; Dojčilo, R.; Tošić, D.; Petrović, J.; Đorđević, A.; Vlahović, B.; Pavlović, V. B. Effect of the Filler Morphology on the Crystallization Behavior and Dielectric Properties of the Polyvinylidene Fluoride-Based Composite. *Journal of Applied Polymer Science* **2024**, *141* (10). <https://doi.org/10.1002/app.55040>.
29. Janićijević, A.; Filipović, S.; Sknepnek, A.; Vlahović, B.; Đorđević, N.; Kovacević, D.; Mirković, M.; Petronijević, I.; Živković, P.; Rogan, J.; Pavlović, V. B. Dielectric and Structural Properties of the Hybrid Material Polyvinylidene Fluoride-Bacterial Nanocellulose-Based Composite. *Polymers* **2023**, *15* (20). <https://doi.org/10.3390/polym15204080>.
30. Djoković, V.; Dudić, D.; Dojčilo, R.; Marinković, F. S.; Pavlović, V. P.; Pavlović, V. B.; Vlahovic, B. Toward Improved PVDF-BaTiO₃ Composite Dielectrics: Mechanical Activation of the Filler versus Filler Content. *Physica Scripta* **2023**, *98* (11). <https://doi.org/10.1088/1402-4896/acff4d>.
31. Pavlović, V. B.; Pavlović, V. P. Polymer-Ceramic Nanocomposites and Converging Technologies. In *Encyclopedia of Materials: Composites*; 2021; Vol. 2, pp 134–144. <https://doi.org/10.1016/B978-0-12-803581-8.11856-9>.
32. Pavlović, V. P.; Tošić, D.; Dojčilo, R.; Dudić, D.; Dramićanin, M. D.; Medić, M.; McPherson, M. M.; Pavlović, V. B.; Vlahovic, B.; Djoković, V. PVDF-HFP/NKBT Composite Dielectrics: Perovskite Particles Induce the Appearance of an Additional Dielectric Relaxation Process in Ferroelectric Polymer Matrix. *Polymer Testing* **2021**, 96. <https://doi.org/10.1016/j.polymertesting.2021.107093>.

Аутоцитати

33. Peleš Tadić, A.; Blagojević, V. A.; Stojanović, D.; Ostojić, S. B.; Tasić, N.; Kosanović, D.; Uskoković, P.; Pavlović, V. B. Nanomechanical Properties of PVDF–ZnO Polymer Nanocomposite. *Materials Science and Engineering: B* **2023**, 287. <https://doi.org/10.1016/j.mseb.2022.116126>.

2. Peleš, A.; Pavlović, V. P.; Filipović, S.; Obradović, N.; Mančić, L.; Krstić, J.; Mitrić, M.; Vlahović, B.; Rašić, G.; Kosanović, D.; Pavlović, V. B. Structural Investigation of Mechanically Activated ZnO Powder. *Journal of Alloys and Compounds* **2015**, *648*, 971–979. <https://doi.org/10.1016/j.jallcom.2015.06.247>.

Хетероцитати

1. Seleš, P.; Vengust, D.; Radošević, T.; Kocijan, M.; Einfalt, L.; Kurtjak, M.; Shvalya, V.; Knaflič, T.; Bernik, S.; Omerzu, A.; Podlogar, M. Altering Defect Population during the Solvothermal Growth of ZnO Nanorods for Photocatalytic Applications. *Ceramics International* **2024**, *50* (15), 26819–26828. <https://doi.org/10.1016/j.ceramint.2024.04.410>.
2. Pronin, I. A.; Averin, I. A.; Karmanov, A. A.; Yakushova, N. D.; Komolov, A. S.; Lazneva, E. F.; Sychev, M. M.; Moshnikov, V. A.; Korotcenkov, G. Control over the Surface Properties of Zinc Oxide Powders via Combining Mechanical, Electron Beam, and Thermal Processing. *Nanomaterials* **2022**, *12* (11). <https://doi.org/10.3390/nano12111924>.
3. Shin, J.; You, J.-M.; Lee, J. Z.; Kumar, R.; Yin, L.; Wang, J.; Shirley Meng, Y. Deposition of ZnO on Bismuth Species towards a Rechargeable Zn-Based Aqueous Battery. *Physical Chemistry Chemical Physics* **2016**, *18* (38), 26376–26382. <https://doi.org/10.1039/c6cp04566a>.
4. Carvalho, M. H.; Rizzo Piton, M.; Lemine, O. M.; Bououdina, M.; Galeti, H. V. A.; Souto, S.; Pereira, E. C.; Galvão Gobato, Y.; De Oliveira, A. J. A. Effects of Strain, Defects and Crystal Phase Transition in Mechanically Milled Nanocrystalline In₂O₃ Powder. *Materials Research Express* **2019**, *6* (2). <https://doi.org/10.1088/2053-1591/aaec62>.
5. Soni, A.; Mulchandani, K.; Mavani, K. R. Effects of Substrates on the Crystalline Growth and UV Photosensitivity of Glancing Angle Deposited Porous ZnO Nanostructures. *Sensors and Actuators, A: Physical* **2020**, *313*. <https://doi.org/10.1016/j.sna.2020.112140>.
6. Ivanova, D.; Kolev, H.; Stefanov, B. I.; Kaneva, N. Enhanced Tribodegradation of a Tetracycline Antibiotic by Rare-Earth-Modified Zinc Oxide. *Molecules* **2024**, *29* (16). <https://doi.org/10.3390/molecules29163913>.
7. Filippov, I. A.; Karmanov, A. A.; Yakushova, N. D.; Gurin, E. I.; Komolov, A. S.; Pronin, I. A. Investigation of the Parameters of the Zinc Oxide Band Structure under High-Energy Mechanical Grinding. *Crystallography Reports* **2024**, *69* (7), 1162–1168. <https://doi.org/10.1134/S106377452460162X>.
8. Marzuki, M.; Rusdi, N. M.; Zain, M. Z. M.; Izaki, M. Multi-Staged Sol–Gel Synthesis of Mg Doped ZnO/CuO Core-Shell Heterojunction Nanocomposite: Dopant Induced and Interface Growth Response. *Journal of Sol-Gel Science and Technology* **2021**, *100* (3), 388–403. <https://doi.org/10.1007/s10971-021-05679-8>.
9. Rinaudo, M. G.; López González, M. K.; Cadús, L. E.; Morales, M. R. On the Scope of Mechanochemical Activation: The Case of Cu/ZnO Catalytic Systems. *Journal of Physics and Chemistry of Solids* **2023**, *183*. <https://doi.org/10.1016/j.jpcs.2023.111661>.
10. Türemiş, M.; Keskin, I. Ç.; Katı, M. I.; Kibar, R.; Şirin, K.; Çanlı, M.; Çorumlu, V.; Çetin, A. Optimizing Optical and Structural Properties of Nanocomposites by ZnO and BP-3. *Russian Journal of Physical Chemistry A* **2018**, *92* (9), 1762–1771. <https://doi.org/10.1134/S0036024418090315>.
11. Brankov, M.; Locharoenrat, K. Photostability Testing for Coumarin-153 Doped ZnO Thin Films Prepared with Spin-Coating Technique. *Ukrainian Journal of Physical Optics* **2016**, *17* (2), 75–80. <https://doi.org/10.3116/16091833/17/2/75/2016>.
12. Locharoenrat, K. *Research Methodologies for Beginners*; Research Methodologies for Beginners; 2017; p 323.
13. Yakushova, N. D.; Pronin, I. A.; Averin, I. A.; Vishnevskaya, G. V.; Sychev, M. M.; Levitsky, V. S.; Karmanov, A. A.; Moshnikov, V. A. Research of Structural Properties of Zinc Oxide Nanopowders Obtained by High-

Energy Mechanical Milling (Attritor) Using Raman Spectroscopy; 2017; Vol. 872.

<https://doi.org/10.1088/1742-6596/872/1/012032>.

14. Marković, S.; Stanković, A.; Dostanić, J.; Veselinović, L.; Mančić, L.; Škapin, S. D.; Dražić, G.; Janković-Častvan, I.; Uskoković, D. Simultaneous Enhancement of Natural Sunlight- and Artificial UV-Driven Photocatalytic Activity of a Mechanically Activated ZnO/SnO₂ Composite. *RSC Advances* **2017**, 7 (68), 42725–42737. <https://doi.org/10.1039/c7ra06895f>.
15. Ivanova, D.; Kolev, H.; Stefanov, B. I.; Kaneva, N. ZnO and ZnO/Ce Powders as Tribocatalysts for Removal of Tetracycline Antibiotic. *Inorganics* **2024**, 12 (9). <https://doi.org/10.3390/inorganics12090244>.

Коцитати

16. Živojinović, J.; Pavlović, V. P.; Kosanović, D.; Marković, S.; Krstić, J.; Blagojević, V. A.; Pavlović, V. B. The Influence of Mechanical Activation on Structural Evolution of Nanocrystalline SrTiO₃ Powders. *Journal of Alloys and Compounds* **2017**, 695, 863–870. <https://doi.org/10.1016/j.jallcom.2016.10.159>.

Аутоцитати

17. Peleš, A.; Aleksić, O.; Pavlović, V. P.; Djoković, V.; Dojčilo, R.; Nikolić, Z.; Marinković, F.; Mitrić, M.; Blagojević, V.; Vlahović, B.; Pavlović, V. B. Structural and Electrical Properties of Ferroelectric Poly(Vinylidene Fluoride) and Mechanically Activated ZnO Nanoparticle Composite Films. *Physica Scripta* **2018**, 93 (10). <https://doi.org/10.1088/1402-4896/aad749>.
18. Peleš Tadić, A.; Blagojević, V. A.; Stojanović, D.; Ostojić, S. B.; Tasić, N.; Kosanović, D.; Uskoković, P.; Pavlović, V. B. Nanomechanical Properties of PVDF–ZnO Polymer Nanocomposite. *Materials Science and Engineering: B* **2023**, 287. <https://doi.org/10.1016/j.mseb.2022.116126>.

3. Djurić, Z.; Jokić, I.; Peleš, A. Fluctuations of the Number of Adsorbed Molecules Due to Adsorption-Desorption Processes Coupled with Mass Transfer and Surface Diffusion in Bio/Chemical MEMS Sensors. *Microelectronic Engineering* **2014**, 124, 81–85. <https://doi.org/10.1016/j.mee.2014.06.001>.

Хетероцитати

1. Karparvarfard, S. M. H.; Asghari, M.; Vatankhah, R. A Geometrically Nonlinear Beam Model Based on the Second Strain Gradient Theory. *International Journal of Engineering Science* **2015**, 91, 63–75. <https://doi.org/10.1016/j.ijengsci.2015.01.004>.
2. Yayli, M.; Kandemir, S.; Çerçevik, A. A Practical Method for Calculating Eigenfrequencies of a Cantilever Microbeam with the Attached Tip Mass. *JOURNAL OF VIBROENGINEERING* **2016**, 18 (5), 3070–3077. <https://doi.org/10.21595/jve.2016.16636>.
3. Yayli, M. Ö.; Kandemir, S. Y.; Çerçevik, A. E. A Practical Method for Calculating Eigenfrequencies of a Cantilever Microbeam with the Attached Tip Mass. *Journal of Vibroengineering* **2016**, 18 (5), 3070–3077. <https://doi.org/10.21595/jve.2016.16636>.
4. Vahidi-Moghaddam, A.; Rajaei, A.; Ayati, M.; Vatankhah, R.; Hairi-Yazdi, M. R. Adaptive Prescribed-Time Disturbance Observer Using Nonsingular Terminal Sliding Mode Control: Extended Kalman Filter and Particle Swarm Optimization. *IET Control Theory and Applications* **2020**, 14 (19), 3301–3311. <https://doi.org/10.1049/iet-cta.2020.0259>.
5. Jakšić, O. Affinity Biosensing: Modeling of Adsorption Kinetics and Fluctuation Dynamics. In *Lecture Notes in Electrical Engineering*; 2023; Vol. 989, pp 225–244. https://doi.org/10.1007/978-981-19-8714-4_12.

6. Aćimović, S. S.; Šípová-Jungová, H.; Emilsson, G.; Shao, L.; Dahlin, A. B.; Käll, M.; Antosiewicz, T. J. Antibody–antigen Interaction Dynamics Revealed by Analysis of Single-Molecule Equilibrium Fluctuations on Individual Plasmonic Nanoparticle Biosensors. *ACS Nano* **2018**, *12* (10), 9958–9965. <https://doi.org/10.1021/acsnano.8b04016>.
7. Alsubaie, H.; Yousefpour, A.; Alotaibi, A.; Alotaibi, N. D.; Jahanshahi, H. Fault-Tolerant Terminal Sliding Mode Control with Disturbance Observer for Vibration Suppression in Non-Local Strain Gradient Nano-Beams. *Mathematics* **2023**, *11* (3). <https://doi.org/10.3390/math11030789>.
8. Bilgic, A.; Cimen, A.; Kursunlu, A. N.; Karapinar, H. S. Novel Fluorescent Microcapsules Based on Sporopollenin for Removal and Detection of Cu (II) Ions in Aqueous Solutions: Eco-Friendly Design, Fully Characterized, Photophysical&physicochemical Data. *Microporous and Mesoporous Materials* **2022**, 330. <https://doi.org/10.1016/j.micromeso.2021.111600>.
9. Negi, S.; Mittal, P.; Kumar, B.; Juneja, P. K. Organic LED Based Light Sensor for Detection of Ovarian Cancer. *Microelectronic Engineering* **2019**, 218. <https://doi.org/10.1016/j.mee.2019.111154>.
10. Sovilj, P.; Vujičić, B.; Sokola, M.; Pejić, D.; Beljić, Ž.; Mitrović, Z. Stochastic Measurement of Noise True Rms Using Two-Bit Flash A/D Converters. *Tehnicki Vjesnik* **2017**, *24* (5), 1315–1322. <https://doi.org/10.17559/TV-20151124100705>.

Коцитати

11. Jokić, I.; Jakšić, O.; Frantlović, M.; Jakšić, Z.; Guha, K. Adsorption-Based Microsensors for Protein Detection: Influence of Protein Structural Transformations and Adsorption-Induced Analyte Depletion of the Analyzed Sample on the Sensor Noise. *Microsystem Technologies* **2025**, *31* (2), 559–567. <https://doi.org/10.1007/s00542-024-05837-2>.
12. Jakšić, O.; Jokić, I.; Frantlović, M.; Randjelović, D.; Tanasković, D.; Lazić, Z.; Vasiljević-Radović, S. Joint Effect of Heterogeneous Intrinsic Noise Sources on Instability of MEMS Resonators. *Electronics* **2015**, *19* (2), 59–65. <https://doi.org/10.7251/ELS1519059j>.
13. Jokić, I.; Djurić, Z.; Radulović, K.; Frantlović, M.; Milovanović, G. V.; Krstajić, P. M. Stochastic Time Response and Ultimate Noise Performance of Adsorption-based Microfluidic Biosensors. *Biosensors* **2021**, *11* (6). <https://doi.org/10.3390/bios11060194>.

4. Peleš Tadić, A.; Blagojević, V. A.; Stojanović, D.; Ostojić, S. B.; Tasić, N.; Kosanović, D.; Uskoković, P.; Pavlović, V. B. Nanomechanical Properties of PVDF–ZnO Polymer Nanocomposite. *Materials Science and Engineering: B* **2023**, 287. <https://doi.org/10.1016/j.mseb.2022.116126>.

Хетероцитати

1. Lou, P.; Bi, Z.; Shang, G. Accurate Detection of Subsurface Microcavity by Bimodal Atomic Force Microscopy. *Nanotechnology* **2024**, *35* (35). <https://doi.org/10.1088/1361-6528/ad544e>.
2. Wypych, G. *Encyclopedia of Polymer and Rubber Additives*; Encyclopedia of Polymer and Rubber Additives; 2024; p 572. <https://doi.org/10.1016/C2023-0-00637-9>.
3. Li, Z.; Roscow, J.; Khanbareh, H.; Haswell, G.; Bowen, C. Energy Harvesting from Water Flow by Using Piezoelectric Materials. *Advanced Energy and Sustainability Research* **2024**, *5* (5). <https://doi.org/10.1002/aesr.202300235>.
4. Pan, H.; Weng, L.; Wang, X.; Zhang, X.; Guan, L.; Shi, J. Enhanced Dielectric Properties of Poly(Vinylidene Fluoride-Co-Hexafluoropropylene) Composites Using Oriented ZnFe₂O₄@BaTiO₃ Rod. *Journal of Materials Science: Materials in Electronics* **2023**, *34* (5). <https://doi.org/10.1007/s10854-022-09798-y>.

5. Kaur, D.; Kumar, N.; Anand, G.; Panwar, R. S.; Madhu, C. Enhancement of Energy Storage in Nanocomposite Thin Films: Investigating PVDF-ZnO and PVDF-TZO for Improved Dielectric and Ferroelectric Characteristics. *Physica Scripta* **2024**, 99 (3). <https://doi.org/10.1088/1402-4896/ad2750>.
6. Kadir, E. S.; Gayen, R. N. Improved UV Sensitivity in Solution-Processed PVDF/ZnO Nanocomposites via Piezo-Phototronic Effect. *Materials Today Communications* **2024**, 39. <https://doi.org/10.1016/j.mtcomm.2024.109174>.
7. Abd El-Aziz, A. M.; Afifi, M. Influence the β -PVDF Phase on Structural and Elastic Properties of PVDF/PLZT Composites. *Materials Science and Engineering: B* **2024**, 301. <https://doi.org/10.1016/j.mseb.2023.117152>.
8. Song, K.; Pan, Y.-T.; Zhang, J.; Song, P.; He, J.; Wang, D.-Y.; Yang, R. Metal–Organic Frameworks–Based Flame-Retardant System for Epoxy Resin: A Review and Prospect. *Chemical Engineering Journal* **2023**, 468. <https://doi.org/10.1016/j.cej.2023.143653>.
9. Rabadanova, A.; Magomedova, A.; Aga-Tagieva, S.; Ni, V.; Salnikov, V.; Selimov, D.; Omelyanchik, A.; Rodionova, V.; Isaev, A.; Rabadanov, M.; Orudzhev, F. Morphological and Structural Aspects in PVDF/CoFe₂O₄ Membranes and Their Influence on Piezocatalytic Activity. *Polymer Engineering and Science* **2025**. <https://doi.org/10.1002/pen.27184>.
10. Wang, Z.; Zhang, S.; Shen, Z.; Zhang, Y.; Dong, Y. Preparation and Properties of WSCR&IL-PVDF Organic-Inorganic Ultrafiltration Membrane. *Chinese Journal of Environmental Engineering* **2024**, 18 (9), 2398–2408. <https://doi.org/10.12030/j.cjee.202403159>.

Коцитати

11. Janićijević, A.; Filipović, S.; Sknepnek, A.; Vlahović, B.; Đorđević, N.; Kovacević, D.; Mirković, M.; Petronijević, I.; Zivković, P.; Rogan, J.; Pavlović, V. B. Dielectric and Structural Properties of the Hybrid Material Polyvinylidene Fluoride-Bacterial Nanocellulose-Based Composite. *Polymers* **2023**, 15 (20). <https://doi.org/10.3390/polym15204080>.

5. Obradović, N.; Đorđević, N.; Peleš, A.; Filipović, S.; Mitrić, M.; Pavlović, V. B. The Influence of Compaction Pressure on the Density and Electrical Properties of Cordierite-Based Ceramics. *Science of Sintering* **2015**, 47 (1), 15–22. <https://doi.org/10.2298/SOS1501015O>.

Хетероцитати

1. Plyushch, A.; Mačiulis, N.; Sokal, A.; Grigalaitis, R.; Macutkevič, J.; Kudlash, A.; Apanasevich, N.; Lapko, K.; Selskis, A.; Maksimenko, S. A.; Kuzhir, P.; Banys, J. 0.7pb(Mg₁/3Nb₂/3)O₃-0.3PbTiO₃ Phosphate Composites: Dielectric and Ferroelectric Properties. *Materials* **2021**, 14 (17). <https://doi.org/10.3390/ma14175065>.
2. Khudyakov, O.; Vashchenko, S.; Baiul, K.; Semenov, Y.; Krot, P. Development of a Versatile Method for Predicting the Density of Monocomponent Dry Fine Materials Compacts Based on Comparative Study of Compression Factors. *Powder Technology* **2024**, 445. <https://doi.org/10.1016/j.powtec.2024.120104>.
3. Zhou, S.; Wang, F.; He, Z.; Wang, X. Effect of Element Doping on Structure and Properties of Cordierite Ceramics. *Journal of Ceramics* **2022**, 43 (2), 196–206. <https://doi.org/10.13957/j.cnki.tcx.2022.02.003>.
4. Ayala-Landeros, J. G.; Saucedo-Rivalcoba, V.; Bribiesca-Vasquez, S.; Castaño, V. M.; Martínez-Hernández, A. L.; Velasco-Santos, C. Influence of Corn Flour as Pore Forming Agent on Porous Ceramic Material Based Mullite: Morphology and Mechanical Properties. *Science of Sintering* **2016**, 48 (1), 29–39. <https://doi.org/10.2298/SOS1601029A>.
5. Pavlović, M.; Andrić, L.; Radulović, D.; Drmanić, S.; Đorđević, N.; Petrov, M. Influence of Mechanical Activation of a Cordierite –Based Filler on Sedimentation Stability of Lost Foam Refractory Coatings. *Science of Sintering* **2019**, 51 (1), 15–25. <https://doi.org/10.2298/SOS1901015P>.

Коцитати

6. Obradović, N.; Blagojević, V.; Filipović, S.; Đorđević, N.; Kosanović, D.; Marković, S.; Kachlik, M.; Maca, K.; Pavlović, V. Kinetics of Thermally Activated Processes in Cordierite-Based Ceramics. *Journal of Thermal Analysis and Calorimetry* **2019**, *138* (5), 2989–2998. <https://doi.org/10.1007/s10973-018-7924-1>.
7. Obradović, N.; Filipović, S.; Đorđević, N.; Kosanović, D.; Pavlović, V.; Olćan, D.; Đorđević, A.; Kachlik, M.; Maca, K. Microstructural and Electrical Properties of Cordierite-Based Ceramics Obtained after Two-Step Sintering Technique. *Science of Sintering* **2016**, *48* (2), 157–165. <https://doi.org/10.2298/SOS1602157O>.
8. Obradović, N.; Pavlović, V.; Kachlik, M.; Maca, K.; Olćan, D.; Đorđević, A.; Tshantshapanyan, A.; Vlahović, B.; Pavlović, V. Processing and Properties of Dense Cordierite Ceramics Obtained through Solid-State Reaction and Pressure-Less Sintering. *Advances in Applied Ceramics* **2019**, *118* (5), 241–248. <https://doi.org/10.1080/17436753.2018.1548150>.
9. Obradović, N.; Đorđević, N.; Filipović, S.; Marković, S.; Kosanović, D.; Mitrić, M.; Pavlović, V. Reaction Kinetics of Mechanically Activated Cordierite-Based Ceramics Studied via DTA. *Journal of Thermal Analysis and Calorimetry* **2016**, *124* (2), 667–673. <https://doi.org/10.1007/s10973-015-5132-9>.
10. Obradović, N.; Gigov, M.; Đorđević, A.; Kern, F.; Dmitrović, S.; Matović, B.; Đorđević, A.; Tshantshapanyan, A.; Vlahović, B.; Petrović, P.; Pavlović, V. Shungite – a Carbon-Mineral Rock Material: Its Sinterability and Possible Applications. *Processing and Application of Ceramics* **2019**, *13* (1), 89–97. <https://doi.org/10.2298/PAC1901089O>.

6. Peleš, A.; Dordević, N.; Obradović, N.; Tadić, N.; Pavlović, V. B. Influence of Prolonged Sintering Time on Density and Electrical Properties of Isothermally Sintered Cordierite-Based Ceramics. *Science of Sintering* **2013**, *45* (2), 157–164. <https://doi.org/10.2298/SOS1302157P>.

Хетероцитати

1. Naga, S. M.; Sayed, M.; El-Omla, M. M.; Wassel, A. R.; El-Mehalawy, N. Processing of Electric Ceramic Insulators from Slate Rocks and MgO. *Materials and Manufacturing Processes* **2020**, *35* (8), 893–900. <https://doi.org/10.1080/10426914.2020.1743853>.
2. Pavlović, M.; Andrić, L.; Radulović, D.; Drmanić, S.; Đorđević, N.; Petrov, M. Influence of Mechanical Activation of a Cordierite –Based Filler on Sedimentation Stability of Lost Foam Refractory Coatings. *Science of Sintering* **2019**, *51* (1), 15–25. <https://doi.org/10.2298/SOS1901015P>.
3. Sanad, M. M. S.; Rashad, M. M.; Abdel-Aal, E. A.; Powers, K. Novel Cordierite Nanopowders of New Crystallization Aspects and Its Cordierite-Based Glass Ceramics of Improved Mechanical and Electrical Properties for Optimal Use in Multidisciplinary Scopes. *Materials Chemistry and Physics* **2015**, *162*, 299–307. <https://doi.org/10.1016/j.matchemphys.2015.05.071>.

Коцитати

4. Obradović, N.; Feng, L.; Filipović, S.; Mirković, M.; Kosanović, D.; Rogan, J.; Fahrenholtz, W. G. Effect of Mechanical Activation on Carbothermal Synthesis and Densification of ZrC. *Journal of the European Ceramic Society* **2023**, *43* (16), 7306–7313. <https://doi.org/10.1016/j.jeurceramsoc.2023.08.007>.
5. Obradovic, N.; Fahrenholtz, W. G.; Corlett, C.; Filipovic, S.; Nikolic, M.; Marinkovic, B. A.; Failla, S.; Sciti, D.; Di Rosa, D.; Sani, E. Microstructural and Optical Properties of MgAl₂O₄ Spinel: Effects of Mechanical Activation, Y₂O₃ and Graphene Additions. *Materials* **2021**, *14* (24). <https://doi.org/10.3390/ma14247674>.

6. Obradović, N.; Pavlović, V.; Kachlik, M.; Maca, K.; Olćan, D.; Đorđević, A.; Tshantshapanyan, A.; Vlahović, B.; Pavlović, V. Processing and Properties of Dense Cordierite Ceramics Obtained through Solid-State Reaction and Pressure-Less Sintering. *Advances in Applied Ceramics* **2019**, *118* (5), 241–248. <https://doi.org/10.1080/17436753.2018.1548150>.
7. Obradović, N.; Fahrenholtz, W. G.; Filipović, S.; Kosanović, D.; Dapčević, A.; Đorđević, A.; Balać, I.; Pavlović, V. B. The Effect of Mechanical Activation on Synthesis and Properties of MgAl₂O₄ Ceramics. *Ceramics International* **2019**, *45* (9), 12015–12021. <https://doi.org/10.1016/j.ceramint.2019.03.095>.
8. Dordevic, N.; Obradovic, N.; Kosanovic, D.; Mitric, M.; Pavlovic, V. Sintering of Cordierite in the Presence of MoO₃ and Crystallization Analysis. *SCIENCE OF SINTERING* **2014**, *46* (3), 307–313. <https://doi.org/10.2298/SOS1403307D>.

Аутоцитати

9. Tadić, A. P.; Živojinović, J.; Pavlović, V.; Stanković, A.; Filipović, S.; Obradović, N.; Kern, F. The Influence of Mechanical Activation and Sintering Process on the Formation of the Spinel Phase of MgAl₂O₄. *Journal of the Australian Ceramic Society* **2025**. <https://doi.org/10.1007/s41779-024-01144-1>.

7. Kosanović, D.; Živojinović, J.; Obradović, N.; Pavlović, V. P.; Pavlović, V. B.; Peleš, A.; Ristić, M. M. The Influence of Mechanical Activation on the Electrical Properties of Ba_{0.77}Sr_{0.23}TiO₃ Ceramics. *Ceramics International* **2014**, *40* (8 PART A), 11883–11888. <https://doi.org/10.1016/j.ceramint.2014.04.023>.

Хетероцитати

1. Sanad, M. M. S.; El-Sadek, M. H. Porous Niobium Carbide as Promising Anode for High Performance Lithium-Ions Batteries via Cost-Effective Processing. *Diamond and Related Materials* **2022**, *121*. <https://doi.org/10.1016/j.diamond.2021.108722>.
2. Song, C.; Shi, M.; Liu, L. The Effect of SiO₂ Doping Content on Microstructure and Dielectric Properties of 0.99Ba_{0.5}Sr_{0.5}TiO₃-0.01SnO₂ Ceramics. *Ferroelectrics* **2018**, *537* (1), 61–67. <https://doi.org/10.1080/00150193.2018.1528957>.
3. Singh, L.; Kim, I. W.; Sin, B. C.; Rai, U. S.; Hyun, S. H.; Lee, Y. Combustion Synthesis of Nanostructured Ba_{0.8}(Ca,Sr)_{0.2}TiO₃ Ceramics and Their Dielectric Properties. *Ceramics International* **2015**, *41* (9), 12218–12228. <https://doi.org/10.1016/j.ceramint.2015.06.044>.

Коцитати

4. Kosanović, D. A.; Blagojević, V. A.; Labus, N. J.; Tadić, N. B.; Pavlović, V. B.; Ristić, M. M. Effect of Chemical Composition on Microstructural Properties and Sintering Kinetics of (Ba,Sr)TiO₃ Powders. *Science of Sintering* **2018**, *50* (1), 29–38. <https://doi.org/10.2298/SOS1801029K>.
5. Kosanović, D.; Blagojević, V. A.; Maričić, A.; Aleksić, S.; Pavlović, V. P.; Pavlović, V. B.; Vlahović, B. Influence of Mechanical Activation on Functional Properties of Barium Hexaferrite Ceramics. *Ceramics International* **2018**, *44* (6), 6666–6672. <https://doi.org/10.1016/j.ceramint.2018.01.078>.
6. Ristanović, Z.; Kalezić – Glišović, A.; Mitrović, N.; Đukić, S.; Kosanović, D.; Maričić, A. The Influence of Mechanochemical Activation and Thermal Treatment on Magnetic Properties of the BaTiO₃ -Fe₃O₄ Powder Mixture. *Science of Sintering* **2015**, *47* (1), 3–14. <https://doi.org/10.2298/SOS141121001R>.

Аутоцитати

7. Kosanović, D.; Blagojević, V. A.; Aleksić, S. O.; Živojinović, J.; Tadić, A. P.; Pavlović, V. B.; Obradović, N. Electronic Properties of BZT Nano-Ceramic Grades at Low Frequency Region. *Science of Sintering* **2023**, *55* (3), 413–423. <https://doi.org/10.2298/SOS230717043K>.
8. Živojinović, J.; Kosanović, D.; Blagojević, V. A.; Tadić, A. P.; Pavlović, V. P.; Tadić, N. Dielectric and Magnetic Response of Mechanically Activated Mn-Doped SrTiO₃ Ceramics. *Ceramics International* **2024**, *50* (18), 31896–31904. <https://doi.org/10.1016/j.ceramint.2024.05.487>.

H-индекс = 7 _____

8. Filipović, S.; Obradović, N.; Fahrenholtz, W. G.; Smith, S.; Mirković, M.; Peleš Tadić, A.; Petrović, J.; Đorđević, A. Spark Plasma Sintering of Magnesium Titanate Ceramics. *Ceramics International* **2024**, *50* (9), 15283–15291. <https://doi.org/10.1016/j.ceramint.2024.02.004>.

Хетероцитати

1. Solomon Godwin Babu, N. D.; Ponnamm, V.; Sharmila, S.; Nagesh Chaganti, R. V. S.; Tondepur, S. A Facile Co-Precipitation Approach for the Synthesis of High-Pure Magnesium Titanate Using Sea Water Bitterns and Titanium Tetrachloride. *Canadian Metallurgical Quarterly* **2024**. <https://doi.org/10.1080/00084433.2024.2397606>.
2. Liew, S. L.; Rafiq, N. B. M.; Ni, X. P.; Tan, S. Y.; Lim, P. C.; Wang, S. Al₂O₃ Enhanced Bi-Phase High-Entropy Ceramic Composites. *Journal of Alloys and Compounds* **2024**, *1004*. <https://doi.org/10.1016/j.jallcom.2024.175754>.
3. Jian, X.; Hu, D.; Wang, L.; Li, Y.; Zhi, L. First-Principles Study of Thermal Conductivity of Welded Interface Elements Based on Mo Interlayer SPS. *Physica B: Condensed Matter* **2025**, *699*. <https://doi.org/10.1016/j.physb.2024.416813>.
4. Dehghaniyan, S. F.; Paydar, M. H. Investigation on the Effect of Reactive (CuO) and Non-Reactive (3YSZ) Additives on Dielectric and Mechanical Properties of MgTiO₃. *Journal of Materials Science: Materials in Electronics* **2024**, *35* (29). <https://doi.org/10.1007/s10854-024-13698-8>.
5. Neelamegam David, S. G. B.; Ponnamm, V.; Tondepur, S. Preparation of Magnesium Titanate by Using Magnesium Chloride a Byproduct of Titanium Plant. *Periodica Polytechnica Chemical Engineering* **2024**, *68* (4), 582–586. <https://doi.org/10.3311/PPch.37854>.
6. Boumous, Z.; Boumous, S.; Fellah, M.; Habeeb, M.; Latreche, S.; Grigorian, S.; El-Hiti, G. Synthesis, Polarization Currents, Dielectric Constant, and Stability of Magnesium Titanate-Based Ceramics. *JOURNAL OF MATERIALS SCIENCE-MATERIALS IN ELECTRONICS* **2025**, *36* (10). <https://doi.org/10.1007/s10854-025-14673-7>.

9. Kosanović, D.; Labus, N. J.; Živojinović, J.; Tadić, A. P.; Blagojević, V. A.; Pavlović, V. B. Effects of Mechanical Activation on the Formation and Sintering Kinetics of Barium Strontium Titanate Ceramics. *Science of Sintering* **2020**, *52* (4), 371–385. <https://doi.org/10.2298/SOS2004371K>.

Хетероцитати

1. Đorđević, N.; Vlahović, M.; Mihajlović, S.; Martinović, S.; Vušović, N.; Šajić, J. L. Fourier-Transform Infrared Spectroscopy Analysis of Mechanochemical Transformation Kinetics of Sodium Carbonate to Bicarbonate. *Science of Sintering* **2022**, *54* (4), 481–494. <https://doi.org/10.2298/SOS2204481D>.

2. Corlett, C. A.; Frontzek, M. D.; Obradovic, N.; Watts, J. L.; Fahrenholtz, W. G. Mechanical Activation and Cation Site Disorder in MgAl₂O₄. *Materials* **2022**, *15* (18). <https://doi.org/10.3390/ma15186422>.
3. Obradovic, N.; Filipovic, S.; Fahrenholtz, W.; Markinkovic, B.; Rogan, J.; Levic, S.; Dordevic, A.; Parolovic, V. Morphological and Structural Characterization of MgAl₂O₄ Spinel. *SCIENCE OF SINTERING* **2023**, *55* (1), 1–10. <https://doi.org/10.2298/SOS23010010>.

Коцитати

4. Živojinović, J.; Tadić, A. P.; Kosanović, D.; Dinić, I.; Vuković, M.; Obradović, N. Photocatalytic Degradation of Tetracycline by Fe-Doped Mechanically Activated SrTiO₃ Powders in Aqueous Solution. *Science of Sintering* **2024**, *56* (4), 535–549. <https://doi.org/10.2298/SOS241011047Z>.
5. Obradović, N.; Feng, L.; Filipović, S.; Mirković, M.; Kosanović, D.; Rogan, J.; Fahrenholtz, W. G. Effect of Mechanical Activation on Carbothermal Synthesis and Densification of ZrC. *Journal of the European Ceramic Society* **2023**, *43* (16), 7306–7313. <https://doi.org/10.1016/j.jeurceramsoc.2023.08.007>.

Аутоцитати

6. Kosanović, D.; Blagojević, V. A.; Aleksić, S. O.; Živojinović, J.; Tadić, A. P.; Pavlović, V. B.; Obradović, N. Electronic Properties of BZT Nano-Ceramic Grades at Low Frequency Region. *Science of Sintering* **2023**, *55* (3), 413–423. <https://doi.org/10.2298/SOS230717043K>.

10. Kosanović, D.; Živojinović, J.; Vujančević, J.; Peleš, A.; Blagojević, V. A. Point Defects and Their Effect on Dielectric Permittivity in Strontium Titanate Ceramics. *Science of Sintering* **2021**, *53* (3), 285–299. <https://doi.org/10.2298/SOS2103285K>.

Хетероцитати

1. Hameed, T. A.; Ibrahim, R. S.; Azab, A. A. Unraveling the Impact of Potassium Doping on the Structure, Optical, and Electric Properties of CdO Nanopowder. *Physica Scripta* **2025**, *100* (4). <https://doi.org/10.1088/1402-4896/adbb94>.
2. Matijašević, S. D.; Topalović, V. S.; Savić, V. V.; Labus, N. J.; Nikolić, J. D.; Zildžović, S. N.; Grujić, S. R. The Crystal Growth of NASICON Phase from the Lithium Germanium Phosphate Glass. *Science of Sintering* **2023**, *55* (4), 539–547. <https://doi.org/10.2298/SOS220809022M>.

Коцитати

3. Živojinović, J.; Kosanović, D.; Blagojević, V. A.; Pavlović, V. P.; Tadić, N.; Vlahović, B.; Pavlović, V. B. Dielectric Properties of Mechanically Activated Strontium Titanate Ceramics. *Science of Sintering* **2022**, *54* (4), 401–404. <https://doi.org/10.2298/SOS2204401Z>.

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4. Živojinović, J.; Tadić, A. P.; Kosanović, D.; Dinić, I.; Vuković, M.; Obradović, N. Photocatalytic Degradation of Tetracycline by Fe-Doped Mechanically Activated SrTiO₃ Powders in Aqueous Solution. *Science of Sintering* **2024**, *56* (4), 535–549. <https://doi.org/10.2298/SOS241011047Z>.

11. Živojinović, J.; Kosanović, D.; Blagojević, V. A.; Tadić, A. P.; Pavlović, V. P.; Tadić, N. Dielectric and Magnetic Response of Mechanically Activated Mn-Doped SrTiO₃ Ceramics. *Ceramics International* **2024**, *50* (18), 31896–31904. <https://doi.org/10.1016/j.ceramint.2024.05.487>.

Хетероцитати

1. Xiao, Z.; Yang, W.; Zhu, J.; Sun, P.; Chen, J.; Li, Y. Porous Cube-Like SrTiO₃ Particles Self-Assembled by Primary Nanocubes with Enhanced Photodegradation Performance. *J. Electron. Mater.* **2025**, *54* (5), 3602–3608. <https://doi.org/10.1007/s11664-025-11831-9>.

12. Djuric, Z. G.; Jokic, I. M.; Peles, A. Highly Sensitive Graphene-Based Chemical and Biological Sensors with Selectivity Achievable through Low-Frequency Noise Measurement-Theoretical Considerations; 2014; pp 153–156. <https://doi.org/10.1109/MIEL.2014.6842108>.

Хетероцитати

1. Sovilj, P.; Vujičić, B.; Sokola, M.; Pejić, D.; Beljić, Ž.; Mitrović, Z. Stochastic Measurement of Noise True Rms Using Two-Bit Flash A/D Converters. *Tehnicki Vjesnik* 2017, *24* (5), 1315–1322. <https://doi.org/10.17559/TV-20151124100705>.



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March 23, 2023

Adriana Peles

Institute of Technical Science of SASA
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Invitation Letter

International Conference: „International Conference of Experimental and Numerical Investigations and New Technologies“ CNN TECH 2023

Dear Adriana Peles,

We are pleased to invite you to the “International Conference of Experimental and Numerical Investigations and New Technologies, CNN Tech 2023” scheduled from 04-07 July 2023 in Zlatibor, Serbia. This Conference will be a joint effort of the University of Belgrade, Faculty of Mechanical Engineering, Innovation Center of Faculty of Mechanical Engineering and Center for Business Trainings. This Conference will examine research and development both locally and internationally, and the Conference deliberations will be on the following themes: Mechanical Engineering, Materials Science, Chemical and Process Engineering, Experimental Techniques, Numerical Methods and New Technologies.

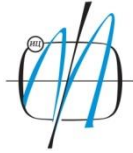
It is an honor to invite you to participate at CNN Tech 2023 Conference as invited lecturer. Taking into consideration your outstanding scientific achievements, we believe that your contribution to the Conference topic will be very beneficial.

We look forward to a positive confirmation.

Yours sincerely,

Dr Nenad Mitrovic, Associate Professor, Chairman

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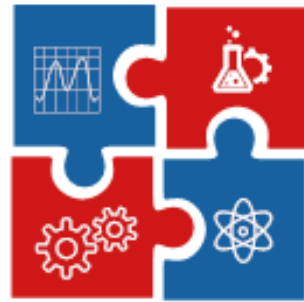
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FRACTAL ANALYSIS AND MICROSTRUCTURE DEVELOPMENT OF BaTiO_3 AND PVDF BASED MULTIFUNCTIONAL MATERIALS

Adriana Peles Tadic^{1*}, George Vukovic², Aleksandar Kojovic³, Dusica Stojanovic³, Branislav Vlahovic⁴, Natasa Milosavljevic⁵, Nina Obradovic¹, Vladimir Pavlovic⁵

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Abstract

Barium titanate (BaTiO_3) and polyvinylidene fluoride (PVDF) based multifunctional materials are attracting a great scientific interest due to their excellent piezoelectric, pyroelectric and ferroelectric properties. These materials undergo controlled transformations through physical interactions and respond to environmental stimuli, such as temperature, pressure, electric and magnetic fields. Their properties strongly depend on synthesis procedures and obtained microstructures. This include intergranular contact surfaces of BaTiO_3 based materials, as well as, porous structure and cross-linking patterns of PVDF prepared by electrospinning. It has been found that these microstructures can have fractal structure and that the fractal analysis can be used as a powerful tool for describing structural and functional properties of these materials. Having this in mind, in this research we have used different fractal methods for the reconstructions of various BaTiO_3 and PVDF microstructure morphologies. Fractal analysis has been performed by using scanning electron microscope micrographs and computational modeling tools. Fractal dimension of irregular morphologies which exhibit fractal regularity were determined by using box-counting method. This method enables the analysis of self-similar microstructure morphologies by quantifying the rate at which an object's geometrical details develop at increasingly fine scales. Theory of Iterated Function Systems and Voronoi tessellation, have been used for modeling BaTiO_3 random microstructures and PVDF porous structures. A python algorithm was created to determine the distribution of pore areas in SEM micrographs. Algorithm's distribution of calculated pore surface areas was compared with measured pore surface areas and fractal reconstructions of different morphologies and their connection with functional properties were analyzed.

Keywords:

PVDF, BaTiO_3 , Electrospinning, Fractals, Voronoi tessellation.

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Funds for the realization of this work are provided by the Ministry of Education, Science and Technological Development of the Republic of Serbia, Agreement on realization and financing of scientific research work of the Institute of Technical Sciences of SASA in 2023 (Record number: 451-03-47/2023-01/200175), Faculty of Technology and Metallurgy, University of Belgrade (Record Number: 451-03-47/2023-01/200135), University of Belgrade, Faculty of Agriculture (Record number: 451-03-47/2023-01/200116) and the National Science Foundation grants HRD-1345219 and DMR-1523617, and the Department of Energy/National Nuclear Security Administration NA0003979 award.



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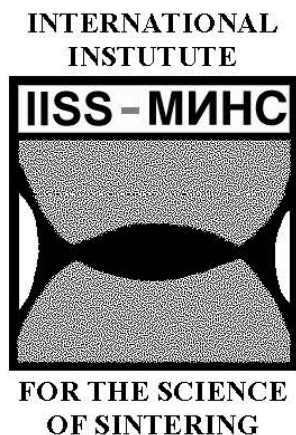
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Научном већу
Института техничких наука САНУ

Београд, април 2025. год.

Предмет: Избор др Адриане Пелеш Тадић у звање виши научни сарадник

ПОТВРДА

Овим се потврђује да је **др Адриана Пелеш Тадић**, научни сарадник Института техничких наука САНУ, **члан Српског Керамичког Друштва** (Serbian Ceramic Society) од 2012. године, које наставља традицију Југословенског Керамичког Друштва од 1997. године.

Др Адриана Пелеш Тадић је као члан организационог комитета и технички уредник учествовала у реализацији више међународних конференција „**Serbian Ceramic Society Conference - ADVANCED CERAMICS AND APPLICATION**”.

Др Адриана Пелеш Тадић је и председавајућа у секцији **Basic ceramics and sintering** (серија *Advanced Ceramics and Application* конференција).

Српско керамичко друштво

Председник

др Нина Обрадовић

Научни саветник Института техничких наука САНУ

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**Serbian Ceramic Society Conference
ADVANCED CERAMICS AND APPLICATION XI
New Frontiers in Multifunctional Material Science and Processing**

**Serbian Ceramic Society
Institute of Technical Sciences of SASA
Institute for Testing of Materials
Institute of Chemistry Technology and Metallurgy
Institute for Technology of Nuclear and Other Raw Mineral Materials**

PROGRAM AND THE BOOK OF ABSTRACTS

**Serbian Academy of Sciences and Arts, Knez Mihailova 35
Serbia, Belgrade, 18-20. September 2023.**

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It is nice to host you here in Belgrade in person. We are very proud that we succeeded in bringing the scientific community together again and fostering the networking and social interactions around an interesting program on emerging advanced ceramic topics. The chosen topics cover contributions from fundamental theoretical research in advanced ceramics, computer-aided design and modeling of new ceramics products, manufacturing of nano-ceramic devices, developing of multifunctional ceramic processing routes, etc.

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- Renewable Energy & Composites
- Amorphous & Magnetic Ceramics
- Heritage, Art & Design

⁸Institute of Technical Sciences of the Serbian Academy of Sciences and Arts, Belgrade, Serbia

⁹North Carolina Central University, Durham, NC, USA

11.20 - 11.40 INV Novel Diboride Ceramics for Extreme Environment Applications

Peter Tatarko¹, Inga Zhukova¹, Naser Hosseini¹, Salvatore Grasso²,
 Vasanthakumar Kombamuthu³, Zdeněk Chlup⁴, Alexandra Kovalčíková⁵,
 Monika Tatarková¹, Ivo Dlouhý³, Ján Dusza⁵

¹Institute of Inorganic Chemistry, Slovak Academy of Sciences, Dúbravská cesta 9, 845 36 Bratislava, Slovakia

²School of Engineering & Materials Science, Queen Mary University of London, Mile End Road, London, E1 4NS, United Kingdom

³CEMEA – Center of Excellence for Advanced Materials Applications, Slovak Academy of Sciences, 845 11 Bratislava, Slovakia

⁴Institute of Physics of Materials, Czech Academy of Sciences, Žitkova 22, 616 00 Brno, Czech Republic

⁵Institute of Materials Research, Slovak Academy of Sciences, Watsonová 47, 04001 Košice, Slovakia

11.40 - 12.00 INV Various strategies and dopants for the preparation of dense MgAl₂O₄ ceramics by SPS

Ali Talimian¹, Ali Najafzadeh², Václav Pouchlý³, Karel Maca³ and Dušan Galusek^{1, 2}

¹Centre for functional and surface-functionalized glass, TnUAD, Trenčín, Slovakia

²CETEC BUT, Brno, Czech Republic

³Joint glass centre of the IIC SAS, TnUAD and FChPT STU, Trenčín Slovakia

12.00 - 12.30 Coffee Break Hallway, 1st Floor

12.30 - 14.05 Basic Ceramics & Sintering

Chairpersons: Darko Kosanović & Adriana Peleš Tadić

12.30 – 12.50 INV Densification of Dual Phase High Entropy Boride-Carbide Ceramics by Pressureless Sintering

William G. Fahrenholtz, Steven M. Smith II, and Gregory E. Hilmas
 Materials Science and Engineering Department, Missouri University of Science and Technology Rolla, MO 65409 United States

12.50 – 13.05 ORL Optimization of processing parameters for high entropy dual phase ceramics

S. Filipovic^{1,2}, S. Smith¹, N. Obradovic^{1,2}, G. Hilmas¹, W. Fahrenholtz¹



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The 12th conference of the Serbian ceramic society "Advanced ceramics and application"
18-20, September 2024. Serbian Academy of Sciences and Arts, Kneza Mihaila 35, Belgrade, Serbia

Date	Time	Programme	Floor, Room, Address
18 th September Wednesday	08.00-09.00	Registration	2 nd Floor, Hallway
	09.00-09.30	Opening Ceremony	
	09.30-10.00	Academician S. Vukosavic (PL)	
	10.00-10.15	Award, Photo session & Short break	
	10.15-12.10	Modelling & Simulation (M. Mirkovic) S. Curtarolo (PL) S. Tidrow (PL) J. Jovanovic (INV) N. Milosavljevic (INV) I. Trajkovic (ORL)	2 nd Floor, Great Hall
	12.10-12.30	Coffee Break	2 nd Floor, Hallway
	12.30-14.15	Nano, Opto & Bio-ceramics (L. Mancic & S. Markovic) M. E. Rabanal (PL) M. Pergal (INV) J. Purenovic (INV) I. Stojkovic Simatovic (INV) Z. Stojanovic (OR)	2 nd Floor, Great Hall
	14.15-15.00	Buffet Lunch	Club SASA, Mezzanine
	15.00-16.30	Amorphous & Magnetic (N. Mitrovic & V. Paunovic) N. Novosel (PL) N. Mitrovic (INV) D. Olcan (INV) M. Mirkovic (INV & exhibition announcement)	2 nd Floor, Great Hall
	16.30-18.30	Poster Session I & Exhibition *	Club SASA, Mezzanine
19 th September Thursday	19.00-23.00	Conference dinner	Restaurant Caruso (Terazije 23/8)
	08.00-09.00	Registration	1 st Floor, Hallway
	09.00-10.00	Poster Session II**	Club SASA, Mezzanine
	10.00-12.00	Basic Ceramics & Sintering (S. Filipovic) G. Hilmas (PL) W. Fahrenholtz (PL) I. Brceski (PL) A. Peles Tadic (OR) M. Dujovic (OR)	1 st Floor, Blue Hall
	12.00-12.30	Coffee Break	1 st Floor, Hallway
	12.30-13.45	Basic Ceramics & Sintering (D. Kosanovic & N. Labus) R. Naraparaju (INV) V. Paunovic (INV) S. Filipovic (INV) S. Smith (OR)	1 st Floor, Blue Hall
	13.45-15.00	Buffet Lunch	Club SASA, Mezzanine
	15.00-16.20	Clay, Refractory & Cements (A. Terzic & M. Vasic) A. Sedmak (PL) G. Tavcar (PL) N. Mijatovic (INV)	1 st Floor, Blue Hall
	16.20-17.00	Coffee Break	1 st Floor, Hallway
	19.00-20.00	Nikola Tesla Museum	Krunska 51

*16.00-16.30 Poster Session I (Posters 1-25)

Installation Club SASA, Mezzanine

** 8.30-09.00 Poster Session II (Posters 26-50)

Installation Club SASA, Mezzanine

ORL2

AI aided biomaterials research: stabilization of selenium nanoparticles with proteins

Zoran Stojanović, Nenad Filipović, Magdalena Stevanović

Institute of Technical Sciences of SASA, Belgrade, Republic of Serbia

In the last few years, we witnessed the revolutionary development of LLMs based on various transformer architectures opening up numerous research and application possibilities of AI models everywhere. The specific architecture, the vast amount of data trained on, and broad knowledge generated within these models give them the ability to understand concepts, plan and solve different kinds of problems, including various chemistry-related tasks. In our previous work, we explored the performances of the GPT4 model on common tasks related to language models, such as text classification, information extraction and, finally, the prediction of proteins suitable for stabilization of Se nanoparticles (SeNp).

Herein we continue to explore advanced prompt-engineering techniques and extrapolate those techniques to GPT-like models available (LLama, Mistral and Claude). We benchmarked those models and compared their performances with those already tested in GPT4. We have used UniProt resources, original research, and review articles as data source and to evaluate performances of models. For data operations, interaction with models we used Python programming language and Jupyter Notebooks for demos.

The study demonstrated abilities and limitation of latest open-source LLMs in field of protein data understanding and knowledge generation in domain of SeNp stabilization and functionalization.

ORL3

The influence of mechanical activation parameters as a function of producing a Magnesium aluminate (MgAl_2O_4) spinel

Adriana Peleš Tadić¹, J. Živojinović¹, S. Marković¹, N. Tadić², S. M. Lević³, V. Pavlović³,
S. Filipović¹, N. Obradović¹

¹Institute of Technical Sciences of the Serbian Academy of Sciences and Arts, 11000 Belgrade, Serbia

²University of Belgrade, Faculty of Physics, 11000 Belgrade, Serbia

³University of Belgrade, Faculty of Agriculture, 11080 Belgrade, Serbia

Magnesium aluminate spinel (MAS) has excellent mechanical, chemical, thermal (high melting point, higher than 2100 °C) and optical properties. Also it has a low dielectric constant ($\epsilon_r \sim 8$). Based on those properties, MgAl_2O_4 has found a significant application in refractory ceramics, radomes, transparent armor, optically transparent windows, integrated electronic devices, etc. In this research, MgO was calcined at 1000°C for an hour, in order to avoid presence of hydroxide or carbonate. MgO and Al_2O_3 powders were mixed in a one-to-one molar ratio and mechanically activated for 15, 30, and 60 minute and pressed in the tablets, under the pressure of 0.5 t. The

pressed powders were heated up to 1300 °C and held for 1 h for the reaction. After that, obtained spinel powders were sintered at 1450 °C for 2 h. Both sintered and non-sintered samples were investigated by XRD, SEM, PSA and Raman spectra. All results are in accordance with our previous results, and the pure dense spinel phase is obtained. XRD shows that mechanically non-activated specimen as well as activated sintered specimens show the pure MgAl_2O_4 phase after sintering at 1450°C. Raman spectra revealed that mechanical activation leads to an increase in the degree of the exchange between Mg and Al cations, due to the introduction of defects during the milling process. The study shows that a precise setting of mechanical activation parameters enhances sinterability, phase formation and microstructure homogeneity of reaction sintered MAS ceramics.

ORL4

Anisotropic Cracking and Lack Thereof in MAX Phases

Miloš Dujović, Sahin Celik, Ankit Srivastava, Miladin Radović

Department of Materials Science and Engineering, Texas A&M University, College Station, TX
77843, USA
milosh@tamu.edu

In this work, we demonstrate that in atomically layered ceramics, such as MAX phases, crack growth is extremely anisotropic and for certain crystal orientations, no crack growth occurs even under Mode I loading. We will present the results of micromechanical testing of notched cantilever beams of chromium aluminum carbide MAX phase. The experiments are carried out for specimens with the basal (slip/cleavage) planes oriented either parallel, perpendicular or at an angle close to 45 degrees relative to the notch. The results show that when the basal planes are parallel to the notch, specimens undergo unstable cracking. However, when the basal planes are at 45 degrees with respect to the notch, no cracking occurs, and the notched samples undergo extensive crystallographic slip. In addition to the experiments, we will also present crystal plasticity finite element simulation results rationalizing experimental observations.

ORL5

Densification and Properties of High Entropy Boride-SiC-B₄C Ceramics

Steven M. Smith¹, William G. Fahrenholtz¹, Gregory E. Hilmas¹, Stefano Curtarolo^{2,3}

¹Missouri University of Science and Technology, Rolla, MO, USA

²Duke University, Department of Mechanical Engineering and Materials Science, Durham, NC, USA

³Duke University, Center of Autonomous Materials Design, Durham, NC, USA

Borides mixed with equal volume fractions of SiC and B₄C have improved properties such as higher hardness (~33 GPa at 1 kgf) and higher strength (~1 GPa) compared to the individual phases. High entropy borides have also been shown to have improved properties such as higher hardness compared to single-metal borides. The present work used (Cr, Hf, Ta, Ti, Zr)B₂ as the

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Србија

Допис о руковођењу пројектним задатком

Др Адриана Пелеш Тадић

Овим потврђујем да је у оквиру Пројекта ОИ 172057 „Усмерена синтеза, структура и својства мултифункционалних материјала“, финансираног од стране Министарства науке и технолошког развоја Републике Србије од 2011. до 2019. године, а којим сам руководио, др Адриана Пелеш Тадић руководила пројектним задатком: „Одређивање параметара синтезе, механичке активације и концентрације различитих филера и њихов утицај на електричне, пиезоелектричне и механичке карактеристике полимерних нанокомпозита на бази PVDF-а“ у периоду од 2012-2019. године.

Истраживачке активности др Адриане Пелеш Тадић су се односиле на руковођење истраживањима која су била из области развоја процедуре синтезе као и одређивање оптималног времена механичке активације различитих прахова (филера) и концентрације у полимерним нанокомпозитима, за примену у MEMC технологијама. Поред синтетисања, њен задатак је био и карактеризација добијених композита као и одређивање потенцијалне примене истих у сензорима.

Из овог пројектног задатка проистекло је неколико публикација у међународним часописима као и неколико конференцијских радова са међународних конференција.

Београд, 01.04.2025.

С поштовањем,



Проф. др Владимир Павловић

научни саветник,
Редовни професор
Пољопривредног факултета
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Србија

Допис о руковођењу пројектним задатком

Др Адриана Пелеш Тадић

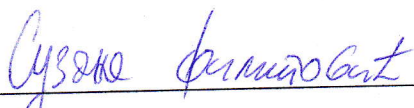
Овим потврђујем да је у оквиру пројекта билатералне сарадње између Републике Србије и Савезне Републике Немачке (број пројекта: 337-00-19/2023-01/9) „Развој магнезијум-алуминатне керамике са циљаним електричним и механичким својствима за примену у електроници“ („Development of magnesium aluminate ceramics with desired electrical and mechanical properties for electronics“), финансираног од стране Министарства науке, технолошког развоја и иновација Републике Србије од 2023. до 2024. године, а којим сам руководила, др Адриана Пелеш Тадић руководила пројектним задатком: *Одређивање параметара синтезе, механичке активације и синтеровање праха $MgAl_2O_4$ у циљу добијања спинел фазе.*

Истраживачке активности др Адриане Пелеш Тадић су се односиле на руковођење истраживањима која су била из области развоја процедуре синтезе као и одређивање оптималног времена механичке активације праха $MgAl_2O_4$ као и каснијег процеса синтеровања.

Из овог пројектног задатка проистекла је публикација у међународном часопису као и неколико конференцијских радова.

Београд, 01.04.2025.

С поштовањем,


др Сузана Филиповић

Научни саветник,

Институт техничких наука САНУ

**УНИВЕРЗИТЕТ У КРАГУЈЕВЦУ
ФАКУЛТЕТ ТЕХНИЧКИХ НАУКА ЧАЧАК**



Дарко Косановић, дипл. физ. хем.

**УТИЦАЈ ПАРАМЕТАРА СИНТЕЗЕ И
СТРУКТУРЕ НА ЕЛЕКТРИЧНА СВОЈСТВА
 $\text{Ba}_{0,77}\text{Sr}_{0,23}\text{TiO}_3$ КЕРАМИКЕ**

Докторска дисертација

У Чачку,
2013. године

Предговор

Ова докторска дисертација урађена је у оквиру пројекта ОИ 172057 "Усмерена синтеза, структура и својства мултифункционалних материјала" Министарства просвете, науке и технолошког развоја Републике Србије и пројекта Ф/198 Фонда за научна истраживања Српске академије наука и уметности.

Материјали на бази $Ba_{0,77}Sr_{0,23}TiO_3$ (BST) налазе широку примену у електроници (нпр. за вишеслојне керамичке кондензаторе, уређаје који процесирају микроталасне сигнале, меморијске елементе у DRAMs (Dynamic Random Access Memory) и у NVRAM (Non Volatile Random Access Memory) итд. Имајући ово у виду, а узимајући у обзир значај ових материјала као фероелектрика, циљ ове дисертације је проучавање зависности између синтезе, структуре и својстава материјала, на примеру механички активираниог BST. Оваква проучавања механички активираниог BST недовољно су проучена, а поменути вид активације последњих година постаје врло значајна техника за добијање нових материјала.

Докторска дисертација "Утицај параметара синтезе и структуре на електрична својства $Ba_{0,77}Sr_{0,23}TiO_3$ керамике" осмишљена је у Институту техничких наука – САНУ, Институту за мултидисциплинарна истраживања Универзитета у Београду, Институту за нуклеарне науке Винча (лабораторија за теоријску физику и физику кондензоване материје) и Факултету техничких наука у Чачку Универзитета у Крагујевцу.

Истраживања у оквиру ове докторске дисертације урађена су под непосредним руководством ментора проф. др Алексе Маричића, професора емеритуса Факултета техничких наука у Чачку Универзитета у Крагујевцу и проф. др Владимира Павловића, научног саветника Института техничких наука САНУ. Овом прилоком им захваљујем на великој и несебичној подршци, корисним дискусијама и саветима током мог истраживачког рада.

Посебну захвалност дугујем академику Момчилу М. Ристићу, редовном члану САНУ, за помоћ у мом научном развоју, а који ми је помагао саветима и током израде ове дисертације.

Такође захваљујем др Нини Обрадовић, др Небојши Митровићу и др Слободану Ђукићу (Факултет техничких наука у Чачку), на исцрпним дискусијама и сугестијама које су биле од изузетне помоћи.

Комплексност истраживања захтевала је употребу различитих метода синтезе, анализе и карактеризације материјала. Из тог разлога ова истраживања су реализована у више лабораторија и уз помоћ великог броја мојих колега. Захваљујем на сарадњи, др Миодрагу Митрићу (ИНН Винча), Александру Косановићу, др Горану Бранковићу, др Марији Весни Николић, др Ненаду Николићу и Александру Радојковићу (Институт за мултидисциплинарна истраживања-Лабораторија за материјале), др Вери П. Павловић (Машински факултет у Београду), др Војиславу Митићу (Електронски факултет у Нишу).

Драгим колегиницама и колегама из Института техничких наука САНУ, др Смиљи Марковић, др Небојши Лабусу, Јелени Живојиновић, Сузани Филиповић и Адриани Пелеш, изражавам захвалност на стручној и пријатељској подршци коју су ми пружили приликом настојања да ова дисертација постане стварност.

Најискренију захвалност дугујем својој породици, која је имала стрпљења и разумевања за мој рад, пре свега мојој мајци Мирјани и оцу Александру Косановићу, који су ми дали изузетно значајну подршку да докторску дисертацију са успехом завршим.

Чачак, 2013.

Дарко Косановић

УНИВЕРЗИТЕТ У КРАГУЈЕВЦУ
ФАКУЛТЕТ ТЕХНИЧКИХ НАУКА ЧАЧАК

Сузана Филиповић, дипл. физ. хем., мастер

УТИЦАЈ МЕХАНИЧКЕ АКТИВАЦИЈЕ НА
СВОЈСТВА MgO-TiO_2 ЕЛЕКТРОКЕРАМИКЕ

Докторска дисертација

Чачак, 2014.

Предговор

У оквиру докторске дисертације испитиван је утицај механичке активације на синтезу и својства MgO-TiO_2 система. Докторска дисертација под називом “Утицај механичке активације на својства MgO-TiO_2 електрокерамике” осмишљена је и највећим делом урађена у Институту техничких наука САНУ и Факултету техничких наука у Чачку, Универзитета у Крагујевцу. Мултидисциплинарност истраживања захтевала је коришћење различитих метода за синтезу и карактеризацију материјала па је истраживање реализовано у више лабораторија и уз помоћ великог броја колега.

Истраживања у оквиру ове докторске дисертације урађена су под непосредним руководством ментора проф. др Небојше Митровића, редовног професора Факултета техничких наука у Чачку, др Нине Обрадовић, вишег научног сарадника Института техничких наука САНУ и проф. др Владимира Павловића, научног саветника Института техничких наука САНУ, којима се неизмерно захваљујем на корисним дискусијама и саветима током мог истраживачког рада.

Посебну захвалност изражавам академику Момчилу М. Ристићу на несебичној помоћи и непроцењивим саветима од самог почетка мог научно истраживачког рада.

Захвалност дугујем и проф. др Алекси Маричићу, професору емеритусу и проф. др Слободану Ђукићу, Факултет техничких наука у Чачку Универзитета у Крагујевцу, на исцрпним дискусијама и сугестијама које су биле од велике помоћи током израде ове докторске дисертације.

Захваљујем се на сарадњи др Маји Шћепановић (Институт за физику, Београд), др Миодрагу Митрићу (ИНН Винча), др Југославу Крстићу (ИХТМ), др Весни Пауновић (Електронски Факултет у Нишу) и др Смиљи Марковић (ИТН САНУ). Велико хвала на успешној сарадњи.

Драгим колегиницама и колегама из Института техничких наука САНУ, др Небојши Лабусу, др Дарку Косановићу, Адриани Пелеш и Јелени Живојиновић се захваљујем на стручној и пријатељској подршци током рада на докторској дисертацији.

Ова докторска дисертација урађена је у оквиру пројекта 142011 Г “Проучавање међузависности у тријади “синтеза-структура-својства” за функционалне материјале” и ОИ 172057 “Усмерена синтеза, структура и својства мултифункционалних материјала”, Министарства просвете, науке и технолошког развоја Републике Србије.

Посебну захвалност изражавам мојој породици на стрпљењу и разумевању приликом настојања да ова дисертација „угледа светлост дана“. Најискреније се захваљујем супругу Зорану на подршци и помоћи током израде ове докторске дисертације. Посебну инспирацију увек представља мој син Михајло коме посвећујем ову дисертацију.

Чачак, 2014.

Сузана Филиповић

UNIVERZITET U BEOGRADU
TEHNOLOŠKO-METALURŠKI FAKULTET

Jelena A. Živojinović

**UTICAJ MEHANIČKE AKTIVACIJE NA STRUKTURU I
SVOJSTVA STRONCIJUM-TITANATNE KERAMIKE**

doktorska disertacija

Beograd, 2020

UNIVERSITY OF BELGRADE
FACULTY OF TEHNOLOGY AND METALLURGY

Jelena A. Živojinović

**THE INFLUENCE OF MECHANICAL ACTIVATION ON
THE STRUCTURE AND PROPERTIES OF STRONTIUM
TITANATE CERAMICS**

Doctoral Dissertation

Belgrade, 2020

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Datum odbrane: _____

Zahvalnica

U okviru doktorske disertacije ispitivan je uticaj mehaničke aktivacije na strukturu i svojstva nedopirane i dopirane stroncijum-titanatne keramike. Doktorska disertacija pod nazivom "Uticaj mehaničke aktivacije na strukturu i svojstva stroncijum-titanatne keramike" osmišljena je i najvećim delom urađena u Institutu tehničkih nauka SANU i na Tehnološko-metalurškom fakultetu Univerziteta u Beogradu. Multidisciplinarnost istraživanja zahtevala je korišćenje različitih eksperimentalnih metoda za sintezu i karakterizaciju materijala, pa je istraživanje realizovano u više laboratorija i uz pomoć drugih kolega kojima se ovim putem zahvaljujem.

Istraživanja u okviru ove doktorske disertacije urađena su pod neposrednim rukovodstvom mentora dr Đorđa Janačkovića, redovnog profesora Tehnološko-metalurškog fakulteta Univerziteta u Beogradu i dr Vere Pavlović, vanrednog profesora Mašinskog fakulteta Univerziteta u Beogradu, kojima se neizmerno zahvaljujem na korisnim diskusijama i savetima tokom mog istraživačkog rada. Posebno se zahvaljujem dr Veri Pavlović na pomoći pri snimanju, tumačenju i interpretaciji Ramanovih spektara, kao i na korisnim sugestijama u završnoj fazi izrade doktorske disertacije koje su značajno uticale na njen finalni oblik.

Zahvalnost dugujem dr Vladimiru Blagojeviću, naučom saradniku Instituta tehničkih nauka SANU i dr Vladimiru Pavloviću, redovnom profesoru Poljoprivrednog fakulteta Univerziteta u Beogradu, na iscrpnim diskusijama i sugestijama koje su bile od velike pomoći tokom izrade ove doktorske disertacije.

Srdačno se zahvaljujem na saradnji akademiku Antoniju Đorđeviću (SANU i Univerzitet u Beogradu – ETF), dr Nenadu Tadiću (Univerzitet u Beogradu – Fizički fakultet), dr Smilji Marković (ITN SANU), dr Nebojši Labusu (ITN SANU), dr Jugoslavu Krstiću (Univerzitet u Beogradu – IHTM), dr Jovani Ćirković (Univerzitet u Beogradu – IMSI), prof. dr Aleksi Maričiću (Univerzitet u Kragujevcu – FTM Čačak), kao i dr Stevi Leviću (Univerzitet u Beogradu – Poljoprivredni fakultet).

*Dragim koleginicama i kolegi iz Instituta tehničkih nauka SANU, dr Darku Kosanoviću, Jeleni Vujančević i **Adriani Peleš** se zahvaljujem na stručnoj i prijateljskoj podršci tokom rada na doktorskoj disertaciji.*

Ova doktorska disertacija urađena je u okviru projekta OI172057 "Usmerena sinteza, struktura i svojstva multifunkcionalnih materijala", Ministarstva prosvete, nauke i tehnološkog razvoja Republike Srbije.

Veliku zahvalnost dugujem svojoj porodici na stpljenju, pomoći i razumevanju. Najiskrenije se zahvaljujem svojoj majci Ljiljani, ocu Aci i braći, Nikoli i Milošu, na neizmernoj podršci i pomoći tokom izrade ove doktorske disertacije. Posebnu inspiraciju uvek predstavlja moj sin Filip kome posvećujem ovu doktorsku disertaciju.

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Invitation letter

This is my great pleasure to invite research assistant **Adriana Peles** from the Institute of Technical Sciences of the Serbian Academy of Science and Arts for a two week visit to the Georgia Institute of Technology - School of Physics. The purpose of Adriana Peles' visit is to discuss common research interest on graphene and related materials. Adriana Peles' research interests on the experimental as well as theoretical sides meet some of our current interests and we hope that her visit will help foster a long term collaboration with the Georgia Tech graphene group. Funding for her visit will be provided by the Serbian side.



Atlanta, April 24th, 2015

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Adriana Peles
Research Assistant
Institute of Technical Science
Serbian Academy of Sciences and Arts

Dear Adriana,

We are delighted that you can come and visit the epitaxial graphene lab at the School of Physics at the Georgia Institute of technology. Due to the summertime travel schedule of the professors involved in the graphene research team and in order to optimize your visit and allow for in depth discussions, scheduled meeting might have to be spread over a period of a month. I truly hope that you can accommodate a month-long stay in Atlanta that will help foster collaboration with the graphene research group.

Yours sincerely

Atlanta, June, 15th, 2015

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