# ПРИЛОГ 1

**1.1. Извештај о цитираности радова др Јелене Вујанчевић**

на основу база података *Web of Science* и *Scopus*, 22. августа 2025.

Укупно цитата: 506

Хетероцитата: 463

1. Vasiljevic, Z.; Dojcinovic, M.; Vujancevic, J.; Jankovic-Castvan, I.; Ognjanovic, M.; Tadic, N.; Stojadinovic, S.; Brankovic, G.; Nikolic, M. Photocatalytic Degradation of Methylene Blue under Natural Sunlight Using Iron Titanate Nanoparticles Prepared by a Modified Sol-Gel Method. *ROYAL SOCIETY OPEN SCIENCE* **2020**, *7* (9). https://doi.org/10.1098/rsos.200708.

Хетероцитати

1. Umar, A.; Claudia, C.; Khalil, M.; Bakri, R.; Bin Bae, H.; Tae-Hwan, K.; Apriandanu, D. O. B. Photocatalytic Activity of CuBi2O4/CuO Heterojunction for Methylene Blue Degradation under Visible Light Irradiation. *Vacuum* **2025**, *238*. https://doi.org/10.1016/j.vacuum.2025.114246.
2. Umair, A.; Baig, M. M.; Yousaf, S.; Touqeer, M.; Hassan, M.; Ahmad, A.; Kim, J.; Ju, H.; Lee, S. G. Multiferroic Y[Sbnd]Sn Co-Doped BiFeO3 2D Nanoplates for Enhanced Photocatalytic Degradation of Cationic Dyes: Synthesis, Chemistry and Mechanisms. *Journal of Water Process Engineering* **2025**, *70*. https://doi.org/10.1016/j.jwpe.2025.107019.
3. Trieu, Q.-A.; Ai Ung, Q. N.; Thai, P. N.; Mai, T. M.; Nguyen, D. V. Harnessing Nature for Dual Action: Silver Nanoparticles Synthesized from Guava Leaf Extract for Photocatalytic Degradation of Methyl Red and Antibacterial Applications. *RSC Advances* **2025**, *15* (17), 13353–13363. https://doi.org/10.1039/d5ra02503f.
4. Tirukkovalluri, S. R.; Alim, S. A.; Kadiyala, N.; Gorli, D.; Sree, G. J.; Singupilla, S. S.; Matangi, R. Tuning of Heterostructured Nanomaterial from Sr and P Co-Doped TiO2 Mediated by Beta-Cyclodextrin – A Visible Light Sensitized Photocatalyst: For Dyes and Microbial Degradation. *Inorganic Chemistry Communications* **2025**, *172*. https://doi.org/10.1016/j.inoche.2024.113725.
5. Sridhar, A.; Dasari, D. S.; Balaganesh, D.; Shruthi, M.; Prasad, M. Effect of Dy3+ Substitution on Structural, Optical, and Magnetic Properties with Improved Photocatalytic Degradation of Ni-Co Nanoferrites. *Ceramics International* **2025**. https://doi.org/10.1016/j.ceramint.2025.06.074.
6. Singh, A.; Seth, R. K.; Sharma, P.; Kumar, S. Optimizing Operational Parameters for Improved Photocatalytic Activity of Hematite–rGO Nanocomposites in Methylene Blue Dye Degradation. *European Physical Journal B* **2025**, *98* (1). https://doi.org/10.1140/epjb/s10051-024-00849-3.
7. Singh, A.; Mohanta, V. L.; Dahiya, S.; Mishra, B. K. Biogenic Synthesis of Azadirachta Indica-Mediated Zirconium Oxide Nanoparticles: Photocatalytic Degradation of Methylene Blue and Antimicrobial Activity. *Biomass Conversion and Biorefinery* **2025**, *15* (6), 8967–8981. https://doi.org/10.1007/s13399-024-05732-w.

8. Simanjuntak, M.; Joni, I.; Faizal, F.; Gultom, N. S.; Kuo, D.-H.; Panatarani, C. Photoluminescence of Oxygen Vacancy-Rich Nano-TiO2 Photocatalyst for Methylene Blue Color Degradation. *Materials Science and Engineering: B* **2025**, *320*. https://doi.org/10.1016/j.mseb.2025.118401.
9. Silva, P. A. P.; Nunes, E. H. M.; Almeida, M. L. B.; Orefice, R. L. Green Polyurethane Foam Coated With a Copolymer Containing TiO2 Nanoparticles Through Non-Solvent Induced Phase Separation: A Photocatalytic Water Cleaning Approach. *Journal of Applied Polymer Science* **2025**, *142* (19). https://doi.org/10.1002/app.56869.
10. Sichani, S. E.; Soltanianfard, M. J.; Zamanpour, A.; Hayati, P.; Janczak, J.; Karimi-Jaberi, Z. Controlled Bottom-up Synthesis and Characterization of Crystalline and Amorphous Lead(II) Coordination Polymers: Sonochemical Methods, Structure–Property Relationship, and Photocatalytic Applications. *Ultrasonics Sonochemistry* **2025**, *114*. https://doi.org/10.1016/j.ultsonch.2025.107264.
11. Shyam, A.; Smitha Chandran, S.; George, B. Sunlight Driven Catalytic Degradation of Orange-G, an Acidic Azo Dye, Utilizing Novel Green Zinc Oxide Nanoparticles. In *Journal of Physics: Conference Series*; 2025; Vol. 3038. https://doi.org/10.1088/1742-6596/3038/1/012006.
12. Sharma, S.; Shukla, S.; Govender, K.; Govender, P. Unveiling the Multifunctionality of Iron Oxide Nanoparticle: A Synergistic Experimental and Computational Investigation. *CHEMICAL PHYSICS IMPACT* **2025**, *10*. https://doi.org/10.1016/j.chphi.2025.100845.
13. Sharma, A.; Shivanna, J. M.; Gupta, N. K.; Menezes, P. W.; Hegde, G. Efficient Photocatalytic Degradation of Methylene Blue From Aqueous Solution Using Hybrid Biomass-Derived Nanostructured Carbon-TiO2 Photocatalyst. *Chemistry - A European Journal* **2025**, *31* (44). https://doi.org/10.1002/chem.202501564.
14. Sathya, T.; Selvarajan, L.; Prabhakaran, D.; Saravanakumar, K. An In-Depth Analysis of the Structure, Optics, Morphology and Photocatalytic Characteristics of Cerium Doped Tin Oxide Nanoparticles. *Solar Energy* **2025**, *286*. https://doi.org/10.1016/j.solener.2024.113153.
15. Salehi, S.; Farahmandzadeh, F.; Molahosseini, E.; Molaei, M.; Karimipour, M. Investigating the Effect of Annealing on Structural, Electrochemical, and Photocatalyst Properties of rGO-MoSe2 Nanocomposite. *Journal of Molecular Structure* **2025**, *1336*. https://doi.org/10.1016/j.molstruc.2025.142019.
16. Sakthivel, S.; Peter, X. T.; Sivaprakash, P.; Malar, P.; Martin Britto Dhas, S. A.; Arumugam, S.; Kim, I. Shock Wave-Driven Phase Transition of Iron Sulphide for Enhanced Photocatalytic Application: A Combined Experimental and DFT Approach. *RSC Advances* **2025**, *15* (28), 22432–22448. https://doi.org/10.1039/d5ra03559g.
17. Raza, A.; Noor, H.; Riaz, S. Structural, Optical, and Photocatalytic Properties of Ni-Doped ZnS Nanoparticles. *ChemistrySelect* **2025**, *10* (27). https://doi.org/10.1002/slct.202405710.
18. Rajendran, A.; Dhandapani, B. A Novel Hydro-Char Mediated Magnetic Catalyst from Hibiscus Cannabinus Agricultural Bio-Waste in Photocatalytic Degradation of Organic Pollutant. *Biomass Conversion and Biorefinery* **2025**, *15* (8), 12369–12385. https://doi.org/10.1007/s13399-024-06005-2.
19. Rajendrachari, S.; Chalageri, G. R.; Mahale, R. S.; Altas, E.; Chapke, Y.; Adimule, V. Investigation of Electrocatalytic Applications of Various Advanced Nanostructured Alloys—An Overview. *Catalysts* **2025**, *15* (3). https://doi.org/10.3390/catal15030259.
20. Pushpam, A. K.; Velrani, S.; Sumathi, T.; Kavitha, P.; Maruthavanan, T.; Ramaiyan, R.; Chava, R. K. Facile Manganese-Iron Mixed Metal Oxy-Hydroxide Nanostructures – Synthesis and Its Catalysis. *Digest Journal of Nanomaterials and Biostructures* **2025**, *20* (2), 657–667. https://doi.org/10.15251/DJNB.2025.202.657.
21. Ponte, C.; Prieto, T.; López-Magano, A.; Moya, A.; Strutyński, K.; Estévez, L.; Fernandes, S. P. S.; Misa, I.; Sardo, M.; Rodríguez-Lorenzo, L. Rapid Formation of Vinylene-Linked Covalent Organic Frameworks Promoted by Dipole Moment. *Chemistry of Materials* **2025**, *37* (5), 1923–1934. https://doi.org/10.1021/acs.chemmater.4c03161.

22. Patra, J. K.; Shin, H.-S.; Das, G. Seaweed Extract as a Sustainable Resource for Au Nanoparticle Synthesis and Its Biological and Environmental Applications. *Artificial Cells, Nanomedicine and Biotechnology* **2025**, *53* (1), 381–398. https://doi.org/10.1080/21691401.2025.2540646.
23. Pareek, P.; Saini, H.; Ledwani, L. Green Synthesis of Tin Oxide (SnO2) Nanoparticles Using Pomelo Fruit Peel for Photocatalytic Degradation of Methylene Blue Dye and Industrial Dye. *Topics in Catalysis* **2025**, *68* (3), 252–272. https://doi.org/10.1007/s11244-024-02031-6.
24. Novia, M. C. Facile Synthesis of Thin Film Cobalt-Doped Zinc Oxide Nanorods Photoanode for Efficient Methylene Blue Degradation. *Trends in Sciences* **2025**, *22* (2). https://doi.org/10.48048/tis.2025.8697.
25. Nadareishvili, M.; Gegechkori, T.; Mamniashvili, G.; Zedginidze, T.; Petriashvili, T. Synergetic Water Purification Modulus for the Methylene Degradation in the Water-Methylene Mixtures. *Edelweiss Applied Science and Technology* **2025**, *9* (2), 266–275. https://doi.org/10.55214/25768484.v9i2.4464.
26. N'faoui, F.-E.; Boudad, L.; Taïbi, M.; El Boukili, A. A Novel Sr2Ni(BO3)2 Orthoborate with Enhanced Photocatalytic Efficiency for Dye Degradation. *Polyhedron* **2025**, *279*. https://doi.org/10.1016/j.poly.2025.117656.
27. Muhammad, F. K.; Arulanandam, J. C. Exploring the Photocatalytic Efficacy of Core–Shell CeO2/TiO2 Nanocomposite Synthesized via Solution Combustion Synthesis. *Zeitschrift fur Physikalische Chemie* **2025**, *239* (6), 839–861. https://doi.org/10.1515/zpch-2024-0780.
28. Luyen, N. T.; Quang, N. X.; Oanh, V. T. K.; Thuy, N. T. T.; Huy, T. Q. A Robust Synthesis of Reverse Au/ZnO Core/Shell Nanostructures with High Visible Photocatalytic Activity of Methylene Blue Dye. *RSC Adv.* **2025**, *15* (32), 25831–25838. https://doi.org/10.1039/D5RA03007B.
29. Loureiro, S. N.; Druzian, D. M.; Oviedo, L. R.; Dos Santos, C.; Moreno Ruiz, Y. P. M.; Galembeck, A.; Pavoski, G.; Tenório, J. A. S.; Espinosa, D. C. R.; da Silva, W. L. Biosynthesis and Characterization of a Novel Bismuth-Based Nanocatalyst for Dye Degradation: Experimental Design, Machine Learning and Ecotoxicity Studies. *Inorganic Chemistry Communications* **2025**, *179*. https://doi.org/10.1016/j.inoche.2025.114763.
30. Kumari, P. S.; Ravi Kumar, D. R.; Vijaya Charan, G. V. Influence of Erbium on Structural Characterization, Photocatalytic, Biological Activity, and Electrical Properties of Nickel Spinel Nano Chromites Synthesized by Citrate Gel Method. *ChemistrySelect* **2025**, *10* (28). https://doi.org/10.1002/slct.202500600.
31. Kulkarni, P. S.; Bamb, R. D.; Watwe, V. S.; Kulkarni, S. D. Enhanced Sunlight Driven Photocatalytic Degradation of Methylene Blue Dye Using TiO2: Exploiting the Self-Dye Degradation Property and pH Specificity in a Novel Approach. *Topics in Catalysis* **2025**. https://doi.org/10.1007/s11244-025-02061-8.
32. Khumaeni, A.; Jonathan, F.; Alkian, I.; Sugito, H.; Nurhasanah, I.; Ibrahim, R. K. R.; Julkapli, N. M. Direct Synthesis of Bismuth-Doped ZnO Nanoparticles in Liquid Precursor: A One-Step Pulsed Laser Ablation Approach for Enhanced Photocatalytic Dye Removal. *Journal of Molecular Liquids* **2025**, *434*. https://doi.org/10.1016/j.molliq.2025.128054.
33. Khao, T.; Gembo, R. O.; Odisitse, S.; King'ondu, C. K. Fabrication of ZnO Nanoparticles Using Marula (Sclerocarya Birrea) Leaf Extract for Catalytic Degradation of Rhodamine 6 G and Methylene Blue Dyes under UV Light Irradiation. *Next Materials* **2025**, *7*. https://doi.org/10.1016/j.nxmate.2024.100366.
34. Khan, H. Sol-Gel Synthesis of TiO2 from TiOSO4 (Part 2): Kinetics and Photocatalytic Efficiency of Methylene Blue Degradation Under UV Irradiation. *Catalysts* **2025**, *15* (1). https://doi.org/10.3390/catal15010064.
35. Kaur, M.; Kumar, V.; Singh, K. Greener Exfoliation of MoS2 Nanosheets Using Sodium Alginate as Biosurfactant and Its Photocatalytic Performance against Azo Dyes. *Sustainable Chemistry for the Environment* **2025**, *9*. https://doi.org/10.1016/j.scenv.2025.100216.
36. Kaur, K.; Yamini, S.; J V, R.; G, L.; Kumar, P.; Rao K C, V.; Senapati, S. Green Synthesis of Saponin-Capped Copper (II) Oxide (CuO) Nanoparticles and Their Efficacy in Photocatalytic Dye Degradation. *Sustainable Chemistry One World* **2025**, *6*. https://doi.org/10.1016/j.scowo.2025.100054.

37. Jolly, S.; Gupta, A.; Kaur, S.; Kumar, A.; Garg, S. Efficient Sunlight-Driven Environmental Remediation: In3+-Doped LaFeO3 Nanoparticles for Binary Dye Degradation in Water. *Ceramics International* **2025**, *51* (17), 23586–23597. https://doi.org/10.1016/j.ceramint.2025.03.046.
38. Jasmine, A.; Baskaran, P.; Bruno Chandrasekar, L. B.; Marimuthu, M.; Krishnaveni, P.; Balakrishnan, T.; Gnanasekaran, L.; Thirumalai, J.; Sundaram, P. S.; Manoharadas, S. Antibacterial and Photocatalytic Activity of Tb-Doped ZnO Nanoparticles: Effect of Doping Concentration. *European Physical Journal B* **2025**, *98* (5). https://doi.org/10.1140/epjb/s10051-025-00943-0.
39. Islam, S.; Aslam, I.; Mahmood, T.; Farooq, M. H. Facile Synthesis of WO3.H2O Nanostructures for Efficient Photocatalytic and Electrochemical Properties. *Journal of Crystal Growth* **2025**, *652*. https://doi.org/10.1016/j.jcrysgro.2024.128017.
40. Hormozi Jangi, S. R.; Dehghani, Z. A Novel Dual-Function Biomimetic Approach for High Throughput Organic Dye Biodegradation and Hydrogen Peroxide Sensing Using a Nanosized Artificial Peroxidase with Ultra-Improved Substrate Affinity and Superb Catalytic Efficiency. *Process Biochemistry* **2025**, *150*, 1–20. https://doi.org/10.1016/j.procbio.2024.12.025.
41. Himanshu, M.; Singh, A.; Srivastava, N.; Verma, B. Comparative Photocatalytic Performance of Iron Nanoparticles Biosynthesized from Aqueous Extracts of Potato, Potato Peels, and Leaves. *International Journal of Biological Macromolecules* **2025**, *292*. https://doi.org/10.1016/j.ijbiomac.2024.139156.
42. He, J.; Wang, Z.; Zhao, P.; Yuan, S.; Gao, P.; Tang, Z. One Stone, Three Birds: Recovery of High-Quality Niobium and Iron Products from Niobium-Bearing Tailings Using Low-Temperature Fluidized Hydrogen Reduction Technology. *Process Safety and Environmental Protection* **2025**, *197*. https://doi.org/10.1016/j.psep.2025.107055.
43. Handal, H. T.; Hegazy, A.; Deyab, N. M.; Azzam, M. A.; Allam, N. Enhanced Photocatalytic and Photoelectrochemical Performance of SrSO4/TiO2 Heterostructures: Interface Engineering for Water Oxidation and Pollutant Degradation. *Materials Today Energy* **2025**, *50*. https://doi.org/10.1016/j.mtener.2025.101857.
44. Haladu, S. A.; Elsayed, K. A.; Manda, A. A.; Ibrahim Gaya, U.; Almessiere, M. A.; Hafez, M. A. ZnO Submicron Spheres Doped with Eu Nanoparticles Prepared by Laser Ablation for Efficient Photocatalytic Degradation of an Organic Dye. *Optics and Laser Technology* **2025**, *180*. https://doi.org/10.1016/j.optlastec.2024.111498.
45. Gohi, B. F. C. A.; Zhu, X.; Zhao, S.; Liao, N.; Li, A.; Yu, H.; Zhang, Y. Photocatalytic Removal of Methylene Blue Dye from Aqueous Solution via F-TiO2 Dispersed on Layered Double Oxide. *Journal of Molecular Structure* **2025**, *1344*. https://doi.org/10.1016/j.molstruc.2025.142561.
46. Ghaoues, C.; Hamici, M.; Haddadi, K.; Far, H.; Guessoum, K. Self-Reducing CaFe1-xCuxO3-δ Perovskite for Photocatalysis: The Synergistic Role of Cu Doping and O–H Groups. *Materials Science and Engineering: B* **2025**, *320*. https://doi.org/10.1016/j.mseb.2025.118400.
47. Gayathri, G. D.; Rengasamy, M.; Thiruneelakanadan, R. Fabrication, Structural, Optical, Electrical Properties of Ternary FeNiS2 Thin Films and Its Applications in Photocatalytic Dye Degradation. *Journal of Materials Science: Materials in Electronics* **2025**, *36* (7). https://doi.org/10.1007/s10854-025-14419-5.
48. Dufner, L.; Hofmann, P.; Dobslaw, D.; Kern, F. Degradation of Bacteria for Water Purification in a TiO2-Coated Photocatalytic Reactor Illuminated by Solar Light. *Applied Water Science* **2025**, *15* (5). https://doi.org/10.1007/s13201-025-02453-x.
49. Debnath, P.; Ray, S. K. Synthesis of Sodium Alginate Grafted and Silver Nanoparticles Filled Anionic Copolymer Polyelectrolytes for Adsorption and Photocatalytic Degradation of a Cationic Dye from Water. *International Journal of Biological Macromolecules* **2025**, *285*. https://doi.org/10.1016/j.ijbiomac.2024.138228.

50. Das, P.; Saha, S.; Bhunia, A. K. Engineering of CdxZn1-xS Nanomaterials for Fabrication of Hybrid CdxZn1-xS/Si Heterojunction Broadband Photo Detectors. *ACS Omega* **2025**, *10* (1), 294–305. https://doi.org/10.1021/acsomega.4c06008.
51. Chauhan, A.; Verma, R.; Alfifi, F.; Dhiman, V. K.; Ataya, F. S.; Rao, S. K.; Gopalakrishnan, C.; Rana, G. Structural, Magnetic, Photocatalytic, Electrochemical and Antibacterial Properties of Ag-Doped Cerium Ferrite Nanoparticles. *Ceramics International* **2025**, *51* (14), 19112–19128. https://doi.org/10.1016/j.ceramint.2025.02.090.
52. Chandel, S.; Kaushal, S.; Thakur, N.; Kumar, S.; Kumar, K. Alkali (Na/K) Doped Cobalt Ferrite Nanoparticles: Photocatalytic and Antioxidant Activities. *Nanofabrication* **2025**, *10*. https://doi.org/10.37819/nanofab.10.2069.
53. Castagnotto, E.; Alberti, S.; Campolucci, M.; Manfrinetti, P.; Ferretti, M.; Locardi, F. Photocorrosion Stability of CdxZn1-xS Yellow-Orange Pigments. *Chemistry of Materials* **2025**, *37* (8), 2749–2761. https://doi.org/10.1021/acs.chemmater.4c03274.
54. Bose, S.; Senthil Kumar, P. S.; Gayathri, G. Studying the Impact of Tween 80 on the Mechanism of Bioremediation of Methylene Blue Dye by Bacillus Cereus Strains. *Biomass Conversion and Biorefinery* **2025**, *15* (6), 8715–8730. https://doi.org/10.1007/s13399-024-05592-4.
55. Bose, S.; Senthil Kumar, P.; Boobalan, B.; Gayathri, G. Remediation of Chlorpyrifos and Methylene Blue Dye Using Biochar-Modified Bacillus Cell-Immobilized Alginate Beads. *Biomass Conversion and Biorefinery* **2025**, *15* (8), 11959–11971. https://doi.org/10.1007/s13399-024-06126-8.
56. Bharathi, K.; Bakiyaraj, G.; Archana, J.; Navaneethan, M. P-n ZnCr2O4/Bi2O3 Heterojunction as an Effective Photocatalytic Degradation of MB and CIP. *Optical Materials* **2025**, *162*. https://doi.org/10.1016/j.optmat.2025.116862.
57. Belkhiria, F.; Rhouma, F. I. H.; Gammoudi, H.; Juraszek, J.; Helali, S.; Amlouk, M. Green Synthesis and Characterization of NiCO2O4 Nanoparticles: Photocatalytic Performances and Magnetic Properties Investigations. *Inorganic Chemistry Communications* **2025**, *176*. https://doi.org/10.1016/j.inoche.2025.114281.
58. Begum, S.; Narwade, V. N.; Taha, S.; Halge, D. I.; Bhosale, H. J.; Danková, Z.; Dadge, J. W.; Bogle, K. A. HAp-ZnO Nanocomposites: Efficient and Recyclable Photocatalysts for Water Pollutants Degradation. *Applied Physics A: Materials Science and Processing* **2025**, *131* (2). https://doi.org/10.1007/s00339-025-08280-w.
59. Arulprakash, G.; Vijayaraghavan, R. Charge-Separated 3D/2D Layered Heterojunction of NiNb2O6/E-gC3N4 as an Efficient Photocatalyst for Photo-Reduction of Cr6+ and Photo-Oxidation of Dyes under Visible and Sunlight. *Applied Surface Science* **2025**, *684*. https://doi.org/10.1016/j.apsusc.2024.161938.
60. Ali, U.; Liaqat, H.; Begum, R.; Arshad, M. A.; Farooqi, Z. H. A Silver/Silver Oxide-Incorporated Poly(Thiophene-Pyrrole) Nanocomposite Photocatalyst for Efficient Degradation of Methylene Blue in Water. *Journal of Molecular Structure* **2025**, *1322*. https://doi.org/10.1016/j.molstruc.2024.140506.
61. Alebachew, N.; Demissie, T. B.; Murthy, H. C. A.; Gonfa, B. A.; von Eschwege, K. G.; Coetsee, E.; Langner, E. H. G.; Doreswamy, B. H. Synthesis, Characterization, and Application of Ternary CuO/ZrO2@S-Doped g-C3N4 Hybrid Nanocomposites. *RSC Advances* **2025**, *15* (9), 6441–6456. https://doi.org/10.1039/d4ra08941c.
62. Ahmed, A. A.; Jamil, L. A.; Idrees, S. A. Enhanced Photocatalytic Degradation of Methylene Blue Using $NaBiO_3$@$TiO_2$ Nanocomposite under Solar Light: A Statistical Analysis and Theoretical Investigations. *International Journal of Environmental Analytical Chemistry* **2025**, *0* (0), 1–17. https://doi.org/10.1080/03067319.2025.2532588.
63. Ahmed Al-Adhreai, A.; Abdulwahab, A. M.; Al-Hammadi, A. H.; Al-Adhreai, A.; M Alaizeri, Z. A.; Katib Alanazi, F. K.; Salem, A.; ALSaeedy, M. Synthesis, Characterization, and Photocatalytic Study of Bi-Doped CuS Nanoparticles. *RSC Advances* **2025**, *15* (30), 24483–24496. https://doi.org/10.1039/d5ra03870g.

64. Afzal, M.; Bilal, M.; Khan, H.; Asif, M.; Khan, M.; Iqbal, M.; Butt, T.; Hassan, M.; Shaikh, A. Understanding Photocatalytic Degradation of RB5 Dye under Salts Using Nickel Sulfide Nanoparticles: Insights from Dynamic Light Scattering and Theoretical Investigations. *ACS OMEGA* **2025**, *10* (30), 32918–32938. https://doi.org/10.1021/acsomega.5c01902.
65. Abdullah, R. N.; Tezel, G. B.; Al-Sameraiy, M. A. Novel Matcha Green Tea Extract for Green Sol-Gel Synthesis of TiO2: Enhancement of Surface Morphology to Improve Photocatalytic Performance. *International Journal of Environmental Analytical Chemistry* **2025**. https://doi.org/10.1080/03067319.2025.2530007.
66. Zare, M. R.; Mengelizadeh, N.; Ghezel', A.; Agah, Z.; Zarei, N.; Faramarzi, M. M. Enhancing Catalytic Degradation of Methylene Blue Through GO-CoFe2O4: Synthesis, Effect of Parameters, and Toxicity Evaluation. *Iranian Journal of Chemistry and Chemical Engineering* **2024**, *43* (11), 4019–4033. https://doi.org/10.30492/ijcce.2024.2024029.6477.
67. Yarnazari, T.; Maleki, B.; Mansouri, M.; Esmaeili, H. Zeolite 13X Incorporated with Zn-Ce Oxide Nanocatalyst for Removal of Reactive Red 120 Dye: RSM-Based Approach. *Environmental Monitoring and Assessment* **2024**, *196* (4). https://doi.org/10.1007/s10661-024-12505-5.
68. Yadav, D.; Sharma, N.; Srivastava, C. M.; Shandilya, M. Soft Ferrites Photocatalytic Degradation of Organic Dyes. In *Soft Nanoferrites for Biomedical and Environmental Applications*; CRC Press, 2024; pp 218–228. https://doi.org/10.1201/9781003517139-16.
69. Yadav, A.; Kumar, H.; Sharma, R.; Kumari, R.; Kumar, G.; Dhayal, A.; Yadav, A. Sulfate-Functionalized Ternary Metal Oxide/Polypyrrole Nanocomposites: Synergistic Enhancement in Photocatalytic, Corrosion Inhibition, Magnetic, and Electrical Properties. *Journal of Molecular Structure* **2024**, *1308*. https://doi.org/10.1016/j.molstruc.2024.138065.
70. Waseem Basha, Z.; Muniraj, S.; Senthil Kumar, A. Neem Biomass Derived Carbon Quantum Dots Synthesized via One Step Ultrasonification Method for Ecofriendly Methylene Blue Dye Removal. *Scientific Reports* **2024**, *14* (1). https://doi.org/10.1038/s41598-024-59483-9.
71. Waqar, M. A.; Mubarak, N.; Khan, A. M.; Khan, R.; Khan, I. N.; Riaz, M.; Ahsan, A.; Munir, M. Sol-Gel for Delivery of Molecules, Its Method of Preparation and Recent Applications in Medicine. *Polymer-Plastics Technology and Materials* **2024**, *63* (12), 1564–1581. https://doi.org/10.1080/25740881.2024.2346331.
72. Vidhya, S.; Subramanian, S.; Durgadevi, K.; Bharath Sabarish, V. C.; Durairajan, A.; Graça, M. P. F.; Gajendiran, J.; Azad, A. K.; Gokul Raj, S.; Ramesh Kumar, G. Influence of Graphitic Phase on the Structural, Optical, Electrical and Photocatalytic Properties of BiFeO3/KNbO3 Based Binary Nanocomposites. *Ceramics International* **2024**, *50* (17), 29097–29107. https://doi.org/10.1016/j.ceramint.2024.05.089.
73. Toloman, D.; Popa, A.; Sonher, R. B.; Bortnic, R.; Marinca, T. F.; Perhaiţa, I.; Filip, M.; Mesaroş, A. Enhancing the Photocatalytic Activity and Luminescent Properties of Rare-Earth-Doped CeO2 Nanoparticles. *Applied Sciences (Switzerland)* **2024**, *14* (2). https://doi.org/10.3390/app14020522.
74. Tamargo, R. J. I.; Magallanes-Nava, J. V. Photoremediation-An Emerging Approach for Dye Degradation in Wastewater Treatment. In *Emerging Trends in Photoredox Synthetic Transformation*; Springer Nature, 2024; pp 249–278. https://doi.org/10.1007/978-981-97-8205-5_9.
75. Syoufian, A.; Kurniawan, R. Codoping of Nickel and Nitrogen in ZrO2-TiO2 Composite as Photocatalyst for Methylene Blue Degradation under Visible Light Irradiation. *Indonesian Journal of Chemistry* **2024**, *24* (4), 1218–1227. https://doi.org/10.22146/ijc.90151.
76. Sulowska, A.; Fiszka-Borzyszkowska, A.; Pisarek, M.; Trzciński, K.; Zielińska-Jurek, A. Polypyrrole-Fe2TiO5 Composites for Adsorption and Photocatalytic Degradation of Micropollutants. *Advanced Powder Technology* **2024**, *35* (8). https://doi.org/10.1016/j.apt.2024.104565.
77. Solangi, A. G.; Tahira, A.; Bhatti, M. A.; Hulio, A. A.; Chang, A. S.; Solangi, Z. A.; Nafady, A.; Lv, K.; Vigolo, B.; Ibupoto, Z. H. Facile Synthesis of NiCo2O4 Nanostructures with Abundant Surface Oxygen Vacancies, and

Reduced Content of Co and Ni Valence States for the Efficient and Bifunctional Electrochemical and Photocatalytic Oxidation of Methylene Blue. *Microchemical Journal* **2024**, *199*. https://doi.org/10.1016/j.microc.2024.110046.

78. Shee, N. K.; Lee, G.-S.; Kim, H.-J. Sn(IV)Porphyrin-Incorporated TiO2 Nanotubes for Visible Light-Active Photocatalysis. *Molecules* **2024**, *29* (7). https://doi.org/10.3390/molecules29071612.
79. Shee, N. K.; Kim, H.-J. Two-Dimensional Porous Porphyrin Materials Composed of Robust Tin(IV)-Porphyrin Linkages for Photocatalytic Wastewater Remediation†. *Dalton Transactions* **2024**, *54* (6), 2448–2459. https://doi.org/10.1039/d4dt03277b.
80. Shee, N. K.; Kim, H.-J. Integration of Sn(IV)Porphyrin on Mesoporous Alumina Support and Visible Light Catalytic Photodegradation of Methylene Blue. *Materials Today Communications* **2024**, *39*. https://doi.org/10.1016/j.mtcomm.2024.109033.
81. Semalti, P.; T K Nguyen, N.; Nur Gamze Özbilgin, İ.; Uchikoshi, T.; Sharma, S. Synergistic Effects of Core@Shell (CZTS@CZTSe) on Photovoltaic & Photocathode Applications. *Inorganic Chemistry Communications* **2024**, *163*. https://doi.org/10.1016/j.inoche.2024.112239.
82. Sarifuddin, W. S.; Mahadi, A. H.; Hussin, M. R.; Masri, M. K. Z.; Prasetyoko, D.; Bahruji, H. Cu Doped ZnFe2O4 Photocatalysts for Enhanced Hydrogen Production and Dye Degradation in the Visible Region. *Journal of Photochemistry and Photobiology A: Chemistry* **2024**, *453*. https://doi.org/10.1016/j.jphotochem.2024.115658.
83. Saravanan, K.; Vanaraj, V.; Alshehri, M. A.; Panneerselvam, C.; Kathirvel, P. Phytoassisted Synthesis of Biogenic ZnO Nanoparticles Using Annona Squamosa L. Bark Extract: Characterization and Its Application Studies. *Green Chemistry Letters and Reviews* **2024**, *17* (1). https://doi.org/10.1080/17518253.2024.2395915.
84. Saraee, M.; Maleki, B.; Kikhavani, T.; Mansouri, M. Investigating the Process of Photocatalytic Removal of Methylene Blue from Wastewater Utilizing ZnO-Mn-Ce/Biochar Nanocomposites under Visible Light. *Iranian Journal of Chemistry and Chemical Engineering* **2024**, *43* (12), 4360–4377. https://doi.org/10.30492/ijcce.2024.2026808.6552.
85. Ribeiro, T. P.; Salgado, B.; Pinto, J.; Silva, P. C.; Santos, J. A. M.; Moreira, J. A.; Monteiro, F. J.; Laranjeira, M. S. Nano Iron Doped Calcium Phosphates Act as pH-Sensitive and Biodegradable Peroxidase-like Nanozymes for Cancer Chemodynamic Therapy and MRI Contrast. *Materials Today Chemistry* **2024**, *35*. https://doi.org/10.1016/j.mtchem.2023.101861.
86. Rauthan, S.; Singh, A. Exploring Trends of Wastewater Treatment by Using Nano-Materials and Their Composites with Bio-Polymer. *Environment Conservation Journal* **2024**, *25* (4), 1252–1256. https://doi.org/10.36953/ECJ.30492024.
87. Rashtbari, S.; Dehghan, G.; Marefat, A.; Khataee, S.; Khataee, A. Proficient Sonophotocatalytic Degradation of Organic Pollutants Using Co3O4/TiO2 Nanocomposite Immobilized on Zeolite: Optimization, and Artificial Neural Network Modeling. *Ultrasonics Sonochemistry* **2024**, *102*. https://doi.org/10.1016/j.ultsonch.2023.106740.
88. Prasad Nayak, S.; Swarnkar, N.; Kiran Kumar, J. K. Eco-Friendly Synthesis of Reduced Graphene Oxide as Sustainable Catalyst for Photodegradation of Methylene Blue. *Inorganic Chemistry Communications* **2024**, *159*. https://doi.org/10.1016/j.inoche.2023.111792.
89. Prakash, J.; Jasrotia, R.; Kotwal, P.; Verma, A.; Kandwal, A.; Kumar, P.; Godara, S. K. Spinel Nanoferrites: Adsorption and Photocatalysis of Emerging Pollutants. In *Nanomaterials: An Approach Towards Environmental Remediation*; Bentham Science Publishers, 2024; pp 31–55. https://doi.org/10.2174/9789815223613124010005.

90. Patra, J. K.; Shin, H.-S.; Yang, I.-J.; Nguyen, L. T. H.; Das, G. Sustainable Utilization of Food Biowaste (Papaya Peel) Extract for Gold Nanoparticle Biosynthesis and Investigation of Its Multi-Functional Potentials. *Antioxidants* **2024**, *13* (5). https://doi.org/10.3390/antiox13050581.
91. Patil, S. S.; Chellachamy Anbalagan, A.; Sukhdev, A.; Chandrasekaran, S. Facile One-Pot Synthesis of Ternary Fe Doped Cu-ZnO Nanocatalyst: An Efficient and Recyclable Solar Light Driven Photocatalyst. *Surfaces and Interfaces* **2024**, *48*. https://doi.org/10.1016/j.surfin.2024.104255.
92. Patial, B.; Bansal, A.; Gupta, R.; Mittal, S. Investigating Role of BiVO4 Nanoparticles in Degradation of Textile Dye in Effluent Water. In *GEOENVIRONMENTAL ENGINEERING, VOL 1, EGRWSE 2023,*; Reddy, K., Bansal, A., Agnihotri, A., Eds.; 2024; Vol. 508, pp 237–245. https://doi.org/10.1007/978-981-97-3823-6_20.
93. Parasuraman, B.; Ganapathi, B.; Kandasamy, B.; Ganesan, M.; Pazhanivel, P. Fabrication of G-C3N4 Nanosheet Anchored NiZn2O4 Nanocomposites for Enhanced Photocatalytic Dye Degradation. *Chemical Physics Letters* **2024**, *842*. https://doi.org/10.1016/j.cplett.2024.141206.
94. Papnai, N. Cerium-Iron Oxide: An Efficient Photocatalyst for the Degradation of Methylene Blue Dye. *Orbital* **2024**, *16* (3), 192–197. https://doi.org/10.17807/orbital.v16i3.21012.
95. Padwal, Y.; Chauhan, R.; Panchang, R.; Fouad, H.; Gosavi, S. W. Exploring Mo-ZnO@NF for Hydrogen Generation and Methylene Blue Remediation: Sunlight-Driven Catalysis. *Frontiers in Physics* **2024**, *12*. https://doi.org/10.3389/fphy.2024.1416563.
96. Nzilu, D.; Madivoli, E.; Makhanu, D.; Wanakai, S.; Kirui, G.; Mwangi, V.; Kareru, P. Synthesis and Characterization of Parthenium Hysterophorus -Mediated ZnO Nanoparticles for Methylene Blue Dye Degradation. *Journal of Chemistry* **2024**, *2024*. https://doi.org/10.1155/2024/1088430.
97. Nordin, N.; Yusoff, H. M.; Siong, J. Y. F.; Su-Yin, K.; Chia, C. P. HIGHLY EFFICIENT ONION PEEL ASH CATALYST FOR DEGRADATION OF METHYLENE BLUE. *Journal of Sustainability Science and Management* **2024**, *19* (3), 1–9. https://doi.org/10.46754/jssm.2024.03.001.
98. Ngulube, K. F.; Abdelhaleem, A.; Fujii, M.; Nasr, M. Synergism of Artificial Intelligence and Techno-Economic for Sustainable Treatment of Methylene Blue Dye-Containing Wastewater by Photocatalysis. *Sustainability (Switzerland)* **2024**, *16* (2). https://doi.org/10.3390/su16020529.
99. Nazari, S.; Zarealiabadi, H.; Mansouri, M.; Maleki, B.; Bayati, B. The Removal of Methylene Blue from Aqueous Solution Using Prepared ZSM-5 Zeolite@ZnO Nanoflowers under LED Irradiation. *Iranian Journal of Chemistry and Chemical Engineering* **2024**, *43* (2), 621–634. https://doi.org/10.30492/ijcce.2023.2003412.6052.
100. Naik, M. M.; Yashwanth, H. J.; Vinuth, M.; Nagaraju, G.; Hareesh, K.; Naik, H. S. B. Microwave Radiation Assisted Synthesis of NiFe2O4-CoFe2O4 Nanocomposites for Photocatalytic and Photoelectrochemical Water Splitting Applications. *Inorganic Chemistry Communications* **2024**, *160*. https://doi.org/10.1016/j.inoche.2023.111898.
101. Nagare, A.; Dhadage, A.; Mallesham, M.; Bhuyan, P. M.; Gogoi, P.; Athare, A.; Navgire, M. Sol-Gel Assisted β-Cyclodextrin Coated MoO3-Fe2O3 Nanocomposite for Photodegradation of Methylene Blue Dye. *Journal of Sol-Gel Science and Technology* **2024**, *110* (2), 304–318. https://doi.org/10.1007/s10971-024-06357-1.
102. Myakala, S. N.; Ladisich, M.; Ayala, P.; Rabl-Wolff, H.; Batool, S.; Elsaesser, M. S.; Cherevan, A.; Eder, D. Harnessing a Ti-Based MOF for Selective Adsorption and Visible-Light-Driven Water Remediation. *Journal of Materials Chemistry A* **2024**, *12* (31), 19924–19934. https://doi.org/10.1039/d4ta01967a.
103. Muhammed, A.; Asere, T. G.; Diriba, T. F. Photocatalytic and Antimicrobial Properties of ZnO and Mg-Doped ZnO Nanoparticles Synthesized Using Lupinus Albus Leaf Extract. *ACS Omega* **2024**, *9* (2), 2480–2490. https://doi.org/10.1021/acsomega.3c07093.

104. Molahosseini, E.; Zare, H.; Molaei, M.; Farahmandzadeh, F. Ultrafast Degradation of Methylene Blue from Aqueous Media by Fe3O4/rGO/SiO2 Magnetic Nanocomposite in Dark Catalyst Process. *Diamond and Related Materials* **2024**, *147*. https://doi.org/10.1016/j.diamond.2024.111338.
105. Mohammadi, H.; Mengelizadeh, N.; Zare, M. R.; Parseh, I.; Hashemi, M.; Yousefi, M.; Amiri, P.; Nasab, Z. K.; Habibi, Z.; Mohseni, E. Effective Activation of Peroxymonosulfate by MMT-CuFe2O4 Composite in the Degradation of Methylene Blue from Aqueous Solutions: Characteristics, Influence of Parameters, and Degradation Mechanism. *Desalination and Water Treatment* **2024**, *317*. https://doi.org/10.1016/j.dwt.2024.100221.
106. Misran, E.; Supardan, M. D.; Iryani, D. A.; Pramananda, V.; Sihombing, A. F.; Sitorus, D. V. Ultrasonic Assisted Adsorption of Methylene Blue Using Blood Clam Shell as a Low-Cost Adsorbent. *Results in Engineering* **2024**, *23*. https://doi.org/10.1016/j.rineng.2024.102715.
107. Mebed, A. M.; Alshammari, K.; Ezzeldien, M.; Al-Ghamdi, S. A.; Abd-Elnaiem, A. M.; El-Aal, M. A.; Hamad, D. Enhancement of the Photodegradation Performance towards Methylene Blue and Rhodamine B Using AgxSn1–xO2 Nanocomposites. *Journal of Alloys and Compounds* **2024**, *1009*. https://doi.org/10.1016/j.jallcom.2024.176977.
108. May, B. M.; Miya, N.; Mapukata, S. Magnetic Polymer Composites for Wastewater Treatment. In *Magnetic Polymer Composites and their Emerging Applications*; CRC Press, 2024; pp 160–188. https://doi.org/10.1201/9781003454236-9.
109. Mandawade, A. S.; Sonawane, L. D.; Ahemad, H. I.; Aher, Y. B.; Gite, A. B.; Nikam, L. K.; Jain, G. H.; Femi, M. D.; Patil, G. E.; Palve, B. M. Gas Sensing and Photocatalytic Activity of Synthesized Hierarchical Bi2O3 Nanoflakes by Sol–Gel and Nanosheets by Hydrothermal Method. *Journal of Materials Science: Materials in Electronics* **2024**, *35* (14). https://doi.org/10.1007/s10854-024-12739-6.
110. Maleki, B.; Khlaif, T. H.; Jasim, M. K.; Mansouri, M. Preparation and Utilization of Zn-La Oxide Nanocatalyst as a Binary Composite for Photocatalytic Degradation of Methylene Blue Dye: Optimization through RSM-BBD. *Arabian Journal of Chemistry* **2024**, *17* (4). https://doi.org/10.1016/j.arabjc.2024.105667.
111. Maleki, B.; Abdulhasan, A. G.; Khlaif, T. H.; Mansouri, M. Synthesis and Photocatalytic Properties of Zinc-Copper Bimetallic Oxide Nanoparticles for Removal of Reactive Blue 19 Dye in Aqueous Suspension. *International Journal of Environmental Analytical Chemistry* **2024**. https://doi.org/10.1080/03067319.2024.2337222.
112. Loura, N.; Rathee, K.; Dhull, R.; Singh, M.; Dhull, V. Carbon Nanotubes for Dye Removal: A Comprehensive Study of Batch and Fixed-Bed Adsorption, Toxicity, and Functionalization Approaches. *Journal of Water Process Engineering* **2024**, *67*. https://doi.org/10.1016/j.jwpe.2024.106193.
113. Lin, L.; Ahmed Ali, K. A. Photocatalytic Degradation of Organic Compounds in Dye Wastewater by Fe3+ Doped Nano-ZnO/TiO2 Composite Photocatalyst. *Indian Journal of Chemical Technology* **2024**, *31* (3), 506–520. https://doi.org/10.56042/ijct.v31i3.3324.
114. Liaqat, M.; Kausar, S.; Iqbal, T.; Afsheen, S.; Younas, A.; Zubair, M.; Syed, A.; Abdallah, A. M.; Wong, L. S. Synergistic Photocatalytic Activity of TiO2/BiVO4 Nanocomposites: Optimization, Characterization, and Recyclability for Dye and Antibiotic Degradation. *Journal of Inorganic and Organometallic Polymers and Materials* **2024**, *34* (7), 3246–3257. https://doi.org/10.1007/s10904-024-03102-7.
115. Li, J.; Cai, X.; Jiang, P.; Wang, H.; Zhang, S.; Sun, T.; Chen, C.; Fan, K. Co-Based Nanozymatic Profiling: Advances Spanning Chemistry, Biomedical, and Environmental Sciences. *Advanced Materials* **2024**, *36* (8). https://doi.org/10.1002/adma.202307337.
116. Kumar Shee, N.; Kim, H.-J. Complementary Metalloporphyrin-Based Nanostructure Decorated with Silver Nanoparticles for Photocatalytic Degradation of Organic Dyes. *Inorganic Chemistry Communications* **2024**, *163*. https://doi.org/10.1016/j.inoche.2024.112252.

117. Krishnaswamy, S.; Nambissan, V. D.; Jeyaraj, A.; Gopalakrishnan Raguraman, K.; Vel Murugan, R. R.; Gummadi, S. N. A Multifunctional Smart Fabric Based on Reduced Graphene Oxide for next Generation Military Couture. *Diamond and Related Materials* **2024**, *150*. https://doi.org/10.1016/j.diamond.2024.111669.
118. Kim, W. S.; Park, S. J.; Hwang, T. G.; Kim, H. M.; Lee, H. K.; Kim, S.; Choi, W. J.; Yoon, J. H.; Kim, Y. S.; Lee, D. J. Enhancing the Reliability of Dyes for Color Filters through TiO2 Adsorption: Comprehensive Identification of Factors Affecting Photocatalysis. *Materials Advances* **2024**, *5* (5), 1917–1929. https://doi.org/10.1039/d3ma00897e.
119. Khlifi, N.; Zerrouki, C.; Fourati, N.; Guermazi, H.; Guermazi, S. Investigation of Structural and Optical Properties of TM-Doped CuO NPs: Correlation with Their Photocatalytic Efficiency in Sunlight-Induced Pollutant Degradation. *Measurement: Journal of the International Measurement Confederation* **2024**, *237*. https://doi.org/10.1016/j.measurement.2024.115209.
120. Kayani, Z. N.; Ali, M. G.; Waseem, S.; Bashir, Z.; Riaz, S.; Naseem, S. Optimization of Nanostructured Zr Doped Bismuth Oxide (Bi2O4) Thin Films for Physical and Biological Properties. *Ceramics International* **2024**, *50* (4), 6854–6869. https://doi.org/10.1016/j.ceramint.2023.12.030.
121. Kaur, M.; Singh, J.; Chauhan, M.; Kumar, V.; Singh, K. Green Synthesis of TiO2-Al2O3-ZnFe2O4 Nanocomposite Using the Hibiscus Rosa Sinesis and Evaluation of Its Photocatalytic Applications. *Open Ceramics* **2024**, *18*. https://doi.org/10.1016/j.oceram.2024.100571.
122. Kaur, A.; Kansal, S. K. Flower Shaped Bi2O2.33/Bi2WO6 Composite: An Efficient Photocatalyst for Degradation of Methylene Blue from Aqueous Solution in Direct Solar Light. *Chemosphere* **2024**, *349*. https://doi.org/10.1016/j.chemosphere.2023.140862.
123. Kathalingam, K.; Vikraman, D.; Lee, D.-H.; Cho, Y.-A.; Kim, H.-S. Optical and UV Shielding Properties of Inorganic Nanoparticles Embedded in Polymethyl Methacrylate Nanocomposite Freestanding Films. *Polymers* **2024**, *16* (8). https://doi.org/10.3390/polym16081048.
124. Karamat, S.; Akhter, T.; Ul-Hassan, S.; Faheem, M.; Mahmood, A.; Almasry, W.; Razzaque, S.; Ashraf, S.; Kim, T.; Han, S.-K. Recycling of Polyethylene Terephthalate to Bismuth-Embedded Bimetallic MOFs as Photocatalysts toward Removal of Cationic Dye in Water. *Journal of Industrial and Engineering Chemistry* **2024**, *137*, 503–513. https://doi.org/10.1016/j.jiec.2024.03.037.
125. Kadam, P. A.; Jagtap, C. V.; Kadam, V. S.; Bhongale, C. J.; Prasad, B.; Gadave, K. M. Photodegradation of Methylene Blue Dye for Water Purification Using Zinc Oxide (ZnO) Nanoparticles Synthesized by Acoustic Cavitation. *ES Energy and Environment* **2024**, *26*. https://doi.org/10.30919/esee1230.
126. Jothiramalingam, J. R.; Radhika, R.; Sutha, A.; Al-Lohedan, H.; Karami, A.; Ashok Kumar, S.; Devendrapandi, G.; Marjorie, S.; Balu, R. Enhanced Photocatalytic Activity of Magnetite/Titanate (Fe3O4/TiO2) Nanocomposite for Methylene Blue Dye Degradation under Direct Sunlight. *Optical Materials* **2024**, *148*. https://doi.org/10.1016/j.optmat.2023.114820.
127. Jebisha, S.; Deepa, G.; Johnson, J.; Mahadevan, C. K. (CdO)1−x (Mn3 O4)x (x = 0.0/0.25/0.50/0.75/1.0) Nanocrystals: Preparation by a Facile Method, Physicochemical Properties and Applications. *Nanosystems: Physics, Chemistry, Mathematics* **2024**, *15* (6), 793–805. https://doi.org/10.17586/2220-8054-2024-15-6-793-805.
128. Ibarra-Cervantes, N. F.; Vázquez-Nu´ñez, E.; Gómez-Solís, C.; Fernandez-Luqueno, F.; Basurto-Islas, G.; Álvarez-Martínez, J.; Castro-Beltrán, R. Green Synthesis of ZnO Nanoparticles from Ball Moss (Tillandsia Recurvata) Extracts: Characterization and Evaluation of Their Photocatalytic Activity. *Environmental Science and Pollution Research* **2024**, *31* (9), 13046–13062. https://doi.org/10.1007/s11356-024-31929-7.
129. Hussain, A.; Inayat, A.; Idrees, M.; Wahab, R.; Alam, M.; Munawar, K. S.; Iqbal, Z.; Abbas, S. M. Improved Cycle Capability of Mn-Doped Fe2TiO5 Anode for Lithium-Ion Batteries. *Journal of Energy Storage* **2024**, *96*. https://doi.org/10.1016/j.est.2024.112707.

130. Hassaballa, S.; Aljabri, A.; Mohamed, S. H.; Bakry, A. M.; Abd Elrahman, A. M. A.; Awad, M. A. Photocatalysis, Wettability and Optical Properties of N-Doped $Cu_2O$/CuO Thin Films for Smart Coating Applications. *Physica Scripta* **2024**, *99* (11). https://doi.org/10.1088/1402-4896/ad8529.
131. Harshitha, V.; Kumar, K. S. M.; Nethravathi, P. C.; Nagaraju, D. H.; Suresh, D. Multifunctional Pr-$V_2O_5$/rGO Hybrid Nanomaterial for Sensitive Heavy Metal Ion Detection and Efficient Photocatalytic Dye Degradation. *Ionics* **2024**, *30* (8), 4853–4870. https://doi.org/10.1007/s11581-024-05571-9.
132. Guru-Prakash, G. P.; Rosaiah, P.; Sangaraju, S.; Gopal, G.; Jwuiyad, A.; Sreedhar, S.; Ko, T. J. Mesostructured Graphitic Carbon Nitride Composites with Silver Nanoparticle Decoration as the Best Visible-Light-Driven Photocatalysts for Dye Degradation and $H_2$ Production. *Colloids and Surfaces A: Physicochemical and Engineering Aspects* **2024**, *680*. https://doi.org/10.1016/j.colsurfa.2023.132615.
133. Gudkov, S. V.; Burmistrov, D. E.; Fomina, P. A.; Validov, S. Z.; Kozlov, V. A. Antibacterial Properties of Copper Oxide Nanoparticles (Review). *International Journal of Molecular Sciences* **2024**, *25* (21). https://doi.org/10.3390/ijms252111563.
134. Goktas, S. Synergic Effects of pH, Reaction Temperature, and Various Light Sources on the Photodegradation of Methylene Blue Without Photocatalyst: A Relatively High Degradation Efficiency. *Chemistry Africa* **2024**, *7* (8), 4425–4437. https://doi.org/10.1007/s42250-024-01036-8.
135. Fellah, M.; Hezil, N.; Hamadi, F.; Iqbal, A.; ABDUL SAMAD, M.; Alburaikan, A.; Khalifa, H.; Obrosov, A. Effect of Fe Content on Physical, Tribological and Photocatalytical Properties of Ti-6Al-xFe Alloys for Biomedical Applications. *Tribology International* **2024**, *191*. https://doi.org/10.1016/j.triboint.2023.109146.
136. Farooq, U.; Raza, M.; Ali Khan, S.; Alam, S.; Khan, M.; Ali, W.; Al-Zoubi, W.; Ali, S.; Bashiri, A. H.; Zakri, W. Fabrication and Characterization of Binary Composite MgO/CuO Nanostructures for the Efficient Photocatalytic Ability to Eliminate Organic Contaminants: A Detailed Spectroscopic Analysis. *Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy* **2024**, *315*. https://doi.org/10.1016/j.saa.2024.124264.
137. Djoudi, L.; Achour, A.; Necira, Z.; Abba, M.; Omari, M. Kinetics of the Photocatalytic Degradation of Methylene Blue under Natural Sunlight Irradiation Using Nanocatalysts $Ce^{3+}$ and $Mg^{2+}$ Co-Doped $CaFeO_{3-\delta}$. *Reaction Kinetics, Mechanisms and Catalysis* **2024**, *137* (2), 1141–1155. https://doi.org/10.1007/s11144-024-02565-6.
138. Deka, J.; Kalita, C.; Sarma, R. K.; Thakur, S.; Sarkar, R. D.; Debanath, M. K.; Adhikary, N. C.; Saikia, E. Photocatalytic and Antibacterial Activities of Alternanthera Dentata Mediated Bio-Nanocomposite of CuO Nanoparticles and DFT Study on the Selective Capping Behavior of Phytocompounds. *Journal of Electronic Materials* **2024**, *53* (10), 6508–6523. https://doi.org/10.1007/s11664-024-11344-x.
139. Das, P.; Saha, S.; Bhunia, A. K. Visible Light Dependent Degradation of Dye: Photocatalytic Activity of CdS, $Cd_xZn_{1-x}S$ and ZnS Nanoparticles Grown by Chemical Route. *Journal of Materials Science: Materials in Electronics* **2024**, *35* (11). https://doi.org/10.1007/s10854-024-12565-w.
140. Das, G.; Shin, H.-S.; Lim, K.-J.; Patra, J. K. Bio-Inspired Synthesis of Gold Nanoparticles Using Leaf Extract of Jamun and Research on Its Biomedical Potential. *International Journal of Nanomedicine* **2024**, *19*, 12257–12286. https://doi.org/10.2147/IJN.S480592.
141. Constantin, M. A.; Constantin, L. A.; Ionescu, I. A.; Nicolescu, C. M.; Bumbac, M.; Tiron, O. Performance of a Solar-Driven Photocatalytic Membrane Reactor for Municipal Wastewater Treatment. *Processes* **2024**, *12* (3). https://doi.org/10.3390/pr12030617.
142. Chandrasekar, S.; Ambikapathi, N.; Prabha, P.; Jing, Q.; Liu, B. Harvesting High-Performance Electro-Water Oxidation and Selective MB Degradation through Dual Functional $Gd_2O_3$–$La_2O_3$ Photo-Electrocatalysts. *Materials Today Sustainability* **2024**, *27*. https://doi.org/10.1016/j.mtsust.2024.100947.

143. Chandra Shyagathur, S.; Nagaraja Rao, A. H.; Ravishankar, P. K.; Nagaraju, G.; Pattar, J. SnS2 Based SnS2/rGO/g-C3N4 Z-Scheme Ternary Nanocomposites for Efficient Visible Light-Driven Photocatalytic Activity. *Optical Materials* **2024**, *147*. https://doi.org/10.1016/j.optmat.2023.114688.
144. Chakraborty, D.; Bhavani, G. Optimization of Ca Doped in Alumina for Efficient Sunlight-Irradiated Methylene Blue Degradation. *Journal of Materials Science* **2024**, *59* (46), 21377–21390. https://doi.org/10.1007/s10853-024-10453-6.
145. Canbaz, Y.; Özdemir, A.; Gülfen, M.; Keskin, C. S. Investigation of Color Removal Mechanisms of Raw and Calcinated Eggshells, and Their Photocatalytic Properties for Selected Dyes. *Iranian Journal of Science* **2024**, *48* (2), 373–388. https://doi.org/10.1007/s40995-024-01592-1.
146. C P, R.; K, J.; Anjana, A.; Kovummal, G. R.; R B, R. Synthesis and Characterization of Alpha and Beta Cobalt Hydroxide Nanostructures for Photocatalytic Dye Degradation and Supercapacitor Applications. *Next Materials* **2024**, *4*. https://doi.org/10.1016/j.nxmate.2024.100199.
147. Buniyamin, I.; Asli, N. A.; Eswar, K. A.; Syed Abd Kadir, S. A. I. A.; Saiman, A.; Idorus, M. Y.; Abd Razak, A. R.; Mahmood, M. R.; Khusaimi, Z. The Application of Pandan and Soybean Extracts on the Biosynthesis of Tin Oxide Nanoparticles. *Journal of Science and Mathematics Letters* **2024**, *12* (2), 83–92. https://doi.org/10.37134/jsml.vol12.2.6.2024.
148. Bradley, D.; Sarpaki, S.; Mirabello, V.; Giuffrida, S. G.; Kociok-Kohn, G. I.; Calatayud, D. G.; Pascu, S. I. Shedding Light on the Use of Graphene Oxide-Thiosemicarbazone Hybrids towards the Rapid Immobilisation of Methylene Blue and Functional Coumarins. *Nanoscale Advances* **2024**, *6* (9), 2287–2305. https://doi.org/10.1039/d3na01042b.
149. Bizuayen Adamu, T.; Melese Mengesha, A.; Assefa Kebede, M.; Lake Bogale, B.; Walle Kassa, T. Facile Biosynthesis of Zinc Oxide Nanoparticles (ZnO NPs) Using Lupinus Albus L (Gibto) Seed Extract for Antibacterial and Photocatalytic Applications. *Results in Chemistry* **2024**, *10*. https://doi.org/10.1016/j.rechem.2024.101724.
150. Basha, Z. W.; Senthil Kumar, A. S.; Muniraj, S. Green Synthesis of Carbon Quantum Dots from Teak Leaves Biomass for in Situ Precipitation and Regenerative-Removal of Methylene Blue-Dye. *Environmental Science and Pollution Research* **2024**. https://doi.org/10.1007/s11356-024-32816-x.
151. Ashie, M. D.; Kumar, D.; Bastakoti, B. P. An Emerging Trend in the Synthesis of Iron Titanate Photocatalyst Toward Water Splitting. *Chemical Record* **2024**, *24* (5). https://doi.org/10.1002/tcr.202400016.
152. Ashie, M. D.; Bastakoti, B. P. Photocatalytic Hydrogen Evolution Using Mesoporous Honeycomb Iron Titanate. *Small* **2024**, *20* (29). https://doi.org/10.1002/smll.202310927.
153. Aruchamy, K.; Sudarsan, D.; Ajith, M.; Sreekumar, A. A. M.; Uma Maheswari, A.; Sivakumar, S. Enhanced Photocatalytic Activity of V3O7 / V2O5 – Reduced Graphene Oxide Nanocomposite towards Methylene Blue Dye Degradation. *Environmental Science and Pollution Research* **2024**, *31* (14), 20983–20998. https://doi.org/10.1007/s11356-024-32375-1.
154. Arsha, A. S.; Raja, D. H.; Davidson, D. J. Comparative Study of Anodized TNTs and S-TNTs on Ti Plates for Effective Methylene Blue Degradation under UV LED and Direct Sunlight. *Ceramics International* **2024**, *50* (24), 52881–52889. https://doi.org/10.1016/j.ceramint.2024.10.140.
155. Anjaneyulu, A.; Chauhan, V.; Vashisth, C.; Raghav, N. Revolutionizing Industrial Wastewater Treatment: MXenes Conquer Organic Pollutants in a Paradigm Shifting Breakthrough towards Sustainability. *Chemical Engineering Journal* **2024**, *490*. https://doi.org/10.1016/j.cej.2024.151373.
156. Anisha, A.; Stalin, S.; Jino, K. V. Analyzing the Effect of Quinalphos Pesticide on Fish Health through Molecular Docking Studies and Their Eradication by Photocatalytic Degradation Using Fe/S/TiO2 Nanocomposite. *Journal of Water and Environmental Nanotechnology* **2024**, *9* (1), 99–111. https://doi.org/10.22090/jwent.2024.01.07.

157. Anandkumar, M.; Kannan, P. K.; Sudarsan, S.; Trofimov, E. A. High-Entropy Oxide (CeGdHfPrZr)O2 Nanoparticles as Reusable Photocatalyst for Wastewater Remediation. *Surfaces and Interfaces* **2024**, *51*. https://doi.org/10.1016/j.surfin.2024.104815.
158. Alprol, A. E.; Eleryan, A.; Abouelwafa, A.; Gad, A. M.; Hamad, T. M. Green Synthesis of Zinc Oxide Nanoparticles Using Padina Pavonica Extract for Efficient Photocatalytic Removal of Methylene Blue. *Scientific Reports* **2024**, *14* (1). https://doi.org/10.1038/s41598-024-80757-9.
159. Ali, N.; Ali, M.; Nawaz, A.; Mao, P.; Bilal, M.; Mohisin Khan, M.; Khan, A.; Khan, F.; Idrees, M. Fabrication, Characterization, Metal Ions Sensor and Photocatalytic Activity of Visible Light Harvesting Lead Free Perovskite Oxide. *Materials Chemistry and Physics* **2024**, *325*. https://doi.org/10.1016/j.matchemphys.2024.129738.
160. Al-Otaibi, A. L.; Elsayed, K. A.; Manda, A. A.; Haladu, S. A.; Ibrahim Gaya, U.; Ercan, F.; Kayed, T. S.; Cevik, E.; Alhajri, U.; Ercan, İ. Pulsed Laser Ablation-Mediated Facile Fabrication of MoO3/TiO2/rGO Nanocomposite as a Photocatalyst for Dye Degradation. *Optics and Laser Technology* **2024**, *170*. https://doi.org/10.1016/j.optlastec.2023.110156.
161. Abubakar Abdulkadir, B. A.; Rozi, M. N. M.; Norfairuzazuan, N. H.; Daud, N. A. M.; Setiabudi, H. D. Improved Photodegradation of Methylene Blue Using Cost-Effective and Renewable Fe-Supported Fibrous Nano-Silica from Palm Oil Fuel Ash. *Topics in Catalysis* **2024**. https://doi.org/10.1007/s11244-024-02035-2.
162. Yadav, S.; Shakya, K.; Gupta, A.; Singh, D.; Chandran, A. R.; Varayil Aanappalli, A.; Goyal, K.; Rani, N.; Saini, K. A Review on Degradation of Organic Dyes by Using Metal Oxide Semiconductors. *Environmental Science and Pollution Research* **2023**, *30* (28), 71912–71932. https://doi.org/10.1007/s11356-022-20818-6.
163. Yadav, A.; Kumar, H.; Sharma, R.; Kumari, R.; Singh, D.; Hamed, O. A. Metal Oxide Decorated Polyaniline Based Multifunctional Nanocomposites: An Experimental and Theoretical Approach. *Results in Engineering* **2023**, *18*. https://doi.org/10.1016/j.rineng.2023.101161.
164. Yadav, A.; Kumar, H. Self-Assembled Quantum Dots Decorated Polypyrrole Based Multifunctional Nanocomposite. *Colloids and Surfaces A: Physicochemical and Engineering Aspects* **2023**, *666*. https://doi.org/10.1016/j.colsurfa.2023.131241.
165. Xi, X.; Kamali, M.; Xue, Y.; Li, S.; Costa, M. E. V.; Cabooter, D.; Dewil, R. Periodate Activation with Copper Oxide Nanomaterials for the Degradation of Ciprofloxacin - A New Insight into the Efficiency and Mechanisms. *Journal of Cleaner Production* **2023**, *383*. https://doi.org/10.1016/j.jclepro.2022.135412.
166. Vuggili, S. B.; Gaur, U. K.; Tyagi, T.; Sharma, M. 2D/2D Nitrogen-Doped Graphitic Carbon Nitride/Cobalt Sulfide Nanostructures for Fast Photodegradation of Methylene Blue Dye and Real Industrial Sewage Effluents. *Environmental Science: Advances* **2023**, *2* (5), 795–814. https://doi.org/10.1039/d2va00208f.
167. Supin, K. K.; Parvathy Namboothiri, P. N.; Vasundhara, M. Enhanced Photocatalytic Activity in ZnO Nanoparticles Developed Using Novel Lepidagathis Ananthapuramensis Leaf Extract. *RSC Advances* **2023**, *13* (3), 1497–1515. https://doi.org/10.1039/d2ra06967a.
168. Stiadi, Y.; Wendari, T. P. Tuning the Structural, Magnetic, and Optical Properties of ZnO/NiFe2O4 Heterojunction Photocatalyst for Simultaneous Photodegradation of Rhodamine B and Methylene Blue under Natural Sunlight. *Environmental Engineering Research* **2023**, *28* (3). https://doi.org/10.4491/eer.2022.074.
169. Stamenković, T.; Dinic, I.; Vuković, M.; Radmilović, N.; Barudžija, T.; Tomić, M.; Mančić, L.; Lojpur, V. Effect of Bi3+co-Doping on the up-Converting and Photocatalytic Properties of SrGd2O4:Yb3+/Ho3+ Phase. *Ceramics International* **2023**, *49* (23), 37758–37767. https://doi.org/10.1016/j.ceramint.2023.09.103.
170. Stalin, S. S.; Jino, E. K. K. V. Fabrication of Cu Doped ZnO Nanocrystals Hybridised with Graphene Oxide Nanosheets as an Efficient Solar Light Driven Photocatalyst for the Degradation of Quinalphos Pesticide in

Aqueous Medium. *Journal of Water and Environmental Nanotechnology* **2023**, *8* (2), 94–107. https://doi.org/10.22090/jwent.2023.02.001.
171. Sindhudevi, M.; Srinivasan, S.; Karthekiyan, B.; Muthuvel, A. Green Synthesis and Characterization of Selenium/Zirconium Bimetallic Nanoparticles Using Cinnamomum Camphora Leaf Extract and Their Photocatalyst and Anticancer Activity. *Journal of Water and Environmental Nanotechnology* **2023**, *8* (4), 417–441. https://doi.org/10.22090/JWENT.2023.04.008.
172. Sharma, A.; Sharma, R.; Kumari, A. Enhanced Photocatalytic Applications of Chitosan-Encapsulated Silver Sulfide Quantum Dots. *Nanofabrication* **2023**, *8*. https://doi.org/10.37819/nanofab.008.327.
173. Shanmuganathan, R.; Hoang Le, Q.; Devanesan, S.; R M Sayed, S.; Devi Rajeswari, V. D.; Liu, X.; Jhanani, G. K. Mint Leaves (Mentha Arvensis) Mediated CaO Nanoparticles in Dye Degradation and Their Role in Anti-Inflammatory, Anti-Cancer Properties. *Environmental Research* **2023**, *236*. https://doi.org/10.1016/j.envres.2023.116718.
174. Shah, M. Nanotechnology for Water Treatment and Filtration. In *Springer Proceedings in Materials*; 2023; Vol. 28, pp 359–362. https://doi.org/10.1007/978-981-99-4685-3_51.
175. Seyrek, M.; Boran, F.; Okutan, M. Treatment of Automotive Paint Wastewater: Photocatalytic Degradation of Methylene Blue Using Semi-Conductive ZrO2. *International Journal of Automotive Science and Technology* **2023**, *7* (4), 316–324. https://doi.org/10.30939/ijastech..1378268.
176. Selvi, M. H.; Ashok, M.; Vanga, P. R.; Harinee, S.; Wiston, B. R. Enhanced Photocatalytic Activity of Bi2WO6/ZnO Nanocomposite in Degradation of Methylene Blue under Sunlight Irradiation and for Antimicrobial Activity. *Optik* **2023**, *287*. https://doi.org/10.1016/j.ijleo.2023.171092.
177. Sehar, K.; Saeed, M.; Murtaza, M.; Zahra, M.; Waseem, A. Synthesis, Characterization, and Environmental Applications of Cu-Ni-Doped Bismuth Molybdate. *Nanomaterials and Nanotechnology* **2023**, *2023*. https://doi.org/10.1155/2023/9793804.
178. Sarma, M.; Jaiswal, M. K.; Podder, S.; Bora, J.; Karmakar, S.; Choudhury, B.; Pal, A. R. A Study on the Applicability of Thin Film over Powder for Visible Light Photocatalysis. *Physica B: Condensed Matter* **2023**, *670*. https://doi.org/10.1016/j.physb.2023.415354.
179. Saranya, K.; Selvaganapathi, P.; Thirumaran, S.; Ciattini, S. Magnetically Separable Tris(N,N-Difurfuryldithiocarbamato-S,S')Iron(III), Micro and Nano Iron Sulfide Photocatalysts for the Degradation of Dyes. *Journal of Molecular Structure* **2023**, *1285*. https://doi.org/10.1016/j.molstruc.2023.135437.
180. Samui, R.; Bhunia, A. K.; Saha, S. Study of Enhanced Photodegradation of Methylene Blue in Presence of Grown SnSe Nanoparticles. *Journal of Materials Science: Materials in Electronics* **2023**, *34* (8). https://doi.org/10.1007/s10854-023-10169-4.
181. Safdar, A.; Ahmed Mohamed, H. E. A.; Hkiri, K.; Muhaymin, A.; Măaza, M. Green Synthesis of Cobalt Oxide Nanoparticles Using Hyphaene Thebaica Fruit Extract and Their Photocatalytic Application. *Applied Sciences (Switzerland)* **2023**, *13* (16). https://doi.org/10.3390/app13169082.
182. Ruziwa, D. T.; Oluwalana, A. E.; Mupa, M.; Meili, L.; Selvasembian, R.; Nindi, M. M.; Sillanpää, M.; Gwenzi, W.; Chaukura, N. Pharmaceuticals in Wastewater and Their Photocatalytic Degradation Using Nano-Enabled Photocatalysts. *Journal of Water Process Engineering* **2023**, *54*. https://doi.org/10.1016/j.jwpe.2023.103880.
183. Riyanti, F.; Purwaningrum, W.; Yuliasari, N.; Hariani, P. L. MgFe2O4 Magnetic Catalyst for Photocatalytic Degradation of Congo Red Dye in Aqueous Solution Under Visible Light Irradiation. *Environment and Natural Resources Journal* **2023**, *21* (4), 322–332. https://doi.org/10.32526/ennrj/21/20230002.
184. Riyanti, F.; Hasanudin, H.; Rachmat, A.; Purwaningrum, W.; Hariani, P. L. Photocatalytic Degradation of Methylene Blue and Congo Red Dyes from Aqueous Solutions by Bentonite-Fe3O4 Magnetic. *Communications in Science and Technology* **2023**, *8* (1). https://doi.org/10.21924/cst.8.1.2023.1007.

185. Prabhu, P. S.; Ponnusamy, P.; Maruthamani, D.; Ram, S. D. G. Enhanced Photocatalytic Activity of Methylene Blue Dye by DIFS Synthesized Pure and Mn Doped MgO Nanostructures. *Optik* **2023**, *283*. https://doi.org/10.1016/j.ijleo.2023.170869.
186. Phuruangrat, A.; Thongtem, S.; Thongtem, T. Chemical Combustion–High Temperature Calcination Combined Synthetic Processes of BiVO4 Microparticles with Their Enhanced Photocatalytic Performance. *Inorganic and Nano-Metal Chemistry* **2023**, *53* (11), 1291–1298. https://doi.org/10.1080/24701556.2021.1987465.
187. Pedanekar, R. S.; Mohite, S. V.; Madake, S. B.; Kim, Y.; Gunjakar, J. L.; Rajpure, K. Y. Photoelectrocatalytic Activity of Methylene Blue Using Chemically Sprayed Bi2WO6 Photoanode under Natural Sunlight. *Journal of Alloys and Compounds* **2023**, *942*. https://doi.org/10.1016/j.jallcom.2023.168866.
188. Okab, A. A.; Alwared, A. I. A Dual S-Scheme g-C3N4/Fe3O4/Bi2WO6/Bi2S3 Heterojunction for Improved Photocatalytic Decomposition of Methylene Blue: Proposed Mechanism, and Stability Studies. *Materials Science in Semiconductor Processing* **2023**, *153*. https://doi.org/10.1016/j.mssp.2022.107196.
189. Niaz, Z.; Tariq, S. R.; Chotana, G. A. Fabrication and Characterization of G-C3N4 Supported Cu-Single Atom Catalysts for the Photocatalytic Degradation of Dyes. *RSC Advances* **2023**, *13* (50), 35537–35550. https://doi.org/10.1039/d3ra06109d.
190. Nawaz, A.; Atif, M.; Khan, A.; Siddique, M.; Ali, N.; Naz, F.; Bilal, M.; Kim, T. H.; Momotko, M.; Ul Haq, H. U. Solar Light Driven Degradation of Textile Dye Contaminants for Wastewater Treatment – Studies of Novel Polycationic Selenide Photocatalyst and Process Optimization by Response Surface Methodology Desirability Factor. *Chemosphere* **2023**, *328*. https://doi.org/10.1016/j.chemosphere.2023.138476.
191. Nawaz, A.; Ali, S.; Atif, M.; Naz, F.; Khan, A.; Li, L.; Ali, N.; Zhenyang, W.; Bououdina, M. A Robust Rationally Designed Multinarydouble Perovskites Microplates as an Efficient Visible-Light Photocatalyst. *Surfaces and Interfaces* **2023**, *38*. https://doi.org/10.1016/j.surfin.2023.102794.
192. Naik, H. S.; Sah, P. M.; Dhangade, M.; Lakkakula, J.; Raut, R. W.; Roy, A.; Alghamdi, S.; Qusty, N.; Alhindi, Z.; Kabrah, A. Synthesis of a Silica Matrix with ZnO Nanoparticles for the Fabrication of a Recyclable Photodegradation System to Eliminate Methylene Blue Dye. *Green Processing and Synthesis* **2023**, *12* (1). https://doi.org/10.1515/gps-2023-0157.
193. Mubeen, K.; Irshad, A.; Safeen, A.; Aziz, U.; Safeen, K.; Ghani, T.; Khan, K.; Ali, Z.; Ul Haq, I.; Shah, A. Band Structure Tuning of ZnO/CuO Composites for Enhanced Photocatalytic Activity. *Journal of Saudi Chemical Society* **2023**, *27* (3). https://doi.org/10.1016/j.jscs.2023.101639.
194. Mohammed, S. H.; Baz, M. M.; Ibrahim, M.; Radwan, I. T.; Selim, A.; Dawood, A.-F. D.; Taie, H. A. A.; Abdalla, S.; Khater, H. F. Acaricide Resistance and Novel Photosensitizing Approach as Alternative Acaricides against the Camel Tick, Hyalomma Dromedarii. *Photochemical and Photobiological Sciences* **2023**, *22* (1), 87–101. https://doi.org/10.1007/s43630-022-00301-4.
195. Mendis, A.; Thambiliyagodage, C.; Ekanayake, G.; Liyanaarachchi, H.; Jayanetti, M.; Vigneswaran, S. Fabrication of Naturally Derived Chitosan and Ilmenite Sand-Based TiO2/Fe2O3/Fe-N-Doped Graphitic Carbon Composite for Photocatalytic Degradation of Methylene Blue under Sunlight. *Molecules* **2023**, *28* (7). https://doi.org/10.3390/molecules28073154.
196. Lins, A.; Jerônimo, A. G.; Barbosa, R.; Neves, L.; Trigueiro, P.; Almeida, L. C.; Osajima, J. A.; Pereira, F. A.; Peña-Garcia, R. R. Facile Synthesis of Ni-Doped ZnO Nanoparticles Using Cashew Gum: Investigation of the Structural, Optical, and Photocatalytic Properties. *Molecules* **2023**, *28* (23). https://doi.org/10.3390/molecules28237772.
197. Liao, C.; Liu, L.; Shi, Z.; Zhang, X.; Zou, L.; Chen, Z.; Liu, Y.; Sun, Y. Efficient Degradation of Organic Dyes Using Vanadium Titanomagnetite Tailings/Kaolin Composite Photocatalyst. *Journal of Sustainable Metallurgy* **2023**, *9* (1), 294–302. https://doi.org/10.1007/s40831-022-00646-1.

198. Liang, H.; He, X.; Li, X.; Semiruomi, D.; Yan, F. Effect of Royal Gel Addition to Chitosan Matrix for Wound Dress Applications: Fabrication, Characterization and Artificial Neural Network Analysis. *Environmental Technology and Innovation* **2023**, *30*. https://doi.org/10.1016/j.eti.2023.103077.
199. Lee, K.; Sahu, M.; Hajra, S.; Abolhassani, R.; Mistewicz, K.; Toroń, B.; Rubahn, H.-G.; Mishra, Y. K.; Kim, H. J. Zinc Oxide Tetrapod Sponges for Environmental Pollutant Monitoring and Degradation. *Journal of Materials Research and Technology* **2023**, *22*, 811–824. https://doi.org/10.1016/j.jmrt.2022.11.142.
200. Kumar, M.; Rahman, A. Facile Synthesis, Characterization, and Photocatalytic Study of La2O3/SnO2 Nanocomposites. *Journal of The Institution of Engineers (India): Series E* **2023**, *104* (1), 95–108. https://doi.org/10.1007/s40034-023-00267-7.
201. Kumar, A.; Rawat, R. K.; Chauhan, P. Hierarchical α-MoO3: A Versatile Eco-Friendly Material for Humidity-Assisted Ammonia Sensing and Efficient Catalytic Activity in Wastewater Treatment. *Colloids and Surfaces A: Physicochemical and Engineering Aspects* **2023**, *676*. https://doi.org/10.1016/j.colsurfa.2023.132147.
202. Jahani, F.; Maleki, B.; Mansouri, M.; Noorimotlagh, Z.; Mirzaee, S. A. Enhanced Photocatalytic Performance of Milkvetch-Derived Biochar via ZnO–Ce Nanoparticle Decoration for Reactive Blue 19 Dye Removal. *Scientific Reports* **2023**, *13* (1). https://doi.org/10.1038/s41598-023-45145-9.
203. Jafarabadi, A.; Sobhani, M.; Koohestani, H. Fabrication and Characterization of Highly Visible-Light Responsive TiO2/Fe2TiO5 Ceramic. *Inorganic Chemistry Communications* **2023**, *154*. https://doi.org/10.1016/j.inoche.2023.111008.
204. Ishaque, M. Z.; Zaman, Y.; Shahzad, M.; Siddique, A. B.; Shahid, S.; Akram, M.; Kanwal, H.; Akhtar, M. T.; Hussain, S. Photocatalytic and Antibacterial Potential of Silver Nanocubes and Nanorods Synthesized via Polyol Reduction Method. *Water, Air, and Soil Pollution* **2023**, *234* (4). https://doi.org/10.1007/s11270-023-06269-w.
205. Hariani, P. L.; Said, M.; Rachmat, A.; Aprianti, N.; Sthephanie, E. A. Synthesis of Fe3 O4 /SiO2 /NiO Magnetic Composite: Evaluation of Its Catalytic Activity for Methylene Blue Degradation. *Global Nest Journal* **2023**, *25* (2), 36–43. https://doi.org/10.30955/gnj.004407.
206. Handal, H. T.; Mohamed, W. A. A.; Yakout, S. M.; Mahmoud, K. R.; Mousa, H. A. Insights into the Structural, and Functionality of RuO2/TiO2 and Ni(OH)2/RuO2/TiO2 for Water Splitting and Dye Degradation. *Advanced Powder Technology* **2023**, *34* (11). https://doi.org/10.1016/j.apt.2023.104234.
207. Halakarni, M. A.; Veerababu, V.; Samage, A. A.; Mahto, A.; Svagan, A. J.; Hedenqvist, M. S.; Nataraj, S. K. Design of Selective and Self-Cleaning Iron Aminoclay Thin Film Nanocomposite Membranes. *Chemical Engineering Journal* **2023**, *456*. https://doi.org/10.1016/j.cej.2022.140941.
208. Haerani, D. N.; Ulan, C. N.; Sarwanto, Y.; Mulyawan, A.; Adnyana, I. G. A. P.; Sukirman, E.; Ari Adi, W. A. Pseudobrookite Fe2-2xCoxTi1-½xO5: Structural, Magnetic Phase Transformation and Reflection Loss Characteristic. *Materialia* **2023**, *27*. https://doi.org/10.1016/j.mtla.2023.101692.
209. Gomes, B. R.; Lopes, J. L.; Coelho, L.; Ligonzo, M.; Rigoletto, M.; Magnacca, G.; Deganello, F. Development and Upscaling of SiO2@TiO2 Core-Shell Nanoparticles for Methylene Blue Removal. *Nanomaterials* **2023**, *13* (16). https://doi.org/10.3390/nano13162276.
210. Gil, M. A.; Murcia, J. J.; Hernández-Laverde, M.; Morante, N.; Sannino, D.; Vaiano, V. Ag/Cr-TiO2 and Pd/Cr-TiO2 for Organic Dyes Elimination and Treatment of Polluted River Water in Presence of Visible Light. *Nanomaterials* **2023**, *13* (16). https://doi.org/10.3390/nano13162341.
211. Gharebaghai, A.; Heshmati Jannat Magham, A. H. J.; Hokmabadi, L. Photocatalytic-Degradation of Some Organic Pollutants in Water by ZnO Nanoparticles Synthesized by a Simple Green Method. *Russian Journal of Physical Chemistry A* **2023**, *97* (14), 3212–3218. https://doi.org/10.1134/S0036024424010072.
212. Ganesan, R.; Vinodhini, S. P.; Arulmozhi, R.; Rajaram, R. Influence of Halogen Substitution in Double Perovskite Rb2Sn(Br0.75I0.25)6 on the Photocatalytic Degradation of Methylene Blue Dye under Visible

Light Irradiation. *Journal of Materials Science: Materials in Electronics* **2023**, *34* (2). https://doi.org/10.1007/s10854-022-09533-7.

213. Farooq, U.; Qureshi, A. K.; Noor, H.; Farhan, M.; Khan, M. E.; Hamed, O. A.; Bashiri, A. H.; Zakri, W. Plant Extract-Based Fabrication of Silver Nanoparticles and Their Effective Role in Antibacterial, Anticancer, and Water Treatment Applications. *Plants* **2023**, *12* (12). https://doi.org/10.3390/plants12122337.
214. Elayaraja, M.; Jothibas, M.; Kartharinal Punithavathy, I. K.; Sankar, M.; Paulson, E. Visible Light-Interfaced Organic Dye Degradation by Mn-Doped CdO Nanoparticles. *Nanotechnology for Environmental Engineering* **2023**, *8* (3), 629–642. https://doi.org/10.1007/s41204-022-00298-2.
215. Ehsan, M. F.; Barai, H. R.; Islam, M. M.; Bin Hasan Susan, M. A.; Joo, S. W.; Miran, M. S. ZnO Nanocomposites Supported by Acid-Activated Kaolinite as Photocatalysts for the Enhanced Photodegradation of an Organic Dye. *Materials Today Communications* **2023**, *36*. https://doi.org/10.1016/j.mtcomm.2023.106563.
216. Eddy, N. O.; Ukpe, R. A.; Ameh, P.; Ogbodo, R.; Garg, R.; Garg, R. Theoretical and Experimental Studies on Photocatalytic Removal of Methylene Blue (MetB) from Aqueous Solution Using Oyster Shell Synthesized CaO Nanoparticles (CaONP-O). *Environmental Science and Pollution Research* **2023**, *30* (34), 81417–81432. https://doi.org/10.1007/s11356-022-22747-w.
217. Demirov, A. P.; Blinkov, I. V.; Belov, D. S.; Kozlova, N. S.; Zabelina, E. V.; Kasimova, V. M.; Kostishin, V. G. Photocatalytic Properties of Porous Films Based on α-$Fe_2O_3$ Hollow Microspheres. *Inorganic Materials* **2023**, *59* (3), 272–283. https://doi.org/10.1134/S0020168523030032.
218. Das, S.; Das, S.; Nair, R. G.; Chowdhury, A. Magnetically Separable $ZnFe_2O_4$ Grafted G-$C_3N_4$/rGO Ternary Nanocomposites for Enhanced Photo-Fenton Catalytic Activity under Visible Light. *Materials Today Sustainability* **2023**, *21*. https://doi.org/10.1016/j.mtsust.2022.100263.
219. Das, G.; Seo, S.; Yang, I.-J.; Nguyen, L. T. H.; Shin, H.-S.; Patra, J. K. Sericin Mediated Gold/Silver Bimetallic Nanoparticles and Exploration of Its Multi-Therapeutic Efficiency and Photocatalytic Degradation Potential. *Environmental Research* **2023**, *229*. https://doi.org/10.1016/j.envres.2023.115935.
220. Chen, M.; Farooqi, Z. H.; Bolognesi, G.; Vladisavljević, G. T. Microfluidic Fabrication of Monodisperse and Recyclable $TiO_2$-Poly(Ethylene Glycol) Diacrylate Hybrid Microgels for Removal of Methylene Blue from Aqueous Medium. *Langmuir* **2023**, *39* (51), 18784–18796. https://doi.org/10.1021/acs.langmuir.3c02276.
221. Anwar, M.; Kayani, Z. N.; Hassan, A.; Zeeshan, T.; Riaz, S.; Naseem, S. Enhancement in Photocatalytic Activity and Biological Properties of Sm Doped ZnO Nanostructures by the Increase in Sm Contents. *Inorganic Chemistry Communications* **2023**, *158*. https://doi.org/10.1016/j.inoche.2023.111431.
222. Amerhaider Nuar, N. N.; Md Jamil, S. N. A.; Choong, T. S. Y.; Mat Azmi, I. D.; Abdul Romli, N. A.; Abdullah, L. C.; Chiang, P.-C.; Li, F. Synthesis of Calcium Peroxide Nanoparticles with Starch as a Stabilizer for the Degradation of Organic Dye in an Aqueous Solution. *Polymers* **2023**, *15* (5). https://doi.org/10.3390/polym15051327.
223. Alikarami, S.; Soltanizadeh, A.; Rashchi, F. Enhancing Decomposition of Rhodamine (RhB) and Methylene Blue (MB) Using CdS Decorated with Ag or Ru Driven by Visible Radiation. *Environmental Science and Pollution Research* **2023**, *30* (22), 62847–62866. https://doi.org/10.1007/s11356-023-26542-z.
224. Al-Amer, K. Thermally Stable Silica Shell/AuNPs Core: Structural, Optical, and Photocatalytic Activity. *Materials Chemistry and Physics* **2023**, *309*. https://doi.org/10.1016/j.matchemphys.2023.128409.
225. Yulizar, Y.; Apriandanu, D. O. B.; Marcony Surya, R. Fabrication of Novel $SnWO_4$/ZnO Using Muntingia Calabura L. Leaf Extract with Enhanced Photocatalytic Methylene Blue Degradation under Visible Light Irradiation. *Ceramics International* **2022**, *48* (3), 3564–3577. https://doi.org/10.1016/j.ceramint.2021.10.135.
226. Valian, M.; Salavati-Niasari, M.; Ganduh, S. H.; Abdulsahib, W. K.; Mahdi, M. A.; Jasim, L. S. Sol-Gel Auto-Combustion Synthesis of a Novel Chitosan/$Ho_2Ti_2O_7$ Nanocomposite and Its Characterization for

Photocatalytic Degradation of Organic Pollutant in Wastewater under Visible Illumination. *International Journal of Hydrogen Energy* **2022**, *47* (49), 21146–21159. https://doi.org/10.1016/j.ijhydene.2022.04.221.

227. Sudhan, N.; Rathiha, S. K.; Balasubramanian, V.; Pandiaraman, M.; Dhandapani, D.; Natarajan, V.; Ismail, M. A.; Vinodhkumar, G. A Study on Methylene Blue Degradation: Enhanced Photocatalytic Activity of Ag-ZnO Nanocomposities. *Materials Research Express* **2022**, *9* (11). https://doi.org/10.1088/2053-1591/aca245.
228. Sikdar, S.; Banu, A.; Ali, S.; Barman, S.; Kalar, P. L.; Das, R. Micro-Structural Analysis and Photocatalytic Properties of Green Synthesized t-ZrO2 Nanoparticles. *ChemistrySelect* **2022**, *7* (4). https://doi.org/10.1002/slct.202103953.
229. Sharma, S.; Devi, A.; Bhattacharyya, K. G. Photocatalytic Degradation of Methylene Blue in Aqueous Solution with Silver-Kaolinite-Titania Nanocomposite under Visible Light Irradiation. *Journal of Nanostructures* **2022**, *12* (2), 426–445. https://doi.org/10.22052/JNS.2022.02.018.
230. Sangaiya, P.; Jayaprakash, R.; Shkir, M.; Ashraf, I. M.; Gedi, S. Hydrogen Production and Photocatalytic Activity of HTAB Assisted Titanium Doped α-Fe2O3 Nanoparticles Treated by Microwave Irradiation Process. *Inorganic Chemistry Communications* **2022**, *144*. https://doi.org/10.1016/j.inoche.2022.109852.
231. Sajid, M. M.; Zhai, H.; Alomayri, T.; Khan, S. B.; Javed, Y.; Shad, N. A.; Ishaq, A. R.; Amin, N.; Zhang, Z. Platinum Doped Bismuth Vanadate (Pt/BiVO4) for Enhanced Photocatalytic Pollutant Degradation Using Visible Light Irradiation. *Journal of Materials Science: Materials in Electronics* **2022**, *33* (18), 15116–15131. https://doi.org/10.1007/s10854-022-08431-2.
232. Sailaja Kumari, P.; Vijaya Charan, G.; Ravi Kumar, D. Synthesis, Structural, Photocatalytic and Anti-Cancer Activity of Zn Doped Ni Nano Chromites by Citrate Gel Auto Combustion Method. *Inorganic Chemistry Communications* **2022**, *139*. https://doi.org/10.1016/j.inoche.2022.109393.
233. Rizzotto, F.; Vasiljevic, Z. Z.; Stanojević, G.; Dojcinovic, M. P.; Janković-Častvan, I.; Vujančević, J. D.; Tadić, N. B.; Brankovič, G. O.; Magniez, A.; Vidic, J. Antioxidant and Cell-Friendly Fe2TiO5 Nanoparticles for Food Packaging Application. *Food Chemistry* **2022**, *390*. https://doi.org/10.1016/j.foodchem.2022.133198.
234. Rai, A. K.; Jat, K. K. Sol–Gel Synthesis of Quantum Dots. In *Quantum Dots: Fundamentals, Synthesis and Applications*; Elsevier, 2022; pp 35–52. https://doi.org/10.1016/B978-0-12-824153-0.00003-3.
235. Ponnambalam, P.; Kamalakkannan, J.; Jayaseelan, R.; Selvi, G. Novel Synthesis of Cu–ZnO Heterostructure for Photoelectric, Medicinal, and Sun-Light Dye Degradative Applications. *Inorganic and Nano-Metal Chemistry* **2022**, *52* (9), 1214–1225. https://doi.org/10.1080/24701556.2022.2034863.
236. Mishra, P. K.; Dobhal, R.; Rini, E. G.; Kumar, M.; Sen, S. Rapid Organic Dye Degradation and Wavelength Dependent Sensing Study in Cu1-xFexO. *Ceramics International* **2022**, *48* (5), 5995–6006. https://doi.org/10.1016/j.ceramint.2021.11.135.
237. Mansur, A. A. P.; Leonel, A. G.; Krambrock, K.; Mansur, H. S. Bifunctional Oxidase-Peroxidase Inorganic Nanozyme Catalytic Cascade for Wastewater Remediation. *Catalysis Today* **2022**, *397–399*, 129–144. https://doi.org/10.1016/j.cattod.2021.11.018.
238. Manda, A. A.; Elsayed, K. A.; Gaya, U. I.; Haladu, S. A.; Ercan, İ.; Ercan, F.; Alheshibri, M.; Al Baroot, A.; Kayed, T. S.; Alshammery, S. Enhanced Photocatalytic Degradation of Methylene Blue by Nanocomposites Prepared by Laser Ablation of Bi on CNT-α-Fe2O3 Nanoparticles. *Optics and Laser Technology* **2022**, *155*. https://doi.org/10.1016/j.optlastec.2022.108430.
239. Lopes, D. V.; Lisenkov, A. D.; Ruivo, L. C. M.; Yaremchenko, A. A.; Frade, J. R.; Kovalevsky, A. V. Prospects of Using Pseudobrookite as an Iron-Bearing Mineral for the Alkaline Electrolytic Production of Iron. *Materials* **2022**, *15* (4). https://doi.org/10.3390/ma15041440.
240. Khlifi, N.; Zerrouki, C.; Fourati, N.; Guermazi, H.; Guermazi, S. UNDOPED AND Ni/Fe DOPED CuO NANOPARTICLES: A STRUCTURAL, OPTICAL, AND PHOTOCATALYTIC COMPARATIVE STUDY. In *9th*

*EnvIMEKO Symposium of Environmental Instrumentation and Measurements, EnvIMEKO 2022*; 2022; pp 24–29.
241. Kayani, Z. N.; Altaf, A.; Sagheer, R.; Riaz, S.; Naseem, S. Vanadium Modified Di-Bismuth Tetra-Oxide Thin Films; Synthesis, Characterization and Properties. *Materials Chemistry and Physics* **2022**, *282*. https://doi.org/10.1016/j.matchemphys.2022.125944.
242. Jesu Amalraj, A. J.; Wang, S.-F. Synthesis of Transition Metal Titanium Oxide (MTiOx, M = Mn, Fe, Cu) and Its Application in Furazolidone Electrochemical Sensor. *Journal of Industrial and Engineering Chemistry* **2022**, *111*, 356–368. https://doi.org/10.1016/j.jiec.2022.04.018.
243. Jeba, R.; Radhika, S.; Padma, C. M.; Ascar Davix, X. D. Synthesis and Characterization of Zirconia Nanorods as a Photo Catalyst for the Degradation of Methylene Blue Dye. *Nanosystems: Physics, Chemistry, Mathematics* **2022**, *13* (1), 78–86. https://doi.org/10.17586/2220-8054-2022-13-1-78-86.
244. Jasrotia, R.; Verma, A.; Verma, R.; Ahmed, J.; Godara, S. K.; Bhargava, G.; Mehtab, A.; Ahmad, T.; Kalia, S. Photocatalytic Dye Degradation Efficiency and Reusability of Cu-Substituted Zn-Mg Spinel Nanoferrites for Wastewater Remediation. *Journal of Water Process Engineering* **2022**, *48*. https://doi.org/10.1016/j.jwpe.2022.102865.
245. Jabbar, Z. H.; Graimed, B. H. Recent Developments in Industrial Organic Degradation via Semiconductor Heterojunctions and the Parameters Affecting the Photocatalytic Process: A Review Study. *Journal of Water Process Engineering* **2022**, *47*. https://doi.org/10.1016/j.jwpe.2022.102671.
246. Jabbar, Z. H.; Ebrahim, S. Recent Advances in Nano-Semiconductors Photocatalysis for Degrading Organic Contaminants and Microbial Disinfection in Wastewater: A Comprehensive Review. *Environmental Nanotechnology, Monitoring and Management* **2022**, *17*. https://doi.org/10.1016/j.enmm.2022.100666.
247. Isopencu, G. O.; Mocanu, A.; Deleanu, I.-M. A Brief Review of Photocatalytic Reactors Used for Persistent Pesticides Degradation. *ChemEngineering* **2022**, *6* (6). https://doi.org/10.3390/chemengineering6060089.
248. Herath, A.; Navarathna, C.; Warren, S.; Pérez, F.; Pittman, C. U.; Mlsna, T. E. Iron/Titanium Oxide-Biochar (Fe2TiO5/BC): A Versatile Adsorbent/Photocatalyst for Aqueous Cr(VI), Pb2+, F- and Methylene Blue. *Journal of Colloid and Interface Science* **2022**, *614*, 603–616. https://doi.org/10.1016/j.jcis.2022.01.067.
249. Hemández-Carabalí, L. A.; Cedeño, E.; Rojas-Trigos, J. B.; Alvarado, S.; Mansanares, A. M.; Isidro-Ojeda, M. A.; Vargas, E.; Calderón, A.; Marín Moares, E. A Comparison between Thermal Lens and Conventional Optical Spectroscopy for Monitoring of a Photocatalytic Process. *Revista Mexicana de Fisica* **2022**, *68* (2). https://doi.org/10.31349/RevMexFis.68.021303.
250. Ha, H. C.; Nguyen, N. P.; Tri, N.; Cuong, H. T.; Van, N. T. T.; Loc, L. C. Small Band Gap Ferric Pseudobrookite as a New Photo-Fenton Catalyst for Degradation of Phenolic Acid. *Journal of Science: Advanced Materials and Devices* **2022**, *7* (3). https://doi.org/10.1016/j.jsamd.2022.100453.
251. Geetha, G. V.; Sivakumar, R.; Slimani, Y.; Sanjeeviraja, C.; Kannapiran, E. Rare Earth (RE: La and Ce) Elements Doped ZnWO4 Nanoparticles for Enhanced Photocatalytic Removal of Methylene Blue Dye from Aquatic Environment. *Physica B: Condensed Matter* **2022**, *639*. https://doi.org/10.1016/j.physb.2022.414028.
252. Devi, T. A.; Velammal, S. P.; Princess Jeba, D. P.; Amaladhas, T. P. Applications of Peristrophe Paniculata Derived Plasmonic Nanoparticles for DNA Binding and Photocatalytic Degradation of Cationic Dyes. *ChemistrySelect* **2022**, *7* (45). https://doi.org/10.1002/slct.202202769.
253. Dadvar, S.; Shahmoradi, B.; Habibi, S.; Wantala, K.; Suwannaruang, T.; Maleki, A.; Puttaiah, H. P.; Lee, S.-M. Photocatalytic Degradation of Water Disinfection By-Products Using Zirconium Doped Zinc Oxide Nanoparticles. *Desalination and Water Treatment* **2022**, *252*, 339–347. https://doi.org/10.5004/dwt.2022.28267.

254. Chakraborty, S.; Chakraborty, N.; Mondal, S.; Pal, M. Band Gap Engineered Sn-Doped Bismuth Ferrite Nanoparticles for Visible Light Induced Ultrafast Methyl Blue Degradation. *Ceramics International* **2022**, *48* (24), 37253–37263. https://doi.org/10.1016/j.ceramint.2022.08.303.
255. Bukhari, S. N. U. S.; Shah, A. A.; Bhatti, M. A.; Tahira, A.; Channa, I. A.; Shah, A. K.; Chandio, A. D.; Mahdi, W. A.; Alshehri, S.; Ibupoto, Z. H. Psyllium-Husk-Assisted Synthesis of ZnO Microstructures with Improved Photocatalytic Properties for the Degradation of Methylene Blue (MB). *Nanomaterials* **2022**, *12* (20). https://doi.org/10.3390/nano12203568.
256. Bhatti, M. A.; Gilani, S. J.; Shah, A. A.; Channa, I. A.; Almani, K. F.; Chandio, A. D.; Halepoto, I. A.; Tahira, A.; Bin-Jumah, M. N.; Ibupoto, Z. H. Effective Removal of Methylene Blue by Surface Alteration of TiO2 with Ficus Carica Leaf Extract under Visible Light. *Nanomaterials* **2022**, *12* (16). https://doi.org/10.3390/nano12162766.
257. Bano, S.; Wasim, A. A.; Khan, M. N. U. Cost Effective Catalytic Degradation of Methylene Blue (MB) Using Zero Valent Iron Nanoparticles (ZVFeNPs). In *2022 19th International Bhurban Conference on Applied Sciences and Technology (IBCAST)*; 2022; pp 47–52. https://doi.org/10.1109/IBCAST54850.2022.9990301.
258. Awais, M.; Khursheed, S.; Tehreem, R.; Mok, Y. S.; Siddiqui, G. U. pH Regulated Rapid Photocatalytic Degradation of Methylene Blue Dye via Niobium-Nitrogen Co-Doped Titanium Dioxide Nanostructures under Sunlight. *Applied Catalysis A: General* **2022**, *643*. https://doi.org/10.1016/j.apcata.2022.118764.
259. Ajay, S.; Panicker, J. S.; Manjumol, K. A.; Subramanian, P. P. Photocatalytic Activity of Biogenic Silver Nanoparticles Synthesized Using Coleus Vettiveroids. *Inorganic Chemistry Communications* **2022**, *144*. https://doi.org/10.1016/j.inoche.2022.109926.
260. Adarsha, J. R.; Ravishankar, T. N.; Ananda, A.; Manjunatha, C. R.; Mayegowda, B. M.; Ramakrishnappa, T. Hydrothermal Synthesis of Novel Heterostructured Ag/TiO2/CuFe2O4 Nanocomposite: Characterization, Enhanced Photocatalytic Degradation of Methylene Blue Dye, and Efficient Antibacterial Studies. *Water Environment Research* **2022**, *94* (6). https://doi.org/10.1002/wer.10744.
261. Yashas, S. R.; Puttaiah, H. P.; Gordon, G.; Shahmoradi, B.; Maleki, A.; Yetilmezsoy, K. Designing Bi-Functional Silver Delafossite Bridged Graphene Oxide Interfaces: Insights into Synthesis, Characterization, Photocatalysis and Bactericidal Efficiency. *Chemical Engineering Journal* **2021**, *426*. https://doi.org/10.1016/j.cej.2021.131729.
262. Violeta, V.; Raditoiu, V.; Raditoiu, A.; Raduly, F. M.; Manea, R.; Frone, A.; Anastasescu, M.; Ispas, G. C.; Căprărescu, S. Bilayer Coatings Based on Silica Materials and Iron (III) Phthalocyanine – Sensitized TiO2 Photocatalyst. *Materials Research Bulletin* **2021**, *138*. https://doi.org/10.1016/j.materresbull.2021.111222.
263. Shih, K.-Y.; Kuan, Y.-L.; Wang, E.-R. One-Step Microwave-Assisted Synthesis and Visible-Light Photocatalytic Activity Enhancement of BiOBr/RGO Nanocomposites for Degradation of Methylene Blue. *Materials* **2021**, *14* (16). https://doi.org/10.3390/ma14164577.
264. Phung Anh, N.; Tri, N.; Nguyen, N. D.; Ha, H. C.; Cuong, H. T.; Van, N. T. T.; Loc, L. C. Envirronmentally Friendly Fabrication of Fe2TiO5-TiO2nanocomposite for Enhanced Photodegradation of Cinnamic Acid Solution. *Advances in Natural Sciences: Nanoscience and Nanotechnology* **2021**, *12* (4). https://doi.org/10.1088/2043-6262/ac498d.
265. Paul, D.; Das, G. Efficient Solid-State Synthesis of Biomineralized Vaterite-Derived Pure CaMnO3perovskite for Effective Photocatalysis. *CrystEngComm* **2021**, *23* (22), 4050–4058. https://doi.org/10.1039/d1ce00386k.
266. Narath, S.; Koroth, S. K.; Sharath Shankar, S. S.; George, B.; Vasundhara, V.; Wacławek, S.; Černík, M.; Padil, V. V. T.; Varma, R. S. Cinnamomum Tamala Leaf Extract Stabilized Zinc Oxide Nanoparticles: A Promising Photocatalyst for Methylene Blue Degradation. *Nanomaterials* **2021**, *11* (6). https://doi.org/10.3390/nano11061558.

267. Karuppasamy, P.; Ramzan Nilofar Nisha, N.; Arivalagan, A.; Kandasamy, S.; Pitchaimuthu, S. An Investigation of Transition Metal Doped TiO2photocatalysts for the Enhanced Photocatalytic Decoloration of Methylene Blue Dye under Visible Light Irradiation. *Journal of Environmental Chemical Engineering* **2021**, *9* (4). https://doi.org/10.1016/j.jece.2021.105254.
268. Jabbar, Z. H.; Ebrahim, S. E. Synthesis, Characterization, and Photocatalytic Degradation Activity of Core/Shell Magnetic Nanocomposites (Fe3O4@SiO2@Ag2WO4@Ag2S) under Visible Light Irradiation. *Optical Materials* **2021**, *122*. https://doi.org/10.1016/j.optmat.2021.111818.
269. Jabbar, Z. H.; Ebrahim, S. E. Highly Efficient Visible-Light-Driven Photocatalytic Degradation of Organic Pollutants by Using Magnetically Separable Supported Heterogeneous Nanocomposites (SiO2/Fe3O4/Ag2WO4). *Environmental Nanotechnology, Monitoring and Management* **2021**, *16*. https://doi.org/10.1016/j.enmm.2021.100554.
270. Gümrükçü, S.; Özçeşmeci, M.; Sezer, E.; Ustamehmetoğlu, B.; Hamuryudan, E. In-Situ Synthesis of Phthalocyanines on Electrospun TiO2 Nanofiber by Solvothermal Process for Photocatalytic Degradation of Methylene Blue. *Turkish Journal of Chemistry* **2021**, *45* (6), 2034–2045. https://doi.org/10.3906/kim-2108-14.
271. Fatima, U.; Khalid, N. R.; Nawaz, T.; Bilal Tahir, M. B.; Fatima, N.; Kebaïli, I.; Alrobei, H.; Alzaid, M.; Shahzad, K.; Ali, A. M. Synthesis of BiVO4/NiFe2O4 Composite for Photocatalytic Degradation of Methylene Blue. *Applied Nanoscience (Switzerland)* **2021**, *11* (12), 2793–2800. https://doi.org/10.1007/s13204-021-02186-8.
272. Bakina, O. V.; Svarovskaya, N. V.; Pervikov, A. V.; Chzhou, V. R.; Vornakova, E. A.; Lerner, M. I. Features of Forming Zinc Titanate by Electrical Explosion Dispersion of Titanium and Zinc Wires in an Oxygen-Containing Atmosphere. *Russian Physics Journal* **2021**, *64* (5), 805–810. https://doi.org/10.1007/s11182-021-02395-2.
273. Areeb, A.; Yousaf, T.; Murtaza, M.; Zahra, M.; Zafar, M. I.; Waseem, A. Green Photocatalyst Cu/NiO Doped Zirconia for the Removal of Environmental Pollutants. *Materials Today Communications* **2021**, *28*. https://doi.org/10.1016/j.mtcomm.2021.102678.
274. Albert, P.; Narayanan, J.; Arockiadoss, T. Indium-Tin Oxide Regulated Band Gap of Nitrogen-Doped Titanium Oxide Thin Films for Visible Light Photocatalyst. *Applied Physics A: Materials Science and Processing* **2021**, *127* (12). https://doi.org/10.1007/s00339-021-05053-z.

Коцитати

275. Vasiljevic, Z. Z.; Vunduk, J.; Dojcinovic, M. P.; Mišković, G.; Tadić, N. B.; Vidic, J.; Nikolić, M. V. ZnO and Fe2TiO5 Nanoparticles Obtained by Green Synthesis as Active Components of Alginate Food Packaging Films. *Food Packaging and Shelf Life* **2024**, *43*. https://doi.org/10.1016/j.fpsl.2024.101280.

Аутоцитати

276. Nikolić, M. V.; Vasiljevic, Z. Z.; Dimitrijević, M.; Radmilović, N.; Vujančević, J.; Tanović, M.; Tadić, N. B. Natural Sunlight Driven Photocatalytic Degradation of Methylene Blue and Rhodamine B over Nanocrystalline Zn2SnO4/SnO2. *Nanomaterials* **2025**, *15* (14). https://doi.org/10.3390/nano15141138.
277. Vasiljevic, Z. Ž.; Dojcinovic, M. P.; Vujančević, J. D.; Spreitzer, M.; Kovač, J.; Bartolić, D.; Markovic, S.; Janković-Častvan, I.; Tadić, N. B.; Nikolić, M. V. Exploring the Impact of Calcination Parameters on the Crystal Structure, Morphology, and Optical Properties of Electrospun Fe2TiO5nanofibers. *RSC Advances* **2021**, *11* (51), 32358–32368. https://doi.org/10.1039/d1ra05748k.

2. Nikolic, M.; Vasiljevic, Z.; Lukovic, M.; Pavlovic, V.; Krstic, J.; Vujancevic, J.; Tadic, N.; Vlahovic, B.; Pavlovic, V. Investigation of ZnFe2O4 Spinel Ferrite Nanocrystalline Screen-Printed Thick Films for Application in Humidity Sensing. *INTERNATIONAL JOURNAL OF APPLIED CERAMIC TECHNOLOGY* **2019**, *16* (3), 981–993. https://doi.org/10.1111/ijac.13190.

Хетероцитати

1. Nemufulwi, M. I.; Swart, H. C.; Mhlongo, G. H. A Comprehensive Comparison Study on Magnetic Behaviour, Defects-Related Emission and Ni Substitution to Clarify the Origin of Enhanced Acetone Detection Capabilities. *Sensors and Actuators, B: Chemical* **2021**, *339*. https://doi.org/10.1016/j.snb.2021.129860.
2. Rafie, S. F.; Abu-Zahra, N.; Sillanpää, M. A Comprehensive Review of Spinel Ferrites and Their Magnetic Composites as Highly Efficient Adsorbents of Rare Earth Elements. *Emerging Contaminants* **2025**, *11* (1). https://doi.org/10.1016/j.emcon.2024.100429.
3. Volkov, F.; Rashitova, K.; Glumov, O.; Osmolovskaya, O.; Eliseeva, S. A New Simple, Cheap and Fast Way for Enhancing Electrochemical Characteristics of Carbon-Coated ZnFe2O4 Nanospheres. *Ceramics International* **2025**, *51* (5), 5870–5881. https://doi.org/10.1016/j.ceramint.2024.12.032.
4. Scott, C.; Cameron, S.; Cundell, J.; Mathur, A.; Davis, J. Adapting Resistive Sensors for Monitoring Moisture in Smart Wound Dressings. *Current Opinion in Electrochemistry* **2020**, *23*, 31–35. https://doi.org/10.1016/j.coelec.2020.02.017.
5. Omerović, N.; Djisalov, M.; Živojević, K.; Mladenović, M.; Vunduk, J.; Milenković, I.; Knežević, N. Ž.; Gadjanski, I.; Vidić, J. Antimicrobial Nanoparticles and Biodegradable Polymer Composites for Active Food Packaging Applications. *Comprehensive Reviews in Food Science and Food Safety* **2021**, *20* (3), 2428–2454. https://doi.org/10.1111/1541-4337.12727.
6. Vidya, Y. S.; Manjunatha, H. C.; Sridhar, K. N.; Seenappa, L.; Munirathnam, R.; Chinnappareddy, B. Brief Review on Magnetic Properties of Nanoferrites. *Inorganic Chemistry Communications* **2023**, *158*. https://doi.org/10.1016/j.inoche.2023.111408.
7. Bohra, M.; Arras, R.; Singh, V.; Singh, N.; Annadi, A.; Toulkeridou, E.; Grammatikopoulos, P.; Chou, H. Cationic Disorder: Governing the Spin-Insulatronic Properties of Nanocrystalline ZnFe2O4 Thin Films. *Materials Today Communications* **2024**, *38*. https://doi.org/10.1016/j.mtcomm.2024.108333.
8. Gupta, P.; Tomar, R.; Sahni, M.; Chauhan, S. Cobalt, Nickel and Copper Doped Non-Stoichiometric Cadmium Gallate as a Prominent Magnetic and Photocatalytic Material. *Chemical Physics* **2022**, *554*. https://doi.org/10.1016/j.chemphys.2021.111419.
9. Abdel-Azim, S. M.; El-Desouki, D. S.; Mady, A. H.; Aman, D. Construction of Novel Z-Scheme Heterojunction in ZnFe2O4/P25 @ MOF-5 Nanocomposite from Plastic Waste for Efficient Photodegradation of Aqueous BTX Under Visible Light. *Journal of Inorganic and Organometallic Polymers and Materials* **2023**. https://doi.org/10.1007/s10904-023-02917-0.
10. Stijepović, I.; Milanović, M.; Novaković, M. Cubic Structured Core/Shell NiFe2O4@ZnFe2O4 Nanocomposite: Structural, Morphological and Magnetic Properties. *Ceramics International* **2024**, *50* (17), 31326–31334. https://doi.org/10.1016/j.ceramint.2024.05.436.
11. Mishra, B.; Nanda, J.; Brahma, S. S.; Sankaran, K. J.; Sakthivel, R.; Ghadei, S.; Suman, S. Effect of La3+ Doping on Structural, Magnetic and LPG Gas-Sensing Properties of Mg-Zn Nano-Ferrites. *Materials Science and Engineering: B* **2024**, *299*. https://doi.org/10.1016/j.mseb.2023.117029.
12. Veeramani, T.; Venkataraju, C.; Porkalai, V.; Sagayaraj, R. Effect of ZnO on the Structural and Magnetodielectric Properties of MgFe2O4 Nanocomposite Prepared by Sol-Gel Method. *Asian Journal of Chemistry* **2023**, *35* (9), 2069–2077. https://doi.org/10.14233/ajchem.2023.28041.

13. Afzal, A.; Mujahid, A.; Iqbal, N.; Javaid, R.; Qazi, U. Y. Enhanced High-Temperature (600◦c) No2 Response of Znfe2o4 Nanoparticle-Based Exhaust Gas Sensors. *Nanomaterials* **2020**, *10* (11), 1–14. https://doi.org/10.3390/nano10112133.
14. Biswas, B.; Rahman, M. L.; Ahmed, M. F.; Sharmin, N. Extraction of Gamma Iron Oxide (γ-Fe2O3) Nanoparticles from Waste Can: Structure, Morphology and Magnetic Properties. *Heliyon* **2024**, *10* (10). https://doi.org/10.1016/j.heliyon.2024.e30810.
15. Rahman, M.; Rahman, M. L.; Biswas, B.; Ahmed, M. F.; Ali Shaikh, M. A.; Jahan, S. A.; Sharmin, N. Fabrication of Novel Ternary G-C3N4/Zn0.5Ni0.5Fe1.8Mn0.2O4/rGO Hybrid Nanocomposites for Humidity Sensing. *Nanoscale Advances* **2025**, *7* (6), 1489–1504. https://doi.org/10.1039/d4na00579a.
16. El Hajjar, I.; Bitar, M. A.; Zahr, R.; Zahr, S.; Khalil, M.; Awad, R. Fabrication, Characterization, and Antibacterial Activity of Ferrite, Chromite, and Aluminate Nanoparticles. *Materials Research Express* **2024**, *11* (1). https://doi.org/10.1088/2053-1591/ad1774.
17. Ha, T. W.; Lim, D.-Y.; Lee, C.-H. High-Temperature Stable NOx Sensor for Exhaust Gas Monitoring in Automobiles. *Journal of Sensor Science and Technology* **2024**, *33* (6), 439–447. https://doi.org/10.46670/JSST.2024.33.6.439.
18. Fourmont, P.; Vaussenat, F.; Gratuze, M.; Ross, C. A.; Cloutier, S. G. Highly-Sensitive and High Operating Range Fully-Printed Humidity Sensors Based on BiFeO3/BiOCl Heterojunctions. *Advanced Electronic Materials* **2024**, *10* (11). https://doi.org/10.1002/aelm.202400156.
19. Mishra, B.; Munisha, B.; Nanda, J.; Sankaran, K. J.; Suman, S. Hydrothermally Synthesized Magnesium Doped Zinc Ferrite Nanoparticles: An Extensive Study on Structural, Optical, Magnetic, and Dielectric Properties. *Materials Chemistry and Physics* **2022**, *292*. https://doi.org/10.1016/j.matchemphys.2022.126791.
20. Islam, S.; Lutfor Rahman, M.; Rassel Moni, M.; Biswas, B.; Farid Ahmed, M.; Sharmin, N. Impacts of Annealing Temperature on Microstructure, Optical and Electromagnetic Properties of Zinc Ferrites Nanoparticles Synthesized by Polymer Assisted Sol-Gel Method. *Arabian Journal of Chemistry* **2023**, *16* (10). https://doi.org/10.1016/j.arabjc.2023.105186.
21. Parry, R. A.; Parveen, N.; Amin, M. A.; Bhat, M. A.; Dar, S. A.; Gaur, N. K. Influence of Mg+2 on the Structure, Microstructure, and Magnetic Interactions of Zinc Ferrite Nanoparticles Synthesized via Co-Precipitation Route. *Solid State Communications* **2024**, *391*. https://doi.org/10.1016/j.ssc.2024.115649.
22. Sankaranarayanan, A.; Tharayanmaru Palliyalil, S.; Divya, A. S.; Devadas, K. M. Investigation of Structural, Magnetic and Morphological Properties of Zinc and Cobalt-Doped Nickel Ferrites. *Zeitschrift fur Physikalische Chemie* **2025**, *239* (7), 1101–1123. https://doi.org/10.1515/zpch-2024-0788.
23. Verma, R.; Yadav, S. K.; Singh, K. R.; Verma, R.; Kumar, D.; Singh, J. Laccase-Conjugated Nanostructured ZnFe2O4/rGO-Modified Electrode-Based Interfaces for Electrochemical Impedance Monitoring of Adrenaline: A Promising Biosensor for Management of Neurodegenerative Disorders. *ACS Applied Bio Materials* **2023**, *6* (12), 5842–5853. https://doi.org/10.1021/acsabm.3c00968.
24. Bohra, M.; Singh, N.; Annadi, A.; Battula, S. V.; Singh, V. Leveraging of Both Positive and Negative Magnetocaloric Effects in ZnFe2O4 Layers. *Materials Research Bulletin* **2024**, *169*. https://doi.org/10.1016/j.materresbull.2023.112547.
25. Tiwari, P. R.; Singh, R. P.; Bharati, K.; Yadav, A. C.; Kumar, K.; Yadav, B. C.; Kumar, S.; Singh, M. P. Magnesium-Substituted Zinc Ferrite as a Promising Nanomaterial for the Development of Humidity Sensors. *Physica Status Solidi (A) Applications and Materials Science* **2022**, *219* (23). https://doi.org/10.1002/pssa.202200424.
26. Gupta, P.; Baliyan, K.; Chaudhary, S.; Tomar, R. Manganese and Iron Doped Cadmium Gallate Spinel as a Multifunctional Inorganic Material. *Macromolecular Symposia* **2023**, *407* (1). https://doi.org/10.1002/masy.202200111.

27. Jermy, B. R.; Khan, F. A.; Ravinayagam, V.; Almessiere, M. A.; Slimani, Y.; Hassan, M.; Homeida, A. M.; Al-Suhaimi, E. A.; Baykal, A. Multifunctional CoCe/Silica and CoMnCe/Silica Spinel Ferrite Nanocomposite: In Vitro and in Vivo Evaluation for Cancer Therapy. *Nano-Structures and Nano-Objects* **2024**, *39*. https://doi.org/10.1016/j.nanoso.2024.101251.
28. Mouhib, Y.; Belaiche, M.; Elansary, M.; Ferdi, C. A.; Guetni, I. Multifunctional Ferrite Nanoparticles Prepared from Non-Standard Precursors: Structural, Morphological, and Magnetic Study. *Journal of Molecular Structure* **2023**, *1292*. https://doi.org/10.1016/j.molstruc.2023.136094.
29. Yadav, B. S.; Vishwakarma, A. K.; Singh, A. K.; Kumar, N. Oxygen Vacancies Induced Ferromagnetism in RF-Sputtered and Hydrothermally Annealed Zinc Ferrite (ZnFe2O4) Thin Films. *Vacuum* **2023**, *207*. https://doi.org/10.1016/j.vacuum.2022.111617.
30. Nigam, A.; Singh, B.; Saini, S.; Rai, A. K.; Pawar, S. J. Physio-Chemical Characterization, in-Vitro Biocompatibility, and Antimicrobial Activity of Magnetite Nanoparticles Synthesized via Sol-Gel Route. *Inorganic and Nano-Metal Chemistry* **2025**, *55* (1), 95–105. https://doi.org/10.1080/24701556.2023.2240771.
31. Nigam, A.; Kalauni, K.; Pawar, S. J. Physio-Chemical Characterizations and Antimicrobial Properties of Nano-Sized Mg-Zn Ferrite Particles for Biomedical Applications. *Materials Technology* **2022**, *37* (13), 2490–2502. https://doi.org/10.1080/10667857.2022.2043649.
32. Dos Santos, O. A. L.; Sneha, M.; Devarani, T.; Bououdina, M.; Backx, B. P.; Vijaya, J. J.; Bellucci, S. Review - Perovskite/Spinel Based Graphene Derivatives Electrochemical and Biosensors. *Journal of the Electrochemical Society* **2021**, *168* (6). https://doi.org/10.1149/1945-7111/ac0306.
33. Cristina De Oliveira, R.; Pontes Ribeiro, R. A.; Cruvinel, G. H.; Ciola Amoresi, R. A.; Carvalho, M. H.; Aparecido De Oliveira, A. J.; Carvalho De Oliveira, M.; Ricardo De Lazaro, S.; Fernando Da Silva, L.; Catto, A. C.; Simões, A. Z.; Sambrano, J. R.; Longo, E. Role of Surfaces in the Magnetic and Ozone Gas-Sensing Properties of ZnFe2O4Nanoparticles: Theoretical and Experimental Insights. *ACS Applied Materials and Interfaces* **2021**, *13* (3), 4605–4617. https://doi.org/10.1021/acsami.0c15681.
34. Sivakumar, A.; Mowlika, V.; Jude Dhas, S. S.; Prabhu, S.; Ramesh, R.; Robert, R.; Britto Dhas, S. A. M. Shock Wave Induced Switchable Electrical Resistance of ZnFe2O4 Nanoparticles. *Solid State Sciences* **2022**, *125*. https://doi.org/10.1016/j.solidstatesciences.2022.106843.
35. Mathpal, M. C.; Niraula, G.; Chand, M.; Kumar, P.; Singh, M. K.; Sharma, S. K.; Soler, M. A. G.; Swart, H. C. State of Art of Spinel Ferrites Enabled Humidity Sensors. In *Topics in Mining, Metallurgy and Materials Engineering*; 2021; pp 437–475. https://doi.org/10.1007/978-3-030-79960-1_14.
36. Nikam, P. N.; Patil, S. S.; Chougale, U. M.; Fulari, A. V.; Fulari, V. J. Supercapacitor Properties of Ni2+ Incrementally Substituted with Co2+ in Cubic Spinel NixCo1-xFe2O4 Nanoparticles by Sol-Gel Auto Combustion Method. *Journal of Energy Storage* **2024**, *96*. https://doi.org/10.1016/j.est.2024.112648.
37. Parmar, K. P. S.; Kim, J. H.; Bist, A.; Dua, P.; Tiwari, P. K.; Phuruangrat, A.; Lee, J. S. Superparamagnetic and Perfect-Paramagnetic Zinc Ferrite Quantum Dots from Microwave-Assisted Tunable Synthesis. *ACS Omega* **2022**, *7* (35), 31607–31611. https://doi.org/10.1021/acsomega.2c04668.
38. Dhall, M.; Jakhar, V.; Khasa, S.; Hooda, A.; Shah, J.; Kotnala, R. K. Sustainable Hydroelectric Energy Generation: Strain-Induced Oxygen-Deficient Nanocomposites NBT-ZFO. *Ceramics International* **2025**, *51* (21), 33820–33842. https://doi.org/10.1016/j.ceramint.2025.05.116.
39. Tiwari, P. R.; Singh, R. P.; Bharati, K.; Yadav, A. C.; Bhardwaj, B.; Yadav, B. C.; Singh, A.; Kumar, S. Synthesis and Application of Strontium-Doped Zinc Ferrite Nanomaterial in Humidity Sensing. *Journal of the Indian Chemical Society* **2024**, *101* (12). https://doi.org/10.1016/j.jics.2024.101439.
40. Tiwari, P. R.; Singh, R. P.; Bharati, K.; Yadav, A. C.; Yadav, B. C.; Singh, A.; Singh, M. P.; Kumar, S. Synthesis of Calcium Doped Zinc Ferrite Nanomaterial and Its Application as a Humidity Sensor. *Journal of*

*Dispersion Science and Technology* **2024**, *45* (11), 2155–2165. https://doi.org/10.1080/01932691.2023.2256383.

41. Babu, K.; Krishnan, Y.; Renugadevi, R.; Suriyaprakash, T.; Jeevitha, V.; Jeevanantham, G.; Jaiganesh, M.; Sakthivel, S.; Santhamoorthy, M.; Sinthuja, S.; Radhakrishnan, K.; Ayyar, M. Synthesis, Characterization, Sensor and Biomedical Applications of Rare Earth and Transition Metal Doped Zinc Ferrite Nanoparticles: A Review. *Semiconductors* **2025**, *59* (2), 203–210. https://doi.org/10.1134/S1063782624602048.
42. Wiranto, G.; Martadi, S.; Sulthoni, M. A.; Hermida, I. D. P.; Maulana, Y. Y.; Widodo, S.; Kurniadi, D. P.; Daud, P. The Effect of SnO2 Mixture on a PVA-Based Thick Film Relative Humidity Sensor. *International Journal on Advanced Science, Engineering and Information Technology* **2022**, *12* (3), 1060–1065. https://doi.org/10.18517/ijaseit.12.3.14869.
43. Madake, S. B.; Patil, A. R.; Pedanekar, R. S.; Narewadikar, N. A.; Thorat, J. B.; Rajpure, K. Y. The Influence of Nickel Substitution on the Structural and Gas Sensing Properties of Sprayed ZnFe2O4 Thin Films. *Journal of Materials Science: Materials in Electronics* **2022**, *33* (9), 6273–6282. https://doi.org/10.1007/s10854-022-07802-z.
44. Rahman, M.; Rahman, M. L.; Biswas, B.; Ahmed, M. F.; Shaikh, M. A. A.; Jahan, S. A.; Sharmin, N. The X-Ray Peak Profiling, Optical and Dielectric Properties of Ag@ZnFe2O4/rGO Ternary Nanocomposites: LED Assisted Photocatalysis and Humidity Sensing. *Journal of Alloys and Compounds* **2024**, *984*. https://doi.org/10.1016/j.jallcom.2024.174012.
45. Lankauf, K.; Górnicka, K.; Błaszczak, P.; Karczewski, J.; Ryl, J.; Cempura, G.; Zając, M.; Bik, M.; Sitarz, M.; Jasiński, P.; Molin, S. Tuning of Eg Electron Occupancy of MnCo2O4 Spinel for Oxygen Evolution Reaction by Partial Substitution of Co by Fe at Octahedral Sites. *International Journal of Hydrogen Energy* **2023**, *48* (24), 8854–8866. https://doi.org/10.1016/j.ijhydene.2022.12.013.
46. Bharath, R. K.; Tripathy, A. Water Adsorption, Relaxation Phenomena and Ion Transport Study of Mesoporous Mn1.5Cr1.5O4 Spinel Oxide. *Inorganic Chemistry Communications* **2025**, *180*. https://doi.org/10.1016/j.inoche.2025.115113.
47. Rogalska, I.; Cieniek, B.; Tomaszewska, A.; Kulpa-Greszta, M.; Krzemiński, P.; Zarychta, B.; Stefaniuk, I.; Pązik, R. X and Q-Band EMR Study of Ultrasmall Zn1−xMnxFe2O4 Spinel Nanoparticles Fabricated under Nonhydrolytic Conditions. *Dalton Transactions* **2024**, *54* (5), 1935–1947. https://doi.org/10.1039/d4dt02647k.
48. Wang, Y.; Li, G.; Zhang, Y.; Li, L. Zinc Ferrite Nanoparticles: Unusual Growth Mechanism for Size-Dependent Properties. *ChemistrySelect* **2021**, *6* (8), 1862–1869. https://doi.org/10.1002/slct.202004562.

Коцитати

49. Nikolic, M. V. An Overview of Oxide Materials for Gas Sensors. In *Proceedings - 2020 23rd International Symposium on Design and Diagnostics of Electronic Circuits and Systems, DDECS 2020*; 2020. https://doi.org/10.1109/DDECS50862.2020.9095743.
50. Nikolic, M. V.; Lukovic, M. D.; Dojcinovic, M.; Vasiljevic, Z. Z.; Labus, N. J. Application of Iron Manganite Thick Films for Humidity Sensing. In *Proceedings of the International Spring Seminar on Electronics Technology*; 2019; Vol. 2019-May. https://doi.org/10.1109/ISSE.2019.8810291.
51. Nikolic, M. V.; Milovanovic, V.; Vasiljevic, Z. Z.; Stamenkovic, Z. Semiconductor Gas Sensors: Materials, Technology, Design, and Application. *Sensors (Switzerland)* **2020**, *20* (22), 1–31. https://doi.org/10.3390/s20226694.
52. Nikolic, M. V.; Krstic, J. B.; Labus, N. J.; Lukovic, M. D.; Dojcinovic, M. P.; Radovanovic, M.; Tadic, N. B. Structural, Morphological and Textural Properties of Iron Manganite (FeMnO3) Thick Films Applied for

Humidity Sensing. *Materials Science and Engineering: B* **2020**, *257*. https://doi.org/10.1016/j.mseb.2020.114547.

Аутоцитати

53. Nikolic, M. V.; Vasiljevic, Z. Z.; Dojcinovic, M. P.; Vujancevic, J.; Radovanovic, M. Impact of Microstructure on Humidity Influence on Complex Impedance of Iron Manganite. In *Proceedings of the International Spring Seminar on Electronics Technology*; 2020; Vol. 2020-May. https://doi.org/10.1109/ISSE49702.2020.9120967.

3. Nikolic, M.; Vasiljevic, Z.; Lukovic, M.; Pavlovic, V.; Vujancevic, J.; Radovanovic, M.; Krstic, J.; Vlahovic, B.; Pavlovic, V. Humidity Sensing Properties of Nanocrystalline Pseudobrookite (Fe2TiO5) Based Thick Films. *SENSORS AND ACTUATORS B-CHEMICAL* **2018**, *277*, 654–664. https://doi.org/10.1016/j.snb.2018.09.063.

Хетероцитати

1. Lv, Z.; Chen, Q.; Guo, Y. CdAl Mixed Metal Oxides Prepared by Calcination of CdAl Layered Double Hydroxides: Synthesis and Properties for Humidity Sensing. *Solid State Sciences* **2020**, *109*. https://doi.org/10.1016/j.solidstatesciences.2020.106393.
2. Tasleem, S.; Tahir, M. Current Trends in Strategies to Improve Photocatalytic Performance of Perovskites Materials for Solar to Hydrogen Production. *Renewable and Sustainable Energy Reviews* **2020**, *132*. https://doi.org/10.1016/j.rser.2020.110073.
3. Kumar, U.; Yadav, B. C. Development of Humidity Sensor Using Modified Curved MWCNT Based Thin Film with DFT Calculations. *Sensors and Actuators, B: Chemical* **2019**, *288*, 399–407. https://doi.org/10.1016/j.snb.2019.03.016.
4. Ivanov, K. V.; Noskov, A. V.; Alekseeva, O. V.; Agafonov, A. V. Effect of Annealing Conditions on the Physicochemical and Photocatalytic Properties of a Nanopowder Based on Fe2TiO5. *Materials Chemistry and Physics* **2023**, *299*. https://doi.org/10.1016/j.matchemphys.2023.127493.
5. Phung Anh, N.; Tri, N.; Trung, N. D.; Anh, H. C.; Cuong, H. T.; Van, N. T. T.; Loc, L. C. Envirronmentally Friendly Fabrication of Fe2TiO5-TiO2nanocomposite for Enhanced Photodegradation of Cinnamic Acid Solution. *Advances in Natural Sciences: Nanoscience and Nanotechnology* **2021**, *12* (4). https://doi.org/10.1088/2043-6262/ac498d.
6. Domingos, A.; Junior, A.; Duarte, H.; Tenorio, J.; Espinosa, D.; Baltazar, M. Extraction of Critical Metals from Secondary Source: Leaching Ti and V from Brazilian Fe-Ti-V Deposit Residue. *JOM* **2023**, *75* (5), 1581–1590. https://doi.org/10.1007/s11837-023-05774-x.
7. Thambiliyagodage, C.; Mirihana, S.; Wijesekera, R.; Madusanka, D. S.; Kandanapitiye, M.; Bakker, M. Fabrication of Fe2TiO5/TiO2 Binary Nanocomposite from Natural Ilmenite and Their Photocatalytic Activity under Solar Energy. *Current Research in Green and Sustainable Chemistry* **2021**, *4*. https://doi.org/10.1016/j.crgsc.2021.100156.
8. Simović, B.; Dapčević, A.; Zdravković, J.; Tasić, N.; Kovač, S.; Krstić, J.; Branković, G. From Titania to Titanates: Phase and Morphological Transition in Less Alkaline Medium under Mild Conditions. *Journal of Alloys and Compounds* **2019**, *781*, 810–819. https://doi.org/10.1016/j.jallcom.2018.12.039.
9. Ferrara, M. C.; Mazzarelli, S.; Schioppa, M.; Pilloni, L.; Tapfer, L. Growth, Optical, and Wettability Properties of Iron Modified Titania and Ferropseudobrookite Thin Films. *Journal of Applied Physics* **2021**, *130* (14). https://doi.org/10.1063/5.0061017.

10. Yin, Y.; Huang, C.; Luo, X.; Xu, B. Iron Behavior during the Continuous Phase Transition of Iron-Doped Titanium Dioxide Determined via High-Temperature in-Situ X-Ray Diffraction, Rietveld Refinement, and Density Functional Theory Studies. *Journal of Materials Research and Technology* **2023**, *23*, 2426–2439. https://doi.org/10.1016/j.jmrt.2023.01.159.
11. Herath, A.; Navarathna, C.; Warren, S.; Perez, F.; Pittman, C. U.; Mlsna, T. E. Iron/Titanium Oxide-Biochar (Fe2TiO5/BC): A Versatile Adsorbent/Photocatalyst for Aqueous Cr(VI), Pb2+, F- and Methylene Blue. *Journal of Colloid and Interface Science* **2022**, *614*, 603–616. https://doi.org/10.1016/j.jcis.2022.01.067.
12. Vojisavljević, K.; Savić, S. M.; Počuča-Nešić, M.; Hodžić, A.; Kriechbaum, M.; Ribić, V.; Rečnik, A.; Vukašinović, J.; Branković, G.; Djokić, V. KIT-5-Assisted Synthesis of Mesoporous SnO2 for High-Performance Humidity Sensors with a Swift Response/Recovery Speed. *Molecules* **2023**, *28* (4). https://doi.org/10.3390/molecules28041754.
13. Khan, S.; Misra, V.; Singh, A.; Singh, V. Metal Oxide Decorated CNT Nanosensors: A Brief Overview. In *Metal Oxide-Based Carbon Nanocomposites for Environmental Remediation and Safety*; 2023; pp 257–271. https://doi.org/10.1201/9781003323464-11.
14. Li, Y.; Yang, B.; Liu, B. MOF Assisted Synthesis of TiO2/Au/Fe2O3 Hybrids with Enhanced Photocatalytic Hydrogen Production and Simultaneous Removal of Toxic Phenolic Compounds. *Journal of Molecular Liquids* **2021**, *322*. https://doi.org/10.1016/j.molliq.2020.114815.
15. Wu, J.; Ma, X.; Hu, X.; Yan, L.; Hou, F.; Liu, J.; Guo, A. New Class of High-Entropy Pseudobrookite Titanate with Excellent Thermal Stability, Low Thermal Expansion Coefficient, and Low Thermal Conductivity. *Journal of Advanced Ceramics* **2022**, *11* (10), 1654–1670. https://doi.org/10.1007/s40145-022-0638-7.
16. Zhang, J.; Anderson, K. P.; Rickman, J. M.; Chan, H. M. Pseudo-Single Crystal Growth of the Entropy-Stabilized Compound CoTi2O5: Microstructural Evolution and Kinetics. *Journal of the American Ceramic Society* **2024**, *107* (2), 1348–1360. https://doi.org/10.1111/jace.19498.
17. Haerani, D. N.; Ulan, C. N.; Sarwanto, Y.; Mulyawan, A.; Adnyana, I. G. A. P.; Sukirman, E.; Adi, W. A. Pseudobrookite Fe2-2xCoxTi1-½xO5: Structural, Magnetic Phase Transformation and Reflection Loss Characteristic. *Materialia* **2023**, *27*. https://doi.org/10.1016/j.mtla.2023.101692.
18. Fort, A.; Lo Grasso, A.; Mugnaini, M.; Panzardi, E.; Parri, L.; Vignoli, V.; Viti, C.; Al-Hamry, A.; Kanoun, O. QCM Measurements of RH with Nanostructured Carbon-Based Materials: Part 2-Experimental Characterization. *Chemosensors* **2022**, *10* (8). https://doi.org/10.3390/chemosensors10080320.
19. Bhoi, Y. P.; Fang, F.; Zhou, X.; Li, Y.; Sun, X.; Wang, J.; Huang, W. Single Step Combustion Synthesis of Novel Fe2TiO5/α-Fe2O3/TiO2 Ternary Photocatalyst with Combined Double Type-II Cascade Charge Migration Processes and Efficient Photocatalytic Activity. *Applied Surface Science* **2020**, *525*. https://doi.org/10.1016/j.apsusc.2020.146571.
20. Anh, H. C.; Anh, N. P.; Tri, N.; Cuong, H. T.; Van, N. T. T.; Loc, L. C. Small Band Gap Ferric Pseudobrookite as a New Photo-Fenton Catalyst for Degradation of Phenolic Acid. *Journal of Science: Advanced Materials and Devices* **2022**, *7* (3). https://doi.org/10.1016/j.jsamd.2022.100453.
21. Wang, J.; Jiang, L.; Zhao, L.; Liu, F.; You, R.; Yang, Z.; He, J.; Liu, T.; Zhang, C.; Wang, C.; Liang, X.; Sun, P.; Lu, G. Stabilized Zirconia-Based Acetone Sensor Utilizing Fe2TiO5-TiO2 Sensing Electrode for Noninvasive Diagnosis of Diabetics. *Sensors and Actuators, B: Chemical* **2020**, *321*. https://doi.org/10.1016/j.snb.2020.128489.
22. Rohilla, B.; Boora, A.; Sehrawat, S.; Malik, P.; Duhan, S. Structural Insights and Performance Evaluation of Er2O3/COK-12 Nanostructures for Humidity Sensing and Photocatalysis. *Materials Research Bulletin* **2025**, *184*. https://doi.org/10.1016/j.materresbull.2024.113264.
23. Pakizeh, E.; Mohammadi, M. Structural, Electronic, Magnetic and Thermoelectric Properties of Pseudobrookite-Type Fe2-xTi1+xO5 (x = 0, 0.5 and 1) Compounds: DFT + U Approaches. *Journal of Physics and Chemistry of Solids* **2021**, *149*. https://doi.org/10.1016/j.jpcs.2020.109802.

24. Raddaoui, G.; Rejaiba, O.; Nasri, M.; Khirouni, K.; Hlil, E. K.; Khelifi, J. Structural, Optical, and Impedance Spectroscopy of the Pseudobrookite Pb0·5Ba0·5Fe2O5 Synthesized by Sol–Gel Route. *Solid State Communications* **2024**, *383*. https://doi.org/10.1016/j.ssc.2024.115449.
25. Senthil, S.; Nattanmai Raman, D.; Sundaramoorthy, A. Study of the Magnetic Properties of Mn-Doped Iron Titanate Nanoparticles Fabricated Using Natural Mineral. *Micro and Nano Letters* **2021**, *16* (4), 245–250. https://doi.org/10.1049/mna2.12039.
26. Li, D.; Long, M.; Zhao, Q.; Li, H.; Wen, Q.; Song, F. Synergetic Effect of Photocatalysis and Peroxymonosulfate Activation by CoTiO3/SBA-15, NiTiO3/SBA-15 and Fe2TiO5/SBA-15 for Efficient Photocatalytic Removal of Oxytetracycline Hydrochloride. *Environmental Science: Water Research and Technology* **2022**, *8* (8), 1763–1776. https://doi.org/10.1039/d2ew00060a.
27. Ferrara, M. C.; Montecchi, M.; Mittiga, A.; Schioppa, M.; Mazzarelli, S.; Tapfer, L.; Lovergine, N.; Prete, P. Synthesis and Annealing Effects on Microstructure and Optical Properties of Wide-Bandgap Polycrystalline Ferro-Pseudobrookite FeTi2O5 Sol-Gel Layers. *Ceramics International* **2025**, *51* (8), 9669–9676. https://doi.org/10.1016/j.ceramint.2024.12.397.
28. Wiranto, G.; Martadi, S.; Sulthoni, M. A.; Hermida, I. D. P.; Maulana, Y. Y.; Widodo, S.; Kurniadi, D. P.; Daud, P. The Effect of SnO2 Mixture on a PVA-Based Thick Film Relative Humidity Sensor. *International Journal on Advanced Science, Engineering and Information Technology* **2022**, *12* (3), 1060–1065. https://doi.org/10.18517/ijaseit.12.3.14869.
29. Wu, J.; Zhang, J.; Hu, X.; Xie, H.; Yan, L.; Hou, F.; Liu, J.; Ma, X.; Guo, A. Ultrahigh Degree of Cationic Disorder, Configurational Entropy in New Type of High-Entropy Pseudobrookite Phase. *Small* **2024**, *20* (26). https://doi.org/10.1002/smll.202310615.

Коцитати

30. Nikolic, M. V. An Overview of Oxide Materials for Gas Sensors. In *Proceedings - 2020 23rd International Symposium on Design and Diagnostics of Electronic Circuits and Systems, DDECS 2020*; 2020. https://doi.org/10.1109/DDECS50862.2020.9095743.
31. Rizzotto, F.; Vasiljevic, Z. Z.; Stanojevic, G.; Dojcinovic, M. P.; Jankovic-Castvan, I.; Vujancevic, J. D.; Tadic, N. B.; Brankovic, G. O.; Magniez, A.; Vidic, J.; Nikolic, M. V. Antioxidant and Cell-Friendly Fe2TiO5 Nanoparticles for Food Packaging Application. *Food Chemistry* **2022**, *390*. https://doi.org/10.1016/j.foodchem.2022.133198.
32. Nikolic, M.; Lukovic, M.; Dojcinovic, M.; Vasiljevic, Z.; Labus, N.; IEEE. Application of Iron Manganite Thick Films for Humidity Sensing. In *2019 42ND INTERNATIONAL SPRING SEMINAR ON ELECTRONICS TECHNOLOGY (ISSE)*; 2019. https://doi.org/10.1109/isse.2019.8810291.
33. Nikolic, M. V.; Dojcinovic, M.; Vasiljevic, Z. Z.; Lukovic, M. D.; Labus, N. J. Nanocomposite Zn2SnO4/SnO2 Thick Films as a Humidity Sensing Material. In *FLEPS 2019 - IEEE International Conference on Flexible and Printable Sensors and Systems, Proceedings*; 2019. https://doi.org/10.1109/FLEPS.2019.8792304.
34. Nikolic, M.; Vasiljevic, Z.; Dojcinovic, M.; Vujancevic, J.; Radovanovic, M.; IEEE. Impact of Microstructure on Humidity Influence on Complex Impedance of Iron Manganite. In *2020 43RD INTERNATIONAL SPRING SEMINAR ON ELECTRONICS TECHNOLOGY (ISSE)*; 2020. https://doi.org/10.1109/isse49702.2020.9120967.
35. Nikolic, M. V.; Dojcinovic, M. P.; Vasiljevic, Z. Z.; Lukovic, M. D.; Labus, N. J. Nanocomposite Zn2SnO4/SnO2Thick Films as a Humidity Sensing Material. *IEEE Sensors Journal* **2020**, *20* (14), 7509–7516. https://doi.org/10.1109/JSEN.2020.2983135.
36. Petrović, P. B.; Nikolić, M. V.; Tatović, M. New Electronic Interface Circuits for Humidity Measurement Based on the Current Processing Technique. *Measurement Science Review* **2021**, *21* (1), 1–10. https://doi.org/10.2478/msr-2021-0001

37. Nikolic, M. V.; Milovanovic, V.; Vasiljevic, Z. Z.; Stamenkovic, Z. Semiconductor Gas Sensors: Materials, Technology, Design, and Application. *Sensors (Switzerland)* **2020**, *20* (22), 1–31. https://doi.org/10.3390/s20226694.
38. Nikolic, M. V.; Krstic, J. B.; Labus, N. J.; Lukovic, M. D.; Dojcinovic, M. P.; Radovanovic, M.; Tadic, N. B. Structural, Morphological and Textural Properties of Iron Manganite (FeMnO3) Thick Films Applied for Humidity Sensing. *Materials Science and Engineering: B* **2020**, *257*. https://doi.org/10.1016/j.mseb.2020.114547.


Аутоцитати


39. Nikolic, M.; Lukovic, M.; Vasiljevic, Z.; Vujancevic, J.; IEEE. Application of Nanocrystalline Pseudobrookite (Fe2TiO5) Thick Films for Humidity Sensing. In *2018 41ST INTERNATIONAL SPRING SEMINAR ON ELECTRONICS TECHNOLOGY (ISSE)*; 2018.
40. Vasiljević, Z. Ž.; Dojčinović, M. P.; Vujančević, J. D.; Spreitzer, M.; Kovač, J.; Bartolić, D.; Marković, S.; Janković-Častvan, I.; Tadić, N. B.; Nikolić, M. V. Exploring the Impact of Calcination Parameters on the Crystal Structure, Morphology, and Optical Properties of Electrospun Fe2TiO5nanofibers. *RSC Advances* **2021**, *11* (51), 32358–32368. https://doi.org/10.1039/d1ra05748k.
41. Dojcinovic, M.; Vasiljevic, Z.; Krstic, J.; Vujancevic, J.; Markovic, S.; Tadic, N.; Nikolic, M. Electrospun Nickel Manganite (NiMn2O4) Nanocrystalline Fibers for Humidity and Temperature Sensing. *SENSORS* **2021**, *21* (13). https://doi.org/10.3390/s21134357.
42. Vasiljevic, Z. Z.; Dojcinovic, M. P.; Vujancevic, J. D.; Jankovic-Castvan, I.; Ognjanovic, M.; Tadic, N. B.; Stojadinovic, S.; Brankovic, G. O.; Nikolic, M. V. Photocatalytic Degradation of Methylene Blue under Natural Sunlight Using Iron Titanate Nanoparticles Prepared by a Modified Sol-Gel Method: Methylene Blue Degradation with Fe2TiO5. *Royal Society Open Science* **2020**, *7* (9). https://doi.org/10.1098/rsos.200708.


4. Vasiljevic, Z.; Dojcinovic, M.; Vujancevic, J.; Spreitzer, M.; Kovac, J.; Bartolic, D.; Markovic, S.; Jankovic-Castvan, I.; Tadic, N.; Nikolic, M. Exploring the Impact of Calcination Parameters on the Crystal Structure, Morphology, and Optical Properties of Electrospun Fe2TiO5 Nanofibers. *RSC ADVANCES* **2021**, *11* (51), 32358–32368. https://doi.org/10.1039/d1ra05748k.

Хетероцитати


1. Cai, Z.; Park, S. A Superior Sensor Consisting of Porous, Pd Nanoparticle–Decorated SnO2 Nanotubes for the Detection of Ppb-Level Hydrogen Gas. *Journal of Alloys and Compounds* **2022**, *907*. https://doi.org/10.1016/j.jallcom.2022.164459.
2. Zouli, N.; Hameed, R.; Abutaleb, A.; Maafa, I.; Yousef, A. Calcined Nickel Oxide Nanostructures at Different Temperatures Onto Graphite for Efficient Electro-Oxidation of Ethylene Glycol in Basic Electrolyte. *Applied Organometallic Chemistry* **2024**, *38* (12). https://doi.org/10.1002/aoc.7729.
3. Bafaqeer, A.; Ummer, A. C.; Ahmed, A. A.; Alshareef, R. S. Construction of 2D/2D S-Scheme Pg-C3N4/Fe2TiO5 Nanosheets with Enhanced Photogenerated Charge Separation for Highly Selective Photoconversion of CO2 into Fuels. *Journal of Alloys and Compounds* **2025**, *1020*. https://doi.org/10.1016/j.jallcom.2025.179287.
4. Zain, M.; Yasin, K. A.; Haq, S.; Rehman, W.; Din, S. U.; Shujaat, S.; Syed, A.; Hossain, M. K.; Paray, B. A.; Razzokov, J.; Samad, A. Effect of Calcination Temperature Induced Structural Modifications on the

Photocatalytic Efficacy of Fe2O3-ZrO2 Nanostructures: Mechanochemical Synthesis. *RSC Advances* **2024**, *14* (21), 15085–15094. https://doi.org/10.1039/d4ra01944j.

5. Zhu, T.; Song, X.; Duan, Z.; Song, Y.; Hu, X.; Zhou, Y.; Han, Y.; Ran, X. Effects of Electrostatic Polarities on the Morphology of Electrospun Oxide Nanofibers: A Case Study on Alumina-Based Nanofibers. *Ceramics International* **2024**, *50* (11), 20402–20409. https://doi.org/10.1016/j.ceramint.2024.03.163.
6. An, W. Y.; Kim, S.; Lee, W.; Choi, S.; Choi, S. R.; Yoo, S.; Han, J. W.; Li, O. L.; Park, J.-Y. Electrically and Morphologically Tailored Misfit-Layered Structure Gd0.3Ca2.7Co3.82Cu0.18O9 Nanofibers as Efficient Oxygen Catalysts for Zinc-Air Batteries. *Applied Catalysis B: Environmental* **2024**, *358*. https://doi.org/10.1016/j.apcatb.2024.124354.
7. Usgodaarachchi, L.; Jayanetti, M.; Thambiliyagodage, C.; Liyanaarachchi, H.; Vigneswaran, S. Fabrication of R-GO/GO/α-Fe2O3/Fe2TiO5 Nanocomposite Using Natural Ilmenite and Graphite for Efficient Photocatalysis in Visible Light. *Materials* **2023**, *16* (1). https://doi.org/10.3390/ma16010139.
8. Akshay, M.; Praneetha, S.; Lee, Y.-S.; Aravindan, V. Hierarchical SnO2@PC@PANI Composite via In-Situ Polymerization towards next-Generation Li-Ion Capacitor by Limiting Alloying Process with High Energy, Wide Temperature Performance, and Cyclability. *Electrochimica Acta* **2023**, *439*. https://doi.org/10.1016/j.electacta.2022.141599.
9. Azmoudeh, A.; Moral, S.; Sari, S.; Türk, M.; Kahveci, M. U.; Doganay, G. D.; Ağaoğulları, D. Magnetic Iron-Based Nanoparticles Encapsulated in Graphene/Reduced Graphene Oxide: Synthesis, Functionalization and Cytotoxicity Tests. *Journal of Science: Advanced Materials and Devices* **2024**, *9* (4). https://doi.org/10.1016/j.jsamd.2024.100776.
10. Bahadori, M.; Tavakoli Hafshejani, M.; Nasrollahzadeh, M.; Mirkhani, V. New Perspectives and Challenges. In *Solar Water Splitting: PV-Electrolysis, Photoelectrochemical, Photothermal, Photocatalyst, and Photobiological Methods*; 2025; pp 339–370. https://doi.org/10.1016/B978-0-443-13957-4.00011-2.
11. Ingalagondi, P. K.; Sannaikar, M. S.; Mruthunjaya, K.; Horti, N. C. Optical and Antibacterial Properties of Nickel Oxide (NiO) Nanoparticles: Effect of Annealing Temperature. *Results in Surfaces and Interfaces* **2025**, *19*. https://doi.org/10.1016/j.rsurfi.2025.100571.
12. HosseiniKia, S. M.; Norouzbeigi, R. Polyol Synthesis of Cobalt Doped Zinc Oxide Green Nano-Pigments: Colorimetry Assessments and Chemical Synthesis Parameters Optimization. *Results in Engineering* **2024**, *22*. https://doi.org/10.1016/j.rineng.2024.102080.
13. Giotto dos Santos, A.; Martins, T. R.; Krishnamurthy, S.; Assumpção Bertuol, D.; Tanabe, E. H. Production of Nanofibers Composed of CuO for the Removal of Pb(II) from Aqueous Solutions. *Metals* **2025**, *15* (1). https://doi.org/10.3390/met15010056.
14. Haerani, D. N.; Ulan, C. N.; Sarwanto, Y.; Mulyawan, A.; Adnyana, I. G. A. P.; Sukirman, E.; Adi, W. A. Pseudobrookite Fe2-2xCoxTi1-½xO5: Structural, Magnetic Phase Transformation and Reflection Loss Characteristic. *Materialia* **2023**, *27*. https://doi.org/10.1016/j.mtla.2023.101692.
15. Basak, S.; Sikdar, S.; Ali, S.; Mondal, M.; Haydar, M. S.; Sarkar, K.; Chowdhury, M.; Roy, M. N. Rational Synthesis and Characterization of Temperature Switching ZnFe2O4/ZnO Nanocomposites Used for Anti-Bacterial, Anti-Oxidant and Seed Germination Properties. *New Journal of Chemistry* **2024**, *48* (8), 3624–3637. https://doi.org/10.1039/d3nj04160c.
16. Mapukata, S.; Shingange, K.; Mokhena, T. Review of the Recent Advances on the Fabrication, Modification and Application of Electrospun TiO2 and ZnO Nanofibers for the Treatment of Organic Pollutants in Wastewater. *Frontiers in Chemical Engineering* **2023**, *5*. https://doi.org/10.3389/fceng.2023.1304128.
17. Trinh, T. N.; Dang, P. X.; Duong, L. T.; Truong, D. P.; Nguyen, K. T.; Nguyen, C. T. H.; Pham, C. N.; Nguyen, B. Q.; Dao, N. N.; Van Nguyen, L.; Pham, N. N.; Kalus, A.; Walenzik, G.; Rudolph, K.-U. Sol–Gel Synthesis of CeO2 Nanoparticles Using a Gelatine Template for Effective Adsorptive Removal of Arsenate and Fluoride from Water. *ChemistrySelect* **2024**, *9* (45). https://doi.org/10.1002/slct.202404325.

18. Eldeeb, N. A.; Ali, R. M.; Emara, M. M.; Sadik, W. A.; Hamad, H. A. Synergism between Physicochemical Properties of Ni-Co-Cu Ferrites for Boosting Catalytic Production of Biodiesel from Waste Cooking Oil. *Renewable Energy* **2025**, *249*. https://doi.org/10.1016/j.renene.2025.123230.
19. Khefanny, Y. C.; Sugiarti, S. Synthesis and Characterization of ZnO/Cellulose Acetate Composite and Its Activity as Antibacterial Agent. *Science and Technology Indonesia* **2024**, *9* (2), 215–223. https://doi.org/10.26554/sti.2024.9.2.215-223.
20. Bafaqeer, A.; Ummer, A. C.; Abba, S. I.; Dhamodharan, D.; Thabit, H. A.; Usman, J.; Benaafi, M.; Waqas, M. Synthesis of Hierarchical 2D Fe2TiO5 Nanosheets for Efficient and Stable Visible Light CO2 Conversion to Solar Fuels. *Arabian Journal for Science and Engineering* **2025**, *50* (6), 4259–4268. https://doi.org/10.1007/s13369-024-09662-7.
21. Hitha, H.; Kuriakose, S.; Francis Xavier, P. A.; Varghese, T. The Size-Dependent Variation of the Optical Properties of Bi-Doped Nickel Tungstate. *Results in Surfaces and Interfaces* **2025**, *20*. https://doi.org/10.1016/j.rsurfi.2025.100592.
22. Bafaqeer, A.; Ummer, A. C.; Abba, S. I.; Thabit, H. A.; Benaafi, M.; Usman, J. Well-Designed 1D/2D Ag3VO4/Fe2TiO5 Type-II Heterojunction with Enhanced Interfacial Charge Separation for Visible-Light-Driven Photocatalytic CO2 Conversion. *Surfaces and Interfaces* **2025**, *62*. https://doi.org/10.1016/j.surfin.2025.106298.
23. Askarzadeh, N.; Shokrollahi, H. Yttrium Iron Garnets: Phase Study and Synthesis Methods. *Progress in Solid State Chemistry* **2025**, *77*. https://doi.org/10.1016/j.progsolidstchem.2024.100507.

Коцитати

24. Ahmetović, S.; Vasiljević, Z. Ž.; Rajić, V.; Bartolić, D.; Novaković, M.; Tadić, N. B.; Cvjetićanin, N.; Nikolić, M. V. Examination of the Doping Effects of Samarium (Sm3+) and Zirconium (Zr4+) on the Photocatalytic Activity of TiO2 Nanofibers. *Journal of Alloys and Compounds* **2023**, *930*. https://doi.org/10.1016/j.jallcom.2022.167423.
25. Dojčinović, M. P.; Kusigerski, V.; Stojković Simatović, I. B.; Pavlović, V. P.; Kovač, J.; Spreitzer, M.; Nikolić, M. V. NiMn2O4 Nano-Cotton Particles and Nanofibers: Exploring Structural, Magnetic and Electrochemical Energy Storage Properties. *Journal of Energy Storage* **2025**, *131*. https://doi.org/10.1016/j.est.2025.117442.
26. Vasiljevic, Z. Z.; Vunduk, J.; Dojcinovic, M. P.; Miskovic, G.; Tadic, N. B.; Vidic, J.; Nikolic, M. V. ZnO and Fe2TiO5 Nanoparticles Obtained by Green Synthesis as Active Components of Alginate Food Packaging Films. *Food Packaging and Shelf Life* **2024**, *43*. https://doi.org/10.1016/j.fpsl.2024.101280.

Аутоцитати

27. Rizzotto, F.; Vasiljevic, Z. Z.; Stanojevic, G.; Dojcinovic, M. P.; Jankovic-Castvan, I.; Vujancevic, J. D.; Tadic, N. B.; Brankovic, G. O.; Magniez, A.; Vidic, J.; Nikolic, M. V. Antioxidant and Cell-Friendly Fe2TiO5 Nanoparticles for Food Packaging Application. *Food Chemistry* **2022**, *390*. https://doi.org/10.1016/j.foodchem.2022.133198.

5. Bjelajac, A.; Petrovic, R.; Vujancevic, J.; Veltruska, K.; Matolin, V.; Siketic, Z.; Provatas, G.; Jaksic, M.; Stan, G.; Socol, G.; Mihailescu, I.; Janackovic, D. Sn-Doped TiO2 Nanotubular Thin Film for Photocatalytic Degradation of Methyl Orange Dye. *JOURNAL OF PHYSICS AND CHEMISTRY OF SOLIDS* **2020**, *147*. https://doi.org/10.1016/j.jpcs.2020.109609.

Хетероцитати

1. Hossen, M. A.; Solayman, H. M.; Leong, K. H.; Sim, L. C.; Yaacof, N.; Abd Aziz, A.; Lihua, W.; Monir, M. U. A Comprehensive Review on Advances in TiO2 Nanotube (TNT)-Based Photocatalytic CO2 Reduction to Value-Added Products. *Energies* **2022**, *15* (22). https://doi.org/10.3390/en15228751.
2. Bashir, N.; Sawaira, T.; Jamil, A.; Awais, M.; Habib, A.; Afzal, A. Challenges and Prospects of Main-Group Metal-Doped TiO2 Photocatalysts for Sustainable Water Remediation. *Materials Today Sustainability* **2024**, *27*. https://doi.org/10.1016/j.mtsust.2024.100869.
3. Wang, H.; Song, L.; Yu, L.; Xia, X.; Bao, Y.; Lourenco, M.; Homewood, K.; Gao, Y. Charge Transfer between Ti4+, Sn4+ and Pt in the Tin Doped TiO2 Photocatalyst for Elevating the Hydrogen Production Efficiency. *Applied Surface Science* **2022**, *581*. https://doi.org/10.1016/j.apsusc.2021.152202.
4. Li, C.; Sun, L.; Niu, J.; Reka, A. A.; Feng, P.; Garcia, H. Core-Shell Bi-Containing Spheres and TiO2 Nanoparticles Co-Loaded on Kaolinite as an Efficient Photocatalyst for Methyl Orange Degradation. *Catalysis Communications* **2023**, *175*. https://doi.org/10.1016/j.catcom.2023.106609.
5. Albornoz, L. L.; da Silva, S. W.; Bortolozzi, J. P.; Banús, E. D.; Brussino, P.; Ulla, M. A.; Bernardes, A. M. Degradation and Mineralization of Erythromycin by Heterogeneous Photocatalysis Using SnO2-Doped TiO2 Structured Catalysts: Activity and Stability. *Chemosphere* **2021**, *268*. https://doi.org/10.1016/j.chemosphere.2020.128858.
6. Das, D.; Sharma, A. K.; Chattopadhyay, K. K.; Banerjee, D. Dye Removal Ability of Pure and Doped Graphitic Carbon Nitride. *Current Analytical Chemistry* **2022**, *18* (3), 309–340. https://doi.org/10.2174/1573411017666210108092850.
7. Beldjebli, O.; Bensaha, R.; Panneerselvam, P. Effect of Both Sn Doping and Annealing Temperature on the Properties of Dip-Coated Nanostructured TiO2 Thin Films. *Journal of Inorganic and Organometallic Polymers and Materials* **2022**, *32* (5), 1624–1636. https://doi.org/10.1007/s10904-022-02227-x.
8. Chen, R.; Lai, D.; Wang, D.; Niu, J.; He, J.; Feng, P.; Garcia, H. Enhanced Photocatalytic Activity of Kaolinite-TiO2-Graphene Oxide Composite with a Porous Stacking Structure. *Journal of Alloys and Compounds* **2022**, *889*. https://doi.org/10.1016/j.jallcom.2021.161682.
9. Al-Aoh, H. A.; Darwish, A. A. A. Enhancement of the Adsorptive Performance of TiO2 Nanoparticles towards Methylene Blue by Adding Suspended Nanoparticles of Pt: Kinetics, Isotherm, and Thermodynamic Studies. *Nanotechnology* **2021**, *32* (41). https://doi.org/10.1088/1361-6528/ac121f.
10. Zhang, S.; Chen, X.; Du, S.; Wang, J.; Dong, J.; Wu, D. Facile Synthesis of Highly Active Ti/Sb-SnO2 Electrode by Sol-Gel Spinning Technique for Landfill Leachate Treatment. *Water Science and Technology* **2021**, *84* (6), 1366–1378. https://doi.org/10.2166/wst.2021.336.
11. MalligArjuna Rao, S.; Kotteeswaran, S.; Visagamani, A. M. Green Synthesis of Zinc Oxide Nanoparticles from Camellia Sinensis: Organic Dye Degradation and Antibacterial Activity. *Inorganic Chemistry Communications* **2021**, *134*. https://doi.org/10.1016/j.inoche.2021.108956.
12. Yang, B.; Wu, X.; Su, Z.; Insua, B. K.; Zhang, P.; Kuo, D.-H.; Gao, L.; Bao, X.; Lu, D.; Lin, J.; Chen, X. Heterovalent State and Oxygen Vacancy Defect Structure-Associated V/S Co-Doped SnO2 for Catalytic Reduction of Organic and Cr6+ Pollutants in the Dark. *Advanced Sustainable Systems* **2024**, *8* (12). https://doi.org/10.1002/adsu.202400429.
13. Zhang, S.; Zhang, X.; Sun, Y.; Zhou, W.; Cao, W.; Cheng, D. Investigation of the Annealing Treatment on the Performance of TiO2 Photoanode. *International Journal of Hydrogen Energy* **2023**, *48* (77), 29996–30005. https://doi.org/10.1016/j.ijhydene.2023.04.196.
14. Singh, M.; Nguyen, T. T.; Muthu Austeria, P.; Ngo, Q. P.; Kim, D. H.; Kim, N. H.; Lee, J. H. Metallic Metastable Hybrid 1T′/1T Phase Triggered Co,P-SnS2 Nanosheets for High Efficiency Trifunctional Electrocatalyst. *Small* **2023**, *19* (11). https://doi.org/10.1002/smll.202206726.
15. Predoană, L.; Ciobanu, E. M.; Petcu, G.; Preda, S.; Pandele-Cușu, J.; Anghel, E. M.; Petrescu, S. V.; Culiță, D. C.; Băran, A.; Surdu, V.-A.; Vasile, B. Ú.; Ianculescu, A. C. Photocatalytic Performance of Sn–Doped TiO2

Nanopowders for Photocatalytic Degradation of Methyl Orange Dye. *Catalysts* **2023**, *13* (3). https://doi.org/10.3390/catal13030534.

16. Kouao, D.-S.; Hanuš, J.; Kylián, O.; Simerova, R.; Sezemsky, P.; Stranak, V.; Grochowska, K.; Siuzdak, K. Photoelectrochemical and Electrochemical Activity of Anodic Semitransparent Aligned and Spaced Titania Nanotubes Formed out of Titanium-Silver Alloys. *ACS Applied Nano Materials* **2024**, *7* (2), 1548–1561. https://doi.org/10.1021/acsanm.3c04186.
17. Kiribayashi, R.; Sunada, K.; Mochizuki, Y.; Isobe, T.; Kobayashi, K.; Nagai, T.; Ishiguro, H.; Nakajima, A. Preparation of La2Sn2O7, Mg2SnO4, and MgSn(OH)6 and Their Antiviral/Antibacterial Activities. *Journal of Materials Science: Materials in Medicine* **2025**, *36* (1). https://doi.org/10.1007/s10856-025-06921-3.
18. Nema, S.; Sharma, A.; Rathore, V. K.; Chakraborty, M. Removal of Pharmaceuticals from Aqueous Solutions by Photodegradation Using TiO2 and Sn/Zn/Fe-Doped TiO2 as Photocatalyst Under Ultraviolet and Visible Light. *International Journal of Environmental Research* **2024**, *18* (2). https://doi.org/10.1007/s41742-024-00565-x.
19. Albornoz, L. L.; Bortolozzi, J. P.; Banús, E. D.; Brussino, P.; da Silva, S. W.; Bernardes, A. M.; Ulla, M. A. Synthesis and Characterization of Immobilized Titanium-Zirconium Sn-Doped Oxides onto Metallic Meshes and Their Photocatalytic Activity for Erythromycin Mineralization. *Chemical Engineering Journal* **2021**, *414*. https://doi.org/10.1016/j.cej.2021.128891.
20. Kouao, D.-S.; Grochowska, K.; Siuzdak, K. The Anodization of Thin Titania Layers as a Facile Process towards Semitransparent and Ordered Electrode Material. *Nanomaterials* **2022**, *12* (7). https://doi.org/10.3390/nano12071131.
21. Soleimani-Gorgani, A.; Al-Sabahi, J.; Nejad, S. A. T.; Heydari, M.; Al-Abri, M.; Namaeighasemi, A. Visible-Light-Driven Super-Active Sn and GO Single- and Sn/Cu Co-Doped Nanophotocatalysts for Phenol Degradation: Thin-Film Printability, Thermal Stability, and Cytotoxicity Assay. *Journal of Industrial and Engineering Chemistry* **2023**, *120*, 514–528. https://doi.org/10.1016/j.jiec.2023.01.003.

Аутоцитати

22. Vujančević, J.; Bjelajac, A.; Veltruska, K.; Matolin, V.; Siketić, Z.; Provatas, G.; Jakšić, M.; Stan, G. E.; Socol, G.; Mihailescu, I. N.; Pavlović, V. B.; Janaćković, D. TiO2 Nanotubes Film/FTO Glass Interface: Thermal Treatment Effects. *Science of Sintering* **2022**, *54* (2), 235–248. https://doi.org/10.2298/SOS2202235V.

6. Rizzotto, F.; Vasiljevic, Z.; Stanojevic, G.; Dojcinovic, M.; Jankovic-Castvan, I.; Vujancevic, J.; Tadic, N.; Brankovic, G.; Magniez, A.; Vidic, J.; Nikolic, M. Antioxidant and Cell-Friendly Fe2TiO5 Nanoparticles for Food Packaging Application. *FOOD CHEMISTRY* **2022**, *390*. https://doi.org/10.1016/j.foodchem.2022.133198.

Хетероцитати

1. Guo, J.; Ku, Y.; Wang, W.; Wu, F.; Luo, L. A Novel Application of Fe2TiO5 in Sulfite-Mediated Photocatalytic Oxidation of Emerging Contaminants in Water. *Journal of Water Process Engineering* **2025**, *77*. https://doi.org/10.1016/j.jwpe.2025.108462.
2. Guo, S.; Guo, Y.; Yang, X.; Wang, X.; Zhang, R.; Wang, S.; Li, M. A Review on Polymer Packaging by Polysaccharide-Based Nanocomposite Films: Crucial Role of Nanofillers and Future Application Trends. *Journal of Food Measurement and Characterization* **2025**, *19* (5), 2987–3004. https://doi.org/10.1007/s11694-025-03199-5.

3. Li, H.; Wang, Z.; Zhu, F.; Li, G. Alginate-Based Active and Intelligent Packaging: Preparation, Properties, and Applications. *International Journal of Biological Macromolecules* **2024**, *279*. https://doi.org/10.1016/j.ijbiomac.2024.135441.
4. Trak, D.; Soyuçok, A.; Kabak, B.; Kendüzler, E.; Arslan, Y. Citrus-Derived Silver Nanoparticles for Food Safety: Biodegradable Packaging with Antimicrobial and Oxidative Stability. *Food Chemistry* **2025**, *490*. https://doi.org/10.1016/j.foodchem.2025.145113.
5. Ivanov, K. V.; Noskov, A. V.; Alekseeva, O. V.; Agafonov, A. V. Effect of Annealing Conditions on the Physicochemical and Photocatalytic Properties of a Nanopowder Based on Fe2TiO5. *Materials Chemistry and Physics* **2023**, *299*. https://doi.org/10.1016/j.matchemphys.2023.127493.
6. Pandey, R. P.; Vidic, J.; Mukherjee, R.; Chang, C.-M. Experimental Methods for the Biological Evaluation of Nanoparticle-Based Drug Delivery Risks. *Pharmaceutics* **2023**, *15* (2). https://doi.org/10.3390/pharmaceutics15020612.
7. Wang, C.; Yan, T.; Yan, T.; Wang, Z. Fabrication of Hesperetin/Hydroxypropyl-β-Cyclodextrin Complex Nanoparticles for Enhancement of Bioactivity Using Supercritical Antisolvent Technology. *Journal of Molecular Structure* **2023**, *1279*. https://doi.org/10.1016/j.molstruc.2023.134947.
8. Barrino, F. Hybrid Organic–Inorganic Materials Prepared by Sol–Gel and Sol–Gel-Coating Method for Biomedical Use: Study and Synthetic Review of Synthesis and Properties. *Coatings* **2024**, *14* (4). https://doi.org/10.3390/coatings14040425.
9. Li, Y.; Su, J.; Liu, S.; Li, S.; Liu, S.; Zhang, H.; Ding, Z.; Wang, Z.; Liu, M.; Zhao, Y. Improved Stability and Biocompatibility of Lycopene Liposomes with Sodium Caseinate and PEG Coating. *International Journal of Biological Macromolecules* **2025**, *311*. https://doi.org/10.1016/j.ijbiomac.2025.143685.
10. Mateus, A. R. S.; Pena, A.; Silva, A. S. Innovations in Antioxidants Films and Coatings for Food Preservation. In *Natural Antioxidants to Enhance the Shelf-Life of Food*; Elsevier, 2024; pp 313–364. https://doi.org/10.1016/B978-0-443-15386-0.00010-2.
11. Ponce, B.; Urtuvia, V.; Castillo, T.; Segura, D.; Peña, C.; Díaz-Barrera, A. Microbial Bioreactors at Different Scales for the Alginate Production by Azotobacter Vinelandii. In *Microbial Bioreactors for Industrial Molecules*; Wiley, 2023; pp 375–396. https://doi.org/10.1002/9781119874096.ch18.
12. Kong, J.; Ge, X.; Sun, Y.; Mao, M.; Yu, H.; Chu, R.; Wang, Y. Multi-Functional pH-Sensitive Active and Intelligent Packaging Based on Highly Cross-Linked Zein for the Monitoring of Pork Freshness. *Food Chemistry* **2023**, *404*. https://doi.org/10.1016/j.foodchem.2022.134754.
13. Bhardwaj, A.; Singh, A. K. Murraya Koenigii Plant Extract Mediated Green Synthesis of Metallic Nanoparticles and Their Applications: A Review. *Plant Nano Biology* **2024**, *8*. https://doi.org/10.1016/j.plana.2024.100076.
14. Ortega, F.; Minnaard, J.; Arce, V. B.; García, M. A. Nanocomposite Starch Films: Cytotoxicity Studies and Their Application as Cheese Packaging. *Food Bioscience* **2023**, *53*. https://doi.org/10.1016/j.fbio.2023.102562.
15. Eremeeva, N. B. Nanoparticles of Metals and Their Compounds in Films and Coatings: A Review. *Foods and Raw Materials* **2024**, *12* (1), 60–79. https://doi.org/10.21603/2308-4057-2024-1-588.
16. Sheng, W.; Yang, L.; Yang, Y.; Wang, C.; Jiang, G.; Tian, Y. Photo-Responsive Cu-Tannic Acid Nanoparticle-Mediated Antibacterial Film for Efficient Preservation of Strawberries. *Food Chemistry* **2025**, *464*. https://doi.org/10.1016/j.foodchem.2024.141711.
17. Si, X.; Liu, S.; Zhang, Y. Recent Advances in Research on Metal Nanoparticle-Based Active Composite Packaging Films for Fresh Food Preservation. *Shipin Kexue/Food Science* **2024**, *45* (12), 340–348. https://doi.org/10.7506/spkx1002-6630-20230529-272.

18. Manikandan, V.; Min, S. C. Roles of Polysaccharides-Based Nanomaterials in Food Preservation and Extension of Shelf-Life of Food Products: A Review. *International Journal of Biological Macromolecules* **2023**, *252*. https://doi.org/10.1016/j.ijbiomac.2023.126381.
19. Jiang, G.; Sheng, W.; Yang, L.; Yang, Y.; Tang, T.; Wang, C.; Tian, Y. Temperature-Controllable Antibacterial Film Mediated by a Photoresponsive Metal-Polyphenol Framework for Long-Term Food Preservation. *Food Control* **2025**, *172*. https://doi.org/10.1016/j.foodcont.2025.111137.
20. Mohlamonyane, M. J.; Adeyemi, J. O.; Fawole, O. A. Use of Metal-Based Nanoparticles for Active Packaging Applications. Part II: Functions, Applications, and Safety Concerns. In *Antimicrobial Food Packaging*; 2025; pp 567–581. https://doi.org/10.1016/B978-0-323-90747-7.00035-1.

Коцитати

21. Vasiljevic, Z. Z.; Vunduk, J.; Dojcinovic, M. P.; Mišković, G.; Tadić, N. B.; Vidic, J.; Nikolić, M. V. ZnO and Fe2TiO5 Nanoparticles Obtained by Green Synthesis as Active Components of Alginate Food Packaging Films. *Food Packaging and Shelf Life* **2024**, *43*. https://doi.org/10.1016/j.fpsl.2024.101280.

7. Pavlovic, V.; Vujancevic, J.; Maskovic, P.; Cirkovic, J.; Papan, J.; Kosanovic, D.; Dramicanin, M.; Petrovic, P.; Vlahovic, B.; Pavlovic, V. Structure and Enhanced Antimicrobial Activity of Mechanically Activated Nano TiO2. *JOURNAL OF THE AMERICAN CERAMIC SOCIETY* **2019**, *102* (12), 7735–7745. https://doi.org/10.1111/jace.16668.

Хетероцитати

1. Nosrati, H.; Heydari, M. Titanium Dioxide Nanoparticles: A Promising Candidate for Wound Healing Applications. *Burns and Trauma* **2025**, *13*. https://doi.org/10.1093/burnst/tkae069.
2. Serov, D. A.; Gritsaeva, A. V.; Yanbaev, F. M.; Simakin, A. V.; Gudkov, S. V. Review of Antimicrobial Properties of Titanium Dioxide Nanoparticles. *International Journal of Molecular Sciences* **2024**, *25* (19). https://doi.org/10.3390/ijms251910519.
3. Palaskar, R. S.; Dhokane, D. S.; Ankamwar, B. G. Green-Synthesized Nanoparticles to Combat Multidrug-Resistant Bacteria. In *Nanotechnology Based Strategies for Combating Antimicrobial Resistance*; Springer Nature, 2024; pp 511–532. https://doi.org/10.1007/978-981-97-2023-1_19.
4. Chatterjee, S.; Sil, P. C. Mechanistic Insights into Toxicity of Titanium Dioxide Nanoparticles at the Micro- and Macro-Levels. *Chemical Research in Toxicology* **2024**, *37* (10), 1612–1633. https://doi.org/10.1021/acs.chemrestox.4c00235.
5. Ali, O. M.; Hasanin, M. S.; Suleiman, W. B.; Helal, E. E.-H.; Hashem, A. H. Green Biosynthesis of Titanium Dioxide Quantum Dots Using Watermelon Peel Waste: Antimicrobial, Antioxidant, and Anticancer Activities. *Biomass Conversion and Biorefinery* **2024**, *14* (5), 6987–6998. https://doi.org/10.1007/s13399-022-02772-y.
6. Younis, A. B.; Haddad, Y.; Košaríšťanová, L.; Šmerková, K. Titanium Dioxide Nanoparticles: Recent Progress in Antimicrobial Applications. *Wiley Interdisciplinary Reviews: Nanomedicine and Nanobiotechnology* **2023**, *15* (3). https://doi.org/10.1002/wnan.1860.
7. Silva, F. B. F.; da Silva, G. T. S. T.; Torres, J. A.; de Oliveira, C. Tuning the Photocatalytic Activity of Tin Oxide through Mechanical Surface Activation. *Journal of the Brazilian Chemical Society* **2022**, *33* (7), 725–733. https://doi.org/10.21577/0103-5053.20220009.

8. Youssef, A. M.; El-Sayed, H. S.; El-Nagar, I.; El-Sayed, S. M. Preparation and Characterization of Novel Bionanocomposites Based on Garlic Extract for Preserving Fresh Nile Tilapia Fish Fillets. *RSC Advances* **2021**, *11* (37), 22571–22584. https://doi.org/10.1039/d1ra03819b.
9. Suresh, I. J.; Lakshimi, I. V.; Ajmera, S. BIOSYNTHESIZED TITANIUM DIOXIDE NANOPARTICLES AND THEIR ANTIBACTERIAL EFFICACY. In *Titanium Dioxide: Advances in Research and Applications*; Nova Science Publishers, Inc., 2021; pp 73–101.
10. Maluangnont, T.; Chanlek, N.; Khamman, O.; Vittayakorn, W.; Sooknoi, T. Structural and Compositional Characteristics of Ball-Milled Lepidocrocite Alkali Titanate and the Correlation to Its Surface Acidic-Basic Properties. *Inorganic Chemistry* **2021**, *60* (21), 16326–16336. https://doi.org/10.1021/acs.inorgchem.1c02162.
11. G A, G. A.; Arumugam, S. Facile Synthesis of N Doped ZnO Coral Bundles for Enhanced Photocatalytic and Antimicrobial Activity. *International Journal of Ceramic Engineering and Science* **2021**, *3* (4), 180–191. https://doi.org/10.1002/ces2.10089.
12. Ćirković, J.; Radojković, A.; Luković Golić, D.; Tasić, N.; Čizmić, M.; Brankovič, G.; Branković, Z. Visible-Light Photocatalytic Degradation of Mordant Blue 9 by Single-Phase BiFeO3nanoparticles. *Journal of Environmental Chemical Engineering* **2021**, *9* (1). https://doi.org/10.1016/j.jece.2020.104587.
13. Li, M.; Liu, W.; Slaveykova, V. I. Effects of Mixtures of Engineered Nanoparticles and Metallic Pollutants on Aquatic Organisms. *Environments - MDPI* **2020**, *7* (4). https://doi.org/10.3390/environments7040027.
14. De Matteis, V.; Cascione, M.; Rinaldi, R. Titanium Dioxide: Antimicrobial Surfaces and Toxicity Assessment. In *Titanium Dioxide (TiO2) and Its Applications*; Springer Nature, 2020; pp 373–393. https://doi.org/10.1016/B978-0-12-819960-2.00010-9.

Коцитати

15. Andjelkovic, L.; Šuljagić, M.; Pavlović, V.; Mirkovic, M.; Vrbica, B.; Novaković, I.; Stanković, D.; Kremenović, A.; Uskoković, V. Mechanical Activation and Silver Supplementation as Determinants of the Antibacterial Activity of Titanium Dioxide Nanoparticles. *Colloids and Surfaces A: Physicochemical and Engineering Aspects* **2024**, *691*. https://doi.org/10.1016/j.colsurfa.2024.133890.
16. Mirkovic, M.; Filipović, S.; Kalijadis, A.; Maskovic, P.; Mašković, J.; Vlahović, B.; Pavlović, V. Hydroxyapatite/TiO2 Nanomaterial with Defined Microstructural and Good Antimicrobial Properties. *Antibiotics* **2022**, *11* (5). https://doi.org/10.3390/antibiotics11050592.

8. Dojcinovic, M.; Vasiljevic, Z.; Krstic, J.; Vujancevic, J.; Markovic, S.; Tadic, N.; Nikolic, M. Electrospun Nickel Manganite (NiMn2O4) Nanocrystalline Fibers for Humidity and Temperature Sensing. *SENSORS* **2021**, *21* (13). https://doi.org/10.3390/s21134357.

Хетероцитати

1. Suresh Kumar, N. V.; Sharma, S.; Shaikh, A.; Thirmal, C. Investigating Water Sensing Capabilities of Ca- and Sr-Containing (BaTiO3)3 Clusters: A Computational Study of Electronic Properties and Chemical Effects in Surface-Enhanced Raman Spectroscopy. *Journal of Raman Spectroscopy* **2025**. https://doi.org/10.1002/jrs.6845.
2. Yang, Y.; Fan, S.; Li, X.; Shi, J.; Mao, Y.; Wang, M.; Tan, F. P-Doped NiMn2O4 Hollow Tubular Nanofiber Spinel Composites for Electrocatalytic Dechlorination. *ACS Applied Nano Materials* **2024**, *7* (2), 1713–1722. https://doi.org/10.1021/acsanm.3c04818.

3. Nagajyothi, P. C.; Pavani, K.; Rajavaram, R.; Shim, J. Microwave Synthesis of NiMn2O4/Ni-Foam: Efficient Bifunctional Electrocatalysts for Overall Water Splitting. *International Journal of Hydrogen Energy* **2024**, *54*, 691–699. https://doi.org/10.1016/j.ijhydene.2023.09.046.
4. Ma, C.; He, L.; Bi, L.; Gao, H.; Ding, J. Enhanced Conductivity and Stability of Co0.98 Cux Mn2.02−x O4 Ceramics with Dual Phases and Twin Structures. *Journal of Advanced Ceramics* **2023**, *12* (9), 1742–1757. https://doi.org/10.26599/JAC.2023.9220783.
5. Caceres, D.; Gutierrez, R.; Kung, K.; Rodriguez, J.; Lao, O.; Contreras, K.; Jo, K.-H.; Sanchez-Galan, J. E. Recent Advances in Automatic Feature Detection and Classification of Fruits Including with a Special Emphasis on Watermelon (Citrillus Lanatus): A Review. *Neurocomputing* **2023**, *526*, 62–79. https://doi.org/10.1016/j.neucom.2023.01.005.
6. Begum, S.; Rahman, M.; Al-Otaibi, S.; Althubeiti, K.; Nazarova, N.; Ullah, B.; Khan, R. High Sensitivity and Low Hysteresis of Humidity Sensor Based on Imidazole Derivative. *Journal of Materials Science: Materials in Electronics* **2023**, *34* (10). https://doi.org/10.1007/s10854-023-10349-2.
7. Begum, S.; Rahman, M.; Al Otaibi, S.; Althubeiti, K.; Nazarova, N.; Zulfiqar; Ullah, B.; Khan, R. High Sensitivity and Low Hysteresis of Humidity Sensor Based on Imidazole Derivative. *JOURNAL OF MATERIALS SCIENCE-MATERIALS IN ELECTRONICS* **2023**, *34* (10). https://doi.org/10.1007/s10854-023-10349-2.
8. Ahmetović, S.; Vasiljevic, Z. Ž.; Rajić, V.; Bartolić, D.; Novaković, M.; Tadić, N. B.; Cvjetićanin, N.; Nikolić, M. V. Examination of the Doping Effects of Samarium (Sm3+) and Zirconium (Zr4+) on the Photocatalytic Activity of TiO2 Nanofibers. *Journal of Alloys and Compounds* **2023**, *930*. https://doi.org/10.1016/j.jallcom.2022.167423.

Коцитати

9. Dojcinovic, M. P.; Kusigerski, V.; Stojković Simatović, I. B.; Pavlović, V. P.; Kovač, J.; Spreitzer, M.; Nikolić, M. V. NiMn2O4 Nano-Cotton Particles and Nanofibers: Exploring Structural, Magnetic and Electrochemical Energy Storage Properties. *Journal of Energy Storage* **2025**, *131*. https://doi.org/10.1016/j.est.2025.117442.
10. Dojcinovic, M. P.; Vasiljevic, Z. Z.; Kovač, J.; Tadić, N. B.; Nikolić, M. V. Nickel Manganite-Sodium Alginate Nano-Biocomposite for Temperature Sensing. *Chemosensors* **2021**, *9* (9). https://doi.org/10.3390/chemosensors9090241.

## Аутоцитати

11. Dojcinovic, M. P.; Vasiljevic, Z. Z.; Rakočević, L.; Pavlović, V. P.; Ammar, S.; Vujančević, J. D.; Nikolić, M. V. Humidity and Temperature Sensing of Mixed Nickel–Magnesium Spinel Ferrites. *Chemosensors* **2023**, *11* (1). https://doi.org/10.3390/chemosensors11010034.

9. Nikolic, M.; Labus, N.; Pavlovic, V.; Markovic, S.; Lukovic, M.; Tadic, N.; Vujancevic, J.; Vlahovic, B.; Pavlovic, V. Nanocrystalline Zn2SnO4/SnO2: Crystal Structure and Humidity Influence on Complex Impedance. *JOURNAL OF ELECTROCERAMICS* **2020**, *45* (4), 135–147. https://doi.org/10.1007/s10832-021-00232-z.

Хетероцитати

1. Zhang, Y.; Zheng, X.; Cui, X.; Liu, X.; Li, Q.; Kong, W.; Liu, H.; Tian, Y.; Yang, H.; Xu, Q. The Construction of a C-SnO2/a-ZnSnO3 Heterostructure with Abundant Interfaces through Topological Transformation for

Efficient Electrocatalytic CO2 Reduction. *Journal of Materials Chemistry A* **2025**, *13* (23), 17834–17841. https://doi.org/10.1039/d5ta01785h.

2. Liang, X.; Fu, S.; Song, X.; Yao, Y.; Gao, N.; Zhang, J. Enhanced Acetone Gas Sensing Performance of SnO2/Zn2SnO4 Heterojunctions Incorporated with MXene: Experimental and Theoretical Insights. *Journal of Alloys and Compounds* **2025**, *1020*. https://doi.org/10.1016/j.jallcom.2025.179489.
3. Shajan, N. T.; Bharathi Mohan, D. RF Magnetron Sputtering of Zn2SnO4 Thin Films: Optimising Microstructure, Optical and Electrical Properties for Photovoltaics. *Journal of Materials Science: Materials in Electronics* **2024**, *35* (12). https://doi.org/10.1007/s10854-024-12648-8.
4. Hernández-Pascacio, A. F.; Millán-Franco, M. A.; Jaramillo-Quintero, O. A. Tailoring the Na Storage Performance of Mixed-Phase Zinc Tin Oxide Anode by Additive-Controlled Synthesis. *Journal of Alloys and Compounds* **2024**, *992*. https://doi.org/10.1016/j.jallcom.2024.174447.
5. Klymov, O.; Yermakov, M.; Pshenychnyi, R.; Dobrozhan, O.; Agouram, S.; Martínez-Tomás, M. C.; Opanasyuk, A.; Muñoz-Sanjosé, V. Synthesis of Zn2SnO4 Particles and the Influence of Annealing Temperature on the Structural and Optical Properties of Zn2SnO4 Films Deposited by Spraying Nanoinks. *Applied Surface Science Advances* **2023**, *18*. https://doi.org/10.1016/j.apsadv.2023.100521.
6. Ma, D.; Zhang, L.; Hu, J.; Fu, Z.; Luo, T.; Yang, D.; Fang, D.; Li, J.; Peng, J.; Wang, Y. Preparation and Gas-Sensitive Properties of Hollow Zn2SnO4/SnO2 Nano-Cubes. *Inorganic Chemistry Communications* **2022**, *141*. https://doi.org/10.1016/j.inoche.2022.109507.

Коцитати

7. Nikolic, M.; Vasiljevic, Z.; Dojcinovic, M.; IEEE. NTC Thermistor Ferrite Composite for Temperature Sensing with Reduced Humidity Influence. In *2024 47TH INTERNATIONAL SPRING SEMINAR ON ELECTRONICS TECHNOLOGY, ISSE 2024*; 2024. https://doi.org/10.1109/ISSE61612.2024.10604149.
8. Nikolic, M. V.; Vasiljevic, Z. Z.; Dojcinovic, M. P. NTC Thermistor Ferrite Composite for Temperature Sensing with Reduced Humidity Influence. In *Proceedings of the International Spring Seminar on Electronics Technology*; 2024. https://doi.org/10.1109/ISSE61612.2024.10604149.

Аутоцитати

9. Nikolic, M. V.; Vasiljevic, Z. Z.; Dimitrijevic, M.; Radmilovic, N.; Vujancevic, J.; Tanovic, M.; Tadic, N. B. Natural Sunlight Driven Photocatalytic Degradation of Methylene Blue and Rhodamine B over Nanocrystalline Zn2SnO4/SnO2. *Nanomaterials* **2025**, *15* (14). https://doi.org/10.3390/nano15141138.
10. Dojcinovic, M. P.; Vasiljevic, Z. Z.; Rakocevic, L.; Pavlovic, V. P.; Ammar-Merah, S.; Vujancevic, J. D.; Nikolic, M. V. Humidity and Temperature Sensing of Mixed Nickel–Magnesium Spinel Ferrites. *Chemosensors* **2023**, *11* (1). https://doi.org/10.3390/chemosensors11010034.

*H*-индекс = 9 ____________________

10. Dojcinovic, M.; Vasiljevic, Z.; Rakocevic, L.; Pavlovic, V.; Ammar-Merah, S.; Vujancevic, J.; Nikolic, M. Humidity and Temperature Sensing of Mixed Nickel-Magnesium Spinel Ferrites. *CHEMOSENSORS* **2023**, *11* (1). https://doi.org/10.3390/chemosensors11010034.

Хетероцитати

1. Rahman, M.; Rahman, M. L.; Biswas, B.; Ahmed, M. F.; Ali Shaikh, M. A.; Jahan, S. A.; Sharmin, N. Fabrication of Novel Ternary G-C3N4/Zn0.5Ni0.5Fe1.8Mn0.2O4/rGO Hybrid Nanocomposites for Humidity Sensing. *Nanoscale Advances* **2025**, *7* (6), 1489–1504. https://doi.org/10.1039/d4na00579a.
2. Kounsalye, J. S.; Dive, A. S.; Humbe, A. V.; Undre, P. G. Advances in Magnetic Materials: Exploring the Properties and Applications of Spinel Ferrites. In *Materials Science for Future Applications: Emerging Development and Future Perspectives*; 2025; pp 309–333. https://doi.org/10.1201/9781003491439-23.
3. Jasrotia, R.; Chaudhary, A. A.; Kumari, S.; Lal, B.; Sharma, A.; Rudayni, H. A.; Kumar, P. Sol-Gel Developed Spinel MgFe2O4 Magnetic Nanomaterials: Impact of Samarium Doping on the Structural, Morphological, Optical, Magnetic, and Antibacterial Traits. *Journal of Sol-Gel Science and Technology* **2025**. https://doi.org/10.1007/s10971-025-06868-5.
4. Shoukat, B.; Hussain, H.; Naz, M. Y.; Ibrahim, A. A.; Shukrullah, S.; Khan, Y.; Zhang, Y. Microwave-Assisted Catalytic Deconstruction of Plastics Waste into Nanostructured Carbon and Hydrogen Fuel Using Composite Magnetic Ferrite Catalysts. *Scientifica* **2024**, *2024*. https://doi.org/10.1155/2024/3318047.
5. Lachini, S. A.; Eslami, A.; Enhessari, M. A Comparative Study of Sol-Gel and Green Synthesized CuCr2O4 Nanoparticles as an Electrode Material for Enhanced Electrochemical Hydrogen Storage. *International Journal of Hydrogen Energy* **2024**, *88*, 841–849. https://doi.org/10.1016/j.ijhydene.2024.09.172.
6. Indira Priyadharsini, C.; Marimuthu, G.; Ravichandran, R.; Albeshr, M. F.; Suganthi, S.; Mythili, R.; Kandasamy, B.; Lee, J.; Palanisamy, G. Exploring the Diverse Performance of Nickel and Cobalt Spinel Ferrite Nanoparticles in Hazardous Pollutant Removal and Gas Sensing Performance. *Environmental Geochemistry and Health* **2024**, *46* (8). https://doi.org/10.1007/s10653-024-01966-9.
7. Dhall, M.; Khasa, S.; Hooda, A.; Shah, J.; Kotnala, R. K. Nanocomposite NBT-MFO for Eco-Friendly Power Generation: Self Sustainable Hydroelectric Cell. *Ceramics International* **2024**, *50* (10), 17570–17592. https://doi.org/10.1016/j.ceramint.2024.02.247.
8. Moon, H.; Son, N.; Goh, M.; Yoon, T.; Kim, J.; Liu, C.; Im, Y.; Yoon, S.; Kang, M. Auto-Selective Reaction Mechanism on Al-Substituted ZnFe2O4 Spinel Electrode and Sustainable Water Oxidation by Oxygen Vacancy Transition. *APPLIED SURFACE SCIENCE* **2023**, *632*. https://doi.org/10.1016/j.apsusc.2023.157553.

Коцитати

9. Dojčinović, M. P.; Stojković Simatović, I.; Nikolić, M. V. Supercapacitor Electrodes: Is Nickel Foam the Right Substrate for Active Materials? *Materials* **2024**, *17* (6). https://doi.org/10.3390/ma17061292.

11. Kosanovic, D.; Zivojinovic, J.; Vujancevic, J.; Peles, A.; Blagojevic, V. A. Point Defects and Their Effect on Dielectric Permittivity in Strontium Titanate Ceramics. *Sci. Sinter.* **2021**, *53* (3), 285–299. https://doi.org/10.2298/SOS2103285K.

Хетероцитати

1. Matijasevic, S.; Topalovic, V.; Savic, V.; Labus, N.; Nikolic, J.; Zildzovic, S.; Grujic, S. 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.
2. Hameed, T.; Ibrahim, R.; Azab, 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.

Коцитати

3. Zivojinovic, J.; Tadic, A.; Kosanovic, D.; Dinic, I.; Vukovic, M.; Obradovic, 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.
4. Zivojinovic, J.; Kosanovic, D.; Blagojevic, V.; Pavlovic, V.; Tadic, N.; Vlahovic, B.; Pavlovic, V. Dielectric Properties of Mechanically Activated Strontium Titanate Ceramics. *SCIENCE OF SINTERING* **2022**, *54* (4), 401–414. https://doi.org/10.2298/SOS2204401Z.

12. Labus, N.; Mentus, S.; Rakic, S.; Duric, Z.; Vujancevic, J.; Nikolic, M. Reheating of Zinc-Titanate Sintered Specimens. *SCIENCE OF SINTERING* **2015**, *47* (1), 71–81. https://doi.org/10.2298/SOS1501071L.

Хетероцитати

1. Abou Hammad, A. B.; Mansour, A. M.; Bakr, A. M.; El Nahrawy, A. M. Zinc Titanate/Silica Nanopowders Formed via Sol Gel Reaction and Their Physical Properties. *Egyptian Journal of Chemistry* **2022**, *65* (11), 163–171. https://doi.org/10.21608/EJCHEM.2022.114039.5185.
2. El Nahrawy, A. M.; Abou Hammad, A. B.; Mansour, A. M. Structural Investigation and Optical Properties of Fe, Al, Si, and Cu-ZnTiO3nanocrystals. *Physica Scripta* **2021**, *96* (11). https://doi.org/10.1088/1402-4896/ac119e.

Коцитати

3. 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.
4. Labus, N.; Vasiljević, Z. Z.; Vasiljević-Radović, D.; Rakić, S.; Nikolić, M. V. Two Step Sintering of ZnTiO3 Nanopowder. *Science of Sintering* **2017**, *49* (1), 51–60. https://doi.org/10.2298/SOS1701051L.

13. Vujancevic, J.; Andricevic, P.; Bjelajac, A.; Dokic, V.; Popovic, M.; Rakocevic, Z.; Horváth, E.; Kollar, M.; Nafrádi, B.; Schiller, A.; Domanski, K.; Forró, L.; Pavlovic, V.; Janackovic, D. Dry-Pressed Anodized Titania Nanotube/CH3NH3PbI3 Single Crystal Heterojunctions: The Beneficial Role of N Doping. *CERAMICS INTERNATIONAL* **2019**, *45* (8), 10013–10020. https://doi.org/10.1016/j.ceramint.2019.02.045.

Хетероцитат

1. Mantulnikovs, K.; Szirmai, P.; Kollár, M.; Stevens, J.; Andricevic, P.; Glushkova, A.; Rossi, L.; Bugnon, P.; Horváth, E.; Sienkiewicz, A.; Forró, L.; Náfrádi, B. Light-Induced Charge Transfer at the CH3NH3PbI3/TiO2 Interface-a Low-Temperature Photo-Electron Paramagnetic Resonance Assay. *JOURNAL OF PHYSICS-PHOTONICS* **2020**, *2* (1). https://doi.org/10.1088/2515-7647/ab6276.

Коцитати

2. Bjelajac, A.; Petrović, R.; Popović, M.; Rakočević, Z.; Socol, G.; Mihailescu, I. N.; Janaćković, D. Doping of TiO2 Nanotubes with Nitrogen by Annealing in Ammonia for Visible Light Activation: Influence of Pre- and Post-Annealing in Air. *Thin Solid Films* **2019**, *692*. https://doi.org/10.1016/j.tsf.2019.137598.

Аутоцитат

3. Vujančević, J.; Andričević, P.; Djokić, V.; Blagojević, V.; Pavlović, V. P.; Ćirković, J.; Horváth, E.; Forró, L.; Karoui, A.; Pavlović, V. B.; Janaćković, D. Effect of the Deposition of Vanadium-Oxide on the Photocatalytic Activity of TiO2 Nanotubes and Its Photodiode Performance Interfaced with CH3NH3PbI3 Single Crystal. *Catalysts* **2023**, *13* (2). https://doi.org/10.3390/catal13020352.

14. Vujancevic, J.; Sodnik, N.; Korent, A.; Cresnovar, S.; Trebse, P.; Kralj, M.; Martelanc, M.; Samardzija, Z.; Soderznik, K. Rapid and Reliable Electrochemical Detection of Bisphenol S in Thermal Paper. *SENSING AND BIO-SENSING RESEARCH* **2024**, *44*. https://doi.org/10.1016/j.sbsr.2024.100662.

Хетероцитати

1. Hu, A.; Huang, A.; Shang, Y.; Ma, C.; Li, L.; Yang, T.; Gao, H.; Gu, J.; Zhu, C.; Chen, G. Fluorescent Sensor for Bisphenol S Based on pH Adjustment and Polydopamine Nanoparticles. *Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy* **2026**, *345*. https://doi.org/10.1016/j.saa.2025.126799.
2. Shoukat, N.; Mun, C.; Jung, H. S.; Lee, M.-Y.; Lee, S. H.; Park, S.-G. Development of Electrochemical Sensors Based on Plasma-Treated Polymeric Nanostructures for Sensitive and Reproducible Detection of Bisphenol A. *International Journal of Electrochemical Science* **2025**, *20* (10). https://doi.org/10.1016/j.ijoes.2025.101121.
3. Liu, Y.; Zhang, R.; Yang, X.; He, Y.; Yang, X. An Ultrasensitive SERS Biosensor Based on Porous ZIF-8-Encapsulated Silver Nanoflowers Coordinated with Host-Gest Recognition Amplification Strategy for the Detection of Bisphenol S. *Microchemical Journal* **2025**, *215*. https://doi.org/10.1016/j.microc.2025.114400.

15. Vujancevic, J.; Bjelajac, A.; Veltruska, K.; Matolin, V.; Siketic, Z.; Provatas, G.; Jaksic, M.; Stan, G.; Socol, G.; Mihailescu, I.; Pavlovic, V.; Janackovic, D. TiO2 Nanotubes Film/FTO Glass Interface: Thermal Treatment Effects. *SCIENCE OF SINTERING* **2022**, *54* (2), 235–248. https://doi.org/10.2298/SOS2202235V.

Хетероцитати

1. Lam, N. H.; Nguyen Truong, N. T.; Kim, C.-D.; Shaikh, H.; Tamboli, M. S.; Alam, M. A.; Jung, J. H. Elevating Photoelectrochemical Water Splitting Efficiency Using Synergistic CuO@ZBO Photocathode. *International Journal of Hydrogen Energy* **2024**, *110*, 359–370. https://doi.org/10.1016/j.ijhydene.2025.02.228.
2. Junbang, P.; Aiempanakit, M.; Aiempanakit, C.; Aiempanakit, K. Influences of Sputtering Power and the Surface Roughness of Substrates on the Microstructures of Sputtered Ti Films and Anodized TiO2 Nanotubes. *Physica B: Condensed Matter* **2024**, *688*. https://doi.org/10.1016/j.physb.2024.416130.

16. Vujančević, J.; Labus, N.; Nikolić, M. V. P. Microstructure Changes Caused by Thermal Etching of Sintered ZnTiO3. *12th International Conference on Fundamental and Applied Aspects of Physical Chemistry-PHYSICAL CHEMISTRY 2014* **2014**.

Коцитат

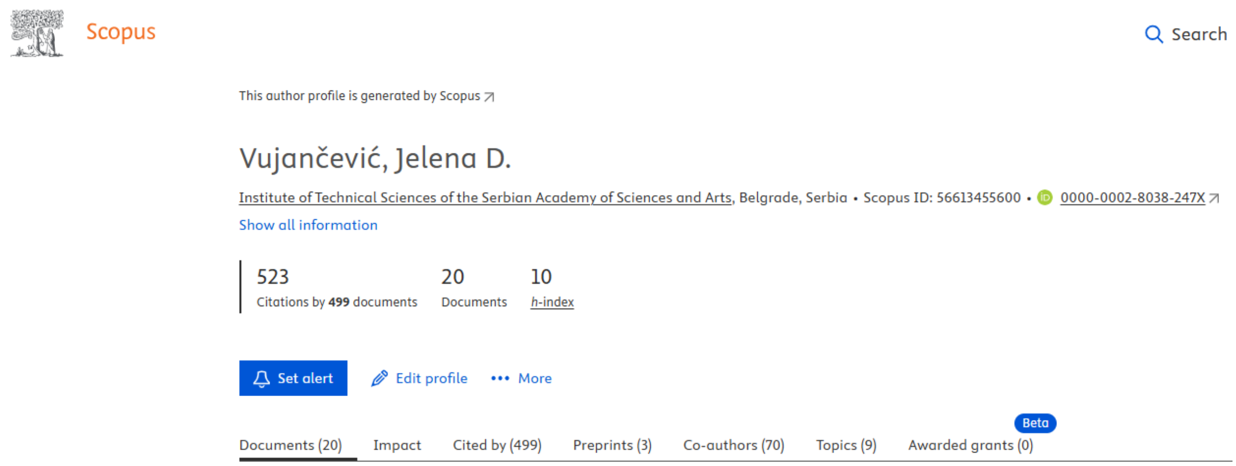
1. Labus, N.; Vasiljevic, Z.; Vasiljevic-Radovic, D.; Rakic, S.; Nikolic, M. Two Step Sintering of ZnTiO3 Nanopowder. *SCIENCE OF SINTERING* **2017**, *49* (1), 51–60. https://doi.org/10.2298/SOS1701051L.

Аутоцитат

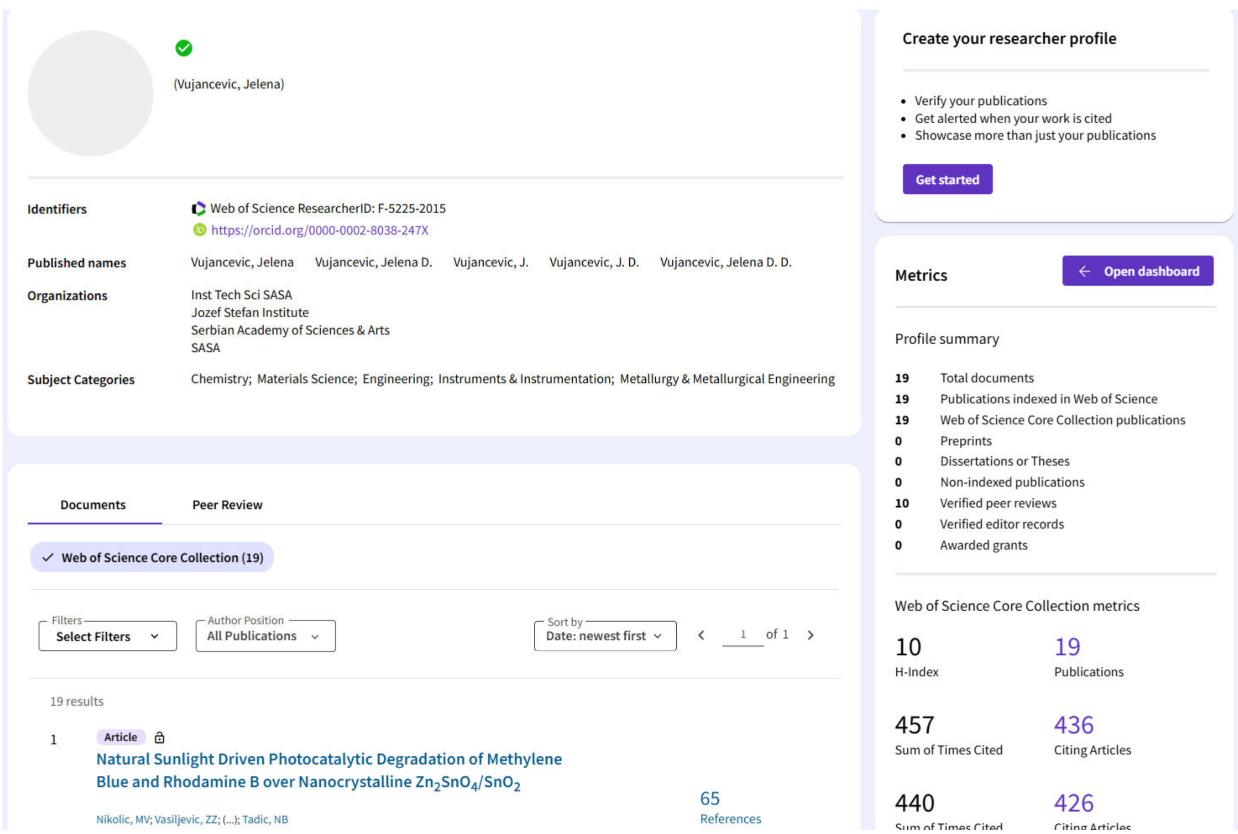
2. Labus, N.; Mentus, S.; Rakic, S.; Duric, Z.; Vujancevic, J.; Nikolic, M. Reheating of Zinc-Titanate Sintered Specimens. *SCIENCE OF SINTERING* **2015**, *47* (1), 71–81. https://doi.org/10.2298/SOS1501071L.

## 1.2. Доказ о Хиршовом индексу према базама *Scopus* и *Web of science*

### *Scopus*




### *Web of Science*



# ПРИЛОГ 2

**Jožef Stefan Institute, Ljubljana, Slovenia**
Jamova cesta 39, POB 3000, SI - 1001 Ljubljana, Slovenia / www.ijs.si
Tel.: +386 1 477 3900

Date: 25.8.2025

**TO WHOM IT MAY CONCERN**

This letter serves as confirmation that Dr. Jelena Vujančević, engaged as an Assistant with a Doctorate is conducting research, training, and related activities at the Jožef Stefan Institute, specifically within the Department for Nanostructured Materials. She is currently engaged in program P2-0084 ("Nanostrukturni materiali") from August 1, 2022 until February 28, 2026, and was involved in project proposal J2-3051 ("Razvoj visoko učinkovitih senzorjev za zaznavanje obstojnih in mobilnih kemikalij v okolju") from August 1, 2022, until September 30, 2024.

Head of Department for Nanustructured Materials

Prof Sašo Šturm

SAŠO ŠTURM
Digitally signed by SAŠO ŠTURM
Date: 2025.08.25 16:23:38 +02'00'

Acting Head of Unit for HR

Manuela Pergar

Digitalni podpis:
PERGAR MANUELA
Podpisano: 26.08.2025 15:33:42

ПРИЛОГ 3

processes

an Open Access Journal by MDPI

IMPACT FACTOR 2.8

CITESCORE 5.5

# CERTIFICATE OF SERVICE

AS

Guest Editor of Special Issue

"Synthesis, Characterization and Applications of Metal Oxide Nanomaterials (MONs)"

*Dr. Jelena D. VujanČeviĆ*

Jožef Stefan Institute, Ljubljana, Slovenia

MDPI

Basel, August 2025

Prof. Dr. Giancarlo Cravotto

Editor-in-Chief

# ПРИЛОГ 4

LUXEMBOURG INSTITUTE OF SCIENCE AND TECHNOLOGY | LIST

Invitation to Lecture for
Dr. Jelena Vujančević
Institute Jozef Stefan
Jamova cesta 39
1000 Ljubljana, Slovenia

Dear Dr. Jelena Vujančević,

We are writing to invite you to the Luxembourg Institute of Science and Technology (LIST) from July 1st to July 14th. Our headquarters is located at 5 avenue des Hauts-Fourneaux, L-4362, Esch-sur-Alzette, Grand Duchy of Luxembourg.

The purpose of this working visit is to strengthen the collaboration between our parties and to provide preliminary results in the field of endocrine disrupting chemicals (EDC) detection, which will serve as the foundation for future grant proposals in this bilateral collaboration. The focus of this visit will be the investigation of the electrochemical properties of Au@carbon nanocatalysts for EDC sensing applications. Our work plan includes two main activities:

1. Synthesis of Au nanoparticles via innovative plasma-assisted deposition method and decoration of both carbon nanoparticles and carbon nanotubes in the form of a powder dispersed in water.
2. Conducting electrochemical tests and EDC sensing analyses.

The results of these activities will be summarized in a scientific article to be published in a peer-reviewed journal.

Additionally, we are impressed by your contributions to the field of Electrochemical Sensors and believe your insights would be invaluable to our researchers. Therefore, we would like to invite you to deliver a lecture at LIST on your groundbreaking research in Electrochemical Sensors. The lecture is tentatively scheduled for July 1st at 10:30 AM, with a duration of approximately 30 minutes, followed by a Q&A session. The lecture will be held in Maison de Matériaux, 28 avenue des Hauts-Fourneaux, L-4365 Esch-sur-Alzette. We are flexible on the date and time to accommodate your availability.

We look forward to your visit and the opportunity to collaborate with you.
Sincerely,
Dr. Simon Bulou
Senior Research & Technology Associate
Luxembourg Institute of Science and Technology,

**Luxembourg Institute of Science and Technology (LIST)**
Plasma Process Engineering group, Maison de Matériaux
5, avenue des Hauts-Fourneaux | L-4362 Esch/Alzette
Tel: (+352) 275 888 – 1 | LIST.lu

**ПРИЛОГ 5 Рецензирање пројеката и научних резултата**

## 1. Рецензија *за Catalysts* за 2021. годину: 1 рецензија

**[Catalysts] Manuscript ID: catalysts-1503551 - Review Re...**
From **Catalysts Editorial Office** Date **2021-11-26 15:08**

Dear Dr. Vujancevic,

We have received the following paper, submitted to Catalysts (https://www.mdpi.com/journal/catalysts/).

Type of manuscript: Review
Title: Research progress on the applications of electrospun nanofibers in catalysis
Special Issue: Catalytic and Electrocatalytic Applications of Nanomaterials
https://www.mdpi.com/journal/catalysts/special_issues/catalytic_electrocatalytic_nanomaterials

We kindly invite you to review this paper and evaluate its suitability for publication in Catalysts. The article abstract is available at the end of this message.

If you choose to accept this invitation, we would appreciate receiving your comments within 1 week. Please let us know if you are likely to need more time to complete your review.

Please click on the link below to let us know if you will be able to provide a review and access the full manuscript and review report form.

https://susy.mdpi.com/user/review/review/22788668/QpTS0Y8L

In recognition of the contribution of reviewers, for thorough and timely review reports we provide discount vouchers for Article Processing Charges (APCs) applicable for manuscripts accepted for publication after peer review in any MDPI journal. Advice for completing your review can be found at: https://www.mdpi.com/reviewers.

Please disclose any potential conflicts of interest you might have concerning the manuscript’s contents or the authors.

If you are not able to review this manuscript, we kindly ask you to decline by clicking on the above link such that we can continue processing this submission. We would also appreciate any feedback you can provide at this

**[Catalysts] Manuscript ID: catalysts-1503551 - Acknowledgement - Review Received**
From **catalysts@mdpi.com** Date **2021-12-03 17:35**

Dear Dr. Vujancevic,

A short note to thank you very much for your review of the following manuscript:

Manuscript ID: catalysts-1503551
Title: Research progress on the applications of electrospun nanofibers in catalysis
Authors: M. Olga Guerrero-Pérez *

To help us improve our services, we kindly ask you to fill in our online survey on the peer-review process at
https://www.surveymonkey.com/r/reviewerfeedbackmdpi

We encourage you to register an account on our submission system and bind your ORCID account (https://susy.mdpi.com/user/edit). You are able to deposit the review activity to your ORCID account manually via the below link:
https://susy.mdpi.com/user/reviewer/status/finished

We also invite you to contribute to Encyclopedia (https://encyclopedia.pub), a scholarly platform providing accurate information about the latest research results. You can adapt parts of your paper to provide valuable reference information for others in the field.

Kind regards,
Nebojsa Trifkovic
Assistant Editor,
E-Mail: trifkovic@mdpi.com
MDPI Novi Sad Branch Office
Bulevar Oslobođenja 83, 21000 Novi Sad
Tel. +381 21 300 14 49
www.mdpi.com

## 2. Рецензија за *Membranes* за 2022. годину: 1 рецензија

**[Membranes] Manuscript ID: membranes-1595134 - Revie...**
From **Membranes Editorial Office** Date **2022-01-31 09:14**

Dear Dr. Vujancevic,

We have received the following paper, submitted to Membranes (https://www.mdpi.com/journal/membranes/).

Type of manuscript: Article
Title: Homochiral Metal-Organic Framework Based Mixed Matrix Membrane for Chiral Resolution
Special Issue: Recent Membrane Research and Development in Korea
https://www.mdpi.com/journal/membranes/special_issues/membrane_in_Korea

We kindly invite you to review this paper and evaluate its suitability for publication in Membranes. The article abstract is available at the end of this message.

If you choose to accept this invitation, we would appreciate receiving your comments within 1 week. Please let us know if you are likely to need more time to complete your review.

Please click on the link below to let us know if you will be able to provide a review and access the full manuscript and review report form.

https://susy.mdpi.com/user/review/review/24439630/nl9j6Xv7

In recognition of the contribution of reviewers, for thorough and timely review reports we provide discount vouchers for Article Processing Charges (APCs) applicable for manuscripts accepted for publication after peer review in any MDPI journal. Advice for completing your review can be found at: https://www.mdpi.com/reviewers.

Please disclose any potential conflicts of interest you might have concerning the manuscript's contents or the authors.

If you are not able to review this manuscript, we kindly ask you to decline by clicking on the above link such that we can continue processing this submission. We would also appreciate any feedback you can provide at this time (i.e., your general impression regarding the quality of this manuscript)

**[Membranes] Manuscript ID: membranes-1595134 - Ackno...**
From **membranes@mdpi.com** Date **2022-03-02 12:10**

Dear Dr. Vujancevic,

A short note to thank you very much for your review of the following manuscript:

Manuscript ID: membranes-1595134
Title: Homochiral Metal-Organic Framework Based Mixed Matrix Membrane for Chiral Resolution
Authors: Hwa Jin Choi, Dong-Yeun Koh *

To help us improve our services, we kindly ask you to fill in our online survey on the peer-review process at
https://www.surveymonkey.com/r/reviewerfeedbackmdpi

We also invite you to contribute to Encyclopedia (https://encyclopedia.pub), a scholarly platform providing accurate information about the latest research results. You can adapt parts of your paper to provide valuable reference information for others in the field.

Kind regards,
Marharyta Vasylieva
Assistant Editor
E-Mail: vasylieva@mdpi.com

MDPI
Membranes Editorial Office
St. Alban-Anlage 66, 4052 Basel, Switzerland
Tel.: +41 61 683 77 34; Fax: +41 61 302 89 18
E-Mail: membranes@mdpi.com
http://www.mdpi.com/journal/membranes/

*** This is an automatically generated email ***

### 3. Рецензија за *Polymers* за 2022. годину: 1 рецензија

**[Polymers] Manuscript ID: polymers-1622194 - Review Re...**
From **Polymers Editorial Office** Date **2022-03-02 11:05**

Dear Dr. Vujancevic,

We have received the following paper, submitted to Polymers
(https://www.mdpi.com/journal/polymers/).

Type of manuscript: Article
Title: Self-assembly of ultrafine fibers with micropores via cryogenic electrospinning and its potential application in esophagus repair
Special Issue: Recent Progress in Bio-Inspired and Bio-Based Polymer Composites
https://www.mdpi.com/journal/polymers/special_issues/bioinspired_and_biobased_polymer_composites

We kindly invite you to review this paper and evaluate its suitability for publication in Polymers. The article abstract is available at the end of this message.

If you choose to accept this invitation, we would appreciate receiving your comments within 1 week. Please let us know if you are likely to need more time to complete your review.

Please click on the link below to let us know if you will be able to provide a review and access the full manuscript and review report form.

https://susy.mdpi.com/user/review/review/25106350/t0D6UWCR

In recognition of the contribution of reviewers, for thorough and timely review reports we provide discount vouchers for Article Processing Charges (APCs) applicable for manuscripts accepted for publication after peer review in any MDPI journal. Advice for completing your review can be found at:
https://www.mdpi.com/reviewers.

Please disclose any potential conflicts of interest you might have concerning the manuscript's contents or the authors.

If you are not able to review this manuscript, we kindly ask you to decline by clicking on the above link such that we can continue processing this submission. We would also appreciate any feedback you can provide at this

**[Polymers] Manuscript ID: polymers-1622194 - Acknowledgement - Review Received**
From **polymers@mdpi.com** Date **2022-03-11 17:22**

Dear Dr. Vujancevic,

A short note to thank you very much for your review of the following manuscript:

Manuscript ID: polymers-1622194
Title: Self-assembly of ultrafine fibers with micropores via cryogenic electrospinning and its potential application in esophagus repair
Authors: Wenqing Tian, Xinghuang Liu, Xianglin Zhang, Tao Bai, Bin Wu *

If we decide to ask the authors for revisions, we will send you the revised version soon. To help us improve our services, we kindly ask you to fill in our online survey on the peer-review process at
https://www.surveymonkey.com/r/reviewerfeedbackmdpi

We encourage you to register an account on our submission system and bind your ORCID account (https://susy.mdpi.com/user/edit). You are able to deposit the review activity to your ORCID account manually via the below link:
https://susy.mdpi.com/user/reviewer/status/finished

We also invite you to contribute to Encyclopedia (https://encyclopedia.pub), a scholarly platform providing accurate information about the latest research results. You can adapt parts of your paper to provide valuable reference information for others in the field.

Kind regards,
Mr. Paul Bian
Special Issue Editor
Polymers Editorial Office
-----
Submit to Polymers:
https://susy.mdpi.com/user/manuscripts/upload?journal=polymers
Propose a special issue in Polymers:
https://mdpi.com/journalproposal/sendproposalspecialissue/polymers
-----
Conference Polymers 2022: 25-27 May 2022, Turin, Italy
Open for registrations: https://polymers2022.sciforum.net/

**4. Рецензија за *Sensors* за 2022. годину**: 1 рецензија

**[Sensors] Manuscript ID: sensors-2120964 - Review Requ...**

From **Sensors Editorial Office** Date **2022-12-12 09:48**

Dear Dr. Vujancevic,

We have received the following paper, submitted to Sensors (https://www.mdpi.com/journal/sensors/).

Type of manuscript: Article
Title: Microwave cavity sensor for measurements of water vapor content in air under reduced pressure

We kindly invite you to review this paper and evaluate its suitability for publication in Sensors. The article abstract is available at the end of this message.

If you choose to accept this invitation, we would appreciate receiving your comments within 1 week. Please let us know if you are likely to need more time to complete your review.

Please click on the link below to let us know if you will be able to provide a review and access the full manuscript and review report form.

https://susy.mdpi.com/user/review/review/34070174/A8cFg0B5

In recognition of the contribution of reviewers, for thorough and timely review reports we provide discount vouchers for Article Processing Charges (APCs) applicable for manuscripts accepted for publication after peer review in any MDPI journal. Advice for completing your review can be found at: https://www.mdpi.com/reviewers.

Please disclose any potential conflicts of interest you might have concerning the manuscript’s contents or the authors.

If you are not able to review this manuscript, we kindly ask you to decline by clicking on the above link such that we can continue processing this submission. We would also appreciate any feedback you can provide at this time (i.e., your general impression regarding the quality of this manuscript) and any suggestions for alternative expert reviewers.

**[Sensors] Manuscript ID: sensors-2120964 - Review report ...**

From **Sensors Editorial Office** Date **2023-01-28 21:12**

Dear Dr. Vujancevic,

Thank you very much for your review of the following manuscript:

Journal name: Sensors
Manuscript ID: sensors-2120964
Type of manuscript: Article
Title: Microwave cavity sensor for measurements of air humidity under reduced pressure
Authors: Alexander Georgievich Galka *, Alexander Vladimirovich Kostrov, Stanislav Eduardovich Priver, Askold Vitalievich Strikovsky, Vladimir Vladimirovich Parshin, Evgeny Alexandrovich Serov, Andrey Sergeevich Nikolenko, Sergey Vladimirovich Korobkov, Mikhail Evgenievich Gushchin
Received: 9 December 2022
E-mails: galasnn@ipfran.ru, kstr@ipfran.ru, priver@ipfran.ru, strik@ipfran.ru, parsh@ipfran.ru, serov@ipfran.ru, nikolenko@ipfran.ru, korobkov@ipfran.ru, mguschin@ipfran.ru
Submitted to section: Environmental Sensing, https://www.mdpi.com/journal/sensors/sections/environmental_sensing

The journal operates open peer review, where the authors can select whether the review reports will be published alongside the accepted manuscript. We are writing to let you know that for this paper your review report will not be published. We will, however, inform you once the paper is online.

If you have any questions, please do not hesitate to contact editorial office sensors@mdpi.com.

Best regards,
Sensors Editorial Office
St. Alban-Anlage 66, 4052 Basel, Switzerland
E-Mail: sensors@mdpi.com
Tel. +41 61 683 77 34
Fax: +41 61 302 89 18

## 5. Рецензија за *Catalysts* за 2023. годину: 2 рецензије

### 5.1. Рецензија број 1:

**[Catalysts] Manuscript ID: catalysts-2515001 - Review Re...**
From **Catalysts Editorial Office** Date **2023-07-04 21:10**

Dear Dr. Vujancevic,

We have received the following paper, submitted to Catalysts
(https://www.mdpi.com/journal/catalysts/).

Type of manuscript: Article
Title: Visible light photocatalytic degradation performance of metal (Fe, Ce,
Ni, Mn, Bi)-doped sodium tantalite perovskite
Special Issue: Advanced Research of Perovskite Materials as Catalysts
https://www.mdpi.com/journal/catalysts/special_issues/M66LE5R57V

We kindly invite you to review this paper and evaluate its suitability for
publication in Catalysts. The article abstract is available at the end of
this message.

If you choose to accept this invitation, we would appreciate receiving your
comments within 1 week. Please let us know if you are likely to need more
time to complete your review.

Please click on the link below to let us know if you will be able to provide
a review and access the full manuscript and review report form.

https://susy.mdpi.com/user/review/review/40581979/z8jSPRLs

In recognition of the contribution of reviewers, for thorough and timely
review reports we provide discount vouchers for Article Processing Charges
(APCs) applicable for manuscripts accepted for publication after peer review
in any MDPI journal. Advice for completing your review can be found at:
https://www.mdpi.com/reviewers.

Please disclose any potential conflicts of interest you might have concerning
the manuscript's contents or the authors.

If you are not able to review this manuscript, we kindly ask you to decline
by clicking on the above link such that we can continue processing this
submission. We would also appreciate any feedback you can provide at this
time (i.e., your general impression regarding the quality of this manuscript)

**[Catalysts] Manuscript ID: catalysts-2515001 - Acknowledgement - Review Received**
From **catalysts@mdpi.com** Date **2023-08-07 17:05**

Dear Dr. Vujancevic,

Thank you for submitting your review of the following manuscript:

Manuscript ID: catalysts-2515001
Title: Visible light photocatalytic degradation performance of metal (Fe, Ce,
Ni, Mn, Bi)-doped sodium tantalite perovskite
Authors: Aijun Huang, Haijuan Zhan *, Meng Wen, Yao Zhou, Shuxian Bi, Wanyi
Liu, Feng Li *

Our Editorial Office and Academic Editors will contact you if they have any
questions about your review report. We ask that you remain available, as far
as possible, during the peer-review process in case of follow-up questions.
We are continuously working to improve the services we offer and would
greatly appreciate receiving feedback about your experiences through the
short survey below.
Click here to start the survey:
https://www.research.net/r/Reviewer_Survey_2023

We also invite you to contribute to Encyclopedia (https://encyclopedia.pub),
a scholarly platform providing accurate information about the latest research
results. You can adapt parts of your paper to provide valuable reference
information for others in the field.

Kind regards,
Dr. Mihai Lacatus
Assistant Editor, MDPI Cluj
Email: lacatus@mdpi.com

MDPI Open Access Publishing Romania SRL
Avram Iancu 454, Floresti 407280, Cluj, Romania
Tel.: +40 0364 150134

## 5.2. Рецензија број 2

[Catalysts] Manuscript ID: catalysts-2128917 - Review Request

CE bernadette.chen@mdpi.com on behalf of Catalysts Editorial Office <catalysts@mdpi.com>
To Jelena D. Vujancevic
Cc Catalysts Editorial Office; Bernadette Chen

Reply | Reply All

We removed extra line breaks from this message.

Dear Dr. Vujancevic,

Following the recommendation of Dr. Andjelika Bjelajac, University of Belgrade, we would like to kindly invite you to provide a review to evaluate the suitability for publication in Catalysts (https://www.mdpi.com/journal/catalysts/) of the following manuscript:

Type of manuscript: Article
Title: Study of lamellar mesoporous TiO2/MFI for photocatalytic degradation of rhodamine B dye in aqueous solution Special Issue: Smart Nanomaterials for Catalytic Environment, Energy, and Sustainability
https://www.mdpi.com/journal/catalysts/special_issues/SNCEES

We kindly invite you to review this paper and evaluate its suitability for publication in Catalysts. The article abstract is available at the end of this message.

If you choose to accept this invitation, we would appreciate receiving your comments within 1 week. Please let us know if you are likely to need more time to complete your review.

Please click on the link below to let us know if you will be able to provide a review and access the full manuscript and review report form.

https://susy.mdpi.com/user/review/review/34456466/hQvo9Cmj

In recognition of the contribution of reviewers, for thorough and timely review reports we provide discount vouchers for Article Processing Charges (APCs) applicable for manuscripts accepted for publication after peer review in any MDPI journal. Advice for completing your review can be found at: https://www.mdpi.com/reviewers.

Please disclose any potential conflicts of interest you might have concerning the manuscript's contents or the authors.

If you are not able to review this manuscript, we kindly ask you to decline by clicking on the above link such that we can continue processing this submission. We would also appreciate any feedback you can provi
your general impression regarding the quality of this manuscript) and any suggestions for alternative expert reviewers.

Catalysts is an open access journal of MDPI. Thank you very much for your consideration and we look forward to hearing from you.

[Catalysts] Manuscript ID: catalysts-2128917 - Review Request Accepted

C catalysts@mdpi.com
To Jelena D. Vujancevic
Cc Bernadette Chen

Reply | Reply A

We removed extra line breaks from this message.

Dear Dr. Vujancevic,

Thank you very much for agreeing to review this manuscript:

Manuscript ID: catalysts-2128917
Type of manuscript: Article
Title: Study of lamellar mesoporous TiO2/MFI for photocatalytic degradation of rhodamine B dye in aqueous solution
Authors: Rosario I. Yocupicio Gaxiola *, Uriel Caudillo-Flores *, Andrea Urtaza Ruiz de Esparza *, Joel Antunez-Garcia, Fabián N. Murrieta-Rico, Hugo Alejandro Borbon-Nuñez, Sergio Fuentes-Moyado, Marina G. Shelyapina, Vitalii Petranovskii Submitted to section: Catalytic Materials,
https://www.mdpi.com/journal/catalysts/sections/catalytic_materials
Smart Nanomaterials for Catalytic Environment, Energy, and Sustainability https://www.mdpi.com/journal/catalysts/special_issues/SNCEES

The review report form can be found here:
https://susy.mdpi.com/user/review/review/34456466/hQvo9Cmj

The review report due date is: 2 January 2023

To ensure your anonymity throughout the peer review process, please do not include any identifying information in your review report either in the comments or in the metadata of any files that you upload. Please check the Guidelines for Reviewers: https://www.mdpi.com/reviewers

We look forward to receiving your valuable comments.

Kind regards,
Bernadette Chen
Assistant Editor
Email: bernadette.chen@mdpi.com
---

MDPI Branch Office, Tianjin
Catalysts Editorial Office
Tel.: +86 22 5833 8835

# REVIEW CONFIRMATION CERTIFICATE

We are pleased to confirm that

*Jelena D. Vujancevic*

has reviewed 4 papers for the following MDPI journals in the period 2021–2022:

*Sensors, Polymers, Membranes, Catalysts*

Shu-Kun Lin

Dr. Shu-Kun Lin, Publisher and President
Basel, 24 February 2023

MDPI

MDPI is a publisher of open access, international, academic journals. We rely on active researchers, highly qualified in their field to provide review reports and support the editorial process. The criteria for selection of reviewers include: holding a doctoral degree or having an equivalent amount of research experience; a national or international reputation in the relevant field; and having made a significant contribution to the field, evidenced by peer-reviewed publications.

INTERNATIONAL INSTUTUTE

IISS - МИНС

FOR THE SCIENCE OF SINTERING

*International Journal*

# Science of SINTERING

By this document we confirm that **Dr. Jelena Vujančević**, from Institute of Technical Sciences of SASA, is a reviewer in an International journal ***Science of Sintering***. She reviewed papers: ***Phyllosilicate-based adsorbents decorated with iron oxyhydroxides: application for lead, chromates and selenites removal***, by Mladen Bugarcic et. al, and ***Characterization of $SiO_2$ Sol-Gel Coated Ti6Al4V Alloy Obtained by Using TEOS and GPTMS***, by Canser Gul et. al.

Sincerely,

Editor in Chief

Prof. Dr. Vladimir Pavlović

**IISS**
**c/o ITN SANU**
**Knez-Mihailova 35/IV**
**11000 Belgrade**
**Serbia**
**Tel: +381112027151**

**scisint@sanu.ac.rs**
**www.iiss.sanu.ac.rs**

# ПРИЛОГ 6

***Универзитет „Унион-Никола Тесла“***
Београд
Ул. Цара Душана бр. 62-64
Број: 203/2
Датум: 01.03.2021. године

На основу чл.65 ст.2 Закона о високом образовању и чл.57 Статута Универзитета „Унион-Никола Тесла“ у Београду, Сенат Универзитета је на седници одржаној дана 01.03.2021. године, донео следећу:

**О Д Л У К А**

***1. Др Јелена Вујанчевић*** бира се у звање ***доцента*** *за ужу научну област:* ***“Индустријско инжењерство“.***

**2.** Одлука је донета једногласно.

***О Б Р А З Л О Ж Е Њ Е***

Сенату Универзитета „Унион-Никола Тесла“ у Београду је достављен извештај Комисије за избор у звање наставника као и предлог одлуке о избору у звање на разматрање и одлучивање.

Након детаљног увида у приложену документацију чланови Сената су донели одлуку као у изреци.

Одлука је донета једногласно.

***Доставити:***

- *Архиви Универзитета;*

***Ректор***
*Проф. др Небојша Закић*

Република Србија

Универзитет у Београду

Оснивач: Република Србија

УБ

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

Технолошко-металуршки факултет, Београд

Оснивач: Република Србија

Дозволу за рад број 612-00-02258/2009-04 од 26. марта 2010. године је издало Министарство просвете Републике Србије

# Диплома

Јелена, Драго, Вујанчевић

рођена 9. децембра 1985. године, Петровац на Млави, Република Србија, уписана школске 2013/2014. године, а дана 29. децембра 2020. године завршила је докторске академске студије, трећег степена, на студијском програму Инжењерство материјала, обима 180 (сто осамдесет) бодова ЕСПБ са просечном оценом 9,75 (девет и 75/100).

Наслов докторске дисертације је: „Модификовање структуре и фотоактивности наноцеви титан(IV)-оксида допирањем и применом фотоосетљивих компонената".

На основу тога издаје јој се ова диплома о стеченом научном називу

доктор наука-технолошко инжењерство

Број: 13617600

У Београду, 28. априла 2022. године

Декан
Проф. др Петар Ускоковић

Ректор
Проф. др Владан Ђокић

00136446

РепубликаСрбија
**МИНИСТАРСТВО ПРОСВЕТЕ,**
**НАУКЕ И ТЕХНОЛОШКОГ РАЗВОЈА**
**Матични научни одбор за хемију**
**Број: 660-01-00004/2021-14/12**
**27.04.2021. године**
**Б е о г р а д**

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 Правилнику о стицању истраживачких и научних звања („Службени гласник РС", број 159) и захтева који је поднео

***Институт техничких наука САНУ, Универзитет у Београду***

Матични научни одбор за хемију на седници одржаној 27.04.2021. године, донео је

# ОДЛУКУ
# О СТИЦАЊУ НАУЧНОГ ЗВАЊА

**Др Јелена Вујанчевић**
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, Универзитет у Београду***

утврдио је предлог број 059/1 од 01.03.2021. године на седници Научног већа и поднео захтев Матичном научном одбору за хемију број 064/1 од 02.03.2021. године за доношење одлуке о испуњености услова за стицање научног звања **Научни сарадник.**

Матични научни одбор за хемију на седници одржаној 27.04.2021. 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 Правилнику о стицању истраживачких и научних звања („Службени гласник РС", број 159) за стицање научног звања **Научни сарадник** па је одлучио као у изреци ове одлуке.

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

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

**МАТИЧНИ НАУЧНИ ОДБОР ЗА ХЕМИЈУ**
**ПРЕДСЕДНИК**

**Проф. др Живослав Тешић**

**ПРВИ ПОТПРЕДСЕДНИК ВЛАДЕ И МИНИСТАР**

**Бранко Ружић**