Instytut Niskich Temperatur
i Badań Strukturalnych PAN

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LISTA PUBLIKACJI 2024
LIST of PUBLICATIONS

KSIĄŻKI, MONOGRAFIE i ARTYKUŁY PRZEGLĄDOWE
Books, Monographs & Reviews

1. **P.E. Tomaszewski**,

   Rozmiarowe przemiany fazowe. Badania rentgenowskie i klasyfikacja
   [Size-Induced Phase Transitions – X-ray Studies and Classification.]

   (Wrocław: Oficyna Wydawnicza ATUT 2024) 347 p. [in Polish] [ISBN 978-83-966642-2-8]

ARTYKUŁY W CZASOPISMACH NAUKOWYCH
Articles in Scientific Journals

2. Md Sh.Alam, A.Kazakov, M.Ahmad, R.Islam, Fei Xue, **M. Matusiak**,

   Quantum Transport Properties of the Topological Dirac Semimetal α-Sn.

   Phys. Rev. B **109** $_{24}$ (2024) # 245135 (9). [DOI]

3. M.Aliahmadi, A.Nemati Kharat, **J. Janczak**,

   Catalytic Deoxydehydration of Glycerol to Allyl Alcohol in the Presence of Mono-Oxygenated Rhenium Diphosphine Complexes.

   Polyhedron **248** (2024) # 116 734 (8). [DOI]

4. M.Amini, A.Sheykhi, A.A.Khandar, **J. Janczak**,

   Binuclear Copper Complex as a New Dual-Use Catalyst for Cycloaddition and Coupling Reactions: Synthesis, Characterization, and Application.

   Appl. Org-met. Chem. **38** $_{6}$ (2024) # e 7472 (13). [DOI]

5. M.Amini, A.Yousofvand, M.Hosseinifard, A.Bayrami, **J. Janczak**,

   Synthesis and Characterization of a New Copper-Based Polyoxomolybdate and Its Catalytic Activity for Azide-Alkyne Cycloaddition Reaction under UV Light Irradiation.

   Sci. Rep. **14** (2024) # 653 (10). [DOI]

6. A.Amirov, **Yu.Koshkid'ko**, R.K.Li, **J. Ćwik**, A.Mashirov, C.Greaves,

   Giant Cryogenic Magnetocaloric Effect in Mineral of Gaudefroyite: Direct and Indirect Measurements.

   Cryogenics **140** (2024) # 103 848 (5). [DOI]

7. Tran Kim Anh, Vu Thi Thai Ha, Nguyen Thanh Huong, Do Thi Thao, Tien Dai Nguyen, Dang Van Thai, **R. Tomala**, Le Quoc Minh,

   Synthesis and Characterizations of Upconverting Luminescent Er^{3+}/Yb^{3+} : Gd_2O_3 Uniform Nanospheres for Biomedical Applications.

   Phys. Scr. **99** $_{10}$ (2024) # 10 59d5 (12). [DOI]

8. M.Antkowiak, Ł.Kucharski, **R. Lemański**, G.Kamieniarz,

   Algorithms on Low Energy Spectra of the Hubbard Model Pertinent to Molecular Nanomagnets.

   Concurr. Comput. Pract. Exper. **36** $_{4}$ (2024) # e7831 (10). [DOI]

9. **V. Apinyan**, **T.K. Kopeć**,

   Excitonic Correlations in the System of Gated Metallic Wires with the Applied Zeeman Magnetic Field.

   J. Appl. Phys. **135** (2024) # 22 4302 (14). [DOI]

10. **V. Apinyan**, **M. Sahakyan**,

    Unusual Spin-Triplet Superconductivity in Monolayer Graphene.

    Eur. Phys. J. B **97**$_6$ (2024) # 75 (20). [DOI]

11. **M.S. Barabashko**, **M. Drozd**, A.V.Dolbin, R.M.Basnukaeva, N.A.Vinnikov,

    Kinetics of the Thermal Decomposition of Thermally Reduced Graphene Oxide Treated with a Pulsed High-Frequency Discharge in Hydrogen Atmosphere.

    Физ. Низк. Темп. **50**$_5$ (2024) 403–7. Also in: *Low Temp. Phys.* **50**$_5$ (2024) 368–71. [DOI]

12. M.Baranowski, A.Nowok, K.Gałkowski, M.Dyksik, A.Surrente, D.Maude, M.Zacharias, G.Volonakis, S.D.Stranks, J.Even, **M. Mączka**, R.Nicholas, P.Płochocka,

    Polaronic Mass Enhancement and Polaronic Excitons in Metal Halide Perovskites.

    ACS Energy Lett. **9**$_6$ (2024) 2 696–702. [DOI]

13. K.Bartosiewicz, B.Albini, **D. Szymański**, P.Socha, T.Horiai, M.Yoshino, A.Yamaji, Sh.Kurosawa, R.Kucerková, P.Galinetto, A.Yoshikawa,

    Engineering Atomic Size Mismatch in Pr^{3+}, La^{3+} Codoped $Lu_3Al_5O_{12}$ Garnet Single Crystals for Tailored Structure and Functional Properties.

    J. Alloy. Compd. **985** (2024) # 174 078 (15). [DOI]

14. K.Bartosiewicz, **R. Tomala**, **D. Szymański**, B.Albini, J.Zeler, M.Yoshino, T.Horiai, P.Socha, S.Kurosawa, K.Kamada, P.Galinetto, E.Zych, A.Yoshikawa,

    Micro-Inclusion Engineering *via* Sc Incompatibility for Luminescence and Photoconversion Control in Ce^{3+}-Doped $Tb_3Al_{5-x}Sc_xO_{12}$ Garnet.

    Materials **17**$_{11}$ (2024) # 2762 (26). [DOI]

15. N.Bashiri, G.Brösigke, E.Gioria, J.Schmidt, M.Konrad, **R.L.Oliveira**, M.Geske, F.Rosowski, S.Matera, R.Schomäcker, A.Thomas, J.- U.Repke,

    Core–Shell Catalyst Particles for Tandem Catalysis : An Experimental / Numerical Approach towards Optimal Design.

    Chem. Eng. J. **495** (2024) # 153 080 (12). [DOI]

16. **O. Bezkrovna**, **R. Lisiecki**, **B. Macalik**, **P.J. Dereń**,

    UVC Up-Conversion and Vis-NIR Luminescence Examined in SrO–CaO–MgO–SiO_2 Glasses Doped with Pr^{3+}.

    Materials **17**$_8$ (2024) # 1771 (16). [DOI]

17. **O. Bezkrovnyi**, **P. Kraszkiewicz**, M.Vorochta,

    ***In situ* Study of the Effect of the Exposed Surface of Ceria (100 *vs* 111) on the Highly Oxidized Species Formation on Ru / Ceria Catalysts.**

    Acta Phys. Pol. A **145**$_6$ (2024) 310–14. [DOI]

18. **O. Bezkrovnyi**, **M. Szymczak**, **Ł.Marciniak**, **P. Kraszkiewicz**, **V. Boiko**, M.Vorochta, I.Matolínová, **L.Kępiński**,

    Eu^{3+} Species as a Luminescent Probe for Fast Monitoring of the Chemical State of Ceria Catalysts.

    J. Phys. Chem. C **128**$_{25}$ (2024) 10 465–73. [DOI]

19. R.Bhavani, N.Kanagathara, **M.K. Marchewka**, **J. Janczak**, K.Senthilkumar, M.Azam,

    Single Crystal Analysis and DFT Studies of the Novel Hybrid Material – Based on 2-Hydroxypyridine and Selenic Acid.

    Result. Chem. **7** (2024) # 101 239 (11). [DOI]

20. **K. Bilińska**, **M.J. Winiarski**,

Machine Learning-Based Predictions of Power Factor for Half-Heusler Phases.

Crystals **14**$_4$ (2024) # 354 (11). [DOI]

21. **K. Bilińska**, **M.J. Winiarski**,

Machine Learning-Based Predictions for Half-Heusler Phases.

Inorganics **12**$_1$ (2024) # 5 (11). [DOI]

22. **B. Bondzior**,

Isochemical Crystallization in Condensed Borate $LaMgB_5O_{10}$ Glass-Ceramics Doped with Optical Probe Eu^{3+}.

Opt. Lett. **49**$_8$ (2024) 2 125–28. [DOI]

23. **B. Bondzior**, **R. Lisiecki**,

Excellent Color Purity and Luminescence Thermometry Performance in Germanate Tellurite Glass Doped with Eu^{3+} and Tb^{3+}.

Appl. Sci. **14**$_{10}$ (2024) # 4198 (15). [DOI]

24. **B. Bondzior**, **R. Lisiecki**,

Divalent Tin Activator for Nd^{3+}/ Yb^{3+} Emission in Lanthanum Borate Glass and Its Impact on Inter-Ionic Phenomena and Thermometry.

J. Alloy. Compd. **1007** (2024) # 176 471 (?). [DOI]

25. **B. Bondzior**, C.Nguyen, **T.H.Q. Vu**, **P.J. Dereń**, L.Petit,

Monitoring Decomposition of Eu^{3+} Doped $LaPO_4$ Nanocrystals in Glass Using Eu^{3+} as an Optical Probe for Applications in Temperature Sensing.

Mater. Chem. Phys. **311** (2024) # 128 493 (9). [DOI]

26. B.Borak, J.Szczurek, **K. Hałubek-Głuchowska**, **A.Łukowiak**,

Influence of P_2O_5 Addition on Glass Structure and Luminescent Properties of Eu^{3+} Ions in SiO_2–CaO Particles of Bioactive Glass.

Eur. Phys. J. Plus **139**$_1$ (2024) # 56 (9). [DOI]

27. M.Buryi, V.Babin, K.Děcká, K.Ridzoňová, N.Neykova, F.Hájek, Z.Velkov, Z.Remeš, **R. Tomala**, P.Socha, K.Bartosiewicz, T.Hostinský, P.Mošner, T.Yamamoto, C.-G.Ma, M.G.Brik,

Charge Trapping and Luminescence of the Mixed Size $CsPbBr_3$ Particles Grown in One Batch.

Opt. Mater. **151** (2024) # 115 279 (12). [DOI]

28. **M. Chaika**,

Advancements and Challenges in Sintering of Cr^{4+} : YAG : A Review.

J. Eur. Cer. Soc. **44**$_{13}$ (2024) 7 432–50. [DOI]

29. **M. Chaika**, **V. Boiko**, **M. Oleszko**, **R. Tomala**, **W. Stręk**,

Closed Circle Measurements of Laser-Induced White Emission of Graphene Foam.

J. Phys. Chem. C **128**$_{20}$ (2024) 8 351–56. [DOI]

30. **M. Chaika**, **K. Elżbieciak-Piecka**, **O. Vovk**, **Ł.Marciniak**,

New Explanation for Oxidation-Induced Cr^{4+} Formation in Garnets.

Opt. Mater. X **23** (2024) # 100 342 (11). [DOI]

31. **M. Chaika**, **D. Kujawa**, **W. Stręk**, **P. Głuchowski**,

Exploring the Impact of Nanorod Diameter on Near Infrared Laser-Induced Stokes and Anti-Stokes Emission in $La_{1-x}Nd_xAlO_3$.

J. Phys. Chem. C **128**$_{19}$ (2024) 7 999–8 006. [DOI]

32. **G. Chajewski**, **D. Kaczorowski**,

Discovery of Magnetic Phase Transitions in Heavy-Fermion Superconductor $CeRh_2As_2$.

Phys. Rev. Lett. **132**$_7$ (2024) # 07 6504 (7). [DOI]

33. **G. Chajewski**, **D. Szymański**, **M. Daszkiewicz**, **D. Kaczorowski**,

Horizontal Flux Growth as an Efficient Preparation Method of $CeRh_2As_2$ Single Crystals. [Communication]

Mater. Horiz. **11** 3 (2024) 855–61. [DOI]

34. **N. Charczuk**, **S. Targońska**, A.Śmieszek, **P. Sobierajska**, **P. Kraszkiewicz**, **R.J. Wiglusz**,

Multifunctional Platform for Future Applications in Cell and Tissue Engineering Based on Silicate Phosphate Hydroxyapatite Co-doped with Li^+, Eu^{3+} and Gd^{3+} Ions.

Mater. Today Commun. **39** (2024) # 108 926 (18). [DOI]

35. **N. Charczuk**, **S. Targońska**, D.Zákutná, **A.Watras**, **A.Patej**, **R.J. Wiglusz**,

Europium(III) **and Gadolinium**(III) **Co-doped Nanohydroxyapatite with Enhanced Photoluminescence as Potential Multimodal Bioimaging Agent.**

Ceram. Int. **50** 9 (2024) 14 601–13. [DOI]

36. Dong Shun Chen, Tian Yuan Zhou, Le Zhang, Wen Tian, Xin Yuan Zhang, Chao Fan Shi, Hong Sen Wang, Zi Han Zhou, Bao Jin Huang, **W. Stręk**, Hao Chen,

Improvement of Thermal Damage Resistance of $SrAl_2O_4 : Eu^{2+}, Dy^{3+}$ Persistent Phosphor by a Low Temperature Pre-annealing and Its Mechanism.

Appl. Phys. Lett. **125** 14 (2024) # 14 6504 (7). [DOI]

37. GuanNan Chen, Lv Zhu, MingYuan Liu, Cong Wei, ChunMing Zhou, TianYuan Zhou, Cen Shao, Jian Kang, **W. Stręk**, Hao Chen, Le Zhang,

Optimizing Optical and Mechanical Properties of Hundred-Micron Transparent Ceramic Fibers through Controlled Ball Milling Time for Gelcasting.

Ceram. Int. **50** 7, Pt B (2024) 11 658–66. [DOI]

38. Hang Chen, XiYue Zhang, ChunMing Zhou, Xu Chen, YanBin Li, TianYuan Zhou, ShengHui Lin, XinYu Zheng, Jian Kang, ChaoFan Shi, Cen Shao, PengDe Han, **W. Stręk**, Hao Chen, Le Zhang,

High Luminous Efficiency and High Saturation Threshold in Highly Transparent LuAG : Ce Phosphor Ceramics for Laser Diodes Lighting.

Opt. Express **32** 1 (2024) 2 644–57. [DOI]

39. Xu Chen, MingYuan Liu, ChunMing Zhou, Hang Chen, TianYuan Zhou, YanBin Li, ShengHui Lin, Cong Wei, Cen Shao, GuanNan Chen, Jian Kang, PengDe Han, **W. Stręk**, Hao Chen, Le Zhang,

High Luminous Efficiency and Excellent Thermal Performance in Rod-Shaped YAG : Ce Phosphor Ceramics for Laser Lighting.

Opt. Express **32** 1 (2024) 1465–77. [DOI]

40. S.V.Cherednichenko, G.V.Andrievsky, N.A.Vinnikov, A.V.Dolbin, M.V.Kosevich, V.S.Shelkovsky, R.M.Basnukaeva, O.P.Gnatyuk, **O. Bezkrovnyi**, **M. Ptak**, **M. Chaika**, P.O.Kuzema, G.I.Dovbeshko,

Raman, UV-Vis, MS, and IR Characterization of Molecular-Colloidal Solution of Hydrated Fullerenes C_{60} Obtained Using Vacuum-Sublimation Cryogenic Deposition Method. Is the C_{60} Molecule Truly Highly Hydrophobic ?

Физ. Низк. Темп. **50** 3 (2024) 267–75. Also in: *Low Temp. Phys.* **50** 3 (2024) 248–56. [DOI]

41. Wa.Chewpraditkul, O.Sakthong, T.Horiai, S.Kurosawa, M.E.Witkowski, M.Makowski, K.Bartosiewicz, **R. Tomala**, **D. Szymański**, W.Drozdowski, Wee.Chewpraditkul, A.Yoshikawa,

Temperature Dependence of Photo- and Radio-Luminescence, Scintillation, and Photoconversion Properties of $Lu_{0.6}Gd_{2.4}(Al_{5-x}Sc_x)O_{12}$: Ce Garnet Crystals Grown by Micro-Pulling-Down Method.

J. Alloy. Compd. **1008** (2024) # 176 586 (12). [DOI]

42. **K. Ciesielski**, **D. Kaczorowski**,

On Electrical Transport and Thermoelectric Performance in Half-Heusler Phase ScNiSb.

Int. J. Mod. Phys. B **38** 6 (2024) # 2450084 (13). [DOI]

43. A.D.Coquen, **B. Bondzior**, L.Petit, M.Kellomäki, E.Pauthe, M.Boissière, J.Massera,

Evaluation of the Sterilization Effect on Biphasic Scaffold Based on Bioactive Glass and Polymer Honeycomb Membrane.

J. Am. Ceram. Soc. **107**$_1$ (2024) 154–65. [DOI]

44. **J. Ćwik**, **Yu.Koshkid'ko**, P.Putyra, B.Weise, **M. Małecka**, **D. Gajda**, **M. Babij**, A.Czernuszewicz,

Layered Composite Magnetic Refrigerants for Hydrogen Liquefaction.

Int. J. Hydrog. Energy **87** (2024) 485–94. [DOI]

45. **J. Ćwik**, **Yu.Koshkid'ko**, K.Shinde, J.Park, N.A. de Oliveira, **M. Babij**, A.Czernuszewicz,

Magnetic and Magnetocaloric Properties of $Dy_{1-x}Er_xNi_2$ Solid Solutions and Their Promise for Hydrogen Liquefaction.

J. Mater. Chem. C **12**$_{36}$ (2024) 14 421–32. [DOI]

46. P.M.M.da Silva, N.G.Camparotto, T.de F.Neves, A.S.Carrara, V.R.Mastelaro, **R.L.Oliveira**, P.Prediger,

Green Composites Based on Magnetic N-Doped Carbons: Synergetic Effect on the Simultaneous Adsorption of Emerging Contaminants from Water.

J. Water Process. Eng. **58** (2024) # 104 832 (??). [DOI]

47. **Sh. Dan**, A.Ptok, **O. Pavlosiuk**, **K. Singh**, **P. Wiśniewski**, **D. Kaczorowski**,

Insulating Half-Heusler TmPdSb with Unusual Band Order and Metallic Surface States.

Adv. Funct. Mater. **34**$_{37}$ (2024) # 240 2415 (9). [DOI]

48. Y.Deligiannakis, E.Bletsa, E.Mouzourakis, M.Solakidou, **K.Adamska**,

Carbon-Coated TiO_2 Nanoparticles for Noble-Metal-Free Photocatalytic H_2 Production from H_2O.

ACS Appl. Nano Mat. **7**$_{10}$ (2024) 11 621–33. [DOI]

49. W.Dobrzyński, M.Szymonowicz, **R.J. Wiglusz**, Z.Rybak, A.Zawadzka-Knefel, M.Janecki, A.Lubojański, K.Kurek, M.Dobrzyński, W.Zakrzewski,

Studying the Application of Nanoparticles in Orthodontics: A Review Study.

Ann. Dent. Specialty **12**$_1$ (2024) 57–64. [DOI]

50. G.Dovbeshko, **T. Borisova**,

War-Derived Air Pollution Nanohybrids and Their Membrane-Active Properties.

Физ. Низк. Темп. **50**$_3$ (2024) 205–9. Also in: *Low Temp. Phys.* **50**$_3$ (2024) 191–95. [DOI]

51. **D. Drozdowski**, **A.Kabański**, **D. Stefańska**, **M. Ptak**, **M. Mączka**, **A.Gągor**,

Layered Methylhydrazinium Lead Halide Perovskites: New Crystal Polymorphs With a Tailored Band Gap and Photoluminescence Colour *via* Halide Substitution.

J. Mater. Chem. C **12**$_{18}$ (2024) 6 653–62. [DOI]

52. I.Dubenko, A.Oli, J.Duncan, A.Granovsky, R.Razhabov, M.Hill, **Yu.Koshkid'ko**, S.Stadler, S.Talapatra, N.Ali,

Magnetic Properties of B-Doped Mn–Ga–C Based Alloys.

J. Magn. Magn. Mater. **595** (2024) # 171 505 (4). [DOI]

53. G.Dwari, **S. Dan**, B.B.Maity, S.Ramakrishnan, A.Lakshan, R.Kulkarni, V.Sharma, S.Nandi, P.P.Jana, A.Ptok, A.Thamizhavel,

Unveiling the Interplay of Magnetic Order and Electronic Band Structure in the Evolution of the Anomalous Hall Effect in Single Crystalline MnPtGa.

Phys. Rev. B **110**$_4$ (2024) # 045111 (9). [DOI]

54. **K. Dyk**, **V. Kinzhybalo**, Yu.Horak, S.Butenko†, M.Siczek, D.M.Kamiński,

Bending the Bonds: Unveiling Halogen Interactions in the Elastic Polymorph of 2,5-*bis*-(3-Bromo-phenyl)-furan.

J. Appl. Crystallogr. **57**$_1$ (2024) 104–14. [DOI]

55. R.Eder, **P. Wróbel**,

Magnetic Polarons in the Kondo Lattice.

Phys. Rev. B **110** $_3$ (2024) # 035112 (10). [DOI]

56. P.Fałat, P.Kuich, Min Ying Tsang, Sz.J.Zelewski, **B. Cichy**, M.Samoć, M.Nyk, D.Wawrzyńczyk,

Lanthanide Doped $NaYF_4$ Core@Multi-Shell Nanoparticles: Synthetic Strategy for Emission in Divergent Spectral Regions.

J. Lumin. **266** (2024) # 120284 (7). [DOI]

57. **M. Fandzloch**, A.W.Augustyniak, J.Trzcińska-Wencel, P.Golińska, K.Roszek,

A New MOF@-Bioactive Glass Composite Reinforced with Silver Nanoparticles — A New Approach to Designing Antibacterial Biomaterials.

Dalton Trans. **53** $_{26}$ (2024) 10928–37. [DOI]

58. K.Fedoruk-Piskorska, J.K.Zaręba, S.J.Zelewski, **A.Gągor**, **M. Mączka**, S.Drobczyński, A.Sieradzki,

Three-State Dielectric Switching within a Narrow Temperature Range in Isopropylammonium Lead Iodide, a One-Dimensional Perovskite with Polar Phase.

ACS Appl. Mater. Interf. **16** $_{22}$ (2024) 28829–37. [DOI]

59. YaGang Feng, Ziyu Liu, G.Toci, A.Pirri, B.Patrizi, M.Vannini, **D. Hreniak**, Jiang Li,

Functional Design and Implementation of Multilayer Ce : YAG / Cr : YAG Composite Transparent Ceramics by Tape Casting for White LEDs / LDs.

J. Am. Ceram. Soc. **107**$_6$ (2024) 4134–46. [DOI]

60. **D. Gajda**, **M. Babij**, **A.Zaleski**, D.Avcı, F.Karaboğa, H.Yetiş, I.Belenli, T.Czujko,

Investigation of Layered Structure Formation in MgB_2 Wires Produced by the Internal Mg Coating Process under Low and High Isostatic Pressures.

Materials **17**$_6$ (2024) # 1362 (14). [DOI]

61. **D. Gajda**, **A.J. Zaleski**, **M. Babij**, M.A.Rindfleisch,

Indication of the Measuring Method for Accurately Determining the Critical Current and $n-Value$ in Superconducting Wires and Tapes Used in Superconducting Coils.

J. Appl. Phys. **136** $_5$ (2024) # 053901 (21). [DOI]

62. G.Gajda, K.Filar, A.Morawski, **D. Gajda**,

The Influence of the HIP Process on the Microstructure, Critical Temperature and Critical Current Density of Double-Doped (with $Dy_2O_3 + C$, and $Tb_2O_3 + C$) MgB_2 Bulk Compounds.

High Press. Res. **44** $_1$ (2024) 44–93. [DOI]

63. B.Georgieva, S.Kolev, K.Krezhov, Ch.Ghelev, D.Kovacheva, P.Tzvetkov, **L.-M. Tran**, **M. Babij**, T.Koutzarova,

Substitution Effects on Y-Type Hexaferrites' Magnetic Characteristics.

J. Phys.: Conf. Ser. **2710** (2024) # 012031 (6). [DOI]

23rd Int.Summ.Sch.on Vacuum, Electron & Ion Technologies 2023 SOZOPOL, BG 2023.09 18–22

64. S.Ghanavati, E.S.Magalhaes, C.Nguyen, **B. Bondzior**, M.Lastusaari, J.N.Anker, A.Draganski, L.Petit, J.Massera,

Biophotonic Composite Scaffolds for Controlled Nitric Oxide Release upon NIR Excitation.

Mater. Des. **247** (2024) # 113369 (8). [DOI]

65. B.Ghanbari, M.Moeinian, M.Kubicki, **J. Janczak**,

Supramolecular Promotion of Chemosensing Effect in a New Amino-Acid-Derivative Macrocyclic Ligand toward Fe(III) and Pb(II) by Zn(II) Polymerization.

J. Photochem. Photobiol. A **449** (2024) # 115399 (??). [DOI]

66. L.T.Kieu Giang, **W.M. Piotrowski**, A.Opalińska, N.T.Hong Le, N.H.Yen, P.H.Linh, **Ł.Marciniak**,

Temperature Sensing and Magnetic Properties of the Fe_3O_4@ZrOBDC : Eu^{3+}, Tb^{3+} MMOF.

Opt. Mater. **157,** Pt 1 (2024) # 116050 (8). [DOI]

67. L.T.Kieu Giang, **W.M. Piotrowski**, A.Opalińska, N.T.Hong Le, N.H.Yen, P.H.Linh, **Ł.Marciniak**,

Synthesis of the Multifunctional Cubic- $Gd_2O_3 : Er^{3+}, Yb^{3+}$ Nanothermometers from the Nanoscaled Metal–Organic Framework of Gd-BTC : Er^{3+}, Yb^{3+}.

Opt. Mater. **149** (2024) # 115 149 (8). [DOI]

68. **P. Głuchowski**, **M. Chaika**,

Crystal-Field Strength Variations and Energy Transfer in Cr^{3+}-Doped GGG Transparent Nanoceramics.

J. Phys. Chem. C **128**$_{23}$ (2024) 9 641–51. [DOI]

69. **P. Głuchowski**, **M. Macieja**, **R. Tomala**, **M. Stefański**, **W. Stręk**, **M. Ptak**, **D. Szymański**, K.Szustakiewicz, A.Junka, B.Dudek,

Mechanical and Antimicrobial Properties of the Graphene–Polyamide 6 Composite.

Materials **17**$_{14}$ (2024) # 3465 (14). [DOI]

70. **D. Gnida**,

Ineffectiveness of the Triplet Diffusion Correction in the Electron Transport of Disordered Systems.

Phys. Rev. B **110**$_{9}$ (2024) # 09 4201 (7). [DOI]

71. P.Godlewska, W.Sąsiadek, E.Kucharska, P.Ropuszyńska-Robak, L.Dymińska, **J. Janczak**, **R. Lisiecki**, **M. Ptak**, **J. Hanuza**,

Structural, Spectroscopic Properties and Prospective Application of a New Nitropyridine Amino *N*-Oxide Derivative: 2-[(4-Nitropyridine-3-yl)amino]ethan-1-ol *N*-Oxide.

Spectrochim. Acta A **305** (2024) # 123 426 (13). [DOI]

72. M.Godzierz, O.Masiuchok, V.Talaniuk, K.Kurtyka, K.Olszowska, A.Kobyliukh, H.Janeczek, S.Pusz, **P. Głuchowski**, **D. Kujawa**, B.Toroń, P.Szperlich,

Design of Piezoelectric Nanogenerator Based on $BiFeO_3$ / Epoxy Resin with Potential Application for Wearable Electronic Devices.

J. Appl. Polym. Sci. **141**$_{6}$ (2024) # e54 932 (10). [DOI]

73. I.Goulatis, A.Daskalopulu, **A.L.Solovjov**, R.V.Vovk, A.Chroneos,

Superconducting Materials for Fusion Reactors: A Brief Review.

Физ. Низк. Темп. **50**$_{11}$ (2024) 1023–29. Also in: *Low Temp. Phys.* **50**$_{5}$ (2023) 1139–46. [DOI]

74. M.Gramala, A.Sikora, **A.Chudzyńska**, Ł.Gelczuk, F.Dybała, P.Modrzyński, R.Kudrawiec,

Highly Conductive Paths in Diamond and Their Application in High Pressure Measurements.

ACS Appl. Mater. Interf. **16**$_{43}$ (2024) 59 528–35. [DOI]

75. M.Grodzicki, M.O.Liedke, K.Moszak, W.Olszewski, Ł.Pawlaczyk, D.Majchrzak, R.Idczak, D.Pucicki, J.Serafińczuk, M.Butterling, E.Hirschmann, A.Wagner, R.Kudrawiec, **D. Hommel**,

Defect Characterizations of N-Rich GaNAs Ternary Alloys.

Vacuum **229** (2024) # 113 554 (10). [DOI]

76. K.Homa, W.Zakrzewski, W.Dobrzyński, P.J.Piszko, A.Piszko, J.Matys, **R.J. Wiglusz**, M.Dobrzyński,

Surface Functionalization of Titanium-Based Implants with a Nanohydroxyapatite Layer and Its Impact on Osteoblasts: A Systematic Review.

J. Funct. Biomater. **15**$_{2}$ (2023) # 45 (27). [DOI]

77. B.Hashemi Hosseini, **R.L.Oliveira**, D.Łomot, O.Chernyayeva, J.C.Colmenares Quintero,

Sonocatalytic Activity of Porous Carbonaceous Materials for the Selective Oxidation of 4-Hydroxy-3,5-dimethoxybenzyl Alcohol.

Molecules **29**$_{7}$ (2023) # 1436 (12). [DOI]

78. K.Idczak, E.Jach, **D.A.Kowalska**, P.Wieczorek, A.Ciżman,

An Insight into the Structure of Nanocomposites in Porous Glasses and Their Interactions after Contact with the Environment.

Appl. Surf. Sci. **669** (2024) # 160 390 (7). [DOI]

79. R.Idczak, **P. Sobota**, **D. Gnida**, S.Kołodziej, B.Chrząszcz, M.Pasturel, **A.Pikul**,

Formation and Physical Properties of $(NbTa)_{67}(HfZr)_{33}$ Medium-Entropy Alloy and $(NbTa)_{67}(HfZrTi)_{33}$ High-Entropy Alloy Prepared by Mechanical Alloying.

Metall. Mat. Trans. A **55** $_{10}$ (2024) 3 777–88. [DOI]

80. R.Idczak, **P. Sobota**, **L.M. Tran**, **M. Babij**, K.Idczak, **W. Nowak**, **A.Pikul**,

New Route to Synthesize High-Entropy Carbide Powders by Mechanical Alloying.

Metall. Mat. Trans. A **55** $_{2}$ (2024) 523–36. [DOI]

81. A.Ingram, Z.Czapla, C.Górecki, **V. Kinzhybalo**, M.Kostrzewa, P.Szklarz,

An Inverse Ferroelastic Type Phase Transition and Electric Properties in *bis*(Ethylenediammonium) tetrachlorozincate Chloride Crystal.

J. Alloy. Compd. **1008** (2024) # 176 752 (7). [DOI]

82. **J. Janczak**,

Ethylenediamine Control of the Solid-State Supramolecular Chemistry of Zinc Phthalocyanine.

Polyhedron **250** (2024) # 116 835 (12). [DOI]

83. **J. Janczak**,

Structure, Vibrational Characterization and DFT Calculations of 1-(Diaminomethylene)thiouron-1-ium 2,3-Pyridinedicarboxylate.

Struct. Chem. **35** $_{4}$ (2024) 1183–98. [DOI]

84. Ł.Janicki, P.Ciechanowicz, **D. Majchrzak**, S.Gorantla, R.Kudrawiec, **D. Hommel**,

Unveiling the Growth Mode Switching Role of As in the Formation of Dodecagonal / Hexagonal GaN Microrods.

Cryst. Growth Des. **24** $_{18}$ (2024) 7 424–31. [DOI]

85. Ł.Janicki, S.Gorantla, **E. Piskorska-Hommel**, **D. Hommel**, R.Kudrawiec,

Dodecagonal GaN Microrods : Chemical Stability of a-, m-, and c-Plane Walls and Their Application to Water-Splitting.

Adv. Mater. Interf. **11** $_{31}$ (2024) # 2400392 (8). [DOI]

86. M.Jędrzejczyk, **J. Janczak**, M.Sulik, A.Huczyński,

Comparative Analysis of the Crystal Structures of Hydrates and Sodium Salts of Monensin and Its New C-26 Succinate Ester.

J. Mol. Struct. **1312,** Pt 2 (2024) # 138 489 (12). [DOI]

87. M.Jędrzejczyk, B.Morabito, B.Żyżyńska-Granica, M.Struga, **J. Janczak**, M.Aminpour, J.A.Tuszynski, A.Huczyński,

Novel Combretastatin A-4 Analogs : Design, Synthesis, and Antiproliferative and Anti-Tubulin Activity.

Molecules **29** $_{10}$ (2023) # 2200 (22). [DOI]

88. YanQiu Jing, **V. Boiko**, **P. Stachowiak**, TingSong Li, Chen Hu, **B. Macalik**, **J. Komar**, Jiang Li, **D. Hreniak**,

Microstructure, Optical and Low Temperature Properties of $Y_3Al_5O_{12}$ Transparent Ceramics Doped With Different Sm^{3+} Concentrations for Laser Cladding Applications.

J. Eur. Cer. Soc. **44** $_{16}$ (2024) # 116 783 (10). [DOI]

89. YanQiu Jing, Feng Tian, LiHao Guo, TingSong Li, JunLin Wu, M.Ivanov, **D. Hreniak**, Jiang Li,

Effect of TEOS Content on Microstructure Evolution and Optical Properties of Sm : YAG Transparent Ceramics.

Opt. Mater. **147** (2024) # 114 681 (8). [DOI]

90. **J. Juraszek**, **Yu.V. Sharlai**, M.Konczykowski, **A.Ślebarski**, **T. Cichorek**,

Two-Band Superconductivity with Weak Interband Coupling in Structurally Disordered $Y_5Rh_6Sn_{18}$.

Phys. Rev. B **109** $_{17}$ (2024) # 174526 (7). [DOI]

91. M.Kalka, K.Bielak, **M. Ptak**, J.Stolarski, P.Dobryszycki, M.Wojtas,

Calcium Carbonate Polymorph Selection in Fish Otoliths: A Key Role of Phosphorylation of Starmaker-Like Protein.

Acta Biomater. **174** (2024) 437–46. [DOI]

92. S.Akshay Kalyan, N.Kanagathara, **M.K. Marchewka**, **J. Janczak**, K.Senthilkumar,

Structure, Spectroscopy, and Theoretical Insights on Co-crystals of 2,4-Diamino-6-Methyl-1,3,5-Triazine *bis*(4-Aminobenzoic Acid) Monohydrate as a Promising Anti-cancer Agent.

Physica B **679** (2024) # 415 807 (16). [DOI]

93. Jian Kang, Xuan Chu Liu, Zi Tong Liu, Bing Heng Sun, Yang Li, **W. Stręk**, **R.A.Tomala**, **M. Stefański**, Le Zhang, Hao Chen,

Rod-Shaped LuAG : Ce Transparent Ceramic Enabling Ultrahigh Forward Efficiency for Laser Lighting in a Transmissive Mode.

Opt. Lett. **49** $_{20}$ (2024) 5 933–36. [DOI]

94. **S. Karmegam**, M.Kolikkaje, S.D.George,

Solvent-Dependent Upconversion Luminescent Studies of Single and Colloidal Nanoparticles.

J. Phys. Chem. C **128** $_{35}$ (2024) 14 709–16. [DOI]

95. A.F.Kateshali, F.Moghzi, J.Soleimannejad, **J. Janczak**,

Bacterial Cellulose-Based MOF Hybrid as a Sensitive Switch off–on Luminescent Sensor for the Selective Recognition of L-Histidine.

Inorg. Chem. **63** $_{7}$ (2024) 3 560–71. [DOI]

96. A.F.Kateshali, J.Soleimannejad, **J. Janczak**,

Ultrasound-Assisted Synthesis of a Eu^{3+}-Functionalized Zn(II) Coordination Polymer as a Fluorescent Dual Detection Probe for Highly Sensitive Recognition of Hg(II) and l-Cys.

Acta Crystallogr. B **80** $_{3}$ (2024) 208–18. [DOI]

97. I.I.Kindrat, B.V.Padlyak, A.Drzewiecki, V.T.Adamiv, I.M.Teslyuk, **R. Lisiecki**,

Influence of Ag Co-activation on the Dy^{3+} Luminescence in Lithium Tetraborate Glasses.

Mat. Res. Bull. **179** (2024) # 112 979 (11). [DOI]

98. **V. Kinzhybalo**, J.Wojciechowski, P.Szklarz, A.Piecha-Bisiorek, M.Otręba, M.Siczek, K.Ślepokura,

Sodium Hypodiphosphate – A New Ionic Conductor.
Synthesis, Stability, Conductivity, and 3D Electron Diffraction Crystal Structure.

J. Mater. Chem. C **12** $_{30}$ (2024) 11 347–51. [DOI]

99. B.Klimesz, **W. Ryba-Romanowski**, **R. Lisiecki**,

Spectroscopic and Thermographic Qualities of Praseodymium-Doped Oxyfluorotellurite Glasses.

Molecules **29** $_{13}$ (2024) # 3041 (13). [DOI]

100. **T.K. Kopeć**,

Interaction-Driven Crossover from Mott Insulator–Superfluid Criticality to Bose–Einstein Condensation in a Simple Cubic Lattice.

Phys. Rev. B **110** $_{14}$ (2024) # 144517 (18). [DOI]

101. **Yu.S. Koshkid'ko**, **J. Ćwik**, C.Salazar-Mejia, N.A.Dormidontov, P.A.Prokofev, A.S.Bakulina, A.A.Nikitin, A.A.Khomich, R.R.Gimaev, A.S.Andreenko, Z.P.Burmii, A.A.Telitsa, V.I.Zverev, N.B.Kol'chugina,

Sublimed Fine-Grained Dysprosium: Significant Magnetocaloric Effect.

Vacuum **225** (2024) # 113 239 (10). [DOI]

102. **A.M. Kotulska**, **K. Prorok**, **O. Bezkrovnyi**, **A.Pilch-Wróbel**, **A.Bednarkiewicz**,

Role of Energy Migration in the Efficiency of Upconversion-Based Resonance Energy Transfer to Organic Acceptors.

J. Lumin. **275** (2024) # 120 823 (9). [DOI]

103. T.Koutzarova, S.Kolev, K.Krezhov, B.Georgieva, Ch.Ghelev, T.Cholakov, **L.M. Tran**, **M. Babij**,

Hexaferrites — Single Phase Magneto-Electric Multiferroics.

J. Chem. Technol. Met. **59** 4 (2024) 985–92. [DOI]

104. **J. Kowalski**, J.Rygas, K.Homa, W.Dobrzyński, **R.J. Wiglusz**, J.Matys, M.Dobrzyński,

Antibacterial Activity of Endodontic Gutta-Percha: A Systematic Review.

Appl. Sci. **14** 1 (2024) # 388 (21). [DOI]

105. **N. Krisanova**, N.Pozdnyakova, A.Pastukhov, M.Dudarenko, A.Tarasenko, A.Borysov, M.Driuk, A.Tolochko, **O. Bezkrovnyi**, K.Paliienko, R.Sivko, **O. Gnatyuk**, **G. Dovbeshko**, **T. Borisova**,

Synergistic Neurological Threat from Cu and Wood Smoke Particulate Matter.

Food Chem. Toxicol. **193** (2024) # 115 009 (??). [DOI]

106. **A.I. Krivchikov**, **A.Jeżowski**, V.A.Konstantinov, V.V.Sagan, O.A.Korolyuk, **D. Szewczyk**,

Enhancing Thermal Transport in ABS Polymer with Graphene Oxide: Insights into Low-Temperature Thermal Conductivity Behavior and Correlation with Boson Peak Anomaly.

Thermochim. Acta **733** (2024) # 179 696 (6). [DOI]

107. A.E.Kuc, J.Kotuła, J.Nawrocki, M.Dobrzyński, **R.J. Wiglusz**, **A.Watras**, M.Sarul, J.Lis, B.Kawala,

Properties and Application of the Gummetal Wire for the Treatment of an Open Bite: Brief Narrative Review and Case Report.

Appl. Sci. **14** 7 (2024) # 2991 (15). [DOI]

108. E.Kucharska, J.Michalski, J.Lorenc, L.Dymińska, **R. Lisiecki**, **J. Hanuza**,

Structural and Spectroscopic Properties as well as Prospective Applications of 2-N-Methylnitramino-5-methyl-4-nitropyridine and Its N-Oxide.

J. Mol. Struct. **1302** (2024) # 137 401 (12). [DOI]

109. A.Kuzan, **J. Rewak-Soroczyńska**, **M. Kardach**, E.Królewicz, K.Kaliszewski, **R. Wiglusz**,

Multi-element Analysis of Metals in Human Pathological and Unchanged Thyroid Glands — Pilot Study.

Thyroid Res. **17**1 (2024) # 11 (12). [DOI]

110. A.S.Kuznetsov, A.V.Mashirov, I.I.Musabirov, M.S.Anikin, V.I.Mitsiuk, **Yu.S. Koshkid'ko**, **J. Ćwik**, A.P.Kamantsev, E.E.Kokorina, K.A.Kolesov, V.G.Shavrov,

Quasi-Isothermal Magnetocaloric Effect in the $DyAl_2$ Alloy in Magnetic Field up to 14 T.

J. Magn. Magn. Mater. **612** (2024) # 172 612 (9). [DOI]

111. **K.A.Ledwa**, **L.Kępiński**,

Soot Oxidation Activity and Stability of $NM_xCe_{1-x}O_{2-y}$ Nanoparticles (NM = Pd, Rh, Ru) Supported on Functionalized Alumina.

Mater. Res. Bull. **179** (2024) # 112 951 (?). [DOI]

112. **K. Lemański**,

Optical Properties of $CaAl_2SiO_6$ Polycrystals Doped with Ce^{3+} and Nd^{3+} Ions.

Bull. Mater. Sci. **47**2 (2024) # 70 (9). [DOI]

113. **K. Lemański**, **M. Babij**,

Tunable Spectroscopic Properties of Benitoite $BaTiSi_2GeO_9 : Eu^{3+}$ Phosphors.

Mat. Res. Bull. **180** (2024) # 113 035 (9). [DOI]

114. **K. Lemański, O. Bezkrovna, N. Rebrova, R. Lisiecki, P. Zdeb, P.J. Dereń,**

UVC Stokes and Anti-Stokes Emission of $Ca_9Y(PO_4)_7$ Polycrystals Doped with Pr^{3+} Ions.

Molecules **29**$_9$ (2024) # 2084 (15). [DOI]

115. Xiang Li, Chen Hu, LiHao Guo, JunLin Wu, G.Toci, A.Pirri, B.Patrizi, M.Vannini, Qiang Liu, **D. Hreniak**, Jiang Li,

Optimization of $Yb : CaF_2$ Transparent Ceramics by Air Pre-Sintering and Hot Isostatic Pressing.

Ceramics **7**$_3$ (2024) 1053–65. [DOI]

116. Xiao Li, LiXuan Zhang, TingSong Li, Chen Hu, HaoBo Hao, LeXiang Wu, **D. Hreniak**, Jiang Li,

Effect of Non-Stoichiometric Ga Content on the Microstructure and Optical Transparency of Terbium Gallium Garnet Ceramics.

Opt. Mater. **154** (2024) # 115 648 (7). [DOI]

117. **R. Lisiecki, J. Komar, B. Macalik**, M.Berkowski, **W. Ryba-Romanowski,**

Impact of Temperature on Optical Properties of Tm^{3+}-Doped Disordered Oxide Crystals for Cryogenic Lasers Emitting Near 1.9 μ : A Comparative Study.

Appl. Phys. B **130**$_6$ (2024) # 96 (9). [DOI]

118. **R. Lisiecki**, J.Pisarska, W.Pisarski, **W. Ryba-Romanowski,**

Study on Temperature-Sensitive Factors Relevant to Thermographic Features of Tb^{3+}-Doped Phosphate Glasses.

Mater. Res. Bull. **179** (2024) # 112 951 (?). [DOI]

119. Qiang Liu, YuDie Yang, HaoHong Chen, LiXuan Zhang, YanQWiu Jing, Chen Hu, PengHui Chen, TingSong Li, M.Ivanov, **D. Hreniak**, Jiang Li,

Fabrication and Properties of Pink 3 mol % Yttria-Stabilized Zirconia Ceramics With High Toughness.

J. Am. Ceram. Soc. **107**$_9$ (2024) 5 881–92. [DOI]

120. XuanChu Liu, CongCong Yang, YanBin Li, Chang Min, Jian Kang, TianYuan Zhou, ChunMing Zhou, ChaoFan Shi, Cen Shao, BoingHeng Sun, **W. Strek**, Hao Chen, Le Zhang,

High Recorded Color Rendering Performance of Single-Structured $Ce, Mn : Y_3(Al, Sc)_2Al_3O_{12}$ Phosphor Ceramics for High-Power White LEDs / LDs.

J. Adv. Ceram. **13**$_6$ (2024) 810–20. [DOI]

121. M.S.Lodge, E.Marcellina, ZiMing Zhu, Xiao-Ping Li, **D. Kaczorowski**, M.S.Fuhrer, ShengYuan A. Yang, B.Weber,

Symmetry-Selective Quasiparticle Scattering and Electric Field Tunability of the ZrSiS Surface Electronic Structure.

Nanotechnology **35** (2024) # 19 5704 (9). [DOI]

122. XiaoNa Lu, YaFan Wang, Jing Yang, P.D.Townsend, **D. Hreniak**,

$LiGa_5O_8 : Fe^{3+}$: A Novel and Super Long Near-Infrared Persistent Material.

Ceram. Int. **50**$_{19}$ (2024) 35 359–67. [DOI]

123. **M. Mączka, M. Ptak**, K.Fedoruk, **D. Stefańska, A.Gągor**, J.K.Zaręba, A.Sieradzki,

The Lattice Symmetrization Worked, but with a Plot Twist: Effects of Methylhydrazinium Doping of $MAPbI_3$ on Phase Transitions, Cation Dynamics and Photoluminescence.

J. Mater. Chem. C **12**$_4$ (2024) 1396–405. [DOI]

124. **M. Mączka**, J.A.S.Silva, W.P.Gomes, D.L.M.Vasconcelos, F.Dybała, A.P.Herman, R.Kudrawiec, P.T.C.Freire,

Temperature- and Pressure-Dependent Raman and Photoluminescence Studies of Corrugated Imidazolium-Methylhydrazinium Lead Bromide.

J. Phys. Chem. C **128**$_{21}$ (2024) 8 698–707. [DOI]

125. **M. Mączka**, **Sz. Smółka**, **M. Ptak**,

Phonon Properties and Lattice Dynamics of Two- and Tri-Layered Lead Iodide Perovskites Comprising Butylammonium and Methylammonium Cations — Temperature-Dependent Raman Studies.

Materials **17**$_{11}$ (2024) # 2503 (13). [DOI]

126. **M. Mączka**, **Sz. Smółka**, **D. Stefańska**, **A.Gągor**, J.K.Zaręba, K.Fedoruk-Piskorska, **M. Ptak**, **D. Drozdowski**, A.Sieradzki,

Multinoncentrosymmetric Two-Dimensional Trilayered Lead Bromide Perovskites with Methylhydrazinium Cations: Lattice Dynamics, Phase Transitions, Dielectric Response, and Optical Properties.

Chem. Mater. **36**$_{17}$ (2024) 8 286–99. [DOI]

127. **M. Mączka**, S.Sobczak, **M. Ptak**, **Sz. Smółka**, K.Fedoruk, F.Dybała, A.P.Herman, W.Paraguassu, J.K.Zaręba, R.Kudrawiec, A.Sieradzki, A.Katrusiak,

Revisiting a (001)-Oriented Layered Lead Chloride Templated by 1,2,4-Triazolium: Structural Phase Transitions, Lattice Dynamics and Broadband Photoluminescence.

Dalton Trans. **53**$_{16}$ (2024) 6 906–19. [DOI]

128. **M. Mączka**, J.K.Zaręba, **A.Gągor**, K.Fedoruk-Piskorska, **D. Stefańska**, **D. Drozdowski**, **M. Ptak**, A.Sieradzki,

Multi-Noncentrosymmetric Polar Order in 2D Hybrid Lead Chloride with Broadband Emission and High-Temperature Second-Harmonic Generation Switching.

ACS Appl. Mater. Interf. **16**$_{44}$ (2024) 60 564–75. [DOI]

129. **M. Mączka**, J.K.Zaręba, A.Nowok, N.Sokołowski, A.Sieradzki, **A.Gągor**, **M. Ptak**,

Two-Dimensional Lead Iodide Perovskites with Extremely Reduced Dielectric Confinement: Embedded Self-Erasing Second-Harmonic Generation Switching, Thermochromism, and Photoluminescence.

Chem. Mater. **36**$_{21}$ (2024) 10,758–72. [DOI]

130. **M. Majak**, **M. Misiak**, **A.Bednarkiewicz**,

The Mechanisms Behind the Extreme Susceptibility of Photon Avalanche Emission to Quenching.

Mater. Horiz. **11**$_{19}$ (2024) 4 791–801. [DOI]

131. D.Majchrzak, K.Kulinowski, W.Olszewski, R.Kuna, D.Hlushchenko, Ad.Piejko, M.Grodzicki, **D. Hommel**, R.Kudrawiec,

Engineering of Interface Barrier in Hybrid MXene / GaN Heterostructures for Schottky Diode Applications.

ACS Appl. Mater. Interf. **16**$_{43}$ (2024) 59 567–75. [DOI]

132. **D. Majchrzak**, **L.M. Tran**, **M. Babij**, J.Serafińczuk, W.Olszewski, R.Kuna, K.Opołczyńska, A.Piejko, P.P.Michałowski, R.Kudrawiec, **D. Hommel**,

Thickness and Mg Doping of Graded AlGaN Layers: Influence on Contact Layer's Structural and Electrical Properties for DUV Emitters.

Mater. Sci. Semicond. Process. **178** (2024) # 108 452 (7). [DOI]

133. **D. Majchrzak**, **L.M. Tran**, **M. Babij**, J.Serafińczuk, Ł.Pawlaczyk, S.Gorlanta, K.Opołczyńska, R.Kudrawiec, **D. Hommel**, **E. Piskorska-Hommel**,

Dislocation Density as a Factor Compensating the Polarization Doping Effect in Graded p-AlGaN Contact Layers.

J. Alloy. Compd. **985** (2024) # 174 034 (8). [DOI]

134. **M. Majewicz**, **M. Szlawska**,

Searching for a Lifshitz Point in the Magnetic Phase Diagram of UNi_2Si_2.

J. Magn. Magn. Mater. **611** (2024) # 172 601 (7). [DOI]

135. **Ł.Marciniak**, **W.M. Piotrowski**, **M. Szymczak**, C.D.S.Brites, **V. Kinzhybalo**, Hao Suo, L.D.Carlos, Feng Wang,

The Butterfly Effect: Multifaceted Consequences of Sensitizer Concentration Change in Phase Transition-Based Luminescent Thermometer of $LiYO_2 : Er^{3+}, Yb^{3+}$.

ACS Appl. Mater. Interf. **16** 20 (2024) 26 439–49. [DOI]

136. **Ł.Marciniak**, **W.M. Piotrowski**, **M. Szymczak**, **M. Drozd**, **V. Kinzhybalo**, M.Back,

Customizing Thermometry: Optimizing the Operating Temperature Range of Phase Transition-Based Ratiometric Luminescence Thermometers.

Chem. Eng. J. **487** (2024) # 150 363 (7). [DOI]

137. **Ł.Marciniak**, P.Woźny, **M. Szymczak**, M.Runowski,

Optical Pressure Sensors for Luminescence Manometry: Classification, Development Status, and Challenges. [Review]

Coord. Chem. Rev. **507** (2024) # 215 770 (21). [DOI]

138. J.Michalski, Z.Stoczewski, Sz.Roszak, E.Kucharska, I.Bryndal, L.Dymińska, **R. Lisiecki**, **J. Hanuza**,

Conformation of the Hydrazo Bond in New 2-Methyl-3,5-dinitro-6- (2-phenylhydrazinyl) Pyridine and Its Influence on the Structural and Optic Properties: Quantum Chemical DFT Calculations.

Spectrochim. Acta A **308** (2024) # 123 760 (14). [DOI]

139. G.P.Mikitik, **Yu.V. Sharlai**,

Determination of the Magnetic Penetration Depth with Measurements of the Vortex-Penetration Field for Type-II Superconductors.

Phys. Rev. B **110** 6 (2024) # 06 4507 (10). [DOI]

140. **N. Miniajluk-Gaweł**, **B. Bondzior**, **M. Ptak**, **P.J. Dereń**,

Highly Sensitive Temperature Sensors Resulting from the Luminescent Behavior of Sm^{3+}-Doped Ba_2MgMoO_6 High-Symmetry Double-Perovskite Molybdate Phosphors.

Materials **17**$_8$ (2024) # 1897 (10). [DOI]

141. Jun Mo, LiXian Zhang, Chen Hu, YanBin Wang, HaoHong Chen, Xiang Li, JunLin Wu, ZiQiu Cheng, TingSong Li, **D. Hreniak**, Jijang Li,

Fabrication of Submicron Grained Alumina Transparent Ceramics with High Bending Strength and Low Dielectric Loss.

Ceram. Int. **50** 16 (2024) 28 301–8. [DOI]

142. E.Mohanapriya, S.Elangovan, **J. Janczak**, K.Sukumar, N.Kanagathara, V.Ragavendran, **M.K. Marchewka**,

Structure, DFT Calculations, Spectroscopic Characterization, and Solvent-Dependent HOMO-LUMO Studies of 3-(Hydroxymethyl) Pyridinium 4-Hydroxybenzenesulfonate.

Mater. Today Commun. **41** (2024) # 110 632 (16). [DOI]

143. E.Mohanapriya, S.Elangovan, N.Kanagathara, **M.K. Marchewka**, **J. Janczak**, P.Revathi,

Density Functional Theory Calculations, Structural and Spectroscopic Characterization, and Solvent-Dependent HOMO–LUMO Studies of 2-Nitro-4-methylanilinium Benzenesulfonate.

J. Mol. Struct. **1317** (2024) # 139 147 (14). [DOI]

144. E.Mohanapriya, R.Kanagathara, **M.K. Marchewka**, **J. Janczak**, K.Senthilkumar, M.Azam,

Exploring the Structure–Property Relationship of Ethylenediammonium Hydrogen Phosphite: Insights from XRD, Vibrational, DFT, and Biological Evaluation.

J. Mol. Struct. **1300** (2024) # 137 226 (16). [DOI]

145. B.Z.Momeni, N.Davarzani, **J. Janczak**, Ning Ma, A.S.Abd-el-Aziz,

Progress in Design and Applications of Supramolecular Assembly of $2, 2' : 6', 2''$-Terpyridine-Based First Row d-Block Elements.

Coord. Chem. Rev. **506** (2024) # 215 619 (70). [DOI]

146. B.Z.Momeni, F.Shirvani, **J. Janczak**,

Synthesis, Structural Characterization, Hirshfeld Surface Analysis and Thermal Properties of Dibutyltin(IV)-Based Complexes Containing Thiocyanate and Pyridyl Ligands.

J. Mol. Struct. **1317** (2024) # 139 155 (11). [DOI]

147. Z.Z.Mpupa, M.B.Tchoula-Tchokonté, B.M.Sondezi, **D. Kaczorowski**, A.M.Strydom,

Crystal and Thermodynamic Properties of Tb_2Ni_2X (X = Al, Ga).

Physica B **695** (2024) # 416 525 (6). [DOI]

148. I.I.Musabirov, R.Yu.Gaifullin, A.B.Gadjiev, A.M.Aliev, E.T.Dil'mieva, S.Krämer, **Yu.S. Koshkid'ko**,

Influence of Multiaxial Isothermal Forging on Magnetocaloric Effect and Magnetostructural Transition in Ni-Mn-Ga-Si Alloy.

J. Magn. Magn. Mater. **594** (2024) # 171 892 (9). [DOI]

149. M.Musielak, M.Serda, **A. Gągor**, E.Talik, R.Sitko,

Ultratrace Determination and Speciation of Hexavalent Chromium by EDXRF and TXRF Using Dispersive Micro-Solid Phase Extraction and Tetraethylenepentamine Graphene Oxide.

Spectrochim. Acta B **213** (2024) # 106 863 (9). [DOI]

150. K.T.H.My, A.Gayen, N.T.Dang, D.N.Petrov, **J. Ćwik**, T.V.Manh, T.A.Ho, D.T.Khan, D.-H.Kim, S.C.Yu, T.L.Phan,

Magnetic and Magnetocaloric Behaviors of a Perovskite / Hausmannite Composite.

Curr. Appl. Phys. **60** (2024) 57–63. [DOI]

151. R.Nixon, Y.Prots, M.Krnel, N.Zaremba, **O. Pavlosiuk**, M.Schmidt, L.Akselrud, Y.Grin, E.Svanidze,

Superconductivity in Mercurides of Strontium.

Front. Mater. **11** (2024) # 147 0878 (8). [DOI]

152. **V.I. Nizhankovskiy**,

Unusual Strain Resulted from Interaction Between Permanent Magnets.

Acta Phys. Pol. A **145** $_1$ (2024) 57–66. [DOI]

153. **N. Nowak**, **D. Czekanowska**, T.Gębarowski, **R.J. Wiglusz**,

Highly Cyto- and Immune- Compatible New Synthetic Fluorapatite Nanomaterials Co-doped with Rubidium(I) and Europium(III) Ions.

Biomater. Adv. **156** (2024) # 213 709 (13). [DOI]

154. W.Nowak, B.Rusin, **M. Babij**, R.Topolnicki, T.Ossowski, **A. Pikul**, R.Idczak,

Superconductivity in a New High-Entropy Alloy $(NbTi)_{0.67}(MoHfV)_{0.33}$.

Metall. Mat. Trans. A **55** $_{10}$ (2024) 3 789–98. [DOI]

155. A.Nowok, **M. Mączka**, **A. Gągor**, **M. Ptak**, J.K.Zaręba, **D. Szewczyk**, S.Palai, A.Sieradzki,

Low-Temperature Persistent Disorder and Lattice Dynamics in a Luminescent 1D Hybrid Lead Halide : Implications and Insights.

Chem. Mater. **36** $_{13}$ (2024) 6 588–97. [DOI]

156. A.Nowok, Sz.Sobczak, K.Roszak, A.Z.Szeremeta, **M. Mączka**, A.Katrusiak, S.Pawlus, F.Formalik, A.J.B. dos Santos, W.Paraguassu, A.Sieradzki,

Temperature and Volumetric Effects on Structural and Dielectric Properties of Hybrid Perovskites.

Nat. Commun. **15** $_1$ (2024) # 7571 (13). [DOI]

157. W.Olszewski, **D. Majchrzak**, M.Grodzicki, J.Serafińczuk, S.Gorantla, D.Pucicki, P.P.Michałowski, R.Kudrawiec, **D. Hommel**,

Monocrystalline GaN Diluted with up to 7 % Arsenic Grown by MOVPE.

Cryst. Growth Des. **24** $_{10}$ (2024) 4 057–64. [DOI]

158. G.Ouertani, **K. Maciejewska**, **W. Piotrowski**, K.Horchani-Naifer, **Ł.Marciniak**, M.Ferhi,

High Thermal Stability of Warm White Emitting Single Phase $GdPO_4 : Dy^{3+}/Sm^{3+}$ Phosphor for UV Excited wLEDs.

J. Lumin. **265** (2024) # 120 228 (13). [DOI]

159. Ya.Padrez, **V. Boiko**, J.Kajan, T.Gregor, V.Tinkova, R.Karpicz, **M. Chaika**,

Temperature Dependence of Charge Transfer Luminescence in Yb^{3+} : YAG Single Crystal.

Opt. Mater. X **22** (2024) # 100 315 (5). [DOI]

160. E.Paradisi, C.Mortalò, V.Zin, F.Armetta, **V. Boiko**, **D. Hreniak**, M.Zapparoli, S.M.Deambrosis, E.Miorin, C.Leonelli, M.L.Saladino,

Eu-Doped YPO_4 Luminescent Nanopowders for Anticounterfeiting Applications : Tuning Morphology and Optical Properties by a Rapid Microwave-Assisted Hydrothermal Method.

ACS Appl. Nano Mat. $\mathbf{7}_7$ (2024) 6 893–905. [DOI]

161. M.Pasturel, **A.Pikul**,

From Caged Compounds with Isolated U Atoms to Frustrated Magnets with 2- or 3-Atom Clusters: A Review of Al-Rich Uranium Aluminides with Transition Metals.

Rep. Prog. Phys. **87** (2024) # 03 5101 (17). [DOI]

162. P.Peksa, V.Grinevych, **A.Gągor**, M.Baranowski, P.Płochocka, **M. Mączka**,

Switchable Optical and Dielectric Properties of $TBAPh_2MnBr_4$: Unraveling Phase Transition Effects in Low-Dimensional Perovskite-Like Structures.

Opt. Mater. **154** (2024) # 115 684 (5). [DOI]

163. E.V.Petrenko, **K. Rogacki**, A.V.Terekhov, L.V.Bludova, Yu.A.Kolesnichenko, N.V.Shytov, D.M.Sergeyev, E.Lähderanta, A.L.Solovjov,

Evolution of the Pseudogap Temperature Dependence in $YBa_2Cu_3O_{7-\delta}$ Films under the Influence of a Magnetic Field.

Физ. Низк. Темп. $\mathbf{50}_4$ (2024) 325–34. Also in: *Low Temp. Phys.* $\mathbf{50}_4$ (2023) 299–307. [DOI]

164. D.N.Petrov, **J. Ćwik**, H.N.Nhat, D.-H.Kim, T.L.Phan,

Magnetocaloric Effect of $LiErP_4O_{12}$ Single Crystal Exhibiting Competing Ferromagnetic and Anti-Ferromagnetic Interactions.

Curr. Appl. Phys. **68** (2024) 224–29. [DOI]

165. R.Petrus, K.Matuszak, **V. Kinzhybalo**,

Synthesis of ω-Hydroxy Fatty Acid Alkyl Esters by Macrocyclic Lactones Alcoholysis Catalyzed by Homoleptic and Heteroleptic Zinc Aryloxides.

Chem. Asian J. $\mathbf{19}_{18}$ (2024) # e2024 00526 (19). [DOI]

166. **M. Pieprz**, **W. Piotrowski**, P.Woźny, M.Runowski, **Ł.Marciniak**,

Highly Sensitive Lifetime-Based Luminescent Manometer on Mn^{4+} Luminescence in $Sr_4Al_{14}O_{25}:Mn^{4+}$.

Adv. Opt. Mater. $\mathbf{12}_1$ (2024) # 230 1316 (10). [DOI]

167. **N.D. Pinchuk**, **P. Sobierajska**, **K. Szyszka**, **O. Bezkrovnyi**, **R.J. Wiglusz**,

Preparation of Nanohydroxyapatite with Diverse Morphologies and Optimization of Its Effective Aqueous Colloidal Dispersions for Biomedical Applications.

Ceram. Int. $\mathbf{50}_{15}$ (2024) 27 426–35. [DOI]

168. P.Piotrowski, M.Buza, R.Nowaczyński, N.Kongsuwan, H.B.Surma, P.Osewski, M.Gajc, **A.Strzęp**, **W. Ryba-Romanowski**, O.Hess, D.A.Pawlak,

Ultrafast Photoluminescence and Multiscale Light Amplification in Nanoplasmonic Cavity Glass.

Nat. Commun. $\mathbf{15}_1$ (2024) # 3309 (9). [DOI]

169. **W.M. Piotrowski**, **Ł.Marciniak**,

Advanced Luminescence Applications of $3d^3$ Transition Metal Ions.

Opt. Mater. X **23** (2024) # 100 338 (21). [DOI]

170. **W.M. Piotrowski**, **M. Szymczak**, E.M.Rodríguez, R.Marin, M.Henklewska, B.Poźniak, M.Dramićanin, **Ł. Marciniak**,

Step by Step Optimization of Luminescence Thermometry in $MgTiO_3 : Cr^{3+}, Nd^{3+}@SiO_2$ Nanoparticles towards Bioapplications.

Mater. Chem. Phys. **312** (2024) # 128 623 (11). [DOI]

171. **E. Piskorska-Hommel**, K.Gas,

(Ga, Mn)N — Epitaxial Growth, Structural, and Magnetic Characterization. [Tutorial]

J. Appl. Phys. **135** (2024) # 07 1101 (12). [DOI]

172. P.J.Piszko, A.Piszko, J.Kiryk, A.Lubojański, W.Dobrzyński, **R.J. Wiglusz**, J.Matys, M.Dobrzyński,

The Influence of Fluoride Gels on the Physicochemical Properties of Tooth Tissues and Dental Materials: A Systematic Review.

Gels **10** $_2$ (2024) # 98 (13). [DOI]

173. K.Podgórska, D.Rybicki, **L.M. Tran**, W.Tabiś, Ł.Gondek, **M. Babij**,

Synthesis of Europium-Based Crystals Containing As or P by a Flux Method: Attempts to Grow EuAgP Single Crystals.

Solid State Sci. **158** (2024) # 107 736 (?). [DOI]

174. G.A.Politova, I.S.Tereshina, A.Y.Karpenkov, V.B.Chzhan, **J. Ćwik**,

Magnetism, Magnetocaloric, and Magnetostrictive Effects in RCo_2-Type (R = Tb, Dy, Ho) Laves Phase Compounds.

J. Magn. Magn. Mater. **591** (2024) # 171 700 (9). [DOI]

175. K.Posmyk, M.Dyksik, A.Surrente, D.K.Maude, N.Zawadzka, A.Babiński, M.R.Molas, W.Paritmongkol, **M. Mączka**, W.A.Tisdale, P.Płochocka, M.Baranowski,

Exciton Fine Structure in 2D Perovskites: The Out-of-Plane Excitonic State.

Adv. Opt. Mater. **12** $_8$ (2024) # 230 0877 (7). [DOI]

176. B.Praveena, T.Sivanesan, N.Kanagathara, R.Ranjani, **J. Janczak**, K.Senthilkumar,

Growth, Structural, Spectral, Optical, Thermal, Third-Order Nonlinear Optical Characteristics, and DFT Studies of Morpholinium Trichloroacetate–Trichloroacetic Acid Co-Crystals for Potential Optoelectronic Applications.

Opt. Mater. **149** (2024) # 115 066 (15). [DOI]

177. B.Praveena, T.Sivanesan, R.Ranjani, **J. Janczak**, S.Elangovan, A.M.Al-Mohaimeed, M.Ajmal Ali, N.Kanagathara,

Growth, Structure, Spectral, Optical, Dielectric, and Thermal Studies on Morpholinium 2,4,6-Trinitrophenolate : An Organic Nonlinear Optical Crystal.

J. Mater. Sci. Mater. Electron. **35** $_{28}$ (2024) # 1875 (28). [DOI]

178. A.K.Przybył, **J. Janczak**, A.Huczyński,

Molecular Structure and Spectroscopic Studies of (−)-Cytisine Salt with (+)-Tartaric Acid.

J. Mol. Struct. **1304** (2024) # 137 704 (10). [DOI]

179. **M. Ptak**, **A. Kabański**, B.Dziuk, S.Balčiūnas, G.Usevičius, J.K.Zaręba, J.Banys, M.Šimėnas, A.Sieradzki, **D. Stefańska**,

Mechanism of Isosymmetric Polar Order–Disorder Phase Transition in Pyroelectric $[CH_3CH_2NH_3]_2NaGa(HCOO)_6$ Double Perovskite.

J. Mater. Chem. C **12** $_{13}$ (2024) 4 663–75. [DOI]

180. **N. Rebrova**, **P. Zdeb**, **P.J. Dereń**,

Synthesis and Upconversion Luminescence of $LiY_9(SiO_4)_6O_2$ Phosphor Doped with Pr^{3+}.

J. Phys. Chem. C **128** $_{22}$ (2024) 9 090–98. [DOI]

181. **N. Rebrova**, **P. Zdeb**, **K. Lemański**, **B. Macalik**, **O. Bezkrovnyi**, **P.J. Dereń**,

Bacterial Cellulose-Based MOF Hybrid as a Sensitive Switch off–on Luminescent Sensor for the Selective Recognition of L-Histidine.

Inorg. Chem. **63** $_6$ (2024) 3 028–36. [DOI]

182. S.Regmi, I. bin Elius, A.P.Sakhya, M.Sprague, M.I.Mondal, N.Valadez, V.Buturlim, K.Booth, **T. Romanova**, K.Gofryk, A.Ptok, **D. Kaczorowski**, M.Neupane,

Discovery of Magnetic Phase Transitions in Heavy-Fermion Superconductor $CeRh_2As_2$.

Phys. Rev. Mater. **8** $_4$ (2024) # L 04 6504 (8). [DOI]

183. S.Regmi, Cheng-Yi Huang, M.A.Khan, B.Wang, A.P.Sakhya, M.M.Hosen, J.Thompson, B.Singh, J.D.Denlinger, M.Ishigami, J.F.Mitchell, **D. Kaczorowski**, A.Bansil, M.Neupane,

Electronic Structure in a Transition Metal Dipnictide $TaAs_2$.

J. Phys.: Condens. Matter **36** $_7$ (2024) # 07 5502 (7). [DOI]

184. G.Rimkus, S.Balčiūnas, **M. Ptak**, **Sz. Smółka**, V.Klimavičius, **D. Szewczyk**, A.Sieradzki, V.Kalendra, J.Banys, **M. Mączka**, M.Šimėnas,

Phase Diagram and Dielectric Response of Hybrid Lead Halide Hollow Perovskites: A Universal Behavior of Molecular Cation Mixing.

Chem. Mater. **36** $_{15}$ (2024) 7 397–405. [DOI]

185. **R.V. Rodrigues**, **M. Stefański**, **M. Ptak**, L.U.Khan, E.J.B.Muri, A.S.Borges, A.A.L.Marins, J.R.Matos, **W. Stręk**,

Visible and Near-Infrared Emission from $Gd_2O_3 : Sm^{3+}$ Phosphor.

J. Lumin. **273** (2024) # 120 662 (8). [DOI]

186. M.Rosmus, N.Olszowska, **Z. Bukowski**†, P.Piekarz, A.Ptok, P.Starowicz,

Dirac Dispersions and Fermi Surface Nesting in $LaCuSb_2$.

J. Alloy. Compd. **1002** (2024) # 175 298 (??). [DOI]

187. **M. Rowińska**, **D. Stefańska**, **T.J. Bednarchuk**, J.K.Zaręba, R.Jakubas, **A.Gągor**,

Polymorphism and Red Photoluminescence Emission from $5s^2$ Electron Pairs of Sb(III) in a New One-Dimensional Organic–Inorganic Hybrid Based on Methylhydrazine: $(MHy)_2SbI_5$.

Molecules **29** $_2$ (2024) # 455 (13). [DOI]

188. G.Russo, F.Armetta, T.Rao, WangChao Yuan, **V. Boiko**, **D. Hreniak**, C.Giordano, M.L.Saladino,

Composite Nanostructures for the Production of White Light.

Molecules **29** $_{19}$ (2024) # 4605 (8). [DOI]

189. **P. Ruszała**, **M.J. Winiarski**, **M. Samsel-Czekała**,

$LaZn_{1-x}Bi_2$ as a Candidate for Dirac Nodal-Line Intermetallic Systems.

Crystals **14** $_3$ (2024) # 209 (12). [DOI]

190. D.Rybicki, K.Komędera, J.Przewoźnik, Ł.Gondek, Cz.Kapusta, K.Podgórska, W.Tabiś, J.Żukrowski, **L.M. Tran**, **M. Babij**, **Z. Bukowski**,†L.Havela, V.Buturlim, J.Prchal, M.Divis, P.Kral, I.Turek, I.Halevy, J.Kastil, M.Misek, U.Dutta, D.Legut,

Ambient– and High-Pressure Studies of Structural, Electronic, and Magnetic Properties of Single-Crystal $EuZn_2P_2$.

Phys. Rev. B **110** $_1$ (2024) # 01 4421 (16). [DOI]

191. **M. Sahakyan**, **V.H. Tran**,

The Study of Electronic Structure and Magnetic Properties of Ferromagnetic Kondo-Lattice $CePd_2P_2$ from the First Principles.

J. Solid State. Chem. **333** (2024) # 124 604 (10). [DOI]

192. A.P.Sakhya, S.Regmi, M.Sprague, M.I.Mondal, I.bin Elius, N.Valadez, A.Ptok, **D. Kaczorowski**, M.Neupane,

Revealing the Intrinsic Electronic Structure and Complex Fermiology of YRu_2Si_2 Using Angle-Resolved Photoemission Spectroscopy.

Phys. Rev. B **110** 12 (2024) # 12 5104 (9). [DOI]

193. PengFei Sang, Le Zhang, Jian Kang, MingZhou Li, ShiWei Chen, Peng Yang, BingHeng Sun, Yang Li, **W. Stręk**, Hao Chen,

Composite Structure Al_2O_3 / Al_2O_3–YAG : Ce / YAG Ceramics with High Color Spatial Uniformity for White Laser Lighting.

J. Adv. Ceram. **13** 2 (2024) 189–97. [DOI]

194. W.Sąsiadek, E.Kucharska, **J. Janczak**, L.Dymińska, **R. Lisiecki**, **J. Hanuza**,

Redox Reaction Thiol–Disulfide for 3-, 4- and 6-Methyl-5-nitopyridine Derivatives — X-ray, Electron Absorption and Emission, IR and Raman Studies Discussed in Term of Quantum Chemical DFT Calculations.

J. Mol. Struct. **1317** (2024) # 139 033 (12). [DOI]

195. **Yu.V. Sharlai**, **Ł.Bochenek**, **J. Juraszek**, **T. Cichorek**, G.P.Mikitik,

Magnetostriction of Metals with Small Fermi Surface Pockets : Case of the Topologically Trivial Semimetal LuAs.

Phys. Rev. B **109** (2024) # 08 5144 (14). [DOI]

196. M.Šimėnas, **A.Gągor**, J.Banys, **M. Mączka**,

Phase Transitions and Dynamics in Mixed Three- and Low-Dimensional Lead Halide Perovskites.

Chem. Rev. **125** 5 (2024) 2 281–326. [DOI]

197. **K. Singh**, **O. Pavlosiuk**, **Sh. Dan**, **D. Kaczorowski**, **P. Wiśniewski**,

Large Unconventional Anomalous Hall Effect Arising from Spin Chirality within Domain Walls of an Antiferromagnet $EuZn_2Sb_2$.

Phys. Rev. B **109** 12 (2024) # 12 5107 (8). [DOI]

198. **A.Ślebarski**, M.Fijałkowski, J.Deniszczyk, M.M.Maśka, **D. Kaczorowski**,

Off-Stoichiometric Effect on Magnetic and Electron Transport Properties of $Fe_2VAl_{1.35}$ and Ni_2VAl : A Comparative Study.

Phys. Rev. B **109** 16 (2024) # 16 5105 (19). [DOI]

199. S.Sobczak, A.Nowok, J.K.Zaręba, K.Roszak, A.Półrolniczak, A.Z.Szeremeta, B.Dziuk, F.Dybała, S.Pawlus, R.Kudrawiec, A.Sieradzki, **M. Mączka**, A.Katrusiak,

Expanding the Horizons of the Thermodynamic Landscape and Optoelectronic Properties of Soft 2D Hybrid Perovskites MHy_2PbX_4 .

J. Mater. Chem. A **12** 27 (2024) 16 803–14. [DOI]

200. M.Sobiech, S.M.Khamanga, K.Synoradzki, **T.J. Bednarchuk**, K.Sikora, P.Luliński, J.Giebułtowicz,

Molecularly Imprinted Drug Carrier for Lamotrigine : Design, Synthesis, and Characterization of Physicochemical Parameters.

Int. J. Mol. Sci. **25** 9 (2024) # 4605 (23). [DOI]

201. M.Sobiech, P.Luliński, K.Synoradzki, **T.J. Bednarchuk**, M.Janczura, V.Provorova, J.Giebułtowicz,

Implementing Magnetic Molecularly Imprinted Solid Phase Extraction to Analytical Method for Determination of 2-Phenethylamine in Cocoa Powder and Chocolate by LC–MS/MS System.

Microchem. J. **205** (2024) # 111 155 (?). [DOI]

202. M.Sójka, **W. Piotrowski**, **Ł.Marciniak**, E.Zych,

Co-doping to Extend the Operating Range of Luminescence Thermometers. The Case of $Y_2SiO_5 : Pr^{3+}, Tb^{3+}$.

J. Alloy. Compd. **970** (2024) # 172 662 (8). [DOI]

203. M.X.Sprague, S.Regmi, B.Ghosh, A.P.Sakhya, M.I.Mondal, I. bin Elius, N.Valadez, B.Singh, **T. Romanova**, **D. Kaczorowski**, A.Bansil, M.Neupane,

Observation of Paramagnetic Spin-Degeneracy Lifting in $EuZn_2Sb_2$.

Phys. Rev. B **110** 4 (2024) # 045130 (6). [DOI]

204. M.Sprague, A.P.Sakhya, S.Regmi, M.I.Mondal, I. bin Elius, N.Valadez, K.Booth, **T. Romanova**, A.Ptok, **D. Kaczorowski**, M.Neupane,

Complex Fermiology and Electronic Structure of Antiferromagnet EuSnP.

Phys. Rev. Mater. **8** 5 (2024) # 054411 (8). [DOI]

205. M.Stanitska, N.Pokhodylo, R.Lytvyn, E.Urbonas, D.Volyniuk, S.Kutsiy, Kh.Ivaniuk, **V. Kinzhybalo**, P.Stakhira, R.Keruckiene, M.Obushak, J.V.Gražulevičius,

Effects of Electron-Withdrawing Strengths of the Substituents on the Properties of 4-(Carbazolyl-*R*-benzoyl)- 5-CF_3-1*H*-1,2,3-triazole Derivatives as Blue Emitters for Doping-Free Electroluminescence Devices.

ACS Omega **9** 12 (2024) 14613–26. [DOI]

206. **M. Stefański**, **B. Bondzior**, **A.Basiński**, **M. Ptak**, Bibo Lou, C.-G.Ma,

Synthesis and Characterization of a $CsPbCl_3$ Perovskite Doped with Nd^{3+}: Structural, Optical, and Energy Transfer Properties.

Inorg. Chem. Front. **11** 9 (2024) 2626–33. [DOI]

207. N.Struzik, J.Kensy, P.J.Piszko, J.Kiryk, K.Wiśniewska, S.Kiryk, Ł.Korjat, T.Horodniczy, **P. Sobierajska**, J.Matys, **R.J. Wiglusz**, M.Dobrzyński,

Contamination in Bone Substitute Materials: A Systematic Review.

Appl. Sci. **14** 18 (2024) # 8266 (24). [DOI]

208. V.V.Sumarokov, A.V.Dolbin, **A.Jeżowski**, **D. Szewczyk**, **D. Gnida**, N.A.Vinnikov, M.I.Bagatskii,

Measurements on the Heat Capacity of Thermal Reduced Graphene Oxide down to 0.3 K.

Физ. Низк. Темп. **50** 2 (2024) 195–97. Also in: *Low Temp. Phys.* **50** 2 (2023) 185–87. [DOI]

209. K.Synoradzki, T.Toliński, Q.Ul-Ain, M.Matczak, **T. Romanova**, **D. Kaczorowski**,

Magnetocaloric Properties of Single-Crystalline $Eu_5In_2Sb_6$.

J. Alloy. Compd. **1006** (2024) # 176214 (8). [DOI]

210. **D. Szewczyk**, M.Cassetta,

Colossal Low-Temperature Upturn in the Heat Capacity of Volcanic Glasses.

J. Non. Cryst. Solids **637** (2024) # 123046 (5). [DOI]

211. **D. Szewczyk**, **A.I. Krivchikov**, **A.Jeżowski**,

Polymorphic States Investigations in Thermal Conductivity of 1-Fluoroadamantane.

J. Phys. Commun. **8** (2024) # 015001 (10). [DOI]

212. **M. Szlawska**, **M. Majewicz**, **M. Ohashi**, **D. Kaczorowski**,

Hunt for a Lifshitz Point in Single-Crystalline UPd_2Si_2.
I. High Pressures.

Phys. Rev. B **110** 1 (2024) # 014345 (9). [DOI]

213. **M. Szlawska**, **M. Majewicz**, **K. Wochowski**, **D. Kaczorowski**,

Hunt for a Lifshitz Point in Single-Crystalline UPd_2Si_2.
I. High Magnetic Fields.

Phys. Rev. B **110** 1 (2024) # 014434 (7). [DOI]

214. **J. Sznajd**,

Frustration — no Frustration Crossover and Phase Transitions in 2D Spin Models with Zig-Zag Structures.

J. Stat. Mech. No. 5 (2024) # 053202 (23). [DOI]

215. K.S.Szot, **K. Rogacki**, F.Krok,

Comment on "Laser-induced structural modulation and superconductivity in $SrTiO_3$" [*Appl. Phys. Lett.* 123, (2023) #052601].

Appl. Phys. Lett. **124** (2024) # 08 6102 (2). [DOI]

216. **M. Szymczak**, Peng Du, M.Runowski, P.Woźny, JunPeng Xue, Teng Zheng, **Ł.Marciniak**,

Highly Sensitive Optical Manometer Based on the Visible Emissions of Ce^{3+}-Doped $La_6Sr_4(SiO_4)_6F_2$ Multisite Phosphors.

Adv. Opt. Mater. **12** $_7$ (2024) # 230 2147 (10). [DOI]

217. **M. Szymczak**, **J. Jaśkielewicz**, M.Runowski, JunPeng Xue, S.Mahlik, **Ł.Marciniak**,

Highly-Sensitive, Tri-Modal Luminescent Manometer Utilizing Band-Shift, Ratiometric and Lifetime-Based Sensing Parameters.

Adv. Funct. Mater. **34** $_{22}$ (2024) # 231 4068 (12). [DOI]

218. **M. Szymczak**, A.Mauri, S.Galli, **Ł.Marciniak**, **M. Fandzloch**,

Highly Sensitive, Multiparametric Thermal History Phosphor Based on an Eu(BTC) Architecture.

Adv. Funct. Mater. **34** $_{19}$ (2024) # 231 3045 (11). [DOI]

219. **M. Szymczak**, **W.M. Piotrowski**, P.Woźny, M.Runowski, **Ł.Marciniak**,

A Highly Sensitive Lifetime-Based Luminescent Manometer and Bi-functional Pressure–Temperature Sensor Based on a Spectral Shift of the R-Line of Mn^{4+} in $K_2Ge_4O_9$.

J. Mater. Chem. C **12** $_{19}$ (2024) 6 793–804. [DOI]

220. **M. Szymczak**, Ke Su, Lefu Mei, M.Runowski, P.Woźny, QingFeng Guo, LiBing Liao, **Ł.Marciniak**,

Investigating the Potential of Cr^{3+}-Doped Pyroxene for Highly Sensitive Optical Pressure Sensing.

ACS Appl. Mater. Interf. **16** $_{44}$ (2024) 60 491–500. [DOI]

221. **K. Szyszka**, **M. Kardach**, **D. Szymański**, **R.J. Wiglusz**,

Synthesis, Characterization, and Temperature-Dependent Luminescence of Tb^{3+}-Activated and Self-activated $Sr_{10}(PO_4)_6Cl_2$ Phosphors.

J. Lumin. **275** (2024) # 120 788 (9). [DOI]

222. **K. Szyszka**, **R.J. Wiglusz**,

Impact of Dopant Concentration on the Structural, Morphological, and Spectroscopic Characteristics of Eu^{3+}-Doped $Sr_{10}(PO_4)_6F_2$ Nanomaterials, Including Temperature-Dependent Emission.

J. Alloy. Compd. **984** (2024) # 173 924 (12). [DOI]

223. **K. Szyszka**, **R.J. Wiglusz**,

Characterization of Sm^{3+}-Activated Carbonated Calcium Chlorapatite Phosphors for Theranostic Applications : A Comparative Study of Co-Precipitation and Hydrothermal Methods.

Phys. Chem. Chem. Phys. **26** $_{14}$ (2024) 10 951–60. [DOI]

224. F.Abedi Tameh, Z.Jahani, S.Sedghiniya, M.A.Aghtaei, M.Abtahi, WenQiang Xiang, M.Akbari, J.Soleimannejad, **J. Janczak**,

Morphology-Dependent Multienzyme Activity of Nanoceria in Antioxidant Protection of $MnCl_2$-Treated PC-12 Cells, and the Potential Application for Parkinson's Disease Treatment.

Inorg. Chem. Commun. **169** (2024) # 113 117 (11). [DOI]

225. **S. Targońska**, M.Dobrzyńska-Mizera, M.L.Di Lorenzo, M.Knitter, A.Longo, M.Dobrzyński, M.Rutkowska, S.Barnaś, B.Czapiga, M.Stagraczyński, M.Mikulski, M.Muzalewska, M.Wyleżoł, **J. Rewak-Soroczyńska**, **N. Nowak**, J.Andrzejewski, **J. Reeks**, **R.J. Wiglusz**,

Design, Clinical Applications and Post-Surgical Assessment of Bioresorbable 3D-Printed Craniofacial Composite Implants.

Biomater. Sci. **12** $_{13}$ (2024) 3 374–88. [DOI]

226. A.V.Terekhov, **K. Rogacki**, V.M.Yarovyi, Z.D.Kovalyuk, E.Lähderanta, E.V.Khristenko, A.L.Solovjov,

Features of Temperature-Dependences Electrical Resistance of $Bi_{88.08}Mn_{11.92}$ in Magnetic Fields.

Физ. Низк. Темп. **50** $_7$ (2024) 605–11. Also in: *Low Temp. Phys.* **50** $_7$ (2023) 543–48. [DOI]

227. R.Thaljaoui, **D. Szewczyk**,

Thermal and Thermoelectric Properties of Potassium-Doped $Pr_{0.6}Sr_{0.4-x}K_xMnO_3$ (x = 0.05 and x = 0.1).

Solid Stat. Commun. **383** (2024) # 115 470 (7). [DOI]

228. Wen Tian, Le Zhang, DongShun Chen, ShengHui Lin, ZiHan Zhou, HongSen Wang, **W. Stręk**, ZhiRu Ren, Hao Chen,

Enhanced Afterglow Properties in Reddish-Orange $Ca_2SnO_4 : Sm^{3+}$ Phosphors by NH_4Cl or $CaCl_2$ Flux.

Opt. Mater. **147** (2024) # 114 773 (8). [DOI]

229. T.Toliński, **K. Oganisian**, J.Karpiński, **K. Rogacki**,

Anisotropic Thermoelectric Power in Single Crystalline $Mg_{1-x}Al_xB_2$ Compounds.

J. Mater. Sci. **59** $_{34}$ (2024) 16 184–92. [DOI]

230. **P.E. Tomaszewski**,

Comments on the Paper on the Properties of Ca-Doped $BaFe_{0.5}Nb_{0.5}O_3$ by R. Chakravarty *et al.*, and Published in *Applied Physics* A 128, 647 (2022).

Appl. Phys. A **130** $_5$ (2024) # 341 (2). [DOI]

231. **P.E. Tomaszewski**,

Comment on "Dielectric, Optical, and Magnetic Behaviors of Magnesium Iron-Based Double Perovskite" [*ECS J. Solid State Sci. Technol.*, **11,** (2022) # 113003].

ECS J. Solid State Sci. Technol. **13** $_3$ (2024) # 03 0001 (1). [DOI]

232. **P.E. Tomaszewski**,

Comments on the Paper on the Properties of $BaFe_{0.5}Nb_{0.5}O_3 : Ca$ by R. Chakravarty, *et al.*, and Published in *Vacuum* 216, (2023) # 112 415.

Inorg. Chem. Commun. **167** (2024) # 112 758 (3). [DOI]

233. **P.E. Tomaszewski**,

Comments on structural and electrical analysis of polycrystalline ceramic $PbCaBiNbO_6$ by A.K. Panda *et al.* [*J.Mater.Sci.: Mater.Elektron.* **34** (2023) 1640-].

J. Mater. Sci. Mater. Electron. **35** $_1$ (2024) # 47 (5). [DOI]

234. **P.E. Tomaszewski**,

Comments on the errors in paper "Impact of $KBiTiO_3$ in optical and ferroelectric behavior of $NaNbO_3$ solid solution" by S.K. Mohanty et al. [*J.Mater.Sci.: Mater.Elektron.* **34** (2023) # 2126-].

J. Mater. Sci. Mater. Electron. **35** $_8$ (2024) # 566 (3). [DOI]

235. **P.E. Tomaszewski**,

Comments on the erroneous calculations presented in the paper on "Dielectric and impedance spectroscopy of barium orthovanadate ceramics, *J. Mater. Sci.: Mater. Electron.* 24, # 1608 (2013)".

J. Mater. Sci. Mater. Electron. **35** $_{14}$ (2024) # 986 (2). [DOI]

236. **P.E. Tomaszewski**,

Comments on the erroneous diffraction structure analysis presented in the paper on BaFe0.5Nb0.5O3:Mg ceramics by R. Chakravarty et al., and published in *J. Mater. Sci.: Mater. Electron.* (2023) 34 : # 1452.

J. Mater. Sci. Mater. Electron. **35** $_{18}$ (2024) # 1266 (4). [DOI]

237. **P.E. Tomaszewski**,

Comment on the paper "Multiferroic and optical spectroscopic behavior of BST in BFO environment" by B. Mohanty *et al.*

J. Mater. Sci. Mater. Electron. **35** $_{27}$ (2024) # 1826 (?). [DOI]

238. **P.E. Tomaszewski**,

Comment on the Paper "Synthesis, nucleation kinetics, spectral, structural, mechanical, and thermal studies of semi-organic barium-doped ?-glycine single crystal" by K. Premlatha *et al.* [J. Mater. Sci.: Mater. Electron. 32 (2021) # 28494.]

J. Mater. Sci. Mater. Electron. **35** $_{28}$ (2024) # 1852 (?). [DOI]

239. **P.E. Tomaszewski**,

Comments on the Paper on the Properties of $BaFe_{0.5}Nb_{0.5}O_3$: Ca by R. Chakravarty, *et al.*, and Published in *Vacuum* 216, (2023) # 112 415.

J. Mol. Struct. **1298** (2024) # 137 013 (3). [DOI]

240. **P.E. Tomaszewski**,

Comments on "Ferroelectric and optical modulations of double perovskite Ba_2BiVO_6". [by B.N Parida, *et al.*, *J. Mol. Struct.* **1189** (2019) 288–98.]

J. Mol. Struct. **1302** (2024) # 137 292 (2). [DOI]

241. **P.E. Tomaszewski**,

Comments on the Paper on the Properties of $NiFe_2O_4$: Gd Ceramics by V.Bhuvaneshwari, N.Lenin, *et al.*, and published in *Materials Science and Engineering* B 288 (2023) # 116184.

Mater. Sci. Eng. B **301** (2024) # 117 120 (3). [DOI]

242. **P.E. Tomaszewski**,

Important Comments on the Paper "Development of a novel triple perovskite barium bismuth molybdate material for thermistor-based applications" by D.Panda *et al.*

Mater. Sci. Eng. B **306** (2024) # 117 442 (2). [DOI]

243. **P.E. Tomaszewski**,

Important Comments on the Paper on $BaBi_{1.2}Fe_{0.8}TiO_6$ Ceramic by Lutu Sahoo *et al.*, and published in *Mater.Sci.Eng.* B 294 (2023) #116561.

Mater. Sci. Eng. B **310** (2024) # 117 690 (3). [DOI]

244. **P.E. Tomaszewski**,

Size-Induced Phase Transitions.

Phase Trans. **97** $_{1/2}$ (2024) 1–58. [DOI]

245. **P.E. Tomaszewski**,

Comments on the Paper on the Properties of $BaFe_{0.5}Nb_{0.5}O_3$ by R. Chakravarty *et al.*, and published in *Phase Transitions* 95 (2022) 163–.

Phase Trans. **97** $_{1/2}$ (2024) 124–29. [DOI]

246. **P.E. Tomaszewski**,

Comments on the Paper "Structural and electrical properties of double perovskite $(BaSr)FeMoO_6$" by R. Das and R.N.P. Choudhary, and Published in *Physica* B 603, (2021) # 412 522.

Physica B **674** (2024) # 415 531 (1). [DOI]

247. **P.E. Tomaszewski**,

Comments on the Paper on the Properties of $BiFeO_3$: $MgTiO_3$ by S. Sen, R.K. Parida, and B.N. Parida, and Published in *Physica* B 650, # 414559 (2023).

Physica B **691** (2024) # 416 303 (2). [DOI]

248. **P.E. Tomaszewski**,

Comments on the Paper on the Properties of $BaFe_{0.5}Nb_{0.5}O_3$: Ca by R. Chakravarty *et al.*, and Published in *Vacuum* 216, (2023) # 112 415.

Vacuum **219** (2024) # 112 710 (2). [DOI]

249. **L.M. Tran**, **A.J. Zaleski**, **Z. Bukowski**†,

Reentrant Resistivity Due to the Interplay of Superconductivity and Magnetism in $Eu_{0.73}Ca_{0.27}(Fe_{0.87}Co_{0.13})_2As_2$.

Phys. Rev. B **109**$_1$ (2024) # 01 4509 (9). [DOI]

250. **M. Trzebiatowska**, **D.A.Kowalska**, A.Ciżman, N.A.Wójcik, R.J.Barczyński, **A.Pikul**, J.K.Zaręba, M.Palewicz, T.Piasecki, K.Roleder, M.Gusowski, **M. Mączka**,

The Influence of Azide and Imidazole on the Properties of Mn- and Cd-Based Networks : Conductivity and Nonlinear Phenomena.

J. Mater. Chem. C **12**$_{37}$ (2024) 15 119–36. [DOI]

251. Z.Tylczyński, M.Wiesner, Z.Czapla, **A.Gągor**,

Spontaneous Piezoeletric Effect as Evidence of Ferroelastoelectricity in Guanidine Zinc Sulfate Crystal.

Sci. Rep. **14** (2024) # 18020 (10). [DOI]

252. S.Valiyaveettil-Sobhan Raj, **P. Głuchowski**, P.López-Aranguren, F.Aguesse, R.Sampathkumar, T.Thompson, C.Rojviriya, W.Manalastas, Jr, M.Srinivasan, M.Casas-Cabanas,

High-Pressure Low-Temperature Densification of NASICON-Based LATP Electrolytes for Solid-State Lithium Batteries.

Materialia **33** (2024) # 101 999 (12). [DOI]

253. V.Vijayalakshmi, N.Kanagathara, **J. Janczak**, **M.K. Marchewka**, Md Azam, K.Senthilkumar,

Structural, Spectroscopic and Second Harmonic Generation Evaluation of 1,2,4-Triazolinium Tartrate–Tartaric Acid as a Promising Nonlinear Optical Material.

Opt. Mater. **147** (2024) # 114 694 (15). [DOI]

254. V.Vijayalakshmi, N.Sivakumar, V.Ali Alsulmi, S.Elangovan, N.Kanagathara, **J. Janczak**, **M.K. Marchewka**, **M. Rowińska**,

Exploring Structure, Molecular Interactions, Optical and Thermal Properties of *bis*(2-Aminopyrimidinium) Selenate Monohydrate : A Combined Experimental and Theoretical Study.

Opt. Mater. **152** (2024) # 115 539 (13). [DOI]

255. D.Vistorskaja, A.Katelnikovas, C.M.Signes, V.Klimavicius, **A.Łukowiak**, **W. Stręk**, A.Kareiva,

Novel Lanthanide-Doped $Y_{3-x}Na_xAl_{5-y}V_yO_{12}$ Garnets : Synthesis, Structural and Optical Properties.

Opt. Mater:X **22** (2024) # 100 300 (13). [DOI]

13 th Int.Conf.on Excited States of Transition Elements (ESTE-2023) ŚWIERADÓW-Zdrój, PL, 2023.09 03–08

256. Z.Walkowiak, **A.Gągor**, S.M.Soliman, M.Jerzykiewicz, M.Sarewicz, M.Fitta, R.Pełka, A.Wojciechowska,

New Heteroleptic L-Argininato Copper(II) Complex with Bromide and N,N'–Heterocyclic Ligands — Synthesis, Supramolecular, Spectroscopic, Magnetic and Theoretical Investigations.

J. Mol. Struct. **1308** (2024) # 138 094 (12). [DOI]

257. Lin Wang, ZiXuan Wan, YuTing Yang, BeiBei Xu, JianRong Qiu, **W. Stręk**, XiaoFeng Liu,

Incandescence-Like Nonlinear Ultra-Broadband Emission from Randomly Assembled Plasmonic Nanoparticles.

Laser Photon. Rev. **18**$_5$ (2024) # 240 0055 (11). [DOI]

258. **A.Watras**, **M. Kardach**, **K. Szyszka**, **P. Sobierajska**, **A.Bartkowiak**, **R.J. Wiglusz**,

Modulation of Spectroscopic Properties in the YXO_4 Compounds (where $X = V^{5+}, P^{5+}, As^{5+}$) Doped with Eu^{3+} Ions.

Opt. Mater. X **24** (2024) # 100 377 (7). [DOI]

259. Cong Wei, Jian Kang, Cen Shao, PengFei Sang, TianYuan Zhou, MingZhou Li, Fan Qiu, BaoLin Jiang, RongYu Xu, **W. Stręk**, Hao Chen, ZhiRu Ren, Le Zhang,

Enhanced Efficiency and Thermal Performance of Multistage Gradient Doping Ce : YAG Transparent Ceramics for Laser Lighting.

J. Eur. Cer. Soc. **44**$_{10}$ (2024) 5 804–13. [DOI]

260. Cong Wei, Cen Shao, PengFei Sang, ChunMing Zhou, Jian Kang, BaoLin Jiang, RongYu Xu, **W. Stręk**, Hao Chen, Le Zhang,

Functional Design and Implementation of Multilayer Ce : YAG / Cr : YAG Composite Transparent Ceramics by Tape Casting for White LEDs / LDs.

J. Eur. Cer. Soc. **44**$_{2}$ (2024) 1153–62. [DOI]

261. K.Wiglusz, E.Żurawska-Płaksej, A.Piwowar, **R.J. Wiglusz**,

***In vitro* Studies of Hemoglobin's Affinity for the Vitamin B_9 and Control of Its Stability Character.**

Int. J. Biol. Macromol. **271** (2024) # 132 665 (11). [DOI]

262. A.Wojciechowska, **J. Janczak**, T.Rojek, M.Ashfaq, M.Malik, N.Trzęsowska, R.Wysokiński, J.Jezierska,

Unique Use of Dibromo–L–Tyrosine Ligand in Building of Cu(II) Coordination Polymer : Experimental and Theoretical Investigations.

Molecules **29**$_{11}$ (2023) # 2709 (17). [DOI]

263. W.Wojtasik, L.Dymińska, **J. Hanuza**, M.Burgberger, A.Boba, J.Szopa, A.Kulma, J.Mierziak,

Endophytic Non-pathogenic *Fusarium oxysporum* Reorganizes the Cell Wall in Flax Seedlings.

Front. Plant Sci. **15** (2023) # 135 2105 (17). [DOI]

264. **P. Woźniak**,

Ce(III) Formate-Derived Hierarchical Cerium Oxide Particles with Icosahedral Symmetry-Based Architectures : Effect of Third Level of Structural Hierarchy in Soot and Propane Oxidation.

Acta Mater. **281** (2024) # 120 372 (17). [DOI]

265. ChongLei Xu, WuDi Wang, Zhen Zhang, FengKai Ma, DaPeng Jiang, **A. Strzęp**, WanXin Zheng, Bin Xu, HuaMin Kou, Jun Xu, LiangBi Su,

Continuous-Wave Orange Laser at 605.98 nm Based on a Diode-Pumped Pr, Gd : SrF_2 Crystal.

Opt. Las. Techn. **168** (2024) # 109 768 (7). [DOI]

266. A.Yousofvand, M.Amini, M.Hosseinifard, A.Bayrami, **J. Janczak**,

A New Nickel-Based δ-Isomer Anderson-Type Polyoxometalates : Synthesis, Crystal Structure and Catalytic Activity in 1,2,3-Triazoles Production.

Polyhedron **258** (2024) # 117 041 (8). [DOI]

267. W.Zakrzewski, Z.Rybak, M.Pajączkowska, J.Nowicka, M.Szymonowicz, A.Rusak, **R.J. Wiglusz**, **K. Szyszka**, **J. Chmielowiec**, G.Chodaczek, K.Kujawa, B.Mielan, M.Dobrzyński,

Antimicrobial Properties and Cytotoxic Effect Evaluation of Nanosized Hydroxyapatite and Fluorapatite Dedicated for Alveolar Bone Regeneration.

Appl. Sci. **14**$_{17}$ (2024) # 7845 (25). [DOI]

268. **P. Zdeb**, **N. Rebrova**, **P.J. Dereń**,

Discovering the Potential of High Phonon Energy Hosts in the Field of Visible-to-Ultraviolet C Upconversion.

J. Phys. Chem. Lett. **15**$_{37}$ (2024) 9 356–60. [DOI]

269. **P. Zdeb**, **N. Rebrova**, **R. Lisiecki**, **P.J. Dereń**,

Luminescence Properties of an Orthorhombic $KLaF_4$ Phosphor Doped with Pr^{3+} Ions under Vacuum Ultraviolet and Visible Excitation.

Materials **17**$_{6}$ (2024) # 1410 (17). [DOI]

270. QiFeng Zeng, M.Runowski, JunPeng Xue, LaiHui Luo, **Ł. Marciniak**, V.Lavín, Peng Du,

Pressure-Induced Remarkable Spectral Red-Shift in Mn^{2+}-Activated $NaY_9(SiO_4)_6O_2$ Red-Emitting Phosphors for High-Sensitive Optical Manometry.

Adv. Sci. **11** 9 (2024) # 230 8221 (7). [DOI]

271. LiXuan Zhang, DianJun Hu, Xiao Li, Ziyu Liu, Chen Hu, LeXiang Wu, TingSong Li, **D. Hreniak**, Jiang Li,

Effect of Y Substitution on the Microstructure, Magneto-Optical, and Thermal Properties of $(Tb_{1-x}Y_x)_3Al_5O_{12}$ Transparent Ceramics.

J. Adv. Ceram. **13** 4 (2024) 529–38. [DOI]

272. XiYue Zhang, PengFei Sang, Cong Wei, ShengHui Lin, Jian Kang, YanBin Li, BingHeng Sun, Yuang Li, F.A.Selim, ChunMing Zhou, TianYuan Zhou, ShiWei Chen, ChaoFan Shi, **W. Stręk**, Hao Chen, Le Zhang,

$Ce : (Lu, Sr)_3(Al, Si)_5O_{12}$ Transparent Ceramics for High-Power White LEDs / LDs with Ultra-High Luminance Saturation Threshold.

J. Mater. Chem. C **12** 17 (2024) 6 046–55. [DOI]

273. XinYu Zheng, Hui Xie, TianYuan Zhou, YanBin Li, JianQiang Li, SiQing Wang, Zihan Zhou, LeLe Xu, YuHuan Zhou, Hao Chen, **W. Stręk**, Jing Zhang, Le Zhang,

Highly Transparent Ce : Nd : YAG Ceramic with Good Light Conversion Capacity for Solar-Pumped Solid-State Lasers.

Opt. Express **32** 10 (2024) 18 352–65. [DOI]

274. T.Zhezhera, **P. Głuchowski**, M.Nowicki, M.Chrunik, A.Miklaszewski, D.Kasprowicz,

Pressure Modified Upconversion Luminescence of Yb^{3+} and Er^{3+}-Doped Bi_3TeBO_9 Ceramics.

J. Lumin. **268** (2024) # 120 401 (9). [DOI]

275. T.Zhezhera, **P. Głuchowski**, M.Nowicki, M.Chrunik, B.Szczesniak, D.Kasprowicz,

Enhancement of Yb^{3+} Emission in Bi_3TeBO_9 through Efficient Energy Transfer from Bi^{3+} Ions.

J. Phys. Chem. C **128** 34 (2024) 14 357–67. [DOI]

276. ChunMing Zhou, Hang Chen, Yue Cao, YanBin Li, TianYuan Zhou, ChaoFan Shi, DongShun Chen, Xu Chen, ShengHui Lin, XuanChu Liu, Jian Kang, Cen Shao, **W. Stręk**, Hao Chen, Le Zhang,

MAS : Eu–YAG : Ce Composite Phosphor Converters with Excellent Thermal Performance and Enhanced Color Rendering Index for High-Power White LDs.

Ceram. Int. **50** 14 (2024) 25 908–17. [DOI]

- N.S.Dhami, V.Balédent, I.Batistić, **O. BEDNARCHUK**, **D. KACZOROWSKI**, J.P.Itié, S.R.Shieh, C.M.N.Kumar, Y.Utsumi,

  Synchrotron X-ray Diffraction and DFT Study of Non-centrosymmetric $EuRhGe_3$ under High Pressure.

  High Press. Res. **44**? (2024) in print. [DOI]

- Ł.Janicki, S.Gorantla, **E. PISKORSKA-HOMMEL**, **D. HOMMEL** R.Kudrawiec,

  Dodecagonal GaN Microrods: Chemical Stability of a-, m-, and c-Plane Walls and Their Application to Water-Splitting.

  Adv. Mater. Interf. **10**?? (2024) in print. [DOI]

- Xiang Li, Chen Hu, Qiang Liu, **D. HRENIAK**, Jiang Li,

  Fluoride Transparent Ceramics for Solid-State Lasers: A Review.

  J. Adv. Ceram. **13**?? (2024) in print. [DOI]

- Xiao Li, LiXuan Zhang, DanYang Zhu, JunLin Wu, Chen Hu, TingSong Li, LeXiang Wu, **D. HRENIAK**, Jiang Li,

  Influence of Germanium Concentration on the Microstructure and Optical Transparency of Terbium Gallium Garnet Ceramics.

  J. Am. Ceram. Soc. **107**?? (2024) in print. [DOI]

- **M. MĄCZKA**, J.K.Zaręba, A.Nowok, N.Sokołowski, A.Sieradzki, **A.GĄGOR**, **M. PTAK**,

  Two-Dimensional Lead Iodide Perovskites with Extremely Reduced Dielectric Confinement: Embedded Self-Erasing Second-Harmonic Generation Switching, Thermochromism, and Photoluminescence.

  Chem. Mater. **36**?? (2024) in print. [DOI]

- **M. SZYMCZAK**, M.Runowski, D.Kwiatek, Sz.Sobczak, P.Woźny, M.Kubicki, G.Dutkiewicz, A.Katrusiak, **Ł.MARCINIAK**,

  Multimodal Luminescence Manometers Based on a Novel Organic Complex Material – $Eu(bpyO_2)_4(PF_6)_3$.

  J. Mater. Chem. C **12**? (2024) in print. [DOI]

(6)

[†]Wymieniono artykuły ze znanym DOI.
[‡]Listed are the articles with DOI known.