

LISTA PUBLIKACJI 2023 LIST of PUBLICATIONS

ARTYKUŁY W CZASOPISMACH NAUKOWYCH ARTICLES IN SCIENTIFIC JOURNALS

1. G. Accardo, A. Orue, D. Chatzogiannakis, **P. GŁUCHOWSKI**, M. Casas-Cabanas, P. López-Aranguren, **Fast and Low-Temperature Densification of Highly Conductive $\text{Li}_7\text{La}_3\text{Zr}_2\text{O}_{12}$ Ceramic Electrolytes for Solid-State Batteries.**
J. Power Sourc. **585** (2023) # 233 632 (10). [\[DOI\]](#)
2. A. Adach, M. Tyszką-Czochara, **M. DASZKIEWICZ**,
An Efficient One-Pot Synthesis of Pyrazole Complexes Formed *in situ*: Synthesis, Crystal Structure, HIRSHFELD Surface Analysis and *in vitro* Biological Properties.
Acta Cryst. C **79**₁₂ (2023) 520–29. [\[DOI\]](#)
3. **K. ADAMSKA**, S. Smykała, S. Zieliński, **D. SZYMAŃSKI**, P. Stelmachowski, A. Kotarba, **J. OKAL**, **L. KĘPIŃSKI**,
TiO₂ Supported RuRe Nanocatalysts for Soot Oxidation: Effect of Re and the Support Nature.
Catal. Lett. **153**₅ (2023) 1372–89. [\[DOI\]](#)
4. Md Sh. Alam, A. Fakhredine, M. Ahmad, P. K. Tanwar, Hung-Yu Yang, F. Tafti, G. Cuono, R. Islam, B. Singh, A. Lynnyk, C. Autieri, **M. MATUSIAK**,
Sign Change of Anomalous HALL Effect and Anomalous NERNST Effect in the WEYL Semimetal CeAlSi.
Phys. Rev. B **107** (2023) # 08 5102 (10). [\[DOI\]](#)
5. **S. ANUFRIIEV**, **T. A. ZALESKI**,
Mixtures of Ultracold Atomic Gases in Optical Lattices with Nonzero Pair or Counterflow Hopping.
Физ. Низк. Темп. **49**₃ (2023) 293–99. Also in: *Low Temp. Phys.* **49**₃ (2023) 267–73. [\[DOI\]](#)
6. **V. APINYAN**, **T. K. KOPEĆ**,
Magnetic Field-Controlled Electrical Conductivity in AA Bilayer Graphene.
C (J. Carbon Res.) **9**₂ (2023) # 42 (17). [\[DOI\]](#)
7. **V. APINYAN**, **T. K. KOPEĆ**,
AB Bilayer Graphene in the External Magnetic Field.
Физ. Низк. Темп. **49**₃ (2023) 308–17. Also in: *Low Temp. Phys.* **49**₃ (2023) 282–90. [\[DOI\]](#)
8. **V. APINYAN**, **T. K. KOPEĆ**,
Comparative Study of the AA and AB Bilayer Graphene Structures in the External Electric and Magnetic Fields.
Physica E **150** (2023) # 115 701 (8). [\[DOI\]](#)
9. **V. APINYAN**, **T. K. KOPEĆ**,
Canted Antiferromagnetism and Excitonic Order in Gated Double-Layer Graphene.
Phys. Rev. B **108** (2023) # 075147 (9). [\[DOI\]](#)

10. F.Armetta, **V. BOIKO**, **D. HRENIAK**, C.Mortalò, C.Leonelli, L.Barbata, M.L.Saladino,
Effect of Hydrothermal Time on the Forming Specific Morphology of $\text{YPO}_4 : \text{Eu}^{3+}$ Nanoparticles for Dedicated Luminescent Applications as Optical Markers.
Ceram. Int. **49**₁₄ (2023) 23 287–94. [\[DOI\]](#)
11. F.Armetta, **V. BOIKO**, **D. HRENIAK**, R.C.Ponterio, M.L.Saladino,
Luminescent $\text{YPO}_4 : \text{Eu}$ @ PVA Dispersions for Anti-Counterfeiting Ink Applications.
Mater. Lett. **333** (2023) # 133 653 (??). [\[DOI\]](#)
12. D.Avcı, H.Yetiş, **D. GAJDA**, **M. BABIJ**, **L.M. TRAN**, F.Karaboğa, C.Aksoy, **A.ZALESKI**, I.Belenli,
Optimized Superconducting MgB_2 Joint Made by IMD Technique.
Supercond. Sci. Techn. **36** (2023) # 075004 (9). [\[DOI\]](#)
13. M.S.Barabashko, R.M.Basnukaeva, A.V.Dolbin, **M. DROZD**, **O. BEZKROVNYI**, M.V.Tkachenko,
Influence of MWCNTs Additives on the Thermal Conductivity of HA-MWCNTs Composite.
Физ. Низк. Темп. **49**₆ (2023) 808–14. Also in: *Low Temp. Phys.* **49**₆ (2023) 737–42. [\[DOI\]](#)
14. M.S.Barabashko, **A.I. KRIVCHIKOV**, R.Basnukaeva, O.A.Korolyuk, **A.JEŻOWSKI**,
Proportional Correlation between Heat Capacity and Thermal Expansion of Atomic, Molecular Crystals and Carbon Nanostructures.
Cond. Matter Phys. **26**₃ (2023) # 33 602 (13). [\[DOI\]](#)
15. **J. BARAN**, N.A.Davydova, **M. DROZD**,
Polymorphism of Glass-Former m -Cresol.
Chem. Phys. Lett. **825** (2023) # 140 620 (6). [\[DOI\]](#)
16. **N. BARTCZAK**, **J. KOWALCZYK**, **R. TOMALA**, **M. STEFAŃSKI**, **D. SZYMAŃSKI**, **M. PTAK**,
W. STRĘK, K.Szustakiewicz, T.Kurzynowski, L.Szczepański, A.Junka, D.Gorczyca,
P. GŁUCHOWSKI,
Effect of the Addition of Graphene Flakes on the Physical and Biological Properties of Composite Paints.
Molecules **28**₁₆ (2023) # 6173 (15). [\[DOI\]](#)
17. K.Bartosiewicz, V.Fritz, D. Van der Heggen, **D. SZYMAŃSKI**, J.Zeler, J.Pejchal, A.Yamaji,
R.Kucerková, A.Beitlerová, Sh.Kurosawa, A.Yoshikawa, Ph.F.Smet, E.Zych, M.Nikl,
Towards Deliberate Design of Persistent Phosphors: A Study of La–Ga Admixing in $\text{LuAG} : \text{Ce}$ Crystals to Engineer Elemental Homogeneity and Carrier Trap Depths.
J. Mater. Chem. C **11**₂₆ (2023) 8 850–65. [\[DOI\]](#)
18. K.Bartosiewicz, A.Szysiak, **R. TOMALA**, P.Gołębiewski, H.Węglarz, V.Nagirnyi, M.Kirm, I.Romet,
M.Buryi, V.Jary, R.Kucerková, M.Wzorek, R.Buczyński,
Energy-Transfer Processes in Nonstoichiometric and Stoichiometric Er^{3+} , Ho^{3+} , Nd^{3+} , Pr^{3+} , and Cr^{3+} -Codoped $\text{Ce}:\text{YAG}$ Transparent Ceramics: Toward High-Power and Warm-White Laser Diodes and LEDs.
Phys. Rev. Appl. **20**₁ (2023) # 01 4047 (21). [\[DOI\]](#)
19. S.Bednarek, **J. ĆWIK**,
Dia- czy paramagnetyk? Oto jest pytania! [Dia- or Paramagnetic? Here Is the Question.]
Fizyka w Szkole (Physics in School) № 1 (2023) 36–38 [in Polish].
20. **A.BEDNARKIEWICZ**, **M. SZALKOWSKI**, **M. MAJAK**, **Z. KORCZAK**, **M. MISIAK**, S.Maćkowski,
All-Optical Data Processing with Photon-Avalanching Nanocrystalline Photonic Synapse.
Adv. Mater. **35**₄₂ (2023) # 230 4390 (12). [\[DOI\]](#)
21. N.Bednarska-Adam, M.Kuwik, T.Goryczka, **B. MACALIK**, W.A.Pisarski, J.Pisarska,
Down- and Up-conversion Luminescence Processes in Olivine-Type Ceramic Phosphors $\text{Li}_2\text{AGeO}_4 : \text{Er}^{3+}$ ($A = \text{Zn}, \text{Mg}$).
Opt. Mater. **143** (2023) # 114 301 (8). [\[DOI\]](#)

22. N.Bednarska-Adam, J.Pisarska, M.Kuwik, E.Pietrasik, T.Goryczka, **B. MACALIK**, W.A.Pisarski,
Thermal, Structural and Optical Properties of Un-Doped and Lanthanide-Doped Germanate Ceramics.
J. Alloy. Compd. **934** (2023) # 167956 (9). [\[DOI\]](#)
23. B.Belan, M.Dzevenko, **D.A. KOWALSKA**, R.Gladyshevskii,
Crystal Structure of the Ternary Silicide $\text{ErNi}_{4.04}\text{Si}_{0.96}$.
Z. Naturforsch. (b) **78**_{7/8} (2023) 417–20. [\[DOI\]](#)
24. **O. BEZKROVNA**, P.Zdeb, **O. BEZKROVNYI**, **R. LISIECKI**, **P.J. DEREŃ**,
Micro and Nanocrystalline LuPO_4 (Ln^{3+} : Nd, Pr) — Morphology, Luminescence and Inter-ionic Interplays.
Acta Phys. Pol. A **144**₄ (2023) 263–72. [\[DOI\]](#)
25. T.Bezrodna, V.Nesprava, V.Melnyk, G.Klishevich, N.Curmei, **T. GAVRILKO**, O.Roshchin, **J. BARAN**,
M. DROZD,
Conformation-Dependent Molecular Association and Spectral Properties of 4-Pentyl-4'-cyanobiphenyl Liquid Crystal in Different Phases.
Физ. Низк. Темп. **49**₃ (2023) 329–37. Also in: *Low Temp. Phys.* **49**₃ (2023) 302–9. [\[DOI\]](#)
26. R.Bhavani, R.Kanagathara, **M.K. MARCHEWKA**, **J. JANCZAK**,
Structural and Spectroscopic Characterization of the Product Formed in Aqueous Solution of Hydrazine and Maleic Acid.
J. Mol. Struct. **1271** (2023) # 134077 (11). [\[DOI\]](#)
27. K.Bielak, D.Benkowska-Biernacka, **M. ПТАК**, J.Stolarski, M.Kalka, A.Ożyhar, P.Dobryczycki,
Otolin-1, an Otolith- and Otoconia-Related Protein, Controls Calcium Carbonate Bioinspired Mineralization.
BBA Gen. Subj. **1867** (2023) # 130327 (8). [\[DOI\]](#)
28. **K. BILIŃSKA**, D.Goles, **M.J. WINIARSKI**,
A Theoretical Investigation of 18-Electron Half-HEUSLER Tellurides in Terms of Potential Thermoelectric Value.
Eur. Phys. J. B **96**₁₀ (2023) # 131 (8). [\[DOI\]](#)
29. **K. BILIŃSKA**, **M.J. WINIARSKI**,
High-Throughput Exploration of Half-HEUSLER Phases for Thermoelectric Applications.
Crystals **13**₉ (2023) # 1378 (12). [\[DOI\]](#)
30. **K. BILIŃSKA**, **M.J. WINIARSKI**,
Search for Semiconducting Materials among 18-Electron Half-HEUSLER Alloys.
Solid State Commun. **364** (2023) # 115133 (6). [\[DOI\]](#)
31. **B. BONDZIOR**, Thu Hoang, L.Petit,
Crystal Formation in Eu^{3+} -Doped Oxyfluorophosphate Glass–Ceramics for Luminescence Thermometry.
Ceram. Int. **49**₂₄ (2023) 41186–93. [\[DOI\]](#)
32. **B. BONDZIOR**, Thu Hoang, **T.H. QUAN VU**, **P.J. DEREŃ**, L.Petit,
Unveiling the Thermometric Sensitivity of Eu^{3+} Doped Glasses in Various System from Theory to Experimental.
Scr. Mater. **227** (2023) # 115310 (5). [\[DOI\]](#)
33. D.Budzikur-Maciąg, **V. KINZHYBALO**, K.Ślepokura,
Structural Variety and Dehydration in 3-Aminopyridine-Hypodiphosphoric Acid–Water System.
Cryst Eng Comm **25**₂₆ (2023) 3826–36. [\[DOI\]](#)

34. B.Burtan-Gwizdała, M.Reben, J.Cisowski, **R. LISIECKI**, B.Jarząbek, A.Alshehri, Kh.I.Hussein, El S.Yousef,
Enhanced Emission of Tellurite Glass Doped with Pr³⁺/Ho³⁺ and Their Applications.
Materials **16**₃ (2023) # 925 (15). [\[DOI\]](#)
35. E.Cako, Sz.Dudziak, **P. GŁUCHOWSKI**, G.Trykowski, M.Pisarek, A.Fiszka Borzyszkowska, K.Sikora, A.Zielińska-Jurek,
Heterojunction of (P, S) Co-coped g-C₃N₄ and 2D TiO₂ for Improved Carbamazepine and Acetaminophen Photocatalytic Degradation.
Sep. Purif. Technol. **311** (2023) # 123320 (18). [\[DOI\]](#)
36. N.G.Camparotto, G.R.Paixão, G.D.V.Brião, **R.L.OLIVEIRA**, P.Prediger, M.G.A.Vieira,
Comparative Effect of Mesoporous Carbon Doping on the Adsorption of Pharmaceutical Drugs in Water: Theoretical Calculations and Mechanism Study.
Environ. Toxicol. Pharmacol. **99** (2023) # 104105 (14). [\[DOI\]](#)
37. A.Carlotto, T.N.L.Tran, B.Babiarczuk, N.Bazzanella, A.Szczurek, S.Varas, J.Krzak, O.S.Bursi, D.Zonta, **A.ŁUKOWIAK**, G.C.Righini, M.Ferrari, S.M.Pietralunga, A.Chiasera,
Low Losses Er³⁺-Doped Flexible Planar Waveguide: Toward an All-Glass Flexible Planar Photonic System.
Ceram. Int. **49**₂₄ (2023) 41 217–21. [\[DOI\]](#)
38. **M. CHAIKA**, S.Balabanov, **W. STRĘK**,
Surface Related White Light Emission in Yb₂O₃ Transparent Nanoceramics.
Mat. Res. Bull. **157** (2023) # 112 011 (7). [\[DOI\]](#)
39. **M. CHAIKA**, G.Dovbeshko, **R. TOMALA**, **V. BOIKO**, **W. STRĘK**,
Surface Related NIR Laser Induced Anti-STOKES Emission from 2-D WS₂ and MoS₂.
Opt. Las. Techn. **162** (2023) # 109 320 (7). [\[DOI\]](#)
40. **M. CHAIKA**, **R. TOMALA**, **O. BEZKROVNYI**, **W. STRĘK**,
Influence of Nonradiative Relaxation on Laser-Induced White Emission Properties in Cr : YAG Nanopowders.
J. Lumin. **257** (2023) # 119 734 (6). [\[DOI\]](#)
41. **M. CHAIKA**, **R. TOMALA**, **O. BEZKROVNYI**, **W. STRĘK**,
Spectroscopic Properties of Cr, Yb : YAG Nanocrystals under Intense NIR Radiation.
Mat. Res. Bull. **163** (2023) # 112 201 (9). [\[DOI\]](#)
42. **M. CHAIKA**, **R. TOMALA**, **M. OLESZKO**, **W. STRĘK**,
Influence of Low Temperature on White Light Emission from Graphene-Based Microchip.
Физ. Низк. Темп. **49**₃ (2023) 360–64. Also in: *Low Temp. Phys.* **49**₃ (2023) 330–34. [\[DOI\]](#)
43. **N. CHARCZUK**, **N. NOWAK**, **R.J. WIGLUSZ**,
Synthesis and Investigation of Physicochemical Properties and Biocompatibility of Phosphate–Vanadate Hydroxyapatite Co-Doped with Tb³⁺ and Sr²⁺ Ions.
Nanomaterials **13**₃ (2023) # 457 (18). [\[DOI\]](#)
44. S.Chernii, M.Losytskyy, I.Tretyakova, M.Kharchuk, S.Vakarov, D.Kovalskyy, **YU.GERASYMCHUK**, V.Pekhnyo, V.Chernii, V.Kovalska[†],
Inhibition of Heat-Induced Protein Aggregation by Zirconium Phthalocyanines.
Proteins **91**₇ (2023) 890–903. [\[DOI\]](#)
45. **K.M. CIESIELSKI**, B.R.Ortiz, L.C.Gomes, V.Meschke, J.Adamczyk, T.L.Braden, **D. KACZOROWSKI**, E.Ertekin, E.S.Toberer,
Strong Scattering from Low-Frequency Rattling Modes Results in Low Thermal Conductivity in Antimonide Clathrate Compounds.
Chem. Mater. **35**₇ (2023) 2 918–35. [\[DOI\]](#)

46. **K. CIESIELSKI, K. SYNORADZKI, D. SZYMAŃSKI, K. Tobita, K. Berent, P. OBSTARCZYK, K. Kimura, D. KACZOROWSKI,**
Half-HEUSLER Phase TmNiSb under Pressure: Intrinsic Phase Separation, Thermoelectric Performance, and Structural Transition.
Sci. Rep. **13** (2023) # 1592 (14). [\[DOI\]](#)
47. **J. ĆWIK, YU. KOSHKID'KO, B. Weise, A. Czernuszewicz,**
High-Field Magnetic and Magnetocaloric Properties of Pseudo-binary $\text{Er}_{1-x}\text{Ho}_x\text{Ni}_2$ ($x = 0.25-0.75$) Solid Solutions.
J. Alloy. Compd. **968** (2023) # 172297 (9). [\[DOI\]](#)
48. T. Czujko, **D. GAJDA, M. Rindfleisch, M. BABIJ, A. ZALESKI,**
Effect of Low Annealing Temperature on the Critical-Current Density of 2% C-Doped MgB_2 Wires Used in Superconducting Coils with the Wind-and-React (W & R) Method — High-Field and High-Temperature Pinning Centers.
Materials **16**₁₈ (2023) # 6157 (15). [\[DOI\]](#)
49. N.S. Dhimi, V. Balédent, **O. BEDNARCHUK, D. KACZOROWSKI, S.R. Shieh, J.M. Ablett, J.-P. Rueff, J.P. Itié, C.M.N. Kumar, Y. Utsumi,**
Pressure Evolution of Electronic and Crystal Structure of Noncentrosymmetric EuCoGe_3 .
Phys. Rev. B **107** (2023) # 155119 (8). [\[DOI\]](#)
50. R. Diliautas, D. Karoblis, K. Mazeika, D. Baltrunas, G. Niaura, M. Talaikis, **A. ŁUKOWIAK, W. STRĘK, A. Zarkov, A. Kareiva,**
Structural, Morphological, and Magnetic Properties of Novel Sol–Gel Derived $\text{Bi}_{1-x}\text{Gd}_x\text{Fe}_{0.85}\text{Mn}_{0.15}\text{O}_3$ Solid Solutions.
J. Magn. Magn. Mater. **570** (2023) # 170498 (13). [\[DOI\]](#)
51. T.T. Doan, T.Q. Le, B.A. Tran, T.C.-T. Pham, R.T. Velpula, M.B.S. Muthu, H.P.T. Nguyen, **Q.T.H. VU, P.J. DEREŃ, H.-D. Nguyen,**
Highly Stable White Light Emission from III-Nitride Nanowire LEDs Utilizing Nanostructured Alumina-Doped Mn^{4+} and Mg^{2+} .
ACS Omega **8**₂ (2023) 2501–7. [\[DOI\]](#)
52. **D. DROZDOWSKI, K. Fedoruk, A. KABAŃSKI, M. MAĆZKA, A. Sieradzki, A. GAĞOR,**
Broadband Yellow and White Emission from Large Octahedral Tilting in (110)-Oriented Layered Perovskites: Imidazolium-Methylhydrazinium Lead Halides.
J. Mater. Chem. C **11**₁₄ (2023) 4907–15. [\[DOI\]](#)
53. **M. DUDEK, Z. KORCZAK, K. PROROK, O. BEZKROVNYI, LiNing Sun, M. SZALKOWSKI, A. BEDNARKIEWICZ,**
Understanding Yb^{3+} -Sensitized Photon Avalanche in Pr^{3+} Co-doped Nanocrystals: Modelling and Optimization.
Nanoscale **15**₄₆ (2023) 18613–23. [\[DOI\]](#)
54. A.J. Dyba, E. Wiącek, M. Nowak, **J. JANCZAK, K.P. Nartowski, D.E. Braun,**
Metronidazole Cocrystal Polymorphs with Gallic and Gentisic Acid Accessed through Slurry, Atomization Techniques, and Thermal Methods.
Cryst. Growth Des. **23**₁₁ (2023) 8241–60. [\[DOI\]](#)
55. K. Dyk, **V. KINZHYBALO, G. Czernel, W. Grudziński, Yu. Horak, S. Butenko, D.M. Kamiński,**
Solvent Induced Conformational Polymorphism.
Cryst Eng Comm **25**₆ (2023) 971–80. [\[DOI\]](#)
56. L. Dymińska, **J. HANUZA, J. JANCZAK, M. PTAK, R. LISIECKI,**
Spectroscopic and Optical Properties of 1,2,4-Triazolo[4,3-a]pyridin-3(2H)-one as a Component of Herbicides.
Spectrochim. Acta A **303** (2023) # 123141 (??). [\[DOI\]](#)

57. **K. ELŻBIECIAK-PIECKA, W.M. PIOTROWSKI, M.D.Dramicanin, Ł.MARCINIAK,**
Understanding the Power of Luminescence Ratiometric Thermal History Indicators Driven by Phase Transitions: The Case of Eu³⁺ Doped LaVO₄.
Dalton Trans. **52**₁₈ (2023) 6 077–84. [\[DOI\]](#)
58. **K. ELŻBIECIAK-PIECKA, M.Sójka, F.Tian, J.Li, E.Zych, Ł.MARCINIAK,**
The Comparison of the Thermometric Performance of Optical Ceramics, Microcrystals and Nanocrystals of Cr³⁺- Doped Gd₃Ga₅O₁₂ Garnets.
J. Alloy. Compd. **963** (2023) # 171 284 (??). [\[DOI\]](#)
59. P.Fałat, Min Ying Tsang, I.Maliszewska, Sz.J.Zelewski, **B. CICHY, T.Y*.Ohulchansky, M.Samoć, M.Nyk, D.Wawrzyńczyk,**
Enhanced Biocidal Activity of Pr³⁺-Doped Yttrium Silicates by Tm³⁺ and Yb³⁺ Co-doping.
Mater. Adv. **4**₂₂ (2023) 5 827–37. [\[DOI\]](#)
60. M.Falkowski, Z.Śniadecki, **T.J. BEDNARCHUK, A.Kowalczyk,**
Structural and Physical Properties of the II-Type Superconductor Nb₅Si₂B.
J. Appl.Phys. **133**₂₄ (2023) # 243 901 (9). [\[DOI\]](#)
61. **M. FANDZŁOCH, W. BODYLSKA, A.W.Augustyniak, K.Roszek, A.Jaromin, A.ŁUKOWIAK,**
Bioactive Nanoglasses and Xerogels (SiO₂–CaO and SiO₂–CaO–P₂O₅) as Promising Candidates for Biomedical Applications.
Ceram. Int. **49**₅ (2023) 7 438–51. [\[DOI\]](#)
62. **M. FANDZŁOCH, W. BODYLSKA, K.Roszek, D. SZYMAŃSKI, A.Jaromin, A.ŁUKOWIAK,**
Synthesis and Characterization of Sol–Gel-Derived SiO₂–CaO Particles: Size Impact on Glass (Bio)Properties.
Particle **40**₆ (2023) # 22 00184 (12). [\[DOI\]](#)
63. **M. FANDZŁOCH, W. BODYLSKA, J.Trzcińska-Wencel, P.Golińska, K.Roszek, J.Wiśniewska, M.Bartmański, A.Lewińska, A.Jaromin,**
Cu-HKUST-1 and Hydroxyapatite — The Interface of Two Worlds toward the Design of Functional Materials Dedicated to Bone Tissue Regeneration.
ACS Biomater. Sci. Eng. **9**₈ (2023) 4 646–53. [\[DOI\]](#)
64. YaGang Feng, GuiMin Chen, LiHao Guo, XinYou Huang, ZiYu Liu, Feng Tian, TengFei Xie, ZhengFa Dai, **D. HRENIAK, Jiang Li,**
Fabrication of Er : SrF₂ Transparent Ceramics by Air Pre-sintering and Hot Isostatic Pressing.
Opt. Mater. **142** (2023) # 114 009 (9). [\[DOI\]](#)
65. **A.FILATOVA-ZALEWSKA, Z. LITWICKI, A.JEŻOWSKI,**
Calculation of Thermal Conductivity of AlGa_N / Ga_N Superlattices.
phys. stat. solidi (b) **260**₇ (2023) # 22 00528 (5). [\[DOI\]](#)
66. E.Gacka, P.Kunicki, P.Łysik, K.Gajewski, P.Ciechanowicz, D.Pucicki, **D. MAJCHRZAK, T.Gotszalk, T.Piasecki, T.Busani, I.W.Rangelow, D. HOMMEL,**
Novel Type of Whisker-Tip Cantilever Based on Ga_N Microrods for Atomic Force Microscopy.
Ultramicroscopy **248** (2023) # 113 713 (8). [\[DOI\]](#)
67. **D. GAJDA, A.ZALESKI, M. BABI, D. SZYMAŃSKI, A.Morawski, M.Rindfleisch, D.Patel, Md Sh.A.Hossain,**
Influence of Bending and Heat Treatment under High Isostatic Pressure on Synthesis Reaction and Transport Critical Current Density in Isotopic IMD ¹¹MgB₂ 'Wind and React' Coils.
J. Alloy. Compd. **963** (2023) # 171 239 (??). [\[DOI\]](#)

68. **D. GAJDA, A. ZALESKI, A. Morawski, M. BABIŃ, D. SZYMAŃSKI, M. Rindfleisch, D. Patel, Md Sh. A. Hossain,**
Influence of Annealing Temperature and Isostatic Pressure on Microstructure and Superconducting Properties of Isotopic Mg¹¹B₂ Wires Fabricated by Internal Mg Diffusion Method.
J. Alloy. Compd. **933** (2023) # 167660 (12). [\[DOI\]](#)
69. G. Gajda, K. Filar, A. Morawski, R. Diduszko, T. Czujko, **D. GAJDA,**
Impact of Rare Earth Oxides Metal (Dy, Tb, Er, Eu, Sm) Admixtures on the Structure, Morphology, Pinning Centers and Critical Parameters of MgB₂ Materials Manufactured by Ambient Pressure Sintering and Hot Isostatic Pressure Processes.
Ceram. Int. **49**₂₂ (2023) 36 031–43. [\[DOI\]](#)
70. G. Gajda, K. Filar, A. Morawski, **D. GAJDA, P. Przystupski,**
The Effect of C and (Er, Sm, Eu)₂O₃ Doping and High Isostatic Pressing on Superconducting Properties of MgB₂ Phase and Volume of Cylindrical MgB₂ Ceramic Samples.
J. Alloy. Compd. **938** (2023) # 168526 (10). [\[DOI\]](#)
71. T. Gavrilko, I. Gnatyuk, V. Styopkin, N. Shcherban, **J. BARAN, M. DROZD,**
Molecular Dynamics and Thermo Physical Properties of Solid Catanionic Surfactants Composed of Octadecyltrimethylammonium Bromide and N-Alkanoic Acids..
J. Mol. Struct. **1284** (2023) # 135 436 (10). [\[DOI\]](#)
72. **A. GERUS, V. BOIKO, V. C. Ciaramitaro, M. L. Saladino, D. HRENIAK,**
Controlling a Defect Structure of the ZnGa₂O₄ : Cr³⁺ Spinel through Synthesis Parameters for Persistent Luminescence Optimization.
Mat. Res. Bull. **168** (2023) # 112 473 (13). [\[DOI\]](#)
73. **P. GŁUCHOWSKI, R. Nikonkov, D. Kujawa, W. STRĘK, T. Murauskas, A. Pakalniškis, A. Kareiva, A. Yaremkevych, O. Fesenko, A. Zhaludkevich, D. Karpinsky,**
Controlling the Magnetic Properties of La_{0.9}A_{0.1}Mn_{0.9}Cr_{0.1}O₃ (A : Li, K, Na) Powders and Ceramics by Alkali Ions Doping.
Magnetochemistry **9**₆ (2023) # 140 (13). [\[DOI\]](#)
74. **D. GNIDA, M. SZLAWSKA, M. DASZKIEWICZ,**
Multiple Phase Transitions and the Effect of Disorder in the Locally Noncentrosymmetric Ferromagnet URhGe₂.
Phys. Rev. B **108** (2023) # 235174 (9). [\[DOI\]](#)
75. **J. M. GONÇALVES, W. MIŚTA, P. WIEWIÓRSKI, M. STEFAŃSKI, R. TOMALA, W. STRĘK,**
Laser Induced Generation of Hydrogen by Using NdAlO₃ Nanocrystals as Photocatalysts in Alcohols.
Int. J. Hydrog. Energy **48**₆₁ (2023) 23 550–57. [\[DOI\]](#)
76. **J. M. GONÇALVES, M. STEFAŃSKI, R. TOMALA, A. MUSIAŁEK, W. STRĘK,**
Laser Induced White Emission Generation from La_{1-x}Nd_xAlO₃ Nanocrystals.
Dalton Trans. **52**₇ (2023) 2 073–79. [\[DOI\]](#)
77. **J. M. GONÇALVES, M. STEFAŃSKI, R. TOMALA, W. STRĘK,**
Bright Warm White Emission of Nd_{0.9}Yb_{0.1}AlO₃ Nanocrystals under High Power Density Infrared Excitation.
ECS J. Solid State Sci. Tech. **12** (2023) # 05 6002 (6). [\[DOI\]](#)
78. **J. M. GONÇALVES, M. STEFAŃSKI, R. TOMALA, W. STRĘK,**
Laser-Induced Broadband White Emission of NdAlO₃ Nanocrystals in Alcohols.
J. Phys. Chem. C **127**₃₁ (2023) 10157–63. [\[DOI\]](#)

79. **J.M. GONÇALVES, M. STEFAŃSKI, R. TOMALA, W. STRĘK,**
Laser Induced Emission of NdAlO₃ Nanocrystals in Vacuum, Air, and Liquid N₂.
 Физ. Низк. Темп. **49**₃ (2023) 365–67. Also in: *Low Temp. Phys.* **49**₃ (2023) 335–37. [DOI]
80. **J.Goszyk, M.ADASZYŃSKI, A.KABAŃSKI, M. PТАК, M. STEFAŃSKI, A.PIKUL, B.Sahraoui,**
M.Kusmierz, J.Myśliwiec, A.Szukalski,
Synthesis Route and Structural, Magnetic, Optical, and Non-linear Optical Properties of
Triboluminescent [Cu(NCS)(py)₂(PPh₃)] Complex.
Polyhedron **243** (2023) # 116545 (8). [DOI]
81. **A.GRABOWSKA, J. KOWALCZYK, R. TOMALA, M. PТАК, M. MAŁECKA, A.WĘDZYŃSKA,**
M. STEFAŃSKI, W. STRĘK, P. GŁUCHOWSKI,
Optimization of the Electrochemical Method of Obtaining Graphene Nanoplatelets (GNPs).
Materials **16**₆ (2023) # 2188 (14). [DOI]
82. **I.Gruss, J.Twardowski, M. SAMSEL-CZEKAŁA, J.Beznosiuk, Cz.Wandzel, K.Twardowska,**
R.J. WIGLUSZ,
The Isothermal BOLTZMANN–GIBBS Entropy Reduction Affects Survival of the Fruit Fly
Drosophila melanogaster.
Sci. Rep. **13** (2023) # 14166 (8). [DOI]
83. **L.D.Gulay, D. KACZOROWSKI,**
Crystal Structure and Low-Temperature Magnetic Properties of R₂Au₂Pb
(R = Y, La – Nd, Sm, Gd – Lu) Plumbides.
 Физ. Низк. Темп. **49**₃ (2023) 368–74. Also in: *Low Temp. Phys.* **49**₃ (2023) 338–44. [DOI]
84. **K.Gutmańska, P.Szweda, M. DASZKIEWICZ, T.Mazur, K.Szaciłowski, A.Ciborska, A.Dołęga,**
Silver(I) Complexes with Nitrile Ligands: New Materials with Versatile Applications.
Appl. Organomet. Chem. **37**₁₀ (2023) # e7207 (16). [DOI]
85. **G.Guy, M. SZLAWSKA, C.Prestipino, V.Dorcet, V.Demange, P.Fertey, D. KACZOROWSKI,**
M.Pasturel, A.PIKUL,
New Insights Into the Crystal Structure of UTE_{0.25}Ge₂ = U₄TEGe₈ (TE = Ru, Os) and
Ferromagnetic Properties of the Os-Bearing Uranium Germanide.
J. Solid State Chem. **319** (2023) # 123 795 (7). [DOI]
86. **K. HALUBEK-GŁUCHOWSKA, K.Gębczak, D. SZYMAŃSKI, M.H.Sapeta, E.Barg, A.ŁUKOWIAK,**
In vitro Evaluation of Bioactivity of SiO₂–CaO and SiO₂–CaO–P₂O₅ Glass Nanoparticles
Activated with Tm³⁺/Yb³⁺ Ions.
Ceram. Int. **49**₁₄ (2023) 24 506–16. [DOI]
87. **E.Hannachi, Y.Slimani, M.A.Almessiere, S.A.Alotaibi, L.V.Omelchenko, E.V.Petrenko, U.Kurbanov,**
F.Ben Azzouz, A.L.SOLOVJOV, A.Baykal,
YBCO Polycrystal Co-added with BaTiO₃ and WO₃ Nanoparticles: Fluctuation Induced
Conductivity and Pseudogap Studies.
Curr. Appl. Phys. **48** (2023) 70–78. [DOI]
88. **SiJie Hao, WenTao Jin, Z. BUKOWSKI†, ZhengWang Lin, YinGuo Xiao, YiXi Su,**
Canted Ferromagnetic Order in Nonsuperconducting Eu(Fe_{1-x}Ni_x)₂As₂.
Phys. Rev. B **107** (2023) # 01 4421 (8). [DOI]
89. **K.Helios T.J. BEDNARCHUK,**
Comment on “Design, synthesis and magneto-structural analysis of Cu(II)-coordination networks
sustained by N – H ⋯ O and O – H ⋯ O hydrogen bond” by A.Yadav et al., Polyhedron 222
(2022) #115 892.
Polyhedron **235** (2023) # 116248 (6). [DOI]
 For the commented art. see: *ibid.*, **222** (2022) # 115 892. [DOI]

90. Ch.Hernández-Álvarez, G.Brito-Santos, I.R.Martín, J.Sanchiz, K.Saidi, K.Soler-Carracedo, **Ł.MARCINIAK**, M.Runowski,
Multifunctional Optical Sensing Platform of Temperature, Pressure (Vacuum) and Laser Power Density: NaYF₄ : Gd³⁺, Yb³⁺, Er³⁺ Nanomaterial as Luminescent Thermometer, Manometer and Power Meter.
J. Mater. Chem. C **11**₃₀ (2023) 10 221–29. [\[DOI\]](#)
91. R.Idczak, **W. NOWAK**, B.Rusin, R.Topolnicki, T.Ossowski, **M. BABIŃ**, **A.PIKUŁ**,
Enhanced Superconducting Critical Parameters in a New High-Entropy Alloy Nb_{0.34}Ti_{0.33}Zr_{0.14}Ta_{0.11}Hf_{0.08}.
Materials **16**₁₇ (2023) # 5814 (16). [\[DOI\]](#)
92. E.Jach, **D.A.KOWALSKA**, M.A.Gusowski, **M. TRZEBIATOWSKA**, M.Krupiński, W.Medycycki,
J.Jędryka, P.Staniorowski, A.Cizman,
Dynamics of Organic Cations in Switchable Quinuclidinium Metal Chloride Dielectrics.
J. Phys. Chem. C **127**₅ (2023) 2 589–602. [\[DOI\]](#)
93. I.Jacukowicz-Sobala, E.Kociołek-Balawejder, E.Stanisławska, A.Seniuk, E.Paluch, **R.J. WIGLUSZ**,
E.Dworniczek,
Biocidal Activity of Multifunctional Cuprite-Doped Anion Exchanger – Influence of Bacteria Type and Medium Composition.
Sci. Tot. Environm. **891** (2023) # 164 667 (12). [\[DOI\]](#)
94. **J. JANCZAK**,
Ethylenediamine Control of the Supramolecular Chemistry of Magnesium Phthalocyanine.
Inorg. Chim. Acta **548** (2023) # 121 362 (12). [\[DOI\]](#)
95. **J. JANCZAK**,
Supramolecular Architecture and SHG Activity of Organic Crystals Formed between the Amidinothiourea and Nicotinic Acid.
J. Mol. Struct. **1273** (2023) # 134 385 (17). [\[DOI\]](#)
96. **J. JANCZAK**, T.Pačkowski, J.Gregoliński, J.Lisowski,
Hexanuclear and Octanuclear Metal Complexes of Octadecaazamacrocyclic Based on Diaminocyclohexane and Pyridine Units.
Polyhedron **244** (2023) # 116 628 (7). [\[DOI\]](#)
97. M.Jaworski, **A.CHUDZYŃSKA**, P.Mrowiński, J.Prażmowska-Czajka, W.Kijaszek, J.Grobe, S.Rodt,
S.Reitzenstein, G.Sek,
Xenon-Plasma Focused Ion Beam Processing of Photonic Microstructures with GaAs-Based Quantum Dots.
Opt. Mater. Express **13**₁₀ (2023) 2 845–56. [\[DOI\]](#)
98. **T. JEŚIAK**, M.Hasiak, A.Łaszcz, J.Chećmanowski, **YU. GERASYMCHUK**, **P. STACHOWIAK**,
W. STREK, **D. HRENIAK**,
Thermo-Smart Composite Materials: Exploring the Potential of Graphene-Doped Porous Silica Foams.
Constr. Build. Mater. **394** (2023) # 132 249 (8). [\[DOI\]](#)
99. G.L.Jimenez, **R. LISIECKI**, B.Starzyk, C.Vazquez-Lopez, M.Lesniak, M.Szumera, P.Szymczak,
M.Kochanowicz, D.Dorosz,
Temperature Sensing Properties of Upconverted-Emission Materials Based on a Fluoroindate Glass Matrix.
Sens. Actuat. A **357** (2023) # 114 367 (7). [\[DOI\]](#)
100. D.A.Johnson, **J.M. REEKS**, A.J.Caron, Sh.M.McGillivray, **R.J. WIGLUSZ**, Yu.M.Strzhemechny,
Surface Photovoltage Response of ZnO to Phosphate-Buffered Saline Solution with and without Presence of *Staphylococcus aureus*.
Nanomaterials **13**₁₀ (2023) # 1652 (13). [\[DOI\]](#)

101. **J. JURASZEK**, M.Konczykowski, **D. KACZOROWSKI**, **T. CICHOREK**,
Temperature Dependence of the Lower Critical Field of the Noncentrosymmetric Superconductor α -BiPd.
phys. stat. solidi (R) **17**₃ (2023) # 22 00423 (6). [\[DOI\]](#)
102. **A. КАБАЊСКИ**, **М. ПТАК**, **Д. СТЕФАЊСКА**,
Metal–Organic Framework Optical Thermometer Based on Cr³⁺ Ion Luminescence.
ACS Appl.Mater. Interf. **15**₅ (2023) 7 074–82. [\[DOI\]](#)
103. A.P.Kamantsev, **YU.S. KOSHKID’KO**, E.O.Bykov, T.Gottschall, A.G.Gamzatov, A.M.Aliev,
A.G.Varzaneh, P.Kameli,
Giant Irreversibility of the Inverse Magnetocaloric Effect in the Ni₄₇Mn₄₀Sn_{12.5}Cu_{0.5} HEUSLER Alloy.
Appl. Phys. Lett. **123**₂₀ (2023) # 20 2405 (6). [\[DOI\]](#)
104. A.P.Kamantsev, **YU.S. KOSHKID’KO**, R.Yu.Gaifullin, I.I.Musabirov, A.V.Koshelev, A.V.Mashirov,
V.V.Sokolovskiy, V.D.Buchelnikov, **J. ĆWIK**, V.G.Shavrov,
Inverse Magnetocaloric Effect in HEUSLER Ni_{44.4}Mn_{36.2}Sn_{14.9}Cu_{4.5} Alloy at Low Temperatures.
Metals **13**₁₂ (2023) # 1985 (14). [\[DOI\]](#)
105. А.П.Каманцев, А.А.Амиров, Д.М.Юсупов, Л.Н.Бутвина, **YU.S. KOSHKID’KO**,
А.В.Головчан, В.И.Вальков, А.М.Алиев, В.В.Коледов, В.Г.Шавров,
Современные бесконтактные оптические методы измерения магнитокалорического эффекта. [Advanced Non-Contact Optical Methods for Measuring the Magnetocaloric Effect.]
Физ. Мет. Металловед. **124**₁₁ (2023) 1025–43. Eng.in: *Phys. Met. Metallogr.* **124**₁₁ (2023) 1075–91.
[\[DOI\]](#)
106. K.Kamińska, D.Iwan, J.Trojnar, **M. DASZKIEWICZ**, J.E.Rode, J.Wojaczyński, E.Wojaczyńska,
Giant Irreversibility of the Inverse Magnetocaloric Effect in the Ni₄₇Mn₄₀Sn_{12.5}Cu_{0.5} HEUSLER Alloy.
Org. Biomol. Chem. **21**₄₆ (2023) 9 182–91. [\[DOI\]](#)
107. N.Kanagathara, **M.K. MARCHEWKA**, M.Thirunavukkarasu, S.Selvaraj, **J. JANCZAK**, An-Ya Lo,
Structural and Vibrational Characterizations, DFT Calculations, Second Harmonic Generation, Molecular Docking Studies on L-Argininium 3,3-Dimethylacrylate.
Mater. Chem. Phys. **307** (2023) # 128166 (16). [\[DOI\]](#)
108. N.Kanagathara, N.Sivakumar, **M.K. MARCHEWKA**, **J. JANCZAK**, A.Alsulmi, V.Yogaraj,
E.Murugan,
Structure, Spectroscopic, Optical, Photoluminescence, and Thermal Characterization of 2-Amino 3-Picolinium Arsenate Crystalline Material.
J. Mater. Sci.: Mater. Electron. **34**₂₁ (2023) # 1573 (12). [\[DOI\]](#)
109. N.Kanagathara, V.J.Thanigaiarasu, V.Ragavendran, **M.K. MARCHEWKA**, L.Saravanan, A.-Y.Lo,
Quantum Computational Investigation into Structural, Spectroscopic, Topological and Electronic Properties of L-Histidinium-L-tartrate Hemihydrate: Nonlinear Optical Organic Single Crystal.
Heliyon **9**₄ (2023) # e14 879 (23). [\[DOI\]](#)
110. N.Kanagathara, M.Thirunavukkarasu, S.Selvaraj, A.R.Kumar, **M.K. MARCHEWKA**, **J. JANCZAK**,
Structural and Vibrational Characterizations, DFT Calculations, Second Harmonic Generation, Molecular Docking Studies on L-Argininium 3,3-Dimethylacrylate.
J. Mol. Liq. **385** (2023) # 122 315 (18). [\[DOI\]](#)
111. **Z. KORCZAK**, **M. DUDEK**, **M. MAJAK**, **M. MISIAK**, **Ł.MARCINIAK**, **M. SZALKOWSKI**,
A.BEDNARKIEWICZ,
Sensitized Photon Avalanche Nanothermometry in Pr³⁺ and Yb³⁺ Co-doped NaYF₄ Colloidal Nanoparticles.
Физ. Низк. Темп. **49**₃ (2023) 351–59. Also in: *Low Temp. Phys.* **49**₃ (2023) 322–29. [\[DOI\]](#)

112. **YU.S. KOSHKID'KO**, E.T.Dil'mieva, A.P.Kamantsev, A.V.Mashirov, **J. ĆWIK**, N.B.Kol'chugina, V.V.Koledov, V.G.Shavrov,
Magnetocaloric Materials for Low-Temperature Magnetic Cooling.
 Радиотехн. Электрон. **68**₄ (2023) ???-??. Englin: *J. Commun. Tech. Electron.* **68**₄ (2023) 379–88.
[\[DOI\]](#)
113. P.Kosior, S.Klimas, A.Nikodem, J.Wolicka, D.Diakowska, **A.WATRAS**, **R.J. WIGLUSZ**,
 M.Dobrzyński,
An *in vitro* Examination of Fluoride Ions Release from Selected Materials — Resin-Modified Glass-Ionomer Cement (Vitremex) and Nanohybrid Composite Material (Tetric EvoCeram).
Acta Bioeng. Biomech. **25**₁ (2023) 101–15. [\[DOI\]](#)
114. **R. KOSMAN**, D.Wawrzyńczyk, M.Nyk, M.Pawlyta, **O. BEZKROVNYI**, **B. CICHY**,
Zn, Cd and Hg Doping of AgInS₂ Quantum Dots – Efficient Strategy to Modify Nonlinear Absorption.
J. Mater. Chem. C **11**₃₁ (2023) 10 758–69. [\[DOI\]](#)
115. K.Krezhov, T.Koutzarova, B.Georgieva, S.Kolev, D.Kovacheva, B.Vertruyen, R.Closset, **L.M. TRAN**,
M. BABIJ, A.Senyshyn,
Influence of Nonmagnetic Cation Substitution on Magnetic Order Temperature in Y-Type Hexaferrites: Ba_{0.5}Sr_{1.5}Zn₂Fe₁₂O₂₂ and Ba_{0.5}Sr_{1.5}Zn₂Al_{0.08}Fe_{11.92}O₂₂.
EPJ Web Conf. **286** (2023) # 05 006 (8). [\[DOI\]](#)
 8th Eur.Conf.on Neutron Scattering (ECNS-2023) GARCHING, DE, 2023.03 20–23
116. A.I.Krivchikov, Y*.V.Horbatnko, O.A.Korolyuk, O.O.Romantsova, O.O.Kryvchikov, **D. SZEWCZYK**,
A.JEŻOWSKI,
Exponential Approximation of the Coherence Contribution to the Thermal Conductivity of Complex Clathrate-Type Crystals.
Materialia **32** (2023) # 101 944 (??). [\[DOI\]](#)
117. S.Lakhera, M.Rana, K.Devlal, N.Kanagathara, **J. JANCZAK**,
Photovoltaic Characteristics of Organic Heterocyclic 2,9-Dimethyl Quinacridone in Different Solvents Using DFT Approach.
J. Photochem. Photobiol. A **441** (2023) # 114 664 (??). [\[DOI\]](#)
118. **K. LEMAŃSKI**,
Tunable Phosphor Properties of the CaAl₂SiO₆ Polycrystals Doped with Chromium, Manganese and Vanadium Ions.
Solid State Sci. **144** (2023) # 107300 (8). [\[DOI\]](#)
119. A.Lemiere, **B. BONDZIOR**, L.Kuusela, A.Veber, L.Petit,
Spectroscopic Properties of Er³⁺- Doped Germanate Glasses Before and After a Heat Treatment Process.
Opt. Mater. Express **13**₁ (2023) 218–28. [\[DOI\]](#)
120. Fan Li, DeWei Zhao, Jian Liu, A.Kamantsev, E.Dilmieva, **YU. KOSHKID'KO**, Chunhui Zhu, Li Ma, CongMian Zhen, DengLu Hou,
Entropy Change of Magnetostructural Transformation and Magnetocaloric Properties in a Ni₅₀Mn_{18.5}Ga₂₅Cu_{6.5} HEUSLER Alloy.
Mat. Res. Bull. **158** (2023) # 112 050 (6). [\[DOI\]](#)
121. TingSong Li, Qiang Liu, DanYang Zhu, PengHui Chen, YanQiu Jing, JunLin Wu, HaoHong Chen,
D. HRENIAK, M.Nikl, Jiang Li,
Fabrication and Characterizations of Eu²⁺–Dy³⁺ Co-doped SrAl₂O₄ Ceramics with Persistent Luminescence.
J. Am. Ceram. Soc. **106**₁₀ (2023) 5 877–86. [\[DOI\]](#)

122. Hao Liang, D.Patel, M.Shahbazi, A.Morawski, **D. GAJDA**, M.Rindfleisch, R.Taylor, Y.Yamauchi, MdSh.A.Hossain,
Recent Progress in MgB2 Superconducting Joint Technology. [Review]
J. Magnes. All. **11**₇ (2023) 2 217–29. [DOI]
123. W.M.Linhart, M.Rybak, M.Birowska, P.Scharoch, K.Mosina, V.Mazanek, **D. KACZOROWSKI**, Z.Sofer, R.Kudrawiec,
Optical Markers of Magnetic Phase Transition in CrSBr.
J. Mater. Chem. C **11**₂₅ (2023) 8 423–30. [DOI]
124. K.Lis, **K. PLACEK**, S.Diplas, M.F.Sunding, S.M.Gorantla, G.Gryglewicz, A.Bachmatiuk,
Effect of Graphene Coatings on the Morphology of Submillimeter Thin Copper Wires after Salt Spray Aging.
J. Coat. Tech. Res. **20**₆ (2023) 1913–21. [DOI]
125. **R. LISIECKI, J. KOMAR, B. MACALIK, A.STRZĘP**, M.Berkowski, **W. RYBA-ROMANOWSKI**,
Exploring the Impact of Structure-Sensitive Factors on Luminescence and Absorption of Trivalent Rare Earth Embedded in Disordered Crystal Structures of Gd₃Ga₅O₁₂–Gd₃Al₅O₁₂ and Lu₂SiO₅–Gd₂SiO₅ Solid Solution Crystals.
Физ. Низк. Темп. **49**₃ (2023) 338–44. Also in: *Low Temp. Phys.* **49**₃ (2023) 310–15. [DOI]
126. **R. LISIECKI, B. MACALIK, J. KOMAR**, M.Berkowski, **W. RYBA-ROMANOWSKI**,
Impact of Temperature on Optical Spectra and Up-Conversion Phenomena in (Lu_{0.3}Gd_{0.7})₂SiO₅ Crystals Single Doped with Er³⁺ and Co-doped with Er³⁺ and Yb³⁺.
J. Lumin. **254** (2023) # 119 495 (12). [DOI]
127. **R. LISIECKI, B. MACALIK, J. KOMAR, R. KOWALSKI, A.STRZĘP**, Z.Zhang, Z.Zhang, Y.Wang, L.Su, **W. RYBA-ROMANOWSKI**,
Effects of Temperature on Factors Relevant to Laser Operation Near 1.6 μ Wavelength in Resonantly (in-band) Pumped CaF₂ : Er and SrF₂ : Er Crystals: A Comparative Study.
Appl. Phys. B **129**₈ (2023) # 134 (10). [DOI]
128. Ziyu Liu, Yagang Feng, HaoHong Chen, G.Toci, A.Pirri, B.Patrizi, **D. HRENIAK**, M.Vannini, Jiang Li,
Microstructure and Properties Characterization of Yb : Lu₂O₃ Transparent Ceramics from Co-precipitated Nano-powders.
Int. J. Appl. Ceram. Technol. **20**₆ (2023) 3365–75. [DOI]
129. A.Lubojański, D.Piesiak-Panczyszyn, W.Zakrzewski, W.Dobrzyński, M.Szymonowicz, Z.Rybak, B.Mielan, **R.J. WIGLUSZ, A.WATRAS, M. DOBRZYŃSKI**,
The Safety of Fluoride Compounds and Their Effect on the Human Body — A Narrative Review.
Materials **16**₃ (2023) # 1242 (20). [DOI]
130. **K. MACIEJEWSKA, Ł.MARCINIAK**,
The Role of Nd³⁺ Concentration in the Modulation of the Thermometric Performance of STOKES / anti-STOKES Luminescence Thermometer in NaYF₄ : Nd³⁺.
Sci. Rep. **13** (2023) # 472 (8). [DOI]
131. **K. MACIEJEWSKA, A.PAŚCIAK**, M.Szalkowski, **M. PTAK, A.BEDNARKIEWICZ, Ł.MARCINIAK**,
Two-Dimensional Photo-Thermo-Polimerisation of MMA with Cr³⁺ Doped Nanoheaters.
Mater. Res. Bull. **160** (2023) # 112 119 (7). [DOI]
132. **K. MACIEJEWSKA, A.PAŚCIAK, M. SZYMCZAK, K. LEDWA, A.BEDNARKIEWICZ, Ł.MARCINIAK**,
Bimodal Role of Cr³⁺ Ions: The Nanoscaled Photothermal Agent and Luminescence Thermometry.
Mater. Today Chem. **30** (2023) # 101 579 (8). [DOI]

133. K. MACIEJEWSKA, P.Szklarz, A.BEDNARKIEWICZ, M.D.Dramićanin, Ł.MARCINIAK,
Thermally-Induced Structural Phase Transition in Rare Earth Orthophosphate Nanocrystals for Highly Sensitive Thermal History Paints.
J. Alloy. Compd. **935**, Pt 1 (2023) # 168 064 (??). [\[DOI\]](#)
134. M. MAĆZKA, D. DROZDOWSKI, D. STEFAŃSKA, A.GĄGOR,
Zero-Dimensional Mixed-Cation Hybrid Lead Halides with Broadband Emissions.
Inorg. Chem. Front. **10**₂₄ (2024) 7222–30. [\[DOI\]](#)
135. M. MAĆZKA, M. PTAK, A.GĄGOR, J.K.Zaręba, Xia Liang, S.Balčiūnas, O.A.Semenikhin, O.I.Kucheriv, I.A.Gural'skiy, S.Shova, A.Walsh, J.Banyas, M.Šimėnas,
Phase Transitions, Dielectric Response, and Nonlinear Optical Properties of Aziridinium Lead Halide Perovskites.
Chem. Mater. **35**₂₂ (2023) 9 725–38. [\[DOI\]](#)
136. M. MAĆZKA, D.L.M.Vasconcelos, P.T.C.Freire,
RAMAN Study of Pressure-Induced Phase Transitions in Imidazolium Manganese-Hypophosphite Hybrid Perovskite.
Spectrochim. Acta A **298** (2023) # 122 768 (??). [\[DOI\]](#)
137. J.Mierziak, W.Wojtasik, A.Kulma, M.Żuk, M.Grajzer, A.Boba, L.Dymińska, J. HANUZA, J.Szperlik, J.Szopa,
Overexpression of Bacterial Beta-Ketothiolase Improves Flax (*Linum usitatissimum* L.) Retting and Changes the Fibre Properties.
Metabolites **13**₃ (2023) # 437 (24). [\[DOI\]](#)
138. G.P.Mikitik, YU.V.SHARLAI,
Low-Frequency Quantum Oscillations in LaRhIn₅ : DIRAC Point or Nodal Line?
Nat. Commun. **14**₁ (2023) # 2060 (9). [\[DOI\]](#)
139. N. MINIAJLUK-GAWEŁ, B. BONDZIOR, V. KINZHYBALO, M. PTAK, T.H.Q. VU, P.J. DEREŃ,
A New Look at the Explanation of Differences in Properties between La³⁺ and Lu³⁺ Titanate Hosts Occupied by Eu³⁺.
J. Phys. Chem. C **127**₁₈ (2023) 8 680–86. [\[DOI\]](#)
140. N. MINIAJLUK-GAWEŁ, B. BONDZIOR, M.Podgórnny, P.J. DEREŃ,
Spectacular Enhancement of Pr³⁺ Emission in a Highly Symmetric Ba₂MgWO₆ Matrix.
J. Phys. Chem. C **127**₄₂ (2023) 20 794–801. [\[DOI\]](#)
141. M. MISIAK, O. PAVLOSIUK, M. SZALKOWSKI, A.KOTULSKA, K. LEDWA, A.BEDNARKIEWICZ,
On the Role of Gd³⁺ Ions in Enhancement of UV Emission from Yb³⁺–Tm³⁺ Up-converting LiYF₄ Nanocrystals.
Nanotechnology **34** (2023) # 34 5702 (14). [\[DOI\]](#)
142. W. MIŚTA, G. DOVBESHKO, M. CHAIKA, P. WIEWIÓRSKI, M. PTAK, V. BOIKO, W. STRĘK,
Ultrathin Graphitic Carbon Nitride (g-C₃N₄) Nanosheets: Synthesis, Properties, and Photocatalytic Application.
Физ. Низк. Темп. **49**₃ (2023) 323–28. Also in: *Low Temp. Phys.* **49**₃ (2023) 296–301. [\[DOI\]](#)
143. B.Z.Momeni, N.Fathi, M.Kharradpour, A.Biglari, J. JANCZAK, R.Samei,
Supramolecular Architectures of Dimethyltin(IV) Isothiocyanate Compounds Containing Diimine Ligands: Structural Phase Transition and Thermal Properties.
J. Mol. Struct. **1290** (2023) # 135 915 (12). [\[DOI\]](#)

144. B.Z.Momeni, S.F.Hosseini, **J. JANCZAK**,
New Supramolecular Architectures of 4'-(4-Quinolyl)-2, 2' : 6', 2''-Terpyridine Based on Tin Complexes: Design, Structural Variations and Thermal Properties.
J. Mol. Struct. **1279** (2023) # 135 038 (12). [\[DOI\]](#)
145. B.Z.Momeni, S.Karimi, **J. JANCZAK**,
Penta-Coordinated Cr(II) and Cu(II) Complexes Appended with 4' – (4–Quinolyl) – 2, 2' : 6', 2'-terpyridine: Crystal Structure, HIRSHFELD Surface Analysis, Luminescence and Thermal Properties.
J. Mol. Struct. **1273** (2023) # 134 245 (10). [\[DOI\]](#)
146. K.Musioł, **J. JANCZAK**, K.Helios, M.Witwicki, M.Fitta, R.Pelka, A.Wojciechowska,
Copper(II) Coordination Polymer Based on L-Arginine as a Supramolecular Hybrid Inorganic–Organic Material: Synthesis, Structural, Spectroscopic, and Magnetic Properties.
Res. Chem. Intermed. **49**₈ (2023) 3563–87. [\[DOI\]](#)
147. M.Najafi, **J. JANCZAK**,
A New 2D Coordination Polymer as Bifunctional Heterogeneous Catalyst for Tandem Deacetalization-KNOEVENAGEL Reaction.
Appl. Organomet. Chem. **37**₁₀ (2023) # e7229 (9). [\[DOI\]](#)
148. A.Nejadsalim, N.Bashiri, H.R.Godini, **R.L.OLIVEIRA**, A.T.Shah, M.F.Bekheet, A.Thomas, R.Schomäcker, A.Gurlo, O.Görke,
Core–Sheath Pt–CeO₂ / Mesoporous SiO₂ Electrospun Nanofibers as Catalysts for the Reverse Water Gas Shift Reaction.
Nanomaterials **13**₃ (2023) # 485 (20). [\[DOI\]](#)
149. T.T. Ha Nguyen, M. SAHAKYAN, V.H. TRAN,
The Study of Electronic Structure and Optical Properties of Ba₂MnWO₆ within Density Functional Theory.
Физ. Низк. Темп. **49**₃ (2023) 300–7. Also in: *Low Temp. Phys.* **49**₃ (2023) 274–81. [\[DOI\]](#)
150. T.T. Ha Nguyen, M. SAHAKYAN, V.H. TRAN,
Structural and Electronic Properties of Ba₂TiMnO₆ from First Principles.
J. Magn. Magn. Mater. **587** (2023) # 171 274 (4). [\[DOI\]](#)
151. V.I. NIZHANKOVSKIY,
Influence of Temperature and Magnetic Field on Optical Absorption Spectra of Nd³⁺-Doped Gd₃Ga₅O₁₂.
J. Lumin. **263** (2023) # 120 025 (5). [\[DOI\]](#)
152. W.Nowak, M. BABIŃ, A.Hanc-Kuczkowska, P.Sobota, A.PIKUL, R.Idczak,
Effect of the Presence of Structural Defects on the Superconducting Properties of (NbTa)_{0.67}(MoHfW)_{0.33} and Nb–47 wt/%Ti.
Metals **13**₁₀ (2023) # 1779 (12). [\[DOI\]](#)
153. P. NOWAKOWSKA, O. PAVLOSIUK, P. WIŚNIEWSKI, D. KACZOROWSKI,
Temperature-Dependent FERMI Surface Probed by SHUBNIKOV–DE HAAS Oscillations in Topological Semimetal Candidates DyBi and HoBi.
Sci. Rep. **13** (2023) # 22 776 (9). [\[DOI\]](#)
154. M. OLESZKO, A.Felix, R. TOMALA, M. CHAIKA, W. STRĘK,
Influence of Vacuum Level on Laser Induced White Emission of Graphene Foam.
Appl. Phys. Lett. **122**₂₂ (2023) # 22 1901 (4). [\[DOI\]](#)
155. **R.L.OLIVEIRA**, K.A.LEDWA, O.Chernyayeva, S.Praetz, C.Schlesiger, L.KĘPIŃSKI,
Cerium Oxide Nanoparticles Confined in Doped Mesoporous Carbons: A Strategy to Produce Catalysts for Imine Synthesis.
Inorg. Chem. **62**₃₃ (2023) 13 554–65. [\[DOI\]](#)

156. **R.L. OLIVEIRA**, M. Pisarek, **K.A. LEDWA**, G. Pasternak, **L. KĘPIŃSKI**,
Enhanced Activation of Persulfate Improves the Selective Oxidation of Alcohols Catalyzed by Earth-Abundant Metal Oxides Embedded on Porous N-Doped Carbon Derived from Chitosan.
React. Chem. Eng. **8**₅ (2023) 1061–71. [DOI]
157. I.V. Ovsienko, T.A. Len, I.G. Mirzoiev, E.Yu. Belayev, **D. GNIDA**, L.Yu. Matzui, V.M. Heraskevych,
Low-Temperature Magnetoresistance of Functionalized Multiwall Carbon Nanotubes.
Физ. Низк. Темп. **49**₁ (2023) 17–33. Engl.in: *Low Temp. Phys.* **49**₁ (2023) 15–29. [DOI]
158. B.V. Padlyak, I.I. Kindrat, Yu.O. Kulyk, Yu.S. Hordieiev, V.I. Goleus, **R. LISIECKI**,
Structural Features and Optical-Luminescent Properties of the Pb-Containing Germanate and Silicate Oxyfluoride Glasses.
Mater. Sci. Eng. B **293** (2023) # 116 460 (12). [DOI]
159. B.V. Padlyak, I.I. Kindrat, Y.O. Kulyk, Y.S. Hordieiev, V.I. Goleus, **R. LISIECKI**,
Spectroscopy and Photoluminescence of Complex Lead-Silicate Glass Doped with Copper.
Mat. Res. Bull. **158** (2023) # 112 071 (11). [DOI]
160. E. Paluch, A. Seniuk, G. Plesh, J. Widelski, **D. SZYMAŃSKI**, **R.J. WIGLUSZ**, M. Motola, E. Dworniczek,
Mechanism of Action and Efficiency of Ag₃PO₄-Based Photocatalysts for the Control of Hazardous Gram-Positive Pathogens.
Int. J. Mol. Sci. **24**₁₇ (2023) # 13553 (16). [DOI]
161. O.R. Parkhomey, V.D. Klipov, O.E. Sych, **N.D. PINCHUK**, T.V. Tomila, O.I. Bykov, A.O. Synytsia,
Comparative Study of the Structure and Properties of Composite Materials Produced from Hydroxyapatite Glass Ceramics and Carbon Fibers of Different Types.
Порошк. Металл. **62**_{3/4} (2023) ???–??.
Engl.in: *Powd. Metall. Met. Ceram.* **62**_{3/4} (2023) 203–14. [DOI]
162. **A. PAŚCIAK**, M. Misiak, **K. TREJGIS**, **K. ELŻBIECIAK-PIECKA**, **O. BEZKROVNYI**,
Ł. MARCINIAK, **A. BEDNARKIEWICZ**,
Highly-Doped Lanthanide Nanomaterials for Efficient Photothermal Conversion — Selection of the Most Promising Ions and Matrices.
J. Alloy. Compd. **934** (2023) # 167900 (11). [DOI]
163. A.J. Pelczarska, **D. STEFAŃSKA**, **A. KABAŃSKI**, M. Ptak, **R. LISIECKI**, I. Szczygieł, **J. HANUZA**,
Structural and Optical Properties of a New Structural Modification of Na_{3+3x}Yb_{2-x}(PO₄)₃ : 1% Eu Phosphate, where x = 0.1 – 0.5 and Prospective Thermometric Applications of the Compound.
J. Alloy. Compd. **944** (2023) # 169228 (11). [DOI]
164. A. Piecuch, **S. TARGOŃSKA**, **J. REWAK-SORCZYŃSKA**, R. Ogórek, **R.J. WIGLUSZ**,
New Silicate-Substituted Hydroxyapatite Materials Doped with Silver Ions as Potential Antifungal Agents.
BMC Microbiol. **23**₁ (2023) # 193 (10). [DOI]
165. **A.M. PIEKARSKA**, **T.K. KOPEĆ**,
Reentrant Phase Transitions Involving Glassy and Superfluid Orders in the Random Hopping BOSE–HUBBARD Model.
Physica A **609** (2023) # 128360 (8). [DOI]
166. M. PIEPRZ, M. Runowski, P. Woźny, J. Xue, **Ł. MARCINIAK**,
Temperature Invariant Lifetime Based Luminescent Manometer on Mn⁴⁺ Ions.
J. Mater. Chem. C **11**₃₃ (2023) 11 353–60. [DOI]
167. D. Piesiak-Panczyszyn, **A. WATRAS**, **R.J. WIGLUSZ**, M. Dobrzyński,
In vitro Comparison of the Fluoride Ion Release from the First- and Second-Generation Fluoride Varnishes.
Appl. Sci. (Basel) **13**₁₂ (2023) # 7327 (12). [DOI]

168. B. Pilarek, M. PTAK, R. LISIECKI, L. MACALIK, SZ. SMÓŁKA, I. Szczygieł, J. HANUZA, **Structural, Vibrational, and Luminescence Properties of Nd³⁺ Ions in New Ca₄Ln₃NbSO₂₁ (Ln = La_{0.99}Nd_{0.01}, Nd, Gd_{0.99}Nd_{0.01}) Niobate: Prospective Laser Material.** *J. Alloy. Compd.* **941** (2023) # 168 805 (14). [\[DOI\]](#)
169. N.D. PINCHUK, A. PAŚCIAK, G. PAŚCIAK, P. SOBIERAJSKA, J. CHMIELOWIEC, O. BEZKROVNYI, P. KRASZKIEWICZ, R.J. WIGLUSZ, **Photothermal Conversion Efficiency of Silver and Gold Incorporated Nanosized Apatites for Biomedical Applications.** *ACS Omega* **8**₄₄ (2023) 41 302–9. [\[DOI\]](#)
170. W.M. PIOTROWSKI, P. Bolek, M.G. Brik, E. Zych, Ł. MARCINIAK, **Frontiers of Deep-Red Emission of Mn⁴⁺ Ions with RUDDLESDEN–POPPER Perovskites.** *Inorg. Chem.* **62**₅₁ (2023) 21 164–72. [\[DOI\]](#)
171. W.M. PIOTROWSKI, M. KARDACH, P. SOBIERAJSKA, A. WATRAS, J.M. REEKS, V. KINZHYBALO, Ł. MARCINIAK, R.J. WIGLUSZ, **Tunable Luminescence Thermal Stability in YV_xAs_{1-x}O₄ : Eu³⁺ through the Introduction of As⁵⁺ Ions for Remote Temperature Sensing Applications.** *J. Mater. Chem. C* **11**₄ (2023) 1418–28. [\[DOI\]](#)
172. W.M. PIOTROWSKI, V. KINZHYBALO, Ł. MARCINIAK, **Revisiting Y₃Al_{5-x}Ga_xO₁₂ Solid Solutions Doped with Chromium Ions: Effect of Local Symmetry on Thermal Quenching of Cr³⁺ and Cr⁴⁺ Ions.** *ECS J. Solid State Sci. Tech.* **12** (2023) # 06 6003 (8). [\[DOI\]](#)
173. W.M. PIOTROWSKI, K. KNIEĆ-STEC, M. Suta, B. Bogielski, B. Poźniak, Ł. MARCINIAK, **Positive Luminescence Thermal Coefficient of Mn²⁺ Ions for Highly Sensitive Luminescence Thermometry.** *Chem. Eng. J.* **464** (2023) # 142 492 (11). [\[DOI\]](#)
174. W.M. PIOTROWSKI, K. MACIEJEWSKA, Ł. MARCINIAK, **Boosting the Thermometric Performance of the Nd³⁺, Er³⁺-Based Luminescence Thermometers by Sensitization via Cr³⁺ Ions: The Role of the Host Material.** *Mater. Today Chem.* **30** (2023) # 101 591 (9). [\[DOI\]](#)
175. W.M. PIOTROWSKI, R. Marin, M. SZYMCZAK, E. Martín Rodríguez, D.H. Ortgies, P. Rodríguez-Sevilla, P. Bolek, M.D. Dramićanin, D. Jaque, Ł. MARCINIAK, **Critical Evaluation of the Thermometric Performance of Ratiometric Luminescence Thermometers Based on Ba₃(VO₄)₂ : Mn⁵⁺, Nd³⁺ for Deep-Tissue Thermal Imaging.** *J. Mater. Chem. C* **11**₂₀ (2023) 6 713–23. [\[DOI\]](#)
176. W.M. PIOTROWSKI, R. Marin, M. SZYMCZAK, E. Martín-Rodríguez, D.H. Ortgies, P. Rodríguez-Sevilla, M.D. Dramićanin, D. Jaque, Ł. MARCINIAK, **Mn⁵⁺ Lifetime-Based Thermal Imaging in the Optical Transparency Windows through Skin-Mimicking Tissue Phantom.** *Adv. Opt. Mater.* **11**₃ (2023) # 220 2366 (12). [\[DOI\]](#)
177. M. PTAK, B. Dziuk, S. SMÓŁKA, J. OSMÓLSKA, M. STEFAŃSKI, A. ŁUKOWIAK, A. Sieradzki, **Influence of Bromination on the Phase Transitions, Structural, Phonon, and Optical Properties Explored for 2-Bromoethylammonium Bismuth Bromide.** *J. Phys. Chem. C* **127**₄₅ (2023) 22 204–11. [\[DOI\]](#)
178. M. PTAK, P. SOLARZ, E. Tomaszewicz, L. MACALIK, SZ. SMÓŁKA, J. HANUZA, **Structural, Optical, and Phonon Characteristics of Lead Molybdate-Tungstate Solid Solution Doped with Pr³⁺ Ions.** *J. Lumin.* **254** (2023) # 119 509 (8). [\[DOI\]](#)

179. J.Rajewska, J.Kowalski, J.Matys, M.Dobrzyński, **R.J. WIGLUSZ**,
The Use of Lactide Polymers in Bone Tissue Regeneration in Dentistry – A Systematic Review.
J. Funct. Biomater. **14**₂ (2023) # 83 (20). [\[DOI\]](#)
180. D.Ram, S.Malick, Z.Hossain, **D. KACZOROWSKI**,
Magnetic, Thermodynamic, and Magnetotransport Properties of CeGaGe and PrGaGe Single Crystals.
Phys. Rev. B **108** (2023) # 02 4428 (8). [\[DOI\]](#)
181. D.Ram, J.Singh, M.K.Hooda, **O. PAVLOSIUK**, V.Kanchana, Z. HOSSAIN, **D. KACZOROWSKI**,
Electronic Structure and Physical Properties of the Candidate Topological Material GdAgGe.
Phys. Rev. B **107** (2023) # 08 5137 (8). [\[DOI\]](#)
182. D.Ram, J.Singh, M.K.Hooda, K.Singh, V.Kanchana, **D. KACZOROWSKI**, Z.Hossain,
Multiple Magnetic Transitions, Metamagnetism, and Large Magnetoresistance in GdAuGe Single Crystals.
Phys. Rev. B **108** (2023) # 23 5107 (10). [\[DOI\]](#)
183. Z.Razmara, S.Shahraki, **J. JANCZAK**,
Single Crystal Structure Feature of a New 1D-Coordination Polymer of Mn(II): Antioxidant Activity and Protective Effects on BLC (both in Enzyme Activity and in Structure).
Polyhedron **240** (2023) # 116 455 (10). [\[DOI\]](#)
184. S.Regmi, I.Bin Elius, A.P.Sakhya, D.Jeff, M.Sprague, M.I.Mondal, D.Jarrett, N.Valadez, A.Agosto, **T. ROMANOVA**, J.-H.Chu, S.I.Khondaker, A.Ptok, **D. KACZOROWSKI**, M.Neupane,
Observation of Momentum-Dependent Charge Density Wave Gap in a Layered Antiferromagnet GdTe₃.
Sci. Rep. **13** (2023) # 18 618 (9). [\[DOI\]](#)
185. S.Regmi, R.Smith, A.P.Sakhya, M.Sprague, M.I.Mondal, I.B.Elius, N.Valadez, A.Ptok, **D. KACZOROWSKI**, M.Neupane,
Observation of Gapless Nodal-Line States in NdSbTe.
Phys. Rev. Mater. **7**₄ (2023) # 04 4202 (9). [\[DOI\]](#)
186. **P. REJNHARDT**, **M. DASZKIEWICZ**,
Anisotropy of Thermal Expansion and Compressibility of Non-centrosymmetric (H₃AmGP)SiF₆.
Физ. Низк. Темп. **49**₃ (2023) 345–50. Also in: *Low Temp. Phys.* **49**₃ (2023) 316–21. [\[DOI\]](#)
187. **P. REJNHARDT**, J.K.Zaręba, A.Katrusiak, **M. DASZKIEWICZ**,
Deuteration-Enhanced Negative Thermal Expansion and Negative Area Compressibility in a Three-Dimensional Hydrogen Bonded Network.
Chem. Mater. **35**₁₃ (2023) 5 160–67. [\[DOI\]](#)
188. G.C.Righini, C.Armellini, M.Ferrari, A.Carlotto, A.Carpentiero, A.Chiappini, A.Chiasera, **A. ŁUKOWIAK**, T.N.L.Tran, S.Varas,
Sol–Gel Photonic Glasses: From Material to Application.
Materials **16**₇ (2023) # 2724 (22). [\[DOI\]](#)
189. **K. ROGACKI**, **A. LOS**, B.Dabrowski,
Raising Critical Currents in YBaCuO-Type High-Temperature Superconductors by Mo Substitution.
Физ. Низк. Темп. **49**₃ (2023) 397–407. Also in: *Low Temp. Phys.* **49**₃ (2023) 364–74. [\[DOI\]](#)
190. T.Rojek, K.Ślepokura, **V. KINZHYBALO**, M.Duczmal, A.Wojciechowska, E.Matczak-Jon,
Synthesis, Structural, Spectroscopic, and Magnetic Studies of Tetranuclear Ni(II) and Co(II) Clusters Based on Cyclobutyl and Cyclopentyl-Substituted Analogues of Zoledronic Acid.
Polyhedron **233** (2023) # 116 301 (14). [\[DOI\]](#)

191. S.R.A.Roshini, R.Maga, N.Kanagathara, **M.K. MARCHEWKA**, D.Jayalakshmi,
Growth and Property Analysis of an Organic Crystal from Aqueous Solution for Non-linear Optical Applicability: L-Arginium 3,3-Dimethylacrylate.
J. Mater. Sci.: Mater. Electron. **34**₁₁ (2023) # 996 (11). [\[DOI\]](#)
192. **M. ROWIŃSKA**, A.Piecha-Bisiorek, W.Medycki, P.Durlak, R.Jakubas, **A.GĄGOR**,
Structural, Electric and Dynamic Properties of (Pyrrolidinium)₃[Bi₂I₉] and (Pyrrolidinium)₃[Sb₂I₉] : New Lead-Free, Organic–Inorganic Hybrids with Narrow Band Gaps.
Molecules **28**₉ (2023) # 3894 (15). [\[DOI\]](#)
193. M.O.Różycka, K.Bielak, **M.,PTAK**, B.Jost, G.Melo Rodriguez, J.Schoelkopf, J.Stolarski, P.Dobryczycki, A.Ożyhar,
Cu-HKUST-1 and Hydroxyapatite — The Interface of Two Worlds toward the Design of Functional Materials Dedicated to Bone Tissue Regeneration.
Biomacromolecules **24**₉ (2023) 4 042–50. [\[DOI\]](#)
194. **W. RYBA-ROMANOWSKI**, **R. LISIECKI**, **J. KOMAR**, **B. MACALIK**, M.Berkowski,
Exploring Structure-Sensitive Factors Relevant to Cryogenic Laser Operation in Oxide Crystals Doped with Er³⁺ Ions.
Materials **16**₅ (2023) # 2095 (16). [\[DOI\]](#)
195. M.Safari, S.Sedghiniya, J.Soleimannejad, **J. JANCZAK**,
Efficient Modulation of a Barium Metal–Organic Framework Using Amino Acids.
Acta Cryst. B **79**₂ (2023) 114–21. [\[DOI\]](#)
196. E.Santos Magalhães, A.Sedda, **B. BONDZIOR**, S.Vuori, D.Van der Heggen, P.F.Smet, M.Lastusaari, L.Petit,
Glass-Based Composites Comprised of CaWO₄ : Yb³⁺, Tm³⁺ Crystals and SrAl₂O₄ : Eu²⁺, Dy³⁺ Phosphors for Green Afterglow after NIR Charging.
Ceram. Int. **49**₂₄, Pt B (2023) 41 150–57. [\[DOI\]](#)
197. W.Śasiadek, I.Bryndal, **M. PTAK**, **R. LISIECKI**, T.Lis, **J. HANUZA**,
Thione-Thiol Tautomerism in New 4-Methyl-3-nitopyridine Derivative in the Solid State – X-ray, Electron Absorption and Emission, IR and Raman Studies Discussed in Term of Quantum Chemical DFT Calculations.
J. Mol. Struct. **1286** (2023) # 135 531 (9). [\[DOI\]](#)
198. A.Sheykhi, A.A.Khandar, **J. JANCZAK**, M.Amini,
A New Binuclear Ni(II) Complex, an Effective A₃-Coupling Catalyst in Solvent-free Condition.
Heliyon **9**₇ (2023) # e17 743 (10). [\[DOI\]](#)
199. M.Sikora, D.Wojcieszak, **A.CHUDZYŃSKA**, A.Zięba,
Improved Methodology of Cross-Sectional SEM Analysis of Thin-Film Multilayers Prepared by Magnetron Sputtering.
Coatings **13**₂ (2023) # 316 (13). [\[DOI\]](#)
200. **K. SINGH**, **SH.DAN**, A.Ptok, **T.A.ZALESKI**, **O. PAVLOSIUK**, **P. WIŚNIEWSKI**, **D. KACZOROWSKI**,
Superexchange Interaction in Insulating EuZn₂P₂.
Phys. Rev. B **108** (2023) # 05 4402 (8). [\[DOI\]](#)
201. **A. ŚLEBARSKI**, J.Spalek, M.Fijałkowski,
Thermodynamic and Electrical Transport Properties of CeRhSb_{1-x}Te_x Systems: Transition from KONDO Insulating to the GRIFFITHS and Non-FERMI Liquid States.
J. Magn. Magn. Mater. **587** (2023) # 171 239 (9). [\[DOI\]](#)

202. **P. SOBIERAJSKA**, B.Wiatrak, P.Jawien, M.Janeczek, K.Wiglusz, A.Szeląg, **R.J. WIGLUSZ**,
Imatinib-Functionalized Galactose Hydrogels Loaded with Nanohydroxyapatite as a Drug Delivery System for Osteosarcoma: *In vitro* Studies.
ACS Omega **8**₂₀ (2023) 17 891–900. [DOI]
203. **P. SOBOTA**, R.Topolnicki, T.Ossowski, T.Pikula, **D. GNIDA**, R.Idczak, **A. PIKUL**,
Superconductivity in High-Entropy Alloy System Containing Th.
Sci. Rep. **13** (2023) # 16 317 (11). [DOI]
204. **P. SOLARZ**, M.Sobczyk, E.Beregi, **R. LISIECKI**, K.Lengyel, L.Kovács, **W.RYBA-ROMANOWSKI**,
VIS-VUV Spectroscopy of Heavily Tb and Eu Doped Gadolinium Aluminum Borate (GAB) Crystal.
J. Lumin. **257** (2023) # 119 717 (10). [DOI]
205. **A.L.SOLOVJOV**, L.V.Bludova, M.V.Shytov, S.N.Kamchatnaya, Z.F.Nazyrov, R.V.Vovk,
Evolution of the Pseudogap and Excess Conductivity of YBa₂Cu₃O_{7-δ} Single Crystals in the Course of Long-Term Aging.
 Физ. Низк. Темп. **49**₄ (2023) 517–26. Also in: *Low Temp. Phys.* **49**₄ (2023) 477–85. [DOI]
206. **A.L.SOLOVJOV**, L.V.Omelchenko, E.V.Petrenko, Yu.A.Kolesnichenko, A.S.Kolesnik, S.Dzhumanov, R.V.Vovk,
 Вплив відпалу на флуктуаційну провідність та псевдощільну у слабодегованих монокристалах HoBa₂Cu₃O_{7-δ}. [Effects of Annealing on the Fluctuation Conductivity and Pseudogap in Slightly Doped HoBa₂Cu₃O_{7-δ} Single Crystals.]
 Физ. Низк. Темп. **49**₁ (2023) 115–27 [in Ukrainian]. Engl.in: *Low Temp. Phys.* **49**₁ (2023) 108–19. [DOI]
207. **A.L.SOLOVJOV**, **K. ROGACKI**,
Local Pairs in High-Temperature Superconductors: The Concept of Pseudogap. [Review article.]
 Физ. Низк. Темп. **49**₃ (2023) 375–96. Also in: *Low Temp. Phys.* **49**₃ (2023) 345–63. [DOI]
208. **P. STACHOWIAK**, **M. BABIJ**, **D. SZEWCZYK**, **Z. BUKOWSKI**,
Anisotropies of Thermal Conductivity of SrIr₄In₂Ge₄ and EuIr₄In₂Ge₄ Crystals: Manifestation of Coupling of Phonons with Europium Spin 1D Fluctuations ?
J. Chem. Phys. **159**₁₉ (2023) # 19 4501 (8). [DOI]
209. **D. STEFAŃSKA**, **B. BONDZIOR**, **M. WINIARSKI**, **P.J. DEREŃ**,
Influence of the Charge Compensating Agent on Tunable Emission of the Ba₂MgWO₆ : Eu³⁺ Double Perovskite.
Ceram. Int. **49**₁₀ (2023) 16 038–43. [DOI]
210. **D. STEFAŃSKA**, **A. КАБАŃSKI**, **M. ADASZYŃSKI**, **M. ПТАК**, **R. LISIECKI**, N.Starościk, **J. HANUZA**,
Broadband Near-Infrared Luminescence Properties of Sc₂(MoO₄)₃ : Cr³⁺ Molybdates.
Spectrochim. Acta A **296** (2023) # 123 699 (??). [DOI]
211. **D. STEFAŃSKA**, **A. КАБАŃSKI**, **T.H.Q. VU**, **M. ADASZYŃSKI**, **M. ПТАК**,
Structure, Luminescence and Temperature Detection Capability of [C(NH₂)₃]M(HCOO)₃ (M = Mg²⁺, Mn²⁺, Zn²⁺) Hybrid Organic–Inorganic Formate Perovskites Containing Cr³⁺ Ions.
Sensors **23**₁₄ (2023) # 6259 (14). [DOI]
212. **D. STEFAŃSKA**, **T.H.Q. VU**, **P.J. DEREŃ**,
Multiple Ways for Temperature Detection Based on La₂MgTiO₆ Double Perovskite Co-doped with Mn⁴⁺ and Cr³⁺ Ions.
J. Alloy. Compd. **938** (2023) # 168 653 (??). [DOI]
213. **M. STEFAŃSKI**, **B. BONDZIOR**, **T. GZYL**, E.Zielony, M.Betke, A.Sieradzki, **M. ПТАК**,
All-Inorganic Micrometric CsPbBr₃ : Yb³⁺ Powder as a Multifunctional Material for Photovoltaics and Optical Thermometry: Structural and Optical Characterization.
Adv. Opt. Mater. **11**₂₁ (2023) # 23 01672 (10). [DOI]

214. M. STEFAŃSKI, J.M. GONÇALVES, W. STREK,
Broad Luminescence Generated by IR Laser Excitation from CsPbBr₃ : Yb³⁺ Perovskite Ceramics.
Molecules **28**₁₄ (2023) # 5324 (12). [DOI]
215. M. STEFAŃSKI, R. TOMALA, W. STREK,
Broadband Laser-Induced Luminescence Generated in the Visible and Near-Infrared Ranges from Nontransparent CsPbCl₃ : Yb³⁺ Perovskite Ceramics.
J. Phys. Chem. C **127**₃₀ (2023) 14891–97. [DOI]
216. V.B.Stepanov, Yu.O.Kolesnichenko, A.L.SOLOVJOV,
Thermoelectric Power in High-Temperature Superconductors: Theory and Experiment. [Review article.]
Физ. Низк. Темп. **49**₈ (2023) 1002–29. Also in: *Low Temp. Phys.* **49**₈ (2023) 911–35. [DOI]
217. M.Stępień, A.Marszałek-Harych, M.Gazińska, A.GĄGOR, Ł.John, J.Ejfler,
Novel Latent Catalyst for Ring-Opening Polymerization of 1,3-Benzoxazines Triggered by a Dual Ionic / Non-ionic Monomer Partnership.
Macromolecules **56**₁₅ (2023) 5 730–42. [DOI]
218. J.Stępień, D.Rybicki, M.Sikora, Z. BUKOWSKI, M. BABIŃ, Ł.Gondek, Cz.Kapusta, T.Strączek, K.Goc, D.O.DeSouza,
Effects of Ni / Co Doping on Structural and Electronic Properties of 122 and 112 Families of Eu Based Iron Pnictides.
Sci. Rep. **13** (2023) # 13123 (8). [DOI]
219. K. SYNORADZKI,
Low-temperature Magnetic and Magnetocaloric Properties of Orthorhombic DyNiSn.
Physica B **669** (2023) # 415 300 (?). [DOI]
220. K.Synoradzki, A.FRĄCKOWIAK, D. SZEWCZYK, T.J. BEDNARCHUK, D.Das, D. KACZOROWSKI,
Magnetic, Magnetocaloric and Thermoelectric Properties of NdCrGe₃.
J. Alloy. Compd. **967** (2023) # 171 713 (10). [DOI]
221. A.Szczurek, T.N.L.Tran, J.Kubacki, A.Gąsiorek, K. STARTEK, A.Mazur-Nowacka, R.Dell’Anna, C.Armellini, S.Varas, A.Carlotto, A.Chiasera, A.ŁUKOWIAK, J.Krzak, M.Ferrari,
Polyethylene Terephthalate (PET) Optical Properties Deterioration Induced by Temperature and Protective Effect of Organically Modified SiO₂-TiO₂ Coating.
Mater. Chem. Phys. **306** (2023) # 128 016 (12). [DOI]
222. D. SZEWCZYK, A.I. KRIVCHIKOV, M.S.Barabashko, A.V.Dolbin, N.A.Vinnikov, R.Basnukaeva, G. CHAJEWSKI, A.JEŻOWSKI,
Universal Behavior of Low-Temperature Heat Capacity of Acrylonitrile-Butadiene-Styrene Thermoplastic Polymer and Its Composite with Graphene Oxide.
Физ. Низк. Темп. **49**₅ (2023) 649–57. Also in: *Low Temp. Phys.* **49**₅ (2023) 593–600. [DOI]
223. P.Szklarz, A.GĄGOR, R.Jakubas, W.Medycki, G.Bator,
Temperature Symmetry Breaking and Properties of Lead-Free Organic–Inorganic Hybrids: Bismuth(III) Iodide and Antimony(III) Iodide: (S(CH₃)₃)₃[Bi₂I₉] and (S(CH₃)₃)₃[Sb₂I₉].
Dalton Trans. **52**₃₄ (2023) 11 981–91. [DOI]
224. M. SZLAWSKA, M. MAJEWICZ, D.A.KOWALSKA, D. KACZOROWSKI,
Metamagnetic Transition in Single-Crystalline UIr₂Si₂.
Sci. Rep. **13** (2023) # 14772 (8). [DOI]
225. B.Szubzda, G. PAŚCIAK, T.Mączka, K.Kozieł,
Bezskurczowy materiał polimerobetonowy do wyrobów elektroizolacyjnych. [Non-shrinking Polymer Concrete as the Material for Electrical Insulating Products.]
Wiad. Elektrotechn. **91**₆ (2023) 9–12 [in Polish]. [DOI]

226. **M. SZYMCZAK**, M.Runowski, M.G.Brik, **Ł.MARCINIAK**,
Multimodal, Super-Sensitive Luminescent Manometer Based on Giant Pressure-Induced Spectral Shift of Cr³⁺ in the NIR Range.
Chem. Eng. J. **466** (2023) # 143 130 (?). [\[DOI\]](#)
227. **M. SZYMCZAK**, M.Runowski, V.Lavín, **Ł.MARCINIAK**,
Highly Pressure-Sensitive, Temperature Independent Luminescence Ratiometric Manometer Based on MgO:Cr³⁺ Nanoparticles.
Las. Photon. Rev. **17**₄ (2023) # 22 00801 (9). [\[DOI\]](#)
228. **M. SZYMCZAK**, P.Woźny, M.Runowski, **M. PIEPRZ**, V.Lavín, **Ł.MARCINIAK**,
Temperature Invariant Ratiometric Luminescence Manometer Based on Cr³⁺ Ions Emission.
Chem. Eng. J. **453** (2023) # 139 632 (8). [\[DOI\]](#)
229. P.K.Tanwar, M.Ahmad, M.Sh.Alam, X.Yao, F.Tafti, **M. MATUSIAK**,
Gravitational Anomaly in the Ferrimagnetic Topological Weyl Semimetal NdAlSi.
Phys. Rev. B **108** (2023) # L16 1106 (6). [\[DOI\]](#)
230. **S. TARGOŃSKA**, **R.J. WIGLUSZ**,
Concentration Quenching Mechanism of Dysprosium(III) Ions in Silicate-Substituted Fluorapatite.
Ceram. Int. **49**₂₄, Pt B (2023) 41 114–22. [\[DOI\]](#)
231. A.V.Terekhov, **K. ROGACKI**, V.M.Yarovy, V.B.Stepanov, Yu.A.Kolesnichenko, A.D.Shevchenko, Z.D.Kovalyuk, E.Lähderanta; **A.L.SOLOVJOV**,
Magnetoresistance Peculiarities of Bi_{95.69}Mn_{3.69}Fe_{0.62} in Magnetic Fields up to 140 kOe.
Физ. Низк. Темп. **49**₈ (2023) 1095–100. Also in: *Low Temp. Phys.* **49**₈ (2023) 998–1003. [\[DOI\]](#)
232. Feng Tian, Nan Jiang, Yang Liu, HaoHong Chen, TengFei Xie, **D. HRENIAK**, Jiang Li,
Fabrication and Properties of Multistage Gradient Doping Yb : YAG Laser Ceramics.
J. Am. Ceram. Soc. **106**₄ (2023) 2309–16. [\[DOI\]](#)
233. Feng Tian, Nan Jiang, Yang Liu, Zhengfa Dai, TengFei Xie, **D. HRENIAK**, Jiang Li,
Fabrication and Properties of Novel Composite Laser Ceramics with a Surface-Gain Structure.
J. Am. Ceram. Soc. **106**₆ (2023) 3550–56. [\[DOI\]](#)
234. **P.E. TOMASZEWSKI**,
Comments on the paper “Structural, dielectric, thermal and electrical characteristics of lead-free double perovskite: BiHoZnCeO₆” by M.Padhy, S.K.Dejury, R.N.P.Choudhary, and P.G.R.Achary, and published in *Appl.Phys A* 126 (2020) # 655.
Appl. Phys. A **129**₇ (2023) # 512 (3). [\[DOI\]](#)
235. **P.E. TOMASZEWSKI**,
Comments on the Paper “How to calculate crystallite size from X-ray diffraction (XRD) using SCHERRER method” by Siti Fatimah *et al.* published in ASEAN J. Sci. Eng. 2₁ (2022) 65.
ASEAN J. Sci. Eng. **3**₃ (2023) 301–4. [\[DOI\]](#)
236. **P.E. TOMASZEWSKI**,
Important Comments on the Paper on BaBiFeTiO₆ Ceramic by Lutu Sahoo *et al.*, and published in *Inorg.Chem.Commun.* 146 (2022) # 110 102.
Inorg. Chem. Commun. **158**, Pt 1 (2023) # 111 482 (3). [\[DOI\]](#)
237. **P.E. TOMASZEWSKI**,
Comments on the Paper on the Nd-doped BiFeO₃ by S.R.Dhanya and J.Satapathy, and Published in *J Mater Sci: Mater Electron* (2023) 34:434, and on the Corresponding Correction Published in *J Mater Sci: Mater Electron* (2023) 34:1484.
J. Mater. Sci.: Mater. Electron. **34**₂₆ (2023) # 1829 (10). [\[DOI\]](#)

238. **P.E. TOMASZEWSKI**,
Comments on the Paper on Vanadium Based Double Perovskite $\text{Ba}_{1.5}\text{Sr}_{0.5}\text{FeVO}_6$ by S. Bhattacharjee *et al.* [Mater. Sci. Engng B 271 (2021) 115-, 234-].
Mater. Sci. Eng. B **288** (2023) # 116 162 (2). [\[DOI\]](#)
239. **P.E. TOMASZEWSKI**,
Addendum to “Comments on the paper on vanadium based double perovskite $\text{Ba}_{1.5}\text{Sr}_{0.5}\text{FeVO}_6$ by S. Bhattacharjee *et al.*, *Mater. Sci. Engng, B* 271, (2021) # 115 234.”.
Mater. Sci. Eng. B **292** (2023) # 116 399 (1). [\[DOI\]](#)
240. **P.E. TOMASZEWSKI**,
Comments on the Paper “Structure, electric and dielectric properties of $\text{PbFe}_{1/3}\text{Ti}_{1/3}\text{W}_{1/3}\text{O}_3$ single perovskite compound” by P.G.R. Achary, R.N.P. Choudhary, & S.K. Parida, publ. in *Process. Appl. Ceram.* 14 (2020) 146–53.
Process. Appl. Ceram. **17**₁ (2023) 104–6. [\[DOI\]](#)
241. T.A. Tran, D.N. Petrov, T.L. Phan, B.D. Tu, H.N. Nhat, H.C. Tran, B. Weise, **J. ĆWIK**, **YU.S. KOSHKID’KO**, T.V. Manh, T.P. Hoang, N.T. Dang,
Investigating the Magnetic and Magnetocaloric Behaviors of $\text{LiSm}(\text{PO}_3)_4$.
RSC Adv. **13**₉ (2023) 5 753–61. [\[DOI\]](#)
242. E. Truskiewicz, K. Latoszek, M. Ojrzynska, A. Ostrowski, **L. KĘPIŃSKI**,
Stability of Ruthenium / Carbon Catalytic Materials during Operation in Carbon Monoxide Methanation Process.
Catalysts **13**₁₂ (2023) # 1518 (19). [\[DOI\]](#)
243. **M. TRZEBIATOWSKA**, **D.A. KOWALSKA**, M.A. Gusowski, E. Jach, A. Ciżman,
Dielectric Switching in Correlation with the Structural Phase Transitions in Tetrapropylammonium Perchlorate.
Phys. Chem. Chem. Phys. **25**₂ (2023) 1269–78. [\[DOI\]](#)
244. G. Usevičius, A. Eggeling, I. Pocius, V. Kalendra, D. Klose, **M. MAĆZKA**, A. Pöpl, J. Banys, G. Jeschke, M. Šimėnas,
Probing Methyl Group Tunneling in $[(\text{CH}_3)_2\text{NH}_2][\text{Zn}(\text{HCOO})_3]$ Hybrid Perovskite Using Co^{2+} EPR.
Molecules **28**₃ (2023) # 979 (13). [\[DOI\]](#)
245. **T.H.Q. VU**, **B. BONDZIOR**, **D. STEFAŃSKA**, **P.J. DEREŃ**,
Low-Temperature Optical Thermometer Based on the Luminescence of the Double Perovskite $\text{Ba}_2\text{MgWO}_6 : \text{Nd}^{3+}$.
J. Lumin. **257** (2023) # 119 750 (8). [\[DOI\]](#)
246. **T.H.Q. VU**, **D. STEFAŃSKA**, **P.J. DEREŃ**,
Effect of A-Cation Radius on the Structure, Luminescence, and Temperature Sensing of Double Perovskites A_2MgWO_6 Doped with Dy^{3+} ($A = \text{Ca}, \text{Sr}, \text{Ba}$).
Inorg. Chem. **62**₄₉ (2023) 20 020–29. [\[DOI\]](#)
247. J. Wang, L. Zhang, J. Kang, M. Li, C. Shi, P. Yang, B. Sun, Y. Li, **W. STRĘK**, H. Chen,
Laminated Structural Al_2O_3 / YAG : Ce Composite Ceramic Phosphor with High Front Light Emission for Transmissive Laser Lighting.
Opt. Express **31**₂₅ (2023) 41 556–68. [\[DOI\]](#)
248. S. Wang, T. Zhou, X. Zheng, C. Shao, P. Yang, F. Qiu, C. Shi, S. Chen, **W. STRĘK**, H. Chen, L. Zhang,
Effect of Powder Dispersion on the Optical Properties of HIP Sintered MgAl_2O_4 Transparent Ceramics.
Ceram. Int. **49**₂₃ (2023) 37 586–93. [\[DOI\]](#)

249. D.We, X.Yang, Y.Liu, Y.Wu, **D. HRENIAK**,
Improved Photocatalytic Performance of Li⁺/Eu³⁺-Co-doped V₂O₅ Ultralong Nanowires.
Ceram. Int. **49**₁₃ (2023) 22 355–67. [DOI]
250. K.Wenelska, T.Kędzierski, **D. BĘBEN**, E.Mijowska,
Sandwich-Type Architecture film Based on WS₂ and Ultrafast Self-expanded and Reduced Graphene Oxide in a Li-ion battery.
Front. Chem. **10** (2023) # 110 2207 (12). [DOI]
251. **P. WIEWIÓRSKI**, **W. STRĘK**, **R. TOMALA**, **M. STEFAŃSKI**,
Electric Field Driven Self-Assembly of Dissolved Graphene Foam Particles in a Capillary.
Mater. Lett. **335** (2023) # 133 851 (3). [DOI]
252. **P. WIEWIÓRSKI**, **R. TOMALA**, **W. STRĘK**, **M. STEFAŃSKI**,
Current Driven Red Emission from Graphene Foam.
Solid State Commun. **371** (2023) # 115 274 (2). [DOI]
253. K.Wiglusz, M.Dobrzyński, M.Gutbier, **R.J. WIGLUSZ**,
Nanofluorapatite Hydrogels in the Treatment of Dentin Hypersensitivity: A Study of Physiochemical Properties and Fluoride Release.
Gels **9**₄ (2023) # 271 (17). [DOI]
254. **M.J. WINIARSKI**,
Ab initio Study of LuN (001) Surface.
Acta Phys. Pol. A **144**₁ (2023) 3–6. [DOI]
255. Ł.Witczak, M.Chrzanowski, P.Sitarek, **M. ŁYSIEN**, A.Podhorodecki,
Imatinib-Functionalized Galactose Hydrogels Loaded with Nanohydroxyapatite as a Drug Delivery System for Osteosarcoma: In vitro Studies.
ACS Omega **8**₄₂ (2023) 39 217–21. [DOI]
256. K.Wiwatowski, K.Sulowska, R.Houssaini, **A. PILCH-WRÓBEL**, **A. BEDNARKIEWICZ**, A.Hartschuh, S.Maćkowski, D.Piątkowski,
Single Up-conversion Nanocrystal as a Local Temperature Probe of Electrically Heated Silver Nanowire.
Nanoscale **15**₂₅ (2023) 10 614–22. [DOI]
257. A.Wojciechowska, **J. JANCZAK**, K.Jarzemska, T.Rojek, A.Gorzás, U.Kersen, T.Olszewski, J.Jeziarska,
Chelidamic acid Tautomers in Copper(II) Compounds. One-Pot Synthesis, Crystal Structure, Spectroscopic and DFT Studies.
Polyhedron **230** (2023) # 116 210 (11). [DOI]
258. A.Wojciechowska, **J. JANCZAK**, P.Rytlewski, M.Sarewicz, A.C.F.Santos, L.Salgueiro, M.Korabik,
The Influence of Ancillary NCS⁻ Ions on Structural, Spectroscopic, Magnetic and Biological Properties of Copper(II) L-Argininato Complex.
J. Mol. Struct. **1276** (2023) # 134 776 (12). [DOI]
259. A.Wojciechowska, T.Rojek, T.Misiaszek, **A. GAĞOR**, P.Rytlewski,
The Supramolecular hybrid inorganic–Organic L-Argininato-Based Copper(II) Materials – Preparation, Structural, Spectroscopic and Thermal Properties.
Inorg. Chim. Acta **557** (2023) # 121 698 (10). [DOI]
260. M.Wojtaś, **T.J. BEDNARCHUK**, I.Bdikin,
New Hybrid: [H- \tilde{A} ŃŃ-(4-Pyridyl)-Ala-OH] Tetrafluoroborate – Crystal Structure and Strong Piezoelectricity.
Cryst Eng Comm **25**₂₅ (2023) 3 609–17. [DOI]

261. W. Wojtasik, K. Majewska, L. Dymińska, **J. HANUZA**, M. Zimmiewska, M. Preisner, J. Szopa, M. Wróbel-Kwiatkowska,
Optimization of Hydrodynamic Degumming of Flax Fiber for Improved Biochemical Profile.
Ind. Crop. Prod. **206** (2023) # 117621 (11). [\[DOI\]](#)
262. JunLin Wu, JiYang Ding, XinYou Huang, ZhengFa Dai, XiaoLing Li, DanYang Zhu, Dong Huang, TengFei Xie, JianRong Zhou, XingFen Jiang, ZhiJia Sun, **D. HRENIAK**, Jiang Li,
Fabrication of Gd₂O₃ : Tb Scintillation Ceramics Using Water-Bath Method: The Influence of Initial Reaction Temperature.
Opt. Mater. **136** (2023) # 113469 (8). [\[DOI\]](#)
263. K. Wydra, **V. KINZHYBALO**, J. Lisowski,
Solid State Structures and Solution Behaviour of Tetranuclear Lanthanide(III) Carbonate-Bridged Coordination Compounds of Chiral 3 + 3 Amine Macrocyclic.
Dalton Trans. **52**₃₄ (2023) 11992–12001. [\[DOI\]](#)
264. P. Wytrych, J. Utko, **M. STEFAŃSKI**, J. Kłak, T. Lis, Ł. John,
Synthesis, Crystal Structures, and Optical and Magnetic Properties of Samarium, Terbium, and Erbium Coordination Entities Containing Mono-Substituted Imine Silsesquioxane Ligands.
Inorg. Chem. **62**₆ (2023) 2913–23. [\[DOI\]](#)
265. E. Yadav, P. Ghising, K. P. Rajeev, Z. HOSSAIN,
Ferromagnetism and Metal–Insulator Transition in F-Doped LaMnO₃.
Phys. Rev. B **107** (2023) # 214446 (7). [\[DOI\]](#)
266. A. Yousofvand, M. Amini, M. Hosseinifard, **J. JANCZAK**,
Synthesis and Characterization a New Polyoxomolybdate C₃₄H₁₁₄Fe₂Mo₁₂N₁₈Na₂O₆₆ and Study of Its Catalytic Activity in the Production of 1,2,3-Triazoles.
J. Coord. Chem. **76**_{11/12} (2023) 1333–43. [\[DOI\]](#)
267. A. Yousofvand, M. Amini, M. Hosseinifard, **J. JANCZAK**,
Synthesis, Structure, and Catalytic Activity of Polyoxometalate (C₇H₁₅N₄)₂[Co(H₂O)₆][C₆H₁₂N₂CoMo₆O₂₄]·4H₂O in the Azide–Alkyne Cycloaddition Reaction.
Polyhedron **236** (2023) # 116367 (6). [\[DOI\]](#)
268. A. Zając, W. Szaśiadek, L. Dymińska, P. Ropuszyńska-Robak, **J. HANUZA**, **M. PTAK**, **S. SMÓŁKA**, **R. LISIECKI**, K. Skrzypczak,
Chitosan and Its Carboxymethyl-Based Membranes Produced by Crosslinking with Magnesium Phytate.
Molecules **28**₁₆ (2023) # 5987 (13). [\[DOI\]](#)
269. **A. J. ZALESKI**, **P. GŁUCHOWSKI**, **W. STRĘK**, **L. M. TRAN**, **M. BABIŃ**,
Room Temperature Ferromagnetic Behavior of GaN Nanoceramics.
Физ. Низк. Темп. **49**₃ (2023) 318–22. Also in: *Low Temp. Phys.* **49**₃ (2023) 291–95. [\[DOI\]](#)
270. **P. ŽEMOJTEL**, A. Olejniczak, **R. TOMALA**, **B. CICHY**, Ł. Radosiński, **A. F. DE ARAUJO MAIA**, **O. BEZKROVNYI**, **W. STRĘK**,
Understanding Continuous Wave Laser-Induced Chemical Reactions at Micro- and Nano-Diamond-Glass Interface under Infrared Excitation.
Mater. Res. Express **10** (2023) # 095601 (14). [\[DOI\]](#)
271. T. Zhezhera, **P. GŁUCHOWSKI**, M. Nowicki, M. Chrunik, A. Majchrowski, D. Kasprowicz,
Enhanced Near-Infrared Emission of Er³⁺ as a Synergistic Effect of Energy Transfers in Bi₃TeBO₉ : Yb³⁺/Er³⁺ Phosphors.
J. Lumin. **257** (2023) # 119774 (10). [\[DOI\]](#)
272. A. Zięba, K. Hreczycho, M. Sikora, **A. CHUDZYŃSKA**, P. Korzec, S. Patela,
Multi-Axis Diffraction Gratings.
Opt. Mater. **137** (2023) # 113606 (5). [\[DOI\]](#)

273. **J.A.ZIENKIEWICZ, D.A.KOWALSKA, D. DROZDOWSKI, A.PIKUL, M. PTAK,**
Hybrid Chlorides with Methylhydrazinium Cation: $[\text{CH}_3\text{NH}_2\text{NH}_2]\text{CdCl}_3$ and JAHN-TELLER
Distorted $[\text{CH}_3\text{NH}_2\text{NH}_2]\text{CuCl}_3$.
Molecules **28**₂ (2023) # 473 (13). [\[DOI\]](#)
-