

LISTA PUBLIKACJI 2021 LIST of PUBLICATIONS

ARTYKUŁY W CZASOPISMACH NAUKOWYCH ARTICLES IN SCIENTIFIC JOURNALS

1. **K. ADAMSKA**, Sz.Smykała, S.Zieliński, **D. SZYMAŃSKI**, **A. HOJEŃSKA**, P.Stelmachowski, A.Kotarba, **J. OKAL**,
Oxidation of Soot over Supported RuRe Nanoparticles Prepared by the Microwave-Polyol Method.
React. Kinet. Mech. Catal. **134**₁ (2021) 221–24. [\[DOI\]](#)
2. A.Anand, M.Manjuladevi, R.K.Veena, V.S.Veena, **YU.S. KOSHKID'KO**, S.Sagar,
A Study on Spin Memory, Nature of Magnetic Transition, and Magnetocaloric Effect in Nd_{0.5}Ca_{0.5}MnO₃.
J. Magn. Magn. Mater. **528** (2021) # 167810 (7). [\[DOI\]](#)
3. Tran Kim Anh, Nguyen Thanh Huong, Do Thi Thao, Pham Thi Lien, Nguyen Van Nghia, Ha Thi Phuong, **R. TOMALA**, Le Quoc Minh,
High Monodisperse Nanospheres Gd₂O₃ : Yb³⁺, Er³⁺ with Strong Upconversion Emission Fabricated by Synergistic Chemical Method.
J. Nanopart. Res. **23**₁₂ (2021) # 264 (15). [\[DOI\]](#)
4. **V. APINYAN**, **T.K. KOPEĆ**,
Antiferromagnetic Ordering and Excitonic Pairing in AA-Stacked Bilayer Graphene.
Phys. Rev. B **104** (2021) # 075426 (16). [\[DOI\]](#)
5. F.Armetta, G.Chirco, F.L.Celso, V.Ciaramitaro, E.Caponetti, M.Midiri, G.L.Re, V.Gaishun, D.Kovalenko, A.Semchenko, **D. HREŃIAK**, M.L.Saladino,
Sicilian Byzantine Icons through the Use of Non-Invasive Imaging Techniques and Optical Spectroscopy : The Case of the *Madonna dell'Elemosina*.
Molecules **26**₂₄ (2021) # 7595 (12). [\[DOI\]](#)
6. M.I.Bagatskii, **A. JEŻOWSKI**, **D. SZEWCZYK**, V.V.Sumarokov, M.S.Barabashko, V.L.Kuznetsov, S.I.Moseenkov, A.N.Ponomarev,
Size Effects in the Heat Capacity of Modified MWCNTs.
Therm. Sci. Eng. Prog. **26** (2021) # 101097 (6). [\[DOI\]](#)
7. M.S.Barabashko, **M. DROZD**, **D. SZEWCZYK**, **A. JEŻOWSKI**, M.I.Bagatskii, V.V.Sumarokov, A.V.Dolbin, S.N.Nesov, P.M.Korusenko, A.N.Ponomarev, V.G.Geidarov, V.L.Kuznetsov, S.I.Moseenkov, D.V.Sokolov, D.A.Smirnov,
Calorimetric, NEXAFS and XPS Studies of MWCNTs with Low Defectiveness.
Fuller. Nanotub. Carbon Nanostr. **29**₅ (2021) 331–36. [\[DOI\]](#)
8. **A. BEDNARKIEWICZ**, **J. DRABIK**, **K. TREJGIS**, D.Jaque, E.Ximendes, **Ł. MARCINIAK**,
Luminescence Based Temperature Bio-imaging : Status, Challenges, and Perspectives Featured.
Appl. Phys. Rev. **8** (2021) # 011317 (54). [\[DOI\]](#)
9. K.A.Begam, N.Kanagathara, V.Ragavendran, R.G.Sh.Rao, **M.K. MARCHEWKA**,
Structural and Vibrational Spectroscopic Elucidation of Nitrogen Rich Energetic Salt : 2,4-Diamino-6-methyl-1,3,5-triazinium Levulinate Dihydrate.
Asian J. Chem. **33**₈ (2021) 1891–904. [\[DOI\]](#)

10. B.Belan, **T.J. BEDNARCHUK**, **V. KINZHYBALO**, M.Dzevenko, S.Pukas, R.Gladyshevskii,
Crystal Structure of the New Silicide $\text{LaNi}_{11.8-11.4}\text{Si}_{1.2-1.6}$.
Z. Naturforsch. B **76**_{3/4} (2021) 243–47. [\[DOI\]](#)
11. B.Belan, M.Dzevenko, **M. DASZKIEWICZ**, R.Gladyshevskii,
Interaction of Components in the Lu–Ag–Si System at 500 °C.
Phys. Chem. Solid State **22**₁ (2021) 88–93. [\[DOI\]](#)
12. E.A.Bensen, **K. CIESIELSKI**, L.C.Gomes, B.R.Ortiz, J.Falke, **O. PAVLOSIUK**, D.Weber, T.L.Braden,
K.X.Steirer, **D. SZYMAŃSKI**, J.E.Goldberger, Chang-Yang Kuo, Chien-Te Chen, Chun-Fu Chang,
LiuHao Tjeng, **D. KACZOROWSKI**, E.Ertekin, E.S.Toberer,
Anomalous Electronic Properties in Layered, Disordered ZnVSb.
Phys. Rev. Mater. **5** (2021) # 01 5002 (14). [\[DOI\]](#)
13. **O.S. BEZKROVNYI**, **P. KRASZKIEWICZ**, **W. MIŚTA**, **L. KĘPIŃSKI**,
**The Sintering of Au Nanoparticles on Flat {100}, {111} and Zigzagged {111}-Nanofaceted
Structures of Ceria and Its Influence on Catalytic Activity in CO Oxidation and CO PROX**.
Catal. Lett. **151**₄ (2021) 1080–90. [\[DOI\]](#)
14. M.Biały, **S. TARGOŃSKA**, A.Szust, **R.J. WIGLUSZ**, M.Dobrzyński,
**In vitro Fracture Resistance of Endodontically Treated Premolar Teeth Restored with
Prefabricated and Custom-Made Fibre-Reinforced Composite Posts**
Materials **14**₂₀ (2021) # 6214 (12). [\[DOI\]](#)
15. **V. BOIKO**, **ZHENGFA DAI**, **M. MARKOWSKA**, C.Leonelli, C.Mortalò, F.Armetta, F.Ursi, G.Nasillo,
M.L.Saladino, **D. HRENIAK**,
**Particle Size-Related Limitations of Persistent Phosphors Based on the Doped $\text{Y}_3\text{Al}_2\text{Ga}_3\text{O}_{12}$
System**.
Sci. Rep. **11** (2021) # 141 (14). [\[DOI\]](#)
16. K.N.Boldyrev, N.M.Abishev, I.E.Mumdzi, S.I.Nikitin, **P.J. DEREŃ**, B.Z.Malkin, M.N.Popova,
Disorder Effects in $\text{LaAlO}_3 : \text{Ho}^{3+}$ Single Crystals Revealed by Optical Spectra.
Phys. Rev. B **103** (2021) # 05 4103 (11). [\[DOI\]](#)
17. **B. BONDZIOR**, **D. STEFAŃSKA**, **T.H. QUÂN VŨ**, **N. MINIAJLUK-GAWEŁ**, **P.J. DEREŃ**,
Red Luminescence with Controlled Rise Time in $\text{La}_2\text{MgTiO}_6 : \text{Eu}^{3+}$.
J. Alloy. Compd. **852** (2021) # 157074 (8). [\[DOI\]](#)
18. **B. BONDZIOR**, **T.H. QUÂN VŨ**, **D. STEFAŃSKA**, **M.J. WINIARSKI**, **P.J. DEREŃ**,
**Tunable Broadband Emission by Bandgap Engineering in $(\text{Ba}, \text{Sr})_2(\text{Mg}, \text{Zn})\text{WO}_6$ Inorganic
Double-Perovskites**.
J. Alloy. Compd. **888** (2022) # 161 567 (8) in print. [\[DOI\]](#)
19. **M.A. CHAIKA**, S.Balabanov, D.Permin,
Optical Spectra and Gain Properties of $\text{Er}^{3+} : \text{Lu}_2\text{O}_3$ Ceramics for Eye-Safe 1.5- μm Lasers.
Opt. Mater. **112** (2021) # 110 785 (6). [\[DOI\]](#)
20. **M. CHAIKA**, **W. STRĘK**,
**Laser Induced Broad Band White Emission from Transparent $\text{Cr}^{4+} : \text{YAG}$ Ceramics :
Origin of Broadband Emission**.
J. Lumin. **233** (2021) # 117 935 (9). [\[DOI\]](#)
21. **M. CHAIKA**, **R. TOMALA**, **W. STRĘK**,
Laser Induced Broadband Vis and NIR Emission from $\text{Yb} : \text{YAG}$ Nanopowders.
J. Alloy. Compd. **865** (2021) # 158 957 (9). [\[DOI\]](#)

22. **M.A.CHAIKA, R. TOMALA, W. STRĘK,**
Infrared Laser Stimulated Broadband White Emission of Transparent Cr : YAG Ceramics Obtained by Solid State Reaction Sintering.
Opt. Mater. **111** (2021) # 110 673 (8). [\[DOI\]](#)
12th Int. Conf. on Excited States of Transition Elements (ESTE-2019) WROCLAW & KUDOWA-Zdrój, PL, 2019.09 08–13
23. **M. CHAIKA, R. TOMALA, W. STRĘK,**
Surface Related Laser Induced White Emission of Cr : YAG Ceramic.
Sci. Rep. **11** (2021) # 14063 (5). [\[DOI\]](#)
24. S.Chernii, **YU.GERASYMCHUK**, M.Losytskyy, **D. SZYMAŃSKI**, I.Tretyakova, **A.ŁUKOWIAK**, V.Pekhnyo, S.Yarmoluk, V.Chernii, V.Kovalska,[†]
Modification of Insulin Amyloid Aggregation by Zr Phthalocyanines Functionalized with Dehydroacetic Acid Derivatives.
PLoS ONE **16**₁ (2021) # e 024 3904 (16). [\[DOI\]](#)
25. A.Chiasera, A.Szczurek, L.Th.N.Tran, **K. STARTEK**, O.Saynger, S.Varas, C.Armellini, A.Chiappini, A.Carpentiero, D.Zonta, O.S.Bursi, R.Ramponi, M.Bollani, F.Scotognella, G.Macrelli, J.Krzak, G.C.Righini, M.Ferrari, **A.ŁUKOWIAK**,
Flexible Photonics: Transform Rigid Materials into Mechanically Flexible and Optically Functional Systems.
Proc. SPIE **11 682** (2021) # 11 682 0Q (7). [\[DOI\]](#)
SPIE OPTO: Optical Components & Materials XVIII, [virtual], SAN FRANCISCO, CA, US, 2021.03 06–12
26. M.Chomiak, J.Trawczyński, **M. ZAWADZKI**,
Effect of Cobalt (Nickel) Oxide on the Properties of Zinc–Titanium Sorbents for High Temperature Desulphurization of Model Coal Gas.
Braz. J. Chem. Eng. **38**₃ (2021) 605–16. [\[DOI\]](#)
27. V.B.Chzhan, I.S.Tereshina, V.S.Rusakov, A.A.Kurganskaya, E.A.Tereshina-Chitrová, A.V.Filimonov, **V.H. TRAN**, A.Yu.Karpenkova, **H. DRULIS**,
Magnetocaloric and MÖSSBAUER Effects Studies of the Multicomponent Tb–Dy–Ho–Co–Fe–H Compounds with a LAVES Phase Structure Near the CURIE Temperature.
J. Alloy. Compd. **868** (2021) # 159 056 (8). [\[DOI\]](#)
28. P.Ciechanowicz, S.Gorantla, P.P.Michałowski, E.Zdanowicz, J.-G.Rousset, D.Hlushchenko, K.Adamczyk, **D. MAJCHRZAK**, R.Kudrawiec, D.Hommel,
Arsenic-Induced Growth of Dodecagonal GaN Microrods with Stable α -Plane Walls.
Adv. Opt. Mater. **9**₅ (2021) # 200 1348 (11). [\[DOI\]](#)
29. **K. CIESIELSKI, I. WOLAŃSKA, K. SYNORADZKI, D. SZYMAŃSKI, D. KACZOROWSKI,**
Mobility Ratio as a Probe for Guiding Discovery of Thermoelectric Materials: The Case of Half-HEUSLER Phase ScNiSb_{1-x}Te_x.
Phys. Rev. Appl. **15** (2021) # 04 4047 (12). [\[DOI\]](#)
30. **A.CIUPA-LITWA, J. JANCZAK**, P.Peksa, A.Sieradzki,
Elucidation of the Mechanism of Phase Transition in a Zinc Formate Framework Templated by a Diammonium Cation – Structural, Phonon and Dielectric Studies.
Crystals **11**₂ (2021) # 213 (14). [\[DOI\]](#)
31. **A.CIUPA-LITWA, J.A.ZIENKIEWICZ, M. STEFAŃSKI, M. PTAK**, A.Majchrowski, M.Chrunik,
Vibrational and Optical Studies of a Nonlinear Optical Crystal, Cs₂Bi₂O(Ge₂O₇).
Spectrochim. Acta A **259** (2021) # 119 816 (10). [\[DOI\]](#)
32. N.Contreras-Pereda, F.Moghzi, J.Baselga, HaiXia Zhong, **J. JANCZAK**, J.Soleimannejad, RenHao Dong, D.Ruiz-Molina,
Ultrasound-Assisted Exfoliation of a Layered 2D Coordination Polymer with HER Electrocatalytic Activity.
Ultrason. Sonochem. **70** (2021) # 105 292 (9). [\[DOI\]](#)

33. **J. ĆWIK, YU.KOSHKID'KO, M. MAŁECKA**, B.Weise, M.Krautz, A.Mikhailova, N.Kol'chugina,
Magnetocaloric Prospects of Mutual Substitutions of Rare-Earth Elements in Pseudobinary Tb_{1-x}Ho_xNi₂ Compositions ($x = 0.25 - 0.75$).
J. Alloy. Compd. **886** (2021) # 161 295 (10). [\[DOI\]](#)
34. **J. ĆWIK, YU.KOSHKID'KO**, K.Nenkov, N.Kol'chugina,
Magnetocaloric Properties of Multicomponent LAVES Phase Compounds and Their Composites.
J. Phys.: Conf. Ser. **1758** (2021) # 01 2009 (6). [\[DOI\]](#)
8th Int.Conf.on Functional Nanomaterials & High-Purity Substances (FNM 2020) SUZDAL, RU, 2020.10 05-09
35. **J. ĆWIK, YU.KOSHKID'KO**, K.Nenkov, A.Mikhailova, **M. MAŁECKA, T. ROMANOVA**,
N.Kol'chugina, N.A. de Oliveira,
Experimental and Theoretical Analysis of Magnetocaloric Behavior of Dy_{1-x}Er_xNi₂ Intermetallics ($x = 0.25, 0.5, 0.75$) and Their Composites for Low-Temperature Refrigerators Performing an ERICSSON Cycle.
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36. **J. ĆWIK, YU.KOSHKID'KO**, K.Nenkov, E.Tereshina-Chitrová, N.Kol'chugina,
Correlation between the Structure and Thermomagnetic Properties of Pseudo-binary (Tb, Er)Ni₂ Solid Solutions.
J. Alloy. Compd. **859** (2021) # 157870 (10). [\[DOI\]](#)
37. M.Czaja, **R. LISIECKI**, R.Juroszek, **T. KRZYKAWSKI**,
Luminescence Properties of Tetrahedral Coordinated Mn²⁺; Genthelvitite and Willemite Examples.
Minerals **11**₁₁ (2021) # 1252 (27). [\[DOI\]](#)
38. **ZHENG FA DAI, V. BOIKO, K. GRZESZKIEWICZ, M. MARKOWSKA**, F.Ursi, J. HÖLSÄ,
M.L.Saladino, **D. HRENIAK**,
Effect of Annealing Temperature on Persistent Luminescence of Y₃Al₂Ga₃O₁₂ : Cr³⁺ Co-doped with Ce³⁺ and Pr³⁺.
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39. **D. DAS, J. BŁAWAT, D. GNIDA, D. KACZOROWSKI**,
Observation of Antiferromagnetic and Superconducting Phases in Polycrystalline Ce₃PtIn₁₁.
Physica B **603** (2021) # 412 724 (4). [\[DOI\]](#)
40. D.Das, R.Gupta, Ch.Baines, H.Luetkens, **D. KACZOROWSKI**, Z.Guguchia, R.Khasanov,
Unconventional Pressure Dependence of the Superfluid Density in the Nodeless Topological Superconductor α -PdBi₂.
Phys. Rev. Lett. **127** (2020) # 21 7002 (6). [\[DOI\]](#)
41. **P.J. DEREŃ, D. STEFAŃSKA, M. PTAK, P. WIŚNIEWSKI**,
Method to Measure the Degree of Reduction of Eu³⁺ to Eu²⁺ : How Anion and Cation Vacancies Influence the Degree of Reduction.
J. Phys. Chem. C **125**₄₄ (2021) 24 505-14. [\[DOI\]](#)
42. G.Dhakal, M.M.Hosen, Wei-Chi Chiu, B.Singh, Cheng-Yi Huang, K.Dimitri, Baokai Wang, F.Kabir,
Ch.Sims, S.Regmi, W.Neff, J.Denlinger, Hsin Lin, **D. KACZOROWSKI**, A.Bansil, M.Neupane,
Cleaving Plane- Dependent Electronic Structures of Transition Metal Diarsenides.
Phys. Rev. Res. **3** (2020) # 02 3170 (11). [\[DOI\]](#)
43. S.Dindar, A.N.Kharat, S.Zamanian, **J. JANCZAK**,
Reductive N-Methylation of Alkanolamines with Paraformaldehyde in the Presence of Cobalt Catalysts.
Inorg. Chem. Commun. **134** (2021) # 108943 (7). [\[DOI\]](#)

44. **J. DRABIK, R. LISIECKI, Ł. MARCINIAK,**
Optimization of the Thermometric Performance of Single Band Ratiometric Luminescent Thermometer Based on Tb³⁺ Luminescence by the Enhancement of Thermal Quenching of GSA-Excited Luminescence in TZPN Glass.
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45. **J. DRABIK, Ł. MARCINIAK,**
Excited State Absorption for Ratiometric Thermal Imaging.
ACS Appl. Mater. Interf. **13**₁ (2021) 1261–69. [\[DOI\]](#)
46. L. Dyminińska, A.M.M. Albejar, A. Zając, T. Czuj, W. Sasiadek, J. Lorenc, **J. HANUZA,**
Applying Additivity Rule to Determine Physico-Chemical Properties of Edible Oil Blends Based on Known Parameters of Component Oils.
Żywność **38**₁ (2021) 133–49. [\[DOI\]](#)
47. **K. ELŻBIECIAK-PIECKA, M. Suta, Ł. MARCINIAK,**
Structurally Induced Tuning of the Relative Sensitivity of LaScO₃ : Cr³⁺ Luminescent Thermometers by Co-doping Lanthanide Ions.
Chem. Eng. J. **421**, Pt 1 (2021) #129757 (?). [\[DOI\]](#)
48. **M. FANDZLOCH, T. Jędrzejewski, L. Dobrzańska, G.M. Esteban-Parra, J. Wiśniewska, A. Paneth, P. Paneth, J. Sitkowski,**
New Organometallic Ruthenium(II) Complexes with Purine Analogs – A Wide Perspective on Their Biological Application.
Dalton Tr. **50**₁₆ (2021) 5557–73. [\[DOI\]](#)
49. D. Farisoğulları, **M. BABIJ, F. Karadağ, A. Ekicibil, Y. Takano,**
The Effect of the Ag Addition on FeSe Superconducting Wire by the *ex-situ* PIT Method.
J. Mater. Sci. Mater. Electron. **32**₃ (2021) 2887–94. [\[DOI\]](#)
50. M. Fijałkowski, M.M. Maśka, J. Deniszczyk, **A. ŚLEBARSKI,**
Antiferromagnetic Ordering and Excitonic Pairing in AA-Stacked Bilayer Graphene.
Phys. Rev. B **104** (2021) #165306 (17). [\[DOI\]](#)
51. **A. FILATOVA-ZALEWSKA, Z. LITWICKI, K. MOSZAK, W. Olszewski, K. Opolczyńska, D. Pucicki, J. Serafińczuk, D. Hommel, A. JEŻOWSKI,**
Anisotropic Thermal Conductivity of AlGaN / GaN Superlattices.
Nanotechnology **32** (2021) #075707 (8). [\[DOI\]](#)
52. K. Fita, M. Dobrzyński, M. Ziętek, D. Diakowska, **A. WATRAS, R.J. WIGLUSZ,**
Assessment of Microstructure and Release of Fluoride Ions from Selected Fissure Sealants: An *in vitro* Study.
Materials **14**₁₇ (2021) #4936 (11). [\[DOI\]](#)
53. **D. GAJDA, A.J. ZALESKI, A.J. Morawski, M. BABIJ, D. SZYMAŃSKI, G. Gajda, M.A. Rindfleisch, M.S.A. Hossain,**
High Transport Critical Current Density in High Magnetic Fields at Mg¹¹B₂ Wires Made with Nano ¹¹B.
Fusion Eng. Des. **168** (2021) #112383 (5). [\[DOI\]](#)
54. **D. GAJDA, A.J. ZALESKI, A. Morawski, T. Czujko, D. Avcı, F. Karaboğa, M. Akdoğan, H. Yetiş, T. Cetner, İ. Belenli,**
The Significant Influence of Packing Density of Unreacted Mg₂⁺B Mixture and Heat Treatment Conditions on Some of Critical Parameters for MgB₂ / Fe Wires.
J. Alloy. Compd. **889** (2021) #161745 (8). [\[DOI\]](#)

55. **D. GAJDA, A.J. ZALESKI**, A.J.Morawski, **M. BABIJ, D. SZYMAŃSKI**, G.Gajda, M.A.Rindfleisch, M.Shahbazi, M.S.A.Hossain,
Superior Engineering Critical Current Density Obtained *via* Hot Isostatic Pressing of MgB₂ wires Manufactured Using Nano-amorphous Isotopic Boron.
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56. **D. GAJDA, A.J. ZALESKI**, A.Morawski, **M. MAŁECKA**, M.Akdoğan, F.Karaboğa, D.Avcı, H.Yetiş, I.Belenli, T.Czujko,
Influence of Amorphous Boron Grain Size, High Isostatic Pressure, Annealing Temperature, and Filling Density of Unreacted Material on Structure, Critical Parameters, *n*-Value, and Engineering Critical Current Density in MgB₂ Wires.
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57. **D. GAJDA, A.J. ZALESKI**, A.Morawski, **M. MAŁECKA**, K.Nenkov, M.Rindfleisch, Md Sh.A.Hossain, T.Czujko,
Effect of Heat Treatments under High Isostatic Pressure on the Transport Critical Current Density at 4.2 K and 20 K in Doped and Undoped MgB₂ Wires.
Materials **14**₁₈ (2021) # 5152 (21). [DOI]
58. E.Ganczar, P.Gawryszewska, **V. KINZHYBALO**, A.Białońska,
Photoreactive Crystal of a Copper(I) Coordination Compound with a Cinnamaldehyde Derivative.
Crys. Growth Des. **21**₁₂ (2021) 7 023–33. [DOI]
59. B.Georgieva, S.Kolev, K.Krezhov, Ch.Ghelev, D.Kovacheva, **L.- M. TRAN, M. BABIJ, A. ZALESKI**, B.Vertruyen, R.Closset, T.Koutzarova,
Magnetic Phase Transitions in Ba_{0.5}Sr_{1.5}Zn₂Fe_{11.92}Al_{0.08}O₂₂ Hexaferrites.
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Effect of Ni and Al Substitution on the Magnetic Properties of Y-type Hexaferrite Ba_{0.5}Sr_{1.5}Zn_{0.5}Ni_{1.5}Fe_{11.92}Al_{0.08}O₂₂ Powders.
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61. **YU.GERASYMCHUK**, W.Kałas, J.Arkowski, **Ł.MARCINIAK, D. HRENIAK**, E.Wysokińska, L.Strządała, M.Obremska, L.Tomachynski, V.Chernii, **W. STREK**,
Gallato Zirconium(IV) Phtalocyanine Complex Conjugated with SiO₂ Nanocarrier as a Photoactive Drug for Photodynamic Therapy of Atheromatic Plaque.
Molecules **26**₂ (2021) # 260 (16). [DOI]
62. **YU.GERASYMCHUK**, A.Kędziora, **A.WĘDZYŃSKA, L.TAHERSHAMSI**, V.Chernii, I.Tretyakova, S.Chernii, V.Pekhnyo, I.Korona-Główniak, A.Malm, B.Rajtar, T.Bachanek, D.Piątek, G.Bugla-Płoskońska, **A.ŁUKOWIAK**,
Composite Based on Graphite Oxide, Metallic Silver and Zirconium Phthalocyanine Coordinated by out-of-Plane Arginate Ligands as Photoactive Antibacterial Additive to Endodontic Cement.
J. Photochem. Photobiol. A **418** (2021) # 113 432 (11). [DOI]
63. **YU.GERASYMCHUK, L.TAHERSHAMSI, R. TOMALA, A.WĘDZYŃSKA**, V.Chernii, I.Tretyakova, I.Korona-Główniak, B.Rajtar, A.Malm, D.Piątek, **A.ŁUKOWIAK**,
Composites Based on Graphite Oxide and Zirconium Phthalocyanines with Aromatic Amino Acids as Photoactive Materials.
Chem. Pap. **75**₁₀ (2021) 5 421–33. [DOI]
64. **P. GŁUCHOWSKI**, K.Rajfur,
Impact of the Synthesis Method on the Conventional and Persistent Luminescence in Gd_{3-x}Ce_xGa₃Al₂O₁₂.
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