

МОДУЛ 1

1. Abrashev B., V. Terziev, D. Paskalev, E. Lefterova, M. Dimitrova, O. Dimitrov, A. Gigova, K. Petrov, Gas diffusion electrodes (GDEs) with Ag/ γ -MnO₂ bimetallic catalytic composition for metal hydride/air batteries, [*Bulgarian Chemical Communications*](#), 55, (2023) 61-65.
2. Angelova V.T., B. Georgiev, T. Pencheva, I. Pajeva, M. Rangelov, N. Todorova, D. Zheleva-Dimitrova, E. Kalvheva-Yovkova, I. V. Valkova, N. Vassilev, R. Mihaylova, D. Stefanova, B. Petrov, Y. Voynikov, V. Tzankova, Design, synthesis, in silico studies and in vitro evaluation of a new indole- and/or donepezil-like hybrids as multitarget-directed agents for Alzheimer's disease, [*Pharmaceuticals*](#), **16** (2023) 1194.
3. Anichina K., N. Georgiev, N. Lumov, D. Vuchev, G. Popova-Daskalova, G. Momekov, E. Cherneva, R. Mihaylova, A. Mavrova, S. Atanasova-Vladimirova, I. Piroeva, D. Yancheva, Fused Triazinobenzimidazoles Bearing Heterocyclic Moiety Synthesis, Structure Investigations, and In Silico and In Vitro Biological Activity, [*Molecules*](#) 28 (2023) 5034.
4. Argirova M., M. Guncheva, G. Momekov, E. Cherneva, R. Mihaylova, M. Rangelov, N. Todorova, P. Denev, K. Anichina, A. Mavrova, et al. Modulation Effect on Tubulin Polymerization, Cytotoxicity and Antioxidant Activity of 1H-Benzimidazole-2-Yl Hydrazones, [*Molecules*](#) 2023, 28, 291. (ИОХЦФ-БАН)
5. Arnaoudova, M., E. Lefterova, R. Rashkov, Corrosion behaviour of electrodeposited nickel-based coatings with W, Mo and TiO_x, [*J. Solid State Electrochem*](#), 2023 DOI: 10.1007/s10008-023-05696-3.
6. Atanasova, A., Petrova, A., Teneva, D., Ognyanov, M., Georgiev, Y., Nenov, N., Denev, P., Subcritical water extraction of rosmarinic acid from lemon balm (*Melissa officinalis* L.) and its effect on plant cell wall constituents, [*Antioxidants*](#), **12** (2023) 888.
7. Avramova I., D. Dimov, N. Stankova, M. Petrov, D. Karaivanova, G. Avdeev, S. Russev, D. Karashanova, B. Georgieva, E. Valcheva, T. Milenov. Novel Approach for Synthesis of Graphene-like Phases by Pulsed Laser Ablation in a Flow-Mode Suspension, [*Materials*](#), 15 (2022) 7870 (ИОМТ-БАН, ИФХ-БАН)
8. Bachvarova-Nedelcheva A., R. Iordanova, A. Stoyanova, N. Georgieva, V. Nemska, Ts. Foteva, Effect of B₂O₃ on the Structure, Properties and Antibacterial Abilities of Sol-Gel-Derived TiO₂/TeO₂/B₂O₃ Powders, [*Materials*](#) **16** (2023) 6400.

9. Bachvarova-Nedelcheva. A., R. Iordanova, A. Naydenov, A. Stoyanova, N. Georgieva, V. Nemska, Ts. Foteva, Sol-Gel Obtaining of TiO₂/TeO₂ Nanopowders with Biocidal and Environmental Applications, [*Catalysts*](#) 13 (2023) 257 (ИОХХ-БАИ)
10. Bakardzhiyski I., E. Mladenova, S. Tagareva, Examination of some elements' transfer in the system bentonite-model solution from the human health and wine quality point of view, [*Food Science and Applied Biotechnology*](#) 6(1), (2023) 56-66, (CY ΦxΦ)
11. Balkanska R., K. Stefanova, R. Stoikova-Grigorova, D. Gerginova, S. Simova, I. Atanassov, Assessment of the botanical origin of Bulgarian honey samples using melissopalynological, DNA barcoding and NMR analyses, [*Botanica Serbica*](#) 47 (2023) 75–85.
12. Boshkova N., I. Stambolova, D. Stoyanova, S. Simeonova, N. Grozev, G. Andreev, M. Shipochka, O. Dimitrov, V. Bachvarov, M. Peshova, N. Boshkov, Protective Characteristics of TiO₂ Sol-Gel Layer Deposited on Zn-Ni or Zn-Co Substrates, [*Coatings*](#) 13 (2023), 295.
13. Boshkova N., K. Kamburova, T. Radeva, S. Simeonova, N. Grozev, N. Boshkov, Hybrid Zinc Coatings with Chitosan/Alginate Encapsulated CuO-Nanoparticles for Anticorrosion and Antifouling Protection of Mild Steel, [*Coatings*](#) 13 (2023), 895.
14. Bozhilova S., K. Lazarova, S. Ivanova, D. Karashanova, T. Babeva, D. Christova. Colloidal Aqueous Dispersions of Methyl (meth) Acrylate-Grafted Polyvinyl Alcohol Designed for Thin Film Applications, [*Coatings*](#), 12 (2022) 1882.
15. Chakarova V., M. Petrova, E. Dobрева, D. Lazarova, M. Monev, Surface modification of ABS polymer by electroless deposition of thin nickel film from a solution without reducing agent, [*Transactions of the IMF*](#), 101(2023) 135-139.
16. Dangelov, M.; Fernández-Figueiras, A.; Ravutsov, M.; Vakarelska, E.; Marinova, M.; Candeias, N.; Simeonov, S. Ru-catalyzed isomerization of Achmatowicz derivatives: a sustainable route to biorenewables and bioactive lactones, [*ACS Catal.*](#), **13** (2023) 1916–1925.
17. Dikovska A., R. Nikov, G. Avdeev, G. Atanasova, T. Dilova, D. Karashanova, N. Nedyalkov. ZnO/Zn₂TiO₄ composite nanostructures produced by laser ablation in air. *Physica E, Low-dimensional Systems and Nanostructures* 150 (2023) 115707 .
18. Dimitrov E., N. Toncheva-Moncheva, P. Bakardzhiev, A. Forsy, J. Doumanov, K. Mladenova, S. Petrova, B. Trzebicka, S. Rangelov, Original Synthesis of a Nucleolipid for Preparation of Vesicular Spherical Nucleic Acids, [*Nanomaterials*](#), 12 (2022) 3645.
19. Dimov D. A., N. Stankova, D. Karaivanova, D. Karashanova, B. Georgieva, I. Avramova, M. Petrov, E. Valcheva, G. Avdeev, K. Ivanov, T. Milenov. Modification of

- microcrystalline graphites by pulsed laser ablation in a flow mode suspension. *Journal of Physics, Conference Series* 2487 (2023) 012010.
20. Dobrikov G., Y. Nikolova, I. Slavchev, M. Dangalov, V. Deneva, L. Antonov, N. Vassilev, Structure and Conformational Mobility of OLED-Relevant 1,3,5-Triazine Derivatives, *Molecules* 28 (2023) 1248.
 21. Gabrovska M., D. Nikolova, H. Kolev, D. Karashanova, P. Tzvetkov, B. Burdin, E. Mladenova, D. Vladikova, T. Tabakova, Environmentally Benign pSOFC for Emissions-Free Energy: Assessment of Nickel Network Resistance in Anodic Ni/BCY15 Nanocatalyst, *Nanomaterials*, 13 (2023) 1781.
 22. Gancheva, M.; Iordanova, R.; Koseva, I.; Avdeev, G.; Burdina, G.; Ivanov, P. „Synthesis and Luminescent Properties of Barium Molybdate Nanoparticles“, *Materials* 16 (2023) 7025.
 23. Gerginova D., S. Simova, Chemical Profiling of Wines Produced in Bulgaria and Distinction from International Grape Varieties, *ACS, Omega* 8 (2023), 18702-18713.
 24. Gerginova, D., M. Popova, R. Chimshirova, B. Trusheva, M. Shanahan, M. Guzmán, E. Solorzano-Gordillo, E. López-Roblero, M. Spivak, S. Simova, V. Bankova, The Chemical Composition of Scaptotrigona mexicana Honey and Propolis Collected in Two Locations: Similarities and Differences, *Foods*, 12 (2023) 3317.
 25. Giosheva I., V. Strijkova, R. Penkova, S. Krumova, A. Langari, A. Danailova, S. Taneva, T. Stoyanova, L. Topalova, E. Gartchev, G. Georgieva, S. Todinova. Membrane Lesions and Reduced Life Span of Red Blood Cells in Preeclampsia as Evidenced by Atomic Force Microscopy, *Int. J. Mol. Sci.*, 24 (2023) 7100.
 26. Grahovski B., R. Velinova, P. Shestakova, A. Naydenov, H. Kolev, I. Yordanova, G. Ivanov, K. Tenchev, S. Todorova, Catalytic Oxidation of VOC over Cobalt-Loaded Hierarchical MFI Zeolite, *Catalysts* 13, (2023), 834.
 27. Grancharov G., Atanasova M., Kalinova R., Tuleshkov P., Petrov P., Marinova M., Ravutsov M., Simeonov S. Biorenewable Oxypropylated Pentane-1,2,5-triol as a Source for Incorporation in Rigid Polyurethane Foams, *Polymers*, 15 (2023) 4148.
 28. Grigorova E., S. Todorova, P. Tzvetkov, T. Spassov, Hydrogen sorption and electrochemical hydriding of $Mg_{2.1}Ni_{0.7}V_{0.3}$, *Bulgarian Chemical Communications* 55 (3) (2023) 183-187.
 29. Gugleva, V.; Ahchiyska, K.; Georgieva, D.; Mihaylova, R.; Konstantinov, S.; Dimitrov, E.; Toncheva-Moncheva, N.; Rangelov, S.; Forys, A.; Trzebicka, B.; et al. Development, Characterization and Pharmacological Evaluation of Cannabidiol-Loaded Long Circulating Niosomes, *Pharmaceutics*, 15 (2023) 2414.

30. Hadjichristov, G, Kovacheva, D, Marinov, Y, Karashanova, D, Vlahov, T, Scaramuzza, N. Dielectric spectroscopy characterization of Na⁺ ion-conducting polymer nanocomposite system PEO–PVP–NaIO₄–TiO₂, *Journal of Advanced Dielectrics*, 2350021 (2023).
31. Haladjova E., S. Panseri, M. Montesi, A. Rossi, A. Skandalis, S. Pispas, S. Rangelov, Influence of DNA Type on the Physicochemical and Biological Properties of Polyplexes Based on Star Polymers Bearing Different Amino Functionalities, *Polymers* 15 (2023) 894.
32. Hyusein C., V. Tsakova, Galvanostatic copper deposition on nanostructured carbon screen printed electrodes, *Journal of Chemical Technology and Metallurgy*, 58 (6) (2023) 1-7.
33. Ignatova, M.; Manolova, N.; Rashkov, I.; Georgieva, A.; Toshkova, R.; Markova, N. 5-Amino-8-hydroxyquinoline-containing Electrospun Materials Based on Poly(vinyl alcohol) and Carboxymethyl Cellulose and Their Cu²⁺ and Fe³⁺ Complexes with Diverse Biological Properties: Antibacterial, Antifungal and Anticancer, *Polymers*, **15** (2023) 3140.
34. Issa, G, Kormunda, M, Tumurbaatar, O, Szegedi, Á, Kovacheva, D, Karashanova, D, Popova, M. Impact of Ce/Zr Ratio in the Nanostructured Ceria and Zirconia Composites on the Selective CO₂ Adsorption, *Nanomaterials*, **13** (2023) 2428.
35. Issa, G., M. Dimitrov, A. Marinov, N. Velinov, I Spasova, D. Kovacheva, T. Tsoncheva, Activated Carbon from Used Motor Oils: Synthesis and Application as Supports of Nanosized Fe–Cr Oxides, *Waste and Biomass, Valorization*, 14 (4) (2023) 1355.
36. Ivanova, N, Ermenlieva, N, Simeonova, L, Kolev, I, Slavov, I, Karashanova, D, Andonova, V. Chlorhexidine–Silver Nanoparticle Conjugation Leading to Antimicrobial Synergism but Enhanced Cytotoxicity, *Pharmaceutics*, 15 (2023) 2298.
37. Kalinova R., G. Grancharov, J. Doumanov, K. Mladenova, S. Petrova, I Dimitrov, Green Synthesis and the Evaluation of a Functional Amphiphilic Block Copolymer as a Micellar Curcumin Delivery System, *Int. J. Mol. Sci.* 24 (2023) 10588.
38. Kalinova, R.; Mladenova, K.; Petrova, S.; Doumanov, J.; Dimitrov, I. Solvent-Free Synthesis of Multifunctional Block Copolymer and Formation of DNA and Drug Nanocarriers, *Nanomaterials*, 13 (2023) 2936.
39. Kamenova, K.; Momekova, D.; Grancharov, G.; Prancheva, A.; Toncheva-Moncheva, N.; Ivanov, E.; Konstantinov, S.; Petrov, P.D. In Situ Gelling Hydroxypropyl Cellulose Formulation Comprising Cannabidiol-Loaded Block Copolymer Micelles for Sustained Drug Delivery, *Int. J. Mol. Sci.*, 24 (2023) 16534.

40. Kamenova, K.; Radeva, L.; Konstantinov, S.; Petrov, P.D.; Yoncheva, K. Copolymeric Micelles of Poly(ϵ -caprolactone) and Poly(methacrylic acid) as Carriers for the Oral Delivery of Resveratrol, *Polymers*, 15 (2023) 3769.
41. Karabelyov, V., V. T. Angelova, M, Sharkov, R. Mihaylova, G. Popov, T. Pencheva, V. Manov, M. Dangelov, N. Todorova, M. Kondeva-Burdina, In vitro/in vivo effects of some new 2,5-disubstituted 1,3,4-oxadiazole and hydrazone analogues targeting Parkinson's disease, *Journal of Molecular Structure*, 1288 (2023) 135755.
42. Komsa-Penkova R., A. Yordanova, P. Tonchev, S. Kyurkchiev, S. Todinova, V. Strijkova, M. Iliev, B. Dimitrov, G. Altankov. Altered Mesenchymal Stem Cells Mechanotransduction from Oxidized Collagen: Morphological and Biophysical Observations, *Int. J. Mol. Sci.*, 24 (2023) 3635.
43. Komsa-Penkova R., S. Krumova, A. Langari, I. Giosheva, L. Gartcheva, A. Danailova, L. Topalova, T. Stoyanova, V. Strijkova, A. Savov, S. Todinova. Blood Plasma Calorimetric Profiles of Women with Preeclampsia: Effect of Oxidative Stress, *Antioxidants*, 12 (2023) 1032.
44. Kostadinova O., I. Popov, S. Stankov, H. Kolev, T. Petkov, Influence of synthesis conditions on the physicochemical and electrocatalytic properties of non-stoichiometric Ba₂Sr₂La₂Ti₄O₁₂ perovskites, *Karbalá International Journal of Modern Science*, 9 (1), Article 1.
45. Kyuchuk, S, Paneva, D, Manolova, N, Rashkov, I, Karashanova, D, Naydenov, M, Markova, N. Electrospun Fibers of Biocompatible and Biodegradable Polyesters, Poly(Ethylene Oxide) and Beeswax with Anti-Bacterial and Anti-Fungal Activities. *Materials*, 16 (2023) 4882.
46. Lazarova K., D. Christova, D. Karashanova, B. Georgieva, G. Marovska, A. Slavov, T. Babeva, Blending Approach Preparation of PVA-g-PMA Films with Embedded "Green" Synthesized Silver Nanoparticles for Acetone Optical Detection, *Sensors*, 23 (2023) 2941.
47. Lilov E., V. Lilova, S. Nedev, S. Kozhukharov, Ch. Girginov, D. Yancheva, Model for photodegradation with a modified rate constant. Part 1: use of anodically-prepared thin ZnO films for methyl orange photodegradation, *Journal of Chemical Technology & Metallurgy* 57 (6) (2022) 1175-1182.
48. Lovchinov K., G. Alexieva, M. Petrov, R. Gergova, N. Tyutyundzhiev, K. Lazarova, T. Babeva. Influence of deposition temperature and time on structural and gas sensing properties of electrochemically deposited ZrO₂ layers, *Materials Science and Engineering, B*, 297 (2023) 116793.

49. Lyubenova L, V. Rangelova, M. Spassova, T. Spassov, Glass Forming Ability of Zr-based Zr–Cu–Ni–Al–(Ag) Alloys, [*Journal of Thermal Analysis and Calorimetry*](#), 148 (2023), 3975 – 3980.
50. Marinov, G, Georgieva, B, Vasileva, M, Babeva, T. Study of Structure, Morphology and Optical Properties of Cobalt-Doped and Co/Al-co-Doped ZnO Thin Films Deposited by Electro spray Method, [*Applied Science*](#), 13 (2023) 9611.
51. Mateev G., G, L. Nedelchev, D. Nazarova, L. Nikolova, B. Ivanov, V. Strijkova, E. Stoykova. Polarization properties of two-dimensional polarization holographic gratings inscribed in azopolymer thin films, [*Journal of Physics: Conference Series*](#), 2487 (2023) 012011.
52. Milenov T., D. Dimov, I. Avramova, S. Kolev, D. Trifonov, G. Avdeev, D. Karashanova, B. Georgieva, K. Ivanov, E. Valcheva, Modification of micro-crystalline graphite and carbon black by acetone, toluene, and phenol, [*J. Chem. Phys.*](#), 158, (2023) 064706.
53. Milkova V., K. Kamburova, P. Martinov, N. Vilhelmova-Ilieva and V. Rashev, Chitosan-Based Nanocarriers for Delivery of Remdesivir, [*Sci. Pharm.*](#), **91** (2023) 37.
54. Milkova, V., Polysaccharide/Carbon Quantum Dots Composite Film on Model Colloidal Particles—An Electro-Optical Study, [*Polymers*](#) **15** (2023) 3766.
55. Milkova, V., Vilhelmova-Ilieva, N., Gyurova, A., Kamburova, K., Dimitrov, I., Tsvetanova, E., Georgieva, A., Mileva, M., Remdesivir-Loaded Nanoliposomes Stabilized by Chitosan/Hyaluronic Acid Film with a Potential Application in the Treatment of Coronavirus Infection, [*Neurol. Int.*](#), **15** (2023) 1320–1338.
56. Miricioiu, M.G., R. E. Ionete, S. Simova, D. Gerginova, O. R. Botoran, Metabolite Profiling of Conifer Needles: Tracing Pollution and Climate Effects, [*Int. J. Mol., Sci.*](#) 24 (2023) 14986.
57. Mladenova R., K. Aleksieva, N. Solakov, K. Loginovska, Effects of gamma irradiation on free radical components, phenolic content and antioxidant activity of beebread, [*Comptes rendus de l'Académie bulgare des Sciences*](#), 75(5), 2022, 672-679.
58. Mladenova R., N. Solakov, K. Loginovska, Irradiation effects on phenolic content in Bulgarian honey bee products and correlation to the antioxidant activity, [*Radiochimica Acta*](#), 2023, DOI: 10.1515/ract-2022-0069.
59. Nakova, A., M. Abrashev, V. Tsakova, Spontaneous silver deposition on cathodically pre-treated screen-printed carbon electrodes, [*J. Solid State Electrochem.*](#), (2023) DOI:10.1007/s10008-023-05602-x.

60. Nazarova, D., Nedelchev, L., Berberova-Buhova, N., Mateev, G. Nanocomposite photoanisotropic materials for applications in polarization holography and photonics, [*Nanomaterials*](#), 13, (2023) 2946.
61. Nedelchev L., G. Mateev, L. Nikolova, D. Nazarova, B. Ivanov, V. Strijkova, E. Stoykova, K. Choi, J. Park. In-line and off-axis polarization-selective holographic lenses recorded in azopolymer thin films via polarization holography and polarization multiplexing, [*Applied Optics*](#), 62 (10) (2023) D1-D7.
62. Palcheva R., L. Kaluža, T. Petrova, L. Dimitrov, D. Karashanova, G. Tyuliev, K. Jirátová. Nanocrystalline Sulfided NiMoW Catalyst Supported on Mesoporous Aluminas for the Hydrodesulfurization of 4, 6-Dimethyldibenzothiophene, [*Crystals*](#), 13 (2023) 543.
63. Pavlov V., R. Georgiev, K. Lazarova, B. Georgieva, T. Babeva. Hard-Templated Porous Niobia Films for Optical Sensing Applications, [*Photonics*](#) 10 (2023) 167 (ИОМТ-БАН).
64. Petrov L., O. Stoilova, G. Pramatarov, H. Kanzova, E. Tsvetanova, M. Andreeva, A. Georgieva, D. Atanasova, S. Philipov, A. Alexandrova, Effect of Chitosan-Diosgenin Combination on Wound Healing, [*Int. J. Mol. Sci.*](#), 24 (2023) 5049.
65. Petrov, S.; Petrova, D.; Minh, C. N. H.; Marinova, V.; Napoleonov, B.; Lan, Y.-P.; Strijkova, V.; Hsu, K.Y.; Dimitrov, D.; and Lin, S. H., Multifunctional Al-doped ZnO thin films for vertically aligned LC devices, [*Optical Materials*](#), **146** (2023) 114498.
66. Petrova D., B. Napoleonov, Ch.N.H. Minh, V. Marinova, Y.-P. Lan, I. Avramova, S. Petrov, B. Blagoev, V. Videva, V. Strijkova, I. Kostadinov, S.-H. Lin, D. Dimitrov. The Effect of Post Deposition Treatment on Properties of ALD Al-Doped ZnO Films, [*Nanomaterials*](#), 13 (2023) 800.
67. Petrova S., N. Mazhdrakova, S. Todinova, V. Strijkova, M. Zhiponova, S. Krumova. Nepeta nuda L. Plant Extract Preserves the Morphology of Red Blood Cells Subjected to Oxidative Stress, [*Med. Sci. Forum.*](#), 21 (2023) 35.
68. Petrova, A., Ognyanov, M., Petkova, N., Denev, P.. Phytochemical characterization of purple coneflower roots (*Echinacea purpurea* (L.) Moench.) and their extracts, [*Molecules*](#) **28** (2023) 3956.
69. Popova M., M. Oykova, M. Dimitrov, D. Karashanova, D. Kovacheva, G. Atanasova, A. Szegedi. CO₂ Hydrogenation to Renewable Methane on Ni/Ru Modified ZSM-5 Zeolites: The Role of the Preparation Procedure, [*Catalysts*](#), 12 (2022) 1648.
70. Rabadjieva D., R. Gergulova, K. Ruseva, A. Bonchev, P. Shestakova, M. Simeonov, R. Vasileva, D. Tatchev, R. Titorenkova, E. Vassileva, Polycarboxy/Sulfo Betaine—Calcium Phosphate Hybrid Materials with a Remineralization Potential, [*Materials*](#) **16** (2023) 6640.

71. Slavkova Z., J. Genov, H. Chamati, V. Boev and D. Yancheva, Silver nanoparticles synthesis and their effect on the SOPC lipid structure, *J. Phys.: Conf. Ser.*, 2240 (2022) 012019.
72. Spasova M., N. Stoyanova, N. Nachev, M. Ignatova, N. Manolova, I. Rashkov, A. Georgieva, R. Toshkova, N. Markova, Innovative Fibrous Materials Loaded with 5-Nitro8-hydroxyquinoline via Electrospinning/Electrospraying Demonstrate Antioxidant, Antimicrobial and Anticancer Activities, *Antioxidants*, 12 (2023) 1243.
73. Stancheva R., T. Paunova-Krasteva, T. Topouzova-Hristova, S. Stoitsova, P. Petrov, E. Haladjova, Ciprofloxacin-Loaded Mixed Polymeric Micelles as Antibiofilm Agents, *Pharmaceutics* 15 (2023) 1147.
74. Stankova N., A. Nikolov, D. Karashanova, N. Nedyalkov, A. Dikovska. Laser-assisted synthesis of metallic composite nanostructures in aqueous solutions, *Journal of Physics: Conference Series*, 2487 (2023) 012013.
75. Stoyanova N., M. Spasova, N. Manolova, I. Rashkov, A. Georgieva, R. Toshkova, Quercetin- and Rutin-Containing Electrospun Cellulose Acetate and Polyethylene Glycol Fibers with Antioxidant and Anticancer Properties, *Polymers*, 14 (2022) 5380.
76. Stoyanova N., M. Spasova, N. Manolova, I. Rashkov, M. Kamenova-Nacheva, P. Staleva, M. Tavlinova-Kirilova, Electrospun PLA-Based Biomaterials Loaded with Melissa officinalis Extract with Strong Antioxidant Activity, *Polymers*, 15 (2023) 1070.
77. Stoyanova N., M. Spasova, N. Manolova, I. Rashkov, S. Taneva, S. Momchilova, A. Georgieva, Physico-Chemical, Mechanical, and Biological Properties of Polylactide/Portulaca oleracea Extract Electrospun Fibers, *Membranes*, 13 (2023) 298.
78. Stoyanova, N.; Nachev, N.; Spasova, M. Innovative Bioactive Nanofibrous Materials Combining Medicinal and Aromatic Plant Extracts and Electrospinning Method, *Membranes*, 13 (2023) 840.
79. Stoyanova-Ivanova A., E. Lefterova, Y. Marinov, G. Ivanova, A. Stoyanova, G. Hadjichristov, Electrochemical Cells with Anodes Performed with Zn Active Mass with Added B(Pb)SCCO 2212 Conductive Ceramics, *Comptes Rendus de l'Academie bulgare des Sciences.*, 76 (2023) 871-880.
80. Todorova S., B. Abrashev, V. Rangelova, E. Vassileva, T. Spassov, Effect of low Al Content on the Electrode Performance of LaNi_{5-x}Al_x Hydrogen Storage Alloys, *Journal of Chemical Technology and Metallurgy*, 58 (1) (2023) 200 – 207 (CY ΦxΦ).
81. Todorova, N., N. Minev, V. Marinova, K. Buchkov, V. Videva, R. Todorov, P. Rafailov, V. Strijkova, V. Psycharis, T. Giannakopoulou, I. Papailias, D. Dimitrov, C. Trapalis. Two-dimensional PtSe₂ coatings with antibacterial activity, *Appl Surface Sci*, 611, Part A, 2023.

82. Toncheva-Moncheva, N.; Dimitrov, E.; Grancharov, G.; Momekova, D.; Petrov, P.; Rangelov, S. Cinnamyl-Modified Polyglycidol/Poly(ϵ -Caprolactone) Block Copolymer Nanocarriers for Enhanced Encapsulation and Prolonged Release of Cannabidiol, *Pharmaceutics*, 15 (2023) 2128.
83. Trendafilova, A., P. Staleva, Zh. Petkova, V. Ivanova, Y. Evstatieva, D. Nikolova, I. Rasheva, N. Atanasov, T. Topouzova-Hristova, R. Veleva, V. Moskova-Doumanova, V. Dimitrov, S. Simova, Phytochemical Profile, Antioxidant Potential, Antimicrobial Activity, and Cytotoxicity of Dry Extract from *Rosa damascena* Mill, *Molecules* 28 (2023) 7666.
84. Tsekova P., O. Stoilova, Fabrication of Electrospun Cellulose Acetate/Nanoclay Composites for Pollutant Removal, *Polymers*, 14 (2022) 5070.
85. Tumurbaatar O., M. Popova, V. Mitova, P. Shestakova, N. Koseva, Engineering of Silica Mesoporous Materials for CO₂ Adsorption, *Materials* 16, (2023) 4179. (ИОХЦФ-БАН, ИП-БАН)
86. Vassileva P., V. Tumbalev, D. Kichukova, D. Voykova, D. Kovacheva, I. Spassova, Study on the Dye Removal from Aqueous Solutions by Graphene-Based Adsorbents, *Materials* 16 (2023) 5754.
87. Vassileva, E., L. Mihaylov, M. Spassova, T. Spassov, Porous Metallic Structures by De-alloying Microcrystalline Melt-spun Ternary Zn₇₀ (Sn,Bi)₃₀, *Journal of Porous Materials*, 30 (2023) 485 – 492.
88. Velinova R., S. Todorova, D. Kovacheva, H. Kolev, Y. Karakirova, P. Markov, K. Tumbalova, G. Ivanov, A. Naydenov, Effect of TiO₂ on Pd/La₂O₃-CeO₂-Al₂O₃ Systems during Catalytic Oxidation of Methane in the Presence of H₂O and SO₂, *Materials* 16 (2023) 6784.
89. Velinova, R., Anton Naydenov , Diana Kichukova, Ventsislav Tumbalev, Genoveva Atanasova , Daniela Kovacheva and Ivanka Spassova, Highly Efficient RGO-Supported Pd Catalyst for Low Temperature Hydrocarbon Oxidation, *Catalysts*, 13 (2023) 1224.

МОДУЛ 2

1. „130 години Народен музей“, каталог на изложбата, Национален етнографски музей, ИЕФЕМ-БАН, 2023, ISBN: 978-954-8458-60-3.
2. Lesigyarski D., A. Nikolova, B. Zlateva, Studying the production technology of a set of archaeological ceramic sherds through magnetic and spectrometric measurements, [*Geologica Balcanica*](#) 52 (3) (2023) 91–94.
3. Mihaylova V., Yotova G., Marinova K., Benderev A., Lyubomirova V., Tsakovski S., Biomonitoring of Potentially Toxic Elements in an Abandoned Mining Region Using *Taraxacum officinale*: A Case Study on the “Tsar Asen” Mine in Bulgaria, [*Appl. Sci.*](#) 13 (2023) 11860.
4. Slavkova Z., Yancheva D., Genova J., Phase behaviour and structural properties of SOPC model lipid system in a sucrose solution, [*Spectrochimica Acta Part A: Molecular and Biomolecular Spectroscopy*](#) 304 (2024) 123287.
5. Stamboliyska B., S. Belishki, N. Haralampiev, D. Yancheva, E. Velcheva, P. Penkova, A.Lederer, D. Fischer, The Wall Paintings in the Russian Church St. Nicholas in Sofia: A Technological Study by Integrated Analytical Approach, [*Proceedings of the Bulgarian Academy of Sciences*](#) 76 (2023) 377–87.
6. Stamboliyska B., Tapanov S., Kovacheva D., Atanasova-Vladimirova S., Ranguelov B., Yancheva D., Velcheva E., Stoyanov S., Guncheva M., Fischer D., Lederer A., Characterization of art materials and degradation processes in the exterior wall paintings of the main church of Rila Monastery, Bulgaria, [*Vibrational Spectroscopy*](#) 128 (2023) 103580.
7. Włodarczak, P., R. Manova, M. Podsiadlo, M. Trautmann, S. Alexandrov, The old man and the three babi: an exceptional burial from the ‘Pamukli bair’ barrow near Malomirovo, southeast Bulgaria, [*Vertaisarvioitu Kollegialt Granskad*](#), Tunnus, Finland (2023) 34-46.
8. Zlateva B., T. Stoyonov, D. Lesigyarski, V. Bonev, The Armour of the Thracian Warriors—an Archaeometrical Approach, [*Arcaeologia Bulgarica*](#), XXVII (2023) 1-12.
9. Антонов П., А. Вѣтов, Медальони с ІУІ и двоен кръст – по повод на един новопостъпил паметник в колекцията на НИМ. *Известия на националния исторически музей*, том XXXVI (2023) 175-208. / Antonov P., A. Vatov, Medallions with the IYI sign and a double cross – on the occasion of a newly acquired artifact in the NHM collection Proceedings, vol. XXXVI (2023) 175-208.

10. Бакърджиев С., Р. Манова, Б. Рангелов, Г. Авдеев, Д. Пантелеева, Р. Кукева, Експертиза и методи на изследване на стенописни фрагменти, Изд. „За буквите – О писменехъ“, 2023 , ISBN: 978-619 -185-592-6.
11. Иванов, Д., Р. Манова (съставители), Идентификация и автентикация на движими и недвижими културни ценности, съставители, Академично издателство „За буквите – О писменехъ“, 2023, ISBN 978-619-185-586-5.
12. Петрунова Б., „Националният исторически музей на 50 години“, *Известия на националния исторически музей*, том XXXVI (2023) 13-29. / *The National Museum of History turns 50 - Proceedings*, vol. XXXVI (2023) 13-29.
13. Христов И., С. Велев. Проучване на антични рудници за добив на злато в околностите на Аполония Понтика. – *Известия НИМ*, том XXXVI (2023) 97-123.