

# SaÅjo Gyergyek

## List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/5901252/publications.pdf>

Version: 2024-02-01

68  
papers

1,361  
citations

331538

21  
h-index

395590

33  
g-index

69  
all docs

69  
docs citations

69  
times ranked

2072  
citing authors

#	ARTICLE	IF	CITATIONS
1	Influence of synthesis method on structural and magnetic properties of cobalt ferrite nanoparticles. <i>Journal of Nanoparticle Research</i> , 2010, 12, 1263-1273.	0.8	113
2	Synthesis of nickel and cobalt sulfide nanoparticles using a low cost sonochemical method. <i>Heliyon</i> , 2017, 3, e00273.	1.4	77
3	Oleic-acid-coated CoFe <sub>2</sub> O <sub>4</sub> nanoparticles synthesized by co-precipitation and hydrothermal synthesis. <i>Materials Chemistry and Physics</i> , 2012, 133, 515-522.	2.0	57
4	Colloidal stability of oleic- and ricinoleic-acid-coated magnetic nanoparticles in organic solvents. <i>Journal of Colloid and Interface Science</i> , 2011, 354, 498-505.	5.0	56
5	Hydrothermal growth of iron oxide NPs with a uniform size distribution for magnetically induced hyperthermia: Structural, colloidal and magnetic properties. <i>Journal of Alloys and Compounds</i> , 2017, 694, 261-271.	2.8	50
6	Magnetic properties and heating efficacy of magnesium doped magnetite nanoparticles obtained by co-precipitation method. <i>Journal of Magnetism and Magnetic Materials</i> , 2019, 475, 470-478.	1.0	45
7	Superparamagnetic nanocomposites of iron oxide in a polymethyl methacrylate matrix synthesized by in situ polymerization. <i>Colloids and Surfaces A: Physicochemical and Engineering Aspects</i> , 2008, 317, 49-55.	2.3	42
8	Effects of magnetic cobalt ferrite nanoparticles on biological and artificial lipid membranes. <i>International Journal of Nanomedicine</i> , 2014, 9, 1559.	3.3	41
9	Adsorption of Amino Acids, Aspartic Acid, and Lysine onto Iron-Oxide Nanoparticles. <i>Journal of Physical Chemistry C</i> , 2016, 120, 14372-14381.	1.5	37
10	Thermal spraying of Co,Ti-substituted Ba-hexaferrite coatings for electromagnetic wave absorption applications. <i>Surface and Coatings Technology</i> , 2009, 203, 3312-3319.	2.2	36
11	Catalytic Hydrogenation, Hydrodeoxygenation, and Hydrocracking Processes of a Lignin Monomer Model Compound Eugenol over Magnetic Ru/Câ€“Fe <sub>2</sub> O <sub>3</sub> and Mechanistic Reaction Microkinetics. <i>Catalysts</i> , 2018, 8, 425.	1.6	34
12	Quantifying shapes of nanoparticles using modified circularity and ellipticity measures. <i>Measurement: Journal of the International Measurement Confederation</i> , 2016, 92, 252-263.	2.5	32
13	Mesoporous silica nanoparticles modified with N-rich polymer as a potentially environmentally-friendly delivery system for pesticides. <i>Microporous and Mesoporous Materials</i> , 2021, 310, 110663.	2.2	30
14	Critical thinking on baseline corrections for electrochemical surface area (ECSA) determination of Pt/C through H-adsorption/H-desorption regions of a cyclic voltammogram. <i>Applied Catalysis B: Environmental</i> , 2022, 311, 121351.	10.8	29
15	Characterisation of plasma-sprayed SrFe <sub>12</sub> O <sub>19</sub> coatings for electromagnetic wave absorption. <i>Journal of the European Ceramic Society</i> , 2011, 31, 1439-1449.	2.8	27
16	Sonochemical preparation of copper sulfides with different phases in aqueous solutions. <i>Materials Research Bulletin</i> , 2013, 48, 1184-1188.	2.7	27
17	Discrete evolution of the crystal structure during the growth of Ba-hexaferrite nanoplatelets. <i>Nanoscale</i> , 2018, 10, 14480-14491.	2.8	27
18	Magnetically separable Ru-based nano-catalyst for the hydrogenation/hydro-deoxygenation of lignin-derived platform chemicals. <i>Materials Research Letters</i> , 2018, 6, 426-431.	4.1	26

#	ARTICLE	IF	CITATIONS
19	Catalyst structure-based hydroxymethylfurfural (HMF) hydrogenation mechanisms, activity and selectivity over Ni. <i>Chemical Engineering Journal</i> , 2021, 412, 127553.	6.6	26
20	Incorporation of Sc into the structure of barium-hexaferrite nanoplatelets and its extraordinary finite-size effect on the magnetic properties. <i>Acta Materialia</i> , 2019, 172, 84-91.	3.8	24
21	Environmentally and Industrially Friendly Recycling of Platinum Nanoparticles Through Electrochemical Dissolution–Electrodeposition in Acid–Free/Dilute Acidic Electrolytes. <i>ChemSusChem</i> , 2018, 11, 3742-3750.	3.6	22
22	Synthesis of Poly-Sodium-Acrylate (PSA)-Coated Magnetic Nanoparticles for Use in Forward Osmosis Draw Solutions. <i>Nanomaterials</i> , 2019, 9, 1238.	1.9	22
23	A hierarchical Ru-bearing alumina/magnetic iron-oxide composite for the magnetically heated hydrogenation of furfural. <i>Green Chemistry</i> , 2020, 22, 5978-5983.	4.6	22
24	Superparamagnetic Fe <sub>3</sub> O <sub>4</sub> @CA Nanoparticles and Their Potential as Draw Solution Agents in Forward Osmosis. <i>Nanomaterials</i> , 2021, 11, 2965.	1.9	22
25	Superior stability and high biosorbent efficiency of carboxymethylchitosan covalently linked to silica-coated core-shell magnetic nanoparticles for application in copper removal. <i>Journal of Environmental Chemical Engineering</i> , 2019, 7, 102913.	3.3	21
26	Efficient Copper Removal from an Aqueous Environment using a Novel and Hybrid Nanoadsorbent Based on Derived-Polyethyleneimine Linked to Silica Magnetic Nanocomposites. <i>Nanomaterials</i> , 2019, 9, 209.	1.9	21
27	Superparamagnetic nanocomposite particles synthesized using the mini-emulsion technique. <i>Colloids and Surfaces A: Physicochemical and Engineering Aspects</i> , 2010, 366, 113-119.	2.3	20
28	Anisotropic microrheological properties of chain-forming magnetic fluids. <i>Soft Matter</i> , 2011, 7, 125-131.	1.2	19
29	Holographic Gratings for Slow-Neutron Optics. <i>Materials</i> , 2012, 5, 2788-2815.	1.3	19
30	Orientational Order-Magnetization Coupling in Mixtures of Magnetic Nanoparticles and the Ferroelectric Liquid Crystal. <i>Ferroelectrics</i> , 2010, 410, 37-41.	0.3	18
31	PZT–NZF/CF ferrite flexible thick films: Structural, dielectric, ferroelectric, and magnetic characterization. <i>Journal of Advanced Ceramics</i> , 2019, 8, 545-554.	8.9	18
32	Synthesis of magnetic iron oxide particles: Development of an in situ coating procedure for fibrous materials. <i>Colloids and Surfaces A: Physicochemical and Engineering Aspects</i> , 2012, 400, 58-66.	2.3	17
33	Pt/C Electrocatalyst Durability Enhancement by Inhibition of Pt Nanoparticle Growth Through Microwave Pretreatment of Carbon Support. <i>ChemElectroChem</i> , 2021, 8, 1183-1195.	1.7	17
34	Synthesis and characterization of nanosized silver chalcogenides under ultrasonic irradiation. <i>Materials Express</i> , 2015, 5, 359-366.	0.2	16
35	Novel Ba-hexaferrite structural variations stabilized on the nanoscale as building blocks for epitaxial bi-magnetic hard/soft sandwiched maghemite/hexaferrite/maghemite nanoplatelets with out-of-plane easy axis and enhanced magnetization. <i>Nanoscale</i> , 2017, 9, 17551-17560.	2.8	16
36	Mixtures of Magnetic Nanoparticles and the Ferroelectric Liquid Crystal: New Soft Magnetoelectrics. <i>Ferroelectrics</i> , 2012, 431, 150-153.	0.3	14

#	ARTICLE	IF	CITATIONS
37	Influence of Al(OH) <sub>3</sub> nanoparticles on the mechanical and fire resistance properties of poly(methyl methacrylate) nanocomposites. <i>Polymer Composites</i> , 2016, 37, 1659-1666.	2.3	14
38	Gram-size Pt/C catalyst synthesized using Pt compound directly recovered from an end-of-life PEM fuel cell stack. <i>Materials Chemistry and Physics</i> , 2022, 276, 125439.	2.0	14
39	Recovery of Pt and Ru from Spent Low-Temperature Polymer Electrolyte Membrane Fuel Cell Electrodes and Recycling of Pt by Direct Redeposition of the Dissolved Precursor on Carbon. <i>ACS Applied Energy Materials</i> , 2021, 4, 6842-6852.	2.5	12
40	Electrification of Catalytic Ammonia Production and Decomposition Reactions: From Resistance, Induction, and Dielectric Reactor Heating to Electrolysis. <i>ACS Applied Energy Materials</i> , 2022, 5, 5457-5472.	2.5	12
41	Nanocomposites comprised of homogeneously dispersed magnetic iron-oxide nanoparticles and poly(methyl methacrylate). <i>Beilstein Journal of Nanotechnology</i> , 2018, 9, 1613-1622.	1.5	11
42	Magnetic Heating of Nanoparticles Applied in the Synthesis of a Magnetically Recyclable Hydrogenation Nanocatalyst. <i>Nanomaterials</i> , 2020, 10, 1142.	1.9	11
43	Use of Natural Clinoptilolite in the Preparation of an Efficient Adsorbent for Ciprofloxacin Removal from Aqueous Media. <i>Minerals (Basel, Switzerland)</i> , 2021, 11, 518.	0.8	11
44	Mechanochemical Route for the Preparation of Nanosized Aluminum and Gallium Sulfide and Selenide. <i>Materials and Manufacturing Processes</i> , 2016, 31, 1608-1612.	2.7	10
45	Evolution of the microstructure during the early stages of sintering barium hexaferrite nanoplatelets. <i>Journal of the European Ceramic Society</i> , 2019, 39, 4831-4841.	2.8	10
46	Sonochemical synthesis, characterization and photocatalytic activity of Bi <sub>2</sub> Mo <sub>3</sub> O <sub>12</sub> . <i>Inorganic Chemistry Communication</i> , 2020, 112, 107699.	1.8	10
47	Magnetic nanostructures functionalized with a derived lysine coating applied to simultaneously remove heavy metal pollutants from environmental systems. <i>Science and Technology of Advanced Materials</i> , 2021, 22, 55-71.	2.8	10
48	Microwave-Assisted Scalable Synthesis of Pt/C: Impact of the Microwave Irradiation and Carrier Solution Polarity on Nanoparticle Formation and Aging of the Support Carbon. <i>ACS Applied Energy Materials</i> , 2022, 5, 705-716.	2.5	9
49	Electro-hydrogenation of biomass-derived levulinic acid to Î <sup>3</sup> -valerolactone via the magnetic heating of a Ru nanocatalyst. <i>Green Chemistry</i> , 2022, 24, 2788-2794.	4.6	8
50	Formation of phosphonate coatings for improved chemical stability of upconverting nanoparticles under physiological conditions. <i>Dalton Transactions</i> , 2021, 50, 6588-6597.	1.6	7
51	Numerical Model for Determining the Magnetic Loss of Magnetic Fluids. <i>Materials</i> , 2019, 12, 591.	1.3	6
52	Solution combustion synthesized ceria or alumina supported Pt as cathode electrocatalyst for PEM fuel cells. <i>Materials Chemistry and Physics</i> , 2020, 242, 122444.	2.0	6
53	A new polymorph of strontium hexaferrite stabilized at the nanoscale. <i>CrystEngComm</i> , 2020, 22, 7113-7122.	1.3	6
54	Solvent-Free Mechanochemical Synthesis and Characterization of Nickel Tellurides with Various Stoichiometries: NiTe, NiTe <sub>2</sub> and Ni <sub>2</sub> Te <sub>3</sub> . <i>Nanomaterials</i> , 2021, 11, 1959.	1.9	6

#	ARTICLE	IF	CITATIONS
55	Preparation of Nanosized Copper and Cadmium Chalcogenides by Mechanochemical Synthesis. Materials and Manufacturing Processes, 0, , 130819103350008.	2.7	5
56	The formation of magnetic carboxymethyl-dextrane-coated iron-oxide nanoparticles using precipitation from an aqueous solution. Materials Chemistry and Physics, 2015, 153, 376-383.	2.0	5
57	Structure and magnetic properties of Co <sub>3</sub> O <sub>4</sub> /SiO <sub>2</sub> nanocomposite synthesized using combustion assisted sol-gel method. Ceramics International, 2016, 42, 18312-18317.	2.3	5
58	Ferroelectric bismuth-titanate nanoplatelets and nanowires with a new crystal structure. Nanoscale, 2022, 14, 3537-3544.	2.8	5
59	Preparation of a Superparamagnetic Nanocomposite with a High Content of Magnetic Iron Oxide in a PMMA Matrix by Precipitation Polymerization. Composite Interfaces, 2010, 17, 137-141.	1.3	4
60	Structural and thermal properties of new copper and nickel single-source precursors. Journal of Molecular Structure, 2019, 1194, 171-177.	1.8	4
61	Indirect Magnetoelectric Coupling in Mixtures of Magnetite and Ferroelectric Liquid Crystal. Ferroelectrics, 2013, 448, 12-16.	0.3	3
62	Neutron diffraction from superparamagnetic colloidal crystals. Journal of Physics and Chemistry of Solids, 2017, 110, 234-240.	1.9	3
63	Magnetic memory effect in hollandite-type $\pm$ -K MnO <sub>2</sub> monocrystalline nanorods. Journal of Alloys and Compounds, 2020, 820, 153406.	2.8	3
64	Sol-gel preparation of Ni <sub>x</sub> Cu <sub>1-x</sub> /silica nanocomposites using different silica precursors. Journal of Sol-Gel Science and Technology, 2022, 101, 579-587.	1.1	3
65	Magnetic polydomain liquid crystal elastomers synthesis and characterisation. Liquid Crystals, 2021, 48, 1815-1826.	0.9	3
66	Hydrothermal formation of bismuth-titanate nanoplatelets and nanowires: the role of metastable polymorphs. CrystEngComm, 2022, 24, 3972-3981.	1.3	3
67	The magnetic and colloidal properties of CoFe <sub>2</sub> O <sub>4</sub> nanoparticles synthesized by co-precipitation. Acta Chimica Slovenica, 2014, 61, 488-96.	0.2	2
68	Functionalization of iron oxide nanoparticles with methacrylate-based monomers for preparation of nanocomposites. AIP Conference Proceedings, 2018, , .	0.3	0