Agnieszka JastrzÄbska

List of Publications by Year
in descending order

81	2,572	212478 28	232693 48
papers	citations	h-index	g-index

83	83	83	3341
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Recent advances in graphene family materials toxicity investigations. Journal of Nanoparticle Research, 2012, 14, 1320.	0.8	246
2	In vitro studies on cytotoxicity of delaminated Ti3C2 MXene. Journal of Hazardous Materials, 2017, 339, 1-8.	6.5	216
3	Future Applications of MXenes in Biotechnology, Nanomedicine, and Sensors. Trends in Biotechnology, 2020, 38, 264-279.	4.9	161
4	2D Ti2C (MXene) as a novel highly efficient and selective agent for photothermal therapy. Materials Science and Engineering C, 2019, 98, 874-886.	3.8	159
5	Surface interactions between 2D Ti3C2/Ti2C MXenes and lysozyme. Applied Surface Science, 2019, 473, 409-418.	3.1	88
6	The Atomic Structure of Ti2C and Ti3C2 MXenes is Responsible for Their Antibacterial Activity Toward E. coli Bacteria. Journal of Materials Engineering and Performance, 2019, 28, 1272-1277.	1.2	85
7	Ti₂C MXene Modified with Ceramic Oxide and Noble Metal Nanoparticles: Synthesis, Morphostructural Properties, and High Photocatalytic Activity. Inorganic Chemistry, 2019, 58, 7602-7614.	1.9	77
8	A simple, low-cost and green method for controlling the cytotoxicity of MXenes. Materials Science and Engineering C, 2020, 111, 110790.	3.8	69
9	Novel 2D MBenesâ€"Synthesis, Structure, and Biotechnological Potential. Advanced Functional Materials, 2021, 31, 2103048.	7.8	67
10	Multilayered stable 2D nano-sheets of Ti2NTx MXene: synthesis, characterization, and anticancer activity. Journal of Nanobiotechnology, 2019, 17, 114.	4.2	63
11	On tuning the cytotoxicity of Ti₃C₂ (MXene) flakes to cancerous and benign cells by post-delamination surface modifications. 2D Materials, 2020, 7, 025018.	2.0	63
12	The ecotoxicity of graphene family materials: current status, knowledge gaps and future needs. Journal of Nanoparticle Research, 2015, 17, 1.	0.8	59
13	Biological Activity and Bio-Sorption Properties of the Ti2C Studied by Means of Zeta Potential and SEM. International Journal of Electrochemical Science, 2017, 12, 2159-2172.	0.5	58
14	Mechanical properties of graphene oxide reinforced alumina matrix composites. Ceramics International, 2017, 43, 6180-6186.	2.3	55
15	2D MBenes: A Novel Member in the Flatland. Advanced Materials, 2022, 34, e2108840.	11.1	54
16	Engineering of 2D Ti3C2 MXene Surface Charge and its Influence on Biological Properties. Materials, 2020, 13, 2347.	1.3	49
17	Synthesis of the RGO/Al2O3 coreâ€"shell nanocomposite flakes and characterization of their unique electrostatic properties using zeta potential measurements. Applied Surface Science, 2016, 362, 577-594.	3.1	41
18	Juggling Surface Charges of 2D Niobium Carbide MXenes for a Reactive Oxygen Species Scavenging and Effective Targeting of the Malignant Melanoma Cell Cycle into Programmed Cell Death. ACS Sustainable Chemistry and Engineering, 2020, 8, 7942-7951.	3.2	38

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19	Influence of bacteria adsorption on zeta potential of Al2O3 and Al2O3/Ag nanoparticles in electrolyte and drinking water environment studied by means of zeta potential. Surface and Coatings Technology, 2015, 271, 225-233.	2.2	37
20	UV Light-Assisted Degradation of Methyl Orange, Methylene Blue, Phenol, Salicylic Acid, and Rhodamine B: Photolysis Versus Photocatalyis. Water, Air, and Soil Pollution, 2017, 228, 1.	1.1	37
21	Surface modification of graphene oxide nanoplatelets and its influence on mechanical properties of alumina matrix composites. Journal of the European Ceramic Society, 2017, 37, 1587-1592.	2.8	35
22	Colloidal Properties and Stability of 2D Ti3C2 and Ti2C MXenes in Water. International Journal of Electrochemical Science, 2018, 13, 10837-10847.	0.5	34
23	Synthesis of RGO/TiO2 nanocomposite flakes and characterization of their unique electrostatic properties using zeta potential measurements. Journal of Alloys and Compounds, 2016, 679, 470-484.	2.8	31
24	Influence of modification of Ti₃C₂ MXene with ceramic oxide and noble metal nanoparticles on its antimicrobial properties and ecotoxicity towards selected algae and higher plants. RSC Advances, 2019, 9, 4092-4105.	1.7	31
25	Silicon carbide matrix composites reinforced with two-dimensional titanium carbide â€“ Manufacturing and properties. Ceramics International, 2019, 45, 6624-6631.	2.3	31
26	On the rapid in situ oxidation of two-dimensional V2CTz MXene in culture cell media and their cytotoxicity. Materials Science and Engineering C, 2021, 119, 111431.	3.8	30
27	In vitroassessment of antibacterial properties and cytotoxicity of Al₂O₃â€“Ag nanopowders. Advances in Applied Ceramics, 2011, 110, 353-359.	0.6	29
28	New Reduced Graphene Oxide/Alumina (<scp>RGO</scp>/Al₂O₃) Nanocomposite: Innovative Method of Synthesis and Characterization. International Journal of Applied Ceramic Technology, 2015, 12, 522-528.	1.1	29
29	The Impact of Zeta Potential and Physicochemical Properties of <scp>T</scp>i<scp>O</scp>₂â€Based Nanocomposites on Their Biological Activity. International Journal of Applied Ceramic Technology, 2015, 12, 1157-1173.	1.1	28
30	The 10th anniversary of MXenes: Challenges and prospects for their surface modification toward future biotechnological applications. Advanced Drug Delivery Reviews, 2022, 182, 114099.	6.6	28
31	Microstructure and Mechanical Properties of Alumina Composites with Addition of Structurally Modified 2D Ti3C2 (MXene) Phase. Materials, 2021, 14, 829.	1.3	27
32	Al₂O₃â€“Ag nanopowders: new method of synthesis, characterisation and biocidal activity. Advances in Applied Ceramics, 2011, 110, 108-113.	0.6	26
33	Controlling the Porosity and Biocidal Properties of the Chitosan-Hyaluronate Matrix Hydrogel Nanocomposites by the Addition of 2D Ti3C2Tx MXene. Materials, 2020, 13, 4587.	1.3	26
34	Synthesis, characterization and biophysical evaluation of the 2D Ti2CTx MXene using 3D spheroid-type cultures. Ceramics International, 2021, 47, 22567-22577.	2.3	26
35	Filtration Materials Modified with 2D Nanocompositesâ€”A New Perspective for Point-of-Use Water Treatment. Materials, 2021, 14, 182.	1.3	26
36	Surface-Related Features Responsible for Cytotoxic Behavior of MXenes Layered Materials Predicted with Machine Learning Approach. Materials, 2020, 13, 3083.	1.3	22

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37	Morphology, structure, and photoactivity of two types of graphene oxideâ€“TiO2 composites. Chemical Papers, 2015, 69, .	1.0	18
38	Silver functionalized titania-silica xerogels: Preparation, morpho-structural and photocatalytic properties, kinetic modeling. Journal of Alloys and Compounds, 2015, 648, 890-902.	2.8	18
39	Controlled synthesis of graphene oxide/alumina nanocomposites using a new dry solâ€“gel method of synthesis. Chemical Papers, 2017, 71, 579-595.	1.0	18
40	Tunable Antibacterial Activity of a Polypropylene Fabric Coated with Bristling Ti₃C₂T_x MXene Flakes Coupling the Nanoblade Effect with ROS Generation. ACS Applied Nano Materials, 2022, 5, 5373-5386.	2.4	18
41	Nano-titanium oxide doped with gold, silver, and palladium â€” synthesis and structural characterization. Chemical Papers, 2014, 68, .	1.0	17
42	The studies of cytotoxicity and antibacterial activity of composites with ZnOâ€doped bioglass. International Journal of Applied Ceramic Technology, 2019, 16, 541-551.	1.1	17
43	Influence of MXene (Ti3C2) Phase Addition on the Microstructure and Mechanical Properties of Silicon Nitride Ceramics. Materials, 2020, 13, 5221.	1.3	16
44	Examination of changes in the morphology of lignocellulosic fibers treated with e-beam irradiation. Radiation Physics and Chemistry, 2014, 94, 226-230.	1.4	15
45	Biosorption properties of RGO/Al2O3 nanocomposite flakes modified with Ag, Au, and Pd for water purification. Journal of Alloys and Compounds, 2017, 724, 869-878.	2.8	14
46	Smart and Sustainable Nanotechnological Solutions in a Battle against COVID-19 and Beyond: A Critical Review. ACS Sustainable Chemistry and Engineering, 2021, 9, 601-622.	3.2	14
47	High catalytic performance of 2D Ti3C2Tx MXene in Î±-pinene isomerization to camphene. Applied Catalysis A: General, 2020, 604, 117765.	2.2	13
48	Synthesis and Bioactivity of Reduced Graphene Oxide/Aluminaâ€Noble Metal Nanocomposite Flakes. International Journal of Applied Ceramic Technology, 2016, 13, 856-870.	1.1	12
49	The toxicity inÂvitro of titanium dioxide nanoparticles modified with noble metals on mammalian cells. International Journal of Applied Ceramic Technology, 2019, 16, 481-493.	1.1	12
50	Two-Dimensional Nanostructures in the World of Advanced Oxidation Processes. Catalysts, 2022, 12, 358.	1.6	12
51	Luminescent and structural properties of Yb3+-doped Al2O3 nanopowders. Optical Materials, 2011, 33, 1487-1491.	1.7	11
52	The effect of the morphology of carbon used as a sintering aid on the sinterability of silicon carbide. Ceramics International, 2018, 44, 7020-7025.	2.3	11
53	The effect of receptor-polymer matrix compatibility on properties of PEO-based polymer electrolytes containing a supramolecular additive. Journal of Power Sources, 2007, 173, 755-764.	4.0	10
54	Terahertz time domain spectroscopy of graphene and <scp>MXene</scp> polymer composites. Journal of Applied Polymer Science, 2021, 138, 49962.	1.3	10

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55	A Review on Development of Ceramic-Graphene Based Nanohybrid Composite Systems in Biological Applications. Frontiers in Chemistry, 2021, 9, 685014.	1.8	10
56	Synthesis and Bioactivity of RGO/TiO₂-Noble Metal Nanocomposite Flakes. Journal of Nano Research, 0, 47, 33-48.	0.8	9
57	Controlling the microstructure of lyophilized porous biocomposites by the addition of ZnOâ€doped bioglass. International Journal of Applied Ceramic Technology, 2017, 14, 1107-1116.	1.1	9
58	Influence of Ti3C2Tx MXene and Surface-Modified Ti3C2Tx MXene Addition on Microstructure and Mechanical Properties of Silicon Carbide Composites Sintered via Spark Plasma Sintering Method. Materials, 2021, 14, 3558.	1.3	9
59	The effect of receptorâ€“polymer matrix compatibility on electrochemical properties of PEO-based polymer electrolytes containing supramolecular additives. Journal of Power Sources, 2007, 173, 765-773.	4.0	8
60	New Non Phytoâ€•and Ecoâ€Toxic Aluminaâ€Stabilized Silver and Praseodymium Nanoparticles. International Journal of Applied Ceramic Technology, 2013, 10, 908-916.	1.1	8
61	Comparative Assessment of Antimicrobial Efficiency of Ionic Silver, Silver Monoxide, and Metallic Silver Incorporated onto an Aluminum Oxide Nanopowder Carrier. Journal of Nanoscience, 2013, 2013, 1-12.	2.6	8
62	Praseodymium doped nanocrystals and nanocomposites for application in white light sources. Optical Materials, 2019, 95, 109247.	1.7	8
63	Non-toxic 2D Ti<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline" id="d1e347" altimg="si5.svg"><mml:msub><mml:mrow /><mml:mrow><mml:mn>3</mml:mn></mml:mrow></mml:msub></mml:math>C<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline" id="d1e355" altimg="si75.svg"><mml:msub><mml:mrow /><mml:mrow><mml:mn>2</mml:mn></mml:mrow></mml:msub></mml:math> MXene surface-modified	1.9	7
64	Bacterial adsorption with graphene family materials compared to nano-alumina. Main Group Chemistry, 2017, 16, 175-190.	0.4	6
65	Investigation of MXenes Oxidation Process during SPS Method Annealing. Materials, 2021, 14, 6011.	1.3	6
66	New Aluminaâ€Based Novel Ceramic Nanopigments: An Alternative to the Purple of Cassius. International Journal of Applied Ceramic Technology, 2014, 11, 738-744.	1.1	5
67	Comparative Assessment of Biocidal Activity of Different RGO/Ceramic Oxide-Ag Nanocomposites. Journal of Nano Research, 0, 47, 89-95.	0.8	5
68	Multifunctional carbon-supported bioactive hybrid nanocomposite (C/GO/NCP) bed for superior water decontamination from waterborne microorganisms. RSC Advances, 2021, 11, 18509-18518.	1.7	5
69	Biological and Corrosion Evaluation of In Situ Alloyed NiTi Fabricated through Laser Powder Bed Fusion (LPBF). International Journal of Molecular Sciences, 2021, 22, 13209.	1.8	5
70	Study of neutral species coordination by macrocyclic anion receptors using FTIR spectroscopy. Electrochimica Acta, 2007, 53, 1541-1547.	2.6	4
71	Study of the Properties of Al₂O₃-Ag Nanopowders Produced by an Innovative Thermal Decompositionâ€“Reduction and Silver Nitrate Reduction Methods. Key Engineering Materials, 0, 478, 13-18.	0.4	4
72	Challenges and opportunities in tailoring MAX phases as a starting materials for MXenes development. Materials Technology, 2022, 37, 1639-1650.	1.5	4

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73	Influence of Al2O3/Pr Nanoparticles on Soil, Air and Water Microorganisms. Advanced Structured Materials, 2013, , 1-8.	0.3	4
74	Fabrication and Characterization of a Composite Ni-SDC Fuel Cell Cathode Reinforced by Ni Foam. Materials, 2022, 15, 4891.	1.3	3
75	The competitive interactions between the anion-receptor, anions and neutral solvent species. Journal of Power Sources, 2009, 194, 58-65.	4.0	2
76	Synthesis and characterization of RE3+:Al 2 O 3 nanopowders for application in the polymer-based composite light sources. , 2012, , .		1
77	Synthesis and characterization of polymer composite base on RE³⁺:Al₂O₃nanopowders doped by rare earth metals for application in optoelectronics. Proceedings of SPIE, 2013, , .	0.8	1
78	Enzyme Substrates Protective Encapsulation within Polymeric Microspheres. American Journal of Analytical Chemistry, 2013, 04, 432-441.	0.3	1
79	Modelling and Characterisation of Residual Stress of SiC-Ti3C2Tx MXene Composites Sintered via Spark Plasma Sintering Method. Materials, 2022, 15, 1175.	1.3	1
80	Online learning of windmill time series using Long Short-term Cognitive Networks. Expert Systems With Applications, 2022, 205, 117721.	4.4	1
81	Estimation of Ion Pairs Formation Constants of Lithium Salts in 1,2-dimethoxyethane and 1,4-dioxane Mixtures.. ECS Transactions, 2006, 2, 117-124.	0.3	0