

Abbas Khan

List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/3775897/publications.pdf>

Version: 2024-02-01

89
papers

1,968
citations

279798

23
h-index

276875

41
g-index

91
all docs

91
docs citations

91
times ranked

1977
citing authors

#	ARTICLE	IF	CITATIONS
1	Highly efficient degradation of 2,4-dichlorophenol over CeO ₂ /g-C ₃ N ₄ composites under visible-light irradiation: Detailed reaction pathway and mechanism. Journal of Hazardous Materials, 2019, 364, 635-644.	12.4	152
2	Synthesis of S-Doped porous g-C ₃ N ₄ by using ionic liquids and subsequently coupled with Au-TiO ₂ for exceptional cocatalyst-free visible-light catalytic activities. Applied Catalysis B: Environmental, 2018, 237, 1082-1090.	20.2	151
3	Superabsorbent polymer hydrogels with good thermal and mechanical properties for removal of selected heavy metal ions. Journal of Cleaner Production, 2018, 201, 78-87.	9.3	139
4	Fabrication of BiFeO ₃ -g-C ₃ N ₄ -WO ₃ Z-scheme heterojunction as highly efficient visible-light photocatalyst for water reduction and 2,4-dichlorophenol degradation: Insight mechanism. Journal of Hazardous Materials, 2020, 397, 122708.	12.4	102
5	A Review of Supercapacitors: Materials Design, Modification, and Applications. Energies, 2021, 14, 7779.	3.1	94
6	Optimization on wear performance of UHMWPE composites using response surface methodology. Tribology International, 2015, 88, 252-262.	5.9	81
7	Comparative study of wear performance of particulate and fiber-reinforced nano-ZnO/ultra-high molecular weight polyethylene hybrid composites using response surface methodology. Materials & Design, 2014, 63, 805-819.	5.1	75
8	Fabrication of stable superabsorbent hydrogels for successful removal of crystal violet from waste water. RSC Advances, 2019, 9, 40051-40061.	3.6	63
9	Synthesis, Characterization, and Silver Nanoparticles Fabrication in N-isopropylacrylamide-Based Polymer Microgels for Rapid Degradation of p-Nitrophenol. Journal of Dispersion Science and Technology, 2013, 34, 1324-1333.	2.4	58
10	Experimental and DFT Studies of Au Deposition Over WO ₃ /g-C ₃ N ₄ Z-Scheme Heterojunction. Nano-Micro Letters, 2020, 12, 7.	27.0	57
11	Bismuth-Graphene Nanohybrids: Synthesis, Reaction Mechanisms, and Photocatalytic Applicationsâ€”A Review. Energies, 2021, 14, 2281.	3.1	51
12	Preparation, Functionalization, Modification, and Applications of Nanostructured Gold: A Critical Review. Energies, 2021, 14, 1278.	3.1	42
13	A rational design of g-C ₃ N ₄ -based ternary composite for highly efficient H ₂ generation and 2,4-DCP degradation. Journal of Colloid and Interface Science, 2021, 599, 484-496.	9.4	38
14	Temperatureâ€”induced volume change and glucose sensitivity of poly[(N-isopropylacrylamide)-Tj ETQq0 0 0 rgBT /Overlock 10 Tf 5 1481-1486.	3.1	37
15	Fabrication of silver nanoparticles in poly (N-isopropylacrylamide-co-allylacetic acid) microgels for catalytic reduction of nitroarenes. Turkish Journal of Chemistry, 2015, 39, 576-588.	1.2	37
16	Synthesis and physicochemical investigation of chitosan-PMAA-based dual-responsive hydrogels. Journal of Polymer Research, 2013, 20, 1.	2.4	34
17	Fabrication of silver nanoparticles in pH responsive polymer microgel dispersion for catalytic reduction of nitrobenzene in aqueous medium. Russian Journal of Physical Chemistry A, 2016, 90, 2600-2608.	0.6	33
18	Synthesis of physically cross-linked gum Arabic-based polymer hydrogels with enhanced mechanical, load bearing and shape memory behavior. Iranian Polymer Journal (English Edition), 2020, 29, 351-360.	2.4	30

#	ARTICLE	IF	CITATIONS
19	Properly aligned band structures in B-TiO ₂ /MIL53(Fe)/g-C ₃ N ₄ ternary nanocomposite can drastically improve its photocatalytic activity for H ₂ evolution: Investigations based on the experimental results. International Journal of Hydrogen Energy, 2021, 46, 21912-21923.	7.1	29
20	Effect of multi walled carbon nanotubes and diamond nanoparticles on the structure and properties of carbon foams. Diamond and Related Materials, 2017, 79, 119-126.	3.9	28
21	Enhanced photocatalytic performance of novel MIL53Sr metal-organic framework (MOF) for RhB dye degradation and H ₂ evolution by coupling MIL53Fe. Solar Energy, 2021, 215, 121-130.	6.1	26
22	Thermal properties and kinetic investigation of chitosan-PMAA based dual-responsive hydrogels. Industrial Crops and Products, 2015, 66, 178-187.	5.2	25
23	Controlled release studies through chitosan-based hydrogel synthesized at different polymerization stages. International Journal of Biological Macromolecules, 2019, 128, 531-536.	7.5	24
24	Structural Characteristics and Environmental Applications of Covalent Organic Frameworks. Energies, 2021, 14, 2267.	3.1	24
25	Preparation, physicochemical and stability studies of chitosan-PNIPAM based responsive microgels under various pH and temperature conditions. Iranian Polymer Journal (English Edition), 2015, 24, 317-328.	2.4	23
26	Preparation of Pd@Ni Nanoparticles Supported on Activated Carbon for Efficient Removal of Basic Blue 3 from Water. Water (Switzerland), 2021, 13, 1211.	2.7	22
27	Synthesis, physicochemical studies and potential applications of high-molecular-weight ferrocene-based poly(azomethine)ester and its soluble terpolymers. Journal of Organometallic Chemistry, 2012, 719, 41-53.	1.8	21
28	Intermolecular Interactions of Polymer/Surfactants Mixture in Aqueous Solution Investigated by Various Techniques. Journal of Dispersion Science and Technology, 2013, 34, 1202-1210.	2.4	20
29	Synthesis and functionalization of chitosan built hydrogel with induced hydrophilicity for extended release of sparingly soluble drugs. Journal of Biomaterials Science, Polymer Edition, 2018, 29, 376-396.	3.5	18
30	A comparative study of the adsorption of congo red dye on rice husk, rice husk char and chemically modified rice husk char from aqueous media. Bulletin of the Chemical Society of Ethiopia, 2020, 34, 41-54.	1.1	18
31	Confinement of Au, Pd and Pt nanoparticle with reduced sizes: Significant improvement of dispersion degree and catalytic activity. Microporous and Mesoporous Materials, 2022, 337, 111927.	4.4	18
32	Preparation and Chemical Modification of Rice Husk Char for the Removal of a Toxic Dye (Orange G) from Aqueous Medium. Zeitschrift Fur Physikalische Chemie, 2019, 233, 375-392.	2.8	17
33	Phytosynthesis of poly (ethylene glycol) methacrylate-hybridized gold nanoparticles from C. tuberculata: their structural characterization and potential for in vitro growth in banana. In Vitro Cellular and Developmental Biology - Plant, 2021, 57, 248-260.	2.1	17
34	Surface activity and micellar behavior of dimethylamino- and trimethylammonium- tipped oxyethylene-oxybutylene diblock copolymers in aqueous media. Journal of Applied Polymer Science, 2010, 118, 3324-3332.	2.6	16
35	Study on the preparation and properties of novel block copolymeric materials based on structurally modified organometallic as well as organic polyamides and polydimethylsiloxane. Polymer International, 2013, 62, 319-334.	3.1	15
36	Kinetic investigation and lifetime prediction of Cs@NIPAM@MBA-based thermo-responsive hydrogels. Carbohydrate Polymers, 2016, 136, 1182-1193.	10.2	15

#	ARTICLE	IF	CITATIONS
37	Vertically grown CeO ₂ and TiO ₂ nanoparticles over the MIL53Fe MOF as proper band alignments for efficient H ₂ generation and 2,4-DCP degradation. Environmental Science and Pollution Research, 2022, 29, 34861-34873.	5.3	15
38	Synthesis, characterisation and thermal properties of hyperbranched polyimide derived from melamine via emulsion polymerisation. Journal of Thermal Analysis and Calorimetry, 2015, 120, 1785-1798.	3.6	14
39	Synthesis, characterization and physiochemical investigation of chitosan-based multi-responsive Copolymeric hydrogels. Journal of Polymer Research, 2017, 24, 1.	2.4	13
40	One-Pot Synthesis and Rheological Study of Cationic Poly (3-acrylamidopropyltrimethyl) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50 627 Td (a 1145-1159.	2.8	13
41	Effect of Temperature, Polymer, and Salts on the Interfacial and Micellization Behavior of 3-Dodecyl-1-Methyl-1 <i>H</i> -Imidazol-3-ium-Bromide: A Dispersion of a Long-Chain Ionic Liquid. Journal of Dispersion Science and Technology, 2015, 36, 723-730.	2.4	12
42	Overview of Polyethylene Glycol-based Materials with a Special Focus on Core-Shell Particles for Drug Delivery Application. Current Pharmaceutical Design, 2022, 28, 352-367.	1.9	12
43	Synthesis, Molecular Modeling and Biological Evaluation of 5-arylidene-N,N-diethylthiobarbiturates as Potential α -glucosidase Inhibitors. Medicinal Chemistry, 2019, 15, 175-185.	1.5	12
44	Associative properties of hydrophilic tip modified oxyethylene- <i>oxy</i> butylene diblock copolymers in aqueous media: Effect of end- <i>group</i> . Journal of Applied Polymer Science, 2012, 124, 951-957.	2.6	11
45	Micellar parameters of diblock copolymers and their interactions with ionic surfactants. Chinese Journal of Polymer Science (English Edition), 2012, 30, 217-226.	3.8	11
46	Effect of Hydrophilic/Hydrophobic Block Ratio and Temperature on the Surface and Associative Properties of Oxyethylene and Oxybutylene Diblock Copolymers in Aqueous Media. Journal of Dispersion Science and Technology, 2015, 36, 1777-1785.	2.4	11
47	Spectroscopic study of benzothiophene partitioning in sodium dodecyl sulfate and cetyl trimethyl ammonium bromide micellar media. Journal of Surfactants and Detergents, 2016, 19, 1033-1041.	2.1	10
48	Characterization of Surfactant-Diblock Copolymer Interactions and Its Thermodynamic Studies. Journal of Dispersion Science and Technology, 2012, 33, 792-798.	2.4	9
49	Synthesis and Characterizations of PdNi Carbon Supported Nanomaterials: Studies of Electrocatalytic Activity for Oxygen Reduction in Alkaline Medium. Molecules, 2021, 26, 3440.	3.8	9
50	Green synthesis, characterization and biological activities of silver nanoparticles using the bark extract of ailanthus altissima. Materials Science-Poland, 2017, 36, 21-26.	1.0	9
51	<i>CuO@SiO₂</i> based nanocomposites: Synthesis, characterization, photocatalytic, antileishmanial, and antioxidant studies. Journal of the Chinese Chemical Society, 2022, 69, 1637-1653.	1.4	9
52	The Kinetics and Equilibrium Thermodynamics Study on the Removal of Direct Blue and Titan Yellow Dyes from Aqueous Media by Modified Rice Husk Char. Zeitschrift Fur Physikalische Chemie, 2020, 234, 485-503.	2.8	8
53	The green synthesis of fine particles of gold using an aqueous extract of Monotheca buxifolia (Flac.). Russian Journal of Physical Chemistry A, 2016, 90, 2625-2632.	0.6	7
54	Green Synthesis of Silver Nanoparticles Using an Aqueous Extract of Monotheca buxifolia (Flac.) Dcne. Russian Journal of Physical Chemistry A, 2018, 92, 124-131.	0.6	7

#	ARTICLE	IF	CITATIONS
55	Hybridization of green synthesized silver nanoparticles with poly(ethylene glycol) methacrylate and their biomedical applications. PeerJ, 2022, 10, e12540.	2.0	7
56	Poly (N-vinyl formamide-co-acrylamide) hydrogels: synthesis, composition and rheology. Iranian Polymer Journal (English Edition), 2022, 31, 845-856.	2.4	7
57	Effect of end-group modification, hydrophilic/hydrophobic block ratio and temperature on the surface, associative and thermodynamic behaviour of poly(ethylene oxide)-b-poly(butylene oxide) diblock copolymers in aqueous media. Journal of Polymer Research, 2014, 21, 1.	2.4	6
58	Preparation and functionalization of zinc oxide nanoparticles with polymer microgels for potential catalytic applications. Journal of Dispersion Science and Technology, 2022, 43, 259-272.	2.4	6
59	Effective performance of CeO ₂ based silica for preparation of octanal. Journal of Porous Materials, 2020, 27, 1101-1108.	2.6	6
60	Effect of end-group modification on the adsorption of poly(ethylene oxide)-b-poly(butylene oxide) diblock copolymers at the solid-liquid interface. Polymer Bulletin, 2010, 65, 521-531.	3.3	5
61	Interactions of Ionic Surfactants With PEO-PBO-PEO Triblock Copolymers in Aqueous Solutions. Journal of Dispersion Science and Technology, 2012, 33, 191-199.	2.4	5
62	Associative, thermodynamic and thermo-kinetics behavior of di- and triblock copolymers of oxyethylene and oxybutylene in aqueous media. Thermochimica Acta, 2014, 595, 51-60.	2.7	5
63	Preparation and Physicochemical Characterization of Dual Responsive and Chemically Modified Cellulose Based Copolymer Hydrogels. Zeitschrift Fur Physikalische Chemie, 2020, 234, 1623-1643.	2.8	5
64	Preparation and Characterization of Agar Based Magnetic Nanocomposite for Potential Biomedical Applications. Current Pharmaceutical Design, 2019, 25, 3672-3680.	1.9	5
65	Physicochemical Investigation of the Micellar Behavior of a Diblock (PEO) ₆₂ -b-(PBO) ₃₃ Copolymer in Water and its Interaction with Ionic Surfactants. Journal of Dispersion Science and Technology, 2016, 37, 519-529.	2.4	4
66	Physicochemical Study of Some Thiobarbiturate Derivatives and Their Interaction with DNA in Aqueous Media. Russian Journal of Physical Chemistry A, 2018, 92, 1987-1995.	0.6	4
67	Physicochemical Investigation of Some Thiobarbiturate Derivatives and Their Binding Study with Deoxyribonucleic Acid. Russian Journal of Physical Chemistry B, 2018, 12, 485-494.	1.3	4
68	Thermo-chemical conversion of waste glass into non-vitreous porous material for adsorption application. Journal of Material Cycles and Waste Management, 2019, 21, 1132-1143.	3.0	4
69	Effect of Experimental Variables on the Physicochemical Characteristics of Multi-Responsive Cellulose Based Polymer Microgels. Russian Journal of Physical Chemistry A, 2020, 94, 1503-1514.	0.6	4
70	Catalytic Effect of 1,4-Dioxane on the Kinetics of the Oxidation of Iodide by Dicyanobis(bipyridine)iron(III) in Water. Catalysts, 2021, 11, 840.	3.5	4
71	Assessing the physico-chemical parameters and some metals of underground water and associated soil in the arid and semiarid regions of Tank District, Khyber Pakhtunkhwa, Pakistan. Environmental Monitoring and Assessment, 2021, 193, 610.	2.7	4
72	Evaluating groundwater nitrate and other physicochemical parameters of the arid and semi-arid district of DI Khan by multivariate statistical analysis. Environmental Technology (United Kingdom), 2023, 44, 911-920.	2.2	4

#	ARTICLE	IF	CITATIONS
73	Formulation of zwitter-ionic terpolymeric hydrogels and their comprehensive rheological investigation. Journal of Dispersion Science and Technology, 2023, 44, 1455-1465.	2.4	4
74	Synthesis and Characterization of Polyaniline Doped with Dodecylbenzenesulfonic and Oxalic Acids. Russian Journal of Physical Chemistry A, 2022, 96, S87-S94.	0.6	4
75	Light scattering and surface tensiometric studies of tip-modified PEO-PBO diblock copolymers in water. Journal of Polymer Research, 2013, 20, 1.	2.4	3
76	Physicochemical Interaction of ZnO Fine Particles with 5-((4-carboxyphenyl)-10,15,20-Triphenylporphyrin. Journal of the Chinese Chemical Society, 2015, 62, 915-924.	2.4	3
77	In-situ stabilization of silver nanoparticles in polymer hydrogels for enhanced catalytic reduction of macro and micro pollutants. Zeitschrift Fur Physikalische Chemie, 2021, 235, 1009-1026.	2.8	3
78	Preparation, Physicochemical and Rheological Studies of Stimuli-Responsive Biodegradable Polymer Gels. Russian Journal of Physical Chemistry B, 2021, 15, S109-S119.	1.3	3
79	Interfacial activity and micellar morphology of an imidazolium ring containing zwitterionic surfactants. Journal of Surfactants and Detergents, 2022, 25, 341-350.	2.1	3
80	Hybridization of Gold Nanoparticles with Poly(ethylene glycol) Methacrylate and Their Biomedical Applications. Russian Journal of Physical Chemistry A, 2021, 95, 2619-2631.	0.6	3
81	Thermodynamics of Adsorption and Micellization of Triblock Copolymers of Oxyethylene and Oxybutylene in Aqueous Medium Using Surface Tensiometry. Journal of Dispersion Science and Technology, 2013, 34, 400-405.	2.4	2
82	Characterization study of polyAMPS@BMA core-shell particles using two types of RAFT agents. Materials Science-Poland, 2021, 39, 200-208.	1.0	2
83	The physicochemical and DNA binding studies of some medicinal compounds in solutions. Zeitschrift Fur Physikalische Chemie, 2022, 236, 425-438.	2.8	2
84	Effect of biocides on the precipitation of calcium fluoride in the presence of anionic copolymeric inhibitors. Toxicological and Environmental Chemistry, 0, , 1-11.	1.2	1
85	Processing strategies of chitosan-built nano-hydrogel as smart drug carriers. , 2021, , 467-490.		1
86	Molecularly Imprinted Polymer Particles and Beads: A Survey of Modern Synthetic Techniques. Current Nanoscience, 2021, 17, 380-392.	1.2	1
87	Preparation of Chitosan Based Polymer Microgels, Their Composites with Zinc Oxide Nanoparticles, and Physicochemical Investigation. Russian Journal of Physical Chemistry A, 2021, 95, 2600-2608.	0.6	1
88	Natural Crude Dye from Cucurbita Pepo Leaves for Dying, Antimicrobial, and Antioxidant Activities. Letters in Organic Chemistry, 2021, 18, 969-976.	0.5	0
89	Physico-Chemical Investigations on the Catalytic Production of Biofuel from Algal Biomass. Russian Journal of Physical Chemistry A, 2022, 96, S31-S37.	0.6	0