Muhammad Asim Khan

List of Publications by Year
in descending order

52	2,265	186265 28	214800 47
papers	citations	h-index	g-index

52	52	52	1748
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	New insights into the capture performance and mechanism of hazardous metals Cr3+ and Cd2+ onto an effective layered double hydroxide based material. Journal of Hazardous Materials, 2022, 426, 128062.	12.4	155
2	Adsorption and Desorption of Pb(II) on l-Lysine Modified Montmorillonite and the simulation of Interlayer Structure. Applied Clay Science, 2019, 169, 40-47.	5.2	149
3	Rapid removal of toxic metals Cu2+ and Pb2+ by amino trimethylene phosphonic acid intercalated layered double hydroxide: A combined experimental and DFT study. Chemical Engineering Journal, 2020, 392, 123711.	12.7	147
4	Adsorption properties, kinetics & thermodynamics of tetracycline on carboxymethyl-chitosan reformed montmorillonite. International Journal of Biological Macromolecules, 2019, 124, 557-567.	7.5	119
5	Rapid and efficient removal of diclofenac sodium from aqueous solution via ternary core-shell CS@PANI@LDH composite: Experimental and adsorption mechanism study. Journal of Hazardous Materials, 2021, 402, 123815.	12.4	113
6	Review on the hazardous applications and photodegradation mechanisms of chlorophenols over different photocatalysts. Environmental Research, 2021, 195, 110742.	7.5	111
7	In-Depth Study of Heavy Metal Removal by an Etidronic Acid-Functionalized Layered Double Hydroxide. ACS Applied Materials & Interfaces, 2022, 14, 7450-7463.	8.0	107
8	Exploration of adsorption mechanism of 2-phosphonobutane-1,2,4-tricarboxylic acid onto kaolinite and montmorillonite via batch experiment and theoretical studies. Journal of Hazardous Materials, 2021, 403, 123810.	12.4	94
9	A new alendronate doped HAP nanomaterial for Pb2+, Cu2+ and Cd2+ effect absorption. Journal of Hazardous Materials, 2020, 400, 123143.	12.4	65
10	Three-dimension hierarchical composite via in-situ growth of Zn/Al layered double hydroxide plates onto polyaniline-wrapped carbon sphere for efficient naproxen removal. Journal of Hazardous Materials, 2022, 423, 127192.	12.4	65
11	Effective adsorption of heavy metal ions by sodium lignosulfonate reformed montmorillonite. International Journal of Biological Macromolecules, 2019, 138, 188-197.	7.5	63
12	Novel biphenyl bis -sulfonamides as acetyl and butyrylcholinesterase inhibitors: Synthesis, biological evaluation and molecular modeling studies. Bioorganic Chemistry, 2016, 64, 13-20.	4.1	56
13	Novel multi amine-containing Gemini surfactant modified montmorillonite as adsorbents for removal of phenols. Applied Clay Science, 2018, 162, 204-213.	5.2	54
14	Kinetics and equilibrium isotherms of adsorption of Pb(II) and Cu(II) onto raw and arginine-modified montmorillonite. Advanced Powder Technology, 2019, 30, 1067-1078.	4.1	53
15	Facile one-step economical methodology of metal free g-C3N4 synthesis with remarkable photocatalytic performance under visible light to degrade trans-resveratrol. Journal of Hazardous Materials, 2019, 367, 293-303.	12.4	53
16	Mesoporous CuS nanospheres decorated rGO aerogel for high photocatalytic activity towards Cr(VI) and organic pollutants. Chemosphere, 2020, 246, 125846.	8.2	52
17	Investigation of the efficient adsorption performance and adsorption mechanism of 3D composite structure La nanosphere-coated Mn/Fe layered double hydrotalcite on phosphate. Journal of Colloid and Interface Science, 2022, 614, 478-488.	9.4	50
18	Encapsulating nano rods of copperâ€“biphenylamines framework on g-C₃N₄ photocatalysts for visible-light-driven organic dyes degradation: promoting charge separation efficiency. Catalysis Science and Technology, 2017, 7, 3017-3026.	4.1	43

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19	Facile immobilization of ethylenediamine tetramethylene-phosphonic acid into UiO-66 for toxic divalent heavy metal ions removal: An experimental and theoretical exploration. Science of the Total Environment, 2022, 806, 150652.	8.0	43
20	Facile synthesis of protonated g-C3N4 and acid-activated montmorillonite composite with efficient adsorption capacity for PO43â‹ and Pb(II). Chemical Engineering Research and Design, 2019, 152, 95-105.	5.6	42
21	The facile synthesis of zoledronate functionalized hydroxyapatite amorphous hybrid nanobiomaterial and its excellent removal performance on Pb2+ and Cu2+. Journal of Hazardous Materials, 2020, 392, 122291.	12.4	42
22	Synthesis and micro-mechanistic studies of histidine modified montmorillonite for lead(II) and copper(II) adsorption from wastewater. Chemical Engineering Research and Design, 2020, 157, 142-152.	5.6	38
23	Synthesis of environmentally encouraged, highly robust pollutants reduction 3-D system consisting of Ag/g-C3N4 and Cu-complex to degrade refractory pollutants. Journal of Photochemistry and Photobiology A: Chemistry, 2018, 364, 826-836.	3.9	34
24	Molecular dynamics simulations of the binging affinity of 1-hydroxyethane-1, 1-diphosphonic acid (HEDP) with nano-hydroxyapatite and the uptake of Cu2+ by HEDP-HAP hybrid systems. Journal of Hazardous Materials, 2020, 383, 121206.	12.4	33
25	Enhanced photo-electrochemical, photo-degradation and charge separation ability of graphitic carbon nitride (g-C3N4) by self-type metal free heterojunction formation for antibiotic degradation. Journal of Photochemistry and Photobiology A: Chemistry, 2017, 348, 118-124.	3.9	31
26	Sensitization of TiO₂ nanosheets with Cuâ€“biphenylamine framework to enhance photocatalytic degradation performance of toxic organic contaminants: synthesis, mechanism and kinetic studies. Nanotechnology, 2018, 29, 375605.	2.6	31
27	Achieving quick charge/discharge rate of 3.0â€Vâ€sâ^'1 by 2D titanium carbide (MXene) via N-doped carbon intercalation. Materials Letters, 2019, 234, 21-25.	2.6	31
28	Microstructural modification of organoâ€montmorillonite with Gemini surfactant containing four ammonium cations: molecular dynamics (MD) simulations and adsorption capacity for copper ions. Journal of Chemical Technology and Biotechnology, 2019, 94, 3585-3594.	3.2	30
29	Efficient preparation and molecular dynamic (MD) simulations of Gemini surfactant modified layered montmorillonite to potentially remove emerging organic contaminants from wastewater. Ceramics International, 2019, 45, 10782-10791.	4.8	30
30	Pristine Co(BDC)TED0.5 a pillared-layer biligand cobalt based metal organic framework as improved anode material for lithium-ion batteries. Applied Materials Today, 2020, 21, 100813.	4.3	29
31	Organocatalyzed and mechanochemical solvent-free synthesis of novel and functionalized bis-biphenyl substituted thiazolidinones as potent tyrosinase inhibitors: SAR and molecular modeling studies. European Journal of Medicinal Chemistry, 2017, 134, 406-414.	5.5	27
32	Methionine-montmorillonite composite â€“ A novel material for efficient adsorption of lead ions. Advanced Powder Technology, 2020, 31, 708-717.	4.1	27
33	Efficient absorption properties of surface grafted HEDP-HAP composites for Pb2+ and Cu2+: Experimental study and visualization study of interaction based on Becke surface analysis and independent gradient model. Journal of Hazardous Materials, 2021, 401, 123748.	12.4	26
34	Efficient and stable ZrO₂/Fe modified hollow-C₃N₄ for photodegradation of the herbicide MTSM. RSC Advances, 2017, 7, 3966-3974.	3.6	25
35	Facile hydrothermal synthesis of magnetic adsorbent CoFe2O4/MMT to eliminate antibiotics in aqueous phase: tetracycline and ciprofloxacin. Environmental Science and Pollution Research, 2019, 26, 215-226.	5.3	23
36	The synergistic effect and microscopic mechanism of co-adsorption of three emerging contaminants and copper ion on gemini surfactant modified montmorillonite. Ecotoxicology and Environmental Safety, 2019, 184, 109610.	6.0	22

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37	Design of Graphene Nanoplatelet/Graphitic Carbon Nitride Heterojunctions by Vacuum Tube with Enhanced Photocatalytic and Electrochemical Response. European Journal of Inorganic Chemistry, 2018, 2018, 1726-1732.	2.0	18
38	Preparation of g-C3N4/TiO2/BiVO4 composite and its application in photocatalytic degradation of pollutant from TATB production under visible light irradiation. Journal of Photochemistry and Photobiology A: Chemistry, 2018, 358, 246-255.	3.9	18
39	Facile synthesis of CNS/TNS sensitized with Cu biphenylamine frameworks for remarkable photocatalytic activity for organic pollutants degradation and bacterial inactivation. Solar Energy, 2019, 186, 204-214.	6.1	18
40	Controllable synthesis of flower-root shaped Bi2O3/Bi2MoO6 heterostructures as an efficient photocatalyst under visible light irradiation. Journal of Photochemistry and Photobiology A: Chemistry, 2019, 372, 78-88.	3.9	17
41	Tyrosine-Immobilized Montmorillonite: An Efficient Adsorbent for Removal of Pb²⁺ and Cu²⁺ from Aqueous Solution. Journal of Chemical & Engineering Data, 2019, 64, 3535-3546.	1.9	16
42	Facile synthesis of cinnamic acid sensitized rice husk biochar for removal of organic dyes from wastewaters: Batch experimental and theoretical studies. Materials Chemistry and Physics, 2022, 288, 126327.	4.0	14
43	Organocatalyzed Solvent Free and Efficient Synthesis of 2,4,5â€Trisubstituted Imidazoles as Potential Acetylcholinesterase Inhibitors for Alzheimer's Disease. Chemistry and Biodiversity, 2020, 17, e1900493.	2.1	11
44	Highly sensitivity electrochemical sensor based on ErGO/MWCNTs nanohybrid for 2,4-dinitroanisole electroanalysis. Microchemical Journal, 2019, 151, 104226.	4.5	8
45	Synthesis and Mechanism of Adsorption Capacity of Modified Montmorillonite with Amino Acids for 4-Acetaminophenol Removal from Wastewaters. Journal of Chemical & Engineering Data, 2019, 64, 5900-5909.	1.9	6
46	Preparation of spherical filler-like ZnFe2O4/Bi2MoO6 surrounded by nanosheets and its photocatalytic applications. Environmental Technology (United Kingdom), 2021, 42, 2077-2084.	2.2	6
47	Synthesis, characterization, lipoxygenase inhibitory activity and in silico molecular docking of biaryl bis(benzenesulfonamide) and indol-3-yl-hydrazide derivatives. Journal of the Iranian Chemical Society, 2015, 12, 1123-1130.	2.2	5
48	Synthesis and characterisation of (Fe, Co, Ni)-polyoxometalates to degrade O, O-diethyl-S-(p-tolyl) phosphorothioate under visible light irradiation. International Journal of Environmental Analytical Chemistry, 2020, 100, 1376-1389.	3.3	4
49	Facile synthesis of rock-like Ag2ZrO3 decorated with TiO2 nanoparticles heterostructures with highly enhanced visible-light photocatalytic properties. Journal of Nanoparticle Research, 2020, 22, 1.	1.9	4
50	Green and Facile Reaction of Gabapentin with Sulfonyl Chlorides to Synthesize Lactams and Sulfonamides Derivatives in Aqueous Medium. Letters in Organic Chemistry, 2018, 15, .	0.5	4
51	Synthesis, characterization and applications of 3D porous graphene hierarchical structure by direct carbonization of maleic acid. Ceramics International, 2022, 48, 8409-8416.	4.8	3
52	Synthesis of RGO and g-C3N4 hybrid with WO3/Bi2WO6 to boost degradation of nitroguanidine under visible light irradiation. Journal of Materials Science: Materials in Electronics, 2019, 30, 5503-5515.	2.2	0