

CITATION REPORT

List of articles citing

A review on the adsorption of heavy metals by clay minerals, with special focus on the past decade

DOI: 10.1016/j.cej.2016.09.029

Chemical Engineering Journal, 2017, 308, 438-462.

Source: <https://exaly.com/paper-pdf/67723254/citation-report.pdf>

Version: 2024-04-28

This report has been generated based on the citations recorded by exaly.com for the above article. For the latest version of this publication list, visit the link given above.

The third column is the impact factor (IF) of the journal, and the fourth column is the number of citations of the article.

#	Paper	IF	Citations
1201	Removal of Hexavalent Chromium (Cr6+) Using Different Natural Adsorbents - A Review. 2016 , 08,		3
1200	Interaction profiles in poly (amidoamine) dendrimer/montmorillonite or rice straw ash hybrids-immobilized magnetite nanoparticles governing their removal efficiencies of various pollutants in wastewater. 2017 , 230, 353-369		20
1199	Using amine-functionalized magnetite hollow nanospheres (AMHNs) as adsorbents for heavy metal ions. 2017 , 76, 452-458		1
1198	Adsorption of Pb ²⁺ , Ni ²⁺ , Cu ²⁺ , Co ²⁺ metal ions from aqueous solution by PPI/SiO ₂ as new high performance adsorbent: Preparation, characterization, isotherm, kinetic, thermodynamic studies. 2017 , 237, 428-436		33
1197	Regeneration of spent activated carbon obtained from home filtration system and applying it for heavy metals adsorption. 2017 , 5, 3091-3099		17
1196	Chemosynthesis and structural characterization of a novel lignin-based bio-sorbent and its strong adsorption for Pb (II). 2017 , 108, 72-80		55
1195	Phenomenological mathematical modeling of heavy metal biosorption in fixed-bed columns. <i>Chemical Engineering Journal</i> , 2017 , 326, 389-400	14.7	19
1194	Effects of clay minerals, hydroxides, and timing of dissolved organic matter addition on the competitive sorption of copper, nickel, and zinc: A column experiment. 2017 , 187, 273-285		21
1193	New Inorganic/Organic Hybrid Materials and Their Oxides for Removal of Heavy Metal Ions: Response Surface Methodology Approach. 2017 , 27, 427-435		12
1192	Exfoliated clay nanosheets as an efficient additive for improving the electrode functionality of graphene-based nanocomposites. 2017 , 4, 521-529		9
1191	A novel design for clean and economical manufacturing new nano-porous zeolite based adsorbent by alkali cement kiln dust for lead uptake from wastewater. 2017 , 143, 440-451		21
1190	Valorisation of post-sorption materials: Opportunities, strategies, and challenges. 2017 , 242, 35-58		59
1189	Fabrication of stable glycine/palygorskite nanohybrid via high-pressure homogenization as high-efficient adsorbent for Cs(I) and methyl violet. 2017 , 80, 997-1005		6
1188	Removal of arsenic from water by porous charred granulated attapulgite-supported hydrated iron oxide in batch and column modes. 2017 , 166, 88-97		56
1187	Insights into the mercury(II) adsorption and binding mechanism onto several typical soils in China. 2017 , 24, 23607-23619		11
1186	Preparation of ureido-functionalized PVA/silica mesoporous fibre membranes via electrospinning for adsorption of Pb and Cu in wastewater. 2017 , 76, 2526-2534		6
1185	Encapsulation in ceramic material of the metals Cr, Ni, and Cu contained in galvanic sludge via the solidification/stabilization method. 2017 , 5, 3834-3843		12

1184	Optimization of carboxymethyl cellulose hydrogels beads generated by an anionic surfactant micelle templating for cationic dye uptake: Swelling, sorption and reusability studies. 2017 , 105, 1025-1042	41
1183	Augmenting granular activated carbon with natural clay for multicomponent sorption of heavy metals from aqueous solutions. 2017 , 76, 2213-2221	8
1182	Chitosan templated synthesis of mesoporous silica and its application in the treatment of aqueous solutions contaminated with cadmium(II) and lead(II). <i>Chemical Engineering Journal</i> , 2017 , 328, 434-444	14.7 57
1181	Study on the influence of thiolation on the adsorption and magnetic recovery of superparamagnetic nanoadsorbents for Cd ²⁺ removal. 2017 , 425, 141-147	13
1180	Comparison of the adsorption preference using superparamagnetic Fe ₃ O ₄ -SH nanoparticles to remove aqueous heavy metal contaminants. 2017 , 125, 319-327	18
1179	Effects of pre-oxidation and adsorption on haloacetonitrile and trichloronitromethane formation during subsequent chlorination. 2017 , 24, 21836-21845	4
1178	As and Cd Sorption on Selected Si-Rich Substances. 2017 , 228, 1	8
1177	Microbial melanins for radioprotection and bioremediation. 2017 , 10, 1186-1190	34
1176	Characterization and electrochemical treatment of a kaolin. 2017 , 146, 264-269	10
1175	Mechanistic links between magnetic nanoparticles and recovery potential and enhanced capacity for crystal violet of nanoparticles-coated kaolin. 2017 , 164, 695-702	14
1174	Introduction. 2017 , 1-18	8
1173	Influence of Bentonite Proportion in Natural Clay on Pb ²⁺ ions Sorption: Response Surface Methodology, Kinetics and Equilibrium Studies. 2017 , 26, 691-708	4
1172	Fabrication of a Magnetic Cellulose Nanocrystal/Metal-Organic Framework Composite for Removal of Pb(II) from Water. 2017 , 5, 10447-10458	110
1171	Porous Materials from Thermally Activated Kaolinite: Preparation, Characterization and Application. 2017 , 10,	7
1170	Water Filter Fabrication from a Mixture of KMnO ₄ Modified Kapok Carbon Fiber, Zeolite, Bentonite and Clay for Fe ³⁺ Removal and Water Hardness Treatment. 2017 , 14, 636-648	1
1169	Removal of Hexavalent Chromium by Adsorption Using Natural Wastes-A Review. 2017 , 02,	
1168	Polyamide magnetic palygorskite for the simultaneous removal of Hg(II) and methyl mercury; with factorial design analysis. 2018 , 211, 323-333	144
1167	Adsorption Behavior of Manganese Dioxide Towards Heavy Metal Ions: Surface Zeta Potential Effect. 2018 , 229, 1	17

1166	Enhanced uranium(VI) adsorption by chitosan modified phosphate rock. 2018 , 547, 141-147		47
1165	Renewable Starch Carriers with Switchable Adsorption Properties. 2018 , 6, 4603-4613		19
1164	A Novel Cross-Linked Magnetic Hydroxyapatite/Chitosan Composite: Preparation, Characterization, and Application for Ni(II) Ion Removal from Aqueous Solution. 2018 , 229, 1		26
1163	Double functional polymer brush-grafted cotton fiber for the fast visual detection and efficient adsorption of cadmium ions. <i>Chemical Engineering Journal</i> , 2018 , 347, 631-639	14.7	23
1162	Bentonite-decorated calix [4] arene: A new, promising hybrid material for heavy-metal removal. 2018 , 161, 15-22		21
1161	Adsorption isotherms and kinetics of vanadium by shale and coal waste. 2018 , 36, 936-952		22
1160	Removal of tetracycline antibiotics from wastewater by pulsed corona discharge plasma coupled with natural soil particles. <i>Chemical Engineering Journal</i> , 2018 , 346, 159-170	14.7	48
1159	Facile one-step synthesis of functionalized biochar from sustainable proliferata-green-tide source for enhanced adsorption of copper ions. 2018 , 73, 185-194		14
1158	Facile fabrication of robust MOF membranes on cloth via a CMC macromolecule bridge for highly efficient Pb(II) removal. <i>Chemical Engineering Journal</i> , 2018 , 339, 230-239	14.7	68
1157	Functionalized halloysite nanotubes for enhanced removal of lead(II) ions from aqueous solutions. 2018 , 156, 87-95		59
1156	Tailoring the structural and morphological properties of hydroxyapatite materials to enhance the capture efficiency towards copper(II) and lead(II) ions. 2018 , 42, 4520-4530		31
1155	Mercury adsorption in the Mississippi River deltaic plain freshwater marsh soil of Louisiana Gulf coastal wetlands. 2018 , 195, 455-462		16
1154	Effect of framework structure, pore size and surface modification on the adsorption performance of methylene blue and Cu ²⁺ in mesoporous silica. 2018 , 539, 154-162		31
1153	Recent advances in applications of activated carbon from biowaste for wastewater treatment: A short review. 2018 , 175, 361-375		282
1152	Removal of fluoride from aqueous solution using nanoscale rice husk biochar. 2018 , 7, 446-451		29
1151	Isosteric heat of water adsorption and desorption in homoionic alkaline-earth montmorillonites. 2018 , 501, 26-34		7
1150	Kinetics, adsorption and desorption of Cd(II) and Cu(II) on natural allophane: Effect of iron oxide coating. 2018 , 319, 70-79		26
1149	Geochemistry and Mineralogy. 2018 , 39-83		2

1148	Novel melamine modified metal-organic frameworks for remarkably high removal of heavy metal Pb (II). 2018 , 430, 120-127		81
1147	Simultaneous removal of tetracycline and Cu(ii) by adsorption and coadsorption using oxidized activated carbon.. 2018 , 8, 1744-1752		34
1146	Efficient heavy metal removal from industrial melting effluent using fixed-bed process based on porous hydrogel adsorbents. 2018 , 131, 246-254		198
1145	Competitive adsorption of Cd, Pb and Ni onto Fe-modified argillaceous limestone: Influence of pH, ionic strength and natural organic matters. 2018 , 637-638, 69-78		66
1144	Vermiculite as a potential component of the engineered barriers in low- and medium-level radioactive waste repositories. 2018 , 161, 139-150		14
1143	What is clay? A new definition of "clay" based on plasticity and its impact on the most widespread soil classification systems. 2018 , 161, 57-63		37
1142	Recovery of phosphorus from incinerated sewage sludge ash by combined two-step extraction and selective precipitation. <i>Chemical Engineering Journal</i> , 2018 , 348, 74-83	14.7	58
1141	Investigating the potential of synthetic humic-like acid to remove metal ions from contaminated water. 2018 , 635, 1036-1046		24
1140	Study of Pb (II) adsorption from aqueous solutions by TiO ₂ functionalized with hydroxide ethyl aniline (PHEA/n-TiO ₂). 2018 , 263, 294-302		23
1139	Kinetic, isotherm and thermodynamic investigations of the adsorption of Ag ⁺ and Cu ²⁺ on vermiculite. 2018 , 258, 295-309		37
1138	Removal of Pb(II) from aqueous solution using hydroxyapatite/calcium silicate hydrate (HAP/C-S-H) composite adsorbent prepared by a phosphate recovery process. <i>Chemical Engineering Journal</i> , 2018 , 344, 53-61	14.7	68
1137	Acidic leaching of potentially toxic metals cadmium, cobalt, chromium, copper, nickel, lead, and zinc from two Zn smelting slag materials incubated in an acidic soil. 2018 , 238, 359-368		21
1136	Removal of Cu ²⁺ and Ni ²⁺ ions from aqueous solutions by adsorption onto natural palygorskite and vermiculite. 2018 , 53, 1-15		17
1135	Comparative and competitive adsorption of Cu(II), Cd(II) and Pb(II) onto Sepia pharaonis endoskeleton biomass from aqueous solutions. 2018 , 32, 209-216		4
1134	Scanning and transmission analytical electron microscopy (STEM-EDX) can identify structural forms of lead by mapping of clay crystals. 2018 , 310, 191-200		3
1133	Effective and efficient desorption of Cs from hydrothermal-treated clay minerals for the decontamination of Fukushima radioactive soil. <i>Chemical Engineering Journal</i> , 2018 , 333, 392-401	14.7	24
1132	The applicability of construction and demolition waste components for radionuclide sorption. 2018 , 171, 322-332		23
1131	Response surface methodology for optimization of simultaneous Cr (VI) and as (V) removal from contaminated water by nanofiltration process. 2018 , 37, 434-443		5

1130	Sorption, transport and biodegradation - An insight into bioavailability of persistent organic pollutants in soil. 2018 , 610-611, 1154-1163		304
1129	A bifunctional adsorbent of silica gel-immobilized Schiff base derivative for simultaneous and selective adsorption of Cu(II) and SO ₄ ²⁻ 2018 , 191, 61-74		18
1128	Enhancement of adsorption capacity of clay through spray drying and surface modification process for wastewater treatment. <i>Chemical Engineering Journal</i> , 2018 , 334, 1719-1728	14.7	59
1127	Treatment of wastewater containing nickel by complexation- ultrafiltration using sodium polyacrylate and the stability of PAA-Ni complex in the shear field. <i>Chemical Engineering Journal</i> , 2018 , 334, 1878-1885	14.7	36
1126	Effect of Adsorbate Concentration to Adsorbent Dosage Ratio on the Sorption of Heavy Metals on Soils. 2018 , 144, 04017094		12
1125	A novel study on the influence of cork waste residue on metakaolin-zeolite based geopolymers. 2018 , 152, 196-210		29
1124	Adsorption properties and mechanisms of palygorskite for removal of various ionic dyes from water. 2018 , 151, 20-28		104
1123	Combined EXAFS and ab initio study of copper complex geometries adsorbed on natural illite. 2018 , 152, 73-82		1
1122	Effective removal of metal ions from aqueous solution by silver and zinc nanoparticles functionalized cellulose: Isotherm, kinetics and statistical supposition of process. 2018 , 9, 1-11		43
1121	Securing The Future: Clay-Based Solutions For a Comprehensive and Sustainable Potable-Water Supply System. 2018 , 66, 315-328		5
1120	Statistical analysis of Litchi chinensis adsorption behavior toward Cr(VI). 2018 , 8, 1		7
1119	Study of Defluoridation of Water Using Natural Clay Minerals. 2018 , 66, 493-499		8
1118	Effects of Fe and V States on the Fenton Catalytic Activity of Natural Rutile. 2018 , 66, 261-273		1
1117	Trimeric Surfactant Modified Montmorillonite Immobilized in Alginate Beads: An Efficient Adsorbent for Removal of Cu ²⁺ and Methyl Orange from Aqueous Solution. 2018 , 92, 2802-2810		2
1116	Adsorción de Cadmio, Cobre y Plomo en Bentonita, Caolín y Zeolita Naturales y Modificadas: Una Revisión de los Parámetros de Operación, Isotermas y Cinética. 2018 , 23,		2
1115	Reduction of Cd accumulation in pak choi (L.) in consecutive growing seasons using mercapto-grafted palygorskite.. 2018 , 8, 32084-32094		12
1114	Remediation of clay soil contaminated with lead nitrate using washing-enhanced electrokinetic technique. 2018 , 9, 63-73		5
1113	. 2018 ,		17

1112	An exploratory study using QICAR models for prediction of adsorption capacity of multi-walled carbon nanotubes for heavy metal ions. 2018 , 29, 997-1009	5
1111	Efficient Removal of Lead Ions from Water by a Low-Cost Alginate-Melamine Hybrid Sorbent. 2018 , 8, 1518	12
1110	Adsorption of cadmium from aqueous solutions by novel FeO- newly isolated Actinomucor sp. bio-nanoadsorbent: functional group study. 2018 , 46, S1092-S1101	13
1109	Novel 2D Nanosheets with Potential Applications in Heavy Metal Purification: A Review. 2018 , 5, 1801094	48
1108	Manganese oxides and their application to metal ion and contaminant removal from wastewater. 2018 , 26, 264-280	71
1107	Facile Fabrication of Multi-Structured SiO ₂ @PVDF-HFP Nanofibrous Membranes for Enhanced Copper Ions Adsorption. 2018 , 10,	10
1106	A Review on the Synthesis and Characterization of Biomass-Derived Carbons for Adsorption of Emerging Contaminants from Water. 2018 , 4, 63	46
1105	Water Purification of Ions of Heavy Metals by Montmorillonite Modified with Polyamine. 2018 , 40, 320-326	5
1104	Hybrid materials based on polymer nanocomposites for environmental applications. 2018 , 507-551	1
1103	Advanced Techniques of Saponite Recovery from Diamond Processing Plant Water and Areas of Saponite Application. 2018 , 8, 549	4
1102	Metal Sequestration through Coupled Dissolution-Precipitation at the Brucite-Water Interface. 2018 , 8, 346	10
1101	Organo-montmorillonites for efficient and rapid water remediation: sequential and simultaneous adsorption of lead and bisphenol A. 2018 , 15, 286	11
1100	A Review of the Synthesis and Applications of Polymer-Nanoclay Composites. 2018 , 8, 1696	127
1099	Clay supported TiO ₂ nanoparticles for photocatalytic degradation of environmental pollutants: A review. 2018 , 6, 6088-6107	78
1098	Study of the adsorption process of heavy metals cations on Kraft lignin. 2018 , 139, 248-258	22
1097	Adsorption and Desorption of Cd by Soil Amendment: Mechanisms and Environmental Implications in Field-Soil Remediation. 2018 , 10, 2337	18
1096	Innovative comparable study for application of iron oxyhydroxide and manganese dioxide modified clinoptilolite in removal of Zn(II) from aqueous medium. 2018 , 6, 6489-6503	6
1095	Opportunities and constraints of using the innovative adsorbents for the removal of cobalt(II) from wastewater: A review. 2018 , 10, 435-456	28

1094	Effect of bis[2-(methacryloyloxy)ethyl] phosphate as a crosslinker on poly(AAm-co-AMPS)/Na-MMT hydrogel nanocomposite as potential adsorbent for dyes: kinetic, isotherm and thermodynamic study. 2018 , 25, 1	19
1093	Adsorption of Cesium from Aqueous Solution of Highly Concentrated Nitric Acid Using Supermolecule/Ordered Mesoporous Carbon Composite. 2018 , 229, 1	6
1092	Properties of Raw Saudi Arabian Grey Kaolin Studied by Pyrrole Adsorption and Catalytic Conversion of Methylbutynol. 2018 , 2018, 1-6	4
1091	Elimination of Chromium (VI) by Adsorption onto Natural and/or Modified Kaolinite. 2018 , 18, 106-112	5
1090	Evaluation of the Influence of Clay Montmorillonite Content on the Aqueous Uptake of Lead and Zinc. 2018 , 90, 771-782	6
1089	Tough and Self-Healable Nanocomposite Hydrogels for Repeatable Water Treatment. 2018 , 10,	18
1088	A review on agro-industrial waste (AIW) derived adsorbents for water and wastewater treatment. 2018 , 227, 395-405	205
1087	Industrial Applications of Clay Materials from Ghana (A Review). 2018 , 34, 1719-1734	6
1086	Characteristics of Cadmium Sorption by Heat-Activated Red Mud in Aqueous Solution. 2018 , 8, 13558	9
1085	Facilitated transport of cadmium with montmorillonite KSF colloids under different pH conditions in water-saturated sand columns: Experiment and transport modeling. 2018 , 146, 216-231	37
1084	Searching for a high efficiency and environmental benign reagent to leach ion-adsorption rare earths based on the zeta potential of clay particles. 2018 , 20, 4528-4536	15
1083	Crystalline Swelling Process of Mg-Exchanged Montmorillonite: Effect of External Environmental Solicitation. 2018 , 2018, 1-18	1
1082	Solid-liquid separation: an emerging issue in heavy metal wastewater treatment. 2018 , 25, 17250-17267	12
1081	Environmental Nanotechnology and Education for Sustainability: Recent Progress and Perspective. 2018 , 1-27	2
1080	A Ce(III)-Based Coordination Polymer as Sorbent for the Removal of Pb ²⁺ and Cd ²⁺ Ions from Water. 2018 , 3, 5480-5485	
1079	Graphene Oxide-Based Fe/Mg (Hydr)oxide Nanocomposite as Heavy Metals Adsorbent. 2018 , 63, 2097-2105	21
1078	Efficient removal of cadmium and lead ions from water by hydrogels modified with cystine. 2018 , 6, 3962-3970	16
1077	Magnetic mesoporous Al ₂ O ₃ /ZnFe ₂ O ₄ micro-bowls realizing enhanced adsorption, separation and recycle performance towards waste water. 2018 , 270, 120-126	13

1076	Adsorption-Based Synthesis of Environmentally Friendly Heterogeneous Chromium(III) Catalysts for Oxidation Reactions into Kaolinite, Saponite, and Their Amine-Modified Derivatives. 2018 , 1, 3867-3877	4
1075	Exploring innovative solutions for aged concrete utilization: treatment of liquid radioactive waste. 2018 , 20, 1343-1354	8
1074	A review on biodegradation and photocatalytic degradation of organic pollutants: A bibliometric and comparative analysis. 2018 , 196, 1669-1680	70
1073	Comparative study of core-shell nanostructures based on amino-functionalized Fe ₃ O ₄ @SiO ₂ and CoFe ₂ O ₄ @SiO ₂ nanocomposites. 2018 , 766, 609-618	27
1072	Treatment modalities for the reuse of produced waste from oil and gas development. 2018 , 643, 107-118	32
1071	The artificial neural network and Box-Behnken design for Cu ²⁺ removal by the pottery sludge from water samples: Equilibrium, kinetic and thermodynamic studies. 2018 , 266, 617-627	23
1070	Adsorption and Oxidation Techniques to Remove Organic Pollutants from Water. 2018 , 249-300	4
1069	Methylene blue removal from water using the hydrogel beads of poly(vinyl alcohol)-sodium alginate-chitosan-montmorillonite. 2018 , 198, 518-528	192
1068	Adsorption of thorium (IV) by amorphous silica; response surface modelling and optimization. 2018 , 318, 823-834	13
1067	Zinc oxide templating of porous alginate beads for the recovery of gold ions. 2018 , 200, 297-304	14
1066	Strong and Tough Ceramic Composites via Ice Templating. 2018 , 177-227	
1065	Recent advances in polyaniline-based nanocomposites as potential adsorbents for trace metal ions. 2018 , 597-615	2
1064	Application of heavy metals sorbent as reactive component in cementitious composites. 2018 , 199, 565-573	11
1063	Adsorption of metha-nitrophenol onto alumina and HDTMA modified alumina: Kinetic, isotherm and mechanism investigations. 2018 , 268, 587-597	15
1062	Structural development and assembly patterns of the root-associated microbiomes during phytoremediation. 2018 , 644, 1591-1601	37
1061	Bayberry tannin immobilized bovine serum albumin nanospheres: characterization, irradiation stability and selective removal of uranyl ions from radioactive wastewater. 2018 , 6, 15359-15370	50
1060	Climatic variations and de-coupling between arsenic and iron in arsenic contaminated ground water in the lowlands of Nepal. 2018 , 210, 347-358	15
1059	Effective Removal of Lead Ions from Aqueous Solution Using Nano Illite/Smectite Clay: Isotherm, Kinetic, and Thermodynamic Modeling of Adsorption. 2018 , 10, 210	24

1058	Thermal analysis of vermiculite using microwave heating. 2018 ,	0
1057	Magnetic mesoporous TiO ₂ microspheres for sustainable arsenate removal from acidic environments. 2018 , 5, 2132-2139	9
1056	Characterization, preparation, and uses of nanomagnetic FeO impregnated onto fish scale as more efficient adsorbent for Cu ion adsorption. 2018 , 25, 19687-19700	14
1055	Mechanisms of copper stabilization by mineral constituents in sewage sludge biochar. 2018 , 193, 185-193	39
1054	Adsorption of vanadium (V) on natural kaolinite and montmorillonite: Characteristics and mechanism. 2018 , 161, 310-316	48
1053	Alleviation of cadmium phytotoxicity to wheat is associated with Cd re-distribution in soil aggregates as affected by amendments.. 2018 , 8, 17426-17434	13
1052	Immobilization of soil cadmium using combined amendments of illite/smectite clay with bone chars. 2018 , 25, 20723-20731	9
1051	Bifunctionalized chitosan: A versatile adsorbent for removal of Cu(II) and Cr(VI) from aqueous solution. 2018 , 201, 218-227	24
1050	A review on halloysite-based adsorbents to remove pollutants in water and wastewater. 2018 , 269, 855-868	103
1049	Geochemical properties and pollution assessment of heavy metals in the sediments of Daechung Lake, Korea. 2018 , 27, 163-171	2
1048	Application of clay ceramics and nanotechnology in water treatment: A review. 2018 , 5, 1476017	18
1047	Selective Adsorption of Pb(II) from Aqueous Solution by Triethylenetetramine-Grafted Polyacrylamide/Vermiculite. 2018 , 11,	25
1046	The mechanism of anionic polyacrylamide adsorption on the montmorillonite surface in the presence of Cr(VI) ions. 2018 , 211, 524-534	32
1045	2.29 Desulfurization Materials. 2018 , 944-979	11
1044	A Review on Heavy Metal Ions and Dye Adsorption from Water by Agricultural Solid Waste Adsorbents. 2018 , 229, 1	209
1043	Effects of water and organic manure coupling on the immobilization of cadmium by sepiolite. 2019 , 19, 798-808	10
1042	Wood-based biochar for the removal of potentially toxic elements in water and wastewater: a critical review. 2019 , 64, 216-247	228
1041	D-Galactose based hydrophobic ionic liquid: A new adsorbent for the removal of Cd ²⁺ ions from aqueous solution. 2019 , 38, S139-S145	7

1040	Clay mineralogy affects the efficiency of sewage sludge in reducing lead retention of soils. 2019 , 80, 45-57	7
1039	Synthesis of zinc oxide-montmorillonite composite and its effect on the removal of aqueous lead ions. 2019 , 38, 120-130	7
1038	Removal of thallium in water/wastewater: A review. 2019 , 165, 114981	38
1037	EDTA-Functionalized Covalent Organic Framework for the Removal of Heavy-Metal Ions. 2019 , 11, 32186-32196	69
1036	Zwitterionic-surfactant modified LAPONITE® s for removal of ions (Cs+, Sr2+ and Co2+) from aqueous solutions as a sustainable recovery method for radionuclides from aqueous wastes. 2019 , 21, 5118-5127	8
1035	Synthesis, characterization of modified nanoadsorbents and its application in removal of Zn2+ ions from battery effluent. 2019 , 1, 2-11	5
1034	Recent advances in hexavalent chromium removal from aqueous solutions by adsorptive methods.. 2019 , 9, 26142-26164	110
1033	Uptake of As(V) from Groundwater Using Fe-Mn Oxides Modified Kaolin Clay: Physicochemical Characterization and Adsorption Data Modeling. 2019 , 11, 1245	9
1032	Heavy metal behaviour at mineral-organo interfaces: Mechanisms, modelling and influence factors. 2019 , 131, 104995	67
1031	Sorption of Heavy Metals on Clay Minerals and Oxides: A Review. 2019 ,	11
1030	Low-price MnO2 loaded sepiolite for Cd2+ capture. 2019 , 25, 1271-1283	4
1029	Synthesis and appraisal of a hydroxyapatite/pectin hybrid material for zinc removal from water.. 2019 , 9, 21095-21105	9
1028	Preparation and characterization of a novel diatomite-based composite and investigation of its adsorption properties for uranyl ions. 2019 , 321, 791-803	18
1027	Removal of aluminum from aqueous solution by adsorption on montmorillonite K10, TiO2, and SiO2: kinetics, isotherms, and effect of ions. 2019 , 25, 1575-1583	5
1026	Adsorption of Cu(II) onto Fe(III)-Modified Montmorillonite - Kinetic, Isotherm, and Thermodynamic Studies. 2019 , 540, 012004	1
1025	Immobilization of dye pollutants on composite adsorbent coating: Screening, efficiency and adsorption mechanism. 2019 ,	
1024	Atomistic View of Mercury Cycling in Polar Snowpacks: Probing the Role of Hg2+ Adsorption Using Ab Initio Calculations. 2019 , 9, 459	1
1023	Synthesis of a cross-linked cellulose-based amine polymer and its application in wastewater purification. 2019 , 26, 28080-28091	6

1022	Photocatalytic activity improvement and application of UV-TiO ₂ photocatalysis in textile wastewater treatment: A review. 2019 , 7, 103248	280
1021	Removal of Hg(II) in aqueous solutions through physical and chemical adsorption principles. 2019 , 9, 20941-20953	33
1020	Environmental constraints sensitivity of soil organic carbon decomposition to temperature, management practices and climate change. 2019 , 107, 105644	14
1019	PANI-CNT nanocomposites. 2019 , 143-163	5
1018	Efficient removal of Pb(II) and Zn(II) ions from aqueous solutions by adsorption onto a native natural bentonite. 2019 , 6, 1979-1985	8
1017	Variety-dependent responses of rice plants with differential cadmium accumulating capacity to cadmium telluride quantum dots (CdTe QDs): Cadmium uptake, antioxidative enzyme activity, and gene expression. 2019 , 697, 134083	9
1016	Insights into the isotherm and kinetic models for the coadsorption of pharmaceuticals in the absence and presence of metal ions: A review. 2019 , 252, 109617	24
1015	Low-dose HRTEM Study of Interstratified Clay Minerals. 2019 , 25, 2472-2473	
1014	Water resistance and corrosion protection properties of waterborne polyurethane coating enhanced by montmorillonite modified with Ce ³⁺ . 2019 , 136, 105213	12
1013	Mining Rock Wastes for Water Treatment: Potential Reuse of Fe- and Mn-Rich Materials for Arsenic Removal. 2019 , 11, 1897	4
1012	Competing droughts affect dust delivery to Sierra Nevada. 2019 , 41, 100545	9
1011	Effect of carbon chain structure on the phthalic acid esters (PAEs) adsorption mechanism by mesoporous cellulose biochar. <i>Chemical Engineering Journal</i> , 2019 , 362, 383-391	14-7 39
1010	Nanoscale Zero-Valent Iron and Chitosan Functionalized Biochar for Efficient Hexavalent Chromium Removal. 2019 , 16,	22
1009	Clay nano-adsorbent: structures, applications and mechanism for water treatment. 2019 , 1, 1	34
1008	Polyacrylic acid-based and chitosan-based hydrogels for adsorption of cadmium: Equilibrium isotherm, kinetic and thermodynamic studies. 2019 , 7, 103327	61
1007	Removal of heavy metals from leaching effluents of sewage sludge via supported liquid membranes. 2019 , 693, 133608	28
1006	Geochemical distribution and behaviour of mercury and arsenic in the Brunei-Muara District, Brunei Darussalam. 2019 , 311, 012087	1
1005	Application of fly ash-based geopolymer for removal of cesium, strontium and arsenate from aqueous solutions: kinetic, equilibrium and mechanism analysis. 2019 , 79, 2116-2125	9

1004	Synthesis of chitosan cross-linked 3D network-structured hydrogel for methylene blue removal. 2019 , 141, 98-107	35
1003	Preparation of nitric acid modified powder activated carbon to remove trace amount of Ni(II) in aqueous solution. 2019 , 80, 86-97	8
1002	Two-Step Preparation of an Amidoxime-Functionalized Chelating Resin for Removal of Heavy Metal Ions from Aqueous Solution. 2019 , 64, 4037-4045	8
1001	Silver/quartz nanocomposite as an adsorbent for removal of mercury (II) ions from aqueous solutions. 2019 , 5, e02415	16
1000	Confident performance of chitosan and pistachio shell biochar on reducing Ni bioavailability in soil and plant plus improved the soil enzymatic activities, antioxidant defense system and nutritional quality of lettuce. 2019 , 183, 109594	131
999	Adsorption of Cu ²⁺ and Mg ²⁺ ions on silica gel derived from rice hulls ash: Experimental and theoretical studies. 2019 , 18, 1950026	1
998	Use of organo-montmorillonite for the nitrate retention in water: influence of alkyl length of loaded surfactants. 2019 , 1, 1	4
997	Ni-Fe-layered double hydroxide/N-doped graphene oxide nanocomposite for the highly efficient removal of Pb(II) and Cd(II) ions from water. 2019 , 280, 120963	17
996	Design swelling micas: Insights on heavy metals cation exchange reaction. 2019 , 182, 105298	7
995	Super rapid removal of copper, cadmium and lead ions from water by NTA-silica gel.. 2018 , 9, 397-407	26
994	Performance of electrospun nanofibrous membranes for trapping of BTX aromatic hydrocarbons and heavy metal ions: Mechanisms, isotherms and kinetics. 2019 , 217, 388-397	24
993	Ligands and media impact interactions between engineered nanomaterials and clay minerals. 2019 , 13, 112-122	4
992	Strategic Design of Clay-Based Multifunctional Materials: From Natural Minerals to Nanostructured Membranes. 2019 , 29, 1807611	39
991	Detailed study on reduction of hazardous Cr(VI) at acidic pH using modified montmorillonite Fe(II)-Mt under ambient conditions. 2019 , 45, 2357-2368	5
990	Arsenic (III) removal from water by hydroxyapatite-bentonite clay-nanocrystalline cellulose. 2019 , 38, 13147	11
989	WITHDRAWN: Adsorption properties of Pb ²⁺ and Cu ²⁺ by threonine functionalized montmorillonite in single-ion system. 2019 ,	
988	Microwave-assisted hydrothermal synthesis of manganate nanoflowers for selective retention of strontium. 2019 , 368, 661-669	5
987	Hydration of Ordinary Portland Cement in Presence of Lead Sorbed on Ceramic Sorbent. 2018 , 12,	6

986	Carbon-coated montmorillonite nanocomposite for the removal of chromium(VI) from aqueous solutions. 2019 , 368, 541-549	49
985	How titanium dioxide and zinc oxide nanoparticles do affect soil microorganism activity?. 2019 , 91, 18-24	5
984	Development of an innovative capsule with three-dimension honeycomb architecture via one-step titration-gel method for the removal of methylene blue. 2019 , 128, 911-922	7
983	Adsorption of Cr (III) using an Iranian natural nanoclay: applicable to tannery wastewater: equilibrium, kinetic, and thermodynamic. 2019 , 78, 1	13
982	Assessment of Cu (II) removal from an aqueous solution by raw Gundelia tournefortii as a new low-cost biosorbent: Experiments and modelling. 2019 , 27, 1945-1955	5
981	A critical review of clay-based composites with enhanced adsorption performance for metal and organic pollutants. 2019 , 369, 780-796	166
980	Modeling in Adsorption: Fundamentals and Applications. 2019 , 85-118	13
979	Influences of pH and metal ions on the interactions of oxytetracycline onto nano-hydroxyapatite and their co-adsorption behavior in aqueous solution. 2019 , 541, 101-113	38
978	Sodium-Modified Vermiculite for Calcium Ion Removal from Aqueous Solution. 2019 , 58, 9380-9389	4
977	Research on the Adsorption Behavior of Heavy Metal Ions by Porous Material Prepared with Silicate Tailings. 2019 , 9, 291	65
976	Mechanism insights into Hg(II) adsorption on kaolinite(001) surface: A density functional study. 2019 , 488, 494-502	23
975	Reactivity of As and U co-occurring in Mine Wastes in northeastern Arizona. 2019 , 522, 26-37	9
974	Carbon Aerogels for Environmental Clean-Up. 2019 , 2019, 3126-3141	21
973	Polyethyleneimine modified activated carbon for adsorption of Cd(II) in aqueous solution. 2019 , 7, 103183	37
972	Enhanced removal of As(III) and As(V) from aqueous solution using ionic liquid-modified magnetic graphene oxide. 2019 , 234, 196-203	45
971	A review on heavy metal pollution, toxicity and remedial measures: Current trends and future perspectives. 2019 , 290, 111197	433
970	Cu-Doped Porous Carbon Derived from Heavy Metal-Contaminated Sewage Sludge for High-Performance Supercapacitor Electrode Materials. 2019 , 9,	9
969	Design of an adsorbent-bearing silica Schiff base ligand for the highly efficient removal of uranium and thorium in acidic solutions. 2019 , 228, 115709	14

968	Adsorption of organic pollutants by natural and modified clays: A comprehensive review. 2019 , 228, 115719	202
967	Removal of Cr ³⁺ ion from aqueous solutions using MgO and montmorillonite nanoparticles. 2019 , 78, 1	8
966	Synthesis and characterization of new nitrogen- and oxygen-rich cyclohexanone-formaldehyde resin for fast Cd(II) adsorption in aqueous solution. 2019 , 68, 1636-1644	4
965	Enhancing cadmium removal by low-cost nanocomposite adsorbents from aqueous solutions; a continuous system. 2019 , 173, 106963	9
964	Surface functionalization of cellulose with hyperbranched polyamide for efficient adsorption of organic dyes and heavy metals. 2019 , 232, 774-783	45
963	Synthesis and characterization of kaolinite coated with copper oxide and its effect on the removal of aqueous Lead(II) ions. 2019 , 9, 1	5
962	Kinetic, isotherm and mechanism investigations of the removal of phenols from water by raw and calcined clays. 2019 , 5, e01616	19
961	The application of machine learning methods for prediction of metal sorption onto biochars. 2019 , 378, 120727	72
960	Synthesis, characterization and acid-base properties of kaolinite and metal (Fe, Mn, Co) doped kaolinite. 2019 , 179, 105138	20
959	Benign-by-design nature-inspired nanosystems in biofuels production and catalytic applications. 2019 , 112, 195-252	60
958	A self-regenerating clay-polymer-bacteria composite for formaldehyde removal from water. <i>Chemical Engineering Journal</i> , 2019 , 374, 1275-1285	14.7 16
957	Treatment from abandoned mine landfill leachates. Adsorption technology. 2019 , 8, 2732-2740	5
956	Effect of the Ionic Radius of Alkali Metal Ions on Octacalcium Phosphate Formation via Different Substitution Modes. 2019 , 19, 4162-4171	19
955	Sorption of Cd ²⁺ ions onto Daphne alpina mediated titanium dioxide nanoparticles. 2019 , 6, 085089	6
954	Use of soil amendments to reduce cadmium accumulation in rice by changing Cd distribution in soil aggregates. 2019 , 26, 20929-20938	12
953	Removal of Arsenate and Chromate by Lanthanum-modified Granular Ceramic Material: The Critical Role of Coating Temperature. 2019 , 9, 7690	13
952	Remobilization and adsorption of colloidal gold on nano-particulate chlorite at the Hardrock Archean orogenic gold deposits: A new tool for gold exploration. 2019 , 204, 181-205	2
951	Modeling and optimization of chromium adsorption onto clay using response surface methodology, artificial neural network, and equilibrium isotherm models. 2019 , 38, e13260	9

950	Influence of structural Al species on Cd(II) capture by iron muscovite nanoparticles. 2019 , 226, 907-914	4
949	Synthesis, characterization, and application of a novel polymeric-bentonite-magnetite composite resin for water softening. 2019 , 224, 356-365	20
948	Efficient removal of p-nitrophenol from water using montmorillonite clay: insights into the adsorption mechanism, process optimization, and regeneration. 2019 , 26, 19615-19631	35
947	Removal of Chromates and Sulphates by Mg/Fe LDH and Heterostructured LDH/Halloysite Materials: Efficiency, Selectivity, and Stability of Adsorbents in Single- and Multi-Element Systems. 2019 , 12,	15
946	Clay Minerals and Associated Metals in Mudflat Core Sediments of the Vaghotan Estuary, India: Implications of Metal Sorption. 2019 , 93, 466-470	1
945	Enhanced Potential Toxic Metal Removal Using a Novel Hierarchical SiO ₂ /Mg(OH) ₂ Nanocomposite Derived from Sepiolite. 2019 , 9, 298	8
944	Removal of heavy metals from acid mine drainage by native natural clay minerals, batch and continuous studies. 2019 , 9, 1	19
943	Abiotic humification of phenolic pollutant to form a hybrid adsorbent for toxic metals by LDH based composite. 2019 , 175, 139-149	2
942	Technologies applicable to the removal of heavy metals from landfill leachate. 2019 , 26, 15725-15753	23
941	Effects of operating parameters and coexisting ions on the efficiency of heavy metal ions removal by nano-fibrous metal-organic framework membrane filtration process. 2019 , 674, 355-362	109
940	Inorganic and Hybrid (Organic/Inorganic) Lamellar Materials for Heavy metals and Radionuclides Capture in Energy Wastes Management-A Review. 2019 , 12,	21
939	Use of (modified) natural adsorbents for arsenic remediation: A review. 2019 , 676, 706-720	147
938	Ultrafast adsorption of heavy metal ions onto functionalized lignin-based hybrid magnetic nanoparticles. <i>Chemical Engineering Journal</i> , 2019 , 372, 82-91	14.7 97
937	Removal of heavy metals (Co, Cr, and Zn) during calcium/aluminium silicate hydrate and trioctahedral smectite formation. 2019 , 54, 9331-9351	23
936	Montmorillonite with unique interlayer space imparted polymer scaffolds with sustained release of Ag ⁺ . 2019 , 45, 11517-11526	7
935	Removal of Pb(II) and As(V) using magnetic nanoparticles coated montmorillonite via one-pot solvothermal reaction as adsorbent. 2019 , 7, 103000	28
934	Porous Waste Glass for Lead Removal in Packed Bed Columns and Reuse in Cement Conglomerates. 2018 , 12,	9
933	Enhanced organic pollutant photodegradation via adsorption/photocatalysis synergy using a 3D g-C ₃ N ₄ /TiO ₂ free-separation photocatalyst. <i>Chemical Engineering Journal</i> , 2019 , 370, 287-294	14.7 166

932	Mussel-inspired Fe ₃ O ₄ @Polydopamine(PDA)-MoS ₂ core-shell nanosphere as a promising adsorbent for removal of Pb ²⁺ from water. 2019 , 282, 598-605		31
931	Control of Contaminant Transport Caused by Open-Air Heavy Metal Slag in Zhehai, Southwest China. 2019 , 16,		0
930	Surface-Modified Conducting Polymer-Based Nanostructured Materials for the Removal of Toxic Heavy Metals from Wastewater. 2019 , 111-144		3
929	Microbial reductive transformation of iron-rich tailings in a column reactor and its environmental implications to arsenic reactive transport in mining tailings. 2019 , 670, 1008-1018		5
928	Preparation of hydroxypropyl-cyclodextrin-graphene / Fe ₃ O ₄ and its adsorption properties for heavy metals. 2019 , 16, 43-49		23
927	Biochar-based engineered composites for sorptive decontamination of water: A review. <i>Chemical Engineering Journal</i> , 2019 , 372, 536-550	14.7	157
926	Preparation and characteristics of bentonite-zeolite adsorbent and its application in swine wastewater. 2019 , 284, 448-455		15
925	Eco-friendly porous carboxymethyl cellulose/dextran sulfate composite beads as reusable and efficient adsorbents of cationic dye methylene blue. 2019 , 132, 126-141		40
924	Distribution and adsorption of metals on different particle size fractions of sediments in a hydrodynamically disturbed canal. 2019 , 670, 654-661		20
923	Design of apolar chitosan-type adsorbent for removal of Cu(II) and Pb(II): An experimental and DFT viewpoint of the complexation process. 2019 , 7, 103070		15
922	Central composite design for optimization of removal of trace amounts of toxic heavy metal ions from aqueous solution using magnetic Fe ₃ O ₄ functionalized by guanidine acetic acid as an efficient nano-adsorbent. 2019 , 147, 133-141		13
921	Polyethylene Glycol-Modified Layered Double Hydroxides: Synthesis, Characterization, and Study on Adsorption Characteristics for Removal of Acid Orange II from Aqueous Solution. 2019 , 4, 3745-3754		19
920	Biomolecule functionalized magnetite nanoparticles efficiently adsorb and remove heavy metals from contaminated water. 2019 , 94, 2009-2022		15
919	Development of a new cathode for the electro-Fenton process combining carbon felt and iron-containing organic/inorganic hybrids. 2019 , 22, 238-249		1
918	Environmentally benign synthesis of mesoporous cobaltaluminate nodules as catalyst and its effect on the selective oxidation of benzhydrol to benzophenone. 2019 , 7, 102834		1
917	Nanocomposites for Environmental Pollution Remediation. 2019 , 1407-1440		3
916	Surface functional groups of carbon-based adsorbents and their roles in the removal of heavy metals from aqueous solutions: A critical review. <i>Chemical Engineering Journal</i> , 2019 , 366, 608-621	14.7	435
915	Cd complexation with mercapto-functionalized attapulgite (MATP): Adsorption and DFT study. <i>Chemical Engineering Journal</i> , 2019 , 366, 569-576	14.7	32

914	Reducing arsenic in rice grains by leonardite and arsenic-resistant endophytic bacteria. 2019 , 223, 448-454	31
913	Highly Selective Copper Ion Imprinted Clay/Polymer Nanocomposites Prepared by Visible Light Initiated Radical Photopolymerization. 2019 , 11,	17
912	Turning Waste to Resource: An Example of Dehydrogenation Catalyst Cr/ZrO ₂ Derived from Photoreduction Treatment of Chromium-Containing Wastewater with ZrO ₂ . 2019 , 58, 4425-4432	4
911	Removal of Cu ²⁺ and Ni ²⁺ from Wastewater by Using Modified Alkali-Leaching Residual Wire Sludge as Low-Cost Adsorbent. 2019 , 230, 1	2
910	Study of ion exchange at test solutions purification from nickel (II) ions with gabbro-diabase from abzakovo deposit. 2019 , 687, 066062	
909	Nickel ion removal from aqueous solutions through the adsorption process: a review. 2019 ,	12
908	Remediation of Clayey Soil Contaminated with Copper Sulfate Using Washing-Enhanced Electrokinetics Technique. 2019 , 55, 1381-1390	2
907	Comparison of Drying Method on Acid-functionalized Multi-walled Carbon Nanotube and their Application for Dye Removal. 2019 , 495, 012057	2
906	Natural and Chemically Modified Post-Mining Clays Structural and Surface Properties and Preliminary Tests on Copper Sorption. 2019 , 9, 704	3
905	Potential of using kaolin as a natural adsorbent for the removal of pollutants from tannery wastewater. 2019 , 5, e02923	36
904	Super Effective Removal of Toxic Metals Water Pollutants Using Multi Functionalized Polyacrylonitrile and Arabic Gum Grafts. 2019 , 11,	21
903	Simultaneous Removal and Recovery of Metal Ions and Dyes from Wastewater through Montmorillonite Clay Mineral. 2019 , 9,	24
902	Cd(II) removal by Fe(II) surface chemically modified layered double hydroxide-graphene oxide: performance and mechanism.. 2019 , 9, 38982-38989	8
901	Nanobubbles effect on heavy metal ions adsorption by activated carbon. <i>Chemical Engineering Journal</i> , 2019 , 356, 91-97	14.7 105
900	β-Cyclodextrin modified electrospinning fibers with good regeneration for efficient temperature-enhanced adsorption of crystal violet. 2019 , 208, 486-494	26
899	Graphene oxide-functionalized dual-scale channels architecture for high-throughput removal of organic pollutants from water. <i>Chemical Engineering Journal</i> , 2019 , 359, 852-862	14.7 20
898	Novel composites based on geopolymer for removal of Pb(II). 2019 , 239, 192-195	29
897	Investigation of electrochemical performance of montmorillonite clay as Li-ion battery electrode. 2019 , 19, e00086	6

896	Adsorption of gallic acid on nanoclay modified with poly(diallyldimethylammonium chloride). 2019 , 26, 28444-28454		8
895	Cation exchange and surface complexation of lead on montmorillonite and illite including competitive adsorption effects. 2019 , 100, 190-202		27
894	A new route to fabricate high-efficient porous silicate adsorbents by simultaneous inorganic-organic functionalization of low-grade palygorskite clay for removal of Congo red. 2019 , 277, 267-276		33
893	Performance of aquatic weed - Waste <i>Myriophyllum spicatum</i> immobilized in alginate beads for the removal of Pb(II). 2019 , 232, 97-109		16
892	Polymer-coated gauze as efficient, reusable and economically viable adsorbents for the removal of Ni ²⁺ ion. 2019 , 134, 1-9		5
891	Simultaneous removal of mixed contaminants, copper and norfloxacin, from aqueous solution by ZIF-8. <i>Chemical Engineering Journal</i> , 2019 , 362, 628-637	14.7	130
890	Sulfonated polyether sulfone reinforced multiwall carbon nanotubes composite for the removal of lead in wastewater. 2019 , 9, 1695-1705		5
889	Effective removal of Cr(VI) by attapulgite-supported nanoscale zero-valent iron from aqueous solution: Enhanced adsorption and crystallization. 2019 , 221, 683-692		84
888	Selective adsorption of Pb(II) from aqueous solution using nanosilica functionalized with diethanolamine: Equilibrium, kinetic and thermodynamic. 2019 , 146, 270-278		31
887	Elaboration and characterization of a low-cost porous ceramic support from natural Tunisian bentonite clay. 2019 , 22, 188-197		18
886	Ultrathin sodium ferric silicate 2D nanosheets: A novel and robust adsorbent for selective removal of cationic dyes in wastewater. 2019 , 784, 256-265		12
885	Post-synthesizing modification of nanostructured Zr-MOFs to increase the adsorption capacity of heavy metals from an aqueous solution. 2019 ,		2
884	A multifunctional gelatin-based aerogel with superior pollutants adsorption, oil/water separation and photocatalytic properties. <i>Chemical Engineering Journal</i> , 2019 , 358, 1539-1551	14.7	143
883	A novel nanostructured Fe-Ti-Mn composite oxide for highly efficient arsenic removal: Preparation and performance evaluation. 2019 , 561, 364-372		34
882	Corn-cob-supported aluminium-manganese binary oxide composite enhanced removal of cadmium ions. 2019 , 561, 109-119		16
881	Leaching mechanism of ion-adsorption rare earth by mono valence cation electrolytes and the corresponding environmental impact. 2019 , 211, 566-573		7
880	Competitive adsorption of heavy metals in aqueous solution onto biochar derived from anaerobically digested sludge. 2019 , 219, 351-357		126
879	Comparison of adsorption affinity of anionic and cationic polyacrylamides for montmorillonite surface in the presence of chromium(VI) ions. 2019 , 25, 41-50		13

878	A review of the retention mechanisms of redox-sensitive radionuclides in multi-barrier systems. 2019 , 100, 414-431	34
877	Simultaneous removal of heavy metals from synthetic storm water using sustainable urban drainage systems. 2019 , 16, 444-450	3
876	Microbial electrolysis cell as an emerging versatile technology: a review on its potential application, advance and challenge. 2019 , 94, 1697-1711	49
875	Modified clay minerals for environmental applications. 2019 , 113-127	18
874	Appropriate Liquid-to-Solid Ratio for Sorption Studies of Bentonite. 2019 , 145, 04018138	17
873	One-pot synthesis of a novel magnetic activated carbon/clay composite for removal of heavy metals from aqueous solution. 2019 , 40, 1761-1776	20
872	Synergy of adsorption and advanced oxidation processes in recalcitrant wastewater treatment. 2019 , 17, 1125-1142	35
871	Humic substances from green waste compost: An effective washing agent for heavy metal (Cd, Ni) removal from contaminated sediments. 2019 , 366, 210-218	57
870	Study on the competitive adsorption and correlational mechanism for heavy metal ions using the carboxylated magnetic iron oxide nanoparticles (MNPs-COOH) as efficient adsorbents. 2019 , 473, 960-966	34
869	Iron speciation at the riverbank surface in wetland and potential impact on the mobility of trace metals. 2019 , 651, 443-455	10
868	Clay mineral adsorbents for heavy metal removal from wastewater: a review. 2019 , 17, 629-654	158
867	Low operating pressure nanofiltration membrane with functionalized natural nanoclay as antifouling and flux promoting agent. <i>Chemical Engineering Journal</i> , 2019 , 358, 821-830	14.7 28
866	Biosynthesis of Cyclodextrin modified Schwertmannite and the application in heavy metals adsorption. 2019 , 342, 181-192	26
865	Simultaneous removal of methylene blue and Pb from aqueous solution by adsorption on facile modified lignosulfonate. 2020 , 41, 1677-1690	8
864	Adsorption kinetics and molecular interactions of lead [Pb(II)] with natural clay and humic acid. 2020 , 17, 1325-1336	61
863	Laccase-Carbon nanotube nanocomposites for enhancing dyes removal. 2020 , 242, 118425	36
862	A modified ionic liquid clay to remove heavy metals from water: investigating its catalytic activity. 2020 , 17, 2043-2058	8
861	Removal of hazardous azo dye from water using synthetic nano adsorbent: Facile synthesis, characterization, adsorption, regeneration and design of experiments. 2020 , 584, 124031	27

860	Comparative performance evaluation of anodic materials for electro-kinetic removal of Lead (II) from contaminated clay soil. 2020 , 29, 69-95		1
859	Applicability of solid process residues as sorbents for the treatment of industrial wastewaters. 2020 , 246, 118951		1
858	Binary adsorption of Cu(II) and Ni(II) on Lai'yang bentonite: Kinetics, equilibrium, competition quantitative and mechanisms investigation. 2020 , 39, e13358		3
857	Bacterial cellulose/attapulgitic magnetic composites as an efficient adsorbent for heavy metal ions and dye treatment. 2020 , 229, 115512		55
856	The performance of Alizarin impregnated bentonite for the displacement of some heavy metals ions from the wet phosphoric acid. 2020 , 55, 3072-3088		8
855	An electron-scale comparative study on the adsorption of six divalent heavy metal cations on MnFe ₂ O ₄ @CAC hybrid: Experimental and DFT investigations. <i>Chemical Engineering Journal</i> , 2020 , 381, 122656	14.7	35
854	In-situ Cu(II) enrichment and recovery from low-strength copper-laden wastewater using a novel electrically enhanced microbial copper recovery cell (MCRC). <i>Chemical Engineering Journal</i> , 2020 , 382, 122788	14.7	14
853	Enhancing the removal performance of Cd(II) from aqueous solutions by NaA zeolite through doped thiourea reduced GO which is trapped within zeolite crystals. 2020 , 815, 152514		11
852	Simultaneous removal of cationic and anionic heavy metal contaminants from electroplating effluent by hydrotalcite adsorbent with disulfide (S) intercalation. 2020 , 382, 121111		25
851	Spatial variability of arsenic in Indo-Gangetic basin of Varanasi and its cancer risk assessment. 2020 , 238, 124623		18
850	Fixed-bed adsorption of copper from aqueous media using chitosan-coated bentonite, chitosan-coated sand, and chitosan-coated kaolinite. 2020 , 27, 24659-24670		2
849	Recent studies in adsorption of Pb(II), Zn(II) and Co(II) using conventional and modified materials: a review. 2020 , 55, 2679-2698		18
848	Removal of arsenic(III) from aqueous solution by concrete-based adsorbents. 2020 , 98, 353-359		6
847	Synthesis of clay-cellulose biocomposite for the removal of toxic metal ions from aqueous medium. 2020 , 381, 120871		41
846	Modeling, Thermodynamic Study and Sorption Mechanism of Cadmium Ions onto Isopropyl Alcohol Mediated Tin Dioxide Nanoparticles. 2020 , 30, 1197-1205		10
845	Thermodynamic, kinetic and equilibrium isotherm studies of As(V) adsorption by Fe(III)-impregnated bentonite. 2020 , 22, 5273-5295		9
844	Lignin-rich sulfated wood nanofibers as high-performing adsorbents for the removal of lead and copper from water. 2020 , 383, 121174		31
843	Raw and modified clays and clay minerals for the removal of pharmaceutical products from aqueous solutions: State of the art and future perspectives. 2020 , 50, 1451-1514		19

842	A colorimetric chemosensor for quantification of exchangeable Cu in soil. 2020 , 238, 124664		5
841	Hydrous titania nanosheets constructed hierarchical hollow microspheres as a highly efficient dual-use decontaminant for elimination of heavy metal ions and organic pollutants. <i>Chemical Engineering Journal</i> , 2020 , 381, 122638	14.7	17
840	Adsorptive removal of lead (II) ion from water and wastewater media using carbon-based nanomaterials as unique sorbents: A review. 2020 , 254, 109814		49
839	Lysine-cyclodipeptide-based polyamidoamine microparticles: Balance between the efficiency of copper ion removal and degradation in water. <i>Chemical Engineering Journal</i> , 2020 , 391, 123493	14.7	2
838	Facile fabrication of hydroxyapatite-magnetite-bentonite composite for efficient adsorption of Pb(II), Cd(II), and crystal violet from aqueous solution. 2020 , 247, 119088		64
837	High-performance two-dimensional montmorillonite supported-poly(acrylamide-co-acrylic acid) hydrogel for dye removal. 2020 , 257, 113574		49
836	Experimental investigation of modified bentonite clay-crumb rubber concrete. 2020 , 233, 117187		19
835	Advances in controlled release pesticide formulations: Prospects to safer integrated pest management and sustainable agriculture. 2020 , 385, 121525		98
834	A one-pot microwave-assisted synthesis of IPN hydrogels based on HEMA/AM/PVA blend for enhancing Cu(II) and Pb(II) ions removal. 2020 , 8, 103469		12
833	Water Bridges in Clay Nanopores: Mechanisms of Formation and Impact on Hydrocarbon Transport. 2020 , 36, 723-733		22
832	Hierarchical magnesium oxide microspheres for removal of heavy ions from water and efficient bacterial inactivation. 2020 , 55, 4408-4419		8
831	A review of the emerging treatment technologies for PFAS contaminated soils. 2020 , 255, 109896		76
830	Effect of the irrigation water type and other environmental parameters on CeO nanopesticide-clay colloid interactions. 2020 , 22, 84-94		8
829	A new nFe@ZIF-8 for the removal of Pb(II) from wastewater by selective adsorption and reduction. 2020 , 565, 167-176		28
828	Fe ₃ O ₄ nanoparticles functionalized with poly(ethylene glycol) for the selective separation and enrichment of Au(III). 2020 , 44, 1313-1319		4
827	Magnetized <i>Tectona grandis</i> sawdust as a novel adsorbent: preparation, characterization, and utilization for the removal of methylene blue from aqueous solution. 2020 , 27, 2613-2635		35
826	Mechanistic study of selective adsorption and reduction of Au (III) to gold nanoparticles by ion-imprinted porous alginate microspheres. <i>Chemical Engineering Journal</i> , 2020 , 385, 123897	14.7	41
825	Low cost red mud modified graphitic carbon nitride for the removal of organic pollutants in wastewater by the synergistic effect of adsorption and photocatalysis. 2020 , 237, 116477		76

824	Graphene Oxide-Supported Organo-Montmorillonite Composites for the Removal of Pb(II), Cd(II), and As(V) Contaminants from Water. 2020 , 3, 806-813		16
823	Nacre-inspired hydroxyapatite/chitosan layered composites effectively remove lead ions in continuous-flow wastewater. 2020 , 386, 121999		19
822	Montmorillonite-catalyzed conversions of carbon dioxide to formic acid: Active site, competitive mechanisms, influence factors and origin of high catalytic efficiency. 2020 , 563, 8-16		9
821	Removal of Cu(II) from aqueous solution using a composite made from cocoa cortex and sodium alginate. 2020 , 27, 8451-8466		7
820	Magsorbents: Potential candidates in wastewater treatment technology A review on the removal of methylene blue dye. 2020 , 500, 166408		90
819	Application of TiO ₂ and ZnO nanoparticles immobilized on clay in wastewater treatment: a review. 2020 , 10, 1		47
818	Leaching behavior and efficiency of cadmium in alkaline soil by adding two novel immobilization materials. 2020 , 710, 135964		9
817	Current advancement and future prospect of biosorbents for bioremediation. 2020 , 709, 135895		98
816	Removal of soluble uranium by illite supported nanoscale zero-valent iron: electron transfer processes and incorporation mechanisms. 2020 , 323, 581-593		3
815	Adsorption Properties of Tropical Soils from Awka North Anambra Nigeria for Lead and Cadmium Ions from Aqueous Media. 2020 , 3, 199-210		10
814	Rapid removal of toxic metals Cu ²⁺ and Pb ²⁺ by amino trimethylene phosphonic acid intercalated layered double hydroxide: A combined experimental and DFT study. <i>Chemical Engineering Journal</i> , 2020 , 392, 123711	14.7	79
813	Exploring the use of ceramic disk filter coated with Ag/ZnO nanocomposites as an innovative approach for removing Escherichia coli from household drinking water. 2020 , 245, 125545		14
812	Charge reversal and anion effects during adsorption of metal ions at clay surfaces: Mechanistic aspects and influence factors. 2020 , 529, 110575		5
811	Efficient removals of Hg and Cd in aqueous solution through NaOH-modified activated carbon fiber. <i>Chemical Engineering Journal</i> , 2020 , 392, 123768	14.7	27
810	Enrichment and source identification of Cd and other heavy metals in soils with high geochemical background in the karst region, Southwestern China. 2020 , 245, 125620		48
809	Synthesis of magnetic graphene oxide-titanate composites for efficient removal of Pb(II) from wastewater: Performance and mechanism. 2020 , 256, 109943		20
808	Self-standing Substrates. 2020 ,		1
807	The improved methods of heavy metals removal by biosorbents: A review. 2020 , 258, 113777		112

806	Tracing source and mobility of arsenic and trace elements in a hydrosystem impacted by past mining activities (Morelos state, Mexico). 2020 , 712, 135565	9
805	Adsorption of heavy metals by L-cysteine intercalated layered double hydroxide: Kinetic, isothermal and mechanistic studies. 2020 , 562, 149-158	50
804	Preparation and performance characterization of ceramic/silver nanoparticle composite in water purification. 2020 , 17, 1522-1530	1
803	Novel environmental-friendly nano-composite magnetic attapulgite functionalized by chitosan and EDTA for cadmium (II) removal. 2020 , 817, 153286	41
802	Preparation and characterization of chlorhexidine modified zinc-kaolinite and its antibacterial activity against bacteria isolated from water vending machine. 2020 , 8, 103545	2
801	The role of clays, clay minerals and clay-based materials for nitrate removal from water systems: A review. 2020 , 185, 105377	69
800	Enhanced synergistic removal of Cr(VI) and Cd(II) with bi-functional biomass-based composites. 2020 , 388, 121776	13
799	Data for experimental and calculated values of the adsorption of Pb(II) and Cr(VI) on APTES functionalized magnetite biochar using Langmuir, Freundlich and Temkin equations. 2020 , 32, 106292	7
798	Adsorption of methylene blue dye from aqueous solution by a novel PVA/CMC/halloysite nanoclay bio composite: Characterization, kinetics, isotherm and antibacterial properties. 2020 , 18, 1311-1327	13
797	Surface Modification of TiO ₂ nanoparticles using Conducting Polymer Coating: Spectroscopic, Structural, Morphological Characterization and Interaction with Dye Molecules. 2020 , 25, 101534	3
796	Acid-Modified and Unmodified Natural Clay Deposits for In Situ Immobilization and Reducing Phytoavailability of Molybdenum in a Sandy Loam Calcareous Soil. 2020 , 12, 8203	0
795	Adsorption of Cr (VI) onto micro- and nanoparticles of palygorskite in aqueous solutions: Effects of pH and humic acid. 2020 , 206, 111247	22
794	Simultaneous removal of acetaminophen and ibuprofen from underground water by an electrocoagulation unit: Operational parameters and kinetics. 2020 , 11, 100474	14
793	Can severe drought periods increase metal concentrations in mangrove sediments? A case study in eastern Brazil. 2020 , 748, 142443	5
792	Role of clay-based membrane for removal of copper from aqueous solution. 2020 , 24, 785-798	16
791	Layered Inorganic Cationic Frameworks beyond Layered Double Hydroxides (LDHs): Structures and Applications. 2020 , 2020, 4055-4063	2
790	Use of activated bentonite-alginate composite beads for efficient removal of toxic Cu and Pb ions from aquatic environment. 2020 , 164, 3145-3154	21
789	A review on biosorptive removal of dyes and heavy metals from wastewater using watermelon rind as biosorbent. 2020 , 2, 100007	40

788	Evaluation of Geophagy Clay Capacity in Adsorbing Cd and Pb for Water Treatment in Southeast Nigeria. 2020 , 2020, 4421117	1
787	Adsorption of arsenic onto films based on chitosan and chitosan/nano-iron oxide. 2020 , 165, 1286-1295	21
786	A critical review of contaminant removal by conventional and emerging media for urban stormwater treatment in the United States. 2020 , 187, 116434	18
785	Effect of Sodium Dodecyl Sulfate (SDS) on Polysulfone/Zelite membrane for the removal of copper ions. 2020 , 796, 012053	1
784	Biomimetic mineralization of montmorillonite-based nanomaterials for efficient capture of copper ions. 2020 , 195, 105720	3
783	Fe(III)-polyhydroxy cations supported onto K10 montmorillonite for removal of phosphate from waters. 2020 , 6, e03868	4
782	High crosslinked sodium carboxyl methylstarch-g-poly (acrylic acid-co-acrylamide) resin for heavy metal adsorption: its characteristics and mechanisms. 2020 , 27, 38617-38630	6
781	Assessing the geochemical and environmental baseline of heavy metals in soils around hydrothermal hematite-barite-galena veins in Baghin area, Kerman, Iran. 2020 , 42, 4011-4036	3
780	Novel derived pectin hydrogel from mandarin peel based metal-organic frameworks composite for enhanced Cr(VI) and Pb(II) ions removal. 2020 , 164, 920-931	26
779	Green sustainable and highly efficient hematite nanoparticles modified biochar-clay granular composite for Cr(VI) removal and related mechanism. 2020 , 276, 123009	27
778	Effective Removal of Pb(II) Ions by Electrospun PAN/Sago Lignin-based Activated Carbon Nanofibers. 2020 , 25,	12
777	Sorption of Heavy Metal Ions of Chromium, Manganese, Selenium, Nickel, Cobalt, Iron from Aqueous Acidic Solutions in Batch and Dynamic Conditions on Natural and Synthetic Aluminosilicate Sorbents. 2020 , 13,	10
776	A novel, recyclable magnetic biochar modified by chitosan-EDTA for the effective removal of Pb(ii) from aqueous solution.. 2020 , 10, 40196-40205	13
775	Caffeine Adsorption on Natural and Synthetic Smectite Clays: Adsorption Mechanism and Effect of Interlayer Cation Valence. 2020 , 124, 25369-25381	4
774	Evaluating the Performance of a Diffusive Gradient in Thin Film Embedded with Montmorillonite for the Determination of Labile Cd, Pb, Mn, and Zn in Natural River Water. 2020 , 2020, 1-12	
773	Nanocomposite Synthesis from a Natural Clay-Rich Soils and Exhausted Coffee Grounds for Environmental Applications. 2020 , 63, 47-63	0
772	Optimization of Kaolin adsorbent to reduction iron metal ion using ultrasonic technology. 2020 , 788, 012003	
771	The role of kaolin and kaolin/ZnO nanoadsorbents in adsorption studies for tannery wastewater treatment. 2020 , 10, 13068	32

770	Removal of cadmium and lead from aqueous solutions by thermal activated electrolytic manganese residues. 2020 , 748, 141490	8
769	A Critical Review on the Synthesis and Application of Ion-Imprinted Polymers for Selective Preconcentration, Speciation, Removal and Determination of Trace and Essential Metals from Different Matrices. 2020 , 1-13	10
768	Selective Reductive Removal of Silver Ions from Acidic Solutions by Redox-Active Covalent Organic Frameworks. 2020 , 12, 37619-37627	6
767	Effect of LDHs and Other Clays on Polymer Composite in Adsorptive Removal of Contaminants: A Review. 2020 , 10, 957	10
766	Development and Characterization of Clay-Nanocomposites for Water Purification. 2020 , 13,	4
765	Adsorption of heavy metal ions by sodium alginate based adsorbent-a review and new perspectives. 2020 , 164, 4423-4434	77
764	Nano-clay as a solid phase microextractor of copper, cadmium and lead for ultra-trace quantification by ICP-MS. 2020 , 12, 4949-4955	8
763	Performance prediction modeling of andesite processing wastewater physicochemical treatment via artificial neural network. 2020 , 13, 1	1
762	Strength and Permeability of Bentonite-Assisted Biocemented Coarse Sand. 2020 ,	25
761	Efficient reduction of environmental pollutants using metal nanoparticles catalyst on calcium alginate surface. 2020 , 1-17	2
760	Treatment of environmental contamination using sepiolite: current approaches and future potential. 2021 , 43, 2679-2697	8
759	Sediment record of mining legacy and water quality from a drinking-water reservoir, Aztec, New Mexico, USA. 2020 , 79, 1	3
758	Enhanced Cu(II) Removal Performance and Mechanisms on Fe(II)-Modified LDH-GO Composites. 2020 , 37, 746-756	1
757	Adsorption Mechanism of PbO/PbCl ₂ on Kaolinite Surfaces during Coal Combustion Based on Frontier Orbital Theory. 2020 , 34, 11258-11269	5
756	Are there any risks of the disposal of pesticide effluents in soils? Biobed system meets ecotoxicology ensuring safety to soil fauna. 2020 , 29, 1409-1421	2
755	<i>>Removal of Heavy Metal Ions from Wastewater Using Food Waste Char</i>. 2020 ,	1
754	ADSORPTIVE REMOVAL OF Ni ²⁺ IONS FROM AQUEOUS SOLUTIONS BY NODULAR SEPIOLITE (MEERSCHAUM) AND INDUSTRIAL SEPIOLITE SAMPLES FROM ESKİŐHIR, TURKEY. 2020 , 68, 220-236	1
753	Removal of iron, copper, and lead from aqueous solutions with zeolite, bentonite, and steel slag. 2020 , 1-12	4

752	Mitigation of Metronidazole (Flagyl) pollution in aqueous media by adsorption: a review. 2020 , 9, 137-148	24
751	Kinetic and static parameters of a new sorbent based on clays and ways of its determination. 2020 , 775, 012100	
750	Effect of Acid Leaching on Different State of Rice Husk. 2020 , 1010, 532-537	
749	Graphene-Based Macromolecular Assemblies for Scavenging Heavy Metals. 2020 , 9, 1065-1073	2
748	Constructing Positively Charged Thin-Film Nanocomposite Nanofiltration Membranes with Enhanced Performance. 2020 , 12,	6
747	Fabrication of Eco-Friendly Betanin Hybrid Materials Based on Palygorskite and Halloysite. 2020 , 13,	5
746	Adsorption of copper (II) cation on polysulfone/zeolite blend sheet membrane: Synthesis, characterization, experiments and adsorption modelling. 2020 , 601, 124980	18
745	Silver Nanoparticle-Incorporated Porous Renewable Film as Low-Cost Bactericidal and Antifouling Filter for Point-of-Use Water Disinfection. 2020 , 59, 10857-10867	8
744	Preparation and Characterization of Montmorillonite/PEDOT-PSS and Diatomite/PEDOT-PSS Hybrid Materials. Study of Electrochemical Properties in Acid Medium. 2020 , 4, 51	3
743	Impact of urban sewage sludge on soil physico-chemical properties and phytotoxicity as influenced by soil texture and reuse conditions. 2020 , 49, 973-986	7
742	Use of low-cost biopolymers and biopolymeric composite systems for heavy metal removal from water. 2020 , 17, 4389-4406	30
741	Characteristics and behaviour of vanadium(V) adsorption on goethite and birnessite. 2020 , 79, 1	5
740	Oil/Water transport in clay-hosted nanopores: Effects of long-range electrostatic forces. 2020 , 66, e16276	6
739	A Layered Cationic Aluminum Oxyhydroxide as a Highly Efficient and Selective Trap for Heavy Metal Oxyanions. 2020 , 132, 19707-19712	0
738	A Layered Cationic Aluminum Oxyhydroxide as a Highly Efficient and Selective Trap for Heavy Metal Oxyanions. 2020 , 59, 19539-19544	11
737	Initial feasibility study in adsorption capacity and mechanism of soda residue on lead (II)-contaminated soil in solidification/stabilization technology. 2020 , 79, 1	3
736	Ca treated Palygorskite and Halloysite clay minerals for Ferrous Iron (Fe ²⁺) removal from water systems. 2020 , 19, 100961	9
735	An alkali modified biochar for enhancing Mn ²⁺ adsorption: Performance and chemical mechanism. 2020 , 248, 122895	16

734	Synthesis of hierarchical ZnO/C hollow spheres constructed by octahedron for water treatment. 2020 , 55, 11938-11948	2
733	Preparation of FeO-coated vermiculite composite by hydrophobic agglomeration and its application in As/Cd co-contaminated soil. 2020 , 1-12	1
732	Thiol functionalized polymer submicron particles prepared by soap-free emulsion polymerization and their adsorption of lead ions in water. 2020 , 137, 49312	1
731	The potential of semi-permeable bentonite and zeolite composite on the reduction of Pb (II) concentration in landfill. 2020 , 148, 01005	
730	Leaching of metal(loid)s from ashes of spent sorbent and stabilisation effect of calcium-rich additives. 2020 , 27, 29248-29256	1
729	Removal of Cd(II) and Pb(II) from wastewater via carbonation of aqueous Ca(OH) ₂ derived from eggshell. 2020 , 141, 278-287	6
728	Acid buffering capacity of four contrasting metal-contaminated calcareous soil types: Changes in soil metals and relevance to phytoextraction. 2020 , 256, 127045	5
727	Walnut shell powder as a low-cost adsorbent for methylene blue dye: isotherm, kinetics, thermodynamic, desorption and response surface methodology examinations. 2020 , 10, 7983	38
726	Adsorption of Cu(II) and Ni(II) ions from wastewater onto bentonite and bentonite/GO composite. 2020 , 27, 33270-33296	24
725	Optimization of Cadmium and Zinc Removal from Contaminated Soil by Surfactants Using Mixture Design and Central Composite Rotatable Design. 2020 , 231, 1	3
724	Exploration of the potential capacity of fly ash and bottom ash derived from wood pellet-based thermal power plant for heavy metal removal. 2020 , 740, 140205	24
723	Molecular sieves for food applications: A review. 2020 , 102, 102-122	8
722	Biosurfactant rhamnolipid affects the desorption of sorbed As(III), As(V), Cr(VI), Cd(II) and Pb(II) on iron (oxyhydr)oxides and clay minerals. 2020 , 153, 105019	6
721	Floatable magnetic aerogel based on alkaline residue used for the convenient removal of heavy metals from wastewater. <i>Chemical Engineering Journal</i> , 2020 , 399, 125760	14.7 14
720	Comparing the performance of low-grade nickel ore and limestone for treatment of synthetic acid mine drainage. 2020 , 15, e2457	3
719	Adsorption of metal ions at kaolinite surfaces: Ion-specific effects, and impacts of charge source and hydroxide formation. 2020 , 194, 105706	10
718	Highly selective removal of Hg(II) ions from aqueous solution using thiol-modified porous polyaminal-networked polymer. 2020 , 250, 117120	15
717	Characterization of activated bentonite clay mineral and the mechanisms underlying its sorption for ciprofloxacin from aqueous solution. 2020 , 27, 32980-32997	24

7 ¹⁶	Recycling heavy metals from wastewater for photocatalytic CO ₂ reduction. <i>Chemical Engineering Journal</i> , 2020 , 402, 125922	14.7	19
7 ¹⁵	Comparison of Chemical Speciation of Lead, Arsenic, and Cadmium in Contaminated Soils from a Historical Mining Site: Implications for Different Mobilities of Heavy Metals. 2020 , 4, 1064-1077		8
7 ¹⁴	Removal of Barium from Solution by Natural and Iron(III) Oxide-Modified Allophane, Beidellite and Zeolite Adsorbents. 2020 , 13,		7
7 ¹³	Adsorption of copper ions from polluted water using biochar derived from waste renewable resources: static and dynamic analysis. 2020 , 1-22		6
7 ¹²	A new synthesis methodology for SiO ₂ gel-based nanostructures and their application for elimination of dye pollutants. 2020 , 44, 5386-5395		3
7 ¹¹	The removal efficiency of iron and manganese from pre-ozonated groundwater using limestone filter. 2020 , 55, 167-183		3
7 ¹⁰	Synthesis, characterization, and performance analysis of carbon molecular sieve-embedded polyethersulfone mixed-matrix membranes for the removal of dissolved ions. 2020 , 92, 1306-1324		2
7 ⁰⁹	A volcanic scenario for the Frasnian-Bamennian major biotic crisis and other Late Devonian global changes: More answers than questions?. 2020 , 189, 103174		3 ¹
7 ⁰⁸	Evaluation of a Low-Cost Ceramic Filter for Sustainable Reuse of Urban Stormwater in Arid Environments. 2020 , 12, 460		5
7 ⁰⁷	A novel robust adsorbent for efficient oil/water separation: Magnetic carbon nanospheres/graphene composite aerogel. 2020 , 392, 122499		4 ¹
7 ⁰⁶	Physico-chemical techniques for the removal of disinfection by-products precursors from water. 2020 , 23-58		2
7 ⁰⁵	Fractal-Like Kinetics of Adsorption Applied to the Solid/Solution Interface. 2020 , 5, 5105-5115		15
7 ⁰⁴	Synthesis and micro-mechanistic studies of histidine modified montmorillonite for lead(II) and copper(II) adsorption from wastewater. 2020 , 157, 142-152		2 ¹
7 ⁰³	Synthesis and Characterization of Chitosan/Fluorapatite Composites for the Removal of Cr (VI) from Aqueous Solutions and Optimized Parameters. 2020 , 231, 1		7
7 ⁰²	Types of inorganic pollutants: metals/metalloids, acids, and organic forms. 2020 , 17-31		12
7 ⁰¹	Facile fabrication of bimetallic Fe-Mg MOF for the synthesis of xanthenes and removal of heavy metal ions.. 2020 , 10, 9693-9703		23
7 ⁰⁰	Application of Floating Aquatic Plants in Phytoremediation of Heavy Metals Polluted Water: A Review. 2020 , 12, 1927		107
6 ⁹⁹	Use of nanotechnology in concrete pavements. 2020 , 383-401		2

698	Reutilization Prospects of Diamond Clay Tailings at the Lomonosov Mine, Northwestern Russia. 2020 , 10, 517	4
697	Development of Ceramic Water Filter Clay Selection Criteria. 2020 , 12, 1657	3
696	Effects of soil particle size on the adsorption, distribution, and migration behaviors of heavy metal(loid)s in soil: a review. 2020 , 22, 1596-1615	25
695	Honeycomb filters as an alternative to powders in the use of clays to remove cadmium from water. 2020 , 259, 127526	8
694	Investigation of high-performance adsorption for benzene and toluene vapors by calix[4]arene based organosilica (CBOS). 2020 , 44, 12949-12961	18
693	Investigation of H-zeolite and metal-impregnated zeolites as transformation catalysts of glucose to hydroxymethylfurfural. 2020 ,	1
692	All-Biomass Double Network Gel: Highly Efficient Removal of Pb ²⁺ and Cd ²⁺ in Wastewater and Utilization of Spent Adsorbents. 2020 , 28, 2669-2680	5
691	Removal of Cu(II) from aqueous solutions imparted by a pectin-based film: Cytocompatibility, antimicrobial, kinetic, and equilibrium studies. 2020 , 152, 77-89	12
690	Effects of GLDA, MGDA, and EDTA chelating ligands on Pb sorption by montmorillonite. 2020 , 366, 114229	5
689	Iron and manganese removal from groundwater using limestone filter with iron-oxidized bacteria. 2020 , 17, 2667-2680	14
688	Hectogram-scale green synthesis of hierarchical 4A zeolite@CuO (OH) (0 \leq \leq 2020, 10, 6405-6413	1
687	A review on the application of clay minerals as heavy metal adsorbents for remediation purposes. 2020 , 18, 100692	70
686	Physically-crosslinked polyvinyl alcohol composite hydrogels containing clays, carbonaceous materials and magnetic nanoparticles as fillers. 2020 , 8, 103795	10
685	Nano-adsorbents preparing from oligoethylene glycol dendron and citric acid: Enhanced adsorption effect for the removal of heavy metal ions. 2020 , 189, 110876	3
684	Preparation and characterization of novel mesoporous chitin blended MoO-montmorillonite nanocomposite for Cu(II) and Pb(II) immobilization. 2020 , 152, 554-566	14
683	Enhanced removal of chromium(III) for aqueous solution by EDTA modified attapulgite: Adsorption performance and mechanism. 2020 , 720, 137391	17
682	Development and assessment of adsorptive hydrogel: Process engineering and economic considerations. 2020 , 2, e12140	1
681	Guidelines for the use and interpretation of adsorption isotherm models: A review. 2020 , 393, 122383	543

680	Effect of synthetic beidellite structural characteristics on the properties of beidellite/Fe oxides magnetic composites as Sr and Cs adsorbent materials. 2020 , 245, 122760		5
679	High performance on the moisture reduction in waste oils by a bentonite-based adsorption process. 2021 , 42, 3338-3347		0
678	Laponites for the Recovery of Cs, Co, and Sr from Aqueous Solutions and Subsequent Storage: Impact of Grafted Silane Loads. 2020 , 13,		0
677	Sorption of Cd ²⁺ and Pb ²⁺ on Aragonite Synthesized from Eggshell. 2020 , 12, 1174		10
676	Synthetic saponite clays as promising solids for lanthanide ion recovery. 2020 , 44, 10033-10041		7
675	Sorbent Materials Characterization Based on Mechanical or Thermal Pretreated Montmorillonite Modified by Surfactant Loading for Improved Chromium Retention. 2020 , 231, 1		3
674	Polydopamine-based functional materials and their applications in energy, environmental, and catalytic fields: State-of-the-art review. <i>Chemical Engineering Journal</i> , 2020 , 387, 124019	14.7	80
673	Secular variation in the elemental composition of marine shales since 840 Ma: Tectonic and seawater influences. 2020 , 287, 367-390		8
672	Rational design, synthesis, adsorption principles and applications of metal oxide adsorbents: a review. 2020 , 12, 4790-4815		126
671	Preparation, characterization, and Cd(II) sorption of/on cysteine-montmorillonite composites synthesized at various pH. 2020 , 27, 10599-10606		0
670	Tuning and controlling photocatalytic performance of TiO ₂ /kaolinite composite towards ciprofloxacin: Role of 0D/2D structural assembly. 2020 , 31, 1241-1252		18
669	Sediment clays are trapping heavy metals in urban lakes: An indicator for severe industrial and agricultural influence on coastal wetlands at the Mediterranean coast of Egypt. 2020 , 151, 110816		19
668	Recycling spent lithium-ion battery as adsorbents to remove aqueous heavy metals: Adsorption kinetics, isotherms, and regeneration assessment. 2020 , 156, 104688		39
667	Cleaner Synthesis of Silylated Clay Minerals for the Durable Recovery of Ions (Co ²⁺ and Sr ²⁺) from Aqueous Solutions. 2020 , 59, 2104-2112		4
666	Removal of methylene blue from aqueous solutions by silica gel supported calix[4]arene cage: Investigation of adsorption properties. 2020 , 125, 109540		36
665	Adsorption Properties of Polyethersulfone-Modified Attapulgite Hybrid Microspheres for Bisphenol A and Sulfamethoxazole. 2020 , 17,		4
664	Removal of Cd(II) and Pb(II) from aqueous solution by modified attapulgite clay. 2020 , 13, 4994-5008		23
663	L-Cysteine/Hydrotalcite Hybrid for Collaborative Removal of Cu(II), Hg(II) and Pb(II) Ions from Aqueous Solutions: Different Metal Ions Require Different Mechanisms. 2020 , 5, 4932-4942		7

662	Dispersive micro-solid-phase extraction using chitosan/polymethacrylate/clay bionanocomposite followed by UV-Vis spectrophotometry for determination of zinc. 2020 , 74, 3399-3408	4
661	The Simultaneous Removal of Zinc and Cadmium from Multicomponent Aqueous Solutions by Their Sorption onto Selected Natural and Synthetic Zeolites. 2020 , 10, 343	8
660	Removal of endocrine disruptors in waters by adsorption, membrane filtration and biodegradation. A review. 2020 , 18, 1113-1143	68
659	Rapid removal of arsenic from water using metal oxide doped recyclable cross-linked chitosan cryogel. 2020 , 2, 1	7
658	Preparation and characterization of nanoporous powders from bentonite by hydrochloric acid leaching and using as bleaching earth. 2020 , 2, 1	0
657	Various water-treatment technologies for inorganic contaminants: current status and future aspects. 2020 , 273-295	9
656	Preparation of ion-imprinted montmorillonite nanosheets/chitosan gel beads for selective recovery of Cu(II) from wastewater. 2020 , 252, 126560	24
655	Pesticides in aquatic environments and their removal by adsorption methods. 2020 , 253, 126646	87
654	Removal of hexavalent chromium using biogenic mackinawite (FeS)-deposited kaolinite. 2020 , 572, 236-245	24
653	Fe ₂ O ₃ /TiO ₂ functionalized biochar as a heterogeneous catalyst for dyes degradation in water under Fenton processes. 2020 , 8, 103905	29
652	Removal of heavy metal ions by ultrafiltration with recovery of extracellular polymer substances from excess sludge. 2020 , 606, 118103	21
651	Renewable P-type zeolite for superior absorption of heavy metals: Isotherms, kinetics, and mechanism. 2020 , 726, 138535	19
650	Simultaneous Removal of Heavy Metals from Wastewater Using Modified Sodium Montmorillonite Nanoclay. 2020 , 36, 1039-1043	2
649	A facile route to construct NiTiO ₃ /Bi ₄ NbO ₈ Cl heterostructures for enhanced photocatalytic water purification. 2020 , 55, 9330-9342	8
648	Adsorption of Selected Metals Ions in Solution Using Nano-Bentonite Particles: Isotherms and Kinetics. 2020 , 7, 463-477	6
647	Adsorption of Cr(VI) in Aqueous Solution Using a Surfactant-Modified Bentonite. 2020 , 2020, 3628163	8
646	Insights into dynamic adsorption of lead by nano-hydroxyapatite prepared with two-stage ultrasound. 2020 , 253, 126661	15
645	Silica gel based new adsorbent having enhanced VOC dynamic adsorption/desorption performance. 2021 , 609, 125848	13

644	Homoionic soda-activated bentonite for batch-mode removal of Pb(II) from polluted brackish water. 2021 , 9, 104606		4
643	Crystal face-dependent methylmercury adsorption onto mackinawite (FeS) nanocrystals: A DFT-D3 study. <i>Chemical Engineering Journal</i> , 2021 , 420, 127594	14.7	6
642	Impact of thermal treatment on bentonite retention ability toward nickel and silver retention. 2021 , 56, 2521-2531		1
641	Removal of arsenic from water through ceramic filter modified by nano-CeO: A cost-effective approach for remote areas. 2021 , 750, 141510		11
640	Mineralogy and heavy metal assessment of the Pietra del Pertusillo reservoir sediments (Southern Italy). 2021 , 28, 4857-4878		3
639	Surface chemistry and structure evaluation of Mg/Al and Mg/Fe LDH derived from magnesite and dolomite in comparison to LDH obtained from chemicals. 2021 , 538, 147923		14
638	KOH-activated high surface area Douglas Fir biochar for adsorbing aqueous Cr(VI), Pb(II) and Cd(II). 2021 , 269, 128409		39
637	Immobilization of Cr(VI) contaminated soil using green-tea impregnated attapulgite. 2021 , 278, 123967		17
636	A nappies management by-product for the treatment of uranium-contaminated waters. 2021 , 404, 124147		6
635	Optimized preparation of washcoated clay honeycomb monoliths as support of manganese catalysts for acetone total combustion. 2021 , 310, 110651		5
634	Tight sorption of arsenic, cadmium, mercury, and lead by edible activated carbon and acid-processed montmorillonite clay. 2021 , 28, 6758-6770		8
633	A calcined clay fixed bed adsorption studies for the removal of heavy metals from aqueous solutions. 2021 , 278, 123935		24
632	Applications of carbon dots in environmental pollution control: A review. <i>Chemical Engineering Journal</i> , 2021 , 406, 126848	14.7	70
631	Exploration of adsorption mechanism of 2-phosphonobutane-1,2,4-tricarboxylic acid onto kaolinite and montmorillonite via batch experiment and theoretical studies. 2021 , 403, 123810		41
630	Theoretical study of adsorption mechanism of heavy metals As and Pb on the calcite (104) surface. 2021 , 26, 101742		2
629	Molecular insights on the adsorption of some pharmaceutical residues from wastewater on kaolinite surfaces. <i>Chemical Engineering Journal</i> , 2021 , 407, 127176	14.7	21
628	Insights to the transport of heavy metals from an industrial effluent through functionalized bentonite incorporated mixed matrix membrane: Process modeling and analysis of the interplay of various parameters. <i>Chemical Engineering Journal</i> , 2021 , 413, 127397	14.7	5
627	Green synthesis of reusable super-paramagnetic diatomite for aqueous nickel (II) removal. 2021 , 582, 1179-1190		11

626	Arsenate removal from aqueous solution by montmorillonite and organo-montmorillonite magnetic materials. 2021 , 192, 110247	11
625	Selective adsorption of Pb and Cu on amino-modified attapulgite: Kinetic, thermal dynamic and DFT studies. 2021 , 404, 124140	34
624	Magnetically modified bentonite: Characterization and stability. 2021 , 37, 53-57	2
623	Functional covalent organic framework for exceptional Fe ²⁺ , Co ²⁺ and Ni ²⁺ removal: An upcycling strategy to achieve water decontamination and reutilization as smoke suppressant and flame retardant simultaneously. <i>Chemical Engineering Journal</i> , 2021 , 421, 127837	14.7 27
622	Efficacy of selected phosphorus sorbing materials (PSMs) to enhance the orthophosphate sorption capacity of filter socks. 2021 , 35, 807-818	0
621	Functional covalent organic framework illuminate rapid and efficient capture of Cu (II) and reutilization to reduce fire hazards of epoxy resin. 2021 , 259, 118119	14
620	The emergence of multifunctional adsorbents and their role in environmental remediation. 2021 , 9, 104793	12
619	Removal of potentially toxic metal by biochar derived from rendered solid residue with high content of protein and bone tissue. 2021 , 208, 111690	8
618	Nanocomposites of sedimentary material with ZnO and magnetite for the effective sequestration of arsenic from aqueous systems: Reusability, modeling and kinetics. 2021 , 21, 101298	6
617	High geogenic arsenic concentrations in travertines and their spring waters: Assessment of the leachability and estimation of ecological and health risks. 2021 , 409, 124429	4
616	Optimization of cadmium ions biosorption by fish scale from aqueous solutions using factorial design analysis and Monte Carlo simulation studies. 2021 , 9, 104727	5
615	Synthesis of iron-based magnetic nanocomposites and applications in adsorption processes for water treatment: a review. 2021 , 19, 1229-1274	19
614	Organophosphorus halloysite nanotubes as adsorbent for lead preconcentration in wine and grape juice. 2021 , 200, 105912	2
613	Adsorption studies of benzophenone-3 onto clay minerals and organosilicates: Kinetics and modelling. 2021 , 202, 105937	6
612	One-step synthesis of cake-like biosorbents from plant biomass for the effective removal and recovery heavy metals: Effect of plant species and roles of xanthation. 2021 , 266, 129129	16
611	Effect of different CO ₃ ²⁻ to PO ₄ ³⁻ molar ratios on the properties, morphology, and Pb(II) removal performance of carbonated hydroxyapatite. 2021 , 9, 104658	3
610	Toxic metal sequential sequestration in water using new amido-aminoacid ligand as a model for the interaction with polyamidoamines. 2021 , 410, 124585	1
609	Adsorption at Natural Minerals/Water Interfaces. 2021 ,	2

608	Cellulose supported promising magnetic sorbents for magnetic solid-phase extraction: A review. 2021 , 253, 117245	8
607	Pb, Cd and Hg removal by designed functionalized swelling high-charged micas. 2021 , 764, 142811	3
606	Removal of Heavy Metals Using Bentonite Clay and Inorganic Coagulants. 2021 , 47-69	3
605	Removal of heavy metals and dyes by clay-based adsorbents: From natural clays to 1D and 2D nano-composites. <i>Chemical Engineering Journal</i> , 2021 , 420, 127574	14.7 49
604	Green earth pigments dispersions: Water dynamics at the interfaces. 2021 , 581, 644-655	0
603	Environmental Remediation Through Carbon Based Nano Composites. 2021 ,	3
602	Analysis of the Mechanical Properties and Mechanism of Zinc Ion-Contaminated Red Clay. 2021 , 2021, 1-12	1
601	Nanomaterials-based absorbents. 2021 , 371-383	
600	Polyacrylonitrile/clay nanofibrous nanocomposites for efficient adsorption of Cr (VI) ions. 2021 , 28, 1	7
599	Application of Iron Oxide Nanomaterials for the Removal of Heavy Metals. 2021 , 2067-2091	
598	Functionalization of kaolin clay with silver nanoparticles by <i>Murraya koenigii</i> fruit extract-mediated bioreduction process for antimicrobial applications. 2021 , 57, 505-513	5
597	Insights into the -nitrophenol adsorption by amidoxime-modified poly(acrylonitrile--acrylic acid): characterization, kinetics, isotherm, thermodynamic, regeneration and mechanism study.. 2021 , 11, 8150-8162 ⁶	6
596	The Provenance of Arsenic in Southeast Asia Discovered by Trace Elements in Groundwater from the Lowlands of Nepal.	
595	Bioremediation of Pollutants and Sustainable Energy Production through Bacterial Activities in Microbial Fuel Cells: An Overview. 2021 , 33, 253-265	1
594	Causes, Effects and Sustainable Approaches to Remediate Contaminated Soil. 2021 , 451-495	0
593	Preparation of Coal-Derived Activated Carbon and Its Application for Adsorption of Metals from Aqueous Solutions. 2021 , 83-141	
592	Iron-based materials for removal of arsenic from water. 2021 , 209-245	3
591	Influence of leachate percolation on two bentonitic mixtures. 2021 , 14, 1	

590	Environmental behaviors of natural colloids in water environment. 2021 , 33, 28-48	1
589	PREPARATION AND CHARACTERIZATION OF ORGANOMONTMORILLONITE MODIFIED WITH ALKYLAMMONIUM CATION SURFACTANT: ADSORPTION EFFECT OF ZENONE. 2021 , 29, 31-44	
588	Removal of nickel from aqueous solutions using natural clay from northern morocco. 2021 , 45, 7457-7467	0
587	An overview of geological originated materials as a trend for adsorption in wastewater treatment. 2021 , 101150	5
586	Current and Emerging Adsorbent Technologies for Wastewater Treatment: Trends, Limitations, and Environmental Implications. 2021 , 13, 215	32
585	Virus removal from drinking water using modified activated carbon fibers.. 2021 , 11, 31547-31556	2
584	Carbon-layered double hydroxide nanocomposite for efficient removal of inorganic and organic based water contaminants Unravelling the adsorption mechanism. 2021 , 2, 3600-3612	4
583	Co-modification of Biochar and Bentonite for Adsorption and Stabilization of Pb ²⁺ ions. 2021 , 36, 1083	0
582	Effective Removal of Heavy Metal Ions from Wastewater Using a New Magnetic PolyHIPE Monoliths. 2021 , 853-858	
581	General Data on Clay Science, Crystallochemistry and Systematics of Clay Minerals, Clay Typologies, and Clay Properties and Applications. 2021 , 195-269	1
580	Influence of pH on the structural and magnetism stability of magnetic kaolinite composite. 2021 ,	
579	Adsorbents based on nanofibers. 2021 , 33, 389-443	2
578	Aerogels for waterborne pollutants purification. 2021 , 109-124	1
577	A method for partitioning dissolved polycyclic aromatic hydrocarbons associated with humic substances using polyethylenimine-coated glass fiber filters.. 2021 , 11, 28704-28710	0
576	Nanomaterials for adsorption of pollutants and heavy metals: Introduction, mechanism, and challenges. 2021 , 343-366	4
575	Effectiveness of Fe, Mn, UV254 and Colour Removal from Pre-ozonated Groundwater Using Anthracite Coal. 2021 , 15, 245-259	2
574	Wastewater treatment. 2021 , 1-24	
573	Nanomaterials for sustainable remediation of chemical contaminants in water and soil. 1-50	10

572	Chitosan-based membranes preparation and applications: Challenges and opportunities. 2021 , 98, 100017	19
571	Efficient and Ultrafast Adsorption of Rhenium by Functionalized Hierarchically Mesoporous Silica: A Combined Strategy of Topological Construction and Chemical Modification. 2021 , 13, 8249-8262	4
570	Enhancing clay adsorption properties: A comparison between chemical and combined chemical/thermal treatments. 2021 , 12, 100544	2
569	Concentraci3n de metales pesados en suelos agr3colas bajo diferentes sistemas de labranza. 2021 , 24, e1738	0
568	A geo-chemo-mechanical study of a highly polluted marine system (Taranto, Italy) for the enhancement of the conceptual site model. 2021 , 11, 4017	10
567	Rice-straw mat mulching improves the soil integrated fertility index of apple orchards on cinnamon soil and fluvo-aquic soil. 2021 , 278, 109837	7
566	Recycling of biogenic hydroxyapatite (HAP) for cleaning of lead from wastewater: performance and mechanism. 2021 , 28, 29509-29520	2
565	Facile strategies for synthesis of functionalized mesoporous silicas for the removal of rare-earth elements and heavy metals from aqueous systems. 2021 , 315, 110919	8
564	Green synthesis, characterization, application and functionality of nitrogen-doped MgO/graphene nanocomposite. 2021 , 28, 28014-28023	3
563	Laboratory study of strength, leaching, and electrical resistivity characteristics of heavy-metal contaminated soil. 2021 , 80, 1	2
562	Preparation of a Novel Millet Straw Biochar-Bentonite Composite and Its Adsorption Property of Hg in Aqueous Solution. 2021 , 14,	3
561	Carboxymethylcellulose-chitosan film modified magnetic alkaline Ca-bentonite for the efficient removal of Pb(II) and Cd(II) from aqueous solution. 2021 , 28, 30312-30322	1
560	FUNCTIONALIZED HALLOYSITE NANOTUBES FOR ENHANCED REMOVAL OF Hg ²⁺ IONS FROM AQUEOUS SOLUTIONS. 2021 , 69, 117-127	1
559	Effective remediation of organic-metal co-contaminated soil by enhanced electrokinetic-bioremediation process. 2021 , 15, 1	1
558	Evaluation of the interactions of arsenic (As), boron (B), and lead (Pb) from geothermal production wells with agricultural soils. 2021 , 211, 111843	6
557	Application of pyridine-modified chitosan derivative for simultaneous adsorption of Cu(II) and oxyanions of Cr(VI) from aqueous solution. 2021 , 282, 111939	4
556	Reservoir operation-induced hydrodynamic disturbances affect the distributions of Cd, Cu, and Pb in the riparian soil of the water-level-fluctuation zone. 2021 , 21, 2343-2356	1
555	A critical review on silver nanoparticles: From synthesis and applications to its mitigation through low-cost adsorption by biochar. 2021 , 281, 111918	29

554	Nature of sorption of trivalent arsenic on novel iron oxyhydroxide stabilized starch/OMMT composite: A mechanistic approach. 2021 , 19, 336-350	1
553	Ammonia removal by adsorptive clinoptilolite ceramic membrane: Effect of dosage, isothermal behavior and regeneration process. 2021 , 38, 807-815	2
552	Purified montmorillonite as a nano-adsorbent of potentially toxic elements from environment: an overview. 2021 , 6, 1	2
551	The interaction and mechanism between threonine-montmorillonite composite and Pb ²⁺ or Cu ²⁺ : Experimental study and theory calculation. 2021 , 326, 115243	3
550	Natural Clay-Based Materials for Energy Storage and Conversion Applications. 2021 , 8, e2004036	20
549	Covalent triazine based polymer with high nitrogen levels for removal of copper(II) ions from aqueous solutions. 2021 , 28, 1	9
548	Super adsorption performance of carboxymethyl cellulose/copper oxide-nickel oxide nanocomposite toward the removal of organic and inorganic pollutants. 2021 , 28, 38476-38496	2
547	Thermodynamic, isothermal and kinetic studies of heavy metals adsorption by chemically modified Tanzanian Malangali kaolin clay. 2021 , 18, 3153-3168	3
546	Prospect of clay-based flexible adsorbent coatings as cleaner production technique in wastewater treatment, challenges, and issues: A review. 2021 , 120, 178-206	7
545	Zirconium-modified natural clays for phosphate removal: Effect of clay minerals. 2021 , 194, 110685	13
544	A comprehensive study on modified-pillared clays as an adsorbent in wastewater treatment processes. 2021 , 147, 8-36	23
543	Sorption of Heavy Metal Ions by Composite Materials Based on Polycarboxylic Acids and Bentonite Clay. 2021 , 23, 19	
542	Comparative assessment of cellulose nanofibers and calcium alginate beads for continuous Cu(II) adsorption in packed columns: the influence of water and surface hydrophobicity. 2021 , 28, 4327-4344	6
541	Adsorption properties of natural aluminosilicate Ukrainian minerals, in situ modified by poly[8-methacryloyloxyquinoline] to Pb(II)-Mn(II)-Cu(II) and Fe(II) ions. 2021 , 717, 1-13	1
540	Removal of Basic Orange 2 dye and Ni from aqueous solutions using alkaline-modified nanoclay. 2021 , 83, 2271-2286	3
539	Bentonite-based composites with ceramic and metallic powders additions for use as filters. 2021 , 13, 168781402110118	0
538	Role of nanoclay surface charge for phytoremediation process enhancement. 2021 , 40, 101850	1
537	An Overview of Soil Chemistry and Role of Its Components in Sorption of Heavy Metals in Soil. 2021 , 79-103	0

536	Thermodynamics and equilibrium evaluation of Cd (II)ion removal by adsorption onto Chitosan/Poly (Acryl amide -Acrylic Acid) Hydrogels. 2021,	1
535	Computational and experimental assessment of pH and specific ions on the solute solvent interactions of clay-biochar composites towards tetracycline adsorption: Implications on wastewater treatment. 2021, 283, 111989	12
534	Preparation and characterization of nanoclay loaded polyacrylonitrile hollow fiber membranes. 1-11	1
533	Adsorption of chromium (VI) and iron (III) ions onto acid-modified kaolinite: Isotherm, kinetics and thermodynamics studies. 2021, 14, 103064	12
532	Application of Full Factorial Design Method for Optimization of Heavy Metal Release from Lead Smelting Slag. 2021, 13, 4890	0
531	The Comparison of the Efficacy of Natural and Synthetic Aluminosilicates, Including Zeolites, in Concurrent Elimination of Lead and Copper from Multi-Component Aqueous Solutions. 2021, 9, 812	1
530	Preparation of Carboxymethyl Cellulose-Based Hydrogel Supported by Two-Dimensional Montmorillonite Nanosheets for Methylene Blue Removal. 2021, 29, 3918	2
529	Radiation Synthesis and Characterization of Poly (vinyl alcohol)/acrylamide/TiO ₂ /SiO ₂ Nanocomposite for Removal of Metal Ion and Dye from Wastewater. 2021, 31, 4103-4125	4
528	Kinetic and thermodynamic study on adsorption of cadmium from aqueous solutions using natural clay. 677-692	1
527	Geochemical characterization and the assessment of trace element retention in sediments of the Reconquista River, Argentina. 2021, 1	0
526	Rehabilitation of a complex industrial wastewater containing heavy metals and organic solvents using low cost permeable bio-barriers [From lab-scale to pilot-scale. 2021, 263, 118381	3
525	Optimization of removal of lead and cadmium from industrial wastewater by ethylenediamine-modified single-walled carbon nanotubes. 1	1
524	Adsorptive removal of pollutants from industrial wastewater using mesoporous kaolin and kaolin/TiO ₂ nanoadsorbents. 2021, 15, 100414	5
523	Metal-Organic Frameworks for Heavy Metal Removal. 2021, 321-356	1
522	Linear and nonlinear investigations for the adsorption of paracetamol and metformin from water on acid-treated clay. 2021, 11, 13606	4
521	Cleaner Approach for Atrazine Removal Using Recycling Biowaste/Waste in Permeable Barriers. 2021, 6, 41	3
520	Amination of cotton fiber using polyethyleneimine and its application as an adsorbent to directly remove a harmful cyanobacterial species, <i>Microcystis aeruginosa</i> , from an aqueous medium. 2021, 197, 111235	1
519	Ultra-efficient adsorption of copper ions in chitosan/montmorillonite composite aerogel at wastewater treatment. 2021, 28, 7201-7212	8

518	Arsenic biogeochemical cycling in paddy soil-rice system: Interaction with various factors, amendments and mineral nutrients. 2021 , 773, 145040	32
517	Kinetic and Thermodynamic Features of Pb(II) Removal From Aqueous Solution by Leonardite-Derived Humic Acid. 2021 , 232, 1	3
516	Preparation of MnO ₂ modified magnetic graphitic carbon nitride composite and its adsorption toward Pb(II) in waste water.	1
515	Nature-Inspired Coral-like Layered [CoAl(OH)(CO)] ₂ HO for Fast Selective ppb Level Capture of Cr(VI) from Contaminated Water. 2021 , 60, 10056-10063	1
514	Swelling layered minerals applications: A solid state NMR overview. 2021 , 124-125, 99-128	3
513	How different are the arsenic fractions inhibit alkaline phosphatases on aggregates scale?. 2021 , 774, 145728	
512	Nanoengineered Polysaccharide-Based Adsorbents as Green Alternatives for Dye Removal from Wastewater.	
511	Polarization induced covalent bonding: A new force of heavy metal adsorption on charged particle surface. 2021 , 412, 125168	2
510	The behavior and mechanism of the adsorption of Pb(II) and Cd(II) by a porous double network porous hydrogel derived from peanut shells. 2021 , 27, 102449	3
509	New insights into the underlying influence of bentonite on Pb immobilization by undissolvable and dissolvable fractions of biochar. 2021 , 775, 145824	2
508	Adsorption of Congo red and malachite green using H ₃ PO ₄ and NaCl-modified activated carbon from rubber (<i>Hevea brasiliensis</i>) seed shells. 2021 , 7, 1	9
507	Effect of modified pomace on copper migration via riverbank soil in southwest China. 2021 , 9, e11844	
506	Phase Studies and Efficient Recovery of Inorganic Metal Salts from the Microemulsion System Using a Sugar-Based Non-Ionic Surfactant. 2021 , 58, 265-270	
505	Functional organoclays for removal of heavy metal ions from water: A review. 2021 , 334, 116143	19
504	Adsorption of U(VI) on the natural soil around a very low-level waste repository. 2021 , 233, 106619	1
503	High performance carbonized corncob-based 3D solar vapor steam generator enhanced by environmental energy. 2021 , 179, 337-347	19
502	Microscopic understanding about adsorption and transport of different Cr(VI) species at mineral interfaces. 2021 , 414, 125485	5
501	Antiretroviral Drugs in African Surface Waters: Prevalence, Analysis, and Potential Remediation. 2021 ,	6

500	Relationships between Heavy Metals and Their Connection to Amorphous and Total Iron in a Frequently Subsampled Clay Pit Core Sample. 2021 , 5, 1726-1740	1
499	Simple one-step synthesis process of novel MoS ₂ @bentonite magnetic nanocomposite for efficient adsorption of crystal violet from aqueous solution. 2021 , 139, 111279	10
498	Mercury Anomalies Link to Extensive Volcanism Across the Late Devonian Frasnian-Bamennian Boundary in South China. 2021 , 9,	
497	Properties and application of MoS ₂ nanopowder: Characterization, Congo red dye adsorption, and optimization. 2021 , 13, 1169-1180	7
496	A review of recent developments in application of low cost natural materials in purification and upgrade of biogas. 2021 , 145, 111081	25
495	Adsorption of Pb(II) and Fe(II) by mesoporous composite activated carbon from Tithonia diversifolia stalk and Theobroma cacao pod. 1	6
494	Dispersion C ₃ coefficients for physisorption of heavy ions and atoms with graphene and carbon nanotubes. 2021 , 104,	1
493	Sensitive Cu ²⁺ detection by reversible on-off fluorescence using Eu ³⁺ complexes in SiO ₂ , in chitosan/polyethylene oxide nanofibers. 2021 , 205, 109708	6
492	Potassium isotopic fractionation during clay adsorption. 2021 , 304, 160-177	10
491	Mineralogical and Physico-Chemical Characterization of the Oraș-Nou (Romania) Bentonite Resources. 2021 , 11, 938	4
490	A review on zeolites as cost-effective adsorbents for removal of heavy metals from aqueous environment. 1	3
489	Removal of heavy metals by covalent organic frameworks (COFs): A review on its mechanism and adsorption properties. 2021 , 9, 105687	20
488	The role of soils in the disposition, sequestration and decontamination of environmental contaminants. 2021 , 376, 20200177	10
487	An empirical literature analysis of adsorbent performance for methylene blue uptake from aqueous media. 2021 , 9, 105658	35
486	Removal of heavy metals from textile industry wastewater.	0
485	Understanding the sorption behaviors of heavy metal ions in the interlayer and nanopore of montmorillonite: A molecular dynamics study. 2021 , 416, 125976	12
484	Comparison of lead(II) ions accumulation and bioavailability on the montmorillonite and kaolinite surfaces in the presence of polyacrylamide soil flocculant. 2021 , 276, 130088	5
483	Eu(II), Cd(II), Co(II), Zn(II) Er(VI) 2021, 70-76	

482	Clay-hydrogel nanocomposites for adsorptive amputation of environmental contaminants from aqueous phase: A review. 2021 , 9, 105575	15
481	Prediction of copper ions adsorption by attapulgite adsorbent using tuned-artificial intelligence model. 2021 , 276, 130162	14
480	Predicting the sorption efficiency of heavy metal based on the biochar characteristics, metal sources, and environmental conditions using various novel hybrid machine learning models. 2021 , 276, 130204	13
479	A comprehensive review on zinc(II) sequestration from wastewater using various natural/modified low-cost agro-waste sorbents. 1	1
478	Upcycling of heavy metal adsorbents into sulfide semiconductors for photocatalytic CO2 reduction. 2021 , 558, 149647	3
477	Comparative Study on the Effect of Common Ions on Zn ²⁺ and Cu ²⁺ Adsorption by Cattle Manure Vermicompost (VC) and VC-amended Soil. 1-16	0
476	Highly efficient removal of Sb(V) from water by franklinite-containing nano-FeZn composites. 2021 , 11, 17113	1
475	Preparation and characterisation of a novel eco-friendly Bentonite/LDH material for removal of copper ions from solution. 1-20	
474	Kinetic and isotherm studies for the sorption of ¹³⁴ Cs and ⁶⁰ Co radionuclides onto supported titanium oxide. 2021 , 330, 127-139	3
473	Adsorption behaviors of paper mill sludge biochar to remove Cu, Zn and As in wastewater. 2021 , 23, 101616	5
472	Field-scale studies on the change of soil microbial community structure and functions after stabilization at a chromium-contaminated site. 2021 , 415, 125727	10
471	Chitosan oligosaccharide/silica nanoparticles hybrid porous gel for mercury adsorption and detection. 2021 , 28, 102707	2
470	Influence of the Nanotube Morphology and Intercalated Species on the Sorption Properties of Hybrid Layered Vanadium Oxides: Application for Cesium Removal from Aqueous Streams. 2021 , 11,	
469	Covalent organic frameworks: Advances in synthesis and applications. 2021 , 28, 102612	3
468	Sorption of lead (II) and strontium (II) ions from aqueous solutions onto non-living <i>Chlorella Vulgaris</i> Alga/ Date pit activated carbon composite. 1	0
467	Snail Shells Adsorbent for Copper Removal from Aqueous Solutions and the Production of Valuable Compounds. 2021 , 2021, 1-15	3
466	Enhanced heavy metal leaching from sewage sludge through anaerobic fermentation and air-assisted ultrasonication. 2021 , 279, 130548	3
465	Specifically designed amine functional group doped sludge biochar for inorganic and organic arsenic removal. 2021 , 31,	1

464	Effect of kaolinite on control of hard deposit formation and alteration of fine particles in a commercial circulating fluidized bed boiler burning solid refuse fuel. 2021 , 389, 549-560	1
463	Comparative adsorption studies of cadmium ions on phosphogypsum and natural clay. 2021 , 13, e00960	3
462	Mechanisms of heavy metal and oil removal from synthetic saline oilfield produced water by electrocoagulation. 2021 , 4,	0
461	Enhanced Single and Simultaneous As(III) Adsorption in Pearl River Delta Water by Hexylamine Functionalized Vermiculite. 2021 , 13, 2412	1
460	The Effect of Proton and Arsenic Concentration on As(III) Removal by Hematite and Kaolin Complexes. 2021 , 2021, 1-8	0
459	Optimization of bleaching power by sulfuric acid activation of bentonite. 1-22	
458	PERME EKBMANI KAYNAKLI AIR METALLERİN TESPIİ EDİLMESİ İN OHUT RNEİİ 666-675	
457	Dyes adsorption from aqueous media through the nanotechnology: A review. 2021 , 14, 2195-2218	25
456	Water-sediment interactions and mobility of heavy metals in aquatic environments. 2021 , 202, 117386	21
455	A review of organic-inorganic hybrid clay based adsorbents for contaminants removal: Synthesis, perspectives and applications. 2021 , 9, 105808	13
454	Simultaneous removal of multiple heavy metals from wastewater by novel plateau laterite ceramic in batch and fixed-bed studies. 2021 , 9, 105792	5
453	Application of co-pyrolysis biochar for the adsorption and immobilization of heavy metals in contaminated environmental substrates. 2021 , 420, 126655	24
452	Advances in biosorbents for removal of environmental pollutants: A review on pretreatment, removal mechanism and future outlook. 2021 , 420, 126596	13
451	Spent kaolin filter cake as an effective adsorbent for the removal of Hexavalent Chromium [Cr (VI)] from aqueous solution: Comparative study of wastewater treatment methods. 2021 , 38, 90-103	1
450	Adsorption Configurations of Iron Complexes on As(III) Adsorption Over Sludge Biochar Surface. 2021 , 21, 5174-5180	3
449	Phosphate functionalised titania for heavy metal removal from acidic sulfate solutions. 2021 , 600, 719-728	5
448	Calcite modification of agricultural waste biochar highly improves the adsorption of Cu(II) from aqueous solutions. 2021 , 9, 106215	2
447	Insights into the improving mechanism of defect-mediated As(V) adsorption on hematite nanoplates. 2021 , 280, 130597	3

446	Carrageenan-based nano-hybrid materials for the mitigation of hazardous environmental pollutants. 2021 , 190, 700-712		13
445	Effects of clay minerals on the transport of nanoplastics through water-saturated porous media. 2021 , 796, 148982		5
444	Preparation of novel ZnO-NP@Zn-MOF-74 composites for simultaneous removal of copper and tetracycline from aqueous solution. 2021 , 274, 118949		7
443	Adsorption of Pb, Cu and Cd by sulfhydryl modified chitosan beads. 2021 , 274, 118622		4
442	Exploring the saturated permeability of remolded loess under inorganic salt solution seepage. 2021 , 294, 106354		2
441	Simultaneous decontamination of multi-pollutants: A promising approach for water remediation. 2021 , 284, 131270		4
440	Lignocellulosic biomass-based engineered biochar composites: A facile strategy for abatement of emerging pollutants and utilization in industrial applications. 2021 , 152, 111643		10
439	The impact of ammonia concentration and reducing agents on the ammonia oxidation performance of embedded nano-FeCu. 2021 , 274, 125189		1
438	Preparation of sludge biochar rich in carboxyl/hydroxyl groups by quenching process and its excellent adsorption performance for Cr(VI). 2021 , 285, 131439		10
437	XRD and TEM analyses of a simulated leached rare earth ore deposit: Implications for clay mineral contents and structural evolution. 2021 , 225, 112728		3
436	Cementitious binders modified with halloysite nanotubes for enhanced lead immobilization. 2022 , 395, 149-157		1
435	Modification of naturally abundant resources for remediation of potentially toxic elements: A review. 2022 , 421, 126755		6
434	Tunable amine-functionalized silsesquioxane-based hybrid networks for efficient removal of heavy metal ions and selective adsorption of anionic dyes. <i>Chemical Engineering Journal</i> , 2022 , 428, 131370	14.7	14
433	Remediation of petroleum-contaminated soil by ball milling and reuse as heavy metal adsorbent. 2022 , 424, 127305		3
432	Surface corrosion by microbial flora enhances the application potential of phosphate rock for cadmium remediation. <i>Chemical Engineering Journal</i> , 2022 , 429, 132560	14.7	0
431	Strategies to cope with the emerging waste water contaminants through adsorption regimes. 2022 , 61-106		0
430	Mechanochemically incorporating magnesium sulfate into antigorite to provide active nucleation sites for efficient precipitation of cadmium ions from weak acidic solution. 2022 , 424, 127272		2
429	Noncarbon-based nanomaterials for concrete applications. 2021 , 59-104		

428	Green Remediation of Heavy Metal Polluted Water and Soil Using Clay Minerals: A Review. 632, 052079	0
427	Enhanced Arsenic Removal from Aqueous Solution by Fe/Mn-C Layered Double Hydroxide Composite. 2021 , 2021, 1-12	3
426	On the Suitability of Almond Shells for the Manufacture of a Natural Low-Cost Bioadsorbent to Remove Brilliant Green: Kinetics and Equilibrium Isotherms Study. 2021 , 2021, 6659902	3
425	Phosphorus adsorption by sediment considering mineral composition and environmental factors. 2021 , 28, 17495-17505	2
424	Conducting Polymer Membranes and Their Applications. 2020 , 147-176	4
423	A Review on Pharmaceutical Removal from Aquatic Media by Adsorption: Understanding the Influential Parameters and Novel Adsorbents. 2020 , 207-265	7
422	Clay, Hydroxyapatite and Their Composites Brief Review. 2020 , 255-272	1
421	Legume-Rhizobium Symbiosis: Secondary Metabolites, Free Radical Processes, and Effects of Heavy Metals. 2019 , 1-32	3
420	Removal of Heavy Metals from Industrial Wastewater Through Minerals. 2020 , 615-632	1
419	Heavy Metals Removal Using Carbon Based Nanocomposites. 2021 , 249-274	5
418	Evaluation of the impact of karst depression-type impoundments on the underlying karst water systems in the Gejiu mining district, southern Yunnan, China. 2019 , 78, 4673-4688	2
417	Adsorption of copper ions from aqueous media using montmorillonite-Al ₂ O ₃ nano-adsorbent incorporated with Fe ₃ O ₄ for facile separation. 2020 , 37, 2273-2286	4
416	Chitosan-rectorite nanospheres immobilized on polystyrene fibrous mats via alternate electrospinning/electrospraying techniques for copper ions adsorption. 2017 , 426, 545-553	36
415	Removal sulfur components from heavy crude oil by natural clay. 2020 , 11, 1265-1273	3
414	Effects of fulvic acid and montmorillonite colloids at different concentrations on Cd(II) sorption onto nano-hydroxyapatite. 2020 , 248, 125992	9
413	Effects of clay colloids on ciprofloxacin transport in saturated quartz sand porous media under different solution chemistry conditions. 2020 , 199, 110754	11
412	An insight of enhanced natural material (calcined diatomite) efficiency in nickel and silver retention: Application to natural effluents. 2020 , 18, 100768	6
411	Spectral induced polarization of clay-oxide hybrid particles. 2020 , 577, 173-180	6

410	In-situ enrichment and removal of Cu(II) and Cd(II) from low-strength wastewater by a novel microbial metals enrichment and recovery cell (MMERC). 2020 , 451, 227627	9
409	Electrospun Polyurethane/Zeoilic Imidazolate Framework Nanofibrous Membrane with Superior Stability for Filtering Performance. 2021 , 3, 710-719	7
408	Adsorption of natural annatto dye by kaolin: kinetic and equilibrium. 2020 , 41, 2648-2656	4
407	Phosphorous runoff risk assessment and its potential management using wollastonite according to geochemical modeling. 2019 , 4, 787-794	4
406	REMOVAL OF CESIUM FROM AQUEOUS SOLUTION BY ADSORPTION ONTO SIVAS-YILDIZELI (TURKEY) VERMICULITE: EQUILIBRIUM, KINETIC AND THERMODYNAMIC STUDIES. 85-116	2
405	Wastewater treatment and biomedical applications of montmorillonite based nanocomposites: A review. 2020 , 16,	7
404	Performance Evaluation of Metakaolin as Low Cost Adsorbent for Manganese Removal in Anoxic Groundwater. 2019 , 29, 107-122	1
403	Wastewater Treatment by Using Polyurethane Foams Modified with Bis-[2-ethylhexyl] Phosphoric Acid: Kinetics, Equilibrium and Desorption Studies. 2017 , 3, 28-37	1
402	Chitosan with Bentonite and Biochar in Ni-Affected Soil Reduces Grain Ni Concentrations, Improves Soil Enzymes and Grain Quality in Lentil. 2021 , 11, 11	2
401	Adsorptive Removal of Phosphate from Aqueous Solution by Magnetic-Supported Kaolinite: Characteristics, Isotherm and Kinetic Studies. 2019 , 09, 544-563	2
400	Electrospun nanofibers for efficient adsorption of heavy metals from water and wastewater. 2021 , 1, 1-33	5
399	Distinct Responses of Rare and Abundant Microbial Taxa to Chemical Stabilization of Cadmium-Contaminated Soil. 2021 , 6, e0104021	2
398	Crosslinked chitosan oligosaccharide-based binary and ternary blends for the removal of Cu(II) ions. 1	0
397	Remediation strategies for heavy metals contaminated ecosystem: A review. 2021 , 12, 100155	7
396	Effect of cadmium sorption by river sediments on longitudinal dispersion.	1
395	Novel TEMPO-oxidized cellulose nanofiber/polyvinyl alcohol/polyethyleneimine nanoparticles for Cu ²⁺ removal in water. 2021 , 28, 10999-11011	0
394	Removal of Pb ²⁺ Ions by ZSM-5/AC Composite in a Fixed-Bed Bench Scale System. 2021 , 2021, 1-8	1
393	Removal of Cd and Pb from Wastewater through Sequent Addition of KR-Slag, Ca(OH) Derived from Eggshells and CO Gas. 2021 , 6, 27600-27609	1

- 392 Adsorption of chromium(VI) and crystal violet onto granular biopolymer-silica pillared clay composites from aqueous solutions. **2021**, 344, 117822 4
- 391 Benefit of ion imprinting technique in solid-phase extraction of heavy metals, special focus on the last decade. **2021**, 9, 106548 5
- 390 Thermodynamic and kinetic understanding of cation exchange at montmorillonite interfaces, and strong coupling with confinement effects. **2021**, 215, 106305 2
- 389 Comparative adsorption of polycyclic aromatic compounds on organo-vermiculites modified by imidazolium- and pyridinium-based gemini surfactants. **2021**, 631, 127701 2
- 388 Kattılcık Depolama Alanlarında Sızıntı Suyunun Killi Zeminde Gerken Adsorpsiyonunun İncelenmesi. 6, 380-387 1
- 387 Adsorption study of cadmium ions on kaolinite modified by histidine and cysteine. **2019**, 74, 15-22 0
- 386 Environmental Nanotechnology and Education for Sustainability: Recent Progress and Perspective. **2019**, 2205-2231 0
- 385 Characterization of a bentonite and its permanent aqueous suspension. 11-18 0
- 384 Microwave-treated bentonite for removal of lead from wastewater. **2019**, 126-134 2
- 383 Reductive Adsorption of Atmospheric Oxidized Mercury on Ice: Insights from Density Functional Calculations. 1 0
- 382 Aluminosilicate Nanosponges: Synthesis, Properties, and Application Prospects. **2021**, 60, 17008-17018 0
- 381 SYNTHESIS OF A COMPOSITE AEROGEL OF REDUCED GRAPHENE OXIDE SUPPORTED BY TWO-DIMENSIONAL MONTMORILLONITE NANOLAYERS FOR METHYLENE BLUE REMOVAL. 1 0
- 380 Ex-Situ Remediation of Heavy Metals Contaminated Soils Using Natural Aluminosilicate Minerals. **2020**, 3-10 0
- 379 Adsorption Characteristics of Anionic Dye by Fe-Decorated Biochar Derived from Fallen Leaves. **2020**, 39, 289-296 0
- 378 Application of Iron Oxide Nanomaterials for the Removal of Heavy Metals. **2021**, 1-25 1
- 377 Selective adsorption behavior of Cd imprinted acrylamide-crosslinked-poly(alginic acid) magnetic polymers: fabrication, characterization, adsorption performance and mechanism. **2021**, 83, 449-462 0
- 376 Designed water channels and sieving effect for heavy metal removal by a novel silica-poly(ionic liquid) nanoparticles TFN membrane. **2022**, 641, 119945 2
- 375 Determination of affecting parameters on removal of methylene blue dyestuff from aqueous solutions using natural clay: Isotherm, kinetic, and thermodynamic studies. **2022**, 1250, 131729 5

- 374 Legume-Rhizobium Symbiosis: Secondary Metabolites, Free Radical Processes, and Effects of Heavy Metals. **2020**, 291-322 3
- 373 EFFECTS OF GAMMA-IRRADIATION ON NANOSTRUCTURED Na-BENTONITE SILICATE LAYERS AT ROOM TEMPERATURE. **2021**, 51-56
- 372 Competitive adsorption of nickel(II) and cadmium(II) ions by chitosan cross-linked with sodium tripolyphosphate. 1-19 3
- 371 BIOADSORPTION OF HEAVY METALS FROM THE PHARMACEUTICAL EFFLUENTS, CONTAMINATED SOILS AND WATER BY FOOD AND AGRICULTURAL WASTE: A SHORT REVIEW. **2020**, 36, 3-7 1
- 370 Regularities of accumulation of heavy metals by strawberry (*Fragaria* Ananassa Duch.) plants from soddy-podzoly soil using adsorbents based on mineral and polymeric substances. 62, 152-164
- 369 Surface Chemistry of Mineral Adsorbents. **2021**, 55-91 0
- 368 Adsorption of Anions on Minerals. **2021**, 145-197
- 367 Adsorption of Cations on Minerals. **2021**, 199-223
- 366 Heavy Metal Removal by Low-Cost Adsorbents. **2021**, 245-272 1
- 365 Removal of heavy metal ions by porous sepiolite-based membrane. **2020**, 15, 903-906 1
- 364 Removal of Dyes and Heavy Metals with Clays and Diatomite. **2021**, 539-569
- 363 Adsorption of $\text{Cr}(\text{OH})_n(3\bar{B})^+$ ($n = 1\bar{B}$) on Illite (001) and (010) Surfaces: A DFT Study. **2021**, 9, 2048 0
- 362 Influence of salinity on heavy metal and oil removal from hypersaline oilfield-produced water by electrocoagulation: mechanistic insights. **2021**, 29, 23619 0
- 361 REMOVAL OF Hg(II) METAL IONS USING KAOLIN ADSORBENTS MODIFIED WITH ANIONIC SURFACTANT AND EFFICIENT ULTRASONIC ASSISTED. **2021**, 9, 72-84
- 360 Organic/inorganic amendments for the remediation of a red paddy soil artificially contaminated with different cadmium levels: Leaching, speciation, and phytoavailability tests. **2021**, 114148 2
- 359 Recent advances in the hybridization of cellulose and carbon nanomaterials: Interactions, structural design, functional tailoring, and applications.. **2022**, 279, 118947 10
- 358 Optimizing temperature and introducing new process arrangements for elevating clay's longevity based on the known poisons in the separation process of trace olefins from aromatics. 0
- 357 Environmental Pollution in the Vicinity of an Aluminium Smelter in Siberia. **2022**, 379-402 1

356	Metal nanoparticles supported chitosan coated carboxymethyl cellulose beads as a catalyst for the selective removal of 4-nitrophenol. 2021 , 291, 133010	2
355	Guidelines to Study the Adsorption of Pesticides onto Clay Minerals Aiming at a Straightforward Evaluation of Their Removal Performance. 2021 , 11, 1282	2
354	3D-printed montmorillonite nanosheets based hydrogel with biocompatible polymers as excellent adsorbent for Pb(II) removal. 2021 , 283, 120176	5
353	Desorption of zinc, copper and lead ions from loaded flax fibers. 2021 , 1-34	0
352	Encapsulated Lewis acidic ionic liquids by halloysite using as efficient catalyst for CO ₂ conversion. 2021 , 215, 106329	1
351	Effect on engineering properties of ground granulated blast furnace slag admixed with laterite soil, cement and bentonite mixtures as a liner in landfill. 2021 , 329, 129757	1
350	Effects of silkworm excrement and water management on the accumulation of Cd and As in different varieties of rice and an assessment of their health risk. 2021 , 228, 112974	0
349	Effect of nZVI/biochar nanocomposites on Cd transport in clay mineral-coated quartz sand: Facilitation and rerelease. 2021 , 228, 112971	3
348	Understanding the microstructure, mineralogical and adsorption characteristics of guar gum blended soil as a liner material. 2021 , 193, 855	1
347	Unique, Inexpensive, and Abundantly Available in Nature Adsorbent of Synthesized Silver Nanoparticles (AgNPs) /Banana Leave Powder (BLP) Composite.	
346	A magnetic amino enriched hydrothermal carbon production with molasses as carbon source. 2022 , 10, 107073	
345	Eco-friendly chitosan/charrageenan membranes reinforced with activated bentonite for adsorption of methylene blue. 2022 , 278, 125611	3
344	Impact of Buffering Agent on Lead Adsorption of Bentonite: An Appraisal. 2022 , 148,	
343	Adsorption characteristics of rocks and soils, and their potential for mitigating the environmental impact of underground coal gasification technology: A review.. 2022 , 305, 114390	0
342	Facile preparation of a multifunctional superhydrophilic PVDF membrane for highly efficient organic dyes and heavy metal ions adsorption and oil/water emulsions separation. 2022 , 637, 128231	0
341	The mechanisms of iron modified montmorillonite in controlling mercury release across mercury-contaminated soil-air interface in greenhouse.. 2021 , 812, 152432	0
340	Effects of aging and reduction processes on Cr toxicity to wheat root elongation in Cr(VI) spiked soils.. 2022 , 296, 118784	2
339	Simple and low-cost production of magnetite/graphene nanocomposites for heavy metal ions adsorption.. 2021 , 813, 152604	3

- 338 Removal and magnetic recovery of heavy metals and pesticides from soil by layered double hydroxides modified biotite. *Chemical Engineering Journal*, **2022**, 431, 134113 14.7 1
- 337 Graphene oxide-CuFe₂O₄ nanohybrid material as an adsorbent of Congo red dye. **2022**, 7, 100147 0
- 336 Sustainable and efficient technologies for removal and recovery of toxic and valuable metals from wastewater: Recent progress, challenges, and future perspectives.. **2021**, 292, 133102 6
- 335 Adsorptive removal of organic dyes via porous materials for wastewater treatment in recent decades: A review on species, mechanisms and perspectives.. **2021**, 293, 133464 13
- 334 Desulfurization of actual diesel fuel onto modified mesoporous material Co/MCM-41. **2022**, 17, 100635 6
- 333 Biosorption of Heavy Metals from Aqueous Solutions:Insight and Review. 1-31 1
- 332 Synthesis and Applications of Organic Framework-Based Cellulosic Nanocomposites. **2021**, 1-33
- 331 Preparation and Characterization of a Novel Chemically Crosslinked Chitosane-g-Polyacrylamide Hydrogel as a Promising Adsorbent for the Removal of Methylene Blue from Aqueous Solutions. **2021**, 63, 853-865 0
- 330 Remediation of Cd (II) Ion from an Aqueous Solution by a Starch-Based Activated Carbon: Experimental and Density Functional Theory (DFT) Approach. **2022**, 12, 189 0
- 329 Preparation and characterization of Co(II) ion-imprinted composite membrane based on a novel functional monomer. **2022**, 111707 1
- 328 Distribution and ecological risk of heavy metal(loid)s in surface sediments of the Hai Phong coastal area, North Vietnam. 1-21
- 327 Using thiol-functionalized montmorillonites for chemically immobilizing Hg in contaminated water and soil: A comparative study of intercalation and grafting functionalization. **2022**, 216, 106381 1
- 326 Removal of lead from aqueous solutions using three biosorbents of aquatic origin with the emphasis on the affective factors.. **2022**, 12, 751 0
- 325 Design and preparation the novel polymeric layered double hydroxide nanocomposite (LDH/Polymer) as an efficient and recyclable adsorbent for the removal of methylene blue dye from water. **2022**, 26, 102377 1
- 324 Sawdust-biomass based materials for sequestration of organic/inorganic pollutants and potential for engineering applications. **2022**, 100274 4
- 323 Natural or engineered clays for stabilization/solidification. **2022**, 31-47 1
- 322 VO, CeO and Their MWCNTs Nanocomposites Modified for the Removal of Kerosene from Water.. **2022**, 12, 0
- 321 Photocatalytic treatment of detergent-contaminated wastewater: A short review on current progress. **2022**, 39, 484 1

320	Effectiveness and Characterization of Novel Mineral Clay in Cd ²⁺ Adsorption Process: Linear and Non-Linear Isotherm Regression Analysis. 2022 , 14, 279	1
319	Lignin for metal ion remediation in aqueous systems. 2022 , 325-356	
318	Biosorption and Bioleaching of Heavy Metals from Electronic Waste Varied with Microbial Genera. 2022 , 14, 935	2
317	In-Depth Study of Heavy Metal Removal by an Etidronic Acid-Functionalized Layered Double Hydroxide.. 2022 ,	12
316	Enhancement of the Properties of Hybridizing Epoxy and Nanoclay for Mechanical, Industrial, and Biomedical Applications.. 2022 , 14,	1
315	Adsorption of Cr (VI) on lignocellulosic wastes adsorbents: an overview and further perspective. 1	0
314	Adsorption of Pb(II) from Water onto ZnO, TiO ₂ , and Al ₂ O ₃ : Process Study, Adsorption Behaviour, and Thermodynamics. 2022 , 2022, 1-13	0
313	Advanced 2D Nanomaterial Composites: Applications in Adsorption of Water Pollutants and Toxic Gases. 2022 , 97-124	2
312	Remediation of Toxic Heavy Metal Contaminated Soil by Combining a Washing Ejector Based on Hydrodynamic Cavitation and Soil Washing Process.. 2022 , 19,	0
311	Molecular picture of the adsorption of phenol, toluene, carbon dioxide and water on kaolinite basal surfaces. 2022 , 585, 152699	1
310	Surface modification of ball clay minerals with gamma irradiation polymerization for removal of cerium and gadolinium ions from aqueous phase. 2022 , 208, 105816	1
309	NiCo ₂ O ₄ nanostructures loaded onto pencil graphite rod: An advanced composite material for oxygen evolution reaction. 2022 , 47, 6650-6665	6
308	Synthesis, characterization, and challenges faced during the preparation of zirconium pillared clays. 2022 , 15, 103706	1
307	Effect of modified bentonite on copper migration via bank soils in the Jialing River, Southwest China. 2022 , 218, 105322	0
306	MIL series of metal organic frameworks (MOFs) as novel adsorbents for heavy metals in water: A review.. 2022 , 429, 128271	7
305	Ferrallisols fertility and crops safety improvement using a low-cost synthetic mineral. 2022 , 26, 102346	
304	The uptake performance and microscopic mechanism of inorganic-organic phosphorus hybrid amorphous hydroxyapatite for multiple heavy metal ions. 2022 , 640, 128384	0
303	Adsorption mechanism of Pb in montmorillonite nanopore under various temperatures and concentrations.. 2022 , 112817	1

302	Evaluating Permeable Clay Brick Pavement for Pollutant Removal from Varying Strength Stormwaters in Arid Regions. 2022 , 14, 491	0
301	Photoinduced adsorption of Cr(VI) ions in nano-zinc oxide and nano-zinc oxide/polypyrrole composite. 52225	1
300	Recent advances in the treatment of contaminated soils by ball milling technology: Classification, mechanisms, and applications. 2022 , 340, 130821	2
299	Efficient dye removal using fixed-bed process based on porous montmorillonite nanosheet/poly(acrylamide-co-acrylic acid)/sodium alginate hydrogel beads. 2022 , 219, 106443	4
298	Adsorption behaviour of pollutants: Heavy metals, radionuclides, organic pollutants, on clays and their minerals (raw, modified and treated): A review.. 2022 , 309, 114685	4
297	A Novel Polyvinylpyrrolidone-Stabilized Illite Microparticle with Enhanced Antioxidant and Antibacterial Effect.. 2021 , 13,	0
296	Synthesis, Characterization, and Utilization of Poly-Amino Acid Functionalized Lignin for Efficient and Selective Removal of Lead Ion from Aqueous Solution.	
295	Mesoporous maltose/calcium oxalate hybrid material with abundant reaction sites and its efficient removal of Pb (II) from diverse water bodies.	
294	Effective and Simultaneous Removal of Heavy Metals and Neutralization of Acid Mine Drainage Using an Attapulgitite-Soda Residue Based Adsorbent.	
293	Mesoporous Maltose/Calcium Oxalate Hybrid Material with Abundant Reaction Sites and its Efficient Removal of Pb (II) from Various Water Bodies.	
292	Nanocomposite material-based catalyst, adsorbent, and membranes for petroleum wastewater treatment. 2022 , 147-160	
291	Effective Removal of Toxic Metals from Polluted Water Using Magnetic Adsorbent Based on ECarrageenan and N-Doped Carbon Dots.	0
290	Liquefiable Biomass-Derived Porous Carbons and their Applications in CO ₂ Capture and Conversion.	0
289	Pristine and activated bentonite for toxic metal removal from wastewater. 2022 , 17, 784-797	1
288	Recent trends in the use of fly ash for the adsorption of pollutants in contaminated wastewater and soils: Effects on soil quality and plant growth.. 2022 , 1	0
287	Adsorption and desorption of Cd in reclaimed soil under the influence of humic acid: characteristics and mechanisms. 2022 , 9, 1	0
286	NanoTafla Nanocomposite as a Novel Low-Cost and Eco-Friendly Sorbent for Strontium and Europium Ions.. 2022 , 7, 10447-10457	1
285	Enhanced Adsorption of Methyl Orange by Mongolian Montmorillonite after Aluminum Pillaring. 2022 , 12, 3182	1

284	Modification of kaolinite/muscovite clay for the removal of Pb(II) ions from aqueous media. 2022,	0
283	CdS@NiCo-LDH hybrid photoelectrocatalyst with enhanced photocatalytic activity: A convenient and stable hybrid for wastewater treatment. 2022, 164736	0
282	EDTA Modified Hollow Microporous Organic Nanospheres for Enhancing Adsorption of Metal Ions. 2022, 7,	
281	Adsorption performance and its mechanism of aqueous As(III) on polyporous calcined oyster shell-supported Fe-Mn binary oxide.. 2022, 94, e10714	
280	A Review on the Use of Nanoclay Adsorbents in Environmental Pollution Control. 2022, 233, 1	0
279	Mapping Potential Toxic Elements in Agricultural and Natural Soils of the Piedemonte Llanero in Colombia. 2022, 233, 1	0
278	Gels based on calcium alginate/pillared bentonite: structural characterization and their use as cadmium removal agent.. 2022, 1-11	1
277	Comparison Study on Sonodirect and Sonoalternate Current Electrocoagulation Process for Domestic Wastewater Treatment.. 2022, 2022, 3477995	0
276	A Review of Titanium Dioxide (TiO)-Based Photocatalyst for Oilfield-Produced Water Treatment.. 2022, 12,	9
275	Research Trends on Pillared Interlayered Clays (PILCs) Used as Catalysts in Environmental and Chemical Processes: Bibliometric Analysis.. 2022, 2022, 5728678	0
274	A Comprehensive Study on the Applications of Clays into Advanced Technologies, with a Particular Attention on Biomedicine and Environmental Remediation. 2022, 10, 40	3
273	Removal of Cu (II), Pb (II) and Cd (II) metal ions with modified clay composite: kinetics, isotherms and thermodynamics studies. 1	
272	Kinetic, equilibrium, and thermodynamic studies of heavy metal removal from aqueous solutions by natural material from Morocco. 2022, 7, 141-153	0
271	Cadmium adsorption performance and mechanism from aqueous solution using red mud modified with amorphous MnO.. 2022, 12, 4424	3
270	Soil indigenous microorganisms alleviate soluble vanadium release from industrial dusts.. 2022, 434, 128837	1
269	Distribution and Influencing Factors of Metals in Surface Soil from the Yellow River Delta, China. 2022, 11, 523	0
268	Hydrogels for the removal of the methylene blue dye from wastewater: a review. 1	0
267	Synthesis, characterization, and utilization of poly-amino acid-functionalized lignin for efficient and selective removal of lead ion from aqueous solution. 2022, 347, 131219	2

- 266 Magnetic responsive mesoporous alginate/ β -cyclodextrin polymer beads enhance selectivity and adsorption of heavy metal ions.. **2022**, 1
- 265 Degradation mechanism of montmorillonite-enhanced antibiotic wastewater: performance, antibiotic resistance genes, microbial communities, and functional metabolism.. **2022**, 352, 127098 0
- 264 Evaluation of the Immobilization of Coexisting Heavy Metal Ions of Pb^{2+} , Cd^{2+} , and Zn^{2+} from Water by Dairy Manure-Derived Biochar: Performance and Reusability. **2022**, 148,
- 263 Membrane fouling control for sustainable microalgal biodiesel production: A review. **2022**, 161, 112335 1
- 262 Interactive effects of metals and carbon nanotubes in a microcosm agrosystem.. **2022**, 431, 128613 0
- 261 A review of diclofenac occurrences, toxicology, and potential adsorption of clay-based materials with surfactant modifier. **2022**, 10, 107541 1
- 260 Dynamic adsorption behavior of benzene, toluene, and xylene VOCs in single- and multi-component systems by activated carbon derived from defatted black cumin (*Nigella sativa* L.) biowaste. **2022**, 10, 107565 1
- 259 Speciation of heavy metals in soils and their immobilization at micro-scale interfaces among diverse soil components.. **2022**, 153862 1
- 258 $FeOOH$ - MnO_2 /Sepiolite and Fe_2O_3 - MnO_2 /Diatomite: Highly efficient adsorbents for the removal of $As(V)$. **2022**, 222, 106491 0
- 257 Recent advances in nano-adsorbents for the sequestration of copper from water. **2022**, 47, 102715 6
- 256 Amino-functionalized biochars for the detoxification and removal of hexavalent chromium in aqueous media.. **2022**, 211, 113073 2
- 255 An integrated chemo- bio- mineral technology for agricultural drainage water remediation. 1-15
- 254 Activated carbon from local oak shells: synthesis, characterisation, and application for Cr (VI) adsorption in the fixed bed column: Experimental and modelling. 1-20
- 253 Green adsorbents for the removal of heavy metals from Wastewater: A review. **2021**, 1
- 252 Evaluation of Natural Montmorillonite Clay for Removal of Cd^{2+} from Aqueous Solution in a Batch Adsorption System. **2021**, 95, 2653-2662
- 251 Statistical Approaches Link Sources of Sediment Contamination in Subtropical Reservoirs to Land Use: an Example from the Itupararanga Reservoir (Brazil). **2022**, 233, 1
- 250 Modelling a multi-stage batch reactor for the immobilization of $Fe(III)$ ions using humic acid and 2-mercaptobenzoxazole fabricated organo-clay. **2022**, 131619 0
- 249 Recovery of Some Rare-Earth Elements by Sorption Technique onto Graphene Oxide. 1

248	Thermally activated serpentine materials as soil additives for copper and nickel immobilization in highly polluted peat.. 2022 , 1		0
247	Dication-accelerated anion transport inside micropores for the rapid decontamination of pertechnetate. 2022 , 33, 1		1
246	High Performance of UiO-66 Metal-Organic Framework Modified with Melamine for Uptaking of Lead and Cadmium from Aqueous Solutions. 1		0
245	Filter Fabrication by Constructing Metal-Organic Frameworks Membrane on Waste Maize Straw for Efficient Phosphate Removal from Wastewater. <i>Chemical Engineering Journal</i> , 2022 , 136461	14.7	1
244	A unique, inexpensive, and abundantly available adsorbent: composite of synthesized silver nanoparticles (AgNPs) and banana leaves powder (BLP).. 2022 , 8, e09279		1
243	The phase transformation of microbial induced struvite and its Cd(II) immobilization mechanism. 2022 , 10, 107695		0
242	Roles of organic matter transformation in the bioavailability of Cu and Zn during sepiolite-amended pig manure composting.. 2022 , 314, 115046		1
241	Arsenic removal from household drinking water by biochar and biochar composites: A focus on scale-up. 2022 , 277-320		
240	Nanoadsorption: An innovational and compelling approach toward fluoride remediation from water. 2022 , 223-242		
239	Photo (Catalytic) Oxidation Processes for the Removal of Dye: Focusing on TiO ₂ Performance. 2022 , 75-90		
238	Recent trends of carbon nanotubes and chitosan composites for hexavalent chromium removal from aqueous samples. 2022 , 177-207		
237	Interaction of diesel oil contaminants with laterite soil and bentonite treated by sawdust -landfill liner. 1-17		
236	Effect of the interaction of fulvic acid with Pb(II) on the distribution of Pb(II) between solid and liquid phases of four minerals.. 2022 ,		0
235	A critical review on clay-based nanocomposite particles for application of wastewater treatment.		0
234	Preparation of efficient and economical adsorbent for Cu ²⁺ and Pb ²⁺ adsorption via modifying the silicon-oxygen structure of leaching residues. 2022 , 31, 102008		
233	A PEI/TMC membrane modified with an ionic liquid with enhanced permeability and antibacterial properties for the removal of heavy metal ions.. 2022 , 435, 129010		0
232	Hybrid nanofiltration thin film hollow fiber membranes with adsorptive supports containing bentonite and LDH nanoclays for boron removal. 2022 , 655, 120576		0
231	Clay-hydrochar composites return to cadmium contaminated paddy soil: Reduced Cd accumulation in rice seed and affected soil microbiome.. 2022 , 155542		0

- 230 Efficient removal of Pb(II) and Hg(II) with eco-friendly polyaspartic acid/ layered double hydroxide by host-guest interaction. **2022**, 225, 106536 0
- 229 Ion exchange to immobilize Cd(II) at neutral pH into silicate matrix prepared by co-grinding kaolinite with calcium compounds.. **2022**, 134677 0
- 228 Natural and recycled materials for sustainable membrane modification: Recent trends and prospects.. **2022**, 156014 1
- 227 Removal of pesticides from water and wastewater by agricultural biomass-based adsorbents. **2022**, 365-384
- 226 Contamination Level in Geo-Accumulation Index of River Sediments at Artisanal and Small-Scale Gold Mining Area in Gorontalo Province, Indonesia. **2022**, 19, 6094 1
- 225 Overlooked Role of Chromium(V) and Chromium(IV) in Chromium Redox Reactions of Environmental Importance. 0
- 224 The Gel Growth Technique: A Neglected Yet Effective Tool to Prepare Crystals of Oxysalts and Supergene Minerals. **2022**, 12, 645 0
- 223 Adsorbent-to-Photocatalyst: Recycling Heavy Metal Cadmium by Natural Clay Mineral for Visible-Light-Driven Photocatalytic Antibacterial. 0
- 222 Carbon Composites as Metal-Free Catalysts. **2022**, 131-169
- 221 Zwitterionic Ammonium-Sulfonato Grafted Cellulose: An Efficient Absorbent for Thallium Removal. 0
- 220 Adsorption of Pollutants from Liquid Swine Manure Through the Application of Metabasalt Rock Powder. **2022**, 233, 0
- 219 Exploring the applicability of a geopolymer and a biopolymer as an environmentally benign treatment option for heavy metals contaminated water. **2022**, 135, 104392
- 218 Characterization of iron-modified natural clay for textile dye retention by sono-adsorption technology. **2022**, 15, 0
- 217 High efficient and selective removal of U(VI) from lanthanides by phenanthroline diamide functionalized carbon doped boron nitride. *Chemical Engineering Journal*, **2022**, 137337 14.7 0
- 216 Amending excavated soft marine clay with fine incineration bottom ash as a fill material for construction of transportation infrastructure. **2022**, 35, 100796 0
- 215 Multi-functional metal-organic frameworks for detection and removal of water pollutions. 3
- 214 Metal Cation Doping Enhances Selective Adsorption of Cr³⁺ at Oxide Interfaces. 0
- 213 Iron Based Passivator Mitigates Arsenic Reduction Process Coupled to Methane Oxidation in Paddy Soils. 0

212	MODELING AND OPTIMIZATION OF INDEPENDENT FACTORS INFLUENCING LEAD(II) BIOSORPTION FROM AQUEOUS SYSTEMS: A STATISTICAL APPROACH. 2022 , e01270	1
211	Adsorption of chromium VI onto hydroxyapatite χ hitosan- montmorillonite thin film. 2022 ,	
210	Molecular-level understanding of metal ion retention in clay-rich materials.	5
209	Cellulose polymers with χ mino ester pendant group: design, synthesis, molecular docking and application in adsorption of toxic metals from wastewater. 2022 , 16,	1
208	Clay honeycomb monoliths for the simultaneous retention of lead and cadmium in water. 2022 , 102765	1
207	High-Efficiency Adsorption Performance of Cobalt Alginate/ Graphene Oxide Aerogel Prepared by Green Method for Methylene Blue. 2022 , 7,	1
206	Synthesis and efficient use of low-cost natural red clay catalyst for the production of upgraded fuel oil using pyrolysis of waste expanded polystyrene and in situ vapour phase hydrogenation.	0
205	Assessment of Trace Metals Contamination, Species Distribution and Mobility in River Sediments Using EDTA Extraction. 2022 , 19, 6978	0
204	ClayBiomass Composites for Water Purification. 2022 , 26,	0
203	Groundwater quality and human health risk assessment in selected coastal and floodplain areas of Bangladesh. 2022 , 249, 104041	1
202	Removal of heavy metals from polluted water using magnetic adsorbent based on χ carrageenan and N-doped carbon dots. 2022 , 213, 105915	0
201	Sand/polyethyleneimine composite microparticles: Eco-friendly, high selective and efficient heavy metal ion catchers. 2022 , 649, 129540	1
200	FCC spent catalyst as an alternative reagent in Mo-contaminated hazardous waste enhanced stabilization. 2022 , 28, 100733	
199	Removal of aflatoxin B1 and zearalenone by clay mineral materials: In the animal industry and environment. 2022 , 228, 106614	0
198	Effect of layer type distribution within the crystallite on the diffracted (00 χ) theoretical intensities. 2022 , 354, 03009	
197	Review of activated carbon adsorbent material for textile dyes removal: Preparation, and modelling. 2022 , 5, 100325	3
196	Synthesis and Applications of Organic Framework-Based Cellulosic Nanocomposites. 2022 , 441-472	
195	The use of natural zeolite and chamotte clay-based sorbents for the extraction of sodium and potassium ions from saline water: a preliminary study. 2022 , 44-53	

- 194 Pyrolysis of rubber seed pericarp biomass treated with sulfuric acid for the adsorption of crystal violet and methylene green dyes: an optimized process. 1-10 3
- 193 Understanding Cd²⁺ Adsorption Mechanism on Montmorillonite Surfaces by Combining DFT and MD. **2022**, 10, 1381
- 192 Highly efficient removal of cadmium (II) ions using cellulose-based monolith with a hierarchically porous structure fabricated through phase separation method. **2022**, 48, 102901
- 191 Montmorillonite and modified montmorillonite as adsorbents for removal of water soluble organic dyes: A review on current status of the art. **2022**, 143, 109686 0
- 190 Adsorptive removal of 2,4-dinitrophenol from aqueous phase using amine functionalized metal organic framework (NH₂-MIL-101(Cr)). **2022**, 289, 126493 1
- 189 Effective and simultaneous removal of heavy metals and neutralization of acid mine drainage using an attapulgite-soda residue based adsorbent. **2022**, 843, 157120
- 188 Two Keggin-type polyoxometalates used as adsorbents with high efficiency and selectivity toward antibiotics and heavy metals. **2022**, 1267, 133604 1
- 187 Facile fabrication of macroporous carbon materials with Cucurbit[6]uril as precursor/template and its application for uranium removal. **2022**, 28, 102779
- 186 Development of Cationic Benzimidazole-Containing UiO-66 through Step-by-Step Linker Modification to Enhance the Initial Sorption Rate and Sorption Capacities for Heavy Metal Oxo-Anions.
- 185 Ionic Polyacrylamides as Stability-Modifying Substances of Soil Mineral Suspensions Containing Heavy Metal Impurities. **2022**, 10, 1473
- 184 Polyacrylonitrile fluorescent nanofibers for selective and reversible copper detection in aqueous solutions. **2022**, 154302 1
- 183 Effect of Pyrolysis Temperature on Removal Efficiency and Mechanisms of Hg(II), Cd(II), and Pb (II) by Maize Straw Biochar. **2022**, 14, 9022 0
- 182 Adsorptive Removal of Lead from Water Using a Novel Cysteine-Bentonite/Poly(vinyl alcohol)/Alginate Nanocomposite.
- 181 Fabrication of polyamide-12/cement nanocomposite and its testing for different dyes removal from aqueous solution: characterization, adsorption, and regeneration studies. **2022**, 12, 2
- 180 Data-Driven Experimental Design of Rheological Clay/Polymer Composites. **2022**, 61, 11455-11463
- 179 Simultaneous adsorption of heavy metals on mesoporous reduced graphene oxide/Fe₂O₃ nanocomposites.
- 178 A review of the removal of heavy metal ions in wastewater by modified montmorillonite. 0
- 177 Adsorption of Heavy Metals from Small-Scale Gold Processing in Baguio Mining District, Philippines. **2022**, 16,

176	Novel green technology for wastewater treatment: Geo-material/geopolymer applications for heavy metal removal from aquatic media. 2022,	1
175	Efficient Removal of Cd (II) from Aquatic Media by Heteronanostructure MgO@TiO ₂ @g-C ₃ N ₄ . 2022, 2022, 1-14	3
174	Adsorption of phenol by sugarcane biochar@bentonite. 1-13	
173	The study on contamination of bottom sediments from the Odra River estuary (SW Baltic Sea) by tributyltin using environmetrics methods. 2022, 136133	0
172	Reviewing the use of zeolites and clay based catalysts for pyrolysis of plastics and oil fractions.	1
171	Hydroxyapatite/Dolomite alkaline activated material reaction in the formation of low temperature sintered ceramic as adsorbent materials. 2022, 349, 128603	0
170	Recent advances in starch-based magnetic adsorbents for the removal of contaminants from wastewater: A review. 2022, 218, 909-929	0
169	Clay-polymer nanocomposites for water and wastewater treatment: A comprehensive review. 2022, 307, 135869	2
168	Adsorption of organic water pollutants by clays and clay minerals composites: A comprehensive review. 2022, 229, 106686	4
167	Effect mechanism of litter extract from <i>Alternanthera philoxeroides</i> on the selective absorption of heavy metal ions by amphoteric purple soil. 2022, 321, 115970	0
166	Metal cations doping enhances selective adsorption of Cr ³⁺ at oxide interfaces. 2022, 300, 121893	0
165	New pyridyl and aniline-functionalized carbamoylcarboxylic acids for removal of metal ions from water by coagulation-flocculation process. 2023, 451, 138396	4
164	Study on the Effectiveness and Mechanism of Mercapto-Modified Attapulgite for Remediation of Cadmium-Contaminated Paddy Soil. 2022, 233,	0
163	Studies towards the adsorption of sulphate ions from acid mine drainage by modified attapulgite clays. 2022, 42, 241-254	0
162	Enhanced adsorption performance of La(III) and Y(III) on kaolinite by oxalic acid intercalation expansion method. 2022, 229, 106693	0
161	Iron-based passivator mitigates the coupling process of anaerobic methane oxidation and arsenate reduction in paddy soils. 2022, 313, 120182	0
160	Perspectives on green fabrication and sustainable utilization of adsorption materials for wastewater treatment. 2022, 187, 541-548	2
159	Ab initio calculation of the adsorption of As, Cd, Cr, and Hg heavy metal atoms onto the illite(001) surface: Implications for soil pollution and reclamation. 2022, 312, 120072	0

- 158 Simultaneous scavenging of As(V) and safranin O dye by Mg/Al LDH-zeolite heterocoagulated materials: The effect of adsorbent synthesis approach on its efficiency in static and dynamic system. **2022**, 302, 122072 ○
- 157 Metal organic framework composites as adsorbents: Synergistic effect for water purification. **2022**, 473, 214815 1
- 156 An investigation of the effects of humic acid on soil erosion and loss of phosphorus from soil to runoff: Experiment and modeling. **2022**, 427, 116121 1
- 155 Adsorbent-to-photocatalyst: Recycling heavy metal cadmium by natural clay mineral for visible-light-driven photocatalytic antibacterial. **2023**, 629, 1055-1065 ○
- 154 Fruit peels as effective materials for heavy metal remediation from the aqueous environment. **2023**, 131-157 ○
- 153 Removal of Toxic Metal Ions from Wastewater Through Microbial Fuel Cells. **2022**, 299-325 ○
- 152 Corrosion impact of AA6061/clay composite for industrial application. **2022**, ○
- 151 The presence of inorganic and organic contaminants in urban water. **2022**, 85-100 ○
- 150 Biodegradation of Azo Dye Pollutants Using Microorganisms. **2022**, 1-29 ○
- 149 Application of Bio-Based and Inorganic Composite Materials to Remove Heavy Metals from Textile Effluent. **2022**, 179-196 ○
- 148 Functionalized magnetic iron oxide-based composites as adsorbents for the removal of heavy metals from wastewater. **2022**, 401-424 ○
- 147 The recent development of inverse vulcanized polysulfide as an alternative adsorbent for heavy metal removal in wastewater. **2023**, 216, 114306 ○
- 146 Carbon dots as adsorbents for removal of toxic chemicals. **2023**, 161-180 ○
- 145 Removal of heavy metals from industrial effluent by development of TiO₂/AC nanosorbent. 1-24 ○
- 144 Adsorptive Membranes for Arsenic Removal [Principles, Progress and Challenges. 1-21 ○
- 143 Development of Adsorptive Materials for Selective Removal of Toxic Metals in Wastewater: A Review. **2022**, 12, 1057 2
- 142 Polypropylene microplastics affect the distribution and bioavailability of cadmium by changing soil components during soil aging. **2022**, 130079 ○
- 141 Comparison of sorption properties towards toxic metal ions of organomineral composites based on vermiculite with in situ immobilized and adsorbed poly [8-oxyquinoline methacrylate]. **2022**, 13, 289-300 ○

- 140 Assessment of the distribution and ecological risks of heavy metals in coastal sediments in Vietnam's Mong Cai area. ○
- 139 Comparison of microscopic adsorption characteristics of Zn(II), Pb(II), and Cu(II) on kaolinite. **2022**, 12, ○
- 138 Cr(VI) removal from contaminated waters using ultra-thin layered meixnerite. ○
- 137 Modified Cobalt Ferrite Entrapped Chitosan Beads as a Magnetic Adsorbent for Effective Removal of Malachite Green and Copper (II) Ions from Aqueous Solutions. ○
- 136 Adsorption removal of heavy metal ions from multi-component aqueous system by clay-supported nanoscale zero-valent iron. 1-12 ○
- 135 Three-dimensional hierarchical pore biochar prepared from soybean protein and its excellent Cr(VI) adsorption. **2022**, 122295 ○
- 134 Preparation and structure analyses of Sn-bentonite for pertechnetate removal. **2022**, 168, 133-141 ○
- 133 Adsorption of copper on iminodisuccinic acid modified attapulgite: characterization and mechanism. **2023**, 28, 220343-0 ○
- 132 Agro-Industrial Waste as Potential Heavy Metal Adsorbents and Subsequent Safe Disposal of Spent Adsorbents. **2022**, 14, 3298 ○
- 131 The highly efficient simultaneous removal of Pb²⁺ and methylene blue induced by the release of endogenous active sites of montmorillonite. ○
- 130 Alkali lignin as a pH response bifunctional material with both adsorption and flocculation for wastewater treatment. **2022**, ○
- 129 Enrichment of Metals in the Sediments of an Industrially Impacted Estuary: Geochemistry, Dispersion and Environmental Considerations. **2022**, 12, 10998 1
- 128 A Potential Peanut Shell Feedstock Pyrolyzed Biochar and Iron-Modified Peanut Shell Biochars for Heavy Metal Fixation in Acid Mine Drainage. ○
- 127 Modified zeolite as an adsorbent for dyes, drugs, and heavy metal removal: a review. ○
- 126 Efficient and Selective Adsorption of Uranium by Diamide-Pyridine-Functionalized Hierarchically Porous Boron Nitride. **2022**, 122538 ○
- 125 The oxidation states of heavy metals and their adsorption behavior onto biobased hydrogels. ○
- 124 Insights into lithium adsorption by coal-bearing strata kaolinite. ○
- 123 Hybrid adsorptive nanofiltration hollow fiber membranes with charge-patterned UiO-66 incorporated thin-film nanocomposite selective layer for enhanced boron removal. **2022**, 664, 121116 ○

- 122 Centrifugally spun lignin fibers with high Cr(VI) adsorption capacity. **2022**, 189, 115833 ○
- 121 A review on metal-organic frameworks for the removal of hazardous environmental contaminants. **2023**, 305, 122416 ○
- 120 The aggregation of natural inorganic colloids in aqueous environment: A review. **2023**, 310, 136805 ○
- 119 Highly effective removal of Hg(II) solution using corn bract@MoS₂ as a new biomass adsorbent. **2022**, 12, 31792-31800 ○
- 118 Removal of trivalent chromium from aqueous solutions by natural clays: Valorization of saturated adsorbents as raw materials in ceramic manufacturing. **2023**, 231, 106747 1
- 117 Adsorption of Pb²⁺ and methylene blue by Al-incorporated magadiite. **2023**, 231, 106745 ○
- 116 Synthesis of NaA zeolite via the mesoscale reorganization of submolten salt depolymerized kaolin: A mechanistic study. **2023**, 454, 140243 ○
- 115 Sorption studies of Pb(II) onto montmorillonite clay. **2022**, 1087, 012007 ○
- 114 Sporadic Pb accumulation by plants: influence of soil biogeochemistry, microbial community and physiological mechanisms. **2022**, 130391 1
- 113 ULTRASOUND-ASSISTED ADSORPTION HG (II) USING KAOLIN ADSORBENTS MODIFIED WITH ANIONIC SURFACTANT. **2022**, 10, 216-227 ○
- 112 Assessment of Heavy Metals and Radionuclides Concentration in Selected Mineral Waters Available on the Polish Market. **2022**, 12, 11401 1
- 111 The changes in the physicochemical properties of calcareous soils and the factors of arsenic (As) uptake by wheat were investigated after the cessation of effluent irrigation for nearly 20 years. **2022**, 160171 ○
- 110 Partitioning pattern of metals onto sediment particles in shallow lakes: an exponential decrease with increased particle size and its environmental implications. ○
- 109 Highly efficient preferential adsorption of Pb(II) and Cd(II) from aqueous solution using sodium lignosulfonate modified illite. ○
- 108 Nickel removal from wastewater using electrocoagulation process with zinc electrodes under various operating conditions: performance investigation, mechanism exploration, and cost analysis. 1
- 107 Amino-functionalized bovine serum albumin amyloid fibrils aerogel for absorbing copper from water. **2022**, 380, 134955 ○
- 106 The Synergistic Effect of Adsorption-Photocatalysis for Removal of Organic Pollutants on Mesoporous Cu₂V₂O₇/Cu₃V₂O₈/g-C₃N₄ Heterojunction. **2022**, 23, 14264 3
- 105 Examining the role of sustainability and natural resources management in improving environmental quality: Evidence from Asian countries. **2023**, 80, 103136 ○

104	Coagulation removal of nickel (II) ions by ferric chloride: Efficiency and mechanism. 2022 , 94,	0
103	Enhanced silicate remediation in cadmium-contaminated alkaline soil: Amorphous structure improves adsorption performance. 2023 , 326, 116760	0
102	Various methods for the recovery of metals from the wastewater. 2023 , 213-237	0
101	Induced abundant oxygen vacancies in Sc ₂ VO ₅ /g-C ₃ N ₄ heterojunctions for enhanced photocatalytic degradation of levofloxacin. 2022 , 13, 688-700	0
100	Recent progress on the remediation of metronidazole antibiotic as emerging contaminant from water environments using sustainable adsorbents: A review. 2023 , 51, 103405	0
99	An overview of the use of water-stable metal-organic frameworks in the removal of cadmium ion. 2023 , 11, 109131	1
98	Competitive ion-exchange reactions of Pb(II) (Pb ²⁺ /PbCl ⁺) and Ra(II) (Ra ²⁺) on smectites: Experiments, modeling, and implication for ²²⁶ Ra(II)/ ²¹⁰ Pb(II) disequilibrium in the environment.. 2023 , 313, 137369	0
97	Synthesis and application of a thiol functionalized clay for borewell water purification: Microchemical characteristics and adsorption studies. 2023 , 190, 33-53	0
96	Biotransformation of chloramphenicol by white-rot-fungi <i>Trametes versicolor</i> under cadmium stress. 2023 , 369, 128508	0
95	Optimization of cemented paste backfill with carbon nanotubes as a sustainable treatment for lead-containing tailings. 2023 , 415, 118152	0
94	Solvent-induced facile synthesis of MnFe ₂ O ₄ and the As(V) removal mechanism study. 2023 , 371, 120845	1
93	Optimizing removal of chromium (VI) ions from water by coagulation process using central composite design: Effectiveness of grape seed as a green coagulant. 2023 , 307, 122805	1
92	Adsorption of single and mixed colors by kaolinite clay: Experimental research combined with a theoretical examination using DFT. 2023 , 1276, 134687	0
91	An insight into the potential of dolomite powder as a sorbent in the elimination of heavy metals: A review. 2023 , 7, 100276	1
90	Zirconium-modified attapulgite was used for removing of Cr(vi) in aqueous solution. 2022 , 20, 1432-1443	0
89	Green Skill Development Program for Wastewater Treatment and Reuse. 2022 , 1-16	0
88	Confinement and passivation of perovskite quantum dots in porous natural palygorskite toward an efficient and ultrastable light-harvesting system in water. 2022 , 13, 14141-14150	1
87	Environmental Impact of Sulaimani Steel Plant (Kurdistan Region, Iraq) on Soil Geochemistry. 2022 , 6, 86	0

- 86 Artificial coloration of smectite by adsorbing dyes from wastewater to make a hybrid pigment. 1-36 ○
- 85 Assessment of the distribution and ecological risks of heavy metals in coastal sediments in Vietnam's Mong Cai area. **2023**, 195, ○
- 84 Zwitterionic ammonium-sulfonate grafted cellulose for efficient thallium removal and adsorption mechanism study. **2022**, ○
- 83 Adsorption mechanism and modeling of radionuclides and heavy metals onto ZnO nanoparticles: a review. **2023**, 13, ○
- 82 Enhancement of heavy metals desorption from the soil by eddy deep leaching in hydrocyclone. **2022**, ○
- 81 A Brief Review of Recent Results in Arsenic Adsorption Process from Aquatic Environments by Metal-Organic Frameworks: Classification Based on Kinetics, Isotherms and Thermodynamics Behaviors. **2023**, 13, 60 1
- 80 Heavy metal removal from aqueous solution by granular hydrated Portland cement. **2022**, 39, 3350-3360 ○
- 79 Modification of activated carbon-based adsorbent for removal of industrial dyes and heavy metals: A review. **2022**, ○
- 78 Removal of Pb(II) and Cd(II) heavy metals from aqueous solution by FeNi₃@MnO₂ core-shell nanostructure. 1-12 ○
- 77 Adsorption of lead by kaolinite, montmorillonite, goethite, and ferrihydrite: Performance and mechanism based on quantitative analysis. 1-32 ○
- 76 Nanocellulose-Based Adsorbents for Heavy Metal Ion. **2022**, 14, 5479 2
- 75 Two-Dimensional Materials Applied in Membranes of Redox Flow Battery. ○
- 74 Porous Materials for Water Purification. ○
- 73 A Novel Approach for the Development of Low-Cost Polymeric Thin-Film Nanocomposite Membranes for the Biomacromolecule Separation. **2022**, 7, 47967-47985 1
- 72 Porous Materials for Water Purification. ○
- 71 Synthesis and Characterization of Novel Polymeric-Sepiolite Composite Resin for Effective Water Softening: Applications in Batch and Column Adsorption. 1-21 ○
- 70 An all-biomass adsorbent: competitive removal and correlative mechanism of Cu²⁺, Pb²⁺, Cd²⁺ from multi-element aqueous solutions. ○
- 69 Evidence of lead ions on palygorskite surface after adsorptive process: kinetic and isotherms studies. **2022**, 27, ○

- 68 Effective Removal of Trace-Level Toxic Metals from Flue Gas Desulfurization Wastewater Using SiO₂ Supported Hydrogel Sorbent. **2023**, 100324 ○
- 67 Effect of clay supplementation on growth performance of broiler chickens: A systematic review and meta-analysis. ○
- 66 Production of adsorbents based on sunflower husks for removal of chromium (VI) from wastewater. **2023**, 12, 506-513 ○
- 65 Dynamic adsorption of Pb by Fe-Mg clay-quartz beds using micro-column testing. 1-35 ○
- 64 Using shrimp shells and concrete to mitigate leaching for metals from waste rock. ○
- 63 Application of Walnut Shell Biowaste as an Inexpensive Adsorbent for Methylene Blue Dye: Isotherms, Kinetics, Thermodynamics, and Modeling. **2023**, 10, 60 2
- 62 The subhorizon-Ofh as a prospective geoinicator of temperate soil quality in relation to selected trace elements and PAHs: A review. ○
- 61 Rapid and effective removal of heavy metal ions from aqueous solution using nanostructured clay particles. **2023**, 10, 100097 ○
- 60 Stabilization of arsenic, antimony, and lead in contaminated soil with montmorillonite modified by ferrihydrite: Efficiency and mechanism. **2023**, 457, 141182 ○
- 59 Effects and mechanism on cadmium adsorption removal by CaCl₂-modified biochar from selenium-rich straw. **2023**, 370, 128563 ○
- 58 The use of local materials to remove heavy metals for household-scale drinking water treatment: A review. **2023**, 29, 103005 ○
- 57 Sustainable removal of uranium from acidic wastewater using various mineral raw materials. **2023**, 330, 117159 ○
- 56 Study of Electronic Bands of Diatomic Molecules for the Evaluation of Toxicity of Green Crackers Using LIBS Coupled with Chemometric Method. **2023**, 4, 1-14 ○
- 55 A review on adsorption characteristics and influencing mechanism of heavy metals in farmland soil. **2023**, 13, 3505-3519 ○
- 54 An overview of water pollutants in present scenario. **2023**, 83-105 ○
- 53 Inorganic pollutants and their degradation with nanomaterials. **2023**, 57-95 ○
- 52 Fe, Zn, and Cu in the Organic Fraction of Soils with Different Textures Under Intense Use of Agrochemicals in Flower Cultivation. **2023**, 234, ○
- 51 A review of PFAS adsorption from aqueous solutions: Current approaches, engineering applications, challenges, and opportunities. **2023**, 321, 121138 ○

- 50 Origin for superior adsorption of metal ions and efficient control of heavy metals by montmorillonite: A molecular dynamics exploration. **2023**, 14, 100467 ○
- 49 Using LIBS for monitoring and estimation of heavy elements in industrial wastewater during its remediation. **2023**, ○
- 48 Investigations of cadmium ion-doped L-histidine hydrochloride crystal growth, vibration, optical, thermal, SHG, and MTT assays for biological and optoelectronic applications. **2023**, 34, ○
- 47 Old wine and new bottles: Insights into traditional attapulgite adsorbents with functionalized modification strategies applied in efficient phosphate immobilization. **2023**, 395, 136451 ○
- 46 Removal of total dissolved solids from oil-field-produced water using ceramic adsorbents integrated with reverse osmosis. **2023**, ○
- 45 Sustainable nanocomposite porous absorbent and membrane sieves: Definition, classification, history, properties, synthesis, applications, and future prospects. **2023**, 11, 109367 ○
- 44 Impact of historical legacy pesticides on achieving legislative goals in Europe. **2023**, 873, 162312 ○
- 43 Influence of montmorillonite incorporation on ferrihydrite transformation and Cr(VI) behaviors during ferrihydrite-Cr(VI) coprecipitates aging. **2023**, 873, 162257 ○
- 42 Immobilization of Cd by mercapto-palygorskite in typical calcareous and acidic soil aggregates: Performance and differences. **2023**, 323, 138223 ○
- 41 Selective removal of copper (II) ions from aqueous solution using pyridyl-bridged mesoporous organosilica hybrid adsorbent. **2023**, 224, 115439 ○
- 40 New insights into the seepage behavior of heavy metal-contaminated loess and its underlying geochemical mechanism. **2023**, 620, 129476 ○
- 39 Periodic DFT study on heavy metals Cu(II) and Pb(II) atoms adsorption on Na-montmorillonite (010) edge surface. **2023**, 366-367, 115171 ○
- 38 Highly efficient entrapping and recovery of gadolinium and samarium ions by nano cerium orthovanadate from acidic solutions. **2023**, 379, 121690 ○
- 37 Potential removal of heavy metal ions from polluted water using Bauxite. **2023**, 12, 100362 ○
- 36 Desorption of cadmium from Fe Cd and recycle of Fe₀: Experimental and mechanism study. **2023**, 11, 109370 ○
- 35 Separation of toxic contaminants from water by silica aerogel-based adsorbents: A comprehensive review. **2023**, 53, 103676 ○
- 34 Molecular dynamics study of the exchange processes of heavy metals into montmorillonite: Characterization of hydrated edge surfaces and dynamic exchange mechanism. **2023**, 150, 105587 ○
- 33 Characterization and sorption study of Zn₂[FeAl]-CO₃ layered double hydroxide for Cu(II) and Pb(II) removal. **2023**, 320, 123869 ○

32	Adsorption of radioactive cobalt(II) in the groundwater-soil systems surrounding the effluent pipeline of a proposed NPP in China. 2023 , 332, 1287-1302	○
31	Thermal activation, characterization and performance evaluation of Ethiopian bentonite for sodium removal. 2023 , 87, 998-1008	○
30	Acetaminophen removal using activated bentonite characterized by (BET, XRF, SEM) and bipolar electrocoagulation: A comparative study. application of coupling process on a pharmaceutical effluent. 2023 , 44, 100998	○
29	Synergistic effect of sulfidated nano zerovalent iron and proton-buffering montmorillonite in reductive immobilization of alkaline Cr(VI)-contaminated soil. 2023 , 321, 138132	○
28	Removal of Heavy Metals (Pb ²⁺ , Zn ²⁺ , Cu ²⁺ , Hg ²⁺ , Co ²⁺ , Cr ²⁺ and Cd ²⁺) From Water by Trimethyl Phenyl Ammonium Cation (TMPA ⁺) Based Organoclay: Experimental and Statistical Test.	○
27	Advancements in Clay Materials for Trace Level Determination and Remediation of Phenols from Wastewater: A Review. 2023 , 10, 125	○
26	Ni-Ti Intercalated and Supported Bentonite for Selective Hydrogenation of Cinnamaldehyde.	○
25	Highly effective sequestration of Cd(II) from aqueous solution using marine diatom biomass: Adsorption performances and mechanism. 11,	○
24	Unique Geochemistry of Arsenic-Contaminated Groundwater and Corresponding Mitigation Efforts in Southern Nepal.	○
23	Removal of Copper Ions from Wastewater: A Review. 2023 , 20, 3885	1
22	Detoxification of olive mill wastewater by adsorption on activated clay. 2023 , 8, 167-177	○
21	Manganese-sulfonato porphyrin adsorbed on amino kaolinite as heterogeneous catalyst for oxidation and polymerization reactions. 2023 , 235, 106871	○
20	Biodegradation of Azo Dye Pollutants Using Microorganisms. 2023 , 781-809	○
19	On the adsorption of neodymium species from aqueous solution by beneficiated palygorskite. 2023 , 195, 108029	○
18	The impact of livestock activities and geochemical processes on groundwater quality of fractured volcanic rock aquifer: Lake HİE watershed (NE Turkey). 2023 , 195,	○
17	Development of composition and study of sorbent properties based on saponite. 259, 21-29	○
16	Pb contaminated soil from a lead-acid battery plant immobilized by municipal sludge and raw clay. 1-13	○
15	Application of Porous Carbon Material for Water Treatment and Gas Storage. 2023 , 623-654	○

- 14 Saponite-inspired Materials as Remediation Technologies for Water Treatment: an Overview. **2023**, 10, ○
- 13 Facile Synthesis of the Polyaniline@Waste Cellulosic Nanocomposite for the Efficient Decontamination of Copper(II) and Phenol from Wastewater. **2023**, 13, 1014 ○
- 12 Adsorption and Removal of Cr⁶⁺, Cu²⁺, Pb²⁺, and Zn²⁺ from Aqueous Solution by Magnetic Nano-Chitosan. **2023**, 28, 2607 ○
- 11 Efficient Removal of Pb(II) by Highly Porous Polymeric Sponges Self-Assembled from a Poly(Amic Acid). **2023**, 28, 2897 ○
- 10 Possibility of obtaining a porous silica material from Khongor-ovoo kaolinite by mechanochemical activation. **2022**, 112-116 ○
- 9 Application of biowaste and nature-inspired (nano)materials in fuel cells. ○
- 8 Preparation of Molybdenum Disulfide with Different Nanostructures and Its Adsorption Performance for Copper (II) Ion in Water. **2023**, 13, 1194 ○
- 7 Use of Nature Based Materials for Textile Wastewater Treatment - A Review. 63, 45-65 ○
- 6 Effects of types and concentrations of modified Cloisite Clays on properties of chitosan nanocomposites for food packaging. ○
- 5 Response of Bacterial Communities to Heavy Metal Contamination in an Abandoned Chromate Factory. 1-11 ○
- 4 Layered Double Hydroxides: An insight into the role of Hydrotalcite-type Anionic Clays in Energy and Environmental applications with Current Progress and Recent Prospects. **2023**, 100399 ○
- 3 Construction of a Bridging Network Structure by Citric Acid for Environmental Heavy Metal Extraction. **2023**, 7, 676-684 ○
- 2 Synthesis and Characterization of Graphene Oxide (GO) Obtained by Modified Hummer's Method: Application to the Removal of Cadmium ions from Wastewater. ○
- 1 Effective removal of Pb(II) and Cu(II) from aqueous solutions using a hybrid composite of fuller's earth, aluminum silicate and chitosan. ○