Dorota Kolodynska

List of Publications by Citations

120 papers	2,903 citations	25 h-index	50 g-index
138 ext. papers	3,488 ext. citations	5.9 avg, IF	6.01 L-index

#	Paper	IF	Citations
120	Kinetic and adsorptive characterization of biochar in metal ions removal. *Chemical Engineering Journal*, **2012**, 197, 295-305	14.7	430
119	Comparison of sorption and desorption studies of heavy metal ions from biochar and commercial active carbon. *Chemical Engineering Journal*, **2017**, 307, 353-363	14.7	316
118	Equilibrium, thermodynamic and kinetic studies on removal of chromium, copper, zinc and arsenic from aqueous solutions onto fly ash coated by chitosan. *Chemical Engineering Journal*, **2015**, 274, 200-212	14.7	145
117	Synthesis and adsorption properties of chitosan-silica nanocomposite prepared by sol-gel method. *Nanoscale Research Letters*, **2015**, 10, 87	5	105
116	Preparation and characterization of novel TiO2/lignin and TiO2-SiO2/lignin hybrids and their use as functional biosorbents for Pb(II). *Chemical Engineering Journal*, **2017**, 314, 169-181	14.7	83
115	Chitosan as an effective low-cost sorbent of heavy metal complexes with the polyaspartic acid. *Chemical Engineering Journal*, **2011**, 173, 520-529	14.7	67
114	Silica with immobilized phosphinic acid-derivative for uranium extraction. *Journal of Hazardous Materials*, **2016**, 314, 326-340	12.8	64
113	Malic acid-enhanced chitosan hydrogel beads (mCHBs) for the removal of Cr(VI) and Cu(II) from aqueous solution. *Chemical Engineering Journal*, **2018**, 353, 225-236	14.7	64
112	Application of Mineral Sorbents for Removal of Petroleum Substances: A Review. *Minerals (Basel, Switzerland)*, **2017**, 7, 37	2.4	61
111	Adsorption of BTX from aqueous solutions by Na-P1 zeolite obtained from fly ash. *Chemical Engineering Research and Design*, **2017**, 109, 214-223	5.5	57
110	Evaluation of heavy metal ions removal from acidic waste water streams. *Chemical Engineering Journal*, **2014**, 252, 362-373	14.7	57
109	Application of a new generation of complexing agents in removal of heavy metal ions from different wastes. *Environmental Science and Pollution Research*, **2013**, 20, 5939-49	5.1	54
108	Development of lignin based multifunctional hybrid materials for Cu(II) and Cd(II) removal from the aqueous system. *Chemical Engineering Journal*, **2017**, 330, 518-530	14.7	52
107	Adsorption characteristics of chitosan modified by chelating agents of a new generation. *Chemical Engineering Journal*, **2012**, 179, 33-43	14.7	47
106	The effect of the novel complexing agent in removal of heavy metal ions from waters and waste waters. *Chemical Engineering Journal*, **2010**, 165, 835-845	14.7	44
105	Sorption of heavy metal ions from aqueous solutions in the presence of EDTA on monodisperse anion exchangers. *Desalination*, **2008**, 227, 150-166	10.3	43
104	Gd-DTPA Adsorption on Chitosan/Magnetite Nanocomposites. *Nanoscale Research Letters*, **2016**, 11, 168	5	42

103	Cu(II), Zn(II), Co(II) and Pb(II) removal in the presence of the complexing agent of a new generation. *Desalination*, **2011**, 267, 175-183	10.3	42
102	Uptake of heavy metal ions from aqueous solutions by sorbents obtained from the spent ion exchange resins. *Microporous and Mesoporous Materials*, **2017**, 244, 127-136	5.3	39
101	Selective Removal of Heavy Metal Ions from Waters and Waste Waters Using Ion Exchange Methods **2012**,		39
100	Zeolite properties improvement by chitosan modification▯sorption studies. *Journal of Industrial and Engineering Chemistry*, **2017**, 52, 187-196	6.3	35
99	Development of New Effective Sorbents Based on Nanomagnetite. *Nanoscale Research Letters*, **2016**, 11, 152	5	31
98	DOWEX M 4195 and LEWATIT▯ MonoPlus TP 220 in Heavy Metal Ions Removal from Acidic Streams. *Separation Science and Technology*, **2014**, 49, 2003-2015	2.5	28
97	Polyaspartic Acid As a New Complexing Agent in Removal of Heavy Metal Ions on Polystyrene Anion Exchangers. *Industrial & Engineering Chemistry Research*, **2008**, 47, 6221-6227	3.9	27
96	Application of a New-Generation Complexing Agent in Removal of Heavy Metal Ions from Aqueous Solutions. *Industrial & Engineering Chemistry Research*, **2008**, 47, 3192-3199	3.9	27
95	FT-IR/PAS Studies of Cu(II)-EDTA Complexes Sorption ▯ the Chelating Ion Exchangers. *Acta Physica Polonica A*, **2009**, 116, 340-343	0.6	25
94	Metal Ions Removal Using Nano Oxide Pyrolox▯Material. *Nanoscale Research Letters*, **2017**, 12, 95	5	24
93	Preparation and properties of organomineral adsorbent obtained by sol▯gel technology. *Journal of Thermal Analysis and Calorimetry*, **2016**, 125, 1335-1351	4.1	24
92	Gd(III) Adsorption on the DTPA-functionalized chitosan/magnetite nanocomposites. *Separation Science and Technology*, **2018**, 53, 1006-1016	2.5	22
91	Investigations of Heavy Metal Ion Sorption Using Nanocomposites of Iron-Modified Biochar. *Nanoscale Research Letters*, **2017**, 12, 433	5	21
90	Cu(II), Zn(II), Ni(II), and Cd(II) Complexes with HEDP Removal from Industrial Effluents on Different Ion Exchangers. *Industrial & Engineering Chemistry Research*, **2010**, 49, 2388-2400	3.9	21
89	Polyacrylate anion exchangers in sorption of heavy metal ions with the biodegradable complexing agent. *Chemical Engineering Journal*, **2009**, 150, 280-288	14.7	21
88	Detoxification of municipal solid waste incinerator (MSWI) fly ash by single-mode microwave (MW) irradiation: Addition of urea on the degradation of Dioxin and mechanism. *Journal of Hazardous Materials*, **2019**, 369, 279-289	12.8	20
87	Adsorption of V(V), Mo(VI) and Cr(VI) Oxoanions by Chitosan▯Silica Composite Synthesized by Mannich Reaction. *Adsorption Science and Technology*, **2015**, 33, 645-657	3.6	20
86	Novel synthesis method combining a foaming agent with freeze-drying to obtain hybrid highly macroporous bone scaffolds. *Journal of Materials Science and Technology*, **2020**, 43, 52-63	9.1	20

85	Titania-Coated Silica Alone and Modified by Sodium Alginate as Sorbents for Heavy Metal Ions. *Nanoscale Research Letters*, **2018**, 13, 96	5	19
84	Evaluation of iron-based hybrid materials for heavy metal ions removal. *Journal of Materials Science* , **2014**, 49, 2483-2495	4.3	18
83	Application of strongly basic anion exchangers for removal of heavy metal ions in the presence of green chelating agent. *Chemical Engineering Journal*, **2011**, 168, 994-1007	14.7	18
82	Sorption of lanthanide ions on biochar composites. *Journal of Rare Earths*, **2018**, 36, 1212-1220	3.7	18
81	Recovery of metals from waste nickel-metal hydride batteries using multifunctional Diphonix resin. *Adsorption*, **2019**, 25, 367-382	2.6	17
80	Novel multifunctional ion exchangers for metal ions removal in the presence of citric acid. *Chemosphere*, **2020**, 251, 126331	8.4	17
79	Use of three types of magnetic biochar in the removal of copper(II) ions from wastewaters. *Separation Science and Technology*, **2018**, 53, 1045-1057	2.5	17
78	Sorption of Zn(II) and Pb(II) ions in the presence of the biodegradable complexing agent of a new generation. *Chemical Engineering Research and Design*, **2012**, 90, 1671-1679	5.5	17
77	Effect of adsorption of Pb(II) and Cd(II) ions in the presence of EDTA on the characteristics of electrical double layers at the ion exchanger/NaCl electrolyte solution interface. *Journal of Colloid and Interface Science*, **2009**, 333, 448-56	9.3	17
76	Iminodisuccinic acid as a new complexing agent for removal of heavy metal ions from industrial effluents. *Chemical Engineering Journal*, **2009**, 152, 277-288	14.7	17
75	Studies of application of monodisperse anion exchangers in sorption of heavy metal complexes with IDS. *Desalination*, **2009**, 239, 216-228	10.3	17
74	Heavy Metal Ions Removal in the Presence of 1-Hydroxyethane-1,1-diphosphonic Acid From Aqueous Solutions on Polystyrene Anion Exchangers. *Industrial & Engineering Chemistry Research*, **2009**, 48, 10584-10593	3.9	17
73	Green complexing agent EDDS in removal of heavy metal ions on strongly basic anion exchangers. *Desalination*, **2011**, 280, 44-57	10.3	16
72	Modified fly ash and zeolites as an effective adsorbent for metal ions from aqueous solution. *Adsorption Science and Technology*, **2017**, 35, 519-533	3.6	15
71	Modern hybrid sorbents New ways of heavy metal removal from waters. *Chemical Engineering and Processing: Process Intensification*, **2013**, 70, 55-65	3.7	15
70	Removal of heavy metal ions in the presence of the biodegradable complexing agent of EDDS from waters. *Chemical Engineering Journal*, **2013**, 221, 512-521	14.7	15
69	A new type of cation-exchange polymeric microspheres with pendant methylenethiol groups. *Polymers for Advanced Technologies*, **2013**, 24, 866-872	3.2	15
68	Polyacrylate anion exchangers in sorption of heavy metal ions with non-biodegradable complexing agents. *Chemical Engineering Journal*, **2009**, 150, 308-315	14.7	14

67	Studies on separation of iminodiacetate complexes of lanthanum (III) from neodymium (III) and praseodymium (III) on anion-exchangers. *Hydrometallurgy*, **1998**, 50, 51-60	4	14
66	Studies on application of polyacrylate anion-exchangers in sorption and separation of iminodiacetate rare earth element(III) complexes. *Hydrometallurgy*, **2001**, 62, 107-113	4	14
65	Static and dynamic studies of lanthanum(III) ion adsorption/desorption from acidic solutions using chelating ion exchangers with different functionalities. *Environmental Research*, **2020**, 191, 110171	7.9	14
64	Impacts of heavy metals and medicinal crops on ecological systems, environmental pollution, cultivation, and production processes in China. *Ecotoxicology and Environmental Safety*, **2021**, 219, 112336	7	14
63	Diphonix Resin® in sorption of heavy metal ions in the presence of the biodegradable complexing agents of a new generation. *Chemical Engineering Journal*, **2010**, 159, 27-36	14.7	13
62	Effect of accompanying ions and ethylenediaminedisuccinic acid on heavy metals sorption using hybrid materials Lewatit FO 36 and Purolite Arsen X np. *Chemical Engineering Journal*, **2015**, 276, 376-387	14.7	12
61	Zeolites in Phenol Removal in the Presence of Cu(II) Ions-Comparison of Sorption Properties after Chitosan Modification. *Materials*, **2020**, 13,	3.5	12
60	Methylglycinediacetic Acid as a New Complexing Agent for Removal of Heavy Metal Ions from Industrial Wastewater. *Solvent Extraction and Ion Exchange*, **2012**, 30, 181-196	2.5	12
59	Evaluation of possible use of the macroporous ion exchanger in the adsorption process of rare earth elements and heavy metal ions from spent batteries solutions. *Chemical Engineering and Processing: Process Intensification*, **2020**, 147, 107767	3.7	12
58	The effects of the treatment conditions on metal ions removal in the presence of complexing agents of a new generation. *Desalination*, **2010**, 263, 159-169	10.3	11
57	Synthesis and characterization of porous microspheres bearing pyrrolidone units. *Materials Chemistry and Physics*, **2015**, 149-150, 43-50	4.4	10
56	Hypertensive Rats Treated Chronically With N-Nitro-L-Arginine Methyl Ester (L-NAME) Induced Disorder of Hepatic Fatty Acid Metabolism and Intestinal Pathophysiology. *Frontiers in Pharmacology*, **2019**, 10, 1677	5.6	10
55	Application of ion exchangers for the purification of galvanic wastewater from heavy metals. *Separation Science and Technology*, **2018**, 53, 1097-1106	2.5	10
54	Investigation of Sorption and Separation of Lanthanides on the Ion Exchangers of Various Types		10
53	Utilization of Fly Ashes from the Coal Burning Processes to Produce Effective Low-Cost Sorbents. *Energy & Fuels*, **2017**, 31, 2095-2105	4.1	9
52	Nitrilotris(methylenephosphonic) acid as a complexing agent in sorption of heavy metal ions on ion exchangers. *Chemical Engineering Journal*, **2013**, 215-216, 948-958	14.7	9
51	Sol‐Gel Derived Organic‐Inorganic Hybrid Ceramic Materials for Heavy Metal Removal **2017**, 253-274		8
50	The zeolite modified by chitosan as an adsorbent for environmental applications. *Adsorption Science and Technology*, **2017**, 35, 834-844	3.6	8

49	Sorption of Cd(II), Pb(II), Cu(II), and Zn(II) Complexes with Nitrilotris(Methylenephosphonic) Acid on Polystyrene Anion Exchangers. *Industrial & Engineering Chemistry Research*, **2010**, 49, 4700-4709	3.9	8
48	Anion-exchange method for separation of ytterbium from holmium and erbium. *Hydrometallurgy*, **1997**, 47, 127-136	4	8
47	Separation of rare-earth element complexes with trans-1,2-diaminocyclohexane-N,N,N?,N?-tetraacetic acid on polyacrylate anion exchangers. *Hydrometallurgy*, **2004**, 71, 343-350	4	8
46	Separation of Y(III) complexes from Dy(III), Ho(III) and Er(III) complexes with iminodiacetic acid on the anion-exchangers type 1 and type 2. *Hydrometallurgy*, **1999**, 53, 89-100	4	8
45	The influence of a washing pretreatment containing phosphate anions on single-mode microwave-based detoxification of fly ash from municipal solid waste incinerators. *Chemical Engineering Journal*, **2020**, 387, 124053	14.7	8
44	The effect of the presence of metatartaric acid on removal effectiveness of heavy metal ions on chelating ion exchangers. *Environmental Technology (United Kingdom)*, **2011**, 32, 805-16	2.6	7
43	Hydrogels from Fundaments to Application **2016**,		7
42	Hexacyanoferrate Composite Sorbent in Removal of Anionic Species From Waters and Waste Waters. *Separation Science and Technology*, **2012**, 47, 1361-1368	2.5	6
41	Sorption of Cd(II), Co(II), and Zn(II) Complexes with MGDA on Anion Exchange Resins: A Study of the Influence of Various Parameters. *Separation Science and Technology*, **2013**, 48, 1801-1809	2.5	6
40	Sorption of Cu(II) and Ni(II) ions in the presence of the methylglycinediacetic acid by microporous ion exchangers and sorbents from aqueous solutions. *Open Chemistry*, **2011**, 9, 52-65	1.6	6
39	Removal of Cd(II) and Pb(II) complexes with glycolic acid from aqueous solutions on different ion exchangers. *Canadian Journal of Chemistry*, **2010**, 88, 540-547	0.9	6
38	Recovery of rare earth elements from acidic solutions using macroporous ion exchangers. *Separation Science and Technology*, **2019**, 54, 2059-2076	2.5	5
37	Enhanced Arsenic(V) Removal on an Iron-Based Sorbent Modified by Lanthanum(III). *Materials*, **2020** , 13,	3.5	5
36	New titanium oxide sorbent for As(V) and Cr(VI) removal as well as La(III) and Nd(III) recovery. *Journal of Molecular Liquids*, **2020**, 315, 113720	6	5
35	Ion Exchange Method for Removal and Separation of Noble Metal Ions **2015**,		5
34	Comparison of chelating ion exchange resins in sorption of copper(II) and zinc(II) complexes with ethylenediaminetetraacetic acid (EDTA) and nitrilotriacetic acid (NTA). *Canadian Journal of Chemistry*, **2008**, 86, 958-969	0.9	5
33	Investigation into the Use of Macroporous Anion Exchangers for the Sorption and Separation of Iminodiacetate Complexes of Lanthanum(III) and Neodymium(III). *Adsorption Science and Technology*, **2000**, 18, 719-726	3.6	5
32	Rare Earth Elements?Separation Methods Yesterday and Today **2019**, 161-185		5

31	Investigations of elemental depth distribution and chemical compositions in the TiO2/SiO2/Si structures after ion irradiation. *Surface and Coatings Technology*, **2020**, 387, 125494	4.4	4
30	Biodegradable chelating agent for heavy metal ions removal. *Separation Science and Technology*, **2016**, 51, 2576-2585	2.5	4
29	Chemical Composition of Native Oxide Layers on In+Implanted and Thermally Annealed GaAs. *Acta Physica Polonica A*, **2013**, 123, 943-947	0.6	4
28	Application of monodispersive anion exchangers in sorption and separation of Y3+ from Nd3+ and Sm3+ complexes with dcta. *Journal of Rare Earths*, **2008**, 26, 619-625	3.7	4
27	Purolite S 940 and Purolite S 950 in heavy metal ions removal from acidic streams. *Separation Science and Technology*, **2016**, 51, 2528-2538	2.5	4
26	Development of ion exchangers for the removal of health-hazardous perchlorate ions from aqueous systems. *Applied Geochemistry*, **2019**, 101, 75-87	3.5	4
25	Chemical composition of native oxides on noble gases implanted GaAs. *Thin Solid Films*, **2016**, 616, 55-63	2.2	3
24	The biodegradable complexing agents as an alternative to chelators in sorption of heavy metal ions. *Desalination and Water Treatment*, **2010**, 16, 146-155		3
23	New approach to Cu(II), Zn(II) and Ni(II) ions removal at high NaCl concentration on the modified chelating resin74, 184-196		3
22	Synthesis of lignin-containing polymer hydrogels with tunable properties and their application in sorption of nickel(II) ions. *Industrial Crops and Products*, **2021**, 164, 113354	5.9	3
21	Development of functional lignin-based spherical particles for the removal of vanadium(V) from an aqueous system. *International Journal of Biological Macromolecules*, **2021**, 186, 181-193	7.9	3
20	Chemical modification of commercial St-DVB microspheres and their application for metal ions removal. *Adsorption*, **2019**, 25, 529-544	2.6	2
19	Fabrication, Characterization and Evaluation of an Alginate-Lignin Composite for Rare-Earth Elements Recovery.. *Materials*, **2022**, 15,	3.5	2
18	Lanthanides and heavy metals sorption on alginates as effective sorption materials131, 238-251		2
17	Recovery of Lanthanum(III) and Nickel(II) Ions from Acidic Solutions by the Highly Effective Ion Exchanger. *Molecules*, **2020**, 25,	4.8	2
16	Synthesis, characterization, and application of a new methylenethiol resins for heavy metal ions removal. *Separation Science and Technology*, **2016**, 51, 2501-2510	2.5	2
15	Green citric acid in the sorption process of rare earth elements. *Chemical Engineering Journal*, **2022**, 437, 135366	14.7	2
14	Adsorption of vanadium (V) ions from the aqueous solutions on different biomass-derived biochars.. *Journal of Environmental Management*, **2022**, 313, 114958	7.9	2

13	Applicability of new sustainable and efficient alginate-based composites for critical raw materials recovery: General composites fabrication optimization and adsorption performance evaluation. *Chemical Engineering Journal*, **2022**, 137245	14.7	2
12	Lanthanum and copper ions recovery from nickel-metal hydride cells leaching solutions by the oxide adsorbent Pyrolox□ . *Journal of Environmental Chemical Engineering*, **2019**, 7, 103003	6.8	1
11	Characterization and application of spherical carbonaceous materials prepared with the use of microwave radiation. *Diamond and Related Materials*, **2020**, 108, 107927	3.5	1
10	Dielectric functions, chemical and atomic compositions of the near surface layers of implanted GaAs by In ions. *Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy*, **2018**, 198, 222-231	4.4	1
9	Dielectric functions E1 and E1 + □in near region of critical points and chemical composition of near surface layers of ions implanted GaAs. *Surface and Coatings Technology*, **2018**, 355, 200-206	4.4	1
8	Sorption of heavy metal metatartrate complexes on polystyrene anion exchangers. *Environmental Technology (United Kingdom)*, **2011**, 32, 569-82	2.6	1
7	Functionalization of Zeolite NaP1 for Simultaneous Acid Red 18 and Cu(II) Removal.. *Materials*, **2021** , 14,	3.5	1
6	Separation of Y(dcta)- complexes from Nd(dcta)- and Sm(dcta)- complexes on polyacrylate anion-exchangers (Short communication). *Journal of the Serbian Chemical Society*, **2003**, 68, 183-190	0.9	1
5	MULTIFUNCTIONAL RESIN DIPHONIX IN ADSORPTION OF HEAVY METAL COMPLEXES WITH METHYLGLYCINEDIACETIC ACID. *Environmental Engineering and Management Journal*, **2016**, 15, 2459-2468	0.6	1
4	Zeolite NaP1 Functionalization for the Sorption of Metal Complexes with Biodegradable -(1,2-dicarboxyethyl)-D,L-aspartic Acid. *Materials*, **2021**, 14,	3.5	1
3	Complexing Agents **2019**, 1-26		0
2	Arsenate removal on the iron oxide ion exchanger modified with Neodymium(III) ions.. *Journal of Environmental Management*, **2022**, 307, 114551	7.9	0
1	Variation of TiO2/SiO2 mixed layers induced by Xe+ ion irradiation with energies from 100 to 250□keV. *Materials Science and Engineering B: Solid-State Materials for Advanced Technology*, **2022**, 277, 115566	3.1	