Robert Pietrzak

List of Publications by Year
in descending order

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115	4,606	71061	123376
papers	citations	41 h-index	61 g-index

115	115	115	4726
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	XPS study and physico-chemical properties of nitrogen-enriched microporous activated carbon from high volatile bituminous coal. Fuel, 2009, 88, 1871-1877.	3.4	245
2	X-ray photoelectron spectroscopy study of oxidized coals with different sulphur content. Fuel Processing Technology, 2002, 77-78, 1-7.	3.7	140
3	Capacitance behaviour of brown coal based active carbon modified through chemical reaction with urea. Electrochimica Acta, 2008, 53, 5469-5475.	2.6	130
4	Comparison of physicochemical and sorption properties of activated carbons prepared by physical and chemical activation of cherry stones. Powder Technology, 2015, 269, 312-319.	2.1	124
5	Preparation of Nitrogen-Enriched Activated Carbons from Brown Coal. Energy & Fuels, 2006, 20, 1275-1280.	2.5	115
6	Capacitance properties of multi-walled carbon nanotubes modified by activation and ammoxidation. Carbon, 2006, 44, 2368-2375.	5.4	115
7	XPS study of pyrite-free coals subjected to different oxidizing agents. Fuel, 2007, 86, 2616-2624.	3.4	114
8	Mesoporous carbons modified with lanthanum(III) chloride for methyl orange adsorption. Chemical Engineering Journal, 2014, 247, 258-264.	6.6	114
9	Sorption properties of active carbons obtained from walnut shells by chemical and physical activation. Catalysis Today, 2010, 150, 107-114.	2.2	96
10	The influence of oxidation with HNO3 on the surface composition of high-sulphur coals: XPS study. Fuel Processing Technology, 2006, 87, 1021-1029.	3.7	94
11	Active carbons prepared by chemical activation of plum stones and their application in removal of NO2. Journal of Hazardous Materials, 2010, 181, 1088-1094.	6.5	92
12	Low temperature oxidation of coals of different rank and different sulphur contentâ‹†. Fuel, 2003, 82, 705-713.	3.4	82
13	X-ray Photoelectron Spectroscopy Study of Nitrogen-Enriched Active Carbons Obtained by Ammoxidation and Chemical Activation of Brown and Bituminous Coals. Energy & Fuels, 2010, 24, 1197-1206.	2.5	73
14	The use of microwave radiation for obtaining activated carbons from sawdust and their potential application in removal of NO2 and H2S. Chemical Engineering Journal, 2015, 269, 352-358.	6.6	73
15	Sorption properties of activated carbons obtained from corn cobs by chemical and physical activation. Adsorption, 2013, 19, 273-281.	1.4	71
16	Physicochemical and adsorption properties of carbonaceous sorbents prepared by activation of tropical fruit skins with potassium carbonate. Materials and Design, 2016, 90, 579-585.	3.3	69
17	Hydrogen sulphide removal on carbonaceous adsorbents prepared from coffee industry waste materials. Chemical Engineering Journal, 2014, 248, 208-215.	6.6	68
18	Activated carbons modified with sewage sludge derived phase and their application in the process of NO2 removal. Carbon, 2007, 45, 2537-2546.	5.4	65

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19	Ordered mesoporous carbons modified with cerium as effective adsorbents for azo dyes removal. Separation and Purification Technology, 2015, 154, 236-245.	3.9	62
20	Removal of rhodamine B from water by modified carbon xerogels. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 2018, 543, 109-117.	2.3	62
21	Nitrogen-enriched bituminous coal-based active carbons as materials for supercapacitors. Fuel, 2010, 89, 3457-3467.	3.4	60
22	Preparation of modified active carbon from brown coal by ammoxidation. Fuel Processing Technology, 2007, 88, 409-415.	3.7	58
23	Removal of tartrazine from aqueous solution by carbon nanotubes decorated with silver nanoparticles. Catalysis Today, 2015, 249, 259-264.	2.2	57
24	Thermal analysis of activated carbon obtained from residue after supercritical extraction of hops. Journal of Thermal Analysis and Calorimetry, 2016, 125, 1199-1204.	2.0	57
25	Oxidation of demineralized coal and coal free of pyrite examined by EPR spectroscopy. Fuel, 2002, 81, 1925-1931.	3.4	56
26	The influence of activation procedure on the physicochemical and sorption properties of activated carbons prepared from pistachio nutshells for removal of NO 2 /H 2 S gases and dyes. Journal of Cleaner Production, 2017, 152, 211-222.	4.6	54
27	Role of Graphite Oxide (GO) and Polyaniline (PANI) in NO₂ Reduction on GO-PANI Composites. Industrial & Engineering Chemistry Research, 2007, 46, 6925-6935.	1.8	53
28	Optimal synthesis of oxidized mesoporous carbons for the adsorption of heavy metal ions. Journal of Molecular Liquids, 2019, 276, 630-637.	2.3	53
29	Microporous activated carbons from ammoxidised anthracite and their capacitance behaviours. Fuel, 2007, 86, 1086-1092.	3.4	52
30	The influence of oxidation with air in comparison to oxygen in sodium carbonate solution on the surface composition of coals of different ranks. Fuel, 2006, 85, 1016-1023.	3.4	51
31	Adsorbents obtained from waste tires for NO2 removal under dry conditions at room temperature. Chemical Engineering Journal, 2011, 170, 202-208.	6.6	50
32	Complex of Rutin with Î²-Cyclodextrin as Potential Delivery System. PLoS ONE, 2015, 10, e0120858.	1.1	50
33	Comparison of the effects of different chemical activation methods on properties of carbonaceous adsorbents obtained from cherry stones. Chemical Engineering Research and Design, 2014, 92, 1187-1191.	2.7	49
34	Ordered mesoporous silica modified with lanthanum for ibuprofen loading and release behaviour. European Journal of Pharmaceutics and Biopharmaceutics, 2015, 94, 550-558.	2.0	49
35	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.	2.2	49
36	Adsorption of organic and inorganic pollutants on activated bio-carbons prepared by chemical activation of residues of supercritical extraction of raw plants. Chemical Engineering Journal, 2020, 393, 124785.	6.6	49

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37	Carbonaceous adsorbents prepared by physical activation of pine sawdust and their application for removal of NO2 in dry and wet conditions. Bioresource Technology, 2010, 101, 5802-5807.	4.8	48
38	Effect of ammoxidation of activated carbons obtained from sub-bituminous coal on their NO2 sorption capacity under dry conditions. Chemical Engineering Journal, 2011, 166, 1039-1043.	6.6	48
39	Synergy effect in the photocatalytic degradation of methylene blue on a suspended mixture of TiO2 and N-containing carbons. Carbon, 2013, 54, 460-471.	5.4	48
40	Thermal analysis of oxidised coals. Thermochimica Acta, 2004, 419, 247-251.	1.2	45
41	NO2 removal on adsorbents obtained by pyrolysis and physical activation of corrugated cardboard. Chemical Engineering Journal, 2012, 195-196, 7-14.	6.6	45
42	Î²-Cyclodextrin complexation as an effective drug delivery system for meropenem. European Journal of Pharmaceutics and Biopharmaceutics, 2016, 99, 24-34.	2.0	44
43	Influence of the Precursor Metamorphism Degree on Preparation of Nitrogen-enriched Activated Carbons by Ammoxidation and Chemical Activation of Coals. Energy & Fuels, 2009, 23, 2205-2212.	2.5	42
44	Comparison of Physicochemical Properties of Nitrogen-enriched Activated Carbons Prepared by Physical and Chemical Activation of Brown Coal. Energy & Fuels, 2008, 22, 4133-4138.	2.5	41
45	Biomass-derived hierarchical carbon as sulfur cathode stabilizing agent for lithium-sulfur batteries. Solid State Ionics, 2016, 297, 59-63.	1.3	39
46	APâ€“TPR study of sulphur in coals subjected to mild oxidation. Part 1. Demineralised coals. Fuel, 2002, 81, 2397-2405.	3.4	38
47	Equilibrium and kinetic studies of chromotrope 2R adsorption onto ordered mesoporous carbons modified with lanthanum. Chemical Engineering Journal, 2015, 270, 140-149.	6.6	37
48	Interactions of NO2 with sewage sludge based composite adsorbents. Journal of Hazardous Materials, 2008, 154, 946-953.	6.5	35
49	Adsorption of l-phenylalanine onto mesoporous silica. Materials Chemistry and Physics, 2013, 142, 586-593.	2.0	35
50	Stability analysis of functionalized mesoporous carbon materials in aqueous solution. Chemical Engineering Journal, 2016, 290, 209-219.	6.6	35
51	Synthesis of carbon xerogels modified with amine groups and copper for efficient adsorption of caffeine. Chemical Engineering Journal, 2018, 345, 13-21.	6.6	35
52	On competitive uptake of SO2 and CO2 from air by porous carbon containing CaO and MgO. Chemical Engineering Journal, 2013, 226, 348-356.	6.6	34
53	Adsorption of poly(acrylic acid) on the surface of microporous activated carbon obtained from cherry stones. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 2017, 514, 137-145.	2.3	34
54	Siberian anthracite as a precursor material for microporous activated carbons. Fuel, 2008, 87, 2037-2040.	3.4	33

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55	Sawdust pellets from coniferous species as adsorbents for NO2 removal. Bioresource Technology, 2010, 101, 907-913.	4.8	33
56	NO2 removal on adsorbents prepared from coffee industry waste materials. Adsorption, 2013, 19, 521-528.	1.4	33
57	MgO/CaO-loaded porous carbons for carbon dioxide capture. Journal of Thermal Analysis and Calorimetry, 2013, 111, 357-364.	2.0	33
58	Adsorption of dyes on the surface of polymer nanocomposites modified with methylamine and copper(II) chloride. Journal of Colloid and Interface Science, 2017, 504, 549-560.	5.0	33
59	Thermal and physicochemical properties of phosphorus-containing activated carbons obtained from biomass. Journal of the Taiwan Institute of Chemical Engineers, 2017, 80, 1006-1013.	2.7	32
60	Production of activated carbons from biodegradable waste materials as an alternative way of their utilisation. Adsorption, 2016, 22, 489-502.	1.4	31
61	Bioavailability of Hesperidin and Its Aglycone Hesperetinâ€"Compounds Found in Citrus Fruits as a Parameter Conditioning the Pro-Health Potential (Neuroprotective and Antidiabetic) Tj ETQq1 1 0.784314 rgBT /Overlock 10 Tf 50 49	2.7	31
62	Reactive Adsorption of NO₂ at Dry Conditions on Sewage Sludge-Derived Materials. Environmental Science & Technology, 2007, 41, 7516-7522.	4.6	30
63	Active Carbons Obtained from Bituminous Coal for NO₂Removal under Dry and Wet Conditions at Room Temperature. Energy & Fuels, 2009, 23, 3617-3624.	2.5	30
64	Interactions of NO₂ and NO with Carbonaceous Adsorbents Containing Silver Nanoparticles. Langmuir, 2010, 26, 9457-9464.	1.6	29
65	Copper ions removal from liquid phase by polyethersulfone (PES) membranes functionalized by introduction of carbonaceous materials. Chemical Engineering Journal, 2013, 215-216, 216-221.	6.6	29
66	Adsorption of l-phenylalanine on ordered mesoporous carbons prepared by hard template method. Journal of the Taiwan Institute of Chemical Engineers, 2014, 45, 347-353.	2.7	29
67	Effect of activation method on the physicochemical properties and NO2 removal abilities of sorbents obtained from plum stones (Prunus domestica). Chemical Engineering Journal, 2010, 162, 723-729.	6.6	28
68	Catalytic performance of ordered mesoporous carbons modified with lanthanides in dry methane reforming. Catalysis Today, 2018, 301, 204-216.	2.2	28
69	The Comparison of Oxygen and Sulfur Species Formed by Coal Oxidation with O2/Na2CO3 or Peroxyacetic Acid Solution. XPS Studies. Energy & Fuels, 2004, 18, 804-809.	2.5	27
70	The use of microwave radiation for obtaining activated carbons enriched in nitrogen. Powder Technology, 2015, 273, 71-75.	2.1	27
71	The effect of surface modification of mesoporous carbons on Auramine-O dye removal from water. Adsorption, 2016, 22, 531-540.	1.4	27
72	MgO/CaO-Loaded Activated Carbon for Carbon Dioxide Capture: Practical Aspects of Use. Industrial & Engineering Chemistry Research, 2013, 52, 6669-6677.	1.8	26

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73	Production of new activated bio-carbons by chemical activation of residue left after supercritical extraction of hops. Environmental Research, 2018, 161, 456-463.	3.7	26
74	Nitrogen-enriched activated carbons prepared by the activation of coniferous tree sawdust and their application in the removal of Nitrogen dioxide. International Journal of Environmental Science and Technology, 2015, 12, 2233-2244.	1.8	25
75	Characterization and application of bio-activated carbons prepared by direct activation of hay with the use of microwave radiation. Powder Technology, 2017, 319, 302-312.	2.1	24
76	Comparison of ordered mesoporous materials sorption properties towards amino acids. Adsorption, 2013, 19, 581-588.	1.4	22
77	Porous carbon material containing CaO for acidic gas capture: Preparation and properties. Journal of Hazardous Materials, 2013, 263, 353-360.	6.5	22
78	Hay-based activated biochars obtained using two different heating methods as effective low-cost sorbents: Solid surface characteristics, adsorptive properties and aggregation in the mixed Cu(II)/PAM system. Chemosphere, 2020, 250, 126312.	4.2	19
79	Composite sulfur cathode for Li-S batteries comprising hierarchical carbon obtained from waste PET bottles. Synthetic Metals, 2020, 261, 116305.	2.1	19
80	In vitro release of l-phenylalanine from ordered mesoporous materials. Microporous and Mesoporous Materials, 2013, 177, 32-36.	2.2	18
81	The influence of oxidation with nitric acid on the preparation and properties of active carbon enriched in nitrogen. Applied Surface Science, 2009, 255, 3586-3593.	3.1	17
82	Sorption Properties of Carbonaceous Adsorbents Obtained by Pyrolysis and Activation of Pistachio Nut Shells. Adsorption Science and Technology, 2015, 33, 581-586.	1.5	17
83	Comparison of adsorption properties of Mg x O y â€“SiO 2 and Zn x O y â€“SiO 2 in the mixed oxide-poly(vinyl alcohol) system. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 2016, 492, 12-18.	2.3	17
84	NO2 removal by adsorbents prepared from waste paper sludge. Chemical Engineering Journal, 2012, 183, 278-283.	6.6	16
85	Physicochemical characterization of ordered mesoporous carbons functionalized by wet oxidation. Journal of Materials Science, 2018, 53, 5997-6007.	1.7	16
86	Removal of NO2 from gas stream by activated bio-carbons from physical activation of residue of supercritical extraction of hops. Chemical Engineering Research and Design, 2021, 166, 67-73.	2.7	16
87	Removal of Heavy Metal Ions from One- and Two-Component Solutions via Adsorption on N-Doped Activated Carbon. Materials, 2021, 14, 7045.	1.3	16
88	The effect of chemical activation method on properties of activated carbons obtained from pine cones. Open Chemistry, 2013, 11, 78-85.	1.0	15
89	The effect of demineralization on the physicochemical and sorption properties of activated bio-carbons. Adsorption, 2019, 25, 337-343.	1.4	15
90	The influence of silver on the physicochemical and catalytic properties of activated carbons. Chemical Engineering Journal, 2012, 189-190, 422-430.	6.6	14

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91	The influence of pore generating agent on the efficiency of copper and iron ions removal from liquid phase by polyethersulfone membranes. Chemical Engineering Journal, 2013, 228, 449-454.	6.6	12
92	Thermal analysis of activated carbons modified with silver metavanadate. Thermochimica Acta, 2012, 541, 42-48.	1.2	11
93	Metals Ions Removal by Polymer Membranes of Different Porosity. Scientific World Journal, The, 2013, 2013, 1-7.	0.8	11
94	Physicochemical and sorption properties of multi-walled carbon nanotubes decorated with silver nanoparticles. Chemical Engineering Journal, 2014, 250, 295-302.	6.6	11
95	Removal of NO2 by carbonaceous adsorbents obtained from residue after supercritical extraction of marigold. Adsorption, 2016, 22, 465-471.	1.4	11
96	Toxic gases removal onto activated carbons obtained from hay with the use of microwave radiation. Chemical Engineering Research and Design, 2016, 109, 346-353.	2.7	10
97	Activated Bio-Carbons Prepared from the Residue of Supercritical Extraction of Raw Plants and Their Application for Removal of Nitrogen Dioxide and Hydrogen Sulfide from the Gas Phase. Materials, 2021, 14, 3192.	1.3	10
98	Microwave saturation of EPR spectra of oxidised coal. Open Chemistry, 2007, 5, 330-340.	1.0	9
99	The use of microwave radiation for obtaining carbonaceous adsorbents from biomass and their use in elimination of inorganic pollutants. Adsorption, 2016, 22, 473-480.	1.4	9
100	Removal of Organic Dyes from Aqueous Solutions by Activated Carbons Prepared from Residue of Supercritical Extraction of Marigold. Materials, 2022, 15, 3655.	1.3	9
101	MgO-loaded porous carbon for carbon dioxide sorption: Study on cyclic sorptionâ€“regeneration. International Journal of Greenhouse Gas Control, 2012, 10, 164-168.	2.3	8
102	Nitrogen-Doped Carbonaceous Materials for Removal of Phenol from Aqueous Solutions. Scientific World Journal, The, 2012, 2012, 1-8.	0.8	8
103	Textural, surface, thermal and sorption properties of the functionalized activated carbons and carbon nanotubes. Polish Journal of Chemical Technology, 2015, 17, 120-127.	0.3	8
104	Comparison of physicochemical, sorption and electrochemical properties of nitrogen-doped activated carbons obtained with the use of microwave and conventional heating. Adsorption, 2019, 25, 405-417.	1.4	7
105	Membranes obtained on the basis of cellulose acetate and their use in removal of metal ions from liquid phase. Polish Journal of Chemical Technology, 2016, 18, 104-110.	0.3	6
106	Coniferous Wood Sawdust-based Activated Carbons as Adsorbents Obtained with the Use of Microwave Radiation. Journal of Wood Chemistry and Technology, 2018, 38, 286-299.	0.9	6
107	N-doped sawdust-based activated biocarbons prepared by microwave-assisted heat treatment as potential electrode materials for supercapacitors. Journal of Wood Chemistry and Technology, 2021, 41, 307-320.	0.9	6
108	Synthesis of polymer membranes of different porosity and their application for phenol removal from liquid phase. Korean Journal of Chemical Engineering, 2014, 31, 304-309.	1.2	5

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109	Characterization and application of spherical carbonaceous materials prepared with the use of microwave radiation. Diamond and Related Materials, 2020, 108, 107927.	1.8	4
110	Removal of Iron and Copper Ions from the Liquid Phase by Modified Polymeric Membranes. Journal of Polymers and the Environment, 2018, 26, 3237-3242.	2.4	3
111	Studies of the soluble part of oxidised coals. Open Chemistry, 2004, 2, 278-289.	1.0	2
112	THERMAL STUDY OF ADSORBENTS PREPARED FROM WASTE TYRES. Environmental Engineering and Management Journal, 2017, 16, 439-447.	0.2	2
113	Iron(II) Sulfate(VI) from Titania Production as a Raw Material for Preparation of Hydrogen Sulfide Sorbents. Chemical Engineering and Technology, 2020, 43, 104-110.	0.9	1
114	The effect of flame coal oxidation on the solid and soluble products of its extraction. Open Chemistry, 2005, 3, 852-865.	1.0	0
115	Preparation and physicochemical characterisation of functionalised multi-walled carbon nanotubes. Adsorption, 2016, 22, 481-488.	1.4	0