

Peter Carrott

List of Publications by Year in descending order

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128
papers

6,559
citations

81743

39
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66788

78
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128
all docs

128
docs citations

128
times ranked

7330
citing authors

#	ARTICLE	IF	CITATIONS
1	Lignin as natural adsorbent to activated carbon: A review. <i>Bioresource Technology</i> , 2007, 98, 2301-2312.	4.8	882
2	Low-Cost Adsorbents: Growing Approach to Wastewater Treatment—a Review. <i>Critical Reviews in Environmental Science and Technology</i> , 2009, 39, 783-842.	6.6	873
3	Cellulose: A review as natural, modified and activated carbon adsorbent. <i>Bioresource Technology</i> , 2016, 216, 1066-1076.	4.8	538
4	Conventional and microwave induced pyrolysis of coffee hulls for the production of a hydrogen rich fuel gas. <i>Journal of Analytical and Applied Pyrolysis</i> , 2007, 79, 128-135.	2.6	295
5	Adsorption of nitrogen by porous and non-porous carbons. <i>Carbon</i> , 1987, 25, 59-68.	5.4	164
6	Preparation of activated carbon fibres from acrylic textile fibres. <i>Carbon</i> , 2001, 39, 1543-1555.	5.4	161
7	Production of activated carbons from coffee endocarp by CO ₂ and steam activation. <i>Fuel Processing Technology</i> , 2008, 89, 262-268.	3.7	149
8	Preparation and modification of activated carbon fibres by microwave heating. <i>Carbon</i> , 2004, 42, 1315-1320.	5.4	142
9	Adsorption of volatile organic compounds onto activated carbon cloths derived from a novel regenerated cellulosic precursor. <i>Journal of Hazardous Materials</i> , 2010, 177, 175-182.	6.5	125
10	Adsorption of nitrogen, neopentane, n-hexane, benzene and methanol for the evaluation of pore sizes in silica grades of MCM-41. <i>Microporous and Mesoporous Materials</i> , 2001, 47, 323-337.	2.2	108
11	Standard nitrogen adsorption data for nonporous carbons. <i>Carbon</i> , 1987, 25, 769-770.	5.4	104
12	Influence of preparation conditions in the textural and chemical properties of activated carbons from a novel biomass precursor: The coffee endocarp. <i>Bioresource Technology</i> , 2008, 99, 7224-7231.	4.8	99
13	Production of activated carbons from almond shell. <i>Fuel Processing Technology</i> , 2011, 92, 234-240.	3.7	95
14	Thermal treatments of activated carbon fibres using a microwave furnace. <i>Microporous and Mesoporous Materials</i> , 2001, 47, 243-252.	2.2	93
15	Application of different equations to adsorption isotherms of phenolic compounds on activated carbons prepared from cork. <i>Carbon</i> , 2006, 44, 2422-2429.	5.4	81
16	Characterization of Micro-Mesoporous Materials from Nitrogen and Toluene Adsorption: Experiment and Modeling. <i>Langmuir</i> , 2006, 22, 513-516.	1.6	79
17	Phenol removal onto novel activated carbons made from lignocellulosic precursors: Influence of surface properties. <i>Journal of Hazardous Materials</i> , 2009, 167, 904-910.	6.5	76
18	Reactivity and porosity development during pyrolysis and physical activation in CO ₂ or steam of kraft and hydrolytic lignins. <i>Journal of Analytical and Applied Pyrolysis</i> , 2008, 82, 264-271.	2.6	73

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19	Surface and porous characterisation of activated carbons made from a novel biomass precursor, the esparto grass. <i>Applied Surface Science</i> , 2013, 265, 919-924.	3.1	70
20	Structural and catalytic properties of Ti-MCM-41 synthesised at room temperature up to high Ti content. <i>Microporous and Mesoporous Materials</i> , 2007, 100, 312-321.	2.2	67
21	Evaluation of the Stability of Pure Silica MCM-41 toward Water Vapor. <i>Langmuir</i> , 1999, 15, 8895-8901.	1.6	63
22	Influence of oxidation process on the adsorption capacity of activated carbons from lignocellulosic precursors. <i>Fuel Processing Technology</i> , 2011, 92, 241-246.	3.7	63
23	Thermal conversion of a novel biomass agricultural residue (vine shoots) into activated carbon using activation with CO ₂ . <i>Journal of Analytical and Applied Pyrolysis</i> , 2010, 87, 8-13.	2.6	62
24	Influence of surface ionization on the adsorption of aqueous zinc species by activated carbons. <i>Carbon</i> , 1997, 35, 403-410.	5.4	60
25	Mercury removal from aqueous solution and flue gas by adsorption on activated carbon fibres. <i>Applied Surface Science</i> , 2006, 252, 6046-6052.	3.1	58
26	Direct synthesis without addition of acid of Al-SBA-15 with controllable porosity and high hydrothermal stability. <i>Microporous and Mesoporous Materials</i> , 2011, 142, 526-534.	2.2	57
27	Hydrocarbons adsorption on templated mesoporous materials: effect of the pore size, geometry and surface chemistry. <i>New Journal of Chemistry</i> , 2011, 35, 407-416.	1.4	54
28	Physical adsorption of gases by microporous carbons. <i>Colloids and Surfaces</i> , 1991, 58, 385-400.	0.9	53
29	The influence of the activated carbon post-treatment on the phenolic compounds removal. <i>Fuel Processing Technology</i> , 2012, 103, 64-70.	3.7	51
30	Evolution of micropore structure of activated charcoal cloth. <i>Carbon</i> , 1991, 29, 499-506.	5.4	50
31	Comparative study of Al-MCM materials prepared at room temperature with different aluminium sources and by some hydrothermal methods. <i>Microporous and Mesoporous Materials</i> , 2006, 92, 270-285.	2.2	50
32	Pore size control in activated carbons obtained by pyrolysis under different conditions of chemically impregnated cork. <i>Journal of Analytical and Applied Pyrolysis</i> , 2006, 75, 120-127.	2.6	50
33	Gas chromatographic study of microporous carbons. <i>Journal of Chromatography A</i> , 1987, 406, 139-144.	1.8	47
34	Adsorption of neopentane by nonporous carbons and silicas. <i>Langmuir</i> , 1988, 4, 740-743.	1.6	47
35	Infrared study of the adsorption of ¹⁶ O ₂ , ¹⁶ O ¹⁸ O and ¹⁸ O ₂ on Cr ₂ O ₃ . <i>Journal of the Chemical Society Faraday Transactions I</i> , 1983, 79, 2425.	1.0	45
36	Multilayer adsorption of nitrogen and alkanes by non-porous carbons and silicas. <i>Pure and Applied Chemistry</i> , 1989, 61, 1835-1840.	0.9	45

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37	From commercial textile fibres to activated carbon fibres: Chemical transformations. <i>Materials Chemistry and Physics</i> , 2005, 93, 100-108.	2.0	45
38	Reference data for the adsorption of benzene on carbon materials. <i>Carbon</i> , 2000, 38, 465-474.	5.4	44
39	Carbon molecular sieves from PET for separations involving CH ₄ , CO ₂ , O ₂ and N ₂ . <i>Applied Surface Science</i> , 2006, 252, 5948-5952.	3.1	43
40	Trends in the condensation/evaporation and adsorption enthalpies of volatile organic compounds on mesoporous silica materials. <i>Microporous and Mesoporous Materials</i> , 2012, 151, 223-230.	2.2	39
41	New carbon materials with high porosity in the 1–7 nm range obtained by chemical activation with phosphoric acid of resorcinol-formaldehyde aerogels. <i>Carbon</i> , 2009, 47, 1874-1877.	5.4	36
42	An innovative approach to develop microporous activated carbons in oxidising atmosphere. <i>Journal of Cleaner Production</i> , 2017, 156, 549-555.	4.6	35
43	Adsorption of water vapor by non-porous carbons. <i>Carbon</i> , 1992, 30, 201-205.	5.4	34
44	Evaluation of the Stoeckli method for the estimation of micropore size distributions of activated charcoal cloths. <i>Carbon</i> , 1999, 37, 647-656.	5.4	34
45	New acrylic monolithic carbon molecular sieves for O ₂ /N ₂ and CO ₂ /CH ₄ separations. <i>Carbon</i> , 2006, 44, 1158-1165.	5.4	33
46	Using alkali metals to control reactivity and porosity during physical activation of demineralised kraft lignin. <i>Carbon</i> , 2009, 47, 1012-1017.	5.4	33
47	Separating Surface and Solvent Effects and the Notion of Critical Adsorption Energy in the Adsorption of Phenolic Compounds by Activated Carbons. <i>Langmuir</i> , 2005, 21, 11863-11869.	1.6	31
48	Evaluation of the thermal and mechanical stability of Si-MCM-41 and Ti-MCM-41 synthesised at room temperature. <i>Microporous and Mesoporous Materials</i> , 2008, 108, 283-293.	2.2	31
49	Adsorption of toluene and toluene-water vapor mixture on almond shell based activated carbons. <i>Adsorption</i> , 2013, 19, 1137-1148.	1.4	31
50	Preparation of Activated Carbons from Cork by Physical Activation in Carbon Dioxide. <i>Adsorption Science and Technology</i> , 2003, 21, 669-681.	1.5	30
51	Influence of surface ionization on the adsorption of aqueous mercury chlorocomplexes by activated carbons. <i>Carbon</i> , 1998, 36, 11-17.	5.4	28
52	Interaction of water vapour at 298K with Al-MCM-41 materials synthesised at room temperature. <i>Microporous and Mesoporous Materials</i> , 2007, 103, 82-93.	2.2	27
53	Tailoring the surface chemistry of mesocellular foams for protein adsorption. <i>Colloids and Surfaces A: Physicochemical and Engineering Aspects</i> , 2011, 386, 25-35.	2.3	27
54	Adsorption of n-pentane and iso-octane for the evaluation of the porosity of dealuminated BEA zeolites. <i>Microporous and Mesoporous Materials</i> , 2005, 81, 259-267.	2.2	25

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55	Adsorption of toluene, methylcyclohexane and neopentane on Silica MCM-41. <i>Adsorption</i> , 2008, 14, 367-375.	1.4	25
56	Comparison of the Dubinin-Radushkevich and Quenched Solid Density Functional Theory approaches for the characterisation of narrow microporosity in activated carbons obtained by chemical activation with KOH or NaOH of Kraft and hydrolytic lignins. <i>Carbon</i> , 2010, 48, 4162-4169.	5.4	25
57	Desorption of n-nonane from microporous carbons. <i>Colloids and Surfaces</i> , 1989, 37, 1-13.	0.9	24
58	Use of n-nonane pre-adsorption for the determination of micropore volume of activated carbon aerogels. <i>Carbon</i> , 2007, 45, 1310-1313.	5.4	24
59	Preparation of activated carbon "membranes" by physical and chemical activation of cork. <i>Carbon</i> , 1999, 37, 515-517.	5.4	23
60	Microwave heating as a novel method for introducing molecular sieve properties into activated carbon fibres. <i>Carbon</i> , 2004, 42, 227-229.	5.4	23
61	Effect of the activating agent on physico-chemical and electrical properties of activated carbon cloths developed from a novel cellulosic precursor. <i>Colloids and Surfaces A: Physicochemical and Engineering Aspects</i> , 2011, 378, 87-93.	2.3	23
62	Assessment of Microporosity. <i>Studies in Surface Science and Catalysis</i> , 1988, 39, 77-87.	1.5	22
63	Ex-hydroxide magnesium oxide as a model adsorbent for investigation of micropore filling mechanisms. <i>Journal of the Chemical Society, Faraday Transactions</i> , 1991, 87, 185.	1.7	22
64	Numerical simulation of surface ionisation and specific adsorption on a two-site model of a carbon surface. <i>Journal of the Chemical Society, Faraday Transactions</i> , 1995, 91, 2179.	1.7	22
65	Reference data for the adsorption of methanol on carbon materials. <i>Carbon</i> , 2001, 39, 193-200.	5.4	22
66	Chemical Characterization of Activated Carbon Fibers and Activated Carbons. <i>Journal of Chemical Education</i> , 2006, 83, 436.	1.1	21
67	Effect of hydrothermal treatment on the structure, stability and acidity of Al containing MCM-41 and MCM-48 synthesised at room temperature. <i>Colloids and Surfaces A: Physicochemical and Engineering Aspects</i> , 2007, 310, 9-19.	2.3	21
68	In vitro adsorption study of fluoxetine in activated carbons and activated carbon fibres. <i>Fuel Processing Technology</i> , 2008, 89, 549-555.	3.7	21
69	Characterisation of the porosity of polymer and carbon aerogels containing Fe, Ni or Cu prepared from 2,4-dihydroxybenzoic acid by n-nonane pre-adsorption and density functional theory. <i>Microporous and Mesoporous Materials</i> , 2010, 131, 75-81.	2.2	21
70	Development of a selective sorbent for the solid-phase extraction of terbuthylazine in olive oil samples: A molecular imprinting strategy. <i>Journal of Separation Science</i> , 2015, 38, 1204-1212.	1.3	19
71	The adsorption of nitrogen and water vapour by carbon-coated precipitated silica. <i>Colloids and Surfaces</i> , 1986, 21, 9-15.	0.9	18
72	Molecular sieve behaviour of activated carbons. <i>Carbon</i> , 1995, 33, 1307-1312.	5.4	17

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73	Adsorption Properties of Activated Carbons Prepared from Recycled PET in the Removal of Organic Pollutants from Aqueous Solutions. <i>Adsorption Science and Technology</i> , 2010, 28, 807-821.	1.5	17
74	Core-shell polymer aerogels prepared by co-polymerisation of 2,4-dihydroxybenzoic acid, resorcinol and formaldehyde. <i>Microporous and Mesoporous Materials</i> , 2012, 158, 170-174.	2.2	17
75	Structure and catalytic activity of Al-MCM-48 materials synthesised at room temperature: Influence of the aluminium source and calcination conditions. <i>Microporous and Mesoporous Materials</i> , 2008, 114, 293-302.	2.2	16
76	Influence of thermal treatment conditions on porosity development and mechanical properties of activated carbon cloths from a novel nanofibre-made fabric. <i>Materials Chemistry and Physics</i> , 2009, 116, 310-314.	2.0	15
77	PEEK: An excellent precursor for activated carbon production for high temperature application. <i>Fuel Processing Technology</i> , 2009, 90, 232-236.	3.7	15
78	The Adsorption of Nitrogen on Precipitated and Pyrogenic Silicas. <i>Adsorption Science and Technology</i> , 1984, 1, 31-39.	1.5	14
79	A New Method for The Determination of Micropore Size Distributions. <i>Studies in Surface Science and Catalysis</i> , 1988, 39, 89-100.	1.5	14
80	The Adsorption of Water Vapour by Microporous Solids. <i>Studies in Surface Science and Catalysis</i> , 1991, 62, 685-692.	1.5	14
81	Stabilization of MCM-41 by Pyrolytic Carbon Deposition. <i>Langmuir</i> , 2000, 16, 9103-9105.	1.6	14
82	Catalytic and adsorption properties of Al- and Ti-MCM-41 synthesized at room temperature. <i>Reaction Kinetics and Catalysis Letters</i> , 2002, 77, 83-90.	0.6	14
83	Controlling the micropore size of activated carbons for the treatment of fuels and combustion gases. <i>Applied Surface Science</i> , 2006, 252, 5953-5956.	3.1	14
84	Activated Carbons Prepared from Natural and Synthetic Raw Materials with Potential Applications in Gas Separations. <i>Advanced Materials Research</i> , 0, 107, 1-7.	0.3	14
85	Application of the Frenkel-Halsey-Hill equation to multilayer isotherms of nitrogen on oxides at 77K. <i>Studies in Surface Science and Catalysis</i> , 1982, 10, 403-410.	1.5	13
86	Boron trifluoride initiated polymerisation of isobutene in the micropores of activated charcoal cloth. <i>Carbon</i> , 1991, 29, 507-513.	5.4	13
87	Production of activated carbon cloth with controlled structure and porosity from a new precursor. <i>Journal of Porous Materials</i> , 2007, 14, 181-190.	1.3	13
88	Reference data for the adsorption of dichloromethane on carbon materials. <i>Carbon</i> , 2001, 39, 465-472.	5.4	12
89	Amine-Modified Carbon Aerogels for CO ₂ Capture. <i>Adsorption Science and Technology</i> , 2013, 31, 223-232.	1.5	12
90	Adsorption of Aqueous Mercury(II) Species by Commercial Activated Carbon Fibres with and without Surface Modification. <i>Adsorption Science and Technology</i> , 2007, 25, 199-215.	1.5	11

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91	Textural Development of Activated Carbon Prepared from Recycled PET with Different Chemical Activation Agents. <i>Materials Science Forum</i> , 0, 587-588, 753-757.	0.3	11
92	Infrared and quantitative adsorption study of coordinatively unsaturated cations on magnesium hydroxide. <i>Journal of the Chemical Society, Faraday Transactions</i> , 1993, 89, 579.	1.7	10
93	Influence of Degassing Temperature on the Performance of Carbon Molecular Sieves for Separations Involving O ₂ , N ₂ , CO ₂ , and CH ₄ . <i>Energy & Fuels</i> , 2006, 20, 766-770.	2.5	10
94	Characterisation of Surface Ionisation and Adsorption of Phenol and 4-Nitrophenol on Non-Porous Carbon Blacks. <i>Adsorption Science and Technology</i> , 2008, 26, 827-841.	1.5	10
95	Gas Chromatographic Study of Specific Physisorption by Activated Carbons. <i>Adsorption Science and Technology</i> , 1989, 6, 93-102.	1.5	9
96	Application of the $\hat{\mu}$ s Method for Analysing Benzene, Dichloromethane and Methanol Isotherms Determined on Molecular Sieve and Superactivated Carbons. <i>Studies in Surface Science and Catalysis</i> , 2000, 128, 323-331.	1.5	9
97	High micropore activated carbon prepared from polyetheretherketone. <i>Carbon</i> , 2007, 45, 2454-2455.	5.4	8
98	Scanning electron microscopy of activated carbons prepared from commercial acrylic textile fibres. <i>Fuel Processing Technology</i> , 2002, 77-78, 381-387.	3.7	7
99	Characterisation by adsorption of various organic vapours of the porosity of fresh and coked H-MCM-22 zeolites. <i>Microporous and Mesoporous Materials</i> , 2009, 118, 473-479.	2.2	7
100	Designing Activated Carbons from Natural and Synthetic Raw Materials for Pollutants Adsorption. <i>Materials Science Forum</i> , 2010, 636-637, 1404-1409.	0.3	7
101	Simulations of Phenol Adsorption onto Activated Carbon and Carbon Black. <i>Adsorption Science and Technology</i> , 2010, 28, 797-806.	1.5	7
102	Diffusion of gases in metal containing carbon aerogels. <i>Fuel Processing Technology</i> , 2011, 92, 229-233.	3.7	7
103	On the use of ethanol for evaluating microporosity of activated carbons prepared from Polish lignite. <i>Fuel Processing Technology</i> , 2012, 103, 34-38.	3.7	7
104	Evolution of porosity of activated carbon fibres prepared from pre-oxidized acrylic fibres. <i>Microporous and Mesoporous Materials</i> , 2018, 264, 176-180.	2.2	7
105	Determination of gas chromatographic plate heights for hydrocarbon adsorption by superactivated carbon AX21. <i>Journal of Chromatography A</i> , 1990, 518, 53-58.	1.8	6
106	On the Lo/lf Range of the TVFM. <i>Adsorption Science and Technology</i> , 2006, 24, 205-214.	1.5	6
107	Influence of the synthesis conditions on the pore structure and stability of MCM-41 materials containing aluminium or titanium. <i>Studies in Surface Science and Catalysis</i> , 2007, 160, 567-574.	1.5	6
108	Adsorption of Bovine Serum Albumin onto Mesocellular Silica Foams with Differently Sized Cells and Windows. <i>Adsorption Science and Technology</i> , 2010, 28, 777-788.	1.5	6

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109	Ordered Mesoporous Silica Materials for Protein Adsorption. Materials Science Forum, 2010, 636-637, 54-59.	0.3	6
110	On the Dubinin-Serpinski Equation. Adsorption Science and Technology, 1993, 10, 63-73.	1.5	5
111	Reactivity of Cork and Lignin for the Production of Activated Carbons. Materials Science Forum, 0, 587-588, 618-622.	0.3	5
112	Pore structural characteristics of mesostructured materials prepared under different conditions. Studies in Surface Science and Catalysis, 2002, 144, 363-370.	1.5	4
113	Virial Analysis of the Adsorption of Trifluorochloromethane and Methane by Microporous Carbons and Zeolites. Adsorption Science and Technology, 1989, 6, 136-146.	1.5	3
114	Adsorption of Water Vapour by Microporous Magnesium Oxide. Studies in Surface Science and Catalysis, 1994, , 497-506.	1.5	3
115	Nitrogen Adsorption Studies on Non-Porous Silica: The Annealing Effect over Surface Non-Bridging Oxygen Atoms. Adsorption Science and Technology, 2011, 29, 357-364.	1.5	3
116	Effect of Temperature on Neopentane Isotherms Determined on Non-Porous Non-Graphitized Carbon Black (Elftex). Adsorption Science and Technology, 1989, 6, 103-109.	1.5	2
117	Adsorption of Methanol and Water by Charcoal Cloth. Studies in Surface Science and Catalysis, 1991, 62, 341-346.	1.5	1
118	Microstructure of Ex-Hydroxide Magnesium Oxide & Products of Rehydration. Studies in Surface Science and Catalysis, 1991, , 635-643.	1.5	1
119	$\hat{\text{I}}^3$ -Irradiation of Activated Charcoal Cloth. Studies in Surface Science and Catalysis, 1994, 87, 661-669.	1.5	1
120	Ordered Mesoporous Titanosilicate Materials Prepared at Room Temperature: Synthesis Conditions vs Structural Properties. Materials Science Forum, 2008, 587-588, 473-477.	0.3	1
121	Different Ways to Regenerate an Activated Carbon: Comparison between an Activated Carbon from Cork and a Commercial Carbon. Materials Science Forum, 0, 587-588, 844-848.	0.3	1
122	Characterization of the Surface of Activated Carbons Produced from Tire Residues. Materials Science Forum, 2010, 636-637, 1383-1388.	0.3	1
123	Hydrothermal Stability of Ordered Mesoporous Titanosilicate Materials Prepared at Room Temperature. Advanced Materials Research, 0, 107, 63-70.	0.3	1
124	Porosity in ion-exchanged and acid activated clays evaluated using n-nonane pre-adsorption. Microporous and Mesoporous Materials, 2016, 232, 238-247.	2.2	1
125	Calculation of Pore Size Distributions in Low-k Films. AIP Conference Proceedings, 2005, , .	0.3	0
126	Development of Monolithic Materials with and without a Binder with Carbon Molecular Sieving Properties. Materials Science Forum, 0, 587-588, 805-809.	0.3	0

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127	Structural Characterisation and Mechanical Stability of Titanium Substituted Mesoporous Materials. Materials Science Forum, 0, 636-637, 136-141.	0.3	0
128	Adsorption of the inhalation anaesthetic isoflurane by activated carbon fibres with reference data on non-porous carbon. Adsorption, 2020, 26, 627-632.	1.4	0