# Peter Carrott

List of Publications by Year
in descending order

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|---|---|---|---|
| 128 papers | 6,559 citations | 81900 39 h-index | 66911 78 g-index |
| 128 all docs | 128 docs citations | 128 times ranked | 7330 citing authors |

| # | Article | IF | Citations |
|---|---|---|---|
| 1 | Lignin â€“ from natural adsorbent to activated carbon: A review. Bioresource Technology, 2007, 98, 2301-2312. | 9.6 | 882 |
| 2 | Low-Cost Adsorbents: Growing Approach to Wastewater Treatmentâ€”a Review. Critical Reviews in Environmental Science and Technology, 2009, 39, 783-842. | 12.8 | 873 |
| 3 | Cellulose: A review as natural, modified and activated carbon adsorbent. Bioresource Technology, 2016, 216, 1066-1076. | 9.6 | 538 |
| 4 | Conventional and microwave induced pyrolysis of coffee hulls for the production of a hydrogen rich fuel gas. Journal of Analytical and Applied Pyrolysis, 2007, 79, 128-135. | 5.5 | 295 |
| 5 | Adsorption of nitrogen by porous and non-porous carbons. Carbon, 1987, 25, 59-68. | 10.3 | 164 |
| 6 | Preparation of activated carbon fibres from acrylic textile fibres. Carbon, 2001, 39, 1543-1555. | 10.3 | 161 |
| 7 | Production of activated carbons from coffee endocarp by CO2 and steam activation. Fuel Processing Technology, 2008, 89, 262-268. | 7.2 | 149 |
| 8 | Preparation and modification of activated carbon fibres by microwave heating. Carbon, 2004, 42, 1315-1320. | 10.3 | 142 |
| 9 | Adsorption of volatile organic compounds onto activated carbon cloths derived from a novel regenerated cellulosic precursor. Journal of Hazardous Materials, 2010, 177, 175-182. | 12.4 | 125 |
| 10 | Adsorption of nitrogen, neopentane, n-hexane, benzene and methanol for the evaluation of pore sizes in silica grades of MCM-41. Microporous and Mesoporous Materials, 2001, 47, 323-337. | 4.4 | 108 |
| 11 | Standard nitrogen adsorption data for nonporous carbons. Carbon, 1987, 25, 769-770. | 10.3 | 104 |
| 12 | Influence of preparation conditions in the textural and chemical properties of activated carbons from a novel biomass precursor: The coffee endocarp. Bioresource Technology, 2008, 99, 7224-7231. | 9.6 | 99 |
| 13 | Production of activated carbons from almond shell. Fuel Processing Technology, 2011, 92, 234-240. | 7.2 | 95 |
| 14 | Thermal treatments of activated carbon fibres using a microwave furnace. Microporous and Mesoporous Materials, 2001, 47, 243-252. | 4.4 | 93 |
| 15 | Application of different equations to adsorption isotherms of phenolic compounds on activated carbons prepared from cork. Carbon, 2006, 44, 2422-2429. | 10.3 | 81 |
| 16 | Characterization of Micro-Mesoporous Materials from Nitrogen and Toluene Adsorption:â€‰ Experiment and Modeling. Langmuir, 2006, 22, 513-516. | 3.5 | 79 |
| 17 | Phenol removal onto novel activated carbons made from lignocellulosic precursors: Influence of surface properties. Journal of Hazardous Materials, 2009, 167, 904-910. | 12.4 | 76 |
| 18 | Reactivity and porosity development during pyrolysis and physical activation in CO2 or steam of kraft and hydrolytic lignins. Journal of Analytical and Applied Pyrolysis, 2008, 82, 264-271. | 5.5 | 73 |

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|---|---|---|---|
| 19 | Surface and porous characterisation of activated carbons made from a novel biomass precursor, the esparto grass. Applied Surface Science, 2013, 265, 919-924. | 6.1 | 70 |
| 20 | Structural and catalytic properties of Tiâ€“MCM-41 synthesised at room temperature up to high Ti content. Microporous and Mesoporous Materials, 2007, 100, 312-321. | 4.4 | 67 |
| 21 | Evaluation of the Stability of Pure Silica MCM-41 toward Water Vapor. Langmuir, 1999, 15, 8895-8901. | 3.5 | 63 |
| 22 | Influence of oxidation process on the adsorption capacity of activated carbons from lignocellulosic precursors. Fuel Processing Technology, 2011, 92, 241-246. | 7.2 | 63 |
| 23 | Thermal conversion of a novel biomass agricultural residue (vine shoots) into activated carbon using activation with CO2. Journal of Analytical and Applied Pyrolysis, 2010, 87, 8-13. | 5.5 | 62 |
| 24 | Influence of surface ionization on the adsorption of aqueous zinc species by activated carbons. Carbon, 1997, 35, 403-410. | 10.3 | 60 |
| 25 | Mercury removal from aqueous solution and flue gas by adsorption on activated carbon fibres. Applied Surface Science, 2006, 252, 6046-6052. | 6.1 | 58 |
| 26 | Direct synthesis without addition of acid of Al-SBA-15 with controllable porosity and high hydrothermal stability. Microporous and Mesoporous Materials, 2011, 142, 526-534. | 4.4 | 57 |
| 27 | Hydrocarbonsadsorption on templated mesoporous materials: effect of the pore size, geometry and surface chemistry. New Journal of Chemistry, 2011, 35, 407-416. | 2.8 | 54 |
| 28 | Physical adsorption of gases by microporous carbons. Colloids and Surfaces, 1991, 58, 385-400. | 0.9 | 53 |
| 29 | The influence of the activated carbon post-treatment on the phenolic compounds removal. Fuel Processing Technology, 2012, 103, 64-70. | 7.2 | 51 |
| 30 | Evolution of micropore structure of activated charcoal cloth. Carbon, 1991, 29, 499-506. | 10.3 | 50 |
| 31 | Comparative study of Al-MCM materials prepared at room temperature with different aluminium sources and by some hydrothermal methods. Microporous and Mesoporous Materials, 2006, 92, 270-285. | 4.4 | 50 |
| 32 | Pore size control in activated carbons obtained by pyrolysis under different conditions of chemically impregnated cork. Journal of Analytical and Applied Pyrolysis, 2006, 75, 120-127. | 5.5 | 50 |
| 33 | Gas chromatographic study of microporous carbons. Journal of Chromatography A, 1987, 406, 139-144. | 3.7 | 47 |
| 34 | Adsorption of neopentane by nonporous carbons and silicas. Langmuir, 1988, 4, 740-743. | 3.5 | 47 |
| 35 | Infrared study of the adsorption of 16O2, 16O18O and 18O2 on Cr2O3. Journal of the Chemical Society Faraday Transactions I, 1983, 79, 2425. | 1.0 | 45 |
| 36 | Multilayer adsorption of nitrogen and alkanes by non-porous carbons and silicas. Pure and Applied Chemistry, 1989, 61, 1835-1840. | 1.9 | 45 |

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|---|---|---|---|
| 37 | From commercial textile fibres to activated carbon fibres: Chemical transformations. Materials Chemistry and Physics, 2005, 93, 100-108. | 4.0 | 45 |
| 38 | Reference data for the adsorption of benzene on carbon materials. Carbon, 2000, 38, 465-474. | 10.3 | 44 |
| 39 | Carbon molecular sieves from PET for separations involving CH4, CO2, O2 and N2. Applied Surface Science, 2006, 252, 5948-5952. | 6.1 | 43 |
| 40 | Trends in the condensation/evaporation and adsorption enthalpies of volatile organic compounds on mesoporous silica materials. Microporous and Mesoporous Materials, 2012, 151, 223-230. | 4.4 | 39 |
| 41 | New carbon materials with high porosity in the 1â€“7nm range obtained by chemical activation with phosphoric acid of resorcinolâ€“formaldehyde aerogels. Carbon, 2009, 47, 1874-1877. | 10.3 | 36 |
| 42 | An innovative approach to develop microporous activated carbons in oxidising atmosphere. Journal of Cleaner Production, 2017, 156, 549-555. | 9.3 | 35 |
| 43 | Adsorption of water vapor by non-porous carbons. Carbon, 1992, 30, 201-205. | 10.3 | 34 |
| 44 | Evaluation of the Stoeckli method for the estimation of micropore size distributions of activated charcoal cloths. Carbon, 1999, 37, 647-656. | 10.3 | 34 |
| 45 | New acrylic monolithic carbon molecular sieves for O2/N2 and CO2/CH4 separations. Carbon, 2006, 44, 1158-1165. | 10.3 | 33 |
| 46 | Using alkali metals to control reactivity and porosity during physical activation of demineralised kraft lignin. Carbon, 2009, 47, 1012-1017. | 10.3 | 33 |
| 47 | Separating Surface and Solvent Effects and the Notion of Critical Adsorption Energy in the Adsorption of Phenolic Compounds by Activated Carbons. Langmuir, 2005, 21, 11863-11869. | 3.5 | 31 |
| 48 | Evaluation of the thermal and mechanical stability of Si-MCM-41 and Ti-MCM-41 synthesised at room temperature. Microporous and Mesoporous Materials, 2008, 108, 283-293. | 4.4 | 31 |
| 49 | Adsorption of toluene and tolueneâ€“water vapor mixture on almond shell based activated carbons. Adsorption, 2013, 19, 1137-1148. | 3.0 | 31 |
| 50 | Preparation of Activated Carbons from Cork by Physical Activation in Carbon Dioxide. Adsorption Science and Technology, 2003, 21, 669-681. | 3.2 | 30 |
| 51 | Influence of surface ionization on the adsorption of aqueous mercury chlorocomplexes by activated carbons. Carbon, 1998, 36, 11-17. | 10.3 | 28 |
| 52 | Interaction of water vapour at 298K with Al-MCM-41 materials synthesised at room temperature. Microporous and Mesoporous Materials, 2007, 103, 82-93. | 4.4 | 27 |
| 53 | Tailoring the surface chemistry of mesocellular foams for protein adsorption. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 2011, 386, 25-35. | 4.7 | 27 |
| 54 | Adsorption of n-pentane and iso-octane for the evaluation of the porosity of dealuminated BEA zeolites. Microporous and Mesoporous Materials, 2005, 81, 259-267. | 4.4 | 25 |

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|---|---|---|---|
| 55 | Adsorption of toluene, methylcyclohexane and neopentane onÂsilica MCM-41. Adsorption, 2008, 14, 367-375. | 3.0 | 25 |
| 56 | Comparison of the Dubininâ€“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. Carbon, 2010, 48, 4162-4169. | 10.3 | 25 |
| 57 | Desorption of n-nonane from microporous carbons. Colloids and Surfaces, 1989, 37, 1-13. | 0.9 | 24 |
| 58 | Use of n-nonane pre-adsorption for the determination of micropore volume of activated carbon aerogels. Carbon, 2007, 45, 1310-1313. | 10.3 | 24 |
| 59 | Preparation of activated carbon "membranes" by physical and chemical actication of cork. Carbon, 1999, 37, 515-517. | 10.3 | 23 |
| 60 | Microwave heating as a novel method for introducing molecular sieve properties into activated carbon fibres. Carbon, 2004, 42, 227-229. | 10.3 | 23 |
| 61 | Effect of the activating agent on physico-chemical and electrical properties of activated carbon cloths developed from a novel cellulosic precursor. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 2011, 378, 87-93. | 4.7 | 23 |
| 62 | Assessment of Microporosity. Studies in Surface Science and Catalysis, 1988, 39, 77-87. | 1.5 | 22 |
| 63 | Ex-hydroxide magnesium oxide as a model adsorbent for investigation of micropore filling mechanisms. Journal of the Chemical Society, Faraday Transactions, 1991, 87, 185. | 1.7 | 22 |
| 64 | Numerical simulation of surface ionisation and specific adsorption on a two-site model of a carbon surface. Journal of the Chemical Society, Faraday Transactions, 1995, 91, 2179. | 1.7 | 22 |
| 65 | Reference data for the adsorption of methanol on carbon materials. Carbon, 2001, 39, 193-200. | 10.3 | 22 |
| 66 | Chemical Characterization of Activated Carbon Fibers and Activated Carbons. Journal of Chemical Education, 2006, 83, 436. | 2.3 | 21 |
| 67 | Effect of hydrothermal treatment on the structure, stability and acidity of Al containing MCM-41 and MCM-48 synthesised at room temperature. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 2007, 310, 9-19. | 4.7 | 21 |
| 68 | In vitro adsorption study of fluoxetine in activated carbons and activated carbon fibres. Fuel Processing Technology, 2008, 89, 549-555. | 7.2 | 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. Microporous and Mesoporous Materials, 2010, 131, 75-81. | 4.4 | 21 |
| 70 | Development of a selective sorbent for the solidâ€phase extraction of terbuthylazine in olive oil samples: A molecular imprinting strategy. Journal of Separation Science, 2015, 38, 1204-1212. | 2.5 | 19 |
| 71 | The adsorption of nitrogen and water vapour by carbon-coated precipitated silica. Colloids and Surfaces, 1986, 21, 9-15. | 0.9 | 18 |
| 72 | Molecular sieve behaviour of activated carbons. Carbon, 1995, 33, 1307-1312. | 10.3 | 17 |

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|---|---|---|---|
| 73 | Adsorption Properties of Activated Carbons Prepared from Recycled PET in the Removal of Organic Pollutants from Aqueous Solutions. Adsorption Science and Technology, 2010, 28, 807-821. | 3.2 | 17 |
| 74 | Core-shell polymer aerogels prepared by co-polymerisation of 2,4-dihydroxybenzoic acid, resorcinol and formaldehyde. Microporous and Mesoporous Materials, 2012, 158, 170-174. | 4.4 | 17 |
| 75 | Structure and catalytic activity of Al-MCM-48 materials synthesised at room temperature: Influence of the aluminium source and calcination conditions. Microporous and Mesoporous Materials, 2008, 114, 293-302. | 4.4 | 16 |
| 76 | Influence of thermal treatment conditions on porosity development and mechanical properties of activated carbon cloths from a novel nanofibre-made fabric. Materials Chemistry and Physics, 2009, 116, 310-314. | 4.0 | 15 |
| 77 | PEEK: An excellent precursor for activated carbon production for high temperature application. Fuel Processing Technology, 2009, 90, 232-236. | 7.2 | 15 |
| 78 | The Adsorption of Nitrogen on Precipitated and Pyrogenic Silicas. Adsorption Science and Technology, 1984, 1, 31-39. | 3.2 | 14 |
| 79 | A New Method for The Determination of Micropore Size Distributions. Studies in Surface Science and Catalysis, 1988, 39, 89-100. | 1.5 | 14 |
| 80 | The Adsorption of Water Vapour by Microporous Solids. Studies in Surface Science and Catalysis, 1991, 62, 685-692. | 1.5 | 14 |
| 81 | Stabilization of MCM-41 by Pyrolytic Carbon Deposition. Langmuir, 2000, 16, 9103-9105. | 3.5 | 14 |
| 82 | Catalytic and adsorption properties of Al- and Ti-MCM-41 synthesized at room temperature. Reaction Kinetics and Catalysis Letters, 2002, 77, 83-90. | 0.6 | 14 |
| 83 | Controlling the micropore size of activated carbons for the treatment of fuels and combustion gases. Applied Surface Science, 2006, 252, 5953-5956. | 6.1 | 14 |
| 84 | Activated Carbons Prepared from Natural and Synthetic Raw Materials with Potential Applications in Gas Separations. Advanced Materials Research, 0, 107, 1-7. | 0.3 | 14 |
| 85 | Application of the Frenkel-Halsey-Hill equation to multilayer isotherms of nitrogen on oxides at 77K. Studies in Surface Science and Catalysis, 1982, 10, 403-410. | 1.5 | 13 |
| 86 | Boron trifluoride initiated polymerisation of isobutene in the micropores of activated charcoal cloth. Carbon, 1991, 29, 507-513. | 10.3 | 13 |
| 87 | Production of activated carbon cloth with controlled structure and porosity from a new precursor. Journal of Porous Materials, 2007, 14, 181-190. | 2.6 | 13 |
| 88 | Reference data for the adsorption of dichloromethane on carbon materials. Carbon, 2001, 39, 465-472. | 10.3 | 12 |
| 89 | Amine-Modified Carbon Aerogels for CO<sub>2</sub> Capture. Adsorption Science and Technology, 2013, 31, 223-232. | 3.2 | 12 |
| 90 | Adsorption of Aqueous Mercury(II) Species by Commercial Activated Carbon Fibres with and without Surface Modification. Adsorption Science and Technology, 2007, 25, 199-215. | 3.2 | 11 |

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|---|---|---|---|
| 91 | Textural Development of Activated Carbon Prepared from Recycled PET with Different Chemical Activation Agents. Materials Science Forum, 0, 587-588, 753-757. | 0.3 | 11 |
| 92 | Infrared and quantitative adsorption study of coordinatively unsaturated cations on magnesium hydroxide. Journal of the Chemical Society, Faraday Transactions, 1993, 89, 579. | 1.7 | 10 |
| 93 | Influence of Degassing Temperature on the Performance of Carbon Molecular Sieves for Separations Involving O2, N2, CO2, and CH4. Energy & Fuels, 2006, 20, 766-770. | 5.1 | 10 |
| 94 | Characterisation of Surface Ionisation and Adsorption of Phenol and 4-Nitrophenol on Non-Porous Carbon Blacks. Adsorption Science and Technology, 2008, 26, 827-841. | 3.2 | 10 |
| 95 | Gas Chromatographic Study of Specific Physisorption by Activated Carbons. Adsorption Science and Technology, 1989, 6, 93-102. | 3.2 | 9 |
| 96 | Application of the Î±s Method for Analysing Benzene, Dichloromethane and Methanol Isotherms Determined on Molecular Sieve and Superactivated Carbons. Studies in Surface Science and Catalysis, 2000, 128, 323-331. | 1.5 | 9 |
| 97 | High micropore activated carbon prepared from polyetheretherketone. Carbon, 2007, 45, 2454-2455. | 10.3 | 8 |
| 98 | Scanning electron microscopy of activated carbons prepared from commercial acrylic textile fibres. Fuel Processing Technology, 2002, 77-78, 381-387. | 7.2 | 7 |
| 99 | Characterisation by adsorption of various organic vapours of the porosity of fresh and coked H-MCM-22 zeolites. Microporous and Mesoporous Materials, 2009, 118, 473-479. | 4.4 | 7 |
| 100 | Designing Activated Carbons from Natural and Synthetic Raw Materials for Pollutants Adsorption. Materials Science Forum, 2010, 636-637, 1404-1409. | 0.3 | 7 |
| 101 | Simulations of Phenol Adsorption onto Activated Carbon and Carbon Black. Adsorption Science and Technology, 2010, 28, 797-806. | 3.2 | 7 |
| 102 | Diffusion of gases in metal containing carbon aerogels. Fuel Processing Technology, 2011, 92, 229-233. | 7.2 | 7 |
| 103 | On the use of ethanol for evaluating microporosity of activated carbons prepared from Polish lignite. Fuel Processing Technology, 2012, 103, 34-38. | 7.2 | 7 |
| 104 | Evolution of porosity of activated carbon fibres prepared from pre-oxidized acrylic fibres. Microporous and Mesoporous Materials, 2018, 264, 176-180. | 4.4 | 7 |
| 105 | Determination of gas chromatographic plate heights for hydrocarbon adsorption by superactivated carbon AX21. Journal of Chromatography A, 1990, 518, 53-58. | 3.7 | 6 |
| 106 | On the Lo∫Ï∫ Range of the TVFM. Adsorption Science and Technology, 2006, 24, 205-214. | 3.2 | 6 |
| 107 | Influence of the synthesis conditions on the pore structure and stability of MCM-41 materials containing aluminium or titanium. Studies in Surface Science and Catalysis, 2007, 160, 567-574. | 1.5 | 6 |
| 108 | Adsorption of Bovine Serum Albumin onto Mesocellular Silica Foams with Differently Sized Cells and Windows. Adsorption Science and Technology, 2010, 28, 777-788. | 3.2 | 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. | 3.2 | 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. | 3.2 | 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. | 3.2 | 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. | 3.2 | 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 | Î³-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. | 4.4 | 1 |
| 125 | Calculation of Pore Size Distributions in Low-k Films. AIP Conference Proceedings, 2005, , . | 0.4 | 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. | 3.0 | 0 |