Darren P Broom

List of Publications by Year
in descending order

26 papers	1,710 citations	623574 14 h-index	580701 25 g-index
29 all docs	29 docs citations	29 times ranked	2064 citing authors

#	Article	IF	Citations
1	First Measurements for the Simultaneous Sorption of Difluoromethane and Pentafluoroethane Mixtures in Ionic liquids Using the Integral Mass Balance Method. Industrial & Engineering Chemistry Research, 2022, 61, 9774-9784.	1.8	6
2	Improving Reproducibility in Hydrogen Storage Material Research. ChemPhysChem, 2021, 22, 2141-2157.	1.0	16
3	Materials for hydrogen-based energy storage â€“ past, recent progress and future outlook. Journal of Alloys and Compounds, 2020, 827, 153548.	2.8	518
4	Integral Mass Balance (IMB) Method for Measuring Multicomponent Gas Adsorption Equilibria in Nanoporous Materials. Industrial & Engineering Chemistry Research, 2020, 59, 20478-20491.	1.8	13
5	Concepts for improving hydrogen storage in nanoporous materials. International Journal of Hydrogen Energy, 2019, 44, 7768-7779.	3.8	160
6	A reference high-pressure CO2 adsorption isotherm for ammonium ZSM-5 zeolite: results of an interlaboratory study. Adsorption, 2018, 24, 531-539.	1.4	59
7	Pitfalls in the characterisation of the hydrogen sorption properties of materials. International Journal of Hydrogen Energy, 2017, 42, 29320-29343.	3.8	40
8	Outlook and challenges for hydrogen storage in nanoporous materials. Applied Physics A: Materials Science and Processing, 2016, 122, 1.	1.1	129
9	Irreproducibility in hydrogen storage material research. Energy and Environmental Science, 2016, 9, 3368-3380.	15.6	96
10	Hydrogen storage in nanoporous materials. , 2014, , 410-450.		2
11	Gas adsorption by nanoporous materials: Future applications and experimental challenges. MRS Bulletin, 2013, 38, 412-421.	1.7	65
12	Potential Storage Materials. Green Energy and Technology, 2011, , 19-59.	0.4	7
13	Hydrogen Sorption Properties of Materials. Green Energy and Technology, 2011, , 61-115.	0.4	7
14	Experimental Considerations. Green Energy and Technology, 2011, , 183-234.	0.4	0
15	Complementary Characterisation Techniques. Green Energy and Technology, 2011, , 141-181.	0.4	1
16	Gas Sorption Measurement Techniques. Green Energy and Technology, 2011, , 117-139.	0.4	3
17	Characterisation of porous hydrogen storage materials: carbons, zeolites, MOFs and PIMs. Faraday Discussions, 2011, 151, 75.	1.6	75
18	Hydrogen Storage Materials. Green Energy and Technology, 2011, , .	0.4	141

#	Article	IF	Citations
19	Multiscale simulation and modelling of adsorptive processes for energy gas storage and carbon dioxide capture in porous coordination frameworks. Energy and Environmental Science, 2010, 3, 1469.	15.6	138
20	Hydrogen Storage in Mesoporous Coordination Frameworks: Experiment and Molecular Simulation. Journal of Physical Chemistry C, 2009, 113, 15106-15109.	1.5	52
21	Accuracy in hydrogen sorption measurements. Journal of Alloys and Compounds, 2007, 446-447, 687-691.	2.8	24
22	The accuracy of hydrogen sorption measurements on potential storage materials. International Journal of Hydrogen Energy, 2007, 32, 4871-4888.	3.8	114
23	Monte Carlo simulation of quasielastic neutron scattering from localised and long-range hydrogen motion in C15 Laves phase intermetallic compounds. Chemical Physics, 2003, 292, 153-160.	0.9	15
24	Magnetic properties of the YCo3â€“H system. Journal of Alloys and Compounds, 2003, 356-357, 174-177.	2.8	7
25	Observations of twinning in YBa2Cu3O6 Âx, 0 <x< 1, at high temperatures. Journal of Physics Condensed Matter, 2002, 14, 9763-9778.	0.7	6
26	Magnetic properties of commercial metal hydride battery materials. Journal of Alloys and Compounds, 1999, 293-295, 255-259.	2.8	14