Paul A. Webley

List of Publications by Year in Descending Order

266 papers	13,038 citations	58 h-index	105 g-index
276 ext. papers	15,132 ext. citations	6.9 avg, IF	6.79 L-index

#	Paper	IF	Citations
266	Gating effect for gas adsorption in microporous materials-mechanisms and applications.. *Chemical Society Reviews*, **2022**,	58.5	5
265	Removal of As(V) from wastewaters using magnetic iron oxides formed by zero-valent iron electrocoagulation.. *Journal of Environmental Management*, **2022**, 307, 114519	7.9	0
264	Remediation of As-contaminated soils using citrate extraction coupled with electrochemical removal.. *Science of the Total Environment*, **2022**, 817, 153042	10.2	1
263	The optimal design and operation of a hybrid renewable micro-grid with the decoupled liquid air energy storage. *Journal of Cleaner Production*, **2022**, 334, 130189	10.3	0
262	Electrosorption of cadmium and arsenic from wastewaters using nitrogen-doped biochar: Mechanism and application. *Journal of Environmental Management*, **2022**, 301, 113921	7.9	3
261	Encapsulation of highly viscous CO2 capture solvents for enhanced capture kinetics: Modeling investigation of mass transfer mechanisms. *Chemical Engineering Journal*, **2022**, 428, 131603	14.7	1
260	Research on Adsorption and Desorption Performance of Gas-Phase Naphthalene on Hydrophobic Modified FDU-15. *Processes*, **2022**, 10, 574	2.9	
259	Combined remediation effects of biochar, zeolite and humus on Cd-contaminated weakly alkaline soils in wheat farmland.. *Chemosphere*, **2022**, 302, 134851	8.4	0
258	Electroreduction of CO/CO to C Products: Process Modeling, Downstream Separation, System Integration, and Economic Analysis.. *Industrial & Engineering Chemistry Research*, **2021**, 60, 17862-17880	3.8	3
257	Ultrapermeable Composite Membranes Enhanced Via Doping with Amorphous MOF Nanosheets. *ACS Central Science*, **2021**, 7, 671-680	16.8	7
256	Highly dispersed Cu-ZnO-ZrO2 nanoparticles on hydrotalcite adsorbent as efficient composite catalysts for CO2 hydrogenation to methanol. *Korean Journal of Chemical Engineering*, **2021**, 38, 747-755	2.8	0
255	Recovery of high-purity NO2 and SO2 products from iron-ore sintering flue gas by distillation: process design, optimization and analysis. *Separation and Purification Technology*, **2021**, 264, 118308	8.3	4
254	Enrichment of low grade CH4 from N2/CH4 mixtures using vacuum swing adsorption with activated carbon. *Chemical Engineering Science*, **2021**, 229, 116152	4.4	13
253	Effect of intermittent purge on O2 production with rapid pressure swing adsorption technology. *Adsorption*, **2021**, 27, 181-189	2.6	3
252	NO removal with efficient recycling of NO from iron-ore sintering flue gas: A novel cyclic adsorption process. *Journal of Hazardous Materials*, **2021**, 407, 124380	12.8	14
251	Integrated adsorption and absorption process for post-combustion CO2 capture. *Frontiers of Chemical Science and Engineering*, **2021**, 15, 483-492	4.5	5
250	Guidelines for Techno-Economic Analysis of Adsorption Processes. *Frontiers in Chemical Engineering* , **2021**, 2,	1	6

249	Nitrogen Rejection from Methane via a "Trapdoor" K-ZSM-25 Zeolite. *Journal of the American Chemical Society*, **2021**, 143, 15195-15204	16.4	3
248	Adsorption and desorption of gaseous naphthalene on carbonaceous sorbents: Insights into advantageous pore sizes and morphologies. *Journal of Cleaner Production*, **2021**, 314, 127905	10.3	3
247	Zeolite-supported manganese oxides decrease the Cd uptake of wheat plants in Cd-contaminated weakly alkaline arable soils. *Journal of Hazardous Materials*, **2021**, 419, 126464	12.8	8
246	Experimental study on oxygen concentrator with wide product flow rate range: individual parametric effect and process improvement strategy. *Separation and Purification Technology*, **2021**, 274, 118918	8.3	1
245	Polyrotaxane-based thin film composite membranes for enhanced nanofiltration performance. *Separation and Purification Technology*, **2020**, 246, 116893	8.3	2
244	Remediation of heavy metal contaminated soils by organic acid extraction and electrochemical adsorption. *Environmental Pollution*, **2020**, 264, 114745	9.3	36
243	Adsorption and catalytic oxidation of arsenite on Fe-Mn nodules in the presence of oxygen. *Chemosphere*, **2020**, 259, 127503	8.4	5
242	Electrochemical adsorption of cadmium and arsenic by natural Fe-Mn nodules. *Journal of Hazardous Materials*, **2020**, 390, 122165	12.8	8
241	Separation of CO2 and CH4 by Pressure Swing Adsorption Using a Molecular Trapdoor Chabazite Adsorbent for Natural Gas Purification. *Industrial & Engineering Chemistry Research*, **2020**, 59, 7857-7865	3.9	12
240	3-D Modeling of Gas□Solid Two-Phase Flow in a □Shaped Centripetal Radial Flow Adsorber. *Applied Sciences (Switzerland)*, **2020**, 10, 614	2.6	
239	Synthesis of Ni5Ga3 catalyst by Hydrotalcite-like compound (HTlc) precursors for CO2 hydrogenation to methanol. *Applied Catalysis B: Environmental*, **2020**, 275, 119067	21.8	9
238	High-throughput CO2 capture using PIM-1@MOF based thin film composite membranes. *Chemical Engineering Journal*, **2020**, 396, 125328	14.7	35
237	Effects of Co(II) ion exchange, Ni(II)- and V(V)-doping on the transformation behaviors of Cr(III) on hexagonal turbostratic birnessite-water interfaces. *Environmental Pollution*, **2020**, 256, 113462	9.3	9
236	Nitrogen Availability and the Nature of Extracellular Organic Matter of Microalgae. *Industrial & Engineering Chemistry Research*, **2020**, 59, 6795-6805	3.9	9
235	Synergistic adsorption of Cd(II) and As(V) on birnessite under electrochemical control. *Chemosphere* , **2020**, 247, 125822	8.4	3
234	High-efficiency As(III) oxidation and electrocoagulation removal using hematite with a charge-discharge technique. *Science of the Total Environment*, **2020**, 703, 135678	10.2	8
233	Physical Aging Investigations of a Spirobisindane-Locked Polymer of Intrinsic Microporosity **2020**, 2, 993-998	6	
232	Insights into adsorption separation of N2/O2 mixture on FAU zeolites under plateau special conditions: A molecular simulation study. *Separation and Purification Technology*, **2020**, 251, 117405	8.3	8

231	Advances in carbon capture, utilization and storage. *Applied Energy*, **2020**, 278, 115627	10.7	36
230	CO2 capture from high concentration CO2 natural gas by pressure swing adsorption at the CO2CRC Otway site, Australia. *International Journal of Greenhouse Gas Control*, **2019**, 83, 1-10	4.2	19
229	Promoting CO2 hydrogenation to methanol by incorporating adsorbents into catalysts: Effects of hydrotalcite. *Chemical Engineering Journal*, **2019**, 378, 122052	14.7	23
228	Postcombustion Carbon Capture Using Thin-Film Composite Membranes. *Accounts of Chemical Research*, **2019**, 52, 1905-1914	24.3	35
227	Two-Dimensional Modeling of Pressure Swing Adsorption (PSA) Oxygen Generation with Radial-Flow Adsorber. *Applied Sciences (Switzerland)*, **2019**, 9, 1153	2.6	5
226	Solvent Impregnated Polymers for Carbon Capture. *Industrial & Engineering Chemistry Research* , **2019**, 58, 6626-6634	3.9	8
225	The effect of nitrogen depletion on the cell size, shape, density and gravitational settling of Nannochloropsis salina, Chlorella sp. (marine) and Haematococcus pluvialis. *Algal Research*, **2019**, 39, 101454	5	20
224	Practical separation performance evaluation of coal mine methane upgrading with carbon molecular sieves. *Chemical Engineering Journal*, **2019**, 367, 295-303	14.7	21
223	Towards sustainable microalgal biomass processing: anaerobic induction of autolytic cell-wall self-ingestion in lipid-rich Nannochloropsis slurries. *Green Chemistry*, **2019**, 21, 2967-2982	10	17
222	Thermodynamic analysis of molecular simulations of N2 and O2 adsorption on zeolites under plateau special conditions. *Applied Surface Science*, **2019**, 480, 868-875	6.7	17
221	Photochemical Formation Process of Schwertmannite on Montmorillonite and Corresponding Cr(VI) Adsorption Capacity. *ACS Earth and Space Chemistry*, **2019**, 3, 718-727	3.2	11
220	Improved removal capacity of magnetite for Cr(VI) by electrochemical reduction. *Journal of Hazardous Materials*, **2019**, 374, 26-34	12.8	64
219	Enhancing plasticization-resistance of mixed-matrix membranes with exceptionally high CO2/CH4 selectivity through incorporating ZSM-25 zeolite. *Journal of Membrane Science*, **2019**, 583, 23-30	9.6	30
218	Molecular Simulation of Naphthalene, Phenanthrene, and Pyrene Adsorption on MCM-41. *International Journal of Molecular Sciences*, **2019**, 20,	6.3	7
217	Additively manufactured, highly-uniform flow distributor for process intensification. *Chemical Engineering and Processing: Process Intensification*, **2019**, 143, 107595	3.7	10
216	Solar Irradiation Induced Transformation of Ferrihydrite in the Presence of Aqueous Fe. *Environmental Science & Technology*, **2019**, 53, 8854-8861	10.3	12
215	Thermally coupled dark-anoxia incubation: A platform technology to induce auto-fermentation and thus cell-wall thinning in both nitrogen-replete and nitrogen-deplete Nannochloropsis slurries. *Bioresource Technology*, **2019**, 290, 121769	11	3
214	Effective Gas Separation Performance Enhancement Obtained by Constructing Polymorphous Core-Shell Metal-Organic Frameworks. *ACS Applied Materials & Interfaces*, **2019**, 11, 30234-30239	9.5	9

213	Intensified isothermal reactor for methanol synthesis. *Chemical Engineering and Processing: Process Intensification*, **2019**, 143, 107606	3.7	9
212	Moderate-pressure conversion of H2 and CO2 to methanol via adsorption enhanced hydrogenation. *International Journal of Hydrogen Energy*, **2019**, 44, 21913-21925	6.7	15
211	Solubility of Carbon Monoxide and Hydrogen in Methanol and Methyl Formate: 298–373 K and 0.3–3.3 MPa. *Journal of Chemical & Engineering Data*, **2019**, 64, 5609-5621	2.8	3
210	Extraction of iron and aluminum from high-iron bauxite by ammonium sulfate roasting and water leaching. *Journal of Iron and Steel Research International*, **2019**, 26, 578-584	1.2	6
209	Sr-LSX zeolite for air separation. *Chemical Engineering Journal*, **2019**, 362, 482-486	14.7	29
208	Recent progress on fabrication methods of polymeric thin film gas separation membranes for CO2 capture. *Journal of Membrane Science*, **2019**, 572, 38-60	9.6	115
207	Improved methanol yield and selectivity from CO2 hydrogenation using a novel Cu-ZnO-ZrO2 catalyst supported on Mg-Al layered double hydroxide (LDH). *Journal of CO2 Utilization*, **2019**, 29, 57-64	7.6	47
206	CO2 capture using a novel hybrid monolith (H-ZSM5/activated carbon) as adsorbent by combined vacuum and electric swing adsorption (VESA). *Chemical Engineering Journal*, **2019**, 358, 707-717	14.7	28
205	An optimal trapdoor zeolite for exclusive admission of CO at industrial carbon capture operating temperatures. *Chemical Communications*, **2018**, 54, 3134-3137	5.8	28
204	Life cycle analysis (LCA) of low emission methanol and di-methyl ether (DME) derived from natural gas. *Fuel*, **2018**, 220, 871-878	7.1	32
203	A comparison of multicomponent electrosorption in capacitive deionization and membrane capacitive deionization. *Water Research*, **2018**, 131, 100-109	12.5	84
202	Heats of adsorption on mixed-cation LiNa-LSX: Estimating SIII site occupancy by Li. *Chemical Engineering Science*, **2018**, 178, 194-198	4.4	8
201	Preparation, characterization and catalytic performance of Cu nanowire catalyst for CO2 hydrogenation. *Journal of Central South University*, **2018**, 25, 691-700	2.1	4
200	Carbon capture and storage (CCS): the way forward. *Energy and Environmental Science*, **2018**, 11, 1062-1176	35.4	1368
199	Continuous assembly of a polymer on a metal–organic framework (CAP on MOF): a 30 nm thick polymeric gas separation membrane. *Energy and Environmental Science*, **2018**, 11, 544-550	35.4	93
198	Li+/ZSM-25 Zeolite as a CO2 Capture Adsorbent with High Selectivity and Improved Adsorption Kinetics, Showing CO2-Induced Framework Expansion. *Journal of Physical Chemistry C*, **2018**, 122, 18933-18941	3.8	21
197	High-performance Cu adsorption of birnessite using electrochemically controlled redox reactions. *Journal of Hazardous Materials*, **2018**, 354, 107-115	12.8	32
196	A numerical modelling study of SO2 adsorption on activated carbons with new rate equations. *Chemical Engineering Journal*, **2018**, 353, 858-866	14.7	25

195	Synthesis of a novel hybrid adsorbent which combines activated carbon and zeolite NaUSY for CO2 capture by electric swing adsorption (ESA). *Chemical Engineering Journal*, **2018**, 336, 659-668	14.7	22
194	Simultaneous biogas purification and CO2 capture by vacuum swing adsorption using zeolite NaUSY. *Chemical Engineering Journal*, **2018**, 334, 2593-2602	14.7	48
193	Potential for using municipal solid waste as a resource for bioenergy with carbon capture and storage (BECCS). *International Journal of Greenhouse Gas Control*, **2018**, 68, 1-15	4.2	77
192	Two-dimensional nanosheet-based gas separation membranes. *Journal of Materials Chemistry A*, **2018**, 6, 23169-23196	13	70
191	Phenol Molecular Sheets Woven by Water Cavities in Hydrophobic Slit Nanospaces. *Langmuir*, **2018**, 34, 15150-15159	4	1
190	Vacuum Exhaust Process in Pilot-Scale Vacuum Pressure Swing Adsorption for Coal Mine Ventilation Air Methane Enrichment. *Energies*, **2018**, 11, 1030	3.1	15
189	Ultrathin Metal-Organic Framework Nanosheets as a Gutter Layer for Flexible Composite Gas Separation Membranes. *ACS Nano*, **2018**, 12, 11591-11599	16.7	68
188	Enhancement in specific absorption rate by solvent microencapsulation. *AICHE Journal*, **2018**, 64, 4066-4079	3.6	8
187	MOF Scaffold for a High-Performance Mixed-Matrix Membrane. *Angewandte Chemie - International Edition*, **2018**, 57, 8597-8602	16.4	37
186	MOF Scaffold for a High-Performance Mixed-Matrix Membrane. *Angewandte Chemie*, **2018**, 130, 8733-8738	3.6	16
185	Opportunities for application of BECCS in the Australian power sector. *Applied Energy*, **2018**, 224, 615-635	10.7	39
184	Pd(0) loaded Zn2(azoBDC)2(dabco) as a heterogeneous catalyst. *CrystEngComm*, **2017**, 19, 4182-4186	3.3	13
183	Can the addition of carbon nanoparticles to a polyimide membrane reduce plasticization?. *Separation and Purification Technology*, **2017**, 183, 333-340	8.3	4
182	Increasing both selectivity and permeability of mixed-matrix membranes: Sealing the external surface of porous MOF nanoparticles. *Journal of Membrane Science*, **2017**, 535, 350-356	9.6	58
181	Improvement of MCDI operation and design through experiment and modelling: Regeneration with brine and optimum residence time. *Desalination*, **2017**, 417, 36-51	10.3	26
180	Intensified Biobutanol Recovery by using Zeolites with Complementary Selectivity. *ChemSusChem*, **2017**, 10, 2968-2977	8.3	23
179	Temperature-regulated guest admission and release in microporous materials. *Nature Communications*, **2017**, 8, 15777	17.4	36
178	Adsorption thermodynamics and desorption properties of gaseous polycyclic aromatic hydrocarbons on mesoporous adsorbents. *Adsorption*, **2017**, 23, 361-371	2.6	18

177	Learnings from CO2CRC Capture Pilot Plant Testing Assessing Technology Development. *Energy Procedia*, **2017**, 114, 5855-5868	2.3	4
176	A Sustainability Framework for Bioenergy with Carbon Capture and Storage (BECCS) Technologies. *Energy Procedia*, **2017**, 114, 6044-6056	2.3	22
175	A New Multi-bed Vacuum Swing Adsorption Cycle for CO2 Capture from Flue Gas Streams. *Energy Procedia*, **2017**, 114, 2467-2480	2.3	19
174	Impact of operating parameters on CO2 capture using carbon monolith by Electrical Swing Adsorption technology (ESA). *Chemical Engineering Journal*, **2017**, 327, 441-453	14.7	27
173	Performance of mesoporous silicas and carbon in adsorptive removal of phenanthrene as a typical gaseous polycyclic aromatic hydrocarbon. *Microporous and Mesoporous Materials*, **2017**, 239, 9-18	5.3	22
172	The use of reduced copper metal-organic frameworks to facilitate CuAAC click chemistry. *Chemical Communications*, **2016**, 52, 12226-12229	5.8	35
171	Exchange Method Using Acid-Solvent Synergy for Metal Organic Framework Synthesis (EASY-MOFs) Based on a Typical Pillar-Layered Parent Structure. *European Journal of Inorganic Chemistry*, **2016**, 2016, 1466-1469	2.3	5
170	A density functional theory study for the adsorption of various gases on a caesium-exchanged trapdoor chabazite. *Computational Materials Science*, **2016**, 122, 307-313	3.2	13
169	A comparative study on conversion of porous and non-porous metal organic frameworks (MOFs) into carbon-based composites for carbon dioxide capture. *Polyhedron*, **2016**, 120, 30-35	2.7	20
168	Novel low energy hydrogen deuterium isotope breakthrough separation using a trapdoor zeolite. *Chemical Engineering Journal*, **2016**, 288, 161-168	14.7	16
167	CO2 Capture by Temperature Swing Adsorption: Use of Hot CO2-Rich Gas for Regeneration. *Industrial & Engineering Chemistry Research*, **2016**, 55, 703-713	3.9	98
166	Strategies for CO2 capture from different CO2 emission sources by vacuum swing adsorption technology. *Chinese Journal of Chemical Engineering*, **2016**, 24, 460-467	3.2	16
165	Functionalized UiO-66 by Single and Binary (OH)2 and NO2 Groups for Uptake of CO2 and CH4. *Industrial & Engineering Chemistry Research*, **2016**, 55, 7924-7932	3.9	40
164	Multi-objective optimisation of a hybrid vacuum swing adsorption and low-temperature post-combustion CO2 capture. *Journal of Cleaner Production*, **2016**, 111, 193-203	10.3	34
163	Oxygen selective iron and cobalt metalloporphyrin polymers Extraordinary selectivity at low temperature. *Microporous and Mesoporous Materials*, **2016**, 222, 63-72	5.3	4
162	The CIDES process: Fractionation of concentrated microalgal paste for co-production of biofuel, nutraceuticals, and high-grade protein feed. *Algal Research*, **2016**, 19, 299-306	5	43
161	Saving, Selling, Earning, and Negotiating: How Adolescents Acquire Monetary Lump Sums and Who Considers Saving. *Journal of Consumer Affairs*, **2016**, 50, 342-371	2	7
160	Performance of mesoporous silicas (MCM-41 and SBA-15) and carbon (CMK-3) in the removal of gas-phase naphthalene: adsorption capacity, rate and regenerability. *RSC Advances*, **2016**, 6, 21193-21203	3.7	36

159	Desorption Kinetics of Naphthalene and Acenaphthene over Two Activated Carbons via Thermogravimetric Analysis. *Energy & Fuels*, **2015**, 29, 5303-5310	4.1	16
158	Converting 3D rigid metal-organic frameworks (MOFs) to 2D flexible networks via ligand exchange for enhanced CO2/N2 and CH4/N2 separation. *Chemical Communications*, **2015**, 51, 14716-9	5.8	38
157	Assessment of ZIF materials for CO2 capture from high pressure natural gas streams. *Chemical Engineering Journal*, **2015**, 280, 486-493	14.7	22
156	CO2 capture by vacuum swing adsorption: role of multiple pressure equalization steps. *Adsorption*, **2015**, 21, 509-522	2.6	18
155	Synthesis of well dispersed polymer grafted metal-organic framework nanoparticles. *Chemical Communications*, **2015**, 51, 15566-9	5.8	62
154	Effects of amino functionality on uptake of CO2, CH4 and selectivity of CO2/CH4 on titanium based MOFs. *Fuel*, **2015**, 160, 318-327	7.1	67
153	Methane Recovery from Coal Bed Gas Using Modified Activated Carbons: A Combined Method for Assessing the Role of Functional Groups. *Energy & Fuels*, **2015**, 29, 6858-6865	4.1	10
152	Density Functional Theory Computational Study of Alkali Cation-Exchanged Sodalite-like Zeolitelike Metal□Organic Framework for CO2, N2, and CH4 Adsorption. *Journal of Physical Chemistry C*, **2015**, 119, 27449-27456	3.8	4
151	Effects of feed gas concentration, temperature and process parameters on vacuum swing adsorption performance for CO2 capture. *Chemical Engineering Journal*, **2015**, 265, 47-57	14.7	30
150	Nile Red Staining for Oil Determination in Microalgal Cells: A New Insight through Statistical Modelling. *International Journal of Chemical Engineering*, **2015**, 2015, 1-14	2.2	7
149	Upgrading Biogas at Low Pressure by Vacuum Swing Adsorption. *Industrial & Engineering Chemistry Research*, **2015**, 54, 404-413	3.9	26
148	Adsorption technology for CO2 separation and capture: a perspective. *Adsorption*, **2014**, 20, 225-231	2.6	135
147	The role of water on postcombustion CO2 capture by vacuum swing adsorption: Bed layering and purge to feed ratio. *AICHE Journal*, **2014**, 60, 673-689	3.6	38
146	Modelling the kinetics of lipid extraction from wet microalgal concentrate: A novel perspective on a classical process. *Chemical Engineering Journal*, **2014**, 242, 234-253	14.7	29
145	Temperature controlled invertible selectivity for adsorption of N(2) and CH(4) by molecular trapdoor chabazites. *Chemical Communications*, **2014**, 50, 4544-6	5.8	23
144	SiC nanofiber reinforced porous ceramic hollow fiber membranes. *Journal of Materials Chemistry A*, **2014**, 2, 5841	13	30
143	A facile method to synthesis a mesoporous carbon supported methanol catalyst containing well dispersed Cu/ZnO. *Materials Research Bulletin*, **2014**, 60, 232-237	5.1	6
142	Microwave assisted vacuum regeneration for CO2 capture from wet flue gas. *Adsorption*, **2014**, 20, 201-210	2.6	19

141	Biogas upgrading through kinetic separation of carbon dioxide and methane over Rb- and Cs-ZK-5 zeolites. *RSC Advances*, **2014**, 4, 62511-62524	3.7	24
140	Mesoporous Carbon-supported Cu/ZnO for Methanol Synthesis from Carbon Dioxide. *Australian Journal of Chemistry*, **2014**, 67, 907	1.2	10
139	Adsorption of CO2, N2, and CH4 in Cs-exchanged chabazite: a combination of van der Waals density functional theory calculations and experiment study. *Journal of Chemical Physics*, **2014**, 140, 084705	3.9	31
138	Effect of the addition of polyvinylpyrrolidone as a pore-former on microstructure and mechanical strength of porous alumina ceramics. *Ceramics International*, **2013**, 39, 7551-7556	5.1	46
137	One-step fabrication of ZIF-8/polymer composite spheres by a phase inversion method for gas adsorption. *Colloid and Polymer Science*, **2013**, 291, 2711-2717	2.4	35
136	A new simplified pressure/vacuum swing adsorption model for rapid adsorbent screening for CO2 capture applications. *International Journal of Greenhouse Gas Control*, **2013**, 15, 16-31	4.2	104
135	Effects of water vapour on CO2 capture with vacuum swing adsorption using activated carbon. *Chemical Engineering Journal*, **2013**, 230, 64-72	14.7	64
134	Mechanical cell disruption for lipid extraction from microalgal biomass. *Bioresource Technology*, **2013**, 140, 53-63	11	97
133	Bioprocess Engineering Aspects of Biodiesel and Bioethanol Production from Microalgae **2013**, 601-628		4
132	Zeolite monoliths with hierarchical designed pore network structure: Synthesis and performance. *Chemical Engineering Journal*, **2013**, 223, 48-58	14.7	25
131	Determination of Composition Range for "Molecular Trapdoor" Effect in Chabazite Zeolite. *Journal of Physical Chemistry C*, **2013**, 117, 12841-12847	3.8	70
130	Direct synthesis of hierarchical LTA zeolite via a low crystallization and growth rate technique in presence of cetyltrimethylammonium bromide. *Journal of Colloid and Interface Science*, **2012**, 382, 1-12	9.3	34
129	Extraction of oil from microalgae for biodiesel production: A review. *Biotechnology Advances*, **2012**, 30, 709-32	17.8	688
128	Synthesis of hydrophobic zeolite X@SiO2 core–shell composites. *Materials Chemistry and Physics*, **2012**, 133, 1144-1151	4.4	14
127	Formation of LTA zeolite crystals with multi-hollow polycrystalline core–shell structure via aggregation–recrystallization route in presence of emulsion droplets. *Microporous and Mesoporous Materials*, **2012**, 160, 75-84	5.3	14
126	General and controllable synthesis of novel mesoporous magnetic iron oxide@carbon encapsulates for efficient arsenic removal. *Advanced Materials*, **2012**, 24, 485-91	24	283
125	Discriminative separation of gases by a "molecular trapdoor" mechanism in chabazite zeolites. *Journal of the American Chemical Society*, **2012**, 134, 19246-53	16.4	226
124	CO2 capture at elevated temperatures by cyclic adsorption processes. *RSC Advances*, **2012**, 2, 5291	3.7	13

123	Silica/Polyethyleneimine Composite Adsorbent S-PEI for CO2 Capture by Vacuum Swing Adsorption (VSA). *ACS Symposium Series*, **2012**, 177-205	0.4	8
122	CO2 Capture by Vacuum Swing Adsorption Using F200 and Sorbead WS as Protective Pre-layers. *Chinese Journal of Chemical Engineering*, **2012**, 20, 849-855	3.2	11
121	Ordered mesoporous platinum@graphitic carbon embedded nanophase as a highly active, stable, and methanol-tolerant oxygen reduction electrocatalyst. *Journal of the American Chemical Society*, **2012**, 134, 2236-45	16.4	193
120	Post-enrichment of nitrogen in soft-templated ordered mesoporous carbon materials for highly efficient phenol removal and CO2 capture. *Journal of Materials Chemistry*, **2012**, 22, 11379		143
119	Ordered mesoporous graphitized pyrolytic carbon materials: synthesis, graphitization, and electrochemical properties. *Journal of Materials Chemistry*, **2012**, 22, 8835		80
118	Optimal design of engineered gas adsorbents: Pore-scale level. *Chemical Engineering Science*, **2012**, 69, 270-278	4.4	24
117	Microalgal cell disruption for biofuel development. *Applied Energy*, **2012**, 91, 116-121	10.7	237
116	Study of Fibrous AlPO4-5 via Hydrothermal Conditions: Morphology Evolution and Growth Mechanism. *Advanced Materials Research*, **2012**, 535-537, 2535-2539	0.5	
115	Adsorption Equilibrium and Kinetics of CO2 and H2O on Activated Carbon. *Wuji Cailiao Xuebao/Journal of Inorganic Materials*, **2012**, 27, 139-145	1	4
114	Advanced adsorbents based on MgO and K2CO3 for capture of CO2 at elevated temperatures. *International Journal of Greenhouse Gas Control*, **2011**, 5, 634-639	4.2	106
113	Preparation of Activated Carbons with Large Specific Surface Areas from Biomass Corncob and Their Adsorption Equilibrium for Methane, Carbon Dioxide, Nitrogen, and Hydrogen. *Industrial & Engineering Chemistry Research*, **2011**, 50, 9286-9294	3.9	36
112	One-pot generation of mesoporous carbon supported nanocrystalline calcium oxides capable of efficient CO2 capture over a wide range of temperatures. *Physical Chemistry Chemical Physics*, **2011**, 13, 2495-503	3.6	58
111	Adsorption and Separation of C1□8 Alcohols on SAPO-34. *Journal of Physical Chemistry C*, **2011**, 115, 8117-8125	3.8	53
110	Formation and photocatalytic properties of bismuth ferrite submicrocrystals with tunable morphologies. *New Journal of Chemistry*, **2011**, 35, 937	3.6	37
109	Effect of water vapor from power station flue gas on CO2 capture by vacuum swing adsorption with activated carbon. *Journal of Fuel Chemistry and Technology*, **2011**, 39, 169-174	1.8	28
108	Preparation of ZIF-8 membranes supported on ceramic hollow fibers from a concentrated synthesis gel. *Journal of Membrane Science*, **2011**, 385-386, 187-193	9.6	122
107	Synthesis and adsorption properties of titanosilicates ETS-4 and ETS-10 from fly ash. *Journal of Hazardous Materials*, **2011**, 195, 340-5	12.8	9
106	The effect of wall porosity and zeolite film thickness on the dynamic behavior of adsorbents in the form of coated monoliths. *Separation and Purification Technology*, **2011**, 81, 191-199	8.3	24

105	Synthesis of ordered mesostructured polymer-organosilica composites by the triconstituent co-assembly method. *Materials Letters*, **2011**, 65, 624-627	3.3	5
104	Zeolite synthesis from waste fly ash and its application in CO2 capture from flue gas streams. *Adsorption*, **2011**, 17, 795-800	2.6	42
103	Oil extraction from microalgae for biodiesel production. *Bioresource Technology*, **2011**, 102, 178-85	11	496
102	Dual mode roll-up effect in multicomponent non-isothermal adsorption processes with multilayered bed packing. *Chemical Engineering Science*, **2011**, 66, 1825-1834	4.4	31
101	Application of the reaction engineering approach (REA) for modeling intermittent drying under time-varying humidity and temperature. *Chemical Engineering Science*, **2011**, 66, 2149-2156	4.4	46
100	Modeling of high-temperature treatment of wood using the reaction engineering approach (REA). *Bioresource Technology*, **2011**, 102, 6214-20	11	12
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