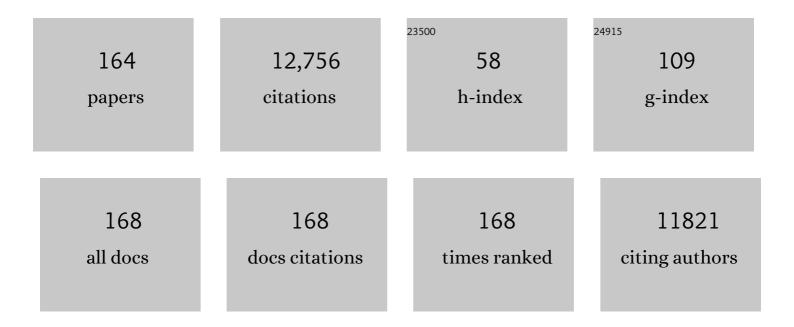
Robert Mokaya

List of Publications by Year in descending order

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| # | Article | IF | CITATIONS |
|----|---|------|-----------|
| 1 | Energy storage applications of activated carbons: supercapacitors and hydrogen storage. Energy and Environmental Science, 2014, 7, 1250-1280. | 15.6 | 1,229 |
| 2 | Enhanced Hydrogen Storage Capacity of High Surface Area Zeolite-like Carbon Materials. Journal of the American Chemical Society, 2007, 129, 1673-1679. | 6.6 | 568 |
| 3 | Hydrothermal Carbonization of Abundant Renewable Natural Organic Chemicals for Highâ€Performance Supercapacitor Electrodes. Advanced Energy Materials, 2011, 1, 356-361. | 10.2 | 538 |
| 4 | Polypyrroleâ€Derived Activated Carbons for Highâ€Performance Electrical Doubleâ€Layer Capacitors with Ionic Liquid Electrolyte. Advanced Functional Materials, 2012, 22, 827-834. | 7.8 | 396 |
| 5 | Synthesis of Ordered Mesoporous Carbon and Nitrogen-Doped Carbon Materials with Graphitic Pore Walls via a Simple Chemical Vapor Deposition Method. Advanced Materials, 2004, 16, 1553-1558. | 11.1 | 351 |
| 6 | Superior CO ₂ Adsorption Capacity on Nâ€doped, High‣urfaceâ€Area, Microporous Carbons Templated from Zeolite. Advanced Energy Materials, 2011, 1, 678-683. | 10.2 | 328 |
| 7 | Templated nanoscale porous carbons. Nanoscale, 2010, 2, 639. | 2.8 | 299 |
| 8 | A Porous Framework Polymer Based on a Zinc(II) 4,4â€~-Bipyridine-2,6,2â€~,6â€~-tetracarboxylate: Synthesis, Structure, and "Zeolite-Like―Behaviors. Journal of the American Chemical Society, 2006, 128, 10745-10753. | 6.6 | 296 |
| 9 | Zeolite ZSM-5 with Unique Supermicropores Synthesized Using Mesoporous Carbon as a Template. Advanced Materials, 2004, 16, 727-732. | 11.1 | 279 |
| 10 | Biomass-derived activated carbon with simultaneously enhanced CO ₂ uptake for both pre and post combustion capture applications. Journal of Materials Chemistry A, 2016, 4, 280-289. | 5.2 | 251 |
| 11 | Preparation and Hydrogen Storage Properties of Zeolite-Templated Carbon Materials Nanocast via Chemical Vapor Deposition:Â Effect of the Zeolite Template and Nitrogen Doping. Journal of Physical Chemistry B, 2006, 110, 18424-18431. | 1.2 | 243 |
| 12 | Ordered Mesoporous Carbon Hollow Spheres Nanocast Using Mesoporous Silica via Chemical Vapor Deposition. Advanced Materials, 2004, 16, 886-891. | 11.1 | 203 |
| 13 | Generalized and Facile Synthesis Approach to N-Doped Highly Graphitic Mesoporous Carbon Materials. Chemistry of Materials, 2005, 17, 1553-1560. | 3.2 | 193 |
| 14 | Oxygen-rich microporous carbons with exceptional hydrogen storage capacity. Nature Communications, 2017, 8, 1545. | 5.8 | 192 |
| 15 | Carbon nanotube/titanium dioxide (CNT/TiO2) core–shell nanocomposites with tailored shell thickness, CNT content and photocatalytic/photoelectrocatalytic properties. Applied Catalysis B: Environmental, 2011, 110, 50-57. | 10.8 | 184 |
| 16 | Improving the Stability of Mesoporous MCM-41 Silica via Thicker More Highly Condensed Pore Walls. Journal of Physical Chemistry B, 1999, 103, 10204-10208. | 1.2 | 176 |
| 17 | Acidity and catalytic activity of the mesoporous aluminosilicate molecular sieve MCM-41. Catalysis Letters, 1996, 37, 113-120. | 1.4 | 174 |
| 18 | Hydrogen Storage in High Surface Area Carbons: Experimental Demonstration of the Effects of Nitrogen Doping. Journal of the American Chemical Society, 2009, 131, 16493-16499. | 6.6 | 174 |

| # | Article | IF | CITATIONS |
|----|---|------|-----------|
| 19 | Ultrastable Mesoporous Aluminosilicates by Grafting Routes. Angewandte Chemie - International Edition, 1999, 38, 2930-2934. | 7.2 | 161 |
| 20 | Ultrahigh surface area polypyrrole-based carbons with superior performance for hydrogen storage. Energy and Environmental Science, 2011, 4, 2930. | 15.6 | 155 |
| 21 | Cigarette butt-derived carbons have ultra-high surface area and unprecedented hydrogen storage capacity. Energy and Environmental Science, 2017, 10, 2552-2562. | 15.6 | 154 |
| 22 | Optimization of the Pore Structure of Biomass-Based Carbons in Relation to Their Use for CO ₂ Capture under Low- and High-Pressure Regimes. ACS Applied Materials & Interfaces, 2018, 10, 1623-1633. | 4.0 | 146 |
| 23 | Valorization of Lignin Waste: Carbons from Hydrothermal Carbonization of Renewable Lignin as Superior Sorbents for CO ₂ and Hydrogen Storage. ACS Sustainable Chemistry and Engineering, 2015, 3, 1658-1667. | 3.2 | 144 |
| 24 | Post-synthesis grafting of Al onto MCM-41. Chemical Communications, 1997, , 2185-2186. | 2.2 | 140 |
| 25 | Mesostructured Hollow Spheres of Graphitic N-Doped Carbon Nanocast from Spherical Mesoporous Silica. Journal of Physical Chemistry B, 2004, 108, 19293-19298. | 1.2 | 138 |
| 26 | Physicochemical Characterisation and Catalytic Activity of Primary Amine Templated Aluminosilicate Mesoporous Catalysts. Journal of Catalysis, 1997, 172, 211-221. | 3.1 | 134 |
| 27 | Highly Ordered Mesoporous Silicon Oxynitride Materials as Base Catalysts. Angewandte Chemie - International Edition, 2003, 42, 2639-2644. | 7.2 | 134 |
| 28 | Generalized Mechanochemical Synthesis of Biomassâ€Đerived Sustainable Carbons for High Performance CO ₂ Storage. Advanced Energy Materials, 2015, 5, 1500867. | 10.2 | 130 |
| 29 | Hollow spheres of crystalline porous metal oxides: A generalized synthesis route via nanocasting with mesoporous carbon hollow shells. Journal of Materials Chemistry, 2005, 15, 3126. | 6.7 | 125 |
| 30 | Biomass to porous carbon in one step: directly activated biomass for high performance CO ₂ storage. Journal of Materials Chemistry A, 2017, 5, 12330-12339. | 5.2 | 122 |
| 31 | Al Content Dependent Hydrothermal Stability of Directly Synthesized Aluminosilicate MCM-41. Journal of Physical Chemistry B, 2000, 104, 8279-8286. | 1.2 | 115 |
| 32 | Is N-Doping in Porous Carbons Beneficial for CO ₂ Storage? Experimental Demonstration of the Relative Effects of Pore Size and N-Doping. Chemistry of Materials, 2016, 28, 994-1001. | 3.2 | 113 |
| 33 | Microporous activated carbon aerogels via a simple subcritical drying route for CO2 capture and hydrogen storage. Microporous and Mesoporous Materials, 2013, 179, 151-156. | 2.2 | 112 |
| 34 | Bifunctional Hybrid Mesoporous Organoaluminosilicates with Molecularly Ordered Ethylene Groups. Journal of the American Chemical Society, 2005, 127, 790-798. | 6.6 | 109 |
| 35 | On the synthesis and characterization of ZSM-5/MCM-48 aluminosilicate composite materials. Journal of Materials Chemistry, 2004, 14, 863. | 6.7 | 107 |
| 36 | High Surface Area Silicon Carbide Whiskers and Nanotubes Nanocast Using Mesoporous Silica. Chemistry of Materials, 2004, 16, 3877-3884. | 3.2 | 102 |

| # | Article | IF | CITATIONS |
|----|--|------|-----------|
| 37 | Superactivated carbide-derived carbons with high hydrogenstorage capacity. Energy and Environmental Science, 2010, 3, 223-227. | 15.6 | 102 |
| 38 | Compactivation: A mechanochemical approach to carbons with superior porosity and exceptional performance for hydrogen and CO2 storage. Nano Energy, 2015, 16, 173-185. | 8.2 | 100 |
| 39 | A simplified synthesis of N-doped zeolite-templated carbons, the control of the level of zeolite-like ordering and its effect on hydrogen storage properties. Carbon, 2011, 49, 844-853. | 5.4 | 94 |
| 40 | Ordered Mesoporous Carbon Monoliths:  CVD Nanocasting and Hydrogen Storage Properties. Journal of Physical Chemistry C, 2007, 111, 10035-10039. | 1.5 | 88 |
| 41 | Aluminosilicate mesoporous molecular sieves with enhanced stability obtained by reacting MCM-41 with aluminium chlorohydrate. Chemical Communications, 1998, , 1839-1840. | 2.2 | 87 |
| 42 | Supercritical Fluid-Mediated Alumination of Mesoporous Silica and Its Beneficial Effect on Hydrothermal Stability. Journal of the American Chemical Society, 2002, 124, 10636-10637. | 6.6 | 85 |
| 43 | Simultaneous Control of Morphology and Porosity in Nanoporous Carbon:  Graphitic Mesoporous Carbon Nanorods and Nanotubules with Tunable Pore Size. Chemistry of Materials, 2006, 18, 140-148. | 3.2 | 85 |
| 44 | Low temperature synthesized carbon nanotube superstructures with superior CO ₂ and hydrogen storage capacity. Journal of Materials Chemistry A, 2015, 3, 5148-5161. | 5.2 | 84 |
| 45 | A simple flash carbonization route for conversion of biomass to porous carbons with high CO ₂ storage capacity. Journal of Materials Chemistry A, 2018, 6, 12393-12403. | 5.2 | 83 |
| 46 | Hydrogen Storage in High Surface Area Carbons with Identical Surface Areas but Different Pore Sizes: Direct Demonstration of the Effects of Pore Size. Journal of Physical Chemistry C, 2012, 116, 25734-25740. | 1.5 | 80 |
| 47 | Are mesoporous silicas and aluminosilicas assembled from zeolite seeds inherently hydrothermally stable? Comparative evaluation of MCM-48 materials assembled from zeolite seeds. Journal of Materials Chemistry, 2004, 14, 3427. | 6.7 | 76 |
| 48 | A family of microporous carbons prepared via a simple metal salt carbonization route with high selectivity for exceptional gravimetric and volumetric post-combustion CO ₂ capture. Journal of Materials Chemistry A, 2014, 2, 14696. | 5.2 | 75 |
| 49 | Efficient post-synthesis alumination of MCM-41 using aluminium chlorohydrate containing Al polycations. Journal of Materials Chemistry, 1999, 9, 555-561. | 6.7 | 72 |
| 50 | On the Hydrothermal Stability of Mesoporous Aluminosilicate MCM-48 Materials. Journal of Physical Chemistry B, 2003, 107, 6954-6960. | 1.2 | 71 |
| 51 | Enhancement of Hydrogen Storage Capacity of Zeolite-Templated Carbons by Chemical Activation. Journal of Physical Chemistry C, 2010, 114, 11314-11319. | 1.5 | 68 |
| 52 | Supercritical fluids: A route to palladium-aerogel nanocomposites. Journal of Materials Chemistry, 2004, 14, 1212. | 6.7 | 67 |
| 53 | Synthesis of mesoporous silica hollow spheres in supercritical CO2/water systems. Journal of Materials Chemistry, 2006, 16, 1751. | 6.7 | 67 |
| 54 | Compaction of a zirconium metal–organic framework (UiO-66) for high density hydrogen storage applications. Journal of Materials Chemistry A, 2018, 6, 23569-23577. | 5.2 | 67 |

| # | Article | IF | CITATIONS |
|----|---|------|-----------|
| 55 | Exceptional gravimetric and volumetric hydrogen storage for densified zeolite templated carbons with high mechanical stability. Energy and Environmental Science, 2014, 7, 427-434. | 15.6 | 65 |
| 56 | Porous clay heterostructures with enhanced acidity obtained from acid-activated clays. Chemical Communications, 2001, , 2100-2101. | 2.2 | 64 |
| 57 | Evolution of optimal porosity for improved hydrogen storage in templated zeolite-like carbons. Energy and Environmental Science, 2010, 3, 1773. | 15.6 | 63 |
| 58 | Synthesis of acidic aluminosilicate mesoporous molecular sieves using primary amines. Chemical Communications, 1996, , 981. | 2.2 | 62 |
| 59 | A cleaner way to nylon?. Nature, 2005, 437, 1243-1244. | 13.7 | 59 |
| 60 | Mesoporous boron nitride and boron-nitride-carbon materials from mesoporous silica templates. Journal of Materials Chemistry, 2008, 18, 235-241. | 6.7 | 58 |
| 61 | Ordered mesoporous MCM-41 silicon oxynitride solid base materials with high nitrogen content: synthesis, characterisation and catalytic evaluation. Journal of Materials Chemistry, 2004, 14, 2507. | 6.7 | 56 |
| 62 | Grafting of Al onto purely siliceous mesoporous molecular sieves. Physical Chemistry Chemical Physics, 1999, 1, 207-213. | 1.3 | 55 |
| 63 | Preparation of ultrahigh surface area porous carbons templated using zeolite 13X for enhanced hydrogen storage. Progress in Natural Science: Materials International, 2013, 23, 308-316. | 1.8 | 55 |
| 64 | Predictable and targeted activation of biomass to carbons with high surface area density and enhanced methane storage capacity. Energy and Environmental Science, 2020, 13, 2967-2978. | 15.6 | 55 |
| 65 | Hollow shells of high surface area graphitic N-doped carbon composites nanocast using zeolite templates. Microporous and Mesoporous Materials, 2005, 86, 69-80. | 2.2 | 54 |
| 66 | Synthesis of Mesoporous Aluminosilicates with Enhanced Stability and Ion-Exchange Capacity via a Secondary Crystallization Route. Advanced Materials, 2000, 12, 1681-1685. | 11.1 | 53 |
| 67 | Aligned N-Doped Carbon Nanotube Bundles Prepared via CVD Using Zeolite Substrates. Chemistry of Materials, 2005, 17, 4502-4508. | 3.2 | 52 |
| 68 | Molecularly Ordered Ethylene-Bridged Periodic Mesoporous Organosilica Spheres with Tunable Micrometer Sizes. Chemistry of Materials, 2006, 18, 1141-1148. | 3.2 | 52 |
| 69 | Hydrothermally stable restructured mesoporous silica. Chemical Communications, 2001, , 933-934. | 2.2 | 50 |
| 70 | High surface area metal salt templated carbon aerogels via a simple subcritical drying route: preparation and CO2 uptake properties. RSC Advances, 2013, 3, 17677. | 1.7 | 48 |
| 71 | High yield and high packing density porous carbon for unprecedented CO ₂ capture from the first attempt at activation of air-carbonized biomass. Journal of Materials Chemistry A, 2016, 4, 13324-13335. | 5.2 | 47 |
| 72 | Influence of pore wall thickness on the steam stability of Al-grafted MCM-41. Chemical Communications, 2001, , 633-634. | 2.2 | 46 |

| # | Article | IF | CITATIONS |
|----|---|-----|-----------|
| 73 | Acidity and catalytic activity of aluminosilicate mesoporous molecular sieves prepared using primary amines. Chemical Communications, 1996, , 983. | 2.2 | 45 |
| 74 | Bridging the performance gap between electric double-layer capacitors and batteries with high-energy/high-power carbon nanotube-based electrodes. Journal of Materials Chemistry A, 2016, 4, 14586-14594. | 5.2 | 44 |
| 75 | Facile and high yield synthesis of mesostructured MCM-48 silica crystals. Journal of Materials Chemistry, 2003, 13, 657-659. | 6.7 | 41 |
| 76 | Aluminosilicate MCM-48 materials with enhanced stability via simple post-synthesis treatment in water. Microporous and Mesoporous Materials, 2004, 68, 1-10. | 2.2 | 41 |
| 77 | Preparation of alumina-pillared acid-activated clays and their use as chlorophyll adsorbents. Journal of Materials Chemistry, 1993, 3, 381. | 6.7 | 39 |
| 78 | A method for the synthesis of high quality large crystal MCM-41. Chemical Communications, 1999, , 51-52. | 2.2 | 39 |
| 79 | Ultra-high surface area mesoporous carbons for colossal pre combustion CO ₂ capture and storage as materials for hydrogen purification. Sustainable Energy and Fuels, 2017, 1, 1414-1424. | 2.5 | 39 |
| 80 | Restructuring of mesoporous silica: high quality large crystal MCMâ€41 via a seeded recrystallisation route. Journal of Materials Chemistry, 2000, 10, 1139-1145. | 6.7 | 37 |
| 81 | Alumination Pathways to Mesoporous Aluminosilicates with High-Temperature Hydrothermal Stability. ChemPhysChem, 2002, 3, 360-363. | 1.0 | 37 |
| 82 | The influence of template extraction on the properties of primary amine templated aluminosilicate mesoporous molecular sieves. Journal of Materials Chemistry, 1998, 8, 2819-2826. | 6.7 | 36 |
| 83 | The "silica garden'' as a BrÃ,nsted acid catalyst. Physical Chemistry Chemical Physics, 1999, 1, 4669-4672. | 1.3 | 36 |
| 84 | Periodic mesoporous organosilica mesophases are versatile precursors for the direct preparation of mesoporous silica/carbon composites, carbon and silicon carbide materials. Journal of Materials Chemistry, 2006, 16, 3417. | 6.7 | 36 |
| 85 | Surfactant Mediated Control of Pore Size and Morphology for Molecularly Ordered Ethylene-Bridged Periodic Mesoporous Organosilica. Journal of Physical Chemistry B, 2006, 110, 3889-3894. | 1.2 | 36 |
| 86 | High surface area ethylene-bridged mesoporous and supermicroporous organosilica spheres. Microporous and Mesoporous Materials, 2005, 86, 231-242. | 2.2 | 35 |
| 87 | Templating of carbon in zeolites under pressure: synthesis of pelletized zeolite templated carbons with improved porosity and packing density for superior gas (CO ₂ and H ₂) uptake properties. Journal of Materials Chemistry A, 2016, 4, 14254-14266. | 5.2 | 35 |
| 88 | Pre-mixed precursors for modulating the porosity of carbons for enhanced hydrogen storage: towards predicting the activation behaviour of carbonaceous matter. Journal of Materials Chemistry A, 2019, 7, 17466-17479. | 5.2 | 35 |
| 89 | The Mechanism of Chlorophyll Adsorption on Acid-Activated Clays. Journal of Solid State Chemistry, 1994, 111, 157-163. | 1.4 | 34 |
| 90 | Tuning the acidic and textural properties of ordered mesoporous silicas for their application as catalysts in the etherification of glycerol with isobutene. Catalysis Today, 2014, 227, 171-178. | 2.2 | 34 |

| # | Article | IF | CITATIONS |
|-----|--|-----|-----------|
| 91 | New perspectives on supercritical methane adsorption in shales and associated thermodynamics. Journal of Industrial and Engineering Chemistry, 2019, 78, 186-197. | 2.9 | 34 |
| 92 | Enhanced hydrothermal stability of Al-grafted MCM-48 prepared via various alumination routes. Microporous and Mesoporous Materials, 2004, 74, 179-188. | 2.2 | 33 |
| 93 | CVD Nanocasting Routes to Zeoliteâ€Templated Carbons for Hydrogen Storage. Chemical Vapor Deposition, 2010, 16, 322-328. | 1.4 | 32 |
| 94 | Characterisation and hydrogen storage of Pt-doped carbons templated by Pt-exchanged zeolite Y. Microporous and Mesoporous Materials, 2011, 142, 716-724. | 2.2 | 32 |
| 95 | Experimental Demonstration of Dynamic Temperature-Dependent Behavior of UiO-66 Metal–Organic Framework: Compaction of Hydroxylated and Dehydroxylated Forms of UiO-66 for High-Pressure Hydrogen Storage. ACS Applied Materials & Interfaces, 2020, 12, 24883-24894. | 4.0 | 32 |
| 96 | Nanocasting of High Surface Area Mesoporous Ga ₂ O ₃ and GaN Semiconductor Materials. Chemistry of Materials, 2009, 21, 4080-4086. | 3.2 | 31 |
| 97 | Chlorophyll adsorption by alumina-pillared acid-activated clays. JAOCS, Journal of the American Oil Chemists' Society, 1993, 70, 241-244. | 0.8 | 30 |
| 98 | Hydrothermally-induced morphological transformation of mesoporous MCM-41 silica. Microporous and Mesoporous Materials, 2001, 44-45, 119-127. | 2.2 | 30 |
| 99 | Crystalline-like Molecularly Ordered Mesoporous Aluminosilicates Derived from Aluminosilicaâ^'Surfactant Mesophases via Benign Template Removal. Journal of Physical Chemistry B, 2006, 110, 9122-9131. | 1.2 | 30 |
| 100 | The Effect of Particle Size on Aluminosilicate MCM-41 Catalysts Prepared via Grafting Routes. Journal of Catalysis, 1999, 186, 470-477. | 3.1 | 29 |
| 101 | Insertion of extra-framework Al into the framework of mesoporous MCM-41 aluminosilicates. Chemical Communications, 2000, , 1891-1892. | 2.2 | 29 |
| 102 | Steam Stable Mesoporous Silica MCM-41 Stabilized by Trace Amounts of Al. ACS Applied Materials & Interfaces, 2014, 6, 1902-1908. | 4.0 | 28 |
| 103 | Integrated biomass thermochemical conversion for clean energy production: Process design and economic analysis. Journal of Environmental Chemical Engineering, 2019, 7, 103093. | 3.3 | 28 |
| 104 | The effect of Al content of zeolite template on the properties and hydrogen storage capacity of zeolite templated carbons. Microporous and Mesoporous Materials, 2011, 144, 140-147. | 2.2 | 27 |
| 105 | A CVD route for the preparation of templated and activated carbons for gas storage applications using zeolitic imidazolate frameworks (ZIFs) as template. Microporous and Mesoporous Materials, 2014, 195, 258-265. | 2.2 | 27 |
| 106 | Layered double hydroxides as templates for nanocasting porous N-doped graphitic carbons via chemical vapour deposition. Microporous and Mesoporous Materials, 2007, 106, 147-154. | 2.2 | 26 |
| 107 | Mesoporous MCM-48 Aluminosilica Oxynitrides:  Synthesis and Characterization of Bifunctional Solid Acidâ 'Base Materials. Journal of Physical Chemistry C, 2008, 112, 1455-1462. | 1.5 | 26 |
| 108 | Mesoporous Aluminosilicates from a Zeolite BEA Recipe. Chemistry of Materials, 2011, 23, 2491-2498. | 3.2 | 26 |

| # | Article | IF | CITATIONS |
|-----|--|-----|-----------|
| 109 | Valorization of lignin waste: high electrochemical capacitance of lignin-derived carbons in aqueous and ionic liquid electrolytes. Journal of Materials Chemistry A, 2018, 6, 18701-18711. | 5.2 | 26 |
| 110 | High temperature synthesis of exceptionally stable pure silica MCM-41 and stabilisation of calcined mesoporous silicas via refluxing in water. Journal of Materials Chemistry, 2012, 22, 18872. | 6.7 | 25 |
| 111 | Formation of Molecularly Ordered Layered Mesoporous Silica via Phase Transformation of Silicateâ^'Surfactant Composites. Journal of Physical Chemistry B, 2004, 108, 11361-11367. | 1.2 | 24 |
| 112 | Supercritical CO2Mediated Incorporation of Pd onto Templated Carbons: A Route to Optimizing the Pd Particle Size and Hydrogen Uptake Density. ACS Applied Materials & Interfaces, 2013, 5, 5639-5647. | 4.0 | 24 |
| 113 | Crystalline mesoporous silicates from layered precursors. Journal of Materials Chemistry, 2008, 18, 1383. | 6.7 | 23 |
| 114 | The effects of metakaolinization and fused-metakaolinization on zeolites synthesized from quartz rich natural clays. Microporous and Mesoporous Materials, 2019, 290, 109668. | 2.2 | 22 |
| 115 | On the extended recrystallisation of mesoporous silica: characterisation of restructured pure silica MCM-41. Journal of Materials Chemistry, 2002, 12, 3027-3033. | 6.7 | 21 |
| 116 | To stir or not to stir: formation of hierarchical superstructures of molecularly ordered ethylene-bridged periodic mesoporous organosilicas. Journal of Materials Chemistry, 2006, 16, 395-400. | 6.7 | 21 |
| 117 | Porous carbons from sustainable sources and mild activation for targeted high-performance CO ₂ capture and storage. Materials Advances, 2020, 1, 3267-3280. | 2.6 | 21 |
| 118 | Modulating the porosity of carbons for improved adsorption of hydrogen, carbon dioxide, and methane: a review. Materials Advances, 2022, 3, 1905-1930. | 2.6 | 21 |
| 119 | Photophysical Properties of [60]Fullerenes and Phthalocyanines Embedded in Ordered Mesoporous Silica Films Annealed at Various Temperatures. Journal of Physical Chemistry B, 2005, 109, 5079-5084. | 1.2 | 20 |
| 120 | Alxn+-grafted MCM-41 Catalysts: Probing the Influence of Temperature on the Alumination Process. Journal of Catalysis, 2000, 193, 103-107. | 3.1 | 19 |
| 121 | New Insights into the Spatial Distribution of Aluminium in Various Mesoporous Aluminosilicates. ChemPhysChem, 2002, 3, 892-896. | 1.0 | 18 |
| 122 | One step room temperature synthesis of ordered mesoporous silicaSBA-15 mediated by cellulose nanoparticles. Journal of Materials Chemistry, 2010, 20, 320-325. | 6.7 | 18 |
| 123 | Pore Characteristics for Efficient CO ₂ Storage in Hydrated Carbons. ACS Applied Materials & Interfaces, 2019, 11, 44390-44398. | 4.0 | 18 |
| 124 | Super-microporous aluminosilicate catalysts via primary amine templating. Chemical Communications, 2001, , 1016-1017. | 2.2 | 17 |
| 125 | A study of the behaviour of mesoporous silicas in OH/CTABr/H2O systems: phase dependent stabilisation, dissolution or semi-pseudomorphic transformation. Journal of Materials Chemistry, 2003, 13, 3112. | 6.7 | 17 |
| 126 | Super-micropore/small mesopore composite pillared silicate and aluminosilicate materials from crystalline layered silicate Na-RUB-18. Microporous and Mesoporous Materials, 2011, 143, 104-114. | 2.2 | 16 |

| # | Article | IF | CITATIONS |
|-----|--|-----|-----------|
| 127 | Potential of Bioenergy in Rural Ghana. Sustainability, 2021, 13, 381. | 1.6 | 16 |
| 128 | Observation of some pore wall ordering in mesoporous silica. Chemical Communications, 2001, , 1092-1093. | 2.2 | 15 |
| 129 | Synthesis of hollow spherical mesoporous N-doped carbon materials with graphitic framework. Studies in Surface Science and Catalysis, 2005, , 565-572. | 1.5 | 14 |
| 130 | Co-pelletization of a zirconium-based metal-organic framework (UiO-66) with polymer nanofibers for improved useable capacity in hydrogen storage. International Journal of Hydrogen Energy, 2021, 46, 8607-8620. | 3.8 | 14 |
| 131 | Stability of Pillared Clays:Â Effect of Compaction on the Physicochemical Properties of Al-Pillared Clays. Chemistry of Materials, 2004, 16, 263-269. | 3.2 | 13 |
| 132 | Probing the effect of the carbonisation process on the textural properties and morphology of mesoporous carbons. Microporous and Mesoporous Materials, 2008, 113, 378-384. | 2.2 | 13 |
| 133 | Template-directed stepwise post-synthesis alumination of MCM-41 mesoporous silica. Chemical Communications, 2000, , 1541-1542. | 2.2 | 12 |
| 134 | Molecularly ordered layered aluminosilicate-surfactant mesophases and their conversion to hydrothermally stable mesoporous aluminosilicates. Microporous and Mesoporous Materials, 2006, 94, 295-303. | 2.2 | 12 |
| 135 | Confirmation of pore formation mechanisms in biochars and activated carbons by dual isotherm analysis. Materials Advances, 2022, 3, 3961-3971. | 2.6 | 11 |
| 136 | Highly Ordered Mesoporous Silicon Oxynitride Materials as Base Catalysts. Angewandte Chemie, 2003, 115, 2743-2748. | 1.6 | 10 |
| 137 | Aligned Bundles of Carbon Nanotubes Are Easily Grown on As-Synthesized Mesoporous Silicate Substrates. Journal of Physical Chemistry C, 2008, 112, 15157-15162. | 1.5 | 10 |
| 138 | Valorisation of adzuki bean waste to biofuel precursors via pyrolysis: kinetics, product distribution and characterisation. Biomass Conversion and Biorefinery, 2018, 8, 699-710. | 2.9 | 10 |
| 139 | Strongly acidic mesoporous aluminosilicates prepared via hydrothermal restructuring of a crystalline layered silicate. Journal of Materials Chemistry A, 2015, 3, 7799-7809. | 5.2 | 9 |
| 140 | Catalytic Upgrading of Pyrolytic Oil via In-situ Hydrodeoxygenation. Waste and Biomass Valorization, 2020, 11, 2935-2947. | 1.8 | 9 |
| 141 | Simultaneous quantification of acetaminophen and tryptophan using a composite graphene foam/Zr-MOF film modified electrode. New Journal of Chemistry, 2020, 44, 13108-13117. | 1.4 | 9 |
| 142 | Direct and mild non-hydroxide activation of biomass to carbons with enhanced CO ₂ storage capacity. Energy Advances, 2022, 1, 216-224. | 1.4 | 9 |
| 143 | Modulating the porosity of activated carbons <i>via</i> pre-mixed precursors for simultaneously enhanced gravimetric and volumetric methane uptake. Journal of Materials Chemistry A, 2022, 10, 13744-13757. | 5.2 | 9 |
| 144 | Synthesis And Characterization Of Pillared Acid-Activated Montmorillonites. Materials Research Society Symposia Proceedings, 1991, 233, 81. | 0.1 | 8 |

| # | Article | IF | CITATIONS |
|-----|--|------|-----------|
| 145 | Influence of alumination pathway on the steam stability of Al-grafted MCM-41. Studies in Surface Science and Catalysis, 2003, 146, 435-438. | 1.5 | 8 |
| 146 | On the Shelf Life and Aging Stability of Mesoporous Silica: Insights on Thermodynamically Stable MCM-41 Structure from Assessment of 12-Year-Old Samples. Chemistry of Materials, 2012, 24, 4450-4458. | 3.2 | 8 |
| 147 | Porous N-doped carbon with various hollow-cored morphologies nanocast using zeolite templates via chemical vapour deposition. Studies in Surface Science and Catalysis, 2005, 156, 573-580. | 1.5 | 7 |
| 148 | Biofuel and valuable products recovery from Napier grass pre-processing: Process design and economic analysis. Journal of Environmental Chemical Engineering, 2019, 7, 102962. | 3.3 | 7 |
| 149 | Synthesis, characterization and density functional theory of copper(II) complex and cobalt(II) coordination polymer for detection of nitroaromatic explosives. Inorganica Chimica Acta, 2021, 515, 120048. | 1.2 | 7 |
| 150 | Effect of kaolin pre-treatment method and NaOH levels on the structure and properties of kaolin-derived faujasite zeolites. Materials Advances, 2021, 2, 5997-6010. | 2.6 | 7 |
| 151 | Rational synthesis of microporous carbons for enhanced post-combustion CO ₂ capture <i>via</i> non-hydroxide activation of air carbonised biomass. RSC Advances, 2022, 12, 20080-20087. | 1.7 | 7 |
| 152 | A hygrothermal modelling approach to water vapour sorption isotherm design for mesoporous humidity buffers. Microporous and Mesoporous Materials, 2015, 211, 113-123. | 2.2 | 6 |
| 153 | Self-Assembled Ultralarge Millimeter-Sized Graphitic Carbon Rods Grown on Mesoporous Silica Substrate. Chemistry of Materials, 2007, 19, 6317-6322. | 3.2 | 5 |
| 154 | Hidden crystalline components in mesoporous silicate. Journal of Materials Chemistry, 2012, 22, 23141. | 6.7 | 5 |
| 155 | Hygrothermal simulation-informed design of mesoporous desiccants for optimised energy efficiency of mixed mode air conditioning systems. Journal of Materials Chemistry A, 2015, 3, 17290-17303. | 5.2 | 5 |
| 156 | Reply: Mesoporous Zeolite ZSM-5 Nanocast from Mesoporous Carbon Templates. Advanced Materials, 2005, 17, 2791-2792. | 11.1 | 4 |
| 157 | Synthesis and characterisation of super-microporous aluminosilicates prepared via primary amine templating. Studies in Surface Science and Catalysis, 2002, 141, 141-150. | 1.5 | 3 |
| 158 | SURFACE ALUMINATION OF MESOPOROUS SILICATES. Series on Chemical Engineering, 2004, , 427-463. | 0.2 | 2 |
| 159 | Mesostructured aluminosilica oxynitrides: solid acid-base materials prepared via post-synthesis grafting routes. Studies in Surface Science and Catalysis, 2005, 156, 125-132. | 1.5 | 2 |
| 160 | A Co-Crystallised Cobalt(II) Cluster of Pyridinedicarboxylic Acid (PDC) as a Luminescent Material for Selective Sensing of Methanol. Journal of Fluorescence, 2021, 31, 1177-1190. | 1.3 | 1 |
| 161 | Direct Synthesis of Acidic Aluminosilicate Mesoporous Molecular Sieves. Materials Research Society Symposia Proceedings, 1996, 431, 83. | 0.1 | 0 |
| 162 | EFFECT OF CARBONISATION HEATING RAMP RATE ON THE PROPERTIES OF ORDERED MESOPOROUS CARBONS. , 2008, , . | | 0 |

| # | ARTICLE | IF | CITATIONS |
|-----|--|-----|-----------|
| 163 | POROUS CARBON MATERIALS VIA CHEMICAL VAPOUR DEPOSITION USING AS-SYNTHESISED ZEOLITES AS TEMPLATE: SYNTHESIS AND HYDROGEN STORAGE PROPERTIES. , 2008, , . | | Ο |
| 164 | Calcium coordination compounds of anionic forms of hydrogen dipicolinate and quinolinate: synthesis, characterization, crystal structures and DFT studies. Structural Chemistry, 0, , 1. | 1.0 | 0 |