Christian Serre

List of Publications by Citations

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The third column is the impact factor (IF) of the journal, and the fourth column is the number of citations of the article.

393 papers

61,819 citations

117 h-index 243 g-index

425 ext. papers

67,457 ext. citations

avg, IF

7.69 L-index

| # | Paper | IF | Citations |
|-----|---|---------------------|-----------|
| 393 | A chromium terephthalate-based solid with unusually large pore volumes and surface area. <i>Science</i> , 2005 , 309, 2040-2 | 33.3 | 4003 |
| 392 | Metal-organic frameworks in biomedicine. <i>Chemical Reviews</i> , 2012 , 112, 1232-68 | 68.1 | 3131 |
| 391 | Porous metal-organic-framework nanoscale carriers as a potential platform for drug delivery and imaging. <i>Nature Materials</i> , 2010 , 9, 172-8 | 27 | 3109 |
| 390 | Very large breathing effect in the first nanoporous chromium(III)-based solids: MIL-53 or Cr(III)(OH) \times [O(2)C-C(6)H(4)-CO(2)] \times [HO(2)C-C(6)H(4)-CO(2)H](\times) \times H(2)O(\times). Journal of the American Chemical Society, 2002 , 124, 13519-26 | 16.4 | 1537 |
| 389 | A rationale for the large breathing of the porous aluminum terephthalate (MIL-53) upon hydration. <i>Chemistry - A European Journal</i> , 2004 , 10, 1373-82 | 4.8 | 1531 |
| 388 | Metal-organic frameworks as efficient materials for drug delivery. <i>Angewandte Chemie - International Edition</i> , 2006 , 45, 5974-8 | 16.4 | 1432 |
| 387 | Large breathing effects in three-dimensional porous hybrid matter: facts, analyses, rules and consequences. <i>Chemical Society Reviews</i> , 2009 , 38, 1380-99 | 58.5 | 1373 |
| 386 | Flexible porous metal-organic frameworks for a controlled drug delivery. <i>Journal of the American Chemical Society</i> , 2008 , 130, 6774-80 | 16.4 | 1369 |
| 385 | Crystallized frameworks with giant pores: are there limits to the possible?. <i>Accounts of Chemical Research</i> , 2005 , 38, 217-25 | 24.3 | 1245 |
| 384 | Amine grafting on coordinatively unsaturated metal centers of MOFs: consequences for catalysis and metal encapsulation. <i>Angewandte Chemie - International Edition</i> , 2008 , 47, 4144-8 | 16.4 | 1031 |
| 383 | Synthesis and catalytic properties of MIL-100(Fe), an iron(III) carboxylate with large pores. <i>Chemical Communications</i> , 2007 , 2820-2 | 5.8 | 997 |
| 382 | High uptakes of CO2 and CH4 in mesoporous metal-organic frameworks MIL-100 and MIL-101. <i>Langmuir</i> , 2008 , 24, 7245-50 | 4 | 968 |
| 381 | BioMOFs: metal-organic frameworks for biological and medical applications. <i>Angewandte Chemie - International Edition</i> , 2010 , 49, 6260-6 | 16.4 | 932 |
| 380 | Different adsorption behaviors of methane and carbon dioxide in the isotypic nanoporous metal terephthalates MIL-53 and MIL-47. <i>Journal of the American Chemical Society</i> , 2005 , 127, 13519-21 | 16.4 | 917 |
| 379 | A new photoactive crystalline highly porous titanium(IV) dicarboxylate. <i>Journal of the American Chemical Society</i> , 2009 , 131, 10857-9 | 16.4 | 888 |
| 378 | Role of solvent-host interactions that lead to very large swelling of hybrid frameworks. <i>Science</i> , 2007 , 315, 1828-31 | 33.3 | 818 |
| 377 | Porous Chromium Terephthalate MIL-101 with Coordinatively Unsaturated Sites: Surface Functionalization, Encapsulation, Sorption and Catalysis. <i>Advanced Functional Materials</i> , 2009 , 19, 1537 | -1 ¹ 552 | 748 |

(2006-2004)

| 376 | A hybrid solid with giant pores prepared by a combination of targeted chemistry, simulation, and powder diffraction. <i>Angewandte Chemie - International Edition</i> , 2004 , 43, 6296-301 | 16.4 | 723 |
|-----|---|------|-----|
| 375 | Hydrogen storage in the giant-pore metal-organic frameworks MIL-100 and MIL-101. <i>Angewandte Chemie - International Edition</i> , 2006 , 45, 8227-31 | 16.4 | 681 |
| 374 | Hydrogen adsorption in the nanoporous metal-benzenedicarboxylate M(OH)(O2C-C6H4-CO2) (M = Al3+, Cr3+), MIL-53. <i>Chemical Communications</i> , 2003 , 2976-7 | 5.8 | 629 |
| 373 | Why hybrid porous solids capture greenhouse gases?. <i>Chemical Society Reviews</i> , 2011 , 40, 550-62 | 58.5 | 562 |
| 372 | Mixed-valence li/fe-based metal-organic frameworks with both reversible redox and sorption properties. <i>Angewandte Chemie - International Edition</i> , 2007 , 46, 3259-63 | 16.4 | 518 |
| 371 | Microwave Synthesis of Chromium Terephthalate MIL-101 and Its Benzene Sorption Ability. <i>Advanced Materials</i> , 2007 , 19, 121-124 | 24 | 516 |
| 370 | Cathode composites for Li-S batteries via the use of oxygenated porous architectures. <i>Journal of the American Chemical Society</i> , 2011 , 133, 16154-60 | 16.4 | 512 |
| 369 | Metal©rganic Frameworks as Efficient Materials for Drug Delivery. <i>Angewandte Chemie</i> , 2006 , 118, 6120-6124 | 3.6 | 469 |
| 368 | An Explanation for the Very Large Breathing Effect of a Metal Drganic Framework during CO2 Adsorption. <i>Advanced Materials</i> , 2007 , 19, 2246-2251 | 24 | 460 |
| 367 | Controlled reducibility of a metal-organic framework with coordinatively unsaturated sites for preferential gas sorption. <i>Angewandte Chemie - International Edition</i> , 2010 , 49, 5949-52 | 16.4 | 430 |
| 366 | A route to the synthesis of trivalent transition-metal porous carboxylates with trimeric secondary building units. <i>Angewandte Chemie - International Edition</i> , 2004 , 43, 6285-9 | 16.4 | 421 |
| 365 | MIL-103, a 3-D lanthanide-based metal organic framework with large one-dimensional tunnels and a high surface area. <i>Journal of the American Chemical Society</i> , 2005 , 127, 12788-9 | 16.4 | 400 |
| 364 | Comparative study of hydrogen sulfide adsorption in the MIL-53(Al, Cr, Fe), MIL-47(V), MIL-100(Cr), and MIL-101(Cr) metal-organic frameworks at room temperature. <i>Journal of the American Chemical Society</i> , 2009 , 131, 8775-7 | 16.4 | 399 |
| 363 | High-throughput assisted rationalization of the formation of metal organic frameworks in the Iron(III) aminoterephthalate solvothermal system. <i>Inorganic Chemistry</i> , 2008 , 47, 7568-76 | 5.1 | 392 |
| 362 | Functionalization in flexible porous solids: effects on the pore opening and the host-guest interactions. <i>Journal of the American Chemical Society</i> , 2010 , 132, 1127-36 | 16.4 | 384 |
| 361 | How hydration drastically improves adsorption selectivity for CO(2) over CH(4) in the flexible chromium terephthalate MIL-53. <i>Angewandte Chemie - International Edition</i> , 2006 , 45, 7751-4 | 16.4 | 384 |
| 360 | Nanostructured metalBrganic frameworks and their bio-related applications. <i>Coordination Chemistry Reviews</i> , 2016 , 307, 342-360 | 23.2 | 382 |
| 359 | A new isoreticular class of metal-organic-frameworks with the MIL-88 topology. <i>Chemical Communications</i> , 2006 , 284-6 | 5.8 | 381 |

| 358 | Synthesis, structure determination and properties of MIL-53as and MIL-53ht: the first CrIII hybrid inorganic-organic microporous solids: CrIII(OH).(O2C-C6H4-CO2).(HO2C-C6H4-CO2H)x. <i>Chemical Communications</i> , 2002 , 822-3 | 5.8 | 378 |
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| 357 | A series of isoreticular, highly stable, porous zirconium oxide based metal-organic frameworks. <i>Angewandte Chemie - International Edition</i> , 2012 , 51, 9267-71 | 16.4 | 366 |
| 356 | Co-adsorption and separation of CO2-CH4 mixtures in the highly flexible MIL-53(Cr) MOF. <i>Journal of the American Chemical Society</i> , 2009 , 131, 17490-9 | 16.4 | 365 |
| 355 | An amino-modified Zr-terephthalate metal-organic framework as an acid-base catalyst for cross-aldol condensation. <i>Chemical Communications</i> , 2011 , 47, 1521-3 | 5.8 | 358 |
| 354 | Rationale of Drug Encapsulation and Release from Biocompatible Porous Metal@rganic Frameworks. <i>Chemistry of Materials</i> , 2013 , 25, 2767-2776 | 9.6 | 345 |
| 353 | High valence 3p and transition metal based MOFs. <i>Chemical Society Reviews</i> , 2014 , 43, 6097-115 | 58.5 | 339 |
| 352 | Nanoparticles of Metal-Organic Frameworks: On the Road to In Vivo Efficacy in Biomedicine. <i>Advanced Materials</i> , 2018 , 30, e1707365 | 24 | 325 |
| 351 | Investigation of acid sites in a zeotypic giant pores chromium(III) carboxylate. <i>Journal of the American Chemical Society</i> , 2006 , 128, 3218-27 | 16.4 | 309 |
| 350 | How linker's modification controls swelling properties of highly flexible iron(III) dicarboxylates MIL-88. <i>Journal of the American Chemical Society</i> , 2011 , 133, 17839-47 | 16.4 | 307 |
| 349 | Functionalizing porous zirconium terephthalate UiO-66(Zr) for natural gas upgrading: a computational exploration. <i>Chemical Communications</i> , 2011 , 47, 9603-5 | 5.8 | 298 |
| 348 | A water stable metal-organic framework with optimal features for CO2 capture. <i>Angewandte Chemie - International Edition</i> , 2013 , 52, 10316-20 | 16.4 | 265 |
| 347 | First Direct Imaging of Giant Pores of the Metal@rganic Framework MIL-101. <i>Chemistry of Materials</i> , 2005 , 17, 6525-6527 | 9.6 | 255 |
| 346 | Complex adsorption of short linear alkanes in the flexible metal-organic-framework MIL-53(Fe). Journal of the American Chemical Society, 2009 , 131, 13002-8 | 16.4 | 249 |
| 345 | In depth analysis of the in vivo toxicity of nanoparticles of porous iron(III) metal b rganic frameworks. <i>Chemical Science</i> , 2013 , 4, 1597 | 9.4 | 245 |
| 344 | Large scale fluorine-free synthesis of hierarchically porous iron(III) trimesate MIL-100(Fe) with a zeolite MTN topology. <i>Microporous and Mesoporous Materials</i> , 2012 , 157, 137-145 | 5.3 | 240 |
| 343 | Very large swelling in hybrid frameworks: a combined computational and powder diffraction study. Journal of the American Chemical Society, 2005 , 127, 16273-8 | 16.4 | 239 |
| 342 | Direct covalent post-synthetic chemical modification of Cr-MIL-101 using nitrating acid. <i>Chemical Communications</i> , 2011 , 47, 2838-40 | 5.8 | 238 |
| 341 | Energy-efficient dehumidification over hierachically porous metal-organic frameworks as advanced water adsorbents. <i>Advanced Materials</i> , 2012 , 24, 806-10 | 24 | 237 |

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| 340 | Prediction of the conditions for breathing of metal organic framework materials using a combination of X-ray powder diffraction, microcalorimetry, and molecular simulation. <i>Journal of the American Chemical Society</i> , 2008 , 130, 12808-14 | 16.4 | 236 |
|-----|--|--------------|-----|
| 339 | Biodegradable therapeutic MOFs for the delivery of bioactive molecules. <i>Chemical Communications</i> , 2010 , 46, 4526-8 | 5.8 | 235 |
| 338 | Colloidal Route for Preparing Optical Thin Films of Nanoporous Metal Drganic Frameworks. <i>Advanced Materials</i> , 2009 , 21, 1931-1935 | 24 | 228 |
| 337 | Hydrocarbon adsorption in the flexible metal organic frameworks MIL-53(Al, Cr). <i>Journal of the American Chemical Society</i> , 2008 , 130, 16926-32 | 16.4 | 223 |
| 336 | Reverse shape selectivity in the adsorption of hexane and xylene isomers in MOF UiO-66. <i>Microporous and Mesoporous Materials</i> , 2011 , 139, 67-73 | 5.3 | 220 |
| 335 | A Hybrid Solid with Giant Pores Prepared by a Combination of Targeted Chemistry, Simulation, and Powder Diffraction. <i>Angewandte Chemie</i> , 2004 , 116, 6456-6461 | 3.6 | 219 |
| 334 | Effect of NH2 and CF3 functionalization on the hydrogen sorption properties of MOFs. <i>Dalton Transactions</i> , 2011 , 40, 4879-81 | 4.3 | 218 |
| 333 | Cytotoxicity of nanoscaled metal-organic frameworks. <i>Journal of Materials Chemistry B</i> , 2014 , 2, 262-27 | 1 7.3 | 217 |
| 332 | Stable polyoxometalate insertion within the mesoporous metal organic framework MIL-100(Fe). Journal of Materials Chemistry, 2011 , 21, 1226-1233 | | 216 |
| 331 | Synthesis of MIL-102, a chromium carboxylate metal-organic framework, with gas sorption analysis. Journal of the American Chemical Society, 2006 , 128, 14889-96 | 16.4 | 213 |
| 330 | MetalBrganic frameworks: a novel host platform for enzymatic catalysis and detection. <i>Materials Horizons</i> , 2017 , 4, 55-63 | 14.4 | 207 |
| 329 | Nitric Oxide Adsorption and Delivery in Flexible MIL-88(Fe) Metal©rganic Frameworks. <i>Chemistry of Materials</i> , 2013 , 25, 1592-1599 | 9.6 | 199 |
| 328 | A zirconium methacrylate oxocluster as precursor for the low-temperature synthesis of porous zirconium(IV) dicarboxylates. <i>Chemical Communications</i> , 2010 , 46, 767-9 | 5.8 | 199 |
| 327 | Optimisation of the synthesis of MOF nanoparticles made of flexible porous iron fumarate MIL-88A. <i>Journal of Materials Chemistry</i> , 2011 , 21, 2220-2227 | | 197 |
| 326 | Multistep N2 breathing in the metal-organic framework co(1,4-benzenedipyrazolate). <i>Journal of the American Chemical Society</i> , 2010 , 132, 13782-8 | 16.4 | 197 |
| 325 | Amine Grafting on Coordinatively Unsaturated Metal Centers of MOFs: Consequences for Catalysis and Metal Encapsulation. <i>Angewandte Chemie</i> , 2008 , 120, 4212-4216 | 3.6 | 182 |
| 324 | Structural effects of solvents on the breathing of metal-organic frameworks: an in situ diffraction study. <i>Angewandte Chemie - International Edition</i> , 2008 , 47, 4100-5 | 16.4 | 180 |
| 323 | Titanium coordination compounds: from discrete metal complexes to metal-organic frameworks. <i>Chemical Society Reviews</i> , 2017 , 46, 3431-3452 | 58.5 | 177 |

| 322 | Giant pores in a chromium 2,6-naphthalenedicarboxylate open-framework structure with MIL-101 topology. <i>Angewandte Chemie - International Edition</i> , 2009 , 48, 3791-4 | 16.4 | 175 |
|-----|---|------|-----|
| 321 | Using pressure to provoke the structural transition of metal-organic frameworks. <i>Angewandte Chemie - International Edition</i> , 2010 , 49, 7526-9 | 16.4 | 175 |
| 320 | How water fosters a remarkable 5-fold increase in low-pressure CO2 uptake within mesoporous MIL-100(Fe). <i>Journal of the American Chemical Society</i> , 2012 , 134, 10174-81 | 16.4 | 170 |
| 319 | Explanation of the adsorption of polar vapors in the highly flexible metal organic framework MIL-53(Cr). <i>Journal of the American Chemical Society</i> , 2010 , 132, 9488-98 | 16.4 | 169 |
| 318 | Design of hydrophilic metal organic framework water adsorbents for heat reallocation. <i>Advanced Materials</i> , 2015 , 27, 4775-80 | 24 | 168 |
| 317 | Comparison of Porous Iron Trimesates Basolite F300 and MIL-100(Fe) As Heterogeneous Catalysts for Lewis Acid and Oxidation Reactions: Roles of Structural Defects and Stability. <i>ACS Catalysis</i> , 2012 , 2, 2060-2065 | 13.1 | 167 |
| 316 | Iron(III) metal®rganic frameworks as solid Lewis acids for the isomerization of ⊕inene oxide. <i>Catalysis Science and Technology</i> , 2012 , 2, 324-330 | 5.5 | 164 |
| 315 | Structure and Dynamics of the Functionalized MOF Type UiO-66(Zr): NMR and Dielectric Relaxation Spectroscopies Coupled with DFT Calculations. <i>Chemistry of Materials</i> , 2012 , 24, 2168-2177 | 9.6 | 163 |
| 314 | An evaluation of UiO-66 for gas-based applications. <i>Chemistry - an Asian Journal</i> , 2011 , 6, 3270-80 | 4.5 | 158 |
| 313 | Synthesis, Structure, Characterization, and Redox Properties of the Porous MIL-68(Fe) Solid. <i>European Journal of Inorganic Chemistry</i> , 2010 , 2010, 3789-3794 | 2.3 | 157 |
| 312 | The structure of the aluminum fumarate metal-organic framework A520. <i>Angewandte Chemie - International Edition</i> , 2015 , 54, 3664-8 | 16.4 | 155 |
| 311 | Understanding the Thermodynamic and Kinetic Behavior of the CO2/CH4 Gas Mixture within the Porous Zirconium Terephthalate UiO-66(Zr): A Joint Experimental and Modeling Approach. <i>Journal of Physical Chemistry C</i> , 2011 , 115, 13768-13774 | 3.8 | 154 |
| 310 | Synthesis, Structure and Properties of Related MicroporousN,NEPiperazinebismethylenephosphonates of Aluminum and Titanium. <i>Chemistry of Materials</i> , 2006 , 18, 1451-1457 | 9.6 | 154 |
| 309 | CH4 storage and CO2 capture in highly porous zirconium oxide based metal-organic frameworks. <i>Chemical Communications</i> , 2012 , 48, 9831-3 | 5.8 | 150 |
| 308 | Infrared study of the influence of reducible iron(III) metal sites on the adsorption of CO, CO2, propane, propene and propyne in the mesoporous metal-organic framework MIL-100. <i>Physical Chemistry Chemical Physics</i> , 2011 , 13, 11748-56 | 3.6 | 150 |
| 307 | Catalytic transfer hydrogenation of ethyl levulinate to Evalerolactone over zirconium-based metal B rganic frameworks. <i>Green Chemistry</i> , 2016 , 18, 4542-4552 | 10 | 149 |
| 306 | Large breathing of the MOF MIL-47(VIV) under mechanical pressure: a joint experimental Enodelling exploration. <i>Chemical Science</i> , 2012 , 3, 1100 | 9.4 | 149 |
| 305 | Isoreticular homochiral porous metal-organic structures with tunable pore sizes. <i>Inorganic Chemistry</i> , 2007 , 46, 6843-5 | 5.1 | 146 |

| 304 | Selective removal of N-heterocyclic aromatic contaminants from fuels by lewis acidic metal-organic frameworks. <i>Angewandte Chemie - International Edition</i> , 2011 , 50, 4210-4 | 16.4 | 145 | |
|-----|--|--------------------------|-----|--|
| 303 | Quasi-elastic neutron scattering and molecular dynamics study of methane diffusion in metal organic frameworks MIL-47(V) and MIL-53(Cr). <i>Angewandte Chemie - International Edition</i> , 2008 , 47, 661 | 1 ^{<u>1</u>6.4} | 145 | |
| 302 | p-Xylene-selective metal-organic frameworks: a case of topology-directed selectivity. <i>Journal of the American Chemical Society</i> , 2011 , 133, 18526-9 | 16.4 | 142 | |
| 301 | Synthesis, characterisation and luminescent properties of a new three-dimensional lanthanide trimesate: M((C6H3)(CO2)3) (M = Y, Ln) or MIL-78. <i>Journal of Materials Chemistry</i> , 2004 , 14, 1540-1543 | | 137 | |
| 300 | Heparin-engineered mesoporous iron metal-organic framework nanoparticles: toward stealth drug nanocarriers. <i>Advanced Healthcare Materials</i> , 2015 , 4, 1246-57 | 10.1 | 136 | |
| 299 | Adsorption properties in high optical quality nanoZIF-8 thin films with tunable thickness. <i>Journal of Materials Chemistry</i> , 2010 , 20, 7676 | | 136 | |
| 298 | Selective nitrogen capture by porous hybrid materials containing accessible transition metal ion sites. <i>Nature Materials</i> , 2017 , 16, 526-531 | 27 | 135 | |
| 297 | Acid-functionalized UiO-66(Zr) MOFs and their evolution after intra-framework cross-linking: structural features and sorption properties. <i>Journal of Materials Chemistry A</i> , 2015 , 3, 3294-3309 | 13 | 135 | |
| 296 | An EXAFS study of the formation of a nanoporous metal-organic framework: evidence for the retention of secondary building units during synthesis. <i>Chemical Communications</i> , 2006 , 1518-20 | 5.8 | 135 | |
| 295 | Green Microwave Synthesis of MIL-100(Al, Cr, Fe) Nanoparticles for Thin-Film Elaboration. <i>European Journal of Inorganic Chemistry</i> , 2012 , 2012, 5165-5174 | 2.3 | 133 | |
| 294 | Molecular Insight into the Adsorption of H2S in the Flexible MIL-53(Cr) and Rigid MIL-47(V) MOFs: Infrared Spectroscopy Combined to Molecular Simulations. <i>Journal of Physical Chemistry C</i> , 2011 , 115, 2047-2056 | 3.8 | 132 | |
| 293 | Elaboration and properties of hierarchically structured optical thin films of MIL-101(Cr). <i>Chemical Communications</i> , 2009 , 7149-51 | 5.8 | 131 | |
| 292 | On the breathing effect of a metal-organic framework upon CO(2) adsorption: Monte Carlo compared to microcalorimetry experiments. <i>Chemical Communications</i> , 2007 , 3261-3 | 5.8 | 131 | |
| 291 | In situ energy-dispersive X-ray diffraction for the synthesis optimization and scale-up of the porous zirconium terephthalate UiO-66. <i>Inorganic Chemistry</i> , 2014 , 53, 2491-500 | 5.1 | 130 | |
| 290 | A robust zirconium amino acid metal-organic framework for proton conduction. <i>Nature Communications</i> , 2018 , 9, 4937 | 17.4 | 130 | |
| 289 | Towards acid MOFs latalytic performance of sulfonic acid functionalized architectures. <i>Catalysis Science and Technology</i> , 2013 , 3, 2311 | 5.5 | 129 | |
| 288 | Probing the Adsorption Sites for CO2 in Metal Organic Frameworks Materials MIL-53 (Al, Cr) and MIL-47 (V) by Density Functional Theory. <i>Journal of Physical Chemistry C</i> , 2008 , 112, 514-520 | 3.8 | 129 | |
| 287 | A robust large-pore zirconium carboxylate metalBrganic framework for energy-efficient water-sorption-driven refrigeration. <i>Nature Energy</i> , 2018 , 3, 985-993 | 62.3 | 129 | |

| 286 | Synthesis and characterization of a new three-dimensional lanthanide carboxyphosphonate: Ln(4)(H(2)O)(7)[O(2)C-C(5)H(10)N-CH(2)(-)PO(3)](4)(H(2)O)(5). <i>Inorganic Chemistry</i> , 2004 , 43, 3159-63 | 5.1 | 126 |
|-----|--|------|-----|
| 285 | Proton Transport in a Highly Conductive Porous Zirconium-Based Metal-Organic Framework: Molecular Insight. <i>Angewandte Chemie - International Edition</i> , 2016 , 55, 3919-24 | 16.4 | 123 |
| 284 | A robust amino-functionalized titanium(iv) based MOF for improved separation of acid gases. <i>Chemical Communications</i> , 2013 , 49, 10082-4 | 5.8 | 123 |
| 283 | A rare example of a porous Ca-MOF for the controlled release of biologically active NO. <i>Chemical Communications</i> , 2013 , 49, 7773-5 | 5.8 | 120 |
| 282 | Molecular Insight into the Adsorption and Diffusion of Water in the Versatile Hydrophilic/Hydrophobic Flexible MIL-53(Cr) MOF. <i>Journal of Physical Chemistry C</i> , 2011 , 115, 10764-10 | 778 | 119 |
| 281 | Probing the dynamics of CO2 and CH4 within the porous zirconium terephthalate UiO-66(Zr): a synergic combination of neutron scattering measurements and molecular simulations. <i>Chemistry - A European Journal</i> , 2011 , 17, 8882-9 | 4.8 | 118 |
| 280 | Adsorption of CO2 in metal organic frameworks of different metal centres: Grand Canonical Monte Carlo simulations compared to experiments. <i>Adsorption</i> , 2007 , 13, 461-467 | 2.6 | 118 |
| 279 | MOF-derived carbonaceous materials enriched with nitrogen: Preparation and applications in adsorption and catalysis. <i>Materials Today</i> , 2019 , 25, 88-111 | 21.8 | 118 |
| 278 | Hydrothermal Synthesis, Structure Determination, and Thermal Behavior of New Three-Dimensional Europium Terephthalates: MIL-51LT,HTand MIL-52 or Eu2n(OH)x(H2O)y(O2Ct6H4t0O2)z(n= III, III, II;x= 4, 0, 0;y= 2, 0, 0;z= 1, 1, 2). Chemistry of Materials | 9.6 | 117 |
| 277 | , 2002, 14, 2409-2415 Nanoscaled Zinc Pyrazolate Metal-Organic Frameworks as Drug-Delivery Systems. <i>Inorganic Chemistry</i> , 2016 , 55, 2650-63 | 5.1 | 116 |
| 276 | Effect of the organic functionalization of flexible MOFs on the adsorption of CO2. <i>Journal of Materials Chemistry</i> , 2012 , 22, 10266 | | 116 |
| 275 | Dynamics of benzene rings in MIL-53(Cr) and MIL-47(V) frameworks studied by 2H NMR spectroscopy. <i>Angewandte Chemie - International Edition</i> , 2010 , 49, 4791-4 | 16.4 | 115 |
| 274 | Hydrogen Storage in the Giant-Pore Metal©rganic Frameworks MIL-100 and MIL-101. <i>Angewandte Chemie</i> , 2006 , 118, 8407-8411 | 3.6 | 113 |
| 273 | A "green" strategy to construct non-covalent, stable and bioactive coatings on porous MOF nanoparticles. <i>Scientific Reports</i> , 2015 , 5, 7925 | 4.9 | 111 |
| 272 | Selective sulfoxidation of aryl sulfides by coordinatively unsaturated metal centers in chromium carboxylate MIL-101. <i>Applied Catalysis A: General</i> , 2009 , 358, 249-253 | 5.1 | 106 |
| 271 | Evidence of CO(2) molecule acting as an electron acceptor on a nanoporous metal-organic-framework MIL-53 or Cr(3+)(OH)(O(2)C-C(6)H(4)-CO(2)). <i>Chemical Communications</i> , 2007 , 3291-3 | 5.8 | 105 |
| 270 | Towards an improved anti-HIV activity of NRTI via metal-organic frameworks nanoparticles. <i>Advanced Healthcare Materials</i> , 2013 , 2, 1630-7 | 10.1 | 104 |
| 269 | Rationalization of the entrapping of bioactive molecules into a series of functionalized porous zirconium terephthalate MOFs. <i>Journal of Materials Chemistry B</i> , 2013 , 1, 1101-1108 | 7.3 | 104 |

| 268 | Tuning the breathing behaviour of MIL-53 by cation mixing. Chemical Communications, 2012, 48, 10237 | -9 5.8 | 104 |
|-----|---|---------------|-----|
| 267 | Synthesis, structure and properties of a three-dimensional porous rare-earth carboxylate MIL-83(Eu): Eu2(O2C-C10H14-CO2)3. <i>Journal of Materials Chemistry</i> , 2004 , 14, 642-645 | | 104 |
| 266 | A Zn azelate MOF: combining antibacterial effect. CrystEngComm, 2015, 17, 456-462 | 3.3 | 103 |
| 265 | An adsorbent performance indicator as a first step evaluation of novel sorbents for gas separations: application to metal-organic frameworks. <i>Langmuir</i> , 2013 , 29, 3301-9 | 4 | 103 |
| 264 | Mixed-Valence Li/Fe-Based Metal@rganic Frameworks with Both Reversible Redox and Sorption Properties. <i>Angewandte Chemie</i> , 2007 , 119, 3323-3327 | 3.6 | 103 |
| 263 | How Hydration Drastically Improves Adsorption Selectivity for CO2 over CH4 in the Flexible Chromium Terephthalate MIL-53. <i>Angewandte Chemie</i> , 2006 , 118, 7915-7918 | 3.6 | 103 |
| 262 | Transport diffusivity of CO2 in the highly flexible metal-organic framework MIL-53(Cr). <i>Angewandte Chemie - International Edition</i> , 2009 , 48, 8335-9 | 16.4 | 102 |
| 261 | Understanding the colloidal stability of the mesoporous MIL-100(Fe) nanoparticles in physiological media. <i>Langmuir</i> , 2014 , 30, 5911-20 | 4 | 100 |
| 260 | A phase transformable ultrastable titanium-carboxylate framework for photoconduction. <i>Nature Communications</i> , 2018 , 9, 1660 | 17.4 | 98 |
| 259 | Probing the adsorption performance of the hybrid porous MIL-68(Al): a synergic combination of experimental and modelling tools. <i>Journal of Materials Chemistry</i> , 2012 , 22, 10210 | | 98 |
| 258 | Reverse shape selectivity in the liquid-phase adsorption of xylene isomers in zirconium terephthalate MOF UiO-66. <i>Langmuir</i> , 2012 , 28, 5715-23 | 4 | 98 |
| 257 | Superhydrophobicity in highly fluorinated porous metal-organic frameworks. <i>Angewandte Chemie - International Edition</i> , 2012 , 51, 6048-50 | 16.4 | 98 |
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