Camille Petit

List of Publications by Year in descending order

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95 papers	9,976 citations	57719 44 h-index	42364 92 g-index
114 all docs	114 docs citations	114 times ranked	11019 citing authors

#	Article	IF	Citations
1	Carbon capture and storage (CCS): the way forward. Energy and Environmental Science, 2018, 11, 1062-1176.	15.6	2,378
2	MOFâ€“Graphite Oxide Composites: Combining the Uniqueness of Graphene Layers and Metalâ€“Organic Frameworks. Advanced Materials, 2009, 21, 4753-4757.	11.1	563
3	Towards the use of metalâ€“organic frameworks for water reuse: a review of the recent advances in the field of organic pollutants removal and degradation and the next steps in the field. Journal of Materials Chemistry A, 2015, 3, 22484-22506.	5.2	516
4	A Techno-economic analysis and systematic review of carbon capture and storage (CCS) applied to the iron and steel, cement, oil refining and pulp and paper industries, as well as other high purity sources. International Journal of Greenhouse Gas Control, 2017, 61, 71-84.	2.3	351
5	Enhanced Adsorption of Ammonia on Metalâ€Organic Framework/Graphite Oxide Composites: Analysis of Surface Interactions. Advanced Functional Materials, 2010, 20, 111-118.	7.8	305
6	Synthesis, Characterization, and Ammonia Adsorption Properties of Mesoporous Metalâ€“Organic Framework (MIL(Fe))â€“Graphite Oxide Composites: Exploring the Limits of Materials Fabrication. Advanced Functional Materials, 2011, 21, 2108-2117.	7.8	294
7	The synthesis and characterization of copper-based metalâ€“organic framework/graphite oxide composites. Carbon, 2011, 49, 563-572.	5.4	293
8	CO 2 capture and photocatalytic reduction using bifunctional TiO 2 /MOF nanocomposites under UVâ€“vis irradiation. Applied Catalysis B: Environmental, 2017, 210, 131-140.	10.8	288
9	Revisiting the chemistry of graphite oxides and its effect on ammonia adsorption. Journal of Materials Chemistry, 2009, 19, 9176.	6.7	235
10	Exploring the coordination chemistry of MOFâ€“graphite oxide composites and their applications as adsorbents. Dalton Transactions, 2012, 41, 4027.	1.6	217
11	Reactive Adsorption of Ammonia on Cu-Based MOF/Graphene Composites. Langmuir, 2010, 26, 15302-15309.	1.6	213
12	Hydrogen Sulfide Adsorption on MOFs and MOF/Graphite Oxide Composites. ChemPhysChem, 2010, 11, 3678-3684.	1.0	206
13	Reactive adsorption of acidic gases on MOF/graphite oxide composites. Microporous and Mesoporous Materials, 2012, 154, 107-112.	2.2	190
14	Reactive Adsorption of NO₂ on Copper-Based Metalâ^'Organic Framework and Graphite Oxide/Metalâ^'Organic Framework Composites. ACS Applied Materials & Interfaces, 2010, 2, 3606-3613.	4.0	152
15	Present and future of MOF research in the field of adsorption and molecular separation. Current Opinion in Chemical Engineering, 2018, 20, 132-142.	3.8	152
16	MOFâ€“graphite oxide nanocomposites: surface characterization and evaluation as adsorbents of ammonia. Journal of Materials Chemistry, 2009, 19, 6521.	6.7	150
17	Toward Understanding Reactive Adsorption of Ammonia on Cu-MOF/Graphite Oxide Nanocomposites. Langmuir, 2011, 27, 13043-13051.	1.6	137
18	MOF/graphite oxide hybrid materials: exploring the new concept of adsorbents and catalysts. Adsorption, 2011, 17, 5-16.	1.4	133

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19	Metal-free dual-phase full organic carbon nanotubes/g-C3N4 heteroarchitectures for photocatalytic hydrogen production. Nano Energy, 2018, 50, 468-478.	8.2	133
20	On the reactive adsorption of ammonia on activated carbons modified by impregnation with inorganic compounds. Journal of Colloid and Interface Science, 2009, 338, 329-345.	5.0	120
21	Carbon nitride nanosheet/metalâ€“organic framework nanocomposites with synergistic photocatalytic activities. Catalysis Science and Technology, 2016, 6, 5042-5051.	2.1	116
22	Role of graphite precursor in the performance of graphite oxides as ammonia adsorbents. Carbon, 2009, 47, 445-456.	5.4	111
23	Titanium dioxide/carbon nitride nanosheet nanocomposites for gas phase CO2 photoreduction under UV-visible irradiation. Applied Catalysis B: Environmental, 2019, 242, 369-378.	10.8	111
24	Graphite Oxide/Polyoxometalate Nanocomposites as Adsorbents of Ammonia. Journal of Physical Chemistry C, 2009, 113, 3800-3809.	1.5	110
25	Removing oil droplets from water using a copper-based metal organic frameworks. Chemical Engineering Journal, 2014, 249, 293-301.	6.6	107
26	Engineering the surface of a new class of adsorbents: Metalâ€“organic framework/graphite oxide composites. Journal of Colloid and Interface Science, 2015, 447, 139-151.	5.0	101
27	The role of sulfur-containing groups in ammonia retention on activated carbons. Carbon, 2010, 48, 654-667.	5.4	99
28	Interactions of Ammonia with the Surface of Microporous Carbon Impregnated with Transition Metal Chlorides. Journal of Physical Chemistry C, 2007, 111, 12705-12714.	1.5	96
29	Template-Free Synthesis of Highly Porous Boron Nitride: Insights into Pore Network Design and Impact on Gas Sorption. ACS Nano, 2017, 11, 10003-10011.	7.3	96
30	Hierarchically porous carbon foams from pickering high internal phase emulsions. Carbon, 2016, 101, 253-260.	5.4	86
31	Exploring the limits of adsorption-based CO₂ capture using MOFs with PVSA â€“ from molecular design to process economics. Molecular Systems Design and Engineering, 2020, 5, 212-231.	1.7	82
32	How Reproducible are Surface Areas Calculated from the BET Equation?. Advanced Materials, 2022, 34, .	11.1	82
33	Band gap modulation in zirconium-based metalâ€“organic frameworks by defect engineering. Journal of Materials Chemistry A, 2019, 7, 23781-23786.	5.2	79
34	Mechanism and stability of an Fe-based 2D MOF during the photoelectro-Fenton treatment of organic micropollutants under UVA and visible light irradiation. Water Research, 2020, 184, 115986.	5.3	73
35	The Effect of Materials Architecture in TiO₂/MOF Composites on CO₂ Photoreduction and Charge Transfer. Small, 2019, 15, e1805473.	5.2	72
36	Magnetically controllable Pickering emulsion prepared by a reduced graphene oxide-iron oxide composite. Journal of Colloid and Interface Science, 2015, 438, 296-305.	5.0	64

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37	The effect of oxidation on the surface chemistry of sulfur-containing carbons and their arsine adsorption capacity. Carbon, 2010, 48, 1779-1787.	5.4	62
38	The use of metalâ€“organic frameworks for CO purification. Journal of Materials Chemistry A, 2018, 6, 10570-10594.	5.2	60
39	Effect of Graphite Features on the Properties of Metalâ€“Organic Framework/Graphite Hybrid Materials Prepared Using an in Situ Process. Langmuir, 2011, 27, 10234-10242.	1.6	59
40	Recent Advances in Anhydrous Solvents for CO2 Capture: Ionic Liquids, Switchable Solvents, and Nanoparticle Organic Hybrid Materials. Frontiers in Energy Research, 2015, 3, .	1.2	57
41	Tunable porous boron nitride: Investigating its formation and its application for gas adsorption. Microporous and Mesoporous Materials, 2017, 243, 154-163.	2.2	51
42	Hypercrosslinked polyHIPEs as precursors to designable, hierarchically porous carbon foams. Polymer, 2017, 115, 146-153.	1.8	48
43	Effect of SO₂ on CO₂ Capture Using Liquid-like Nanoparticle Organic Hybrid Materials. Energy & Fuels, 2013, 27, 4167-4174.	2.5	47
44	Porous boron nitride for combined CO₂ capture and photoreduction. Journal of Materials Chemistry A, 2019, 7, 23931-23940.	5.2	47
45	Design and Characterization of Liquidlike POSS-Based Hybrid Nanomaterials Synthesized via Ionic Bonding and Their Interactions with CO₂. Langmuir, 2013, 29, 12234-12242.	1.6	46
46	Combined Experimental, Theoretical, and Molecular Simulation Approach for the Description of the Fluid-Phase Behavior of Hydrocarbon Mixtures within Shale Rocks. Energy & Fuels, 2018, 32, 5750-5762.	2.5	46
47	Halloysite and sepiolite â€“TiO2 nanocomposites: Synthesis characterization and photocatalytic activity in three aquatic wastes. Materials Science in Semiconductor Processing, 2018, 85, 1-8.	1.9	44
48	Spectroscopic Investigation of the Canopy Configurations in Nanoparticle Organic Hybrid Materials of Various Grafting Densities during CO₂ Capture. Journal of Physical Chemistry C, 2012, 116, 516-525.	1.5	43
49	Hypercrosslinked Polymers as a Photocatalytic Platform for Visibleâ€Lightâ€Driven CO₂Photoreduction Using H₂O. ChemSusChem, 2021, 14, 1720-1727.	3.6	42
50	Activated carbons modified with aluminiumâ€“zirconium polycations as adsorbents for ammonia. Microporous and Mesoporous Materials, 2008, 114, 137-147.	2.2	40
51	Removal of Ammonia from Air on Molybdenum and Tungsten Oxide Modified Activated Carbons. Environmental Science & Technology, 2008, 42, 3033-3039.	4.6	38
52	Role of Aluminum Oxycations in Retention of Ammonia on Modified Activated Carbons. Journal of Physical Chemistry C, 2007, 111, 16445-16452.	1.5	37
53	Effect of canopy structures and their steric interactions on CO2 sorption behavior of liquid-like nanoparticle organic hybrid materials. RSC Advances, 2014, 4, 8723.	1.7	36
54	Engineering metalâ€“organic frameworks for adsorption-based gas separations: from process to atomic scale. Molecular Systems Design and Engineering, 2021, 6, 841-875.	1.7	36

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55	En Route to Zero Emissions for Power and Industry with Amine-Based Post-combustion Capture. Environmental Science & Technology, 2021, 55, 10619-10632.	4.6	36
56	One step synthesis of MOFâ€“polymer composites. RSC Advances, 2016, 6, 17314-17317.	1.7	34
57	Tuning Thermally Treated Graphitic Carbon Nitride for H₂ Evolution and CO₂ Photoreduction: The Effects of Material Properties and Mid-Gap States. ACS Applied Energy Materials, 2018, 1, 6524-6534.	2.5	33
58	Towards scaleâ€up of graphene production via nonoxidizing liquid exfoliation methods. AICHE Journal, 2018, 64, 3246-3276.	1.8	32
59	Effect of water on the physical properties and carbon dioxide capture capacities of liquid-like Nanoparticle Organic Hybrid Materials and their corresponding polymers. Journal of Colloid and Interface Science, 2013, 407, 102-108.	5.0	30
60	Simultaneous measurement of CO2 sorption and swelling of phosphate-based ionic liquid. Green Energy and Environment, 2016, 1, 258-265.	4.7	30
61	Porous Boron Nitride Materials: Influence of Structure, Chemistry and Stability on the Adsorption of Organics. Frontiers in Chemistry, 2019, 7, 160.	1.8	27
62	Enhanced Hydrolytic Stability of Porous Boron Nitride via the Control of Crystallinity, Porosity, and Chemical Composition. Journal of Physical Chemistry C, 2019, 123, 4282-4290.	1.5	26
63	Role of surface heterogeneity in the removal of ammonia from air on micro/mesoporous activated carbons modified with molybdenum and tungtsen oxides. Microporous and Mesoporous Materials, 2009, 118, 61-67.	2.2	25
64	Microcalorimetric insight into the analysis of the reactive adsorption of ammonia on Cu-MOF and its composite with graphite oxide. Journal of Materials Chemistry, 2012, 22, 21443.	6.7	25
65	Thermal stability, swelling behavior and CO₂ absorption properties of Nanoscale Ionic Materials (NIMs). RSC Advances, 2014, 4, 65195-65204.	1.7	23
66	Novel Approach to Hydrogen Production with Suppressed CO_x Generation from a Model Biomass Feedstock. Energy & Fuels, 2012, 26, 4486-4496.	2.5	22
67	Phase Equilibrium Study of the AlCl₃â€“CaCl₂â€“H₂O System for the Production of Aluminum Chloride Hexahydrate from Ca-Rich Flue Ash. Journal of Chemical & Engineering Data, 2016, 61, 359-369.	1.0	21
68	Guidelines for Techno-Economic Analysis of Adsorption Processes. Frontiers in Chemical Engineering, 2021, 2, .	1.3	21
69	Optimisation of Cu⁺ impregnation of MOF-74 to improve CO/N₂ and CO/CO₂ separations. RSC Advances, 2020, 10, 5152-5162.	1.7	19
70	Advanced Porous Materials: Design, Synthesis, and Applications in Sustainability. ACS Sustainable Chemistry and Engineering, 2019, 7, 7997-7998.	3.2	18
71	Effect of Band Bending in Photoactive MOF-Based Heterojunctions. ACS Applied Materials & Interfaces, 2022, 14, 19342-19352.	4.0	17
72	Formation Mechanism and Porosity Development in Porous Boron Nitride. Journal of Physical Chemistry C, 2021, 125, 27429-27439.	1.5	15

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73	H₂, N₂, CO₂, and CH₄ Unary Adsorption Isotherm Measurements at Low and High Pressures on Zeolitic Imidazolate Framework ZIF-8. Journal of Chemical & Engineering Data, 2022, 67, 1674-1686.	1.0	15
74	Screening Metalâ€“Organic Frameworks for Dynamic CO/N₂ Separation Using Complementary Adsorption Measurement Techniques. Industrial & Engineering Chemistry Research, 2019, 58, 18336-18344.	1.8	13
75	Complexity of ammonia interactions on activated carbons modified with V2O5. Journal of Colloid and Interface Science, 2008, 325, 301-308.	5.0	12
76	Thermodynamic and kinetic studies of the MgCl₂â€¢NH₄Clâ€¢NH₃â€¢H₂O system for the production of high purity MgO from calcined lowâ€grade magnesite. AICHE Journal, 2015, 61, 1933-1946.	1.8	11
77	Understanding trade-offs in adsorption capacity, selectivity and kinetics for propylene/propane separation using composites of activated carbon and hypercrosslinked polymer. Chemical Engineering Journal, 2021, 426, 131628.	6.6	11
78	Intrinsic Thermal Desorption in a 3D Printed Multifunctional Composite CO₂ Sorbent with Embedded Heating Capability. ACS Applied Materials & Interfaces, 2019, 11, 43337-43343.	4.0	10
79	Real-time monitoring and hydrodynamic scaling of shear exfoliated graphene. 2D Materials, 2021, 8, 025029.	2.0	10
80	Removal of oil droplets from water using carbonized rice husk: enhancement by surface modification using polyethylenimine. Environmental Science and Pollution Research, 2015, 22, 8316-8328.	2.7	9
81	Mechanically stable structured porous boron nitride with high volumetric adsorption capacity. Journal of Materials Chemistry A, 2021, 9, 13366-13373.	5.2	9
82	The development of a comprehensive toolbox based on multi-level, high-throughput screening of MOFs for CO/N₂ separations. Chemical Science, 2021, 12, 12068-12081.	3.7	8
83	Using silver exchange to achieve high uptake and selectivity for propylene/propane separation in zeolite Y. Chemical Engineering Journal, 2022, 446, 137104.	6.6	8
84	Material Screening for Gas Sensing Using an Electronic Nose: Gas Sorption Thermodynamic and Kinetic Considerations. ACS Sensors, 2021, 6, 3808-3821.	4.0	7
85	A Response Surface Model to Predict and Experimentally Tune the Chemical, Magnetic and Optoelectronic Properties of Oxygenâ€Doped Boron Nitride**. ChemPhysChem, 2022, 23, .	1.0	7
86	CCS â€“ A technology for the future: general discussion. Faraday Discussions, 2016, 192, 303-335.	1.6	4
87	MOFâ€Based Heterojunctions: The Effect of Materials Architecture in TiO₂/MOF Composites on CO₂ Photoreduction and Charge Transfer (Small 11/2019). Small, 2019, 15, 1970060.	5.2	3
88	Green Synthesis and Engineering Applications of Metalâ€“Organic Frameworks. , 2020, , 139-162.		3
89	Interparticle Forces of a Native and Encapsulated Metal-Organic Framework and Their Effects on Colloidal Dispersion. ACS Applied Materials & Interfaces, 2021, 13, 45898-45906.	4.0	3
90	Role of Surface Chemistry. Springer Theses, 2012, , 53-82.	0.0	3

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91	Performance of the Materials Tested for Ammonia Removal. Springer Theses, 2012, , 29-33.	0.0	1
92	Role of Textural Parameters. Springer Theses, 2012, , 35-51.	0.0	1
93	Mechanisms of Adsorption and Strength of Retention. Springer Theses, 2012, , 89-99.	0.0	0
94	Porous Boron Oxynitride for Combined CO2 Capture and Photoreduction. , 0, , .		0
95	Porous Boron Oxynitride for Combined CO2 Capture and Photoreduction. , 0, , .		0