Simon M Humphrey

List of Publications by Year
in descending order

75 papers	3,184 citations	126907 33 h-index	161849 54 g-index
78 all docs	78 docs citations	78 times ranked	4513 citing authors

#	Article	IF	Citations
1	Porous Cobalt(II)â€"Organic Frameworks with Corrugated Walls: Structurally Robust Gas-Sorption Materials. Angewandte Chemie - International Edition, 2007, 46, 272-275.	13.8	194
2	Charge-Transfer Interaction of Poly(vinylpyrrolidone) with Platinum and Rhodium Nanoparticles. Journal of Physical Chemistry C, 2007, 111, 6288-6295.	3.1	181
3	Rational Design of Rhodiumâ€"Iridium Alloy Nanoparticles as Highly Active Catalysts for Acidic Oxygen Evolution. ACS Nano, 2019, 13, 13225-13234.	14.6	151
4	Beneficial Effects of Microwave-Assisted Heating <i>versus</i> Conventional Heating in Noble Metal Nanoparticle Synthesis. ACS Nano, 2012, 6, 9433-9446.	14.6	140
5	Oxygen Reduction Reaction on Classically Immiscible Bimetallics: A Case Study of RhAu. Journal of Physical Chemistry C, 2018, 122, 2712-2716.	3.1	123
6	Microwave Synthesis of Classically Immiscible Rhodiumâ€"Silver and Rhodiumâ€"Gold Alloy Nanoparticles: Highly Active Hydrogenation Catalysts. ACS Nano, 2014, 8, 11512-11521.	14.6	118
7	Rhodium Nanoparticles from Cluster Seeds:Â Control of Size and Shape by Precursor Addition Rate. Nano Letters, 2007, 7, 785-790.	9.1	114
8	Sonogashira Coupling Catalyzed by Gold Nanoparticles: Does Homogeneous or Heterogeneous Catalysis Dominate?. ChemCatChem, 2010, 2, 1444-1449.	3.7	107
9	A Sensor for Trace H2O Detection in D2O. CheM, 2017, 2, 579-589.	11.7	91
10	PdAu Alloy Nanoparticle Catalysts: Effective Candidates for Nitrite Reduction in Water. ACS Catalysis, 2017, 7, 3268-3276.	11.2	89
11	Rational Design of Porous Coordination Polymers Based on Bis(phosphine)MCl₂ Complexes That Exhibit High-Temperature H₂ Sorption and Chemical Reactivity. Journal of the American Chemical Society, 2013, 135, 16038-16041.	13.7	87
12	A coordination polymer of (Ph3P)AuCl prepared by post-synthetic modification and its application in 1-hexene/n-hexane separation. Chemical Communications, 2011, 47, 11855.	4.1	84
13	Highly reversible sorption of H2S and CO2 by an environmentally friendly Mg-based MOF. Journal of Materials Chemistry A, 2018, 6, 16900-16909.	10.3	81
14	Cu<i>_x</i>Ir_{1â€"<i>x</i>} Nanoalloy Catalysts Achieve Near 100% Selectivity for Aqueous Nitrite Reduction to NH₃. ACS Catalysis, 2020, 10, 7915-7921.	11.2	69
15	PdAg Alloy Nanocatalysts: Toward Economically Viable Nitrite Reduction in Drinking Water. ACS Catalysis, 2020, 10, 7979-7989.	11.2	64
16	Metalâ€"organophosphine and metalâ€"organophosphonium frameworks with layered honeycomb-like structures. Dalton Transactions, 2009, , 2298.	3.3	61
17	Microwave-Assisted Synthesis of Classically Immiscible Agâ€"Ir Alloy Nanoparticle Catalysts. ACS Catalysis, 2018, 8, 11386-11397.	11.2	57
18	Microwave-Assisted Synthesis of Pd_{<i>x</i>}Au_{100â€"<i>x</i>} Alloy Nanoparticles: A Combined Experimental and Theoretical Assessment of Synthetic and Compositional Effects upon Catalytic Reactivity. ACS Catalysis, 2016, 6, 4882-4893.	11.2	54

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19	Separation of <i>p</i>â€Divinylbenzene by Selective Roomâ€Temperature Adsorption Inside Mgâ€CUKâ€1 Prepared by Aqueous Microwave Synthesis. Angewandte Chemie - International Edition, 2015, 54, 5394-5398.	13.8	53
20	A Metalâ€“Organic Framework with Cooperative Phosphines That Permit Postâ€Synthetic Installation of Open Metal Sites. Angewandte Chemie - International Edition, 2018, 57, 9295-9299.	13.8	52
21	Isolated Magnetic Clusters of Co(II) and Ni(II) within 3-Dimensional Organic Frameworks of 6-Mercaptonicotinic Acid:â€‰ Unique Structural Topologies Based on Selectivity for Hard and Soft Coordination Environments. Inorganic Chemistry, 2005, 44, 5981-5983.	4.0	50
22	A PCP Pincer Ligand for Coordination Polymers with Versatile Chemical Reactivity: Selective Activation of CO₂ Gas over CO Gas in the Solid State. Angewandte Chemie - International Edition, 2016, 55, 12351-12355.	13.8	49
23	High capacity CO2 adsorption in a Mg(ii)-based phosphine oxide coordination material. Chemical Communications, 2011, 47, 4899.	4.1	48
24	Li- and Na-reduction products of meso-Co₃O₄form high-rate, stably cycling battery anode materials. Journal of Materials Chemistry A, 2014, 2, 14209-14221.	10.3	48
25	A new Co(ii) coordination solid with mixed oxygen, carboxylate, pyridine and thiolate donors exhibiting canted antiferromagnetism with TCâ‰ˆ 68 K. Chemical Communications, 2006, , 1607.	4.1	46
26	Porous Metalâ€“Organic Framework CUK-1 for Adsorption Heat Allocation toward Green Applications of Natural Refrigerant Water. ACS Applied Materials & Interfaces, 2019, 11, 25778-25789.	8.0	45
27	High surface area mesoporous Co3O4 from a direct soft template route. Journal of Materials Chemistry, 2012, 22, 12675.	6.7	43
28	Low-Valent Metal Ions as MOF Pillars: A New Route Toward Stable and Multifunctional MOFs. Journal of the American Chemical Society, 2021, 143, 13710-13720.	13.7	43
29	Gas sorption and luminescence properties of a terbium(iii)-phosphine oxide coordination material with two-dimensional pore topology. Dalton Transactions, 2012, 41, 8003.	3.3	41
30	Highly selective room temperature acetylene sorption by an unusual triacetylenic phosphine MOF. Chemical Communications, 2018, 54, 9937-9940.	4.1	40
31	Mixed Alkali Metal/Transition Metal Coordination Polymers with the Mellitic Acid Hexaanion: 2-Dimensional Hexagonal Magnetic Nets. Inorganic Chemistry, 2010, 49, 3441-3448.	4.0	39
32	Continuous Flow Synthesis of Rh and RhAg Alloy Nanoparticle Catalysts Enables Scalable Production and Improved Morphological Control. Chemistry of Materials, 2017, 29, 4341-4350.	6.7	39
33	Shape-persistent pyrrole-based covalent organic cages: synthesis, structure and selective gas adsorption properties. Chemical Communications, 2019, 55, 6185-6188.	4.1	36
34	Organic Vapor Sorption in a High Surface Area Dysprosium(III)â€“Phosphine Oxide Coordination Material. Inorganic Chemistry, 2012, 51, 12242-12247.	4.0	33
35	Microwave synthesis of Auâ€“Rh coreâ€“shell nanoparticles and implications of the shell thickness in hydrogenation catalysis. Chemical Communications, 2013, 49, 4241.	4.1	33
36	Tuning the Hostâ€“Guest Interactions in a Phosphine Coordination Polymer through Different Types of <i>post</i>-Synthetic Modification. Inorganic Chemistry, 2014, 53, 282-288.	4.0	32

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37	Hydrogen Evolution by Ni₂P Catalysts Derived from Phosphine MOFs. ACS Applied Energy Materials, 2020, 3, 176-183.	5.1	31
38	Humidity-induced CO₂ capture enhancement in Mg-CUK-1. Dalton Transactions, 2018, 47, 15827-15834.	3.3	29
39	Organoarsine Metalâ€“Organic Framework with <i>cis</i>-Diarsine Pockets for the Installation of Uniquely Confined Metal Complexes. Journal of the American Chemical Society, 2018, 140, 9806-9809.	13.7	29
40	Accumulation-Driven Unified Spatiotemporal Synthesis and Structuring of Immiscible Metallic Nanoalloys. Matter, 2019, 1, 1606-1617.	10.0	29
41	Direct, One-Pot Syntheses of MOFs Decorated with Low-Valent Metal-Phosphine Complexes. Organometallics, 2019, 38, 3406-3411.	2.3	28
42	Optothermophoretic Manipulation of Colloidal Particles in Nonionic Liquids. Journal of Physical Chemistry C, 2018, 122, 24226-24234.	3.1	26
43	CO2 adsorption properties of a Ca(ii)-based organophosphonium coordination material. Dalton Transactions, 2012, 41, 3920.	3.3	25
44	Ship in a breakable bottle: fluoride-induced release of an organic molecule from a Pr(<scp>iii</scp>)-linked molecular cage. Chemical Communications, 2016, 52, 8514-8517.	4.1	23
45	Phosphonium zwitterions for lighter and chemically-robust MOFs: highly reversible H₂S capture and solvent-triggered release. Journal of Materials Chemistry A, 2019, 7, 16842-16849.	10.3	22
46	Highly selective adsorption of <i>p</i>-xylene over other C₈ aromatic hydrocarbons by Co-CUK-1: a combined experimental and theoretical assessment. Dalton Transactions, 2017, 46, 16096-16101.	3.3	20
47	Magnetism of Linear [Ln₃]⁹⁺ Oxo-Bridged Clusters (Ln = Pr, Nd) Supported inside a [R₃PRâ€²]⁺ Phosphonium Coordination Material. Inorganic Chemistry, 2014, 53, 12674-12676.	4.0	19
48	Rapid Synthesis of Rhodiumâ€“Palladium Alloy Nanocatalysts. ChemCatChem, 2018, 10, 329-333.	3.7	19
49	Bis(imino)acenaphthene (BIAN)-supported palladium(<scp>ii</scp>) carbene complexes as effective Câ€“C coupling catalysts and solvent effects in organic and aqueous media. Catalysis Science and Technology, 2014, 4, 1456-1464.	4.1	18
50	Reversible Solid-State Isomerism of Azobenzene-Loaded Large-Pore Isoreticular Mg-CUK-1. Journal of the American Chemical Society, 2020, 142, 6467-6471.	13.7	18
51	Synthesis and charge storage properties of templated LaMnO₃â€“SiO₂ composite materials. Dalton Transactions, 2017, 46, 977-984.	3.3	17
52	1-D and 2-D phosphine coordination materials based on a palladium(II) PCP pincer metalloligand. Polyhedron, 2018, 143, 149-156.	2.2	16
53	Stabilizer-Free CuIr Alloy Nanoparticle Catalysts. Chemistry of Materials, 2019, 31, 10225-10235.	6.7	16
54	Structural characterization of heterogeneous RhAu nanoparticles from a microwave-assisted synthesis. Nanoscale, 2018, 10, 22520-22532.	5.6	15

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55	Rhenium(i) phenanthrolines bearing electron withdrawing CF3 substituents: synthesis, characterization and biological evaluation. RSC Advances, 2013, 3, 23963.	3.6	13
56	Synthesis and Characterization of a Binuclear Copper(II) Naphthoisoamethyrin Complex Displaying Weak Antiferromagnetic Coupling. Inorganic Chemistry, 2017, 56, 12665-12669.	4.0	13
57	A Metalâ€"Organic Framework with Cooperative Phosphines That Permit Postâ€Synthetic Installation of Open Metal Sites. Angewandte Chemie, 2018, 130, 9439-9443.	2.0	13
58	Inelastic Neutron Scattering and Theoretical Studies of H2Sorption in a Dy(III)-Based Phosphine Coordination Material. Chemistry of Materials, 2015, 27, 7619-7626.	6.7	10
59	Computationally Assisted STEM and EXAFS Characterization of Tunable Rh/Au and Rh/Ag Bimetallic Nanoparticle Catalysts. Microscopy and Microanalysis, 2017, 23, 2030-2031.	0.4	10
60	Testing the predictive power of theory for Pd_xIr_(100â^'x) alloy nanoparticles for the oxygen reduction reaction. Journal of Materials Chemistry A, 2020, 8, 8421-8429.	10.3	9
61	Pyridine-2,4-Dicarboxylate: A Versatile Building Block for the Preparation of Functional Coordination Polymers. Journal of Nanoscience and Nanotechnology, 2010, 10, 34-48.	0.9	8
62	Effect of microwave heating on the synthesis of rhodium nanoparticles in ionic liquids. Inorganica Chimica Acta, 2014, 422, 65-69.	2.4	8
63	Synthesis and Structure of [{Sn2(Î¼-PMes)3}K2Â·3THF]â^ž, Exhibiting Multifunctional Coordination of [Sn2(Î¼-PMes)3]2-Anions to K+. Organometallics, 2004, 23, 4821-4823.	2.3	7
64	A PCP Pincer Ligand for Coordination Polymers with Versatile Chemical Reactivity: Selective Activation of CO 2 Gas over CO Gas in the Solid State. Angewandte Chemie, 2016, 128, 12539-12543.	2.0	6
65	Dipyrrolylnaphthyridine-based Schiff-base cryptands and their selective gas adsorption properties. Journal of Porphyrins and Phthalocyanines, 2020, 24, 424-431.	0.8	6
66	Magnetism and Luminescence of a MOF with Linear Mn3 Nodes Derived from an Emissive Terthiophene-Based Imidazole Linker. Molecules, 2021, 26, 4286.	3.8	6
67	<i>In situ</i> formation and solid-state oxidation of a triselenane NSeN-pincer MOF. Chemical Communications, 2020, 56, 1286-1289.	4.1	5
68	Investigating H₂ Adsorption in Isostructural Metalâ€"Organic Frameworks M-CUK-1 (M = Co) Tj ETQq0 0 0 rgBT /Overlock 14, 8126-8136.	8.0	5
69	A Survey of Metal-Organic Frameworks Based on Phosphorus- and Sulfur-Containing Building Blocks. Series on Chemistry, Energy and the Environment, 2018, , 37-141.	0.3	3
70	Thermal Stability Study of Classically Immiscible Rh-Ag Alloy Nanoparticles by in situ TEM. Microscopy and Microanalysis, 2016, 22, 820-821.	0.4	2
71	An unusual coordination polymer containing Cu+ions and featuring possible Cu...Cu `cuprophilic' interactions: poly[di-Î¼-chlorido-(Î¼4-3,5-diaminobenzoato-Îº4O:Oâ€²:N:Nâ€²)tricopper(I)(3Cuâ€"Cu)]. Acta Crystallographica Section C, Structural Chemistry, 2016, 72, 63-67.	0.5	2
72	Magnetic Properties of the Distorted KagomÃ© Lattice Mn3(1,2,4-(O2C)3C6H3)2. Inorganic Chemistry, 2017, 56, 7851-7860.	4.0	2

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73	Organometallic Chemistry at Various Length Scales: More Than Just Metalâ€“Carbon Bonds Bring Chemists Together. Organometallics, 2020, 39, 881-882.	2.3	0
74	Accumulation-Driven Surfactant-Free Synthesis of Architectured Immiscible Metallic Nanoalloys with Enhanced Catalysis. SSRN Electronic Journal, 0, , .	0.4	0
75	Hydrothermal synthesis and crystal structure of poly[bis(Î¼₃-3,4-diaminobenzoato)manganese], a layered coordination polymer. Acta Crystallographica Section E: Crystallographic Communications, 2020, 76, 909-913.	0.5	0