Andrew D Burrows

List of Publications by Year
in descending order

109 papers	3,800 citations	172457 29 h-index	138484 58 g-index
114 all docs	114 docs citations	114 times ranked	5197 citing authors

#	Article	IF	Citations
1	Gas sensing using porous materials for automotive applications. Chemical Society Reviews, 2015, 44, 4290-4321.	38.1	406
2	Mixed-component metalâ€“organic frameworks (MC-MOFs): enhancing functionality through solid solution formation and surface modifications. CrystEngComm, 2011, 13, 3623.	2.6	336
3	Postâ€Synthetic Modification of Tagged Metalâ€“Organic Frameworks. Angewandte Chemie - International Edition, 2008, 47, 8482-8486.	13.8	276
4	Solvent hydrolysis and templating effects in the synthesis of metalâ€“organic frameworks. CrystEngComm, 2005, 7, 548.	2.6	242
5	Synthesis and post-synthetic modification of MIL-101(Cr)-NH2via a tandem diazotisation process. Chemical Communications, 2012, 48, 12053.	4.1	166
6	Size-controlled synthesis of MIL-101(Cr) nanoparticles with enhanced selectivity for CO2 over N2. CrystEngComm, 2011, 13, 6916.	2.6	128
7	The influence of hydrogen bonding on the structure of zinc co-ordination polymersâ€Šâ€. Dalton Transactions RSC, 2000, , 3845-3854.	2.3	106
8	Sulfur-tagged metalâ€“organic frameworks and their post-synthetic oxidation. Chemical Communications, 2009, , 4218.	4.1	98
9	Manufacturing of metal-organic framework monoliths andÂtheirÂapplication in CO 2 adsorption. Microporous and Mesoporous Materials, 2015, 214, 149-155.	4.4	97
10	The stepwise formation of mixed-metal coordination networks using complexes of 3-cyanoacetylacetonate. Dalton Transactions, 2007, , 2499.	3.3	66
11	Syntheses, structures and properties of cadmium benzenedicarboxylate metalâ€“organic frameworks. Dalton Transactions, 2008, , 2465.	3.3	63
12	Dipyridyl Î²-diketonate complexes and their use as metalloligands in the formation of mixed-metal coordination networks. Dalton Transactions, 2012, 41, 4153.	3.3	59
13	Metalâ€“organic frameworks post-synthetically modified with ferrocenyl groups: framework effects on redox processes and surface conduction. Dalton Transactions, 2012, 41, 1475-1480.	3.3	57
14	Selective incorporation of functional dicarboxylates into zinc metalâ€“organic frameworks. Chemical Communications, 2011, 47, 3380.	4.1	56
15	Dipyridyl Î²-diketonate complexes: versatile polydentate metalloligands for metalâ€“organic frameworks and hydrogen-bonded networks. Chemical Communications, 2010, 46, 5067.	4.1	53
16	Mixed matrix membranes based on MIL-101 metalâ€“organic frameworks in polymer of intrinsic microporosity PIM-1. Separation and Purification Technology, 2019, 212, 545-554.	7.9	53
17	Mechanical characterisation of polymer of intrinsic microporosity PIM-1 for hydrogen storage applications. Journal of Materials Science, 2017, 52, 3862-3875.	3.7	51
18	Rhodium-Promoted Linear Tetramerization and Cyclization of 3,3-Dimethylbut-l-yne. Angewandte Chemie - International Edition, 1999, 38, 3043-3045.	13.8	50

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19	Subtle structural variation in copper metal-organic frameworks: syntheses, structures, magnetic properties and catalytic behaviour. Dalton Transactions, 2008, , 6788.	3.3	48
20	The effect of carboxylate and N,Nâ€²-ditopic ligand lengths on the structures of copper and zinc coordination polymers. CrystEngComm, 2012, 14, 3658.	2.6	46
21	Incorporation by coordination and release of the iron chelator drug deferiprone from zinc-based metalâ€“organic frameworks. Chemical Communications, 2013, 49, 11260.	4.1	43
22	Hydrogen storage in polymer-based processable microporous composites. Journal of Materials Chemistry A, 2017, 5, 18752-18761.	10.3	43
23	Facile synthesis of crack-free metalâ€“organic framework films on alumina by a dip-coating route in the presence of polyethylenimine. Journal of Materials Chemistry A, 2013, 1, 5497.	10.3	41
24	Ether functionalised aminophosphines: synthesis and co-ordination chemistry of palladium(II) and platinum(II) complexesâ€Šâ€. Dalton Transactions RSC, 2000, , 1669-1677.	2.3	38
25	Manipulation of Molecular and Supramolecular Structure in Nickel(II) Complexes through the Orientation of Dicarboxylate Hydrogen Bonding Faces. Crystal Growth and Design, 2004, 4, 813-822.	3.0	38
26	Incorporation of sulfonate dyes into hydrogen-bonded networks. CrystEngComm, 2004, 6, 429.	2.6	37
27	Zinc dicarboxylate polymers and dimers: thiourea substitution as a tool in supramolecular synthesis. Dalton Transactions, 2003, , 3840.	3.3	35
28	MononuclearÎ·2(4e)-Bonded Phosphaalkyne Complexes; Selective Formation of a 1,2-Diphosphacyclobutadiene Tantalum Complex. Angewandte Chemie - International Edition, 2001, 40, 3221-3224.	13.8	30
29	Selective Cleavage of Pâ^'N Bonds and the Conversion of RhodiumN-Pyrrolyl Phosphine Complexes into Diphosphoxane-Bridged Dimers. Inorganic Chemistry, 2002, 41, 1695-1697.	4.0	30
30	Supercritical hydrogen adsorption in nanostructured solids with hydrogen density variation in pores. Adsorption, 2013, 19, 643-652.	3.0	29
31	Biodegradable Active Packaging with Controlled Release: Principles, Progress, and Prospects. ACS Food Science & Technology, 2022, 2, 1166-1183.	2.7	29
32	The synthesis and late transition metal chemistry of 7-aza-N-indolyl phosphines and the activity of their palladium complexes in COâ€“ethene co-polymerisation. Dalton Transactions, 2003, , 4718-4730.	3.3	28
33	The synthesis and characterisation of coordination and hydrogen-bonded networks based on 4-(3,5-dimethyl-1H-pyrazol-4-yl)benzoic acid. Dalton Transactions, 2015, 44, 9269-9280.	3.3	26
34	Solid state interconversion of cages and coordination networks via conformational change of a semi-rigid ligand. Chemical Communications, 2010, 46, 5064.	4.1	25
35	A reagentless thermal post-synthetic rearrangement of an allyloxy-tagged metalâ€“organic framework. Chemical Communications, 2013, 49, 990-992.	4.1	25
36	Ion flow in a zeolitic imidazolate framework results in ionic diode phenomena. Chemical Communications, 2016, 52, 2792-2794.	4.1	25

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37	Conversion of primary amines into secondary amines on a metalâ€“organic framework using a tandem post-synthetic modification. CrystEngComm, 2012, 14, 4112.	2.6	24
38	Nanoporous polymer-based composites for enhanced hydrogen storage. Adsorption, 2019, 25, 889-901.	3.0	24
39	Complexes as metalloligands in network formation: synthesis and characterisation of a mixed-metal coordination network containing palladium and zinc. CrystEngComm, 2008, 10, 487.	2.6	23
40	Evaluating Iodine Uptake in a Crystalline Sponge Using Dynamic X-ray Crystallography. Inorganic Chemistry, 2018, 57, 4959-4965.	4.0	23
41	Comparison of MIL-101(Cr) metal-organic framework and 13X zeolite monoliths for CO2 capture. Microporous and Mesoporous Materials, 2020, 308, 110525.	4.4	22
42	Incorporation of Dyes into Hydrogen-Bond Networks:â€‰ The Structures and Properties of Guanidinium Sulfonate Derivatives Containing Ethyl Orange and 4-Aminoazobenzene-4â€˜-sulfonate. Crystal Growth and Design, 2006, 6, 546-554.	3.0	21
43	The synthesis, structures and reactions of zinc and cobalt metalâ€“organic frameworks incorporating an alkyne-based dicarboxylate linker. CrystEngComm, 2012, 14, 188-192.	2.6	20
44	A facile single crystal to single crystal transition with significant structural contraction on desolvation. Chemical Communications, 2014, 50, 14436-14439.	4.1	19
45	Compositional control of pore geometry in multivariate metalâ€“organic frameworks: an experimental and computational study. Dalton Transactions, 2016, 45, 4316-4326.	3.3	19
46	Sterically hindered electron-withdrawing ligands: the reactions of N-carbazolyl phosphines with rhodium and palladium centres. Dalton Transactions, 2004, , 3321.	3.3	18
47	Furnishing Amine-Functionalized Metalâ€“Organic Frameworks with the Î²-Amidoketone Group by Postsynthetic Modification. Inorganic Chemistry, 2016, 55, 10839-10842.	4.0	18
48	Mixed-Component Sulfoneâ€“Sulfoxide Tagged Zinc IRMOFs: <i>In Situ</i> Ligand Oxidation, Carbon Dioxide, and Water Sorption Studies. Crystal Growth and Design, 2017, 17, 2016-2023.	3.0	18
49	The effect of metal distribution on the luminescence properties of mixed-lanthanide metalâ€“organic frameworks. Dalton Transactions, 2018, 47, 2360-2367.	3.3	18
50	Amine-functionalised aminophosphines: synthesis, reversible co-ordination to platinum and use in heteronuclear dimer formation. Dalton Transactions RSC, 2000, , 3615-3619.	2.3	17
51	Diphosphines Possessing Electronically Different Donor Groups:Â Synthesis and Coordination Chemistry of the Unsymmetrical Di(N-pyrrolyl)phosphino-Functionalized dppm Analogue Ph2PCH2P(NC4H4)2. Inorganic Chemistry, 2003, 42, 7227-7238.	4.0	17
52	Synthesis, Structures, And Magnetic Behavior of New Anionic Copper(II) Sulfate Aggregates and Chains. Inorganic Chemistry, 2012, 51, 10983-10989.	4.0	17
53	Role of Ethynyl-Derived Weak Hydrogen-Bond Interactions in the Supramolecular Structures of 1D, 2D, and 3D Coordination Polymers Containing 5-Ethynyl-1,3-benzenedicarboxylate. Crystal Growth and Design, 2015, 15, 465-474.	3.0	17
54	An Iodineâ€Vaporâ€Induced Cyclization in a Crystalline Molecular Flask. Angewandte Chemie - International Edition, 2016, 55, 5943-5946.	13.8	17

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55	Post-synthetic modification of zirconium metalâ€“organic frameworks by catalyst-free aza-Michael additions. Dalton Transactions, 2018, 47, 14491-14496.	3.3	17
56	Interpenetration isomers in isoreticular amine-tagged zinc MOFs. CrystEngComm, 2019, 21, 7498-7506.	2.6	17
57	Assessment of the long-term stability of the polymer of intrinsic microporosity PIM-1 for hydrogen storage applications. International Journal of Hydrogen Energy, 2019, 44, 332-337.	7.1	17
58	Bismuth coordination networks containing deferiprone: synthesis, characterisation, stability and antibacterial activity. Dalton Transactions, 2015, 44, 13814-13817.	3.3	16
59	Chemical modification of the polymer of intrinsic microporosity PIM-1 for enhanced hydrogen storage. Adsorption, 2020, 26, 1083-1091.	3.0	16
60	Immobilisation of L-proline onto mixed-linker zirconium MOFs for heterogeneous catalysis of the aldol reaction. Chemical Engineering and Processing: Process Intensification, 2021, 161, 108315.	3.6	16
61	Synthesis and reactivity of rhodium(i) complexes containing keto-functionalised N-pyrrolyl phosphine ligands. Dalton Transactions, 2003, , 3717.	3.3	15
62	Substitution and derivatization reactions of a water soluble iron(ii) complex containing a self-assembled tetradentate phosphine ligand. Dalton Transactions, 2007, , 570-580.	3.3	14
63	Silver coordination networks and cages based on a semi-rigid bis(isoxazolyl) ligand. Dalton Transactions, 2011, 40, 5483.	3.3	14
64	The impact of N,Nâ€²-ditopic ligand length and geometry on the structures of zinc-based mixed-linker metalâ€“organic frameworks. CrystEngComm, 2017, 19, 5549-5557.	2.6	14
65	Postâ€synthetic Modification of MOFs. RSC Catalysis Series, 2013, , 31-75.	0.1	13
66	Structural manipulation through selective substitution of hydrogen bonding groups: the supramolecular structures of bis(thiosemicarbazidato)nickel complexes. CrystEngComm, 2002, 4, 539.	2.6	12
67	Structural manipulation through control of hydrogen bonding faces: the effects of cation substitution on the guanidinium sulfonate structure. CrystEngComm, 2006, 8, 931.	2.6	12
68	Competition between coordination and hydrogen bonding in networks constructed using dipyridyl-1H-pyrazole ligands. CrystEngComm, 2011, 13, 1676-1682.	2.6	11
69	Sodium Trihydrogen-1,4-Benzenediphosphonate: An Extended Coordination Network. Journal of Chemical Crystallography, 2011, 41, 1165-1168.	1.1	11
70	A molybdenum diphosphonate network structure exhibiting reversible dehydration and selective uptake of methanol. CrystEngComm, 2013, 15, 9301.	2.6	11
71	Postâ€Synthetic Mannich Chemistry on Metalâ€Organic Frameworks: Systemâ€Specific Reactivity and Functionalityâ€Triggered Dissolution. Chemistry - A European Journal, 2018, 24, 11094-11102.	3.3	11
72	The structural influence of ligand coordination and hydrogen bonding capabilities in the crystal engineering of metal thiosemicarbazide compounds with malonate. CrystEngComm, 2005, 7, 388.	2.6	10

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73	Postsynthetic modification of coordination networks. CrystEngComm, 2012, 14, 4095.	2.6	10
74	Secondary amine-functionalised metalâ€“organic frameworks: direct syntheses versus tandem post-synthetic modifications. CrystEngComm, 2016, 18, 5710-5717.	2.6	10
75	Zinc(II) and cadmium(II) coordination polymers containing phenylenediacetate and bis(imidazol-1-ylmethyl)benzene linkers: The effect of ligand isomers on the solid state structures. Journal of Solid State Chemistry, 2017, 252, 8-21.	2.9	10
76	Inclusion and release of ant alarm pheromones from metalâ€“organic frameworks. Dalton Transactions, 2020, 49, 10334-10338.	3.3	10
77	Polymer of Intrinsic Microporosity (PIMâ€7) Coating Affects Triphasic Palladium Electrocatalysis. ChemElectroChem, 2019, 6, 4307-4317.	3.4	9
78	Supramolecular aspects of biomolecule interactions in metalâ€“organic frameworks. Coordination Chemistry Reviews, 2021, 439, 213928.	18.8	9
79	Synthesis and characterisation of metalâ€“organic frameworks containing bis(Î²-diketonate) linkers. CrystEngComm, 2008, 10, 1474.	2.6	8
80	Synthesis, Characterization, and Electrochemistry of a Series of Iron(II) Complexes Containing Self-Assembled 1,5-Diaza-3,7-diphosphabicyclo[3.3.1]nonane Ligands. Inorganic Chemistry, 2009, 48, 9924-9935.	4.0	8
81	Solvent Sorption-Induced Actuation of Composites Based on a Polymer of Intrinsic Microporosity. ACS Applied Polymer Materials, 2021, 3, 920-928.	4.4	8
82	Redox Reactivity of Methylene Blue Bound in Pores of UMCM-1 Metal-Organic Frameworks. Molecular Crystals and Liquid Crystals, 2012, 554, 12-21.	0.9	7
83	A new small molecule gelator and 3D framework ligator of lead(<scp>ii</scp>). CrystEngComm, 2015, 17, 8139-8145.	2.6	7
84	Exploring Structureâ€“Property Relationships of Silver 4â€(Phenylethynyl)pyridine Complexes. European Journal of Inorganic Chemistry, 2017, 2017, 1855-1867.	2.0	6
85	Solid-state hostâ€“guest influences on a BODIPY dye hosted within a crystalline sponge. New Journal of Chemistry, 2020, 44, 14108-14115.	2.8	6
86	N-Pyrrolyl phosphine ligands: an analysis of their size, conformation and supramolecular interactions. CrystEngComm, 2001, 3, 217.	2.6	5
87	Disorder within dicarboxylates and supramolecular structural control in hydrogen-bonded networks. CrystEngComm, 2003, 5, 355.	2.6	5
88	Isomerism and interpenetration in hydrogen-bonded network structures. CrystEngComm, 2008, 10, 15-18.	2.6	5
89	The structures and properties of zinc(II) and cadmium(II) coordination polymers based on semi-rigid phenylenediacetate and 1,4-bis(2-methylimidazol-1-ylmethyl)benzene linkers. Journal of Solid State Chemistry, 2019, 269, 246-256.	2.9	5
90	Enhancement of gas storage and separation properties of microporous polymers by simple chemical modifications. Multifunctional Materials, 2021, 4, 025002.	3.7	5

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91	Synthesis, structures and properties of metalâ€“organic frameworks prepared using a semi-rigid tricarboxylate linker. CrystEngComm, 2022, 24, 863-876.	2.6	5
92	Post-synthetic modification of zinc metal-organic frameworks through palladium-catalysed carbonâ€“carbon bond formation. Journal of Organometallic Chemistry, 2015, 792, 134-138.	1.8	4
93	Design and optimisation of a multifunctional monolithic filter for fire escape masks. Chemical Engineering Journal, 2022, 430, 132775.	12.7	4
94	6 Nitrogen, phosphorus, arsenic, antimony andbismuth. Annual Reports on the Progress of Chemistry Section A, 2001, 97, 81-93.	0.8	3
95	6â€ƒâ€ƒNitrogen, phosphorus, arsenic, antimony and bismuth. Annual Reports on the Progress of Chemistry Section A, 2003, 99, 83-99.	0.8	3
96	Hydrogen-bonded linear thiourea hexads in tetra-n-butylammonium terephthalate inclusion compounds. CrystEngComm, 2003, 5, 226.	2.6	3
97	An Iodineâ€Vaporâ€Induced Cyclization in a Crystalline Molecular Flask. Angewandte Chemie, 2016, 128, 6047-6050.	2.0	3
98	Low burden, adsorbent and heat absorbing structures for respiratory protection in building fires. Chemical Engineering Journal, 2021, 421, 127834.	12.7	3
99	Coupling Postsynthetic High-Temperature Oxidative Thermolysis and Thermal Rearrangements in Isoreticular Zinc MOFs. Inorganic Chemistry, 2022, 61, 1136-1144.	4.0	3
100	6â€ƒâ€ƒNitrogen, phosphorus, arsenic, antimony and bismuth. Annual Reports on the Progress of Chemistry Section A, 2002, 98, 77-91.	0.8	2
101	7ÂÂNitrogen, phosphorus, arsenic, antimony and bismuth. Annual Reports on the Progress of Chemistry Section A, 2004, 100, 95-111.	0.8	2
102	Inclusion of viologen cations leads to switchable metalâ€“organic frameworks. Faraday Discussions, 2021, 225, 414-430.	3.2	2
103	Using geometric simulation software â€˜GASPâ€™ to model conformational flexibility in a family of zinc metalâ€“organic frameworks. New Journal of Chemistry, 2021, 45, 8728-8737.	2.8	2
104	Advanced characterisation techniques: multi-scale, <i>in situ</i>, and time-resolved: general discussion. Faraday Discussions, 2021, 225, 152-167.	3.2	2
105	Synthesis, structure and hydrogen sorption properties of a pyrazine-bridged copper(I) nitrate metal-organic framework. European Journal of Chemistry, 2019, 10, 195-200.	0.6	2
106	The Chemistry of Metalâ€“Organic Frameworks. Synthesis, Characterization, and Applications, 2 BÃnde. Herausgegeben von Stefan Kaskel.. Angewandte Chemie, 2017, 129, 1471-1471.	2.0	1
107	Innentitelbild: An Iodineâ€Vaporâ€Induced Cyclization in a Crystalline Molecular Flask (Angew. Chem.) Tj ETQq1 1 0.784314 rgBT /Ove	2.0	0
108	Development of Regenerative and Low Pressure Drop Adsorbent Structure For Biogas Upgrading. , 2019, , .		0

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109	Towards complex systems and devices: general discussion. Faraday Discussions, 2021, 225, 431-441.	3.2	0