Andrew D Burrows

List of Publications by Year
in descending order

109 papers	3,800 citations	172207 29 h-index	138251 58 g-index
114 all docs	114 docs citations	114 times ranked	5197 citing authors

#	Article	IF	Citations
1	Design and optimisation of a multifunctional monolithic filter for fire escape masks. Chemical Engineering Journal, 2022, 430, 132775.	6.6	4
2	Synthesis, structures and properties of metalâ€“organic frameworks prepared using a semi-rigid tricarboxylate linker. CrystEngComm, 2022, 24, 863-876.	1.3	5
3	Coupling Postsynthetic High-Temperature Oxidative Thermolysis and Thermal Rearrangements in Isoreticular Zinc MOFs. Inorganic Chemistry, 2022, 61, 1136-1144.	1.9	3
4	Biodegradable Active Packaging with Controlled Release: Principles, Progress, and Prospects. ACS Food Science & Technology, 2022, 2, 1166-1183.	1.3	29
5	Low burden, adsorbent and heat absorbing structures for respiratory protection in building fires. Chemical Engineering Journal, 2021, 421, 127834.	6.6	3
6	Inclusion of viologen cations leads to switchable metalâ€“organic frameworks. Faraday Discussions, 2021, 225, 414-430.	1.6	2
7	Solvent Sorption-Induced Actuation of Composites Based on a Polymer of Intrinsic Microporosity. ACS Applied Polymer Materials, 2021, 3, 920-928.	2.0	8
8	Towards complex systems and devices: general discussion. Faraday Discussions, 2021, 225, 431-441.	1.6	0
9	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.	1.4	2
10	Advanced characterisation techniques: multi-scale, <i>in situ</i>, and time-resolved: general discussion. Faraday Discussions, 2021, 225, 152-167.	1.6	2
11	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.	1.8	16
12	Enhancement of gas storage and separation properties of microporous polymers by simple chemical modifications. Multifunctional Materials, 2021, 4, 025002.	2.4	5
13	Supramolecular aspects of biomolecule interactions in metalâ€“organic frameworks. Coordination Chemistry Reviews, 2021, 439, 213928.	9.5	9
14	Inclusion and release of ant alarm pheromones from metalâ€“organic frameworks. Dalton Transactions, 2020, 49, 10334-10338.	1.6	10
15	Solid-state hostâ€“guest influences on a BODIPY dye hosted within a crystalline sponge. New Journal of Chemistry, 2020, 44, 14108-14115.	1.4	6
16	Comparison of MIL-101(Cr) metal-organic framework and 13X zeolite monoliths for CO2 capture. Microporous and Mesoporous Materials, 2020, 308, 110525.	2.2	22
17	Chemical modification of the polymer of intrinsic microporosity PIM-1 for enhanced hydrogen storage. Adsorption, 2020, 26, 1083-1091.	1.4	16
18	Nanoporous polymer-based composites for enhanced hydrogen storage. Adsorption, 2019, 25, 889-901.	1.4	24

#	Article	IF	Citations
19	Development of Regenerative and Low Pressure Drop Adsorbent Structure For Biogas Upgrading. , 2019, , .		0
20	Interpenetration isomers in isoreticular amine-tagged zinc MOFs. CrystEngComm, 2019, 21, 7498-7506.	1.3	17
21	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.	3.9	53
22	Polymer of Intrinsic Microporosity (PIMâ€7) Coating Affects Triphasic Palladium Electrocatalysis. ChemElectroChem, 2019, 6, 4307-4317.	1.7	9
23	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.	1.4	5
24	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.	3.8	17
25	Synthesis, structure and hydrogen sorption properties of a pyrazine-bridged copper(I) nitrate metal-organic framework. European Journal of Chemistry, 2019, 10, 195-200.	0.3	2
26	Evaluating Iodine Uptake in a Crystalline Sponge Using Dynamic X-ray Crystallography. Inorganic Chemistry, 2018, 57, 4959-4965.	1.9	23
27	The effect of metal distribution on the luminescence properties of mixed-lanthanide metalâ€“organic frameworks. Dalton Transactions, 2018, 47, 2360-2367.	1.6	18
28	Post-synthetic modification of zirconium metalâ€“organic frameworks by catalyst-free aza-Michael additions. Dalton Transactions, 2018, 47, 14491-14496.	1.6	17
29	Postâ€Synthetic Mannich Chemistry on Metalâ€Organic Frameworks: Systemâ€Specific Reactivity and Functionalityâ€Triggered Dissolution. Chemistry - A European Journal, 2018, 24, 11094-11102.	1.7	11
30	The Chemistry of Metalâ€“Organic Frameworks. Synthesis, Characterization, and Applications, 2 BÃnde. Herausgegeben von Stefan Kaskel.. Angewandte Chemie, 2017, 129, 1471-1471.	1.6	1
31	Mechanical characterisation of polymer of intrinsic microporosity PIM-1 for hydrogen storage applications. Journal of Materials Science, 2017, 52, 3862-3875.	1.7	51
32	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.	1.4	18
33	Exploring Structureâ€“Property Relationships of Silver 4â€(Phenylethynyl)pyridine Complexes. European Journal of Inorganic Chemistry, 2017, 2017, 1855-1867.	1.0	6
34	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.	1.4	10
35	Hydrogen storage in polymer-based processable microporous composites. Journal of Materials Chemistry A, 2017, 5, 18752-18761.	5.2	43
36	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.	1.3	14

#	Article	IF	Citations
37	An Iodineâ€Vaporâ€Induced Cyclization in a Crystalline Molecular Flask. Angewandte Chemie - International Edition, 2016, 55, 5943-5946.	7.2	17
38	Furnishing Amine-Functionalized Metalâ€“Organic Frameworks with the Î²-Amidoketone Group by Postsynthetic Modification. Inorganic Chemistry, 2016, 55, 10839-10842.	1.9	18
39	Secondary amine-functionalised metalâ€“organic frameworks: direct syntheses versus tandem post-synthetic modifications. CrystEngComm, 2016, 18, 5710-5717.	1.3	10
40	An Iodineâ€Vaporâ€Induced Cyclization in a Crystalline Molecular Flask. Angewandte Chemie, 2016, 128, 6047-6050.	1.6	3
41	Innentitelbild: An Iodineâ€Vaporâ€Induced Cyclization in a Crystalline Molecular Flask (Angew. Chem.) Tj ETQq1 1 0.784314 rgBT /Overl	1.6	0
42	Ion flow in a zeolitic imidazolate framework results in ionic diode phenomena. Chemical Communications, 2016, 52, 2792-2794.	2.2	25
43	Compositional control of pore geometry in multivariate metalâ€“organic frameworks: an experimental and computational study. Dalton Transactions, 2016, 45, 4316-4326.	1.6	19
44	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.	1.6	26
45	Gas sensing using porous materials for automotive applications. Chemical Society Reviews, 2015, 44, 4290-4321.	18.7	406
46	Manufacturing of metal-organic framework monoliths andÂtheirÂapplication in CO 2 adsorption. Microporous and Mesoporous Materials, 2015, 214, 149-155.	2.2	97
47	Bismuth coordination networks containing deferiprone: synthesis, characterisation, stability and antibacterial activity. Dalton Transactions, 2015, 44, 13814-13817.	1.6	16
48	Post-synthetic modification of zinc metal-organic frameworks through palladium-catalysed carbonâ€“carbon bond formation. Journal of Organometallic Chemistry, 2015, 792, 134-138.	0.8	4
49	A new small molecule gelator and 3D framework ligator of lead(<scp>ii</scp>). CrystEngComm, 2015, 17, 8139-8145.	1.3	7
50	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.	1.4	17
51	A facile single crystal to single crystal transition with significant structural contraction on desolvation. Chemical Communications, 2014, 50, 14436-14439.	2.2	19
52	Incorporation by coordination and release of the iron chelator drug deferiprone from zinc-based metalâ€“organic frameworks. Chemical Communications, 2013, 49, 11260.	2.2	43
53	A reagentless thermal post-synthetic rearrangement of an allyloxy-tagged metalâ€“organic framework. Chemical Communications, 2013, 49, 990-992.	2.2	25
54	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.	5.2	41

#	Article	IF	Citations
55	A molybdenum diphosphonate network structure exhibiting reversible dehydration and selective uptake of methanol. CrystEngComm, 2013, 15, 9301.	1.3	11
56	Postâ€synthetic Modification of MOFs. RSC Catalysis Series, 2013, , 31-75.	0.1	13
57	Supercritical hydrogen adsorption in nanostructured solids with hydrogen density variation in pores. Adsorption, 2013, 19, 643-652.	1.4	29
58	Redox Reactivity of Methylene Blue Bound in Pores of UMCM-1 Metal-Organic Frameworks. Molecular Crystals and Liquid Crystals, 2012, 554, 12-21.	0.4	7
59	Synthesis and post-synthetic modification of MIL-101(Cr)-NH2via a tandem diazotisation process. Chemical Communications, 2012, 48, 12053.	2.2	166
60	Synthesis, Structures, And Magnetic Behavior of New Anionic Copper(II) Sulfate Aggregates and Chains. Inorganic Chemistry, 2012, 51, 10983-10989.	1.9	17
61	Metalâ€“organic frameworks post-synthetically modified with ferrocenyl groups: framework effects on redox processes and surface conduction. Dalton Transactions, 2012, 41, 1475-1480.	1.6	57
62	The effect of carboxylate and N,Nâ€²-ditopic ligand lengths on the structures of copper and zinc coordination polymers. CrystEngComm, 2012, 14, 3658.	1.3	46
63	Dipyridyl Î²-diketonate complexes and their use as metalloligands in the formation of mixed-metal coordination networks. Dalton Transactions, 2012, 41, 4153.	1.6	59
64	Postsynthetic modification of coordination networks. CrystEngComm, 2012, 14, 4095.	1.3	10
65	Conversion of primary amines into secondary amines on a metalâ€“organic framework using a tandem post-synthetic modification. CrystEngComm, 2012, 14, 4112.	1.3	24
66	The synthesis, structures and reactions of zinc and cobalt metalâ€“organic frameworks incorporating an alkyne-based dicarboxylate linker. CrystEngComm, 2012, 14, 188-192.	1.3	20
67	Size-controlled synthesis of MIL-101(Cr) nanoparticles with enhanced selectivity for CO2 over N2. CrystEngComm, 2011, 13, 6916.	1.3	128
68	Silver coordination networks and cages based on a semi-rigid bis(isoxazolyl) ligand. Dalton Transactions, 2011, 40, 5483.	1.6	14
69	Competition between coordination and hydrogen bonding in networks constructed using dipyridyl-1H-pyrazole ligands. CrystEngComm, 2011, 13, 1676-1682.	1.3	11
70	Selective incorporation of functional dicarboxylates into zinc metalâ€“organic frameworks. Chemical Communications, 2011, 47, 3380.	2.2	56
71	Mixed-component metalâ€“organic frameworks (MC-MOFs): enhancing functionality through solid solution formation and surface modifications. CrystEngComm, 2011, 13, 3623.	1.3	336
72	Sodium Trihydrogen-1,4-Benzenediphosphonate: An Extended Coordination Network. Journal of Chemical Crystallography, 2011, 41, 1165-1168.	0.5	11

#	Article	IF	Citations
73	Dipyridyl Î²-diketonate complexes: versatile polydentate metalloligands for metalâ€“organic frameworks and hydrogen-bonded networks. Chemical Communications, 2010, 46, 5067.	2.2	53
74	Solid state interconversion of cages and coordination networks via conformational change of a semi-rigid ligand. Chemical Communications, 2010, 46, 5064.	2.2	25
75	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.	1.9	8
76	Sulfur-tagged metalâ€“organic frameworks and their post-synthetic oxidation. Chemical Communications, 2009, , 4218.	2.2	98
77	Postâ€Synthetic Modification of Tagged Metalâ€“Organic Frameworks. Angewandte Chemie - International Edition, 2008, 47, 8482-8486.	7.2	276
78	Synthesis and characterisation of metalâ€“organic frameworks containing bis(Î²-diketonate) linkers. CrystEngComm, 2008, 10, 1474.	1.3	8
79	Subtle structural variation in copper metal-organic frameworks: syntheses, structures, magnetic properties and catalytic behaviour. Dalton Transactions, 2008, , 6788.	1.6	48
80	Syntheses, structures and properties of cadmium benzenedicarboxylate metalâ€“organic frameworks. Dalton Transactions, 2008, , 2465.	1.6	63
81	Complexes as metalloligands in network formation: synthesis and characterisation of a mixed-metal coordination network containing palladium and zinc. CrystEngComm, 2008, 10, 487.	1.3	23
82	Isomerism and interpenetration in hydrogen-bonded network structures. CrystEngComm, 2008, 10, 15-18.	1.3	5
83	Substitution and derivatization reactions of a water soluble iron(ii) complex containing a self-assembled tetradentate phosphine ligand. Dalton Transactions, 2007, , 570-580.	1.6	14
84	The stepwise formation of mixed-metal coordination networks using complexes of 3-cyanoacetylacetonate. Dalton Transactions, 2007, , 2499.	1.6	66
85	Structural manipulation through control of hydrogen bonding faces: the effects of cation substitution on the guanidinium sulfonate structure. CrystEngComm, 2006, 8, 931.	1.3	12
86	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.	1.4	21
87	Solvent hydrolysis and templating effects in the synthesis of metalâ€“organic frameworks. CrystEngComm, 2005, 7, 548.	1.3	242
88	The structural influence of ligand coordination and hydrogen bonding capabilities in the crystal engineering of metal thiosemicarbazide compounds with malonate. CrystEngComm, 2005, 7, 388.	1.3	10
89	Sterically hindered electron-withdrawing ligands: the reactions of N-carbazolyl phosphines with rhodium and palladium centres. Dalton Transactions, 2004, , 3321.	1.6	18
90	Incorporation of sulfonate dyes into hydrogen-bonded networks. CrystEngComm, 2004, 6, 429.	1.3	37

#	Article	IF	Citations
91	7ÂÂNitrogen, phosphorus, arsenic, antimony and bismuth. Annual Reports on the Progress of Chemistry Section A, 2004, 100, 95-111.	0.8	2
92	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.	1.4	38
93	Zinc dicarboxylate polymers and dimers: thiourea substitution as a tool in supramolecular synthesis. Dalton Transactions, 2003, , 3840.	1.6	35
94	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.	1.9	17
95	Synthesis and reactivity of rhodium(i) complexes containing keto-functionalised N-pyrrolyl phosphine ligands. Dalton Transactions, 2003, , 3717.	1.6	15
96	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.	1.6	28
97	6â€ƒâ€ƒNitrogen, phosphorus, arsenic, antimony and bismuth. Annual Reports on the Progress of Chemistry Section A, 2003, 99, 83-99.	0.8	3
98	Hydrogen-bonded linear thiourea hexads in tetra-n-butylammonium terephthalate inclusion compounds. CrystEngComm, 2003, 5, 226.	1.3	3
99	Disorder within dicarboxylates and supramolecular structural control in hydrogen-bonded networks. CrystEngComm, 2003, 5, 355.	1.3	5
100	Selective Cleavage of PâN Bonds and the Conversion of RhodiumN-Pyrrolyl Phosphine Complexes into Diphosphoxane-Bridged Dimers. Inorganic Chemistry, 2002, 41, 1695-1697.	1.9	30
101	6â€ƒâ€ƒNitrogen, phosphorus, arsenic, antimony and bismuth. Annual Reports on the Progress of Chemistry Section A, 2002, 98, 77-91.	0.8	2
102	Structural manipulation through selective substitution of hydrogen bonding groups: the supramolecular structures of bis(thiosemicarbazidato)nickel complexes. CrystEngComm, 2002, 4, 539.	1.3	12
103	N-Pyrrolyl phosphine ligands: an analysis of their size, conformation and supramolecular interactions. CrystEngComm, 2001, 3, 217.	1.3	5
104	6 Nitrogen, phosphorus, arsenic, antimony andbismuth. Annual Reports on the Progress of Chemistry Section A, 2001, 97, 81-93.	0.8	3
105	MononuclearÎ·2(4e)-Bonded Phosphaalkyne Complexes; Selective Formation of a 1,2-Diphosphacyclobutadiene Tantalum Complex. Angewandte Chemie - International Edition, 2001, 40, 3221-3224.	7.2	30
106	Amine-functionalised aminophosphines: synthesis, reversible co-ordination to platinum and use in heteronuclear dimer formation. Dalton Transactions RSC, 2000, , 3615-3619.	2.3	17
107	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
108	The influence of hydrogen bonding on the structure of zinc co-ordination polymersâ€Šâ€. Dalton Transactions RSC, 2000, , 3845-3854.	2.3	106

#	Article	IF	Citations
109	Rhodium-Promoted Linear Tetramerization and Cyclization of 3,3-Dimethylbut-l-yne. Angewandte Chemie - International Edition, 1999, 38, 3043-3045.	7.2	50