Andrew D Burrows

List of Publications by Year in Descending Order

107 papers	3,209 citations	27 h-index	53 g-index
114 ext. papers	3,491 ext. citations	5.4 avg, IF	5.5 L-index

#	Paper	IF	Citations
107	Coupling Postsynthetic High-Temperature Oxidative Thermolysis and Thermal Rearrangements in Isoreticular Zinc MOFs.. *Inorganic Chemistry*, **2022**, 61, 1136-1144	5.1	1
106	Design and optimisation of a multifunctional monolithic filter for fire escape masks. *Chemical Engineering Journal*, **2022**, 430, 132775	14.7	0
105	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	3.7	5
104	Enhancement of gas storage and separation properties of microporous polymers by simple chemical modifications. *Multifunctional Materials*, **2021**, 4, 025002	5.2	2
103	Supramolecular aspects of biomolecule interactions in metal–organic frameworks. *Coordination Chemistry Reviews*, **2021**, 439, 213928	23.2	5
102	Low burden, adsorbent and heat absorbing structures for respiratory protection in building fires. *Chemical Engineering Journal*, **2021**, 421, 127834	14.7	1
101	Inclusion of viologen cations leads to switchable metal-organic frameworks. *Faraday Discussions*, **2021**, 225, 414-430	3.6	0
100	Solvent Sorption-Induced Actuation of Composites Based on a Polymer of Intrinsic Microporosity. *ACS Applied Polymer Materials*, **2021**, 3, 920-928	4.3	2
99	Using geometric simulation software GASP to model conformational flexibility in a family of zinc metal–organic frameworks. *New Journal of Chemistry*, **2021**, 45, 8728-8737	3.6	0
98	Chemical modification of the polymer of intrinsic microporosity PIM-1 for enhanced hydrogen storage. *Adsorption*, **2020**, 26, 1083-1091	2.6	5
97	Inclusion and release of ant alarm pheromones from metal-organic frameworks. *Dalton Transactions*, **2020**, 49, 10334-10338	4.3	5
96	Solid-state host–guest influences on a BODIPY dye hosted within a crystalline sponge. *New Journal of Chemistry*, **2020**, 44, 14108-14115	3.6	2
95	Comparison of MIL-101(Cr) metal-organic framework and 13X zeolite monoliths for CO2 capture. *Microporous and Mesoporous Materials*, **2020**, 308, 110525	5.3	10
94	Nanoporous polymer-based composites for enhanced hydrogen storage. *Adsorption*, **2019**, 25, 889-901	2.6	12
93	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	1
92	Interpenetration isomers in isoreticular amine-tagged zinc MOFs. *CrystEngComm*, **2019**, 21, 7498-7506	3.3	8
91	Mixed matrix membranes based on MIL-101 metal–organic frameworks in polymer of intrinsic microporosity PIM-1. *Separation and Purification Technology*, **2019**, 212, 545-554	8.3	31

90	Polymer of Intrinsic Microporosity (PIM-7) Coating Affects Triphasic Palladium Electrocatalysis. *ChemElectroChem*, **2019**, 6, 4307-4317	4.3	2
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	3.3	4
88	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	6.7	9
87	Evaluating Iodine Uptake in a Crystalline Sponge Using Dynamic X-ray Crystallography. *Inorganic Chemistry*, **2018**, 57, 4959-4965	5.1	17
86	The effect of metal distribution on the luminescence properties of mixed-lanthanide metal-organic frameworks. *Dalton Transactions*, **2018**, 47, 2360-2367	4.3	12
85	Tuning the Properties of Metal□Organic Frameworks by Post-synthetic Modification **2018**, 29-56		3
84	Post-Synthetic Mannich Chemistry on Metal-Organic Frameworks: System-Specific Reactivity and Functionality-Triggered Dissolution. *Chemistry - A European Journal*, **2018**, 24, 11094-11102	4.8	10
83	Post-synthetic modification of zirconium metal-organic frameworks by catalyst-free aza-Michael additions. *Dalton Transactions*, **2018**, 47, 14491-14496	4.3	12
82	The Chemistry of Metal□Organic Frameworks. Synthesis, Characterization, and Applications, 2 B□de. Herausgegeben von Stefan Kaskel.. *Angewandte Chemie*, **2017**, 129, 1471-1471	3.6	1
81	Mechanical characterisation of polymer of intrinsic microporosity PIM-1 for hydrogen storage applications. *Journal of Materials Science*, **2017**, 52, 3862-3875	4.3	39
80	Mixed-Component Sulfone□Sulfoxide Tagged Zinc IRMOFs: In Situ Ligand Oxidation, Carbon Dioxide, and Water Sorption Studies. *Crystal Growth and Design*, **2017**, 17, 2016-2023	3.5	15
79	Exploring Structure□Property Relationships of Silver 4-(Phenylethynyl)pyridine Complexes. *European Journal of Inorganic Chemistry*, **2017**, 2017, 1855-1867	2.3	4
78	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	3.3	7
77	Hydrogen storage in polymer-based processable microporous composites. *Journal of Materials Chemistry A*, **2017**, 5, 18752-18761	13	30
76	The impact of N,N?-ditopic ligand length and geometry on the structures of zinc-based mixed-linker metal□rganic frameworks. *CrystEngComm*, **2017**, 19, 5549-5557	3.3	12
75	Furnishing Amine-Functionalized Metal-Organic Frameworks with the □Amidoketone Group by Postsynthetic Modification. *Inorganic Chemistry*, **2016**, 55, 10839-10842	5.1	17
74	Secondary amine-functionalised metal□rganic frameworks: direct syntheses versus tandem post-synthetic modifications. *CrystEngComm*, **2016**, 18, 5710-5717	3.3	7
73	An Iodine-Vapor-Induced Cyclization in a Crystalline Molecular Flask. *Angewandte Chemie*, **2016**, 128, 6047-6050	3.6	3

72	Innentitelbild: An Iodine-Vapor-Induced Cyclization in a Crystalline Molecular Flask (Angew. Chem. 20/2016). *Angewandte Chemie*, **2016**, 128, 5970-5970	3.6	
71	Ion flow in a zeolitic imidazolate framework results in ionic diode phenomena. *Chemical Communications*, **2016**, 52, 2792-4	5.8	21
70	Compositional control of pore geometry in multivariate metal-organic frameworks: an experimental and computational study. *Dalton Transactions*, **2016**, 45, 4316-26	4.3	14
69	An Iodine-Vapor-Induced Cyclization in a Crystalline Molecular Flask. *Angewandte Chemie - International Edition*, **2016**, 55, 5943-6	16.4	13
68	Bismuth coordination networks containing deferiprone: synthesis, characterisation, stability and antibacterial activity. *Dalton Transactions*, **2015**, 44, 13814-7	4.3	13
67	Post-synthetic modification of zinc metal-organic frameworks through palladium-catalysed carbon–carbon bond formation. *Journal of Organometallic Chemistry*, **2015**, 792, 134-138	2.3	3
66	A new small molecule gelator and 3D framework ligator of lead(II). *CrystEngComm*, **2015**, 17, 8139-8145	3.3	6
65	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	3.5	14
64	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, 9269-80	4.3	20
63	Gas sensing using porous materials for automotive applications. *Chemical Society Reviews*, **2015**, 44, 4290-321	38.3	325
62	Manufacturing of metal-organic framework monoliths and their application in CO 2 adsorption. *Microporous and Mesoporous Materials*, **2015**, 214, 149-155	5.3	74
61	A facile single crystal to single crystal transition with significant structural contraction on desolvation. *Chemical Communications*, **2014**, 50, 14436-9	5.8	19
60	Incorporation by coordination and release of the iron chelator drug deferiprone from zinc-based metal-organic frameworks. *Chemical Communications*, **2013**, 49, 11260-2	5.8	40
59	A reagentless thermal post-synthetic rearrangement of an allyloxy-tagged metal-organic framework. *Chemical Communications*, **2013**, 49, 990-2	5.8	23
58	Facile synthesis of crack-free metal–organic framework films on alumina by a dip-coating route in the presence of polyethylenimine. *Journal of Materials Chemistry A*, **2013**, 1, 5497	13	31
57	A molybdenum diphosphonate network structure exhibiting reversible dehydration and selective uptake of methanol. *CrystEngComm*, **2013**, 15, 9301	3.3	10
56	Supercritical hydrogen adsorption in nanostructured solids with hydrogen density variation in pores. *Adsorption*, **2013**, 19, 643-652	2.6	23
55	Synthesis and post-synthetic modification of MIL-101(Cr)-NH2 via a tandem diazotisation process. *Chemical Communications*, **2012**, 48, 12053-5	5.8	132

54	Synthesis, structures, and magnetic behavior of new anionic copper(II) sulfate aggregates and chains. *Inorganic Chemistry*, **2012**, 51, 10983-9	5.1	14
53	Metal-organic frameworks post-synthetically modified with ferrocenyl groups: framework effects on redox processes and surface conduction. *Dalton Transactions*, **2012**, 41, 1475-80	4.3	56
52	The effect of carboxylate and N,N?-ditopic ligand lengths on the structures of copper and zinc coordination polymers. *CrystEngComm*, **2012**, 14, 3658	3.3	36
51	Dipyridyl β-diketonate complexes and their use as metalloligands in the formation of mixed-metal coordination networks. *Dalton Transactions*, **2012**, 41, 4153-63	4.3	53
50	Conversion of primary amines into secondary amines on a metal–organic framework using a tandem post-synthetic modification. *CrystEngComm*, **2012**, 14, 4112	3.3	24
49	The synthesis, structures and reactions of zinc and cobalt metal–organic frameworks incorporating an alkyne-based dicarboxylate linker. *CrystEngComm*, **2012**, 14, 188-192	3.3	18
48	Redox Reactivity of Methylene Blue Bound in Pores of UMCM-1 Metal-Organic Frameworks. *Molecular Crystals and Liquid Crystals*, **2012**, 554, 12-21	0.5	7
47	Selective incorporation of functional dicarboxylates into zinc metal-organic frameworks. *Chemical Communications*, **2011**, 47, 3380-2	5.8	51
46	Mixed-component metal–organic frameworks (MC-MOFs): enhancing functionality through solid solution formation and surface modifications. *CrystEngComm*, **2011**, 13, 3623	3.3	308
45	Sodium Trihydrogen-1,4-Benzenediphosphonate: An Extended Coordination Network. *Journal of Chemical Crystallography*, **2011**, 41, 1165-1168	0.5	11
44	Size-controlled synthesis of MIL-101(Cr) nanoparticles with enhanced selectivity for CO2 over N2. *CrystEngComm*, **2011**, 13, 6916	3.3	110
43	Silver coordination networks and cages based on a semi-rigid bis(isoxazolyl) ligand. *Dalton Transactions*, **2011**, 40, 5483-93	4.3	14
42	Competition between coordination and hydrogen bonding in networks constructed using dipyridyl-1H-pyrazole ligands. *CrystEngComm*, **2011**, 13, 1676-1682	3.3	11
41	Dipyridyl beta-diketonate complexes: versatile polydentate metalloligands for metal-organic frameworks and hydrogen-bonded networks. *Chemical Communications*, **2010**, 46, 5067-9	5.8	47
40	Solid state interconversion of cages and coordination networks via conformational change of a semi-rigid ligand. *Chemical Communications*, **2010**, 46, 5064-6	5.8	22
39	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, 9924-35	5.1	8
38	Sulfur-tagged metal-organic frameworks and their post-synthetic oxidation. *Chemical Communications*, **2009**, 4218-20	5.8	92
37	Subtle structural variation in copper metal-organic frameworks: syntheses, structures, magnetic properties and catalytic behaviour. *Dalton Transactions*, **2008**, 6788-95	4.3	44

36	Syntheses, structures and properties of cadmium benzenedicarboxylate metal-organic frameworks. *Dalton Transactions*, **2008**, 2465-74	4.3	58
35	Complexes as metalloligands in network formation: synthesis and characterisation of a mixed-metal coordination network containing palladium and zinc. *CrystEngComm*, **2008**, 10, 487	3.3	23
34	Isomerism and interpenetration in hydrogen-bonded network structures. *CrystEngComm*, **2008**, 10, 15-18	3.3	4
33	Post-synthetic modification of tagged metal-organic frameworks. *Angewandte Chemie - International Edition*, **2008**, 47, 8482-6	16.4	255
32	Synthesis and characterisation of metal–organic frameworks containing bis(β-diketonate) linkers. *CrystEngComm*, **2008**, 10, 1474	3.3	8
31	The stepwise formation of mixed-metal coordination networks using complexes of 3-cyanoacetylacetonate. *Dalton Transactions*, **2007**, 2499-509	4.3	59
30	Substitution and derivatization reactions of a water soluble iron(II) complex containing a self-assembled tetradentate phosphine ligand. *Dalton Transactions*, **2007**, 570-80	4.3	14
29	Structural manipulation through control of hydrogen bonding faces: the effects of cation substitution on the guanidinium sulfonate structure. *CrystEngComm*, **2006**, 8, 931	3.3	11
28	Incorporation of Dyes into Hydrogen-Bond Networks: The Structures and Properties of Guanidinium Sulfonate Derivatives Containing Ethyl Orange and 4-Aminoazobenzene-4′-sulfonate. *Crystal Growth and Design*, **2006**, 6, 546-554	3.5	21
27	Solvent hydrolysis and templating effects in the synthesis of metal–organic frameworks. *CrystEngComm*, **2005**, 7, 548	3.3	235
26	The structural influence of ligand coordination and hydrogen bonding capabilities in the crystal engineering of metal thiosemicarbazide compounds with malonate. *CrystEngComm*, **2005**, 7, 388	3.3	10
25	Sterically hindered electron-withdrawing ligands: the reactions of N-carbazolyl phosphines with rhodium and palladium centres. *Dalton Transactions*, **2004**, 3321-30	4.3	18
24	Incorporation of sulfonate dyes into hydrogen-bonded networks. *CrystEngComm*, **2004**, 6, 429	3.3	33
23	7 Nitrogen, phosphorus, arsenic, antimony and bismuth. *Annual Reports on the Progress of Chemistry Section A*, **2004**, 100, 95-111		1
22	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	3.5	38
21	Zinc dicarboxylate polymers and dimers: thiourea substitution as a tool in supramolecular synthesis. *Dalton Transactions*, **2003**, 3840	4.3	33
20	Diphosphines possessing electronically different donor groups: synthesis and coordination chemistry of the unsymmetrical Di(N-pyrrolyl)phosphino-functionalized dppm analogue Ph2PCH2P(NC4H4)2. *Inorganic Chemistry*, **2003**, 42, 7227-38	5.1	15
19	Synthesis and reactivity of rhodium(I) complexes containing keto-functionalised N-pyrrolyl phosphine ligands. *Dalton Transactions*, **2003**, 3717	4.3	14

18	The synthesis and late transition metal chemistry of 7-aza-N-indolyl phosphines and the activity of their palladium complexes in CO□ethene co-polymerisation. *Dalton Transactions*, **2003**, 4718-4730	4.3	27
17	6 Nitrogen, phosphorus, arsenic, antimony and bismuth. *Annual Reports on the Progress of Chemistry Section A*, **2003**, 99, 83-99		2
16	Hydrogen-bonded linear thiourea hexads in tetra-n-butylammonium terephthalate inclusion compounds. *CrystEngComm*, **2003**, 5, 226	3.3	3
15	Disorder within dicarboxylates and supramolecular structural control in hydrogen-bonded networks. *CrystEngComm*, **2003**, 5, 355	3.3	3
14	Selective cleavage of P-N bonds and the conversion of rhodium N-pyrrolyl phosphine complexes into diphosphoxane-bridged dimers. *Inorganic Chemistry*, **2002**, 41, 1695-7	5.1	23
13	6 Nitrogen, phosphorus, arsenic, antimony and bismuth. *Annual Reports on the Progress of Chemistry Section A*, **2002**, 98, 77-91		1
12	Structural manipulation through selective substitution of hydrogen bonding groups: the supramolecular structures of bis(thiosemicarbazidato)nickel complexes. *CrystEngComm*, **2002**, 4, 539	3.3	12
11	Mononuclear □(4e)-Bonded Phosphaalkyne Complexes; Selective Formation of a 1,2-Diphosphacyclobutadiene Tantalum Complex. *Angewandte Chemie*, **2001**, 113, 3321-3324	3.6	15
10	Mononuclear □(4e)-Bonded Phosphaalkyne Complexes; Selective Formation of a 1,2-Diphosphacyclobutadiene Tantalum Complex. *Angewandte Chemie - International Edition*, **2001**, 40, 3221-3224	16.4	26
9	N-Pyrrolyl phosphine ligands: an analysis of their size, conformation and supramolecular interactions. *CrystEngComm*, **2001**, 3, 217	3.3	3
8	6 Nitrogen, phosphorus, arsenic, antimony andbismuth. *Annual Reports on the Progress of Chemistry Section A*, **2001**, 97, 81-93		1
7	Amine-functionalised aminophosphines: synthesis, reversible co-ordination to platinum and use in heteronuclear dimer formation. *Dalton Transactions RSC*, **2000**, 3615-3619		17
6	Ether functionalised aminophosphines: synthesis and co-ordination chemistry of palladium(II) and platinum(II) complexes. *Dalton Transactions RSC*, **2000**, 1669-1677		38
5	The influence of hydrogen bonding on the structure of zinc co-ordination polymers. *Dalton Transactions RSC*, **2000**, 3845-3854		99
4	Rhodium-vermittelte lineare Tetramerisierung und Cyclisierung von 3,3-Dimethylbut-1-in. *Angewandte Chemie*, **1999**, 111, 3228-3230	3.6	10
3	Rhodium-Promoted Linear Tetramerization and Cyclization of 3,3-Dimethylbut-l-yne. *Angewandte Chemie - International Edition*, **1999**, 38, 3043-3045	16.4	48
2	CHAPTER 3:Post-synthetic Modification of MOFs. *RSC Catalysis Series*,31-75	0.3	9
1	Biodegradable Active Packaging with Controlled Release: Principles, Progress, and Prospects. *ACS Food Science & Technology*,		3