George K H Shimizu

List of Publications by Year
in descending order

91 papers	12,644 citations	38660 50 h-index	42291 92 g-index
94 all docs	94 docs citations	94 times ranked	9783 citing authors

#	Article	IF	Citations
1	Post-Combustion CO₂ Capture Using Solid Sorbents: A Review. Industrial & Engineering Chemistry Research, 2012, 51, 1438-1463.	1.8	1,524
2	MOFs as proton conductors â€" challenges and opportunities. Chemical Society Reviews, 2014, 43, 5913-5932.	18.7	1,183
3	Direct Observation and Quantification of CO ₂ Binding Within an Amine-Functionalized Nanoporous Solid. Science, 2010, 330, 650-653.	6.0	860
4	Anhydrous proton conduction at 150ÂÂ°C in a crystalline metalâ€"organic framework. Nature Chemistry, 2009, 1, 705-710.	6.6	724
5	Phosphonate and sulfonate metal organic frameworks. Chemical Society Reviews, 2009, 38, 1430.	18.7	609
6	A Water-Stable Metalâ€"Organic Framework with Highly Acidic Pores for Proton-Conducting Applications. Journal of the American Chemical Society, 2013, 135, 1193-1196.	6.6	409
7	An amine-functionalized metal organic framework for preferential CO2 adsorption at low pressures. Chemical Communications, 2009, , 5230.	2.2	390
8	Facile Proton Conduction via Ordered Water Molecules in a Phosphonate Metalâˆ'Organic Framework. Journal of the American Chemical Society, 2010, 132, 14055-14057.	6.6	384
9	Proton Conduction with Metal-Organic Frameworks. Science, 2013, 341, 354-355.	6.0	366
10	Microporous Metalâˆ'Organic Frameworks Formed in a Stepwise Manner from Luminescent Building Blocks. Journal of the American Chemical Society, 2006, 128, 10403-10412.	6.6	363
11	A scalable metal-organic framework as a durable physisorbent for carbon dioxide capture. Science, 2021, 374, 1464-1469.	6.0	308
12	Proton conductive metal phosphonate frameworks. Coordination Chemistry Reviews, 2019, 378, 577-594.	9.5	300
13	The supramolecular chemistry of the sulfonate group in extended solids. Coordination Chemistry Reviews, 2003, 245, 49-64.	9.5	293
14	Enhancing Proton Conduction in a Metalâ€"Organic Framework by Isomorphous Ligand Replacement. Journal of the American Chemical Society, 2013, 135, 963-966.	6.6	289
15	A Water Stable Magnesium MOF That Conducts Protons over 10^{â€"2} S cm^{â€"1}. Journal of the American Chemical Society, 2015, 137, 7640-7643.	6.6	287
16	Achieving Superprotonic Conduction in Metalâ€"Organic Frameworks through Iterative Design Advances. Journal of the American Chemical Society, 2018, 140, 1077-1082.	6.6	259
17	Enhancing Water Stability of Metalâ€"Organic Frameworks via Phosphonate Monoester Linkers. Journal of the American Chemical Society, 2012, 134, 14338-14340.	6.6	210
18	Crystal Engineering of a Permanently Porous Network Sustained Exclusively by Charge-Assisted Hydrogen Bonds. Journal of the American Chemical Society, 2007, 129, 12114-12116.	6.6	174

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19	Mechanical gas capture and release in a network solid via multiple single-crystalline transformations. Nature Materials, 2008, 7, 229-235.	13.3	173
20	Single Crystal Proton Conduction Study of a Metal Organic Framework of Modest Water Stability. Journal of the American Chemical Society, 2017, 139, 7176-7179.	6.6	133
21	Highly Selective Guest Uptake in a Silver Sulfonate Network Imparted by a Tetragonal to Triclinic Shift in the Solid State. Chemistry - A European Journal, 2001, 7, 5176-5182.	1.7	132
22	Competition and Cooperativity in Carbon Dioxide Sorption by Amineâ€Functionalized Metalâ€"Organic Frameworks. Angewandte Chemie - International Edition, 2012, 51, 1826-1829.	7.2	131
23	A Tetrahedral Organophosphonate as a Linker for a Microporous Copper Framework. Angewandte Chemie - International Edition, 2007, 46, 795-798.	7.2	114
24	Coordination Solids via Assembly of Adaptable Components: Systematic Structural Variation in Alkaline Earth Organosulfonate Networks. Chemistry - A European Journal, 2003, 9, 5361-5370.	1.7	109
25	Series of Lanthanide-Alkali Metal-Organic Frameworks Exhibiting Luminescence and Permanent Microporosity. Chemistry of Materials, 2007, 19, 4467-4473.	3.2	109
26	Silver(I) Arylsulfonates:Â A Systematic Study of â€œSofterâ€•Hybrid Inorganicâ˜'Organic Solids. Inorganic Chemistry, 2004, 43, 6663-6673.	1.9	106
27	A layered silver sulfonate incorporating nine-coordinate AgI in a hexagonal grid. Chemical Communications, 1999, , 1485-1486.	2.2	104
28	A Family of Supramolecular Inclusion Solids Based Upon Second-Sphere Interactions. Angewandte Chemie - International Edition, 2003, 42, 1360-1364.	7.2	101
29	Tuning Intrinsic and Extrinsic Proton Conduction in Metalâ€"Organic Frameworks by the Lanthanide Contraction. Journal of the American Chemical Society, 2017, 139, 14676-14683.	6.6	101
30	Intra- and Intermolecular Second-Sphere Coordination Chemistry:Â Formation of Capsules, Half-Capsules, and Extended Structures with Hexaaquo- and Hexaamminemetal Ions. Inorganic Chemistry, 2002, 41, 6986-6996.	1.9	92
31	Anion Exchange in the Channels of a Robust Alkaline Earth Sulfonate Coordination Network. Chemistry - A European Journal, 2002, 8, 3010.	1.7	89
32	Mechanical Properties of a Metalâ€"Organic Framework formed by Covalent Cross-Linking of Metalâ€"Organic Polyhedra. Journal of the American Chemical Society, 2019, 141, 1045-1053.	6.6	89
33	Parameterizing and grading hydrolytic stability in metalâ€"organic frameworks. Dalton Transactions, 2016, 45, 3668-3678.	1.6	86
34	Phosphonate Monoesters as Carboxylate-like Linkers for Metal Organic Frameworks. Journal of the American Chemical Society, 2011, 133, 20048-20051.	6.6	85
35	Intercalation of Alcohols in Ag Sulfonates:Â Topotactic Behavior Despite Flexible Layers. Inorganic Chemistry, 2002, 41, 287-292.	1.9	83
36	Crystalline Zinc Diphosphonate Metalâ˜'Organic Framework with Three-Dimensional Microporosity. Inorganic Chemistry, 2007, 46, 10449-10451.	1.9	78

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37	Silver Sulfonates:Â An Unexplored Class of Layered Solids. Chemistry of Materials, 1998, 10, 3282-3283.	3.2	75
38	The first example of a functional pillared metal sulfonate network. Chemical Communications, 2001, , 251-252.	2.2	70
39	Structural Constraints in the Design of Silver Sulfonate Coordination Networks:â€‰ Three New Polysulfonate Open Frameworks. Inorganic Chemistry, 2005, 44, 8868-8875.	1.9	65
40	Supramolecular encapsulation of hexaaquo metal ions by second sphere coordination. Chemical Communications, 2001, , 2672-2673.	2.2	63
41	A sponge-like luminescent coordination framework via an Aufbau approach. Chemical Communications, 2002, , 1900-1901.	2.2	62
42	Ligand-Engineered Metalâ€"Organic Frameworks for Electrochemical Reduction of Carbon Dioxide to Carbon Monoxide. ACS Catalysis, 2021, 11, 7350-7357.	5.5	62
43	A permanently porous van der Waals solid by using phosphonate monoester linkers in a metal organic framework. Chemical Communications, 2011, 47, 4430.	2.2	61
44	A pseudo-honeycomb coordination net formed with 5-sulfoisophthalic acid. CrystEngComm, 2002, 4, 102.	1.3	60
45	The Effects of Anion Variation and Ligand Derivatization on Silver Coordination Networks Based upon Weaker Interactions. Inorganic Chemistry, 2001, 40, 4641-4648.	1.9	59
46	Self-Assembly of Lamellar and Expanded Lamellar Coordination Networks. Angewandte Chemie - International Edition, 1998, 37, 1407-1409.	7.2	58
47	Assembly of metal ions and ligands with adaptable coordinative tendencies as a route to functional metal-organic solids. Journal of Solid State Chemistry, 2005, 178, 2519-2526.	1.4	56
48	The First Nonlayered Metal Sulfonate Structure:â€‰ a 1-D Ba2+ Network Incorporating Hydrophobic Channels. Inorganic Chemistry, 2001, 40, 582-583.	1.9	55
49	An open channel coordination framework sustained by cooperative primary and secondary sphere interactions. Chemical Communications, 2002, , 2224-2225.	2.2	55
50	Superprotonic Phase Change to a Robust Phosphonate Metalâ€"Organic Framework. Chemistry of Materials, 2018, 30, 314-318.	3.2	55
51	Selective guest inclusion in a non-porous H-bonded host. Chemical Communications, 2006, , 956.	2.2	50
52	Mediating Order and Modulating Porosity by Controlled Hydrolysis in a Phosphonate Monoester Metal-Organic Framework. Angewandte Chemie - International Edition, 2016, 55, 14614-14617.	7.2	48
53	Exploiting Complementary Second-sphere Effects in Supramolecular Coordination Solids. Supramolecular Chemistry, 2003, 15, 591-606.	1.5	45
54	Copper(I) and silver(I) complexes of the crown thioether ligand 2,5,8-trithia[9]-o-benzenophane (TT[9]OB). Structures of [Cu(PPh2Me)(TT[9]OB)][ClO4] and [Ag(PPh3)(TT[9]OB)][ClO4]. Inorganic Chemistry, 1991, 30, 177-182.	1.9	41

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55	Design of a Humidity-Stable Metalâ€“Organic Framework Using a Phosphonate Monoester Ligand. Inorganic Chemistry, 2015, 54, 1185-1187.	1.9	40
56	Mono- versus Dipalladation of the Durene-Based Tetrathioether Ligand 1,2,4,5-(tBuSCH2)4C6H2. Structures of [PdCl((tBuSCH2)4C6H)] and [Pd2((tBuSCH2)4C6)(MeCN)2][BF4]2. Organometallics, 1998, 17, 2324-2327.	1.1	39
57	Highly Selective Intercalation of Primary Amines in a Continuous Layer Ag Coordination Network. Chemistry of Materials, 2005, 17, 217-220.	3.2	38
58	Effects of Secondary Anions on Proton Conduction in a Flexible Cationic Phosphonate Metalâ€“Organic Framework. Chemistry of Materials, 2020, 32, 679-687.	3.2	36
59	An adamantane-based tetraphosphonic acid that forms an open diamondoid net via a hydrogen-bonded phosphonic acidâ€“water cluster. CrystEngComm, 2006, 8, 303-305.	1.3	33
60	An Adamantane-Based Coordination Framework with the First Observation of Discrete Metal Sulfonate Clusters. Inorganic Chemistry, 2003, 42, 8603-8605.	1.9	32
61	3D porous metalâ€“organic framework for selective adsorption of methane over dinitrogen under ambient pressure. Chemical Communications, 2018, 54, 14104-14107.	2.2	32
62	Ditopic crown thioethers. Synthesis and structures of anti-[Cu2(L)(PPh2Me)2][ClO4]2, syn-[Cu2(L)(.mu.-PPh2CH2CH2PPh2)][PF6]2, and anti-[Ag2(L)(PPh3)2][BF4]2 (L =) Tj ETQq0 0 0 rgBT /Overlock 10.5 Tf 50 453 Td (2,5,8	1.9	30
63	Enhancing Order and Porosity in a Highly Robust Tin(IV) Triphosphonate Framework. Inorganic Chemistry, 2013, 52, 7311-7313.	1.9	30
64	Pyridinium linkers and mixed anions in cationic metalâ€“organic frameworks. Inorganic Chemistry Frontiers, 2014, 1, 302-305.	3.0	28
65	Large-Ring S6-Thiacyclophanes as Ditopic Macrocycles. Synthesis and Structures of 2,5,8,17,20,23-Hexathia[9.9]-o-cyclophane, HT[9.9]OC, 2,5,8,17,20,23-Hexathia[9.9]-m-cyclophane, HT[9.9]MC, and [Ag2(CH3CN)2(HT[9.9]OC)][BF4]2. Inorganic Chemistry, 1994, 33, 2663-2667.	1.9	25
66	Zn7O2(RCOO)10 Clusters and Nitro Aromatic Linkers in a Porous Metalâ€“Organic Framework. Inorganic Chemistry, 2013, 52, 4124-4126.	1.9	24
67	Assessment of encapsulated dyesâ€™ distribution in silica nanoparticles and their ability to release useful singlet oxygen. Chemical Communications, 2018, 54, 6320-6323.	2.2	24
68	A neutral self-assembled coordination cage organized for inclusion of aromatic guests. Chemical Communications, 2004, , 2678-2679.	2.2	21
69	Mutual structure-directing effects of a non-interpenetrated square grid coordination polymer and its complementary complex anion net. Chemical Communications, 2005, , 1270.	2.2	20
70	Phosphonate additives do not always inhibit crystallization. CrystEngComm, 2011, 13, 1090-1095.	1.3	19
71	Reconciling order, stability, and porosity in phosphonate metalâ€“organic frameworks via HF-mediated synthesis. Inorganic Chemistry Frontiers, 2015, 2, 273-277.	3.0	19
72	Particle size dependence of proton conduction in a cationic lanthanum phosphonate MOF. Dalton Transactions, 2020, 49, 4022-4029.	1.6	19

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73	Second-sphere coordination networks: â€˜Tame-ingâ€™ (Tame=1,1,1-Tris(aminomethyl)ethane) the hydrogen bond. Journal of Molecular Structure, 2006, 796, 95-106.	1.8	18
74	Amphiphile-like self assembly of metal organic polyhedra having both polar and non-polar groups. Chemical Communications, 2018, 54, 1722-1725.	2.2	18
75	Computational and Experimental Assessment of CO₂ Uptake in Phosphonate Monoester Metalâ€“Organic Frameworks. Chemistry of Materials, 2017, 29, 10469-10477.	3.2	17
76	Model, make, measure. Nature Chemistry, 2010, 2, 909-911.	6.6	16
77	Shrink-wrapping water to conduct protons. Nature Energy, 2017, 2, 842-843.	19.8	16
78	A Family of Supramolecular Inclusion Solids Based Upon Second-Sphere Interactions. Angewandte Chemie, 2003, 115, 1398-1402.	1.6	14
79	Three Sequential Hydrolysis Products of the Ubiquitous Cu24 Isophthalate Metalâ€“Organic Polyhedra. Inorganic Chemistry, 2019, 58, 9874-9881.	1.9	14
80	Supramolecular inorganic frameworks: â€œdynamicâ€•challenges for structural chemistry. Zeitschrift Fur Kristallographie - Crystalline Materials, 2005, 220, 364-372.	0.4	13
81	A route to functionalised pores in coordination polymers via mixed phosphonate and amino-triazole linkers. Supramolecular Chemistry, 2011, 23, 278-282.	1.5	13
82	Three Guest-Including Coordination Solids from a Single Crystallization:Â A Discrete Cage and Open-Channel Networks from 1-D Ladders and 1-D Ribbons. Inorganic Chemistry, 2007, 46, 1593-1602.	1.9	12
83	Extracting structural trends from systematic variation of phosphonate/phosphonate monoester coordination polymers. CrystEngComm, 2017, 19, 3727-3736.	1.3	12
84	Mediating Order and Modulating Porosity by Controlled Hydrolysis in a Phosphonate Monoester Metalâ€“Organic Framework. Angewandte Chemie, 2016, 128, 14834-14837.	1.6	11
85	Design Strategy for the Controlled Generation of Cationic Frameworks and Ensuing Anion-Exchange Capabilities. ACS Applied Materials & Interfaces, 2019, 11, 3181-3188.	4.0	11
86	Structural design of coordination polymers. CrystEngComm, 2013, 15, 9237.	1.3	10
87	Synthesis of Bis-Crown Thioethers Containing a Common Aromatic Unit. Regioselectivity Based on the Length of the -S(CH2)nS(CH2)nS-Chain. Synlett, 1992, 1992, 823-824.	1.0	9
88	Microsphere Assemblies via Phosphonate Monoester Coordination Chemistry. Chemistry - A European Journal, 2018, 24, 1533-1538.	1.7	7
89	Complexes of the crown thioether ligand 2,5,8-trithia[9]-o-benzenophane, (TT[9]OB). Synthesis and molecular structure of [Cu(NCS)(TT[9]OB)]. Canadian Journal of Chemistry, 1991, 69, 1141-1145.	0.6	5
90	A new bismuth coordination polymer with proton conductivity and orange-red photoluminescence. Journal of Coordination Chemistry, 2021, 74, 1810-1822.	0.8	3

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91	Orthogonalization of Polyaryl Linkers as a Route to More Porous Phosphonate Metalâ€Organic Frameworks. Chemistry - A European Journal, 2022, 28, .	1.7	3