Shuhei Furukawa

List of Publications by Year
in descending order

127 papers	15,327 citations	34493 54 h-index	19470 122 g-index
151 all docs	151 docs citations	151 times ranked	17794 citing authors

#	Article	IF	Citations
1	Rhodium-Based Metalâ€“Organic Polyhedra Assemblies for Selective CO₂ Photoreduction. Journal of the American Chemical Society, 2022, 144, 3626-3636.	6.6	57
2	Hypercrosslinked Polymer Gels as a Synthetic Hybridization Platform for Designing Versatile Molecular Separators. Journal of the American Chemical Society, 2022, 144, 6861-6870.	6.6	40
3	Assembling metalâ€“organic cages as porous materials. Chemical Society Reviews, 2022, 51, 4876-4889.	18.7	60
4	Controlled Sequential Assembly of Metalâ€“Organic Polyhedra into Colloidal Gels with High Chemical Complexity. Small Structures, 2022, 3, .	6.9	6
5	Control of Extrinsic Porosities in Linked Metalâ€“Organic Polyhedra Gels by Imparting Coordination-Driven Self-Assembly with Electrostatic Repulsion. ACS Applied Materials & Interfaces, 2022, 14, 23660-23668.	4.0	8
6	Coordination/metalâ€“organic cages inside out. Coordination Chemistry Reviews, 2022, 467, 214612.	9.5	29
7	Dynamic properties of a flexible metal-organic framework exhibiting a unique â€œpicture frameâ€•like crystal morphology. Nano Research, 2021, 14, 432-437.	5.8	4
8	Directional asymmetry over multiple length scales in reticular porous materials. Chemical Science, 2021, 12, 18-33.	3.7	14
9	Porosimetry for Thin Films of Metalâ€“Organic Frameworks: A Comparison of Positron Annihilation Lifetime Spectroscopy and Adsorptionâ€Based Methods. Advanced Materials, 2021, 33, e2006993.	11.1	40
10	Spatiotemporal Control of Supramolecular Polymerization and Gelation of Metalâ€“Organic Polyhedra. Journal of the American Chemical Society, 2021, 143, 3562-3570.	6.6	39
11	Porous Colloidal Hydrogels Formed by Coordinationâ€Driven Selfâ€Assembly of Charged Metalâ€Organic Polyhedra. Chemistry - an Asian Journal, 2021, 16, 1092-1100.	1.7	19
12	Mechanoresponsive Porosity in Metal-Organic Frameworks. Trends in Chemistry, 2021, 3, 254-265.	4.4	13
13	Multiscale structural control of linked metalâ€“organic polyhedra gel by aging-induced linkage-reorganization. Chemical Science, 2021, 12, 12556-12563.	3.7	24
14	Fast multipoint immobilization of lipase through chiral<scp>l</scp>-proline on a MOF as a chiral bioreactor. Dalton Transactions, 2021, 50, 1866-1873.	1.6	12
15	Materials Designed for Biological Nitric Oxide Delivery. Fundamental Biomedical Technologies, 2021, , 125-133.	0.2	1
16	Understanding the role of linker flexibility in soft porous coordination polymers. Molecular Systems Design and Engineering, 2020, 5, 284-293.	1.7	9
17	Porous materials as carriers of gasotransmitters towards gas biology and therapeutic applications. Chemical Communications, 2020, 56, 9750-9766.	2.2	20
18	Pseudo-5-Fold-Symmetrical Ligand Drives Geometric Frustration in Porous Metalâ€“Organic and Hydrogen-Bonded Frameworks. Journal of the American Chemical Society, 2020, 142, 13839-13845.	6.6	18

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19	A selective ionic rectifier. Nature Materials, 2020, 19, 701-702.	13.3	16
20	Hysteresis in the gas sorption isotherms of metalâ€“organic cages accompanied by subtle changes in molecular packing. Chemical Communications, 2020, 56, 3689-3692.	2.2	14
21	Formulation of Metalâ€“Organic Framework Inks for the 3D Printing of Robust Microporous Solids toward High-Pressure Gas Storage and Separation. ACS Applied Materials & Interfaces, 2020, 12, 10983-10992.	4.0	95
22	Open framework materials for energy applications. APL Materials, 2020, 8, 040401.	2.2	4
23	Mehr als nur ein Netzwerk: Strukturierung retikulÃrer Materialien im Nanoâ€, Mesoâ€•und Volumenbereich. Angewandte Chemie, 2020, 132, 22534-22556.	1.6	8
24	Beyond Frameworks: Structuring Reticular Materials across Nanoâ€, Mesoâ€, and Bulk Regimes. Angewandte Chemie - International Edition, 2020, 59, 22350-22370.	7.2	60
25	Vaporâ€Phase Linker Exchange of the Metalâ€“Organic Framework ZIFâ€8: A Solventâ€Free Approach to Postâ€synthetic Modification. Angewandte Chemie - International Edition, 2019, 58, 18471-18475.	7.2	42
26	Vaporâ€Phase Linker Exchange of the Metalâ€“Organic Framework ZIFâ€8: A Solventâ€Free Approach to Postâ€synthetic Modification. Angewandte Chemie, 2019, 131, 18642-18646.	1.6	14
27	Postsynthetic Covalent and Coordination Functionalization of Rhodium(II)-Based Metalâ€“Organic Polyhedra. Journal of the American Chemical Society, 2019, 141, 4094-4102.	6.6	104
28	MOFBOTS: Metalâ€“Organicâ€Frameworkâ€Based Biomedical Microrobots. Advanced Materials, 2019, 31, e1901592.	11.1	139
29	Partially fluorinated MIL-101(Cr): from a miniscule structure modification to a huge chemical environment transformation inspected by ¹²⁹Xe NMR. Journal of Materials Chemistry A, 2019, 7, 15101-15112.	5.2	36
30	A Coordinative Solubilizer Method to Fabricate Soft Porous Materials from Insoluble Metalâ€“Organic Polyhedra. Angewandte Chemie - International Edition, 2019, 58, 6347-6350.	7.2	62
31	Charting a course for chemistry. Nature Chemistry, 2019, 11, 286-294.	6.6	18
32	A Coordinative Solubilizer Method to Fabricate Soft Porous Materials from Insoluble Metalâ€“Organic Polyhedra. Angewandte Chemie, 2019, 131, 6413-6416.	1.6	17
33	Understanding the multiscale self-assembly of metalâ€“organic polyhedra towards functionally graded porous gels. Chemical Science, 2019, 10, 10833-10842.	3.7	33
34	Self-assembled materials and supramolecular chemistry within microfluidic environments: from common thermodynamic states to non-equilibrium structures. Chemical Society Reviews, 2018, 47, 3788-3803.	18.7	119
35	Coordination Modulation Method To Prepare New Metalâ€“Organic Framework-Based CO-Releasing Materials. ACS Applied Materials & Interfaces, 2018, 10, 31158-31167.	4.0	31
36	Influence of nanoscale structuralisation on the catalytic performance of ZIF-8: a cautionary surface catalysis study. CrystEngComm, 2018, 20, 4926-4934.	1.3	38

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37	Switchable gate-opening effect in metalâ€“organic polyhedra assemblies through solution processing. Chemical Science, 2018, 9, 6463-6469.	3.7	40
38	Tuning Light Emission towards White Light from a Naphthalenediimide-Based Entangled Metal-Organic Framework by Mixing Aromatic Guest Molecules. Polymers, 2018, 10, 188.	2.0	6
39	Fighting at the Interface: Structural Evolution during Heteroepitaxial Growth of Cyanometallate Coordination Polymers. Inorganic Chemistry, 2018, 57, 8701-8704.	1.9	14
40	Self-assembly of metalâ€“organic polyhedra into supramolecular polymers with intrinsic microporosity. Nature Communications, 2018, 9, 2506.	5.8	152
41	Solâ€“Gel Processing of Metalâ€“Organic Frameworks. Chemistry of Materials, 2017, 29, 2626-2645.	3.2	116
42	Photopatterning of fluorescent hostâ€“guest carriers through pore activation of metalâ€“organic framework single crystals. Chemical Communications, 2017, 53, 7222-7225.	2.2	12
43	Enhanced properties of metalâ€“organic framework thin films fabricated via a coordination modulation-controlled layer-by-layer process. Journal of Materials Chemistry A, 2017, 5, 13665-13673.	5.2	35
44	Metal-Organic Cuboctahedra for Synthetic Ion Channels with Multiple Conductance States. CheM, 2017, 2, 393-403.	5.8	89
45	Light responsive metalâ€“organic frameworks as controllable CO-releasing cell culture substrates. Chemical Science, 2017, 8, 2381-2386.	3.7	96
46	Enhanced selectivity in mixed matrix membranes for CO2 capture through efficient dispersion of amine-functionalized MOF nanoparticles. Nature Energy, 2017, 2, .	19.8	428
47	Localized Conversion of Metalâ€“Organic Frameworks into Polymer Gels via Light-Induced Click Chemistry. Chemistry of Materials, 2017, 29, 5982-5989.	3.2	26
48	Greater Porosity with Redox Reaction Speeds Up MOF Color Change. CheM, 2016, 1, 186-188.	5.8	5
49	Rhodiumâ€“Organic Cuboctahedra as Porous Solids with Strong Binding Sites. Inorganic Chemistry, 2016, 55, 10843-10846.	1.9	97
50	Emerging applications of metalâ€“organic frameworks. CrystEngComm, 2016, 18, 6532-6542.	1.3	125
51	Structuralization of Ca²⁺-Based Metalâ€“Organic Frameworks Prepared via Coordination Replication of Calcium Carbonate. Inorganic Chemistry, 2016, 55, 3700-3705.	1.9	39
52	Application of metal and metal oxide nanoparticles@MOFs. Coordination Chemistry Reviews, 2016, 307, 237-254.	9.5	479
53	Particle size effects in the kinetic trapping of a structurally-locked form of a flexible MOF. CrystEngComm, 2016, 18, 4172-4179.	1.3	28
54	Thermal Conversion of Coreâ€“Shell Metalâ€“Organic Frameworks: A New Method for Selectively Functionalized Nanoporous Hybrid Carbon. Journal of the American Chemical Society, 2015, 137, 1572-1580.	6.6	1,307

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55	Mechanically stable, hierarchically porous Cu₃(btc)₂ (HKUST-1) monoliths via direct conversion of copper(<scp>ii</scp>) hydroxide-based monoliths. Chemical Communications, 2015, 51, 3511-3514.	2.2	67
56	Mesoscopic superstructures of flexible porous coordination polymers synthesized <i>via</i> coordination replication. Chemical Science, 2015, 6, 5938-5946.	3.7	39
57	Light-induced nitric oxide release from physiologically stable porous coordination polymers. Dalton Transactions, 2015, 44, 15324-15333.	1.6	30
58	<scp>l</scp>-Glutamic acid release from a series of aluminum-based isoreticular porous coordination polymers. Journal of Materials Chemistry B, 2015, 3, 4205-4212.	2.9	11
59	Hierarchical structuring of metalâ€“organic framework thin-films on quartz crystal microbalance (QCM) substrates for selective adsorption applications. Journal of Materials Chemistry A, 2015, 3, 23385-23394.	5.2	56
60	Reductive coordination replication of V2O5 sacrificial macrostructures into vanadium-based porous coordination polymers. CrystEngComm, 2015, 17, 323-330.	1.3	25
61	Terahertz phase contrast imaging of sorption kinetics in porous coordination polymer nanocrystals using differential optical resonator. Optics Express, 2014, 22, 11061.	1.7	3
62	Using Functional Nano- and Microparticles for the Preparation of Metalâ€“Organic Framework Composites with Novel Properties. Accounts of Chemical Research, 2014, 47, 396-405.	7.6	264
63	Diffusion-Coupled Molecular Assembly: Structuring of Coordination Polymers Across Multiple Length Scales. Journal of the American Chemical Society, 2014, 136, 14966-14973.	6.6	50
64	Confined synthesis of CdSe quantum dots in the pores of metalâ€“organic frameworks. Journal of Materials Chemistry C, 2014, 2, 7173-7175.	2.7	36
65	Impact of crystal orientation on the adsorption kinetics of a porous coordination polymerâ€“quartz crystal microbalance hybrid sensor. Journal of Materials Chemistry C, 2014, 2, 3336.	2.7	38
66	Enhanced Phosphorescence Emission by Incorporating Aromatic Halides into an Entangled Coordination Framework Based on Naphthalenediimide. ChemPhysChem, 2014, 15, 2517-2521.	1.0	20
67	Design of Superhydrophobic Porous Coordination Polymers through the Introduction of External Surface Corrugation by the Use of an Aromatic Hydrocarbon Building Unit. Angewandte Chemie - International Edition, 2014, 53, 8225-8230.	7.2	110
68	Structuring of metalâ€“organic frameworks at the mesoscopic/macroscopic scale. Chemical Society Reviews, 2014, 43, 5700-5734.	18.7	760
69	Trapping of a Spatial Transient State During the Framework Transformation of a Porous Coordination Polymer. Journal of the American Chemical Society, 2014, 136, 4938-4944.	6.6	24
70	Fibrous Architectures of Porous Coordination Polymersâ€“Alumina Composites Fabricated by Coordination Replication. Chemistry Letters, 2014, 43, 1052-1054.	0.7	15
71	Combining UV Lithography and an Imprinting Technique for Patterning Metalâ€Organic Frameworks. Advanced Materials, 2013, 25, 4701-4705.	11.1	98
72	Shape-Memory Nanopores Induced in Coordination Frameworks by Crystal Downsizing. Science, 2013, 339, 193-196.	6.0	483

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73	Binary Janus Porous Coordination Polymer Coatings for Sensor Devices with Tunable Analyte Affinity. Angewandte Chemie - International Edition, 2013, 52, 341-345.	7.2	125
74	Programmed crystallization via epitaxial growth and ligand replacement towards hybridizing porous coordination polymer crystals. Dalton Transactions, 2013, 42, 15868.	1.6	27
75	Integration of Porous Coordination Polymers and Gold Nanorods into Coreâ€“Shell Mesoscopic Composites toward Light-Induced Molecular Release. Journal of the American Chemical Society, 2013, 135, 10998-11005.	6.6	171
76	Impact of Molecular Clustering inside Nanopores on Desorption Processes. Journal of the American Chemical Society, 2013, 135, 4608-4611.	6.6	28
77	Hostâ€“Guest Metalâ€“Organic Frameworks for Photonics. Structure and Bonding, 2013, , 167-186.	1.0	6
78	Localized cell stimulation by nitric oxide using a photoactive porous coordination polymer platform. Nature Communications, 2013, 4, 2684.	5.8	122
79	Control over Flexibility of Entangled Porous Coordination Frameworks by Molecular and Mesoscopic Chemistries. Chemistry Letters, 2013, 42, 570-576.	0.7	48
80	Formation of Nanocrystals of a Zinc Pillared-layer Porous Coordination Polymer Using Microwave-assisted Coordination Modulation. Chemistry Letters, 2012, 41, 1436-1438.	0.7	13
81	Charge Transfer and Exciplex Emissions from a Naphthalenediimide-Entangled Coordination Framework Accommodating Various Aromatic Guests. Journal of Physical Chemistry C, 2012, 116, 26084-26090.	1.5	60
82	Direct Carbonization of Al-Based Porous Coordination Polymer for Synthesis of Nanoporous Carbon. Journal of the American Chemical Society, 2012, 134, 2864-2867.	6.6	588
83	Redox reaction in two-dimensional porous coordination polymers based on ferrocenedicarboxylates. Dalton Transactions, 2012, 41, 3924.	1.6	49
84	Crystal morphology-directed framework orientation in porous coordination polymer films and freestanding membranes via Langmuirâ€“Blodgettry. Journal of Materials Chemistry, 2012, 22, 10159.	6.7	74
85	Targeted functionalisation of a hierarchically-structured porous coordination polymer crystal enhances its entire function. Chemical Communications, 2012, 48, 6472.	2.2	48
86	Doping Light Emitters into Metalâ€“Organic Frameworks. Angewandte Chemie - International Edition, 2012, 51, 8431-8433.	7.2	137
87	Mesoscopic architectures of porous coordination polymers fabricated by pseudomorphic replication. Nature Materials, 2012, 11, 717-723.	13.3	352
88	Synthesis of Prussian Blue Nanoparticles with a Hollow Interior by Controlled Chemical Etching. Angewandte Chemie - International Edition, 2012, 51, 984-988.	7.2	424
89	Thermodynamically controlled coordination-engineering of novel 2D cadmium thiolate coordination polymers. New Journal of Chemistry, 2011, 35, 1265.	1.4	7
90	Molecular pentagonal tiling: self-assemblies of pentagonal-shaped macrocycles at liquid/solid interfaces. CrystEngComm, 2011, 13, 5551.	1.3	28

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91	Preparation of Microporous Carbon Fibers through Carbonization of Al-Based Porous Coordination Polymer (Al-PCP) with Furfuryl Alcohol. Chemistry of Materials, 2011, 23, 1225-1231.	3.2	231
92	Direct synthesis of nanoporous carbon nitride fibers using Al-based porous coordination polymers (Al-PCPs). Chemical Communications, 2011, 47, 8124.	2.2	140
93	Liquid Phase Separation of Polyaromatics on [Cu2(BDC)2(dabco)]. Langmuir, 2011, 27, 9083-9087.	1.6	19
94	Control of the charge-transfer interaction between a flexible porous coordination host and aromatic guests by framework isomerism. CrystEngComm, 2011, 13, 3360.	1.3	46
95	MOF-on-MOF heteroepitaxy: perfectly oriented [Zn2(ndc)2(dabco)]n grown on [Cu2(ndc)2(dabco)]n thin films. Dalton Transactions, 2011, 40, 4954.	1.6	146
96	Morphology Design of Porous Coordination Polymer Crystals by Coordination Modulation. Journal of the American Chemical Society, 2011, 133, 15506-15513.	6.6	383
97	Porous Coordination Polymer Hybrid Device with Quartz Oscillator: Effect of Crystal Size on Sorption Kinetics. Journal of the American Chemical Society, 2011, 133, 11932-11935.	6.6	98
98	Molecular decoding using luminescence from an entangled porous framework. Nature Communications, 2011, 2, 168.	5.8	715
99	Precise Control and Consecutive Modulation of Spin Transition Temperature Using Chemical Migration in Porous Coordination Polymers. Journal of the American Chemical Society, 2011, 133, 8600-8605.	6.6	191
100	Sequential Functionalization of Porous Coordination Polymer Crystals. Angewandte Chemie - International Edition, 2011, 50, 8057-8061.	7.2	175
101	Coordinatively Immobilized Monolayers on Porous Coordination Polymer Crystals. Angewandte Chemie - International Edition, 2010, 49, 5327-5330.	7.2	133
102	Control over the nucleation process determines the framework topology of porous coordination polymers. CrystEngComm, 2010, 12, 2350.	1.3	55
103	Periodic molecular boxes in entangled enantiomorphic lcy nets. Chemical Communications, 2010, 46, 4142.	2.2	26
104	Controlled Multiscale Synthesis of Porous Coordination Polymer in Nano/Micro Regimes. Chemistry of Materials, 2010, 22, 4531-4538.	3.2	459
105	2D analogues of the inverted hexagonal phase self-assembled from 4,6-dialkoxylated isophthalic acids at solidâ€“liquid interfaces. Nanoscale, 2010, 2, 1773.	2.8	7
106	Heterogeneously Hybridized Porous Coordination Polymer Crystals: Fabrication of Heterometallic Coreâ€“Shell Single Crystals with an Inâ€Plane Rotational Epitaxial Relationship. Angewandte Chemie - International Edition, 2009, 48, 1766-1770.	7.2	287
107	Nanoporous Nanorods Fabricated by Coordination Modulation and Oriented Attachment Growth. Angewandte Chemie - International Edition, 2009, 48, 4739-4743.	7.2	611
108	Two-Leg Molecular Ladders Formed by Hierarchical Self-Assembly of an Organic Radical. Journal of the American Chemical Society, 2009, 131, 6246-6252.	6.6	31

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109	A block PCP crystal: anisotropic hybridization of porous coordination polymers by face-selective epitaxial growth. Chemical Communications, 2009, , 5097.	2.2	147
110	Electrochemical reactions at a porphyrinâ€"copper interface. Physical Chemistry Chemical Physics, 2009, 11, 5422.	1.3	27
111	Two-Dimensional Crystal Engineering at the Liquidâ€"Solid Interface. Topics in Current Chemistry, 2008, 287, 87-133.	4.0	56
112	Directing the Assembly of Charged Organic Molecules by a Hydrophilicâ^'Hydrophobic Nanostructured Monolayer at Electrified Interfaces. Nano Letters, 2008, 8, 1163-1168.	4.5	10
113	Molecular Clusters in Two-Dimensional Surface-Confined Nanoporous Molecular Networks: Structure, Rigidity, and Dynamics. Journal of the American Chemical Society, 2008, 130, 7119-7129.	6.6	149
114	Supramolecular Hydrophobicâ^'Hydrophilic Nanopatterns at Electrified Interfaces. Nano Letters, 2007, 7, 791-795.	4.5	35
115	Structural Transformation of a Two-Dimensional Molecular Network in Response to Selective Guest Inclusion. Angewandte Chemie - International Edition, 2007, 46, 2831-2834.	7.2	182
116	Three-Dimensional Porous Coordination Polymer Functionalized with Amide Groups Based on Tridentate Ligand:Â Selective Sorption and Catalysis. Journal of the American Chemical Society, 2007, 129, 2607-2614.	6.6	921
117	Two-Dimensional Porous Molecular Networks of Dehydrobenzo[12]annulene Derivatives via Alkyl Chain Interdigitation. Journal of the American Chemical Society, 2006, 128, 16613-16625.	6.6	343
118	Chiral Alignment of OPV Chromophores:Â Exploitation of the Ureidophthalimide-Based Foldamer. Journal of the American Chemical Society, 2006, 128, 16113-16121.	6.6	63
119	Molecular Geometry Directed KagomÃ© and Honeycomb Networks:Â Toward Two-Dimensional Crystal Engineering. Journal of the American Chemical Society, 2006, 128, 3502-3503.	6.6	143
120	Architecture and Functional Engineering Based on Paddlewheel Dinuclear Tetracarboxylate Building Blocks. , 2006, , 195-218.		1
121	Monte Carlo wavefunction approach to the dissipative quantum-phase dynamics of two-component Bose-Einstein condensates. European Physical Journal D, 2006, 38, 523-532.	0.6	1
122	Porous Coordination Polymer with Ï€ Lewis Acidic Pore Surfaces, {[Cu3(CN)3{hat(CN)3(OEt)3}]â‹…3â€‰THF}n. Angewandte Chemie - International Edition, 2006, 45, 4628-4631.	7.2	43
123	Effect of the Metal-Assisted Assembling Mode on the Redox States of Hexaazatriphenylene Hexacarbonitrile. Angewandte Chemie - International Edition, 2005, 44, 2700-2704.	7.2	50
124	Rational synthesis of a two-dimensional honeycomb structure based on a paramagnetic paddlewheel diruthenium complex. Chemical Communications, 2005, , 865.	2.2	43
125	Neutral Paddlewheel Diruthenium Complexes with Tetracarboxylates of Large Ï€-Conjugated Substituents:Â Facile One-Pot Synthesis, Crystal Structures, and Electrochemical Studies. Inorganic Chemistry, 2004, 43, 6464-6472.	1.9	39
126	A New Class of Cyclic Hexamer: [Co6L6]24â^' (H6L=hexaazatriphenylene hexacarboxylic acid). Angewandte Chemie - International Edition, 2001, 40, 3817-3819.	7.2	62

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127	Anomalous temperature dependence of the sound velocities of SiO_2-TiO_2 glasses. Journal of Materials Science Letters, 1995, 14, 697.	0.5	17