Kenji Hirai

List of Publications by Citations

54 papers	2,385 citations	21 h-index	48 g-index
60 ext. papers	2,610 ext. citations	8.3 avg, IF	4.74 L-index

#	Paper	IF	Citations
54	Shape-memory nanopores induced in coordination frameworks by crystal downsizing. *Science*, **2013**, 339, 193-6	33.3	397
53	Mesoscopic architectures of porous coordination polymers fabricated by pseudomorphic replication. *Nature Materials*, **2012**, 11, 717-23	27	307
52	Heterogeneously hybridized porous coordination polymer crystals: fabrication of heterometallic core-shell single crystals with an in-plane rotational epitaxial relationship. *Angewandte Chemie - International Edition*, **2009**, 48, 1766-70	16.4	256
51	Sequential functionalization of porous coordination polymer crystals. *Angewandte Chemie - International Edition*, **2011**, 50, 8057-61	16.4	157
50	A block PCP crystal: anisotropic hybridization of porous coordination polymers by face-selective epitaxial growth. *Chemical Communications*, **2009**, 5097-9	5.8	136
49	MOF-on-MOF heteroepitaxy: perfectly oriented [Zn2(ndc)2(dabco)]n grown on [Cu2(ndc)2(dabco)]n thin films. *Dalton Transactions*, **2011**, 40, 4954-8	4.3	134
48	Coordinatively immobilized monolayers on porous coordination polymer crystals. *Angewandte Chemie - International Edition*, **2010**, 49, 5327-30	16.4	121
47	Binary Janus porous coordination polymer coatings for sensor devices with tunable analyte affinity. *Angewandte Chemie - International Edition*, **2013**, 52, 341-5	16.4	116
46	Porous coordination polymer hybrid device with quartz oscillator: effect of crystal size on sorption kinetics. *Journal of the American Chemical Society*, **2011**, 133, 11932-5	16.4	88
45	Heterogeneously Hybridized Porous Coordination Polymer Crystals: Fabrication of Heterometallic Core–Shell Single Crystals with an In-Plane Rotational Epitaxial Relationship. *Angewandte Chemie*, **2009**, 121, 1798-1802	3.6	65
44	The Rise of Catalyst Informatics: Towards Catalyst Genomics. *ChemCatChem*, **2019**, 11, 1146-1152	5.2	52
43	Modulation of Prins Cyclization by Vibrational Strong Coupling. *Angewandte Chemie - International Edition*, **2020**, 59, 5332-5335	16.4	45
42	Redox reaction in two-dimensional porous coordination polymers based on ferrocenedicarboxylates. *Dalton Transactions*, **2012**, 41, 3924-7	4.3	45
41	Targeted functionalisation of a hierarchically-structured porous coordination polymer crystal enhances its entire function. *Chemical Communications*, **2012**, 48, 6472-4	5.8	45
40	Diffusion-coupled molecular assembly: structuring of coordination polymers across multiple length scales. *Journal of the American Chemical Society*, **2014**, 136, 14966-73	16.4	43
39	Impact of crystal orientation on the adsorption kinetics of a porous coordination polymer–quartz crystal microbalance hybrid sensor. *Journal of Materials Chemistry C*, **2014**, 2, 3336	7.1	32
38	Binary Janus Porous Coordination Polymer Coatings for Sensor Devices with Tunable Analyte Affinity. *Angewandte Chemie*, **2013**, 125, 359-363	3.6	32

37	Coordinatively Immobilized Monolayers on Porous Coordination Polymer Crystals. *Angewandte Chemie*, **2010**, 122, 5455-5458	3.6	30
36	Confined synthesis of CdSe quantum dots in the pores of metal□organic frameworks. *Journal of Materials Chemistry C*, **2014**, 2, 7173-7175	7.1	29
35	Recent Progress in Vibropolaritonic Chemistry. *ChemPlusChem*, **2020**, 85, 1981-1988	2.8	27
34	Programmed crystallization via epitaxial growth and ligand replacement towards hybridizing porous coordination polymer crystals. *Dalton Transactions*, **2013**, 42, 15868-72	4.3	24
33	Trapping of a spatial transient state during the framework transformation of a porous coordination polymer. *Journal of the American Chemical Society*, **2014**, 136, 4938-44	16.4	21
32	Coordination Assembly of Discoid Nanoparticles. *Angewandte Chemie - International Edition*, **2015**, 54, 8966-70	16.4	21
31	Sequential Functionalization of Porous Coordination Polymer Crystals. *Angewandte Chemie*, **2011**, 123, 8207-8211	3.6	21
30	Liquid phase separation of polyaromatics on [Cu2(BDC)2(dabco)]. *Langmuir*, **2011**, 27, 9083-7	4	19
29	Modulation of Prins Cyclization by Vibrational Strong Coupling. *Angewandte Chemie*, **2020**, 132, 5370-5373	3.6	15
28	Pyrolysis of Helical Coordination Polymers for Metal-Sulfide-Based Helices with Broadband Chiroptical Activity. *ACS Nano*, **2017**, 11, 5309-5317	16.7	13
27	Infrared laser writing of MOFs. *Chemical Communications*, **2017**, 53, 5275-5278	5.8	9
26	Selective crystallization vibrational strong coupling. *Chemical Science*, **2021**, 12, 11986-11994	9.4	9
25	Low-Cytotoxic Gold-Coated Silver Nanoflowers for Intracellular pH Sensing. *ACS Applied Nano Materials*, **2020**, 3, 7643-7650	5.6	7
24	Controlled Fabrication of Optical Signal Input/Output Sites on Plasmonic Nanowires. *Nano Letters*, **2020**, 20, 2460-2467	11.5	6
23	Pseudo-Membrane Jackets: Two-Dimensional Coordination Polymers Achieving Visible Phase Separation in Cell Membrane. *Angewandte Chemie - International Edition*, **2020**, 59, 17931-17937	16.4	6
22	Water-mediated polyol synthesis of pencil-like sharp silver nanowires suitable for nonlinear plasmonics. *Chemical Communications*, **2019**, 55, 11630-11633	5.8	5
21	Host□Guest Metal□Organic Frameworks for Photonics. *Structure and Bonding*, **2013**, 167-186	0.9	5
20	Adaptive Optical Two-Photon Microscopy for Surface-Profiled Living Biological Specimens. *ACS Omega*, **2021**, 6, 438-447	3.9	5

19	Label-free visualization of heterogeneities and defects in metal-organic frameworks using nonlinear optics. *Chemical Communications*, **2020**, 56, 13331-13334	5.8	5
18	Data science assisted investigation of catalytically active copper hydrate in zeolites for direct oxidation of methane to methanol using HO. *Scientific Reports*, **2021**, 11, 2067	4.9	5
17	Solid-Solution Coordination Polymers as Precursors for ZnxCd1S/C Composite Nanowires. *European Journal of Inorganic Chemistry*, **2017**, 2017, 2444-2449	2.3	4
16	Coordination Assembly of Discoid Nanoparticles. *Angewandte Chemie*, **2015**, 127, 9094-9098	3.6	3
15	Cover Picture: Heterogeneously Hybridized Porous Coordination Polymer Crystals: Fabrication of Heterometallic Core‐Shell Single Crystals with an In-Plane Rotational Epitaxial Relationship (Angew. Chem. Int. Ed. 10/2009). *Angewandte Chemie - International Edition*, **2009**, 48, 1697-1697	16.4	3
14	Multicolour photochromic fluorescence of a fluorophore encapsulated in a metal-organic framework. *Chemical Communications*, **2020**, 56, 9651-9654	5.8	3
13	Selective Crystallization via Vibrational Strong Coupling		3
12	Nanoparticle Assemblies into Luminescent Dendrites in Shrinking Microdroplets. *Langmuir*, **2016**, 32, 12468-12475	4	2
11	Gas-generated thermal oxidation of a coordination cluster for an anion-doped mesoporous metal oxide. *Scientific Reports*, **2015**, 5, 18468	4.9	2
10	Titelbild: Heterogeneously Hybridized Porous Coordination Polymer Crystals: Fabrication of Heterometallic Core‐Shell Single Crystals with an In-Plane Rotational Epitaxial Relationship (Angew. Chem. 10/2009). *Angewandte Chemie*, **2009**, 121, 1725-1725	3.6	2
9	Surface Chemistry of Porous Coordination Polymers (PCPs) or Metal-Organic Frameworks (MOFs). *Hyomen Kagaku*, **2012**, 33, 519-523		2
8	Selective Crystallization via Vibrational Strong Coupling		2
7	Pseudo-Membrane Jackets: Two-Dimensional Coordination Polymers Achieving Visible Phase Separation in Cell Membrane. *Angewandte Chemie*, **2020**, 132, 18087-18093	3.6	2
6	Li@C thin films: characterization and nonlinear optical properties.. *RSC Advances*, **2021**, 12, 389-394	3.7	1
5	Gold-Photodeposited Silver Nanowire Endoscopy for Cytosolic and Nuclear pH Sensing. *ACS Applied Nano Materials*, **2021**, 4, 9886-9894	5.6	1
4	All-Optical and One-Color Rewritable Chemical Patterning on Pristine Graphene under Water.. *Journal of Physical Chemistry Letters*, **2022**, 3796-3803	6.4	0
3	Innentitelbild: Coordination Assembly of Discoid Nanoparticles (Angew. Chem. 31/2015). *Angewandte Chemie*, **2015**, 127, 8976-8976	3.6	
2	Plasmon-Associated Control of Chemical Reaction at Nanometer Scale **2020**, 117-133		

List of Publications

1 Polariton Chemistry in Cavity Vacuum Fields. *Chemistry Letters*, **2021**, 50, 727-732 1.7