Liang-Liang Zhang

List of Publications by Year
in descending order

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118 papers	7,892 citations	76196 40 h-index	51492 86 g-index
120 all docs	120 docs citations	120 times ranked	8269 citing authors

#	Article	IF	Citations
1	Stable Metalâ€“Organic Frameworks: Design, Synthesis, and Applications. Advanced Materials, 2018, 30, e1704303.	11.1	1,740
2	Metalâ€“Organic Framework-Based Hierarchically Porous Materials: Synthesis and Applications. Chemical Reviews, 2021, 121, 12278-12326.	23.0	633
3	Catalytic reactions within the cavity of coordination cages. Chemical Society Reviews, 2019, 48, 4707-4730.	18.7	313
4	Creating Hierarchical Pores by Controlled Linker Thermolysis in Multivariate Metalâ€“Organic Frameworks. Journal of the American Chemical Society, 2018, 140, 2363-2372.	6.6	310
5	A tubular europiumâ€“organic framework exhibiting selective sensing of Fe3+ and Al3+ over mixed metal ions. Chemical Communications, 2013, 49, 11557.	2.2	286
6	Metalâ€“organic frameworks based luminescent materials for nitroaromatics sensing. CrystEngComm, 2016, 18, 193-206.	1.3	235
7	[Ti₈Zr₂O₁₂(COO)₁₆] Cluster: An Ideal Inorganic Building Unit for Photoactive Metalâ€“Organic Frameworks. ACS Central Science, 2018, 4, 105-111.	5.3	204
8	Lanthanide metalâ€“organic frameworks containing a novel flexible ligand for luminescence sensing of small organic molecules and selective adsorption. Journal of Materials Chemistry A, 2015, 3, 12777-12785.	5.2	171
9	Retrosynthesis of multi-component metalâ^'organic frameworks. Nature Communications, 2018, 9, 808.	5.8	159
10	Amino-functionalized MOFs with high physicochemical stability for efficient gas storage/separation, dye adsorption and catalytic performance. Journal of Materials Chemistry A, 2018, 6, 24486-24495.	5.2	159
11	A multifunctional Eu MOF as a fluorescent pH sensor and exhibiting highly solvent-dependent adsorption and degradation of rhodamine B. Journal of Materials Chemistry A, 2015, 3, 24016-24021.	5.2	154
12	Poreâ€Environment Engineering with Multiple Metal Sites in Rareâ€Earth Porphyrinic Metalâ€“Organic Frameworks. Angewandte Chemie - International Edition, 2018, 57, 5095-5099.	7.2	136
13	Two Solvent-Dependent Zinc(II) Supramolecular Isomers: Rare kgd and Lonsdaleite Network Topologies Based on a Tripodal Flexible Ligand. Crystal Growth and Design, 2011, 11, 5182-5187.	1.4	133
14	Metalâ€“Organic Framework Derived Porous Hollow Co₃O₄/Nâ€“C Polyhedron Composite with Excellent Energy Storage Capability. ACS Applied Materials & Interfaces, 2017, 9, 10602-10609.	4.0	127
15	Porous Zirconium Metalâ€“Organic Framework Constructed from 2D â† 3D Interpenetration Based on a 3,6-Connected kgd Net. Inorganic Chemistry, 2014, 53, 7086-7088.	1.9	118
16	A multi-aromatic hydrocarbon unit induced hydrophobic metalâ€“organic framework for efficient C₂/C₁ hydrocarbon and oil/water separation. Journal of Materials Chemistry A, 2017, 5, 1168-1175.	5.2	113
17	Two nanocage anionic metalâ€“organic frameworks with rht topology and {[M(H₂O)₆]₆}¹²⁺ charge aggregation for rapid and selective adsorption of cationic dyes. Chemical Communications, 2014, 50, 14674-14677.	2.2	110
18	Luminescent Terbium-Organic Framework Exhibiting Selective Sensing of Nitroaromatic Compounds (NACs). Crystal Growth and Design, 2015, 15, 2589-2592.	1.4	107

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19	Absorption of Carbon Dioxide with Ionic Liquid in a Rotating Packed Bed Contactor: Mass Transfer Study. Industrial & Engineering Chemistry Research, 2011, 50, 6957-6964.	1.8	105
20	Unprecedented Solvent-Dependent Sensitivities in Highly Efficient Detection of Metal Ions and Nitroaromatic Compounds by a Fluorescent Barium Metalâ€“Organic Framework. Inorganic Chemistry, 2016, 55, 1782-1787.	1.9	87
21	Porous Lanthanideâ€“Organic Frameworks: Control over Interpenetration, Gas Adsorption, and Catalyst Properties. Crystal Growth and Design, 2013, 13, 3154-3161.	1.4	80
22	Multifunctional lanthanideâ€“organic frameworks for fluorescent sensing, gas separation and catalysis. Dalton Transactions, 2016, 45, 3743-3749.	1.6	74
23	A leadâ€“porphyrin metalâ€“organic framework: gas adsorption properties and electrocatalytic activity for water oxidation. Dalton Transactions, 2016, 45, 61-65.	1.6	73
24	Ligand-Directed Conformational Control over Porphyrinic Zirconium Metalâ€“Organic Frameworks for Size-Selective Catalysis. Journal of the American Chemical Society, 2021, 143, 12129-12137.	6.6	73
25	Exposed Equatorial Positions of Metal Centers via Sequential Ligand Elimination and Installation in MOFs. Journal of the American Chemical Society, 2018, 140, 10814-10819.	6.6	70
26	A rare (3,12)-connected zirconium metalâ€“organic framework with efficient iodine adsorption capacity and pH sensing. Journal of Materials Chemistry A, 2019, 7, 13173-13179.	5.2	68
27	Flexible Zirconium MOFs as Bromineâ€Nanocontainers for Bromination Reactions under Ambient Conditions. Angewandte Chemie - International Edition, 2017, 56, 14622-14626.	7.2	65
28	An Aminoâ€Functionalized Metalâ€Organic Framework, Based on a Rare Ba₁₂(COO)₁₈(NO₃)₂ Cluster, for Efficient C₃/C₂/C₁ Separation and Preferential Catalytic Performance. Chemistry - A European Journal, 2018, 24, 2137-2143.	1.7	61
29	Bright-yellow to orange-red thermochromic luminescence of an AgI6â€“ZnII2 heterometallic aggregate. Dalton Transactions, 2013, 42, 3528.	1.6	60
30	Improving the Porosity and Catalytic Capacity of a Zinc Paddlewheel Metal-Organic Framework (MOF) through Metal-Ion Metathesis in a Single-Crystal-to-Single-Crystal Fashion. Inorganic Chemistry, 2014, 53, 10649-10653.	1.9	60
31	Cooperative Sieving and Functionalization of Zr Metalâ€“Organic Frameworks through Insertion and Post-Modification of Auxiliary Linkers. ACS Applied Materials & Interfaces, 2019, 11, 22390-22397.	4.0	60
32	A fluorine-functionalized microporous In-MOF with high physicochemical stability for light hydrocarbon storage and separation. Inorganic Chemistry Frontiers, 2018, 5, 2445-2449.	3.0	59
33	Stable Metalâ€“Organic Frameworks: Stable Metalâ€“Organic Frameworks: Design, Synthesis, and Applications (Adv. Mater. 37/2018). Advanced Materials, 2018, 30, 1870277.	11.1	55
34	Iron(III) Porphyrinâ€Based Porous Material as Photocatalyst for Highly Efficient and Selective Degradation of Congo Red. Macromolecular Chemistry and Physics, 2016, 217, 599-604.	1.1	53
35	Pentiptycene-Based Luminescent Cu (II) MOF Exhibiting Selective Gas Adsorption and Unprecedentedly High-Sensitivity Detection of Nitroaromatic Compounds (NACs). Scientific Reports, 2016, 6, 20672.	1.6	51
36	Fluorescence turn-on detection of uric acid by a water-stable metalâ€“organic nanotube with high selectivity and sensitivity. Journal of Materials Chemistry C, 2017, 5, 601-606.	2.7	48

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37	Porous bariumâ€“organic frameworks with highly efficient catalytic capacity and fluorescence sensing ability. Journal of Materials Chemistry A, 2015, 3, 21545-21552.	5.2	46
38	Molecular Pivotâ€Hinge Installation to Evolve Topology in Rareâ€Earth Metalâ€“Organic Frameworks. Angewandte Chemie - International Edition, 2019, 58, 16682-16690.	7.2	45
39	Cadmiumâ€“Organic Coordination Polymers Based on N-Donor Ligands and Small Anions: Syntheses, Crystal Structures, and Photoluminescent Properties. Crystal Growth and Design, 2012, 12, 5649-5654.	1.4	43
40	Terahertz wave reference-free phase imaging for identification of explosives. Applied Physics Letters, 2008, 92, 091117.	1.5	42
41	Achieving a Rare Breathing Behavior in a Polycatenated 2â€‰D to 3â€‰D Net through a Pillarâ€Ligand Extension Strategy. Chemistry - A European Journal, 2014, 20, 649-652.	1.7	38
42	Balancing crystallinity and specific surface area of metal-organic framework derived nickel hydroxide for high-performance supercapacitor. Electrochimica Acta, 2018, 284, 202-210.	2.6	38
43	Bimolecular proximity of a ruthenium complex and methylene blue within an anionic porous coordination cage for enhancing photocatalytic activity. Chemical Science, 2019, 10, 3529-3534.	3.7	38
44	Rapid room-temperature synthesis of a porphyrinic MOF for encapsulating metal nanoparticles. Nano Research, 2021, 14, 444-449.	5.8	36
45	A Stable Amino-Functionalized Interpenetrated Metalâ€“Organic Framework Exhibiting Gas Selectivity and Pore-Size-Dependent Catalytic Performance. Inorganic Chemistry, 2017, 56, 13634-13637.	1.9	34
46	Ferroceneâ€Induced Perpetual Recovery on All Elemental Defects in Perovskite Solar Cells. Angewandte Chemie - International Edition, 2021, 60, 25567-25574.	7.2	34
47	Five MOFs with different topologies based on anthracene functionalized tetracarboxylic acid: syntheses, structures, and properties. CrystEngComm, 2014, 16, 2917-2928.	1.3	33
48	Cyclodextrin-Based Metal-Organic Nanotube as Fluorescent Probe for Selective Turn-On Detection of Hydrogen Sulfide in Living Cells Based on H2S-Involved Coordination Mechanism. Scientific Reports, 2016, 6, 21951.	1.6	33
49	Expanded Porous Metalâ€“Organic Frameworks by SCSC: Organic Building Units Modifying and Enhanced Gas-Adsorption Properties. Inorganic Chemistry, 2016, 55, 6420-6425.	1.9	33
50	Effect of Functional Groups on the Adsorption of Light Hydrocarbons in fmj-type Metalâ€“Organic Frameworks. Crystal Growth and Design, 2019, 19, 832-838.	1.4	33
51	Synthesis of Two Triarylboron-Functionalized Metalâ€“Organic Frameworks: In Situ Decarboxylic Reaction, Structure, Photoluminescence, and Gas Adsorption Properties. Inorganic Chemistry, 2014, 53, 11206-11212.	1.9	32
52	Optimizing crystallinity and porosity of hierarchical Ni(OH)₂ through conformal transformation of metalâ€“organic framework template for supercapacitor applications. CrystEngComm, 2018, 20, 4313-4320.	1.3	32
53	Efficient Asymmetric Biomimetic Aldol Reaction of Glycinates and Trifluoromethyl Ketones by Carbonyl Catalysis. Angewandte Chemie - International Edition, 2021, 60, 20166-20172.	7.2	32
54	Crystal Structure Diversities Based on 4,4â€²-(2,3,6,7-Tetramethoxyanthracene-9,10-diyl)dibenzoic Acid: From 2D Layer to 3D Net Framework. Crystal Growth and Design, 2012, 12, 6215-6222.	1.4	31

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55	Solvent-controlled Cd(ii) metalâ€“organic frameworks constructed from a tetrapodal silicon-based linker. RSC Advances, 2012, 2, 5543.	1.7	30
56	Syntheses, structures and characteristics of four metalâ€“organic coordination polymers based on 5-hydroxyisophthalic acid and N-containing auxiliary ligands. CrystEngComm, 2013, 15, 9578.	1.3	29
57	Investigation of the effect of pore size on gas uptake in two fsc metalâ€“organic frameworks. Chemical Communications, 2014, 50, 4911.	2.2	29
58	Stepwise Synthesis of Diverse Isomer MOFs via Metal-Ion Metathesis in a Controlled Single-Crystal-to-Single-Crystal Transformation. Crystal Growth and Design, 2017, 17, 4084-4089.	1.4	29
59	Solvent-induced framework-interpenetration isomers of Cu MOFs for efficient light hydrocarbon separation. Inorganic Chemistry Frontiers, 2018, 5, 2408-2412.	3.0	27
60	A Zn Metalâ€“Organic Framework with High Stability and Sorption Selectivity for CO2. Inorganic Chemistry, 2015, 54, 10587-10592.	1.9	26
61	Stepwise Construction of a Ag^I₉â€“Cu^{II}₄ Heterometallic Cluster Incorporating Two Unusual Vertexâ€Shared Trigonalâ€Bipyramidal Silver Polyhedra. Chemistry - an Asian Journal, 2012, 7, 1558-1561.	1.7	25
62	A non-interpenetrating lead-organic framework with large channels based on 1D tube-shaped SBUs. Chemical Communications, 2017, 53, 5694-5697.	2.2	25
63	Solution-processed single crystal microsheets of a novel dimeric phthalocyanine-involved triple-decker for high-performance ambipolar organic field effect transistors. Chemical Communications, 2017, 53, 12754-12757.	2.2	25
64	Crystal structures, topologies and luminescent properties of three Zn(<scp>ii</scp>)/Cd(<scp>ii</scp>) coordination networks based on naphthalene-2,6-dicarboxylic acid and different bis(imidazole) linkers. RSC Advances, 2015, 5, 16190-16198.	1.7	24
65	A â€œStronglyâ€•Self-Catenated Metalâ€“Organic Framework with the Highest Topological Density among 3,4-Coordinated Nets. Inorganic Chemistry, 2013, 52, 10732-10734.	1.9	23
66	Amphipathic Pentiptycene-Based Water-Resistant Cu-MOF for Efficient Oil/Water Separation. Inorganic Chemistry, 2019, 58, 5384-5387.	1.9	23
67	Fluorescent selectivity for small molecules of three Zn-MOFs with different topologies based on a tetracarboxylate ligand. RSC Advances, 2015, 5, 62982-62988.	1.7	22
68	Tuning the Dimensionality of Interpenetration in a Pair of Framework-Catenation Isomers To Achieve Selective Adsorption of CO₂ and Fluorescent Sensing of Metal Ions. Inorganic Chemistry, 2015, 54, 6084-6086.	1.9	22
69	Synthesis, structure, and properties of a 3D porous Zn(<scp>ii</scp>) MOF constructed from a terpyridine-based ligand. RSC Advances, 2016, 6, 16575-16580.	1.7	21
70	Terahertz Wave Generation From Noble Gas Plasmas Induced by a Wavelength-Tunable Femtosecond Laser. IEEE Transactions on Terahertz Science and Technology, 2018, 8, 299-304.	2.0	20
71	Crystal structures, topological analysis and luminescence properties of three coordination polymers based on a semi-rigid ligand and N-donor ligand linkers. New Journal of Chemistry, 2016, 40, 5957-5965.	1.4	19
72	A 2D porous pentiptycene-based MOF for efficient detection of Ba²⁺ and selective adsorption of dyes from water. Inorganic Chemistry Frontiers, 2018, 5, 1314-1320.	3.0	19

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73	Uncovering Structural Opportunities for Zirconium Metalâ€“Organic Frameworks via Linker Desymmetrization. Advanced Science, 2019, 6, 1901855.	5.6	19
74	A phase feature extraction technique for terahertz reflection spectroscopy. Applied Physics Letters, 2008, 92, 221106.	1.5	18
75	Rational Design and Synthesis of Hexanuclear Rare Earth the-a Metalâ€“Organic Frameworks Platform Based on RE₆O₄(OH)₄(COO)₈ Clusters. Crystal Growth and Design, 2019, 19, 1509-1513.	1.4	18
76	Optical property and spectroscopy studies on the explosive 2,4,6-trinitro-1,3,5-trihydroxybenzene in the terahertz range. Applied Physics Letters, 2008, 92, .	1.5	17
77	Structural and property comparison between the diâ€piperidinylâ€and diâ€pyrrolidinylâ€substituted perylene tetracarboxylic diimides. Journal of Physical Organic Chemistry, 2011, 24, 621-629.	0.9	17
78	Solvent modulated assembly of two Zn metalâ€“organic frameworks: syntheses, luminescence, and gas adsorption properties. CrystEngComm, 2015, 17, 6591-6597.	1.3	16
79	Dielectric and Lattice Vibrational Spectra of Cu₂O Hollow Spheres in the Range of 1â€“10 THz. Journal of Physical Chemistry C, 2011, 115, 10333-10337.	1.5	15
80	C_{3i}â€Symmetric Octanuclear Cadmium Cages: Doubleâ€Anionâ€Templated Synthesis, Formation Mechanism, and Properties. Chemistry - A European Journal, 2012, 18, 16525-16530.	1.7	15
81	A luminescent ytterbium(III)-organic framework for highly selective sensing of 2,4,6-trinitrophenol. Journal of Solid State Chemistry, 2018, 262, 186-190.	1.4	15
82	Fabrication of (4, 10) and (4, 12)-Connected Multifunctional Zirconium Metalâ€“Organic Frameworks for the Targeted Adsorption of a Guest Molecule. Inorganic Chemistry, 2020, 59, 695-704.	1.9	15
83	Two novel isostructural Ln (III) 3D frameworks supported by 3,6-dibromobenzene-1,2,4,5-tetracarboxylic acid and in situ generated oxalate: Syntheses, characterization and photoluminescent property. Inorganic Chemistry Communication, 2012, 26, 51-55.	1.8	14
84	Anion-controlled formation of two silver lamella frameworks based on in situ ligand reaction. CrystEngComm, 2013, 15, 8877.	1.3	14
85	An imidazole functionalized copper(II)â€organic framework for highly selective sensing of picric acid and metal ions in water. Applied Organometallic Chemistry, 2020, 34, e5803.	1.7	14
86	Construction of hexanuclear Ce(III) metalâ€porphyrin frameworks through linker induce strategy for CO2 capture and conversion. Catalysis Today, 2021, 374, 38-43.	2.2	14
87	Flexible Zirconium MOFs as Bromineâ€Nanocontainers for Bromination Reactions under Ambient Conditions. Angewandte Chemie, 2017, 129, 14814-14818.	1.6	13
88	Phase characterization in broadband THz wave detection through field-induced second harmonic generation. Optics Express, 2012, 20, 75.	1.7	12
89	Syntheses, Crystal Structures, and Properties of Two 2-Fold Interpenetrating Metalâ€“Organic Frameworks Based on a Trigonal Rigid Ligand. Crystal Growth and Design, 2014, 14, 6521-6527.	1.4	12
90	Excitation-wavelength-dependent terahertz wave modulation via preformed air plasma. Applied Physics Letters, 2018, 112, .	1.5	12

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91	Post-Synthetic Modification of Zirconium Metalâ€“Organic Frameworks for Adsorption and Separation of Light Hydrocarbons. Crystal Growth and Design, 2020, 20, 4882-4885.	1.4	12
92	Metalâ€Ion Metathesis and Properties of Triarylboronâ€Functionalized Metalâ€“Organic Frameworks. Chemistry - an Asian Journal, 2015, 10, 1535-1540.	1.7	10
93	Syntheses, Crystal Structures, and Properties of Four Metalâ€“Organic Complexes Based on 1,4,5,6,7,7-Hexachlorobicyclo[2.2.1]hept-5-ene-2,3-dicarboxylic Acid. Crystal Growth and Design, 2015, 15, 4198-4205.	1.4	10
94	Ultrahigh Modulation Enhancement in All-Optical Si-Based THz Modulators Integrated with Gold Nanobipyramids. Nano Letters, 2022, 22, 1541-1548.	4.5	9
95	Synthesis of a Difunctionalized Pillar[5]arene with Hydroxyl and Amino Groups at A1/A2 Positions. European Journal of Organic Chemistry, 2019, 2019, 2508-2512.	1.2	8
96	High-Îº Polyimide-Based Dielectrics by Introducing a Functionalized Metalâ€“Organic Framework. Inorganic Chemistry, 2022, 61, 3412-3419.	1.9	8
97	Two birds with one stone: Self-assembly of metalâ€“organic coordination complexes with discrete metallamacrocycle and 1D zigzag chain based on a flexible dicarboxylate ligand. Inorganic Chemistry Communication, 2013, 28, 75-80.	1.8	7
98	Crystal structure and temperature-dependent fluorescent property of a 2D cadmium (II) complex based on 3,6-dibromobenzene-1,2,4,5-tetracarboxylic acid. Journal of Molecular Structure, 2013, 1038, 73-77.	1.8	7
99	Four novel Co(II) metal-organic frameworks based on semi-rigid ligand and their secondary building units transformation. Journal of Molecular Structure, 2019, 1197, 87-95.	1.8	7
100	Synthesis, structure, and magnetism of three manganese-organic framework with PtS topology. Science China Chemistry, 2014, 57, 1507-1513.	4.2	6
101	Excitation-wavelength scaling of terahertz radiation in alkali vapor plasmas. Applied Physics Letters, 2017, 111, .	1.5	6
102	High-selectivity Detection of 2,4,6-Trinitrophenol Based on Fluorescent Mg-MOF-74 in Ethanol Solution. Chemical Research in Chinese Universities, 2018, 34, 175-179.	1.3	6
103	Wavelength Scaling of Terahertz Wave Absorption via Preformed Air Plasma. IEEE Transactions on Terahertz Science and Technology, 2016, 6, 846-850.	2.0	5
104	Halogen Bonding in the Assembly of a 1D Cadmium(II) Polymer Based on Chlorendic Acid (HET). Zeitschrift Fur Anorganische Und Allgemeine Chemie, 2013, 639, 1269-1273.	0.6	4
105	Molecular Pivotâ€Hinge Installation to Evolve Topology in Rareâ€Earth Metalâ€“Organic Frameworks. Angewandte Chemie, 2019, 131, 16835-16843.	1.6	4
106	Efficient Asymmetric Biomimetic Aldol Reaction of Glycinates and Trifluoromethyl Ketones by Carbonyl Catalysis. Angewandte Chemie, 2021, 133, 20328-20334.	1.6	4
107	Synthesis, Structures, and Fluorescent Properties of Three Cobalt-Based Coordination Polymers with a Rigid Tripodal Carboxylate Ligand. Zeitschrift Fur Anorganische Und Allgemeine Chemie, 2016, 642, 31-35.	0.6	3
108	A one-dimensional coordination polymer based on a di-Schiff base supported trinuclear Cu^{II}subunit. Acta Crystallographica Section C: Crystal Structure Communications, 2012, 68, m97-m99.	0.4	2

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109	Synthesis, Structure, and Luminescent Properties of Three Coordination Compounds Based on in situ Generated Tetrazolate and Carboxylate Ligands. Zeitschrift Fur Anorganische Und Allgemeine Chemie, 2014, 640, 1408-1412.	0.6	1
110	Enhanced THz-to-IR emission from gas-surrounded metallic nanostructures by femtosecond laser irradiation. Optics Communications, 2016, 381, 414-417.	1.0	1
111	Terahertz Wave Modulation by Pre-plasma Using Different Laser Wavelength. Journal of Infrared, Millimeter, and Terahertz Waves, 2019, 40, 962-970.	1.2	1
112	Intense and ultra-broadband Terahertz generation from metal foil. , 2013, , .		0
113	Terahertz wave absorption via femtosecond laser-filament concatenation. Optical Engineering, 2015, 54, 046104.	0.5	0
114	Modulation of terahertz wave based on a preionized plasma. , 2019, , .		0
115	Metalâ€“Organic Frameworks: Uncovering Structural Opportunities for Zirconium Metalâ€“Organic Frameworks via Linker Desymmetrization (Adv. Sci. 23/2019). Advanced Science, 2019, 6, 1970141.	5.6	0
116	Frontispiz: Efficient Asymmetric Biomimetic Aldol Reaction of Glycinates and Trifluoromethyl Ketones by Carbonyl Catalysis. Angewandte Chemie, 2021, 133, .	1.6	0
117	Frontispiece: Efficient Asymmetric Biomimetic Aldol Reaction of Glycinates and Trifluoromethyl Ketones by Carbonyl Catalysis. Angewandte Chemie - International Edition, 2021, 60, .	7.2	0
118	Ferrocene Induced Perpetual Recovery on All Elemental Defects in Perovskite Solar Cells. Angewandte Chemie, 0, , .	1.6	0