Kecheng Jie

List of Publications by Year
in descending order

69 papers	5,508 citations	87843 38 h-index	95218 68 g-index
70 all docs	70 docs citations	70 times ranked	5053 citing authors

#	Article	IF	Citations
1	Supramolecular Amphiphiles Based on Hostâ€“Guest Molecular Recognition Motifs. Chemical Reviews, 2015, 115, 7240-7303.	23.0	869
2	Nonporous Adaptive Crystals of Pillararenes. Accounts of Chemical Research, 2018, 51, 2064-2072.	7.6	364
3	Nanoparticles with Near-Infrared Emission Enhanced by Pillararene-Based Molecular Recognition in Water. Journal of the American Chemical Society, 2016, 138, 80-83.	6.6	278
4	Reversible Iodine Capture by Nonporous Pillar[6]arene Crystals. Journal of the American Chemical Society, 2017, 139, 15320-15323.	6.6	230
5	Entropy-stabilized metal oxide solid solutions as CO oxidation catalysts with high-temperature stability. Journal of Materials Chemistry A, 2018, 6, 11129-11133.	5.2	196
6	Styrene Purification by Guest-Induced Restructuring of Pillar[6]arene. Journal of the American Chemical Society, 2017, 139, 2908-2911.	6.6	191
7	Near-Ideal Xylene Selectivity in Adaptive Molecular Pillar[n]arene Crystals. Journal of the American Chemical Society, 2018, 140, 6921-6930.	6.6	191
8	CO₂-Responsive Pillar[5]arene-Based Molecular Recognition in Water: Establishment and Application in Gas-Controlled Self-Assembly and Release. Journal of the American Chemical Society, 2015, 137, 10472-10475.	6.6	188
9	Macrocyclic amphiphiles. Chemical Society Reviews, 2015, 44, 3568-3587.	18.7	188
10	Vapochromic crystals: understanding vapochromism from the perspective of crystal engineering. Chemical Society Reviews, 2020, 49, 1517-1544.	18.7	166
11	Mechanochemical Synthesis of High Entropy Oxide Materials under Ambient Conditions: Dispersion of Catalysts via Entropy Maximization. , 2019, 1, 83-88.		143
12	Linear Positional Isomer Sorting in Nonporous Adaptive Crystals of a Pillar[5]arene. Journal of the American Chemical Society, 2018, 140, 3190-3193.	6.6	132
13	Supramolecular Construction of Multifluorescent Gels: Interfacial Assembly of Discrete Fluorescent Gels through Multiple Hydrogen Bonding. Advanced Materials, 2015, 27, 8062-8066.	11.1	118
14	Separation of Aromatics/Cyclic Aliphatics by Nonporous Adaptive Pillararene Crystals. Angewandte Chemie - International Edition, 2018, 57, 12845-12849.	7.2	116
15	Supramolecularâ€Macrocycleâ€Based Crystalline Organic Materials. Advanced Materials, 2020, 32, e1904824.	11.1	110
16	Entropyâ€Driven Mechanochemical Synthesis of Polymetallic Zeolitic Imidazolate Frameworks for CO₂ Fixation. Angewandte Chemie - International Edition, 2019, 58, 5018-5022.	7.2	107
17	Transforming Porous Organic Cages into Porous Ionic Liquids via a Supramolecular Complexation Strategy. Angewandte Chemie - International Edition, 2020, 59, 2268-2272.	7.2	101
18	Mechanochemical synthesis of pillar[5]quinone derived multi-microporous organic polymers for radioactive organic iodide capture and storage. Nature Communications, 2020, 11, 1086.	5.8	87

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19	Post-Synthetic Modification of Nonporous Adaptive Crystals of Pillar[4]arene[1]quinone by Capturing Vaporized Amines. Journal of the American Chemical Society, 2018, 140, 15070-15079.	6.6	86
20	Dihalobenzene Shape Sorting by Nonporous Adaptive Crystals of Perbromoethylated Pillararenes. Angewandte Chemie - International Edition, 2019, 58, 3981-3985.	7.2	86
21	Cisâ€“Trans Selectivity of Haloalkene Isomers in Nonporous Adaptive Pillararene Crystals. Journal of the American Chemical Society, 2019, 141, 11847-11851.	6.6	80
22	Surpassing Robeson Upper Limit for CO2/N2 Separation with Fluorinated Carbon Molecular Sieve Membranes. CheM, 2020, 6, 631-645.	5.8	73
23	Formation of fluorescent supramolecular polymeric assemblies via orthogonal pillar[5]arene-based molecular recognition and metal ion coordination. Chemical Communications, 2015, 51, 4503-4506.	2.2	72
24	An ultrastable heterostructured oxide catalyst based on high-entropy materials: A new strategy toward catalyst stabilization via synergistic interfacial interaction. Applied Catalysis B: Environmental, 2020, 276, 119155.	10.8	72
25	Mechanochemical Nonhydrolytic Solâ€“Gel-Strategy for the Production of Mesoporous Multimetallic Oxides. Chemistry of Materials, 2019, 31, 5529-5536.	3.2	65
26	Highly Selective Separation of Minimumâ€Boiling Azeotrope Toluene/Pyridine by Nonporous Adaptive Crystals of Cucurbit[6]uril. Angewandte Chemie - International Edition, 2020, 59, 5355-5358.	7.2	60
27	A double supramolecular crosslinked polymer gel exhibiting macroscale expansion and contraction behavior and multistimuli responsiveness. Polymer Chemistry, 2015, 6, 1912-1917.	1.9	56
28	Facile Synthesis of Highly Porous Metal Oxides by Mechanochemical Nanocasting. Chemistry of Materials, 2018, 30, 2924-2929.	3.2	54
29	Aliphatic Aldehyde Detection and Adsorption by Nonporous Adaptive Pillar[4]arene[1]quinone Crystals with Vapochromic Behavior. ACS Applied Materials & Interfaces, 2018, 10, 23147-23153.	4.0	53
30	Highly Selective Removal of Trace Isomers by Nonporous Adaptive Pillararene Crystals for Chlorobutane Purification. Journal of the American Chemical Society, 2020, 142, 6957-6961.	6.6	53
31	Selective Separation of Methylfuran and Dimethylfuran by Nonporous Adaptive Crystals of Pillararenes. Journal of the American Chemical Society, 2020, 142, 19722-19730.	6.6	48
32	Influence of fluorination on CO₂adsorption in materials derived from fluorinated covalent triazine framework precursors. Journal of Materials Chemistry A, 2019, 7, 17277-17282.	5.2	47
33	A redox-responsive selenium-containing pillar[5]arene-based macrocyclic amphiphile: synthesis, controllable self-assembly in water, and application in controlled release. Chemical Communications, 2017, 53, 8364-8367.	2.2	45
34	A CO2-responsive pillar[5]arene: synthesis and self-assembly in water. Chemical Communications, 2014, 50, 5503.	2.2	43
35	Transformation of Nonporous Adaptive Pillar[4]arene[1]quinone Crystals into Fluorescent Crystals via Multi-Step Solidâ€“Vapor Postsynthetic Modification for Fluorescence Turn-on Sensing of Ethylenediamine. Journal of the American Chemical Society, 2020, 142, 15560-15568.	6.6	43
36	Engineering Permanent Porosity into Liquids. Advanced Materials, 2021, 33, e2005745.	11.1	43

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37	A Î³-ray and dual redox-responsive supramolecular polymer constructed by a selenium containing pillar[5]arene dimer and a neutral guest. Chemical Communications, 2015, 51, 11112-11114.	2.2	40
38	Separation of Aromatics/Cyclic Aliphatics by Nonporous Adaptive Pillararene Crystals. Angewandte Chemie, 2018, 130, 13027-13031.	1.6	39
39	Controlled synthesis of hierarchical ZSM-5 for catalytic fast pyrolysis of cellulose to aromatics. Journal of Materials Chemistry A, 2018, 6, 21178-21185.	5.2	38
40	A Cu²⁺ specific metallohydrogel: preparation, multi-responsiveness and pillar[5]arene-induced morphology transformation. Chemical Communications, 2015, 51, 8461-8464.	2.2	37
41	Reversible assembly of silver nanoparticles driven by hostâ€“guest interactions based on water-soluble pillar[n]arenes. Chemical Communications, 2014, 50, 5072-5074.	2.2	32
42	Topotactic Synthesis of Phosphabenzeneâ€Functionalized Porous Organic Polymers: Efficient Ligands in CO₂Conversion. Angewandte Chemie - International Edition, 2019, 58, 13763-13767.	7.2	32
43	A dual redox-responsive supramolecular amphiphile fabricated by selenium-containing pillar[6]arene-based molecular recognition. Chemical Communications, 2018, 54, 12856-12859.	2.2	31
44	Water-soluble pillar[6]arene stabilized silver nanoparticles: preparation and application in amino acid detection. Tetrahedron Letters, 2014, 55, 3195-3199.	0.7	29
45	A redox-responsive supramolecular amphiphile fabricated by selenium-containing pillar[5]arene-based hostâ€“guest recognition. Organic Chemistry Frontiers, 2017, 4, 2387-2391.	2.3	28
46	A benzoquinone-derived porous hydrophenazine framework for efficient and reversible iodine capture. Chemical Communications, 2018, 54, 12706-12709.	2.2	28
47	Entropyâ€Driven Mechanochemical Synthesis of Polymetallic Zeolitic Imidazolate Frameworks for CO₂ Fixation. Angewandte Chemie, 2019, 131, 5072-5076.	1.6	27
48	A Water-Soluble Cyclotriveratrylene-Based Supra-amphiphile: Synthesis, pH-Responsive Self-Assembly in Water, and Its Application in Controlled Drug Release. Organic Letters, 2016, 18, 2910-2913.	2.4	24
49	Dihalobenzene Shape Sorting by Nonporous Adaptive Crystals of Perbromoethylated Pillararenes. Angewandte Chemie, 2019, 131, 4021-4025.	1.6	24
50	From Highly Purified Boron Nitride to Boron Nitrideâ€Based Heterostructures: An Inorganic Precursorâ€Based Strategy. Advanced Functional Materials, 2019, 29, 1906284.	7.8	22
51	Transforming Porous Organic Cages into Porous Ionic Liquids via a Supramolecular Complexation Strategy. Angewandte Chemie, 2020, 132, 2288-2292.	1.6	21
52	A bifunctional zeolitic porous liquid with incompatible Lewis pairs for antagonistic cascade catalysis. CheM, 2021, 7, 3340-3358.	5.8	21
53	Taco complex-templated highly regio- and stereo-selective photodimerization of a coumarin-containing crown ether. Chemical Communications, 2017, 53, 1688-1691.	2.2	17
54	CO₂-Enhanced Bola-Type Supramolecular Amphiphile Constructed from Pillar[5]arene-Based Hostâ€“Guest Recognition. Organic Letters, 2018, 20, 4888-4892.	2.4	17

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55	A pH-responsive amphiphilic supramolecular graft copolymer constructed by crown ether based molecular recognition. Polymer Chemistry, 2015, 6, 218-222.	1.9	16
56	Cyclic Ether Contaminant Removal from Water Using Nonporous Adaptive Pillararene Crystals via Host-Guest Complexation at the Solid-Solution Interface. Research, 2019, 2019, 5406365.	2.8	16
57	Synthesis of Composition-Tunable Syngas from Efficiently Electrochemical Conversion of CO₂ over AuCu/CNT Bimetallic Catalyst. Industrial & Engineering Chemistry Research, 2019, 58, 15425-15431.	1.8	14
58	Separation of pyrrolidine from tetrahydrofuran by using pillar[6]arene-based nonporous adaptive crystals. Chemical Science, 2022, 13, 7536-7540.	3.7	14
59	Highly Selective Separation of Minimumâ€Boiling Azeotrope Toluene/Pyridine by Nonporous Adaptive Crystals of Cucurbit[6]uril. Angewandte Chemie, 2020, 132, 5393-5396.	1.6	13
60	Heterogeneity of polyoxometalates by confining within ordered mesopores: toward efficient oxidation of benzene to phenol. Catalysis Science and Technology, 2019, 9, 2173-2179.	2.1	12
61	A triply-responsive supramolecular amphiphile fabricated by a thermal-responsive pillar[5]arene-based hostâ€“guest recognition motif. Tetrahedron Letters, 2017, 58, 2217-2222.	0.7	10
62	A cavity extended water-soluble resorcin[4]arene: synthesis, pH-controlled complexation with paraquat, and application in controllable self-assembly. New Journal of Chemistry, 2017, 41, 916-919.	1.4	9
63	A succinct strategy for construction of nanoporous ionic organic networks from a pyrylium intermediate. Chemical Communications, 2019, 55, 13450-13453.	2.2	9
64	Facile benzene reduction promoted by a synergistically coupled Cuâ€“Coâ€“Ce ternary mixed oxide. Chemical Science, 2020, 11, 5766-5771.	3.7	8
65	Applications of pillararene NACs in adsorption and separation. Scientia Sinica Chimica, 2019, 49, 832-843.	0.2	8
66	An Ag2O-responsive [2]pseudorotaxane based on the pillar[5]arene/bis(imidazolium) dication molecular recognition motif. Tetrahedron Letters, 2015, 56, 2091-2093.	0.7	7
67	Clip[4]arene: synthesis, rigid acyclic C-shaped structure, and redox-controlled hostâ€“guest complexation. Tetrahedron Letters, 2018, 59, 1204-1207.	0.7	5
68	Topotactic Synthesis of Phosphabenzeneâ€Functionalized Porous Organic Polymers: Efficient Ligands in CO 2 Conversion. Angewandte Chemie, 2019, 131, 13901-13905.	1.6	3
69	Porous Liquids: Engineering Permanent Porosity into Liquids (Adv. Mater. 18/2021). Advanced Materials, 2021, 33, 2170136.	11.1	3