

# Hengquan Yang

## List of Publications by Year in descending order

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101  
papers

5,833  
citations

57758

44  
h-index

79698

73  
g-index

108  
all docs

108  
docs citations

108  
times ranked

5674  
citing authors

#	ARTICLE	IF	CITATIONS
1	Oxygen vacancies in Co <sub>3</sub> O <sub>4</sub> promote CO <sub>2</sub> photoreduction. Applied Catalysis B: Environmental, 2022, 300, 120729.	20.2	105
2	Pickering emulsion droplet-based biomimetic microreactors for continuous flow cascade reactions. Nature Communications, 2022, 13, 475.	12.8	47
3	Nitrogen vacancies in polymeric carbon nitrides promote CO <sub>2</sub> photoreduction. Journal of Catalysis, 2022, 409, 12-23.	6.2	23
4	Pickering Droplet-Derived Silica Microreactors with a Biomimetic Aqueous Environment for Continuous-Flow Enzymatic Reactions. ACS Sustainable Chemistry and Engineering, 2022, 10, 662-670.	6.7	5
5	Light-Induced Synthesis of Oxygen-Vacancy-Functionalized Ni(OH) <sub>2</sub> Nanosheets for Highly Selective CO <sub>2</sub> Reduction. ChemSusChem, 2022, 15, .	6.8	13
6	Hydrogen-Bonded Aggregates Featuring $\pi$ - $\pi^*$ Electronic Transition for Efficient Visible-Light-Responsive Photocatalysis. ACS Catalysis, 2022, 12, 6276-6284.	11.2	11
7	Tri-templating Synthesis of Multilevel Mesoporous Silica Microspheres with a Complex Interior Structure for Efficient CO <sub>2</sub> Capture and Catalysis. Langmuir, 2022, 38, 9421-9430.	3.5	3
8	Deep eutectic solvents as non-traditionally multifunctional media for the desulfurization process of fuel oil. Physical Chemistry Chemical Physics, 2021, 23, 785-805.	2.8	21
9	Mesoporous RhRu Nanosponges with Enhanced Water Dissociation toward Efficient Alkaline Hydrogen Evolution. ACS Applied Materials & Interfaces, 2021, 13, 5052-5060.	8.0	30
10	One-Step Synthesis of Solid-Liquid Composite Microsphere for CO <sub>2</sub> Capture. ACS Applied Materials & Interfaces, 2021, 13, 5814-5822.	8.0	14
11	Highly Selective Catalysis at the Liquid-Liquid Interface Microregion. ACS Catalysis, 2021, 11, 1485-1494.	11.2	34
12	A semi-crystalline carbonaceous structure as a wide-spectrum-responsive photocatalyst for efficient redox catalysis. Chemical Communications, 2021, 57, 5086-5089.	4.1	4
13	A liquid marble method for synthesizing large-sized carbon microspheres with controlled interior structures. Carbon, 2021, 179, 541-553.	10.3	3
14	Tandem Catalysis of Direct CO <sub>2</sub> Hydrogenation to Higher Alcohols. ACS Catalysis, 2021, 11, 8978-8984.	11.2	42
15	Dual metal nanoparticles within multicompartimentalized mesoporous organosilicas for efficient sequential hydrogenation. Nature Communications, 2021, 12, 4968.	12.8	43
16	Metal-Nanoparticles-Loaded Ultrathin g-C <sub>3</sub> N <sub>4</sub> Nanosheets at Liquid-Liquid Interfaces for Enhanced Biphasic Catalysis. ACS Applied Materials & Interfaces, 2021, 13, 47236-47243.	8.0	20
17	Selectively constructing nitrogen vacancy in carbon nitrides for efficient syngas production with visible light. Applied Catalysis B: Environmental, 2021, 297, 120496.	20.2	31
18	Pickering-Droplet-Derived MOF Microreactors for Continuous-Flow Biocatalysis with Size Selectivity. Journal of the American Chemical Society, 2021, 143, 16641-16652.	13.7	45

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19	Widely Adaptable Oil-in-Water Gel Emulsions Stabilized by an Amphiphilic Hydrogelator Derived from Dehydroabiatic Acid. <i>Angewandte Chemie</i> , 2020, 132, 647-651.	2.0	7
20	Widely Adaptable Oil-in-Water Gel Emulsions Stabilized by an Amphiphilic Hydrogelator Derived from Dehydroabiatic Acid. <i>Angewandte Chemie - International Edition</i> , 2020, 59, 637-641.	13.8	33
21	Hydrophobic zeolite modification for in situ peroxide formation in methane oxidation to methanol. <i>Science</i> , 2020, 367, 193-197.	12.6	470
22	Rational electronic control of carbon dioxide reduction over cobalt oxide. <i>Journal of Catalysis</i> , 2020, 387, 119-128.	6.2	20
23	Reversible Switching of the Amphiphilicity of Organic-Inorganic Hybrids by Adsorption-Desorption Manipulation. <i>Journal of Physical Chemistry C</i> , 2019, 123, 21097-21102.	3.1	1
24	Pickering emulsion droplets hosting ionic liquid catalysts for continuous-flow cyanosilylation reaction. <i>Green Chemistry</i> , 2019, 21, 627-633.	9.0	34
25	Biphasic biocatalysis using a CO <sub>2</sub> -switchable Pickering emulsion. <i>Green Chemistry</i> , 2019, 21, 4062-4068.	9.0	70
26	Liquid marble-derived solid-liquid hybrid superparticles for CO <sub>2</sub> capture. <i>Nature Communications</i> , 2019, 10, 1854.	12.8	52
27	One-step fabrication of Ni-embedded hierarchically-porous carbon microspheres for levulinic acid hydrogenation. <i>Chemical Engineering Journal</i> , 2019, 369, 386-393.	12.7	53
28	Microspherical nitrogen-doped carbon nanotube assembly derived from Pickering droplets. <i>Carbon</i> , 2019, 148, 124-133.	10.3	12
29	Pickering Emulsion-Derived Liquid-Solid Hybrid Catalyst for Bridging Homogeneous and Heterogeneous Catalysis. <i>Journal of the American Chemical Society</i> , 2019, 141, 5220-5230.	13.7	93
30	Incorporation of flexible ionic polymers into a Lewis acid-functionalized mesoporous silica for cooperative conversion of CO <sub>2</sub> to cyclic carbonates. <i>Chinese Journal of Catalysis</i> , 2019, 40, 1874-1883.	14.0	18
31	A pH-responsive TiO <sub>2</sub> -based Pickering emulsion system for in situ catalyst recycling. <i>Chinese Chemical Letters</i> , 2018, 29, 778-782.	9.0	28
32	Enhancing reaction rate in a Pickering emulsion system with natural magnetotactic bacteria as nanoscale magnetic stirring bars. <i>Chemical Science</i> , 2018, 9, 2575-2580.	7.4	34
33	Facile Preparation of Ag-Coated Superhydrophobic/Superoleophilic Mesh for Efficient Oil/Water Separation with Excellent Corrosion Resistance. <i>Langmuir</i> , 2018, 34, 6922-6929.	3.5	59
34	Construction of a chiral macromolecular catalyst in hollow silica nanoreactors for efficient and recyclable asymmetric catalysis. <i>Catalysis Science and Technology</i> , 2018, 8, 2304-2311.	4.1	7
35	A reinforced Pickering emulsion for cascade reactions. <i>Chemical Communications</i> , 2018, 54, 13014-13017.	4.1	25
36	Iodide-mediated templating synthesis of highly porous rhodium nanospheres for enhanced dehydrogenation of ammonia borane. <i>Journal of Materials Chemistry A</i> , 2018, 6, 24166-24174.	10.3	26

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37	Tuning Biphasic Catalysis Reaction with a Pickering Emulsion Strategy Exemplified by Selective Hydrogenation of Benzene. <i>ChemCatChem</i> , 2018, 10, 5224-5230.	3.7	33
38	Palladium/Graphitic Carbon Nitride ( $g\text{-}C_3N_4$ ) Stabilized Emulsion Microreactor as a Store for Hydrogen from Ammonia Borane for Use in Alkene Hydrogenation. <i>Angewandte Chemie</i> , 2018, 130, 15073-15077.	2.0	18
39	Janus N-Doped Carbon@Silica Hollow Spheres as Multifunctional Amphiphilic Nanoreactors for Base-Free Aerobic Oxidation of Alcohols in Water. <i>ACS Applied Materials &amp; Interfaces</i> , 2018, 10, 33474-33483.	8.0	65
40	Fabrication of multi-compartmentalized mesoporous silica microspheres through a Pickering droplet strategy for enhanced CO <sub>2</sub> capture and catalysis. <i>NPG Asia Materials</i> , 2018, 10, 899-911.	7.9	34
41	Palladium/Graphitic Carbon Nitride ( $g\text{-}C_3N_4$ ) Stabilized Emulsion Microreactor as a Store for Hydrogen from Ammonia Borane for Use in Alkene Hydrogenation. <i>Angewandte Chemie - International Edition</i> , 2018, 57, 14857-14861.	13.8	135
42	Surfactant Assembly within Pickering Emulsion Droplets for Fabrication of Interior-Structured Mesoporous Carbon Microspheres. <i>Angewandte Chemie</i> , 2018, 130, 11065-11070.	2.0	22
43	Surfactant Assembly within Pickering Emulsion Droplets for Fabrication of Interior-Structured Mesoporous Carbon Microspheres. <i>Angewandte Chemie - International Edition</i> , 2018, 57, 10899-10904.	13.8	65
44	Plasmonic Janus hybrids for the detection of small metabolites. <i>Journal of Materials Chemistry B</i> , 2018, 6, 7280-7287.	5.8	40
45	Janus mesoporous silica nanosheets with perpendicular mesochannels: affording highly accessible reaction interfaces for enhanced biphasic catalysis. <i>Chemical Communications</i> , 2018, 54, 10455-10458.	4.1	52
46	Direct Observation of Carbon Nitride-Stabilized Pickering Emulsions. <i>Langmuir</i> , 2018, 34, 10135-10143.	3.5	25
47	Tuning the Interfacial Activity of Mesoporous Silicas for Biphasic Interface Catalysis Reactions. <i>ACS Applied Materials &amp; Interfaces</i> , 2017, 9, 8403-8412.	8.0	73
48	Growing a hydrophilic nanoporous shell on a hydrophobic catalyst interface for aqueous reactions with high reaction efficiency and in situ catalyst recycling. <i>Journal of Materials Chemistry A</i> , 2017, 5, 16162-16170.	10.3	37
49	Dumbbell-Shaped Bi-component Mesoporous Janus Solid Nanoparticles for Biphasic Interface Catalysis. <i>Angewandte Chemie</i> , 2017, 129, 8579-8583.	2.0	34
50	Dumbbell-Shaped Bi-component Mesoporous Janus Solid Nanoparticles for Biphasic Interface Catalysis. <i>Angewandte Chemie - International Edition</i> , 2017, 56, 8459-8463.	13.8	204
51	Positional immobilization of Pd nanoparticles and enzymes in hierarchical yolk-shell@shell nanoreactors for tandem catalysis. <i>Chemical Communications</i> , 2017, 53, 7780-7783.	4.1	52
52	Flow Pickering Emulsion Interfaces Enhance Catalysis Efficiency and Selectivity for Cyclization of Citronellal. <i>ChemSusChem</i> , 2017, 10, 1989-1995.	6.8	37
53	In situ mosaic strategy generated Co-based N-doped mesoporous carbon for highly selective hydrogenation of nitroaromatics. <i>Journal of Catalysis</i> , 2017, 348, 212-222.	6.2	100
54	N-doped porous carbons with exceptionally high CO <sub>2</sub> selectivity for CO <sub>2</sub> capture. <i>Carbon</i> , 2017, 114, 473-481.	10.3	148

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55	Semipermeable Organic-Inorganic Hybrid Microreactors for Highly Efficient and Size-Selective Asymmetric Catalysis. <i>ACS Catalysis</i> , 2017, 7, 6711-6718.	11.2	25
56	Synthesis of pH-Responsive Inorganic Janus Nanoparticles and Experimental Investigation of the Stability of Their Pickering Emulsions. <i>Langmuir</i> , 2017, 33, 10283-10290.	3.5	56
57	Rationally Turning the Interface Activity of Mesoporous Silicas for Preparing Pickering Foam and "Dry Water". <i>Langmuir</i> , 2017, 33, 9025-9033.	3.5	15
58	Ionic Liquid Droplet Microreactor for Catalysis Reactions Not at Equilibrium. <i>Journal of the American Chemical Society</i> , 2017, 139, 17387-17396.	13.7	130
59	N-doped ordered mesoporous carbon as a multifunctional support of ultrafine Pt nanoparticles for hydrogenation of nitroarenes. <i>Chinese Journal of Catalysis</i> , 2017, 38, 1252-1260.	14.0	34
60	Pickering Emulsion as an Efficient Platform for Enzymatic Reactions without Stirring. <i>ACS Sustainable Chemistry and Engineering</i> , 2016, 4, 6838-6843.	6.7	107
61	Compartmentalized Droplets for Continuous Flow Liquid-Liquid Interface Catalysis. <i>Journal of the American Chemical Society</i> , 2016, 138, 10173-10183.	13.7	178
62	In Situ Surface Engineering of Mesoporous Silica Generates Interfacial Activity and Catalytic Acceleration Effect. <i>ACS Omega</i> , 2016, 1, 930-938.	3.5	10
63	Compartmentalization of Incompatible Reagents within Pickering Emulsion Droplets for One-Pot Cascade Reactions. <i>Journal of the American Chemical Society</i> , 2015, 137, 1362-1371.	13.7	212
64	Encapsulation of Hoveyda-Grubbs <sup>2nd</sup> Catalyst within Yolk-Shell Structured Silica for Olefin Metathesis. <i>ACS Catalysis</i> , 2015, 5, 2225-2231.	11.2	26
65	A pH-switched Pickering emulsion catalytic system: high reaction efficiency and facile catalyst recycling. <i>Chemical Communications</i> , 2015, 51, 7333-7336.	4.1	68
66	pH-Responsive Gas-Water-Solid Interface for Multiphase Catalysis. <i>Journal of the American Chemical Society</i> , 2015, 137, 15015-15025.	13.7	105
67	Pd nanoparticles embedded in the outershell of a mesoporous core-shell catalyst for phenol hydrogenation in pure water. <i>RSC Advances</i> , 2015, 5, 102811-102817.	3.6	18
68	Multifunctional mesoporous silica-supported palladium nanoparticles for selective phenol hydrogenation in the aqueous phase. <i>Catalysis Science and Technology</i> , 2015, 5, 572-577.	4.1	27
69	Pickering Emulsion Inversion Strategy for Separating and Recycling Nanoparticle Catalysts. <i>ChemPhysChem</i> , 2014, 15, 841-848.	2.1	27
70	Tuning the wettability of mesoporous silica for enhancing the catalysis efficiency of aqueous reactions. <i>Chemical Communications</i> , 2014, 50, 10045-10048.	4.1	56
71	Micrometer-Scale Mixing with Pickering Emulsions: Biphasic Reactions without Stirring. <i>ChemSusChem</i> , 2014, 7, 391-396.	6.8	79
72	Recycling Nanoparticle Catalysts without Separation Based on a Pickering Emulsion/Organic Biphasic System. <i>ChemSusChem</i> , 2014, 7, 1888-1900.	6.8	37

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73	Surface Active Nanoparticles for Interfacial Catalysis. , 2014, , 1-17.		0
74	Pd nanoparticles confined in fluoro-functionalized yolk-shell-structured silica for olefin hydrogenation in water. Chinese Journal of Catalysis, 2013, 34, 1192-1200.	14.0	8
75	A Mesoporous Silica Nanocomposite Shuttle: pH-Triggered Phase Transfer between Oil and Water. Langmuir, 2013, 29, 6687-6696.	3.5	34
76	Encapsulation of an Olefin Metathesis Catalyst in the Nanocages of SBA-15: Facile Preparation, High Encapsulation Efficiency, and High Activity. ChemCatChem, 2013, 5, 2278-2287.	3.7	26
77	Hydrophobic Core/Hydrophilic Shell Structured Mesoporous Silica Nanospheres: Enhanced Adsorption of Organic Compounds from Water. Langmuir, 2013, 29, 1228-1237.	3.5	51
78	A Strategy for Separating and Recycling Solid Catalysts Based on the pH-Triggered Pickering Emulsion Inversion. Angewandte Chemie - International Edition, 2013, 52, 7455-7459.	13.8	197
79	A Fluorescence Turn-on Sensor for Cyanide Anion Based on Exciplex Signaling Mechanism. Chemistry Letters, 2012, 41, 518-520.	1.3	11
80	Hydrophobic core-hydrophilic shell-structured catalysts: a general strategy for improving the reaction rate in water. Chemical Communications, 2012, 48, 11217.	4.1	34
81	Encapsulation of a catalytically active core with a nanoporous shell: a new strategy for designing size-selective catalysts. Journal of Materials Chemistry, 2012, 22, 9069.	6.7	29
82	Magnetic core-shell-structured nanoporous organosilica microspheres for the Suzuki-Miyaura coupling of aryl chlorides: improved catalytic activity and facile catalyst recovery. Journal of Materials Chemistry, 2012, 22, 6639.	6.7	44
83	Controlled Synthesis of Au Nanoparticles in the Nanocages of SBA-16: Improved Activity and Enhanced Recyclability for the Oxidative Esterification of Alcohols. Journal of Physical Chemistry C, 2012, 116, 6512-6519.	3.1	74
84	Encapsulation of chiral Fe(salan) in nanocages with different microenvironments for asymmetric sulfide oxidation. Physical Chemistry Chemical Physics, 2011, 13, 2504-2511.	2.8	45
85	One-pot preparation of magnetic N-heterocyclic carbene-functionalized silica nanoparticles for the Suzuki-Miyaura coupling of aryl chlorides: improved activity and facile catalyst recovery. Green Chemistry, 2011, 13, 1352.	9.0	99
86	Rationally designed palladium complexes on a bulky N-heterocyclic carbene-functionalized organosilica: an efficient solid catalyst for the Suzuki-Miyaura coupling of challenging aryl chlorides. Green Chemistry, 2011, 13, 2939.	9.0	44
87	Synthesis of a ferrocene-containing ordered mesoporous organosilica and its catalytic activity. Journal of Porous Materials, 2010, 17, 643-649.	2.6	14
88	Three-dimensional cubic mesoporous materials with a built-in N-heterocyclic carbene for Suzuki-Miyaura coupling of aryl chlorides and C(sp <sup>3</sup> )-chlorides. Journal of Catalysis, 2010, 276, 123-133.	6.2	54
89	Palladium nanoparticles confined in the nanocages of SBA-16: Enhanced recyclability for the aerobic oxidation of alcohols in water. Journal of Molecular Catalysis A, 2010, 331, 78-85.	4.8	85
90	Enhancement of catalytic performance in asymmetric transfer hydrogenation by microenvironment engineering of the nanocage. Chemical Communications, 2010, 46, 8145.	4.1	60

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91	Mesoporous Ethaneâ€”Silicas Functionalized with a Bulky N-Heterocyclic Carbene for Suzukiâ€”Miyaura Coupling of Aryl Chlorides and Benzyl Chlorides. <i>Journal of Physical Chemistry C</i> , 2010, 114, 22221-22229.	3.1	48
92	Palladium-guanidine complex immobilized on SBA-16: a highly active and recyclable catalyst for Suzuki coupling and alcohol oxidation. <i>Green Chemistry</i> , 2010, 12, 441.	9.0	105
93	Hoveydaâ€”Grubbs catalyst confined in the nanocages of SBA-1: enhanced recyclability for olefin metathesis. <i>Chemical Communications</i> , 2010, 46, 8659.	4.1	55
94	The enantioselective cyanosilylation of aldehydes on a chiral VO(Salen) complex encapsulated in SBA-16. <i>Green Chemistry</i> , 2009, 11, 257-264.	9.0	76
95	N-Heterocyclic carbene palladium complex supported on ionic liquid-modified SBA-16: an efficient and highly recyclable catalyst for the Suzuki and Heck reactions. <i>Green Chemistry</i> , 2009, 11, 1184.	9.0	155
96	Asymmetric Catalysis with Metal Complexes in Nanoreactors. <i>Chemistry - an Asian Journal</i> , 2008, 3, 1214-1229.	3.3	79
97	Super-microporous organosilicas synthesized from well-defined nanobuilding units. <i>Journal of Materials Chemistry</i> , 2008, 18, 450-457.	6.7	35
98	Asymmetric reactions on chiral catalysts entrapped within a mesoporous cage. <i>Chemical Communications</i> , 2007, , 1086.	4.1	106
99	Enhanced Cooperative Activation Effect in the Hydrolytic Kinetic Resolution of Epoxides on [Co(salen)] Catalysts Confined in Nanocages. <i>Angewandte Chemie - International Edition</i> , 2007, 46, 6861-6865.	13.8	196
100	Influence of surfactants on the parameters of polylactide nanocapsules containing insulin. <i>Journal of Surfactants and Detergents</i> , 2005, 8, 353-358.	2.1	27
101	Synthesis and Characterization of Mesoporous Manganese Oxides. <i>Journal of Materials Synthesis and Processing</i> , 2002, 10, 297-302.	0.3	8