Chong Liu å^˜å²

List of Publications by Year
in descending order

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61 papers	3,563 citations	147801 31 h-index	133252 59 g-index
64 all docs	64 docs citations	64 times ranked	4915 citing authors

#	Article	IF	Citations
1	All-Inorganic CsPbI₂Br Perovskite Solar Cells with High Efficiency Exceeding 13%. Journal of the American Chemical Society, 2018, 140, 3825-3828.	13.7	505
2	Computational Approach to Molecular Catalysis by 3d Transition Metals: Challenges and Opportunities. Chemical Reviews, 2019, 119, 2453-2523.	47.7	260
3	Engineering of Transition Metal Catalysts Confined in Zeolites. Chemistry of Materials, 2018, 30, 3177-3198.	6.7	232
4	Structurally Reconstructed CsPbI₂Br Perovskite for Highly Stable and Squareâ€Centimeter Allâ€Inorganic Perovskite Solar Cells. Advanced Energy Materials, 2019, 9, 1803572.	19.5	192
5	Nonâ€Pincerâ€Type Manganese Complexes as Efficient Catalysts for the Hydrogenation of Esters. Angewandte Chemie - International Edition, 2017, 56, 7531-7534.	13.8	169
6	Thermodynamically Selfâ€Healing 1Dâ€“3D Hybrid Perovskite Solar Cells. Advanced Energy Materials, 2018, 8, 1703421.	19.5	158
7	Insights into the Dual Activation Mechanism Involving Bifunctional Cinchona Alkaloid Thiourea Organocatalysts: An NMR and DFT Study. Journal of Organic Chemistry, 2012, 77, 9813-9825.	3.2	136
8	Fabrication Strategy for Efficient 2D/3D Perovskite Solar Cells Enabled by Diffusion Passivation and Strain Compensation. Advanced Energy Materials, 2020, 10, 2002004.	19.5	97
9	â€œBottomâ€Upâ€•Embedding of the JÃ¸rgensenâ€“Hayashi Catalyst into a Chiral Porous Polymer for Highly Efficient Heterogeneous Asymmetric Organocatalysis. Chemistry - A European Journal, 2012, 18, 6718-6723.	3.3	92
10	Nature and Catalytic Role of Extraframework Aluminum in Faujasite Zeolite: A Theoretical Perspective. ACS Catalysis, 2015, 5, 7024-7033.	11.2	92
11	Tailoring C₆₀ for Efficient Inorganic CsPbI₂Br Perovskite Solar Cells and Modules. Advanced Materials, 2020, 32, e1907361.	21.0	88
12	Isolated Indium Hydrides in CHA Zeolites: Speciation and Catalysis for Nonoxidative Dehydrogenation of Ethane. Journal of the American Chemical Society, 2020, 142, 4820-4832.	13.7	86
13	<i>In situ</i> induced core/shell stabilized hybrid perovskites <i>via</i> gallium(<scp>iii</scp>) acetylacetonate intermediate towards highly efficient and stable solar cells. Energy and Environmental Science, 2018, 11, 286-293.	30.8	79
14	Rational Interface Design and Morphology Control for Bladeâ€Coating Efficient Flexible Perovskite Solar Cells with a Record Fill Factor of 81%. Advanced Functional Materials, 2020, 30, 2001240.	14.9	77
15	Scaling Relations for Acidity and Reactivity of Zeolites. Journal of Physical Chemistry C, 2017, 121, 23520-23530.	3.1	74
16	Relationship between acidity and catalytic reactivity of faujasite zeolite: A periodic DFT study. Journal of Catalysis, 2016, 344, 570-577.	6.2	72
17	C₆₀ additive-assisted crystallization in CH₃NH₃Pb_{0.75}Sn_{0.25}I₃ perovskite solar cells with high stability and efficiency. Nanoscale, 2017, 9, 13967-13975.	5.6	71
18	Formation and Reactions of NH₄NO₃ during Transient and Steady-State NH₃-SCR of NO_{<i>x</i>} over H-AFX Zeolites: Spectroscopic and Theoretical Studies. ACS Catalysis, 2020, 10, 2334-2344.	11.2	67

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19	Inorganic hole transport layers in inverted perovskite solar cells: A review. Nano Select, 2021, 2, 1081-1116.	3.7	65
20	<i>In Situ</i> Spectroscopic Studies on the Redox Cycle of NH₃âˆ’SCR over Cuâˆ’CHA Zeolites. ChemCatChem, 2020, 12, 3050-3059.	3.7	64
21	Propane Dehydrogenation on Ga₂O₃-Based Catalysts: Contrasting Performance with Coordination Environment and Acidity of Surface Sites. ACS Catalysis, 2021, 11, 907-924.	11.2	55
22	Structure and Reactivity of the Mo/ZSM-5 Dehydroaromatization Catalyst: An Operando Computational Study. ACS Catalysis, 2019, 9, 8731-8737.	11.2	52
23	Hydride Transfer versus Deprotonation Kinetics in the Isobutaneâ€“Propene Alkylation Reaction: A Computational Study. ACS Catalysis, 2017, 7, 8613-8627.	11.2	49
24	Catalysts for Isocyanate-Free Polyurea Synthesis: Mechanism and Application. ACS Catalysis, 2016, 6, 6883-6891.	11.2	48
25	Promotional Effect of La in the Three-Way Catalysis of La-Loaded Al₂O₃-Supported Pd Catalysts (Pd/La/Al₂O₃). ACS Catalysis, 2020, 10, 1010-1023.	11.2	46
26	Giant Twoâ€Photon Absorption in Mixed Halide Perovskite CH₃NH₃Pb_{0.75}Sn_{0.25}I₃ Thin Films and Application to Photodetection at Optical Communication Wavelengths. Advanced Optical Materials, 2018, 6, 1700819.	7.3	44
27	Nonâ€Pincerâ€Type Manganese Complexes as Efficient Catalysts for the Hydrogenation of Esters. Angewandte Chemie, 2017, 129, 7639-7642.	2.0	40
28	Tracking Local Mechanical Impact in Heterogeneous Polymers with Direct Optical Imaging. Angewandte Chemie - International Edition, 2018, 57, 16385-16390.	13.8	38
29	Mechanistic Complexity of Asymmetric Transfer Hydrogenation with Simple Mnâ€“Diamine Catalysts. Organometallics, 2019, 38, 3187-3196.	2.3	38
30	Computational insights into the catalytic role of the base promoters in ester hydrogenation with homogeneous non-pincer-based Mn-P,N catalyst. Journal of Catalysis, 2018, 363, 136-143.	6.2	35
31	Transformation of Bulk Pd to Pd Cations in Small-Pore CHA Zeolites Facilitated by NO. Jacs Au, 2021, 1, 201-211.	7.9	34
32	Molecular Selfâ€Assembly Fabrication and Carrier Dynamics of Stable and Efficient CH₃NH₃Pb_(1âˆ’<i>x</i>)Sn_{<i>x</i>}I₃ Perovskite Solar Cells. ChemSusChem, 2017, 10, 3839-3845.	6.8	28
33	Mechanistic insights into the oxidation of copper(<scp>i</scp>) species during NH₃-SCR over Cu-CHA zeolites: a DFT study. Catalysis Science and Technology, 2020, 10, 3586-3593.	4.1	25
34	In Situ/Operando IR and Theoretical Studies on the Mechanism of NH₃â€“SCR of NO/NO₂ over Hâ€“CHA Zeolites. Journal of Physical Chemistry C, 2021, 125, 13889-13899.	3.1	23
35	Frontier Molecular Orbital Based Analysis of Solidâ€“Adsorbate Interactions over Group 13 Metal Oxide Surfaces. Journal of Physical Chemistry C, 2020, 124, 15355-15365.	3.1	22
36	Propertyâ€“Activity Relations for Methane Activation by Dualâ€Metal Cuâ€“Oxo Trimers in ZSMâ€5 Zeolite. Small Methods, 2018, 2, 1800266.	8.6	21

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37	Inorganic halide perovskite materials and solar cells. APL Materials, 2019, 7, .	5.1	21
38	Mechanism of NH₃â€“Selective Catalytic Reduction (SCR) of NO/NO₂ (Fast SCR) over Cu-CHA Zeolites Studied by <i>In Situ/Operando</i> Infrared Spectroscopy and Density Functional Theory. Journal of Physical Chemistry C, 2021, 125, 21975-21987.	3.1	21
39	Efficiency enhancement of Cu ₂ ZnSnS ₄ solar cells via surface treatment engineering. Royal Society Open Science, 2018, 5, 171163.	2.4	19
40	Alkane Activation Initiated by Hydride Transfer: Coâ€conversion of Propane and Methanol over Hâ€ZSMâ€5 Zeolite. Angewandte Chemie - International Edition, 2015, 54, 7363-7366.	13.8	18
41	Experimental and theoretical study of multinuclear indiumâ€“oxo clusters in CHA zeolite for CH₄ activation at room temperature. Physical Chemistry Chemical Physics, 2019, 21, 13415-13427.	2.8	18
42	Bulk and surface transformations of Ga2O3 nanoparticle catalysts for propane dehydrogenation induced by a H2 treatment. Journal of Catalysis, 2022, 408, 155-164.	6.2	18
43	Local structure and NO adsorption/desorption property of Pd²⁺ cations at different paired Al sites in CHA zeolite. Physical Chemistry Chemical Physics, 2021, 23, 22273-22282.	2.8	15
44	Lean NO_{<i>x</i>} Capture and Reduction by NH₃ <i>via</i> NO⁺ Intermediates over H-CHA at Room Temperature. Journal of Physical Chemistry C, 2021, 125, 1913-1922.	3.1	15
45	The nature of strong BrÃ¸nsted acidity of Ni-SMM clay. Applied Catalysis B: Environmental, 2016, 191, 62-75.	20.2	14
46	A CHA zeolite supported Ga-oxo cluster for partial oxidation of CH4 at room temperature. Catalysis Today, 2020, 352, 118-126.	4.4	13
47	Fine-tuning the coordination atoms of copper redox mediators: an effective strategy for boosting the photovoltage of dye-sensitized solar cells. Journal of Materials Chemistry A, 2019, 7, 12808-12814.	10.3	12
48	â€œOn Waterâ€• Direct Organocatalytic Cyanoarylmethylation of Isatins for the Diastereoselective Synthesis of 3-Hydroxy-3-cyanomethyl Oxindoles. Journal of Organic Chemistry, 2019, 84, 4000-4008.	3.2	12
49	In situ/operando spectroscopic studies on NH3â€“SCR reactions catalyzed by a phosphorus-modified Cu-CHA zeolite. Catalysis Today, 2021, 376, 73-80.	4.4	12
50	Steering CO2 hydrogenation coupled with benzene alkylation toward ethylbenzene and propylbenzene using a dual-bed catalyst system. Chem Catalysis, 2022, 2, 1223-1240.	6.1	12
51	Mechanism of Standard NH₃â€“SCR over Cu-CHA via NO⁺ and HONO Intermediates. Journal of Physical Chemistry C, 2022, 126, 11594-11601.	3.1	10
52	Embryonic zeolites for highly efficient synthesis of dimethyl ether from syngas. Microporous and Mesoporous Materials, 2021, 322, 111138.	4.4	9
53	Origin of enhanced BrÃ¸nsted acidity of NiF-modified synthetic micaâ€“montmorillonite clay. Catalysis Science and Technology, 2018, 8, 244-251.	4.1	8
54	Interfacial engineering with carbonâ€“graphiteâ€“Cu_{Î´}Ni_{1âˆ'Î´}O for ambient-air stable composite-based hole-conductor-free perovskite solar cells. Nanoscale Advances, 2020, 2, 5883-5889.	4.6	8

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55	Crystallization Dependent Stability of Perovskite Solar Cells With Different Hole Transporting Layers. Solar Rrl, 2017, 1, 1700141.	5.8	7
56	Selective catalytic reduction of NO over Cu-AFX zeolites: mechanistic insights from <i>in situ</i>/<i>operando</i> spectroscopic and DFT studies. Catalysis Science and Technology, 2021, 11, 4459-4470.	4.1	6
57	Tracking Local Mechanical Impact in Heterogeneous Polymers with Direct Optical Imaging. Angewandte Chemie, 2018, 130, 16623-16628.	2.0	4
58	Lewis Acid Catalysis by Zeolites * *These authors contributed equally.. , 2018, , 229-263.		3
59	Theory of Zeolite Catalysis. , 2018, , 151-188.		1
60	InnenrÃ¼cktitelbild: Nonâ€Pincerâ€Type Manganese Complexes as Efficient Catalysts for the Hydrogenation of Esters (Angew. Chem. 26/2017). Angewandte Chemie, 2017, 129, 7787-7787.	2.0	0
61	CAN WE PREDICT THE REACTIVITY OF THE ZEOLITE CATALYST?. , 2018, , .		0