

# Chong Liu $\hat{\sim} \hat{\sim}^2$

## 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	Bulk and surface transformations of Ga <sub>2</sub> O <sub>3</sub> nanoparticle catalysts for propane dehydrogenation induced by a H <sub>2</sub> treatment. <i>Journal of Catalysis</i> , 2022, 408, 155-164.	6.2	18
2	Steering CO <sub>2</sub> hydrogenation coupled with benzene alkylation toward ethylbenzene and propylbenzene using a dual-bed catalyst system. <i>Chem Catalysis</i> , 2022, 2, 1223-1240.	6.1	12
3	Mechanism of Standard NH <sub>3</sub> -SCR over Cu-CHA via NO <sup>+</sup> and HONO Intermediates. <i>Journal of Physical Chemistry C</i> , 2022, 126, 11594-11601.	3.1	10
4	In situ/operando spectroscopic studies on NH <sub>3</sub> -SCR reactions catalyzed by a phosphorus-modified Cu-CHA zeolite. <i>Catalysis Today</i> , 2021, 376, 73-80.	4.4	12
5	Local structure and NO adsorption/desorption property of Pd <sup>2+</sup> cations at different paired Al sites in CHA zeolite. <i>Physical Chemistry Chemical Physics</i> , 2021, 23, 22273-22282.	2.8	15
6	Inorganic hole transport layers in inverted perovskite solar cells: A review. <i>Nano Select</i> , 2021, 2, 1081-1116.	3.7	65
7	Propane Dehydrogenation on Ga <sub>2</sub> O <sub>3</sub> -Based Catalysts: Contrasting Performance with Coordination Environment and Acidity of Surface Sites. <i>ACS Catalysis</i> , 2021, 11, 907-924.	11.2	55
8	Transformation of Bulk Pd to Pd Cations in Small-Pore CHA Zeolites Facilitated by NO. <i>Jacs Au</i> , 2021, 1, 201-211.	7.9	34
9	In Situ/Operando IR and Theoretical Studies on the Mechanism of NH <sub>3</sub> -SCR of NO/NO <sub>2</sub> over H-CHA Zeolites. <i>Journal of Physical Chemistry C</i> , 2021, 125, 13889-13899.	3.1	23
10	Embryonic zeolites for highly efficient synthesis of dimethyl ether from syngas. <i>Microporous and Mesoporous Materials</i> , 2021, 322, 111138.	4.4	9
11	Mechanism of NH <sub>3</sub> -Selective Catalytic Reduction (SCR) of NO/NO <sub>2</sub> (Fast SCR) over Cu-CHA Zeolites Studied by In Situ/Operando Infrared Spectroscopy and Density Functional Theory. <i>Journal of Physical Chemistry C</i> , 2021, 125, 21975-21987.	3.1	21
12	Lean NO <sub>x</sub> Capture and Reduction by NH <sub>3</sub> via NO <sup>+</sup> Intermediates over H-CHA at Room Temperature. <i>Journal of Physical Chemistry C</i> , 2021, 125, 1913-1922.	3.1	15
13	Selective catalytic reduction of NO over Cu-AFX zeolites: mechanistic insights from in situ/operando spectroscopic and DFT studies. <i>Catalysis Science and Technology</i> , 2021, 11, 4459-4470.	4.1	6
14	Formation and Reactions of NH <sub>4</sub> NO <sub>3</sub> during Transient and Steady-State NH <sub>3</sub> -SCR of NO <sub>x</sub> over H-AFX Zeolites: Spectroscopic and Theoretical Studies. <i>ACS Catalysis</i> , 2020, 10, 2334-2344.	11.2	67
15	Promotional Effect of La in the Three-Way Catalysis of La-Loaded Al <sub>2</sub> O <sub>3</sub> -Supported Pd Catalysts (Pd/La/Al <sub>2</sub> O <sub>3</sub> ). <i>ACS Catalysis</i> , 2020, 10, 1010-1023.	11.2	46
16	A CHA zeolite supported Ga-oxo cluster for partial oxidation of CH <sub>4</sub> at room temperature. <i>Catalysis Today</i> , 2020, 352, 118-126.	4.4	13
17	Fabrication Strategy for Efficient 2D/3D Perovskite Solar Cells Enabled by Diffusion Passivation and Strain Compensation. <i>Advanced Energy Materials</i> , 2020, 10, 2002004.	19.5	97
18	Interfacial engineering with carbon-graphite-Cu <sub>1</sub> Ni <sub>1</sub> O for ambient-air stable composite-based hole-conductor-free perovskite solar cells. <i>Nanoscale Advances</i> , 2020, 2, 5883-5889.	4.6	8

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19	Rational Interface Design and Morphology Control for Blade-Coating Efficient Flexible Perovskite Solar Cells with a Record Fill Factor of 81%. <i>Advanced Functional Materials</i> , 2020, 30, 2001240.	14.9	77
20	Frontier Molecular Orbital Based Analysis of Solid-Adsorbate Interactions over Group 13 Metal Oxide Surfaces. <i>Journal of Physical Chemistry C</i> , 2020, 124, 15355-15365.	3.1	22
21	Isolated Indium Hydrides in CHA Zeolites: Speciation and Catalysis for Nonoxidative Dehydrogenation of Ethane. <i>Journal of the American Chemical Society</i> , 2020, 142, 4820-4832.	13.7	86
22	<i>In Situ</i> Spectroscopic Studies on the Redox Cycle of $\text{NH}_3$ -SCR over Cu-CHA Zeolites. <i>ChemCatChem</i> , 2020, 12, 3050-3059.	3.7	64
23	Tailoring $\text{C}_{60}$ for Efficient Inorganic $\text{CsPbI}_2\text{Br}$ Perovskite Solar Cells and Modules. <i>Advanced Materials</i> , 2020, 32, e1907361.	21.0	88
24	Mechanistic insights into the oxidation of copper (I) species during $\text{NH}_3$ -SCR over Cu-CHA zeolites: a DFT study. <i>Catalysis Science and Technology</i> , 2020, 10, 3586-3593.	4.1	25
25	Structure and Reactivity of the Mo/ZSM-5 Dehydroaromatization Catalyst: An Operando Computational Study. <i>ACS Catalysis</i> , 2019, 9, 8731-8737.	11.2	52
26	Mechanistic Complexity of Asymmetric Transfer Hydrogenation with Simple Mn-Diamine Catalysts. <i>Organometallics</i> , 2019, 38, 3187-3196.	2.3	38
27	Experimental and theoretical study of multinuclear indium-oxo clusters in CHA zeolite for $\text{CH}_4$ activation at room temperature. <i>Physical Chemistry Chemical Physics</i> , 2019, 21, 13415-13427.	2.8	18
28	Fine-tuning the coordination atoms of copper redox mediators: an effective strategy for boosting the photovoltage of dye-sensitized solar cells. <i>Journal of Materials Chemistry A</i> , 2019, 7, 12808-12814.	10.3	12
29	On Water-Direct Organocatalytic Cyanoarylmethylation of Isatins for the Diastereoselective Synthesis of 3-Hydroxy-3-cyanomethyl Oxindoles. <i>Journal of Organic Chemistry</i> , 2019, 84, 4000-4008.	3.2	12
30	Inorganic halide perovskite materials and solar cells. <i>APL Materials</i> , 2019, 7, .	5.1	21
31	Structurally Reconstructed $\text{CsPbI}_2\text{Br}$ Perovskite for Highly Stable and Square-Centimeter All-Inorganic Perovskite Solar Cells. <i>Advanced Energy Materials</i> , 2019, 9, 1803572.	19.5	192
32	Computational Approach to Molecular Catalysis by 3d Transition Metals: Challenges and Opportunities. <i>Chemical Reviews</i> , 2019, 119, 2453-2523.	47.7	260
33	All-Inorganic $\text{CsPbI}_2\text{Br}$ Perovskite Solar Cells with High Efficiency Exceeding 13%. <i>Journal of the American Chemical Society</i> , 2018, 140, 3825-3828.	13.7	505
34	Theory of Zeolite Catalysis. , 2018, , 151-188.		1
35	Giant Two-Photon Absorption in Mixed Halide Perovskite $\text{CH}_3\text{NH}_3\text{Pb}_{0.75}\text{Sn}_{0.25}\text{I}_3$ Thin Films and Application to Photodetection at Optical Communication Wavelengths. <i>Advanced Optical Materials</i> , 2018, 6, 1700819.	7.3	44
36	Lewis Acid Catalysis by Zeolites * *These authors contributed equally.. , 2018, , 229-263.		3

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37	Efficiency enhancement of Cu <sub>2</sub> ZnSnS <sub>4</sub> solar cells via surface treatment engineering. Royal Society Open Science, 2018, 5, 171163.	2.4	19
38	In situ induced core/shell stabilized hybrid perovskites via gallium(acetylacetonate) intermediate towards highly efficient and stable solar cells. Energy and Environmental Science, 2018, 11, 286-293.	30.8	79
39	Thermodynamically Self-Healing 1D-3D Hybrid Perovskite Solar Cells. Advanced Energy Materials, 2018, 8, 1703421.	19.5	158
40	Origin of enhanced Brønsted acidity of NiF-modified synthetic mica-montmorillonite clay. Catalysis Science and Technology, 2018, 8, 244-251.	4.1	8
41	Tracking Local Mechanical Impact in Heterogeneous Polymers with Direct Optical Imaging. Angewandte Chemie - International Edition, 2018, 57, 16385-16390.	13.8	38
42	Tracking Local Mechanical Impact in Heterogeneous Polymers with Direct Optical Imaging. Angewandte Chemie, 2018, 130, 16623-16628.	2.0	4
43	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
44	Engineering of Transition Metal Catalysts Confined in Zeolites. Chemistry of Materials, 2018, 30, 3177-3198.	6.7	232
45	Property-Activity Relations for Methane Activation by Dual-Metal Cu-Oxo Trimers in ZSM-5 Zeolite. Small Methods, 2018, 2, 1800266.	8.6	21
46	CAN WE PREDICT THE REACTIVITY OF THE ZEOLITE CATALYST?., 2018, , .		0
47	Non-pincer-type Manganese Complexes as Efficient Catalysts for the Hydrogenation of Esters. Angewandte Chemie - International Edition, 2017, 56, 7531-7534.	13.8	169
48	Non-pincer-type Manganese Complexes as Efficient Catalysts for the Hydrogenation of Esters. Angewandte Chemie, 2017, 129, 7639-7642.	2.0	40
49	Molecular Self-Assembly Fabrication and Carrier Dynamics of Stable and Efficient CH <sub>3</sub> NH <sub>3</sub> Pb(1-x)Sn <sub>x</sub> I <sub>3</sub> Perovskite Solar Cells. ChemSusChem, 2017, 10, 3839-3845.	6.8	28
50	Innenrücktittelbild: Non-pincer-type Manganese Complexes as Efficient Catalysts for the Hydrogenation of Esters (Angew. Chem. 26/2017). Angewandte Chemie, 2017, 129, 7787-7787.	2.0	0
51	Scaling Relations for Acidity and Reactivity of Zeolites. Journal of Physical Chemistry C, 2017, 121, 23520-23530.	3.1	74
52	Crystallization Dependent Stability of Perovskite Solar Cells With Different Hole Transporting Layers. Solar Rrl, 2017, 1, 1700141.	5.8	7
53	C <sub>60</sub> additive-assisted crystallization in CH <sub>3</sub> NH <sub>3</sub> Pb <sub>0.75</sub> Sn <sub>0.25</sub> I <sub>3</sub> perovskite solar cells with high stability and efficiency. Nanoscale, 2017, 9, 13967-13975.	5.6	71
54	Hydride Transfer versus Deprotonation Kinetics in the Isobutane-Propene Alkylation Reaction: A Computational Study. ACS Catalysis, 2017, 7, 8613-8627.	11.2	49

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55	Catalysts for Isocyanate-Free Polyurea Synthesis: Mechanism and Application. ACS Catalysis, 2016, 6, 6883-6891.	11.2	48
56	Relationship between acidity and catalytic reactivity of faujasite zeolite: A periodic DFT study. Journal of Catalysis, 2016, 344, 570-577.	6.2	72
57	The nature of strong Brønsted acidity of Ni-SMM clay. Applied Catalysis B: Environmental, 2016, 191, 62-75.	20.2	14
58	Nature and Catalytic Role of Extraframework Aluminum in Faujasite Zeolite: A Theoretical Perspective. ACS Catalysis, 2015, 5, 7024-7033.	11.2	92
59	Alkane Activation Initiated by Hydride Transfer: Coconversion of Propane and Methanol over HZSM-5 Zeolite. Angewandte Chemie - International Edition, 2015, 54, 7363-7366.	13.8	18
60	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
61	Bottom-Up Embedding of the Yrgensen Hayashi Catalyst into a Chiral Porous Polymer for Highly Efficient Heterogeneous Asymmetric Organocatalysis. Chemistry - A European Journal, 2012, 18, 6718-6723.	3.3	92