

# Jun Ren

## List of Publications by Year in descending order

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60  
papers

1,834  
citations

279798

23  
h-index

276875

41  
g-index

60  
all docs

60  
docs citations

60  
times ranked

2219  
citing authors

#	ARTICLE	IF	CITATIONS
1	Insights into the mechanisms of CO <sub>2</sub> methanation on Ni(111) surfaces by density functional theory. Applied Surface Science, 2015, 351, 504-516.	6.1	157
2	Methanation of carbon dioxide over Ni-M/ZrO <sub>2</sub> (M=Fe, Co, Cu) catalysts: Effect of addition of a second metal. Fuel Processing Technology, 2015, 137, 204-211.	7.2	147
3	The catalytic methanation of coke oven gas over Ni-Ce/Al <sub>2</sub> O <sub>3</sub> catalysts prepared by microwave heating: Effect of amorphous NiO formation. Applied Catalysis B: Environmental, 2015, 164, 18-30.	20.2	124
4	Silica-Titania mixed Oxides: Si-O-Ti Connectivity, Coordination of Titanium, and Surface Acidic Properties. Catalysis Letters, 2008, 124, 185-194.	2.6	101
5	Modification of a magnetic carbon composite for ciprofloxacin adsorption. Journal of Environmental Sciences, 2016, 49, 179-188.	6.1	98
6	Nitrogen-doped graphene supported copper catalysts for methanol oxidative carbonylation: Enhancement of catalytic activity and stability by nitrogen species. Carbon, 2018, 130, 185-195.	10.3	89
7	Ni/SBA-15 catalysts for CO methanation: effects of V, Ce, and Zr promoters. RSC Advances, 2015, 5, 96504-96517.	3.6	79
8	Silica/titania composite-supported Ni catalysts for CO methanation: Effects of Ti species on the activity, anti-sintering, and anti-coking properties. Applied Catalysis B: Environmental, 2017, 201, 561-572.	20.2	68
9	Combustion Characteristics of Coal Gangue under an Atmosphere of Coal Mine Methane. Energy & Fuels, 2014, 28, 3688-3695.	5.1	46
10	A theoretical investigation on the mechanism of dimethyl carbonate formation on Cu/AC catalyst. Applied Catalysis A: General, 2014, 472, 47-52.	4.3	44
11	Oxidative carbonylation of methanol to dimethyl carbonate over CuCl/SiO <sub>2</sub> -TiO <sub>2</sub> catalysts prepared by microwave heating: The effect of support composition. Applied Catalysis A: General, 2009, 366, 93-101.	4.3	42
12	Catalytic Combustion of Toluene over Cobalt Oxides Supported on Graphitic Carbon Nitride (CoOx/g-C <sub>3</sub> N <sub>4</sub> ) Catalyst. Industrial & Engineering Chemistry Research, 2018, 57, 11920-11928.	3.7	41
13	Highly stable and coking resistant Ce promoted Ni/SiC catalyst towards high temperature CO methanation. Fuel Processing Technology, 2018, 177, 266-274.	7.2	40
14	Ordered mesoporous silica-carbon-supported copper catalyst as an efficient and stable catalyst for catalytic oxidative carbonylation. Chemical Engineering Journal, 2017, 328, 673-682.	12.7	37
15	Direct and generalized synthesis of carbon-based yolk-shell nanocomposites from metal-oleate precursor. Chemical Engineering Journal, 2016, 283, 1295-1304.	12.7	31
16	A comparison study on the deoxygenation of coal mine methane over coal gangue and coke under microwave heating conditions. Energy Conversion and Management, 2015, 100, 45-55.	9.2	30
17	The growth of Ni <sub>n</sub> clusters and their interaction with cubic, monoclinic, and tetragonal ZrO <sub>2</sub> surfaces—a theoretical and experimental study. RSC Advances, 2015, 5, 59935-59945.	3.6	29
18	Density-functional theory study of dimethyl carbonate synthesis by methanol oxidative carbonylation on single-atom Cu <sub>1</sub> /graphene catalyst. Applied Surface Science, 2017, 425, 291-300.	6.1	27

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19	Graphene supported Cu nanoparticles as catalysts for the synthesis of dimethyl carbonate: Effect of carbon black intercalation. <i>Molecular Catalysis</i> , 2018, 445, 257-268.	2.0	27
20	Remarkable activity of nitrogen-doped hollow carbon spheres encapsulated Cu on synthesis of dimethyl carbonate: Role of effective nitrogen. <i>Applied Surface Science</i> , 2018, 436, 803-813.	6.1	25
21	Cu nanoparticles encapsulated with hollow carbon spheres for methanol oxidative carbonylation: Tuning of the catalytic properties by particle size control. <i>Applied Surface Science</i> , 2018, 459, 707-715.	6.1	24
22	Enhanced performance of Ni catalysts supported on ZrO <sub>2</sub> nanosheets for CO <sub>2</sub> methanation: Effects of support morphology and chelating ligands. <i>International Journal of Hydrogen Energy</i> , 2021, 46, 14395-14406.	7.1	24
23	Mechanism of microwave-induced carbothermic reduction and catalytic performance of Cu/activated carbon catalysts in the oxidative carbonylation of methanol. <i>Journal of Thermal Analysis and Calorimetry</i> , 2015, 120, 1929-1939.	3.6	23
24	Influence of Microwave Irradiation on the Structural Properties of Carbon-Supported Hollow Copper Nanoparticles and Their Effect on the Synthesis of Dimethyl Carbonate. <i>ChemCatChem</i> , 2016, 8, 861-871.	3.7	23
25	Density functional theory study of the mechanism of CO methanation on Ni <sub>4</sub> /t-ZrO <sub>2</sub> catalysts: Roles of surface oxygen vacancies and hydroxyl groups. <i>International Journal of Hydrogen Energy</i> , 2017, 42, 177-192.	7.1	23
26	Highly Active and Dispersed Ni/Al <sub>2</sub> O <sub>3</sub> Catalysts for CO Methanation Prepared by the Cation-Anion Double-Hydrolysis Method: Effects of Zr, Fe, and Ce Promoters. <i>Industrial &amp; Engineering Chemistry Research</i> , 2019, 58, 11728-11738.	3.7	23
27	Highly active urchin-like MCo <sub>2</sub> O <sub>4</sub> (M = Co, Cu, Ni or Zn) spinel for toluene catalytic combustion. <i>Fuel</i> , 2022, 318, 123648.	6.4	22
28	Influence of oxygen-containing groups of activated carbon aerogels on copper/activated carbon aerogels catalyst and synthesis of dimethyl carbonate. <i>Journal of Materials Science</i> , 2018, 53, 1833-1850.	3.7	20
29	Highly efficient synthesis of dimethyl carbonate over copper catalysts supported on resin-derived carbon microspheres. <i>Chemical Engineering Science</i> , 2019, 207, 1060-1071.	3.8	20
30	Highly anti-sintering and anti-coking ordered mesoporous silica carbide supported nickel catalyst for high temperature CO methanation. <i>Fuel</i> , 2019, 257, 116006.	6.4	20
31	Structural feature and catalytic performance of Cu-SiO <sub>2</sub> -TiO <sub>2</sub> cogelled xerogel catalysts for oxidative carbonylation of methanol to dimethyl carbonate. <i>Catalysis Communications</i> , 2011, 12, 357-361.	3.3	19
32	Mechanism studies concerning carbon deposition effect of CO methanation on Ni-based catalyst through DFT and TPSR methods. <i>International Journal of Hydrogen Energy</i> , 2016, 41, 8401-8411.	7.1	19
33	Effects of surface acid-base properties of ZrO <sub>2</sub> on the direct synthesis of DMC from CO <sub>2</sub> and methanol: A combined DFT and experimental study. <i>Chemical Engineering Science</i> , 2021, 229, 116018.	3.8	19
34	Synthesis of dimethyl carbonate over starch-based Carbon-supported Cu nanoparticles catalysts. <i>Chinese Journal of Catalysis</i> , 2013, 34, 1734-1744.	14.0	18
35	Co-utilization of two coal mine residues: Non-catalytic deoxygenation of coal mine methane over coal gangue. <i>Chemical Engineering Research and Design</i> , 2014, 92, 896-902.	5.6	18
36	Surface reconstruction induced highly efficient N-doped carbon nanosheet supported copper cluster catalysts for dimethyl carbonate synthesis. <i>Applied Catalysis B: Environmental</i> , 2022, 300, 120718.	20.2	18

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37	Activated carbon aerogel supported copper catalysts for the hydrogenation of methyl acetate to ethanol: effect of KOH activation. <i>New Journal of Chemistry</i> , 2019, 43, 9430-9438.	2.8	17
38	Synthesis of dimethyl carbonate on single Cu atom embedded in N-doped graphene: Effect of nitrogen species. <i>Molecular Catalysis</i> , 2017, 443, 1-13.	2.0	16
39	Hierarchical Porous Carbon-Supported Copper Nanoparticles as an Efficient Catalyst for the Dimethyl Carbonate Synthesis. <i>Catalysis Letters</i> , 2019, 149, 3184-3193.	2.6	16
40	Oxidative Dehydrogenation of Ethylbenzene with Carbon Dioxide over Metal-Doped Titanium Oxides. <i>Catalysis Letters</i> , 2004, 93, 31-35.	2.6	14
41	Using data mining technology in screening potential additives to Ni/Al <sub>2</sub> O <sub>3</sub> catalysts for methanation. <i>Catalysis Science and Technology</i> , 2017, 7, 6042-6049.	4.1	14
42	Preparation of Modified Semi-Coke-Supported ZnFe <sub>2</sub> O <sub>4</sub> Sorbent with the Assistance of Ultrasonic Irradiation. <i>Environmental Engineering Science</i> , 2012, 29, 1026-1031.	1.6	13
43	A DFT study of dimethyl carbonate synthesis from methanol and CO <sub>2</sub> on zirconia: Effect of crystalline phases. <i>Computational Materials Science</i> , 2019, 159, 210-221.	3.0	13
44	Carbon-Supported Nitrogen-Doped Graphene-Wrapped Copper Nanoparticles: An Effective Catalyst for the Oxidative Carbonylation of Methanol. <i>Industrial &amp; Engineering Chemistry Research</i> , 2021, 60, 2944-2953.	3.7	13
45	Fabrication of Yolk-Shell Cu@C Nanocomposites as High-Performance Catalysts in Oxidative Carbonylation of Methanol to Dimethyl Carbonate. <i>Nanoscale Research Letters</i> , 2017, 12, 481.	5.7	12
46	Promotion effect by Mg on the catalytic behavior of MgNi/WO <sub>3</sub> in the CO methanation. <i>International Journal of Hydrogen Energy</i> , 2020, 45, 29917-29928.	7.1	12
47	Density-functional theory study on hydrogenation of dimethyl oxalate to methyl glycolate over copper catalyst: Effect of copper valence state. <i>Molecular Catalysis</i> , 2020, 482, 110667.	2.0	10
48	Catalytic combustion of toluene over CeO <sub>2</sub> -CoO <sub>x</sub> composite aerogels. <i>New Journal of Chemistry</i> , 2020, 44, 11557-11565.	2.8	10
49	Highly active CuZn/SBA-15 catalyst for methanol dehydrogenation to methyl formate: Influence of ZnO promoter. <i>Molecular Catalysis</i> , 2021, 505, 111514.	2.0	10
50	A DFT study of DMC formation on R-doped C <sub>u</sub> /AC surfaces. <i>International Journal of Quantum Chemistry</i> , 2015, 115, 853-858.	2.0	8
51	Catalytic Hydrogenation of Methyl Acetate to Ethanol over Boron Doped Carbon Aerogels Supported Cu Catalyst. <i>ChemistrySelect</i> , 2020, 5, 11517-11521.	1.5	8
52	Fabrication of Few-Layer Graphene-Supported Copper Catalysts Using a Lithium-Promoted Thermal Exfoliation Method for Methanol Oxidative Carbonylation. <i>ACS Applied Materials &amp; Interfaces</i> , 2020, 12, 30483-30493.	8.0	8
53	Study on the formation and role of copper chloride hydroxide in the oxidative carbonylation of methanol to dimethyl carbonate. <i>Kinetics and Catalysis</i> , 2010, 51, 250-254.	1.0	5
54	The improved activity of Co <sub>3</sub> O <sub>4</sub> nanorods using silver in the catalytic oxidation of toluene. <i>Environmental Science and Pollution Research</i> , 2021, 28, 37592-37602.	5.3	5

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55	Screening of Additives to Ni-Based Methanation Catalyst for Enhanced Anti-Sintering Performance. Catalysts, 2019, 9, 493.	3.5	4
56	Highly Efficient La <sub>x</sub> Ce <sub>1-x</sub> O <sub>2</sub> Nanorod-Supported Nickel Catalysts for CO Methanation: Effect of La Addition. Energy & Fuels, 2021, 35, 3307-3314.	5.1	4
57	Surface Properties and Reactivity of Iron-Doped Titanium Oxides Catalysts in Oxidative Dehydrogenation of Ethylbenzene with CO <sub>2</sub> . Petroleum Science and Technology, 2006, 24, 963-972.	1.5	3
58	Comparison of Machine Learning Algorithms in Screening Potential Additives to Ni/Al <sub>2</sub> O <sub>3</sub> Methanation Catalysts for Improving the Anti-Coking Performance. ChemistrySelect, 2019, 4, 11790-11795.	1.5	2
59	Development of Highly Stable Ni-Al <sub>2</sub> O <sub>3</sub> Catalysts for CO Methanation. Catalysis Letters, 2021, 151, 2647-2657.	2.6	2
60	Comparative predicting study of heterogeneous catalysis using support vector regression and neural networks with chaotic particle swarm optimization algorithm. , 2009, , .		0