Juntian Niu

List of Publications by Year
in descending order

40 papers	1,227 citations	331259 21 h-index	360668 35 g-index
40 all docs	40 docs citations	40 times ranked	995 citing authors

#	Article	IF	Citations
1	Comprehensive review of Cu-based CO2 hydrogenation to CH3OH: Insights from experimental work and theoretical analysis. International Journal of Hydrogen Energy, 2022, 47, 9183-9200.	3.8	78
2	Effect of low-nitrogen combustion system with flue gas circulation technology on the performance of NOx emission in waste-to-energy power plant. Chemical Engineering and Processing: Process Intensification, 2022, 175, 108910.	1.8	5
3	A density functional theory study of methane activation on MgO supported Ni9M1 cluster: role of M on C-H activation. Frontiers of Chemical Science and Engineering, 2022, 16, 1485-1492.	2.3	10
4	The role of S in the Co-N-S-C catalysis system towards the ORR for proton exchange membrane fuel cells. Applied Surface Science, 2021, 540, 148325.	3.1	39
5	Highly active and stable Ni/perovskite catalysts in steam methane reforming for hydrogen production. Sustainable Energy and Fuels, 2021, 5, 1845-1856.	2.5	30
6	Mechanisms of oxygen reduction reaction on B doped <scp> FeN ₄ ï£¿G </scp> and <scp> FeN ₄ ï£¿CNT </scp> catalysts for protonâ€exchange membrane fuel cells. International Journal of Energy Research, 2021, 45, 8524-8535.	2.2	10
7	Effect of different doping ratios of Cu on the carbon formation and the elimination on Ni (111) surface: A DFT study. Molecular Catalysis, 2021, 502, 111360.	1.0	17
8	Unraveling Enhanced Activity, Selectivity, and Coke Resistance of Ptâ€“Ni Bimetallic Clusters in Dry Reforming. ACS Catalysis, 2021, 11, 2398-2411.	5.5	83
9	Comparative density functional theory study of carbon formation and removal mechanism on Rh modified Niâ€based catalyst in the<scp>CH₄</scp>/<scp>CO₂</scp>reforming. International Journal of Energy Research, 2021, 45, 10100-10111.	2.2	8
10	Reaction mechanism insights into CH4 catalytic oxidation on Pt13 cluster: A DFT study. Molecular Catalysis, 2021, 515, 111891.	1.0	6
11	Numerical Study on Flow Field Distribution Regularities in Wet Gas Desulfurization Tower Changing Inlet Gas/Liquid Feature Parameters. Journal of Energy Resources Technology, Transactions of the ASME, 2021, 143, .	1.4	3
12	Understanding effects of Ni particle size on steam methane reforming activity by combined experimental and theoretical analysis. Catalysis Today, 2020, 355, 139-147.	2.2	32
13	Mechanisms insight into oxygen reduction reaction on sulfur-doped Feâ€“N2 graphene electrocatalysts. International Journal of Hydrogen Energy, 2020, 45, 521-530.	3.8	29
14	Methane dry (CO2) reforming to syngas (H2/CO) in catalytic process: From experimental study and DFT calculations. International Journal of Hydrogen Energy, 2020, 45, 30267-30287.	3.8	88
15	Effect of active site and charge transfer on methane dehydrogenation over different Co doped Ni surfaces by density functional theory. International Journal of Hydrogen Energy, 2020, 45, 31849-31862.	3.8	22
16	Understanding active sites and mechanism of oxygen reduction reaction on FeN4â€“doped graphene from DFT study. International Journal of Hydrogen Energy, 2020, 45, 15465-15475.	3.8	21
17	Understanding the mechanism of CO2 reforming of methane to syngas on Ni@Pt surface compared with Ni(1Â1Â1) and Pt(1Â1Â1). Applied Surface Science, 2020, 513, 145840.	3.1	37
18	A density functional theory study of CO2 hydrogenation to methanol over Pd/TiO2 catalyst: The role of interfacial site. International Journal of Hydrogen Energy, 2020, 45, 6328-6340.	3.8	35

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19	New mechanism insights into methane steam reforming on Pt/Ni from DFT and experimental kinetic study. Fuel, 2020, 266, 117143.	3.4	86
20	Identification of active sites in CO2 activation on MgO supported Ni cluster. International Journal of Hydrogen Energy, 2020, 45, 11108-11115.	3.8	24
21	Insight into the effect of facet-dependent surface and oxygen vacancies of CeO2 for Hg removal: From theoretical and experimental studies. Journal of Hazardous Materials, 2020, 397, 122646.	6.5	40
22	Effect of oxide additives on the hydrotalcite derived Ni catalysts for CO2 reforming of methane. Chemical Engineering Journal, 2019, 377, 119763.	6.6	97
23	Experimental and theoretical study on propane pyrolysis to produce gas and soot. International Journal of Hydrogen Energy, 2019, 44, 22904-22918.	3.8	7
24	Numerical Study on Separation Performance of Cyclone Flue Used in Grate Waste Incinerator. Processes, 2019, 7, 866.	1.3	3
25	Mechanism insights into elemental mercury oxidation on RuO2(1â€¯1â€¯0) surface: A density functional study. Applied Surface Science, 2019, 466, 920-927.	3.1	14
26	A comprehensive DFT study of CO2 catalytic conversion by H2 over Pt-doped Ni catalysts. International Journal of Hydrogen Energy, 2019, 44, 819-834.	3.8	47
27	Investigation on the effect of water vapor on the catalytic combustion of methane on platinum. Petroleum Science and Technology, 2018, 36, 494-499.	0.7	2
28	Effects of Methane Addition on Exhaust Gas Emissions and Combustion Efficiency of the Premixed n-Heptane/Air Combustion. Energy & Fuels, 2018, 32, 3900-3907.	2.5	13
29	Methane combustion reactivity during the metalâ†'metallic oxide transformation of Pd-Pt catalysts: Effect of oxygen pressure. Applied Surface Science, 2018, 435, 776-785.	3.1	17
30	Effect of Pt addition on resistance to carbon formation of Ni catalysts in methane dehydrogenation over Ni-Pt bimetallic surfaces: A density functional theory study. Molecular Catalysis, 2017, 434, 206-218.	1.0	48
31	Effects of convex cavity structure, position and number on conversion of methane catalytic combustion and extinction limit in a micro-channel: A numerical study. Chemical Engineering and Processing: Process Intensification, 2017, 117, 58-69.	1.8	23
32	Investigation and improvement of the kinetic mechanism for methanol pyrolysis. International Journal of Hydrogen Energy, 2017, 42, 16345-16354.	3.8	11
33	The Influence of Slight Protuberances in a Micro-Tube Reactor on Methane/Moist Air Catalytic Combustion. Energies, 2016, 9, 421.	1.6	2
34	CO2 dissociation over PtxNi4â^'x bimetallic clusters with and without hydrogen sources: A density functional theory study. Journal of CO2 Utilization, 2016, 16, 431-441.	3.3	28
35	Kinetic consequences of methane combustion on Pd, Pt and Pdâ€"Pt catalysts. RSC Advances, 2016, 6, 109834-109845.	1.7	16
36	Effects of trapezoidal bluff bodies on blow out limit of methane/air combustion in a micro-channel. Applied Thermal Engineering, 2016, 95, 454-461.	3.0	56

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37	Dry (CO 2) reforming of methane over Pt catalysts studied by DFT and kinetic modeling. Applied Surface Science, 2016, 376, 79-90.	3.1	113
38	Mechanism of methylene oxidation on Pt catalysts: A DFT study. Computational and Theoretical Chemistry, 2015, 1067, 40-47.	1.1	16
39	A comparison of methane activation on catalysts Pt 2 and PtNi. Computational and Theoretical Chemistry, 2015, 1073, 94-101.	1.1	10
40	Effects of the geometrical parameters of a rough structure on the wall of a micro-channel on the catalytic combustion of methane and the extinction limit: a numerical study. Sustainable Energy and Fuels, 0, , .	2.5	1