Benzhen Yao

List of Publications by Year
in descending order

20 papers	699 citations	1162367 8 h-index	839053 18 g-index
20 all docs	20 docs citations	20 times ranked	611 citing authors

#	Article	IF	Citations
1	Microwave-initiated catalytic deconstruction of plastic waste into hydrogen and high-value carbons. Nature Catalysis, 2020, 3, 902-912.	16.1	287
2	Transforming carbon dioxide into jet fuel using an organic combustion-synthesized Fe-Mn-K catalyst. Nature Communications, 2020, 11, 6395.	5.8	161
3	The decarbonisation of petroleum and other fossil hydrocarbon fuels for the facile production and safe storage of hydrogen. Energy and Environmental Science, 2019, 12, 238-249.	15.6	75
4	Rapid Production of Highâ€Purity Hydrogen Fuel through Microwaveâ€Promoted Deep Catalytic Dehydrogenation of Liquid Alkanes with Abundant Metals. Angewandte Chemie - International Edition, 2017, 56, 10170-10173.	7.2	42
5	Thermodynamic study of hydrocarbon synthesis from carbon dioxide and hydrogen. , 2017, 7, 942-957.		29
6	Yolkâ€“Shell Nanocapsule Catalysts as Nanoreactors with Various Shell Structures and Their Diffusion Effect on the CO₂ Reforming of Methane. ACS Applied Materials & Interfaces, 2021, 13, 31699-31709.	4.0	21
7	Bimetallic Synergy Effects of Phyllosilicateâ€Derived NiCu@SiO₂ Catalysts for 1,4â€Butynediol Direct Hydrogenation to 1,4â€Butanediol. ChemCatChem, 2019, 11, 4777-4787.	1.8	15
8	Intrinsic kinetics of methane aromatization under non-oxidative conditions over modified Mo/HZSM-5 catalysts. Journal of Natural Gas Chemistry, 2008, 17, 64-68.	1.8	13
9	H2â€“rich gas production from leaves. Catalysis Today, 2018, 317, 43-49.	2.2	10
10	One-Pot Synthesis of Ca Oxide-Promoted Cr Catalysts for the Dehydrogenation of Propane Using CO₂. Industrial & Engineering Chemistry Research, 2020, 59, 12645-12656.	1.8	7
11	Catalytic Activity of Various Carbons during the Microwave-Initiated Deep Dehydrogenation of Hexadecane. Jacs Au, 2021, 1, 2021-2032.	3.6	7
12	Atomic Structure and Valence State of Cobalt Nanocrystals on Carbon under Syngas Versus Hydrogen Reduction. Journal of Physical Chemistry C, 2022, 126, 6325-6333.	1.5	7
13	Thermodynamic analysis of synthesis of cyclopentanol from cyclopentene and comparison with experimental data. Applied Petrochemical Research, 2015, 5, 135-142.	1.3	5
14	The decarbonization of coal tar via microwave-initiated catalytic deep dehydrogenation. Fuel, 2020, 268, 117332.	3.4	5
15	Rapid, non-invasive characterization of the dispersity of emulsionsviamicrowaves. Chemical Science, 2018, 9, 6975-6980.	3.7	4
16	Metals and non-metals in the periodic table. Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences, 2020, 378, 20200213.	1.6	4
17	Rapid Production of Highâ€Purity Hydrogen Fuel through Microwaveâ€Promoted Deep Catalytic Dehydrogenation of Liquid Alkanes with Abundant Metals. Angewandte Chemie, 2017, 129, 10304-10307.	1.6	3
18	Tailoring the crystallite size of Co3O4/SiO2 catalyst using organic-metal matrix method. Catalysis Today, 2020, 353, 252-259.	2.2	2

#	Article	IF	Citations
19	The periodic law of the chemical elements: â€˜ The new system of atomic weights which renders evident the analogies which exist between bodies ' []. Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences, 2020, 378, 20190537.	1.6	2
20	Activation of Co Fischer-Tropsch Catalyst: Exploring Co Valence State under Different Reduction Conditions Using STEM-EELS. Microscopy and Microanalysis, 2019, 25, 668-669.	0.2	0