Rui Huang

List of Publications by Year
in descending order

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40 papers	1,805 citations	304602 22 h-index	302012 39 g-index
43 all docs	43 docs citations	43 times ranked	2293 citing authors

#	Article	IF	Citations
1	Sulfur vacancy-rich MoS2 as a catalyst for the hydrogenation of CO2 to methanol. Nature Catalysis, 2021, 4, 242-250.	16.1	308
2	CO₂ Activation over Catalytic Surfaces. ChemPhysChem, 2017, 18, 3135-3141.	1.0	228
3	Revealing the Origin of Activity in Nitrogenâ€Doped Nanocarbons towards Electrocatalytic Reduction of Carbon Dioxide. ChemSusChem, 2016, 9, 1085-1089.	3.6	143
4	Direct Insight into Ethane Oxidative Dehydrogenation over Boron Nitrides. ChemCatChem, 2017, 9, 3293-3297.	1.8	112
5	Free-Standing Three-Dimensional CuCo₂S₄ Nanosheet Array with High Catalytic Activity as an Efficient Oxygen Electrode for Lithiumâ€“Oxygen Batteries. ACS Applied Materials & Interfaces, 2019, 11, 3834-3842.	4.0	75
6	Highly Selective Production of Ethylene by the Electroreduction of Carbon Monoxide. Angewandte Chemie - International Edition, 2020, 59, 154-160.	7.2	68
7	Insight into the Enhanced Selectivity of Phosphate-Modified Annealed Nanodiamond for Oxidative Dehydrogenation Reactions. ACS Catalysis, 2015, 5, 2436-2444.	5.5	58
8	Deciphering key intermediates in the transformation of carbon dioxide into heterocyclic products. Nature Catalysis, 2019, 2, 62-70.	16.1	56
9	Insight into the chemical adsorption properties of CO molecules supported on Au or Cu and hybridized Auâ€“CuO nanoparticles. Nanoscale, 2017, 9, 15033-15043.	2.8	51
10	New insights into the oxidative dehydrogenation of propane on borate-modified nanodiamond. Chemical Communications, 2015, 51, 9145-9148.	2.2	49
11	Rotating-tool diamond turning of Fresnel lenses on a roller mold for manufacturing of functional optical film. Precision Engineering, 2018, 51, 445-457.	1.8	49
12	Highly efficient conversion of methane to formic acid under mild conditions at ZSM-5-confined Fe-sites. Nano Energy, 2021, 82, 105718.	8.2	47
13	Selective and Stable Ethylbenzene Dehydrogenation to Styrene over Nanodiamonds under Oxygenâ€lean Conditions. ChemSusChem, 2016, 9, 662-666.	3.6	43
14	Nitrogen-doped carbon nanotubes as bifunctional catalysts with enhanced catalytic performance for selective oxidation of ethanol. Carbon, 2017, 111, 519-528.	5.4	43
15	Catalytic conversion of C1 molecules under mild conditions. EnergyChem, 2021, 3, 100050.	10.1	42
16	Ultra-precision machining of radial Fresnel lens on roller moulds. CIRP Annals - Manufacturing Technology, 2015, 64, 121-124.	1.7	38
17	Oxygen breaks into carbon nanotubes and abstracts hydrogen from propane. Carbon, 2016, 96, 631-640.	5.4	38
18	Different Crystal Forms of ZnS Nanomaterials for the Adsorption of Elemental Mercury. Environmental Science & Technology, 2021, 55, 6965-6974.	4.6	32

#	Article	IF	Citations
19	Evolution and Reactivity of Active Oxygen Species on sp²@sp³ Coreâ€“Shell Carbon for the Oxidative Dehydrogenation Reaction. ChemCatChem, 2014, 6, 2270-2275.	1.8	29
20	Enhanced cyclability of rechargeable Liâ€“O₂batteries enabled by boron carbide. RSC Advances, 2015, 5, 103019-103022.	1.7	25
21	Multiâ€Walled Carbon Nanotubes as a Catalyst for Gasâ€Phase Oxidation of Ethanol to Acetaldehyde. ChemSusChem, 2016, 9, 1820-1826.	3.6	24
22	Suppression of diamond tool wear in machining of tungsten carbide by combining ultrasonic vibration and electrochemical processing. Ceramics International, 2018, 44, 4142-4153.	2.3	23
23	Phosphateâ€Modified Carbon Nanotubes in the Oxidative Dehydrogenation of Isopentanes. ChemSusChem, 2014, 7, 3476-3482.	3.6	21
24	Phosphate modified carbon nanotubes for oxidative dehydrogenation of n-butane. Journal of Energy Chemistry, 2016, 25, 349-353.	7.1	19
25	High-efficiency swinging-rotating diamond shaping of Fresnel lenses on roller molds. CIRP Annals - Manufacturing Technology, 2018, 67, 121-124.	1.7	19
26	Ultra-precision machining of grayscale pixelated micro images on metal surface. Precision Engineering, 2018, 52, 211-220.	1.8	18
27	Formation of SS316L Single Tracks in Micro Selective Laser Melting: Surface, Geometry, and Defects. Advances in Materials Science and Engineering, 2019, 2019, 1-9.	1.0	18
28	Profile evaluation of radial Fresnel lens directly machined on roller molds by rotating-tool diamond turning. Precision Engineering, 2017, 50, 44-52.	1.8	16
29	Effect of graphitization of oxygen-modified carbon nanotubes in selective oxidation of acrolein. Catalysis Today, 2019, 330, 142-148.	2.2	16
30	Roll-to-Roll Embossing of Optical Radial Fresnel Lenses on Polymer Film for Concentrator Photovoltaics: A Feasibility Study. International Journal of Precision Engineering and Manufacturing - Green Technology, 2021, 8, 77-88.	2.7	16
31	The difference between borate and phosphate modified carbon nanotubes in isopentane oxidative dehydrogenation. Catalysis Today, 2015, 249, 161-166.	2.2	13
32	Abrasive-free polishing of tungsten alloy using electrochemical etching. Electrochemistry Communications, 2017, 82, 80-84.	2.3	13
33	Highly Selective Production of Ethylene by the Electroreduction of Carbon Monoxide. Angewandte Chemie, 2020, 132, 160-166.	1.6	13
34	Phosphorus oxide clusters stabilized by carbon nanotubes for selective isomerization and dehydrogenation of Î²-isopentene. Catalysis Science and Technology, 2018, 8, 1522-1527.	2.1	11
35	Suppression of diamond tool wear with sub-millisecond oxidation in ultrasonic vibration cutting of steel. Journal of Materials Processing Technology, 2022, 299, 117320.	3.1	10
36	Error Modeling and Path Planning for Freeform Surfaces by Laser Triangulation On-Machine Measurement. IEEE Transactions on Instrumentation and Measurement, 2021, 70, 1-11.	2.4	10

#	Article	IF	Citations
37	Reconfigured multi-axis diamond shaping of complex monolithic optics. CIRP Annals - Manufacturing Technology, 2022, 71, 69-72.	1.7	5
38	Micromachining of a roller mould and roll-to-roll imprinting to form large area optical films with radial Fresnel lens arrays. Japanese Journal of Applied Physics, 2017, 56, 05EA02.	0.8	3
39	Frontispiece: Highly Selective Production of Ethylene by the Electroreduction of Carbon Monoxide. Angewandte Chemie - International Edition, 2020, 59, .	7.2	0
40	Frontispiz: Highly Selective Production of Ethylene by the Electroreduction of Carbon Monoxide. Angewandte Chemie, 2020, 132, .	1.6	0