Weixin Huang

List of Publications by Year
in descending order

43 papers	3,737 citations	201674 27 h-index	254184 43 g-index
43 all docs	43 docs citations	43 times ranked	6517 citing authors

#	ARTICLE	IF	CITATIONS
1	Co³⁺â€“O Bond Elongation Unlocks Co₃O₄ for Methane Activation under Ambient Conditions. ACS Catalysis, 2022, 12, 7037-7045.	11.2	9
2	A General Approach for Monolayer Adsorption of High Weight Loadings of Uniform Nanocrystals on Oxide Supports. Angewandte Chemie - International Edition, 2021, 60, 7971-7979.	13.8	6
3	A General Approach for Monolayer Adsorption of High Weight Loadings of Uniform Nanocrystals on Oxide Supports. Angewandte Chemie, 2021, 133, 8050-8058.	2.0	2
4	Steam-created grain boundaries for methane Câ€“H activation in palladium catalysts. Science, 2021, 373, 1518-1523.	12.6	105
5	Photoionization Mass Spectrometry for Online Detection of Reactive and Unstable Gasâ€Phase Intermediates in Heterogeneous Catalytic Reactions. ChemCatChem, 2020, 12, 675-688.	3.7	14
6	Tunable Syngas Formation from Electrochemical CO₂ Reduction on Copper Nanowire Arrays. ACS Applied Energy Materials, 2020, 3, 9841-9847.	5.1	41
7	Dynamics of Copper-Containing Porous Organic Framework Catalysts Reveal Catalytic Behavior Controlled by the Polymer Structure. ACS Catalysis, 2020, 10, 9356-9365.	11.2	6
8	Enhanced Catalytic Activity for Methane Combustion through <i>in Situ</i> Water Sorption. ACS Catalysis, 2020, 10, 8157-8167.	11.2	55
9	Modular Pd/Zeolite Composites Demonstrating the Key Role of Support Hydrophobic/Hydrophilic Character in Methane Catalytic Combustion. ACS Catalysis, 2019, 9, 4742-4753.	11.2	97
10	Colloidal nanocrystals for heterogeneous catalysis. Nano Today, 2019, 24, 15-47.	11.9	98
11	Single rhodium atoms anchored in micropores for efficient transformation of methane under mild conditions. Nature Communications, 2018, 9, 1231.	12.8	213
12	Effect of Light Illumination on Mixed Halide Lead Perovskites: Reversible or Irreversible Transformation. ACS Applied Energy Materials, 2018, 1, 2859-2865.	5.1	27
13	<i>In situ</i> identification of cation-exchange-induced reversible transformations of 3D and 2D perovskites. Chemical Communications, 2018, 54, 5879-5882.	4.1	12
14	Birnessite manganese oxide nanosheets assembled on Ni foam as high-performance pseudocapacitor electrodes: Electrochemical oxidation driven porous honeycomb architecture formation. Applied Surface Science, 2018, 458, 10-17.	6.1	23
15	Deconvoluting Transient Water Effects on the Activity of Pd Methane Combustion Catalysts. Industrial & Engineering Chemistry Research, 2018, 57, 10261-10268.	3.7	40
16	Electronic Properties of Free-Standing Surfactant-Capped Lead Halide Perovskite Nanocrystals Isolated in Vacuo. Journal of Physical Chemistry Letters, 2018, 9, 3604-3611.	4.6	18
17	Controllable transformation between 3D and 2D perovskites through cation exchange. Chemical Communications, 2018, 54, 7944-7947.	4.1	20
18	Functionalized Graphene Enables Highly Efficient Solar Thermal Steam Generation. ACS Nano, 2017, 11, 5510-5518.	14.6	330

#	Article	IF	Citations
19	Heat- and Gas-Induced Transformation in CH₃NH₃PbI₃ Perovskites and Its Effect on the Efficiency of Solar Cells. Chemistry of Materials, 2017, 29, 8478-8485.	6.7	50
20	Lowâ€Temperature Transformation of Methane to Methanol on Pd₁O₄ Single Sites Anchored on the Internal Surface of Microporous Silicate. Angewandte Chemie - International Edition, 2016, 55, 13441-13445.	13.8	180
21	Direct Observation of Reversible Transformation of CH₃NH₃PbI₃ and NH₄PbI₃ Induced by Polar Gaseous Molecules. Journal of Physical Chemistry Letters, 2016, 7, 5068-5073.	4.6	62
22	Lowâ€Energy Electronâ€Induced Transformations in Organolead Halide Perovskite. Angewandte Chemie - International Edition, 2016, 55, 10083-10087.	13.8	49
23	Lowâ€Energy Electronâ€Induced Transformations in Organolead Halide Perovskite. Angewandte Chemie, 2016, 128, 10237-10241.	2.0	9
24	Lowâ€Temperature Transformation of Methane to Methanol on Pd₁O₄ Single Sites Anchored on the Internal Surface of Microporous Silicate. Angewandte Chemie, 2016, 128, 13639-13643.	2.0	40
25	Functionalization of graphene by atmospheric pressure plasma jet in air or H2O2 environments. Applied Surface Science, 2016, 367, 160-166.	6.1	11
26	Evolution of Chemical Composition, Morphology, and Photovoltaic Efficiency of CH₃NH₃PbI₃ Perovskite under Ambient Conditions. Chemistry of Materials, 2016, 28, 303-311.	6.7	173
27	Catalysis on singly dispersed bimetallic sites. Nature Communications, 2015, 6, 7938.	12.8	235
28	pH-driven phase separation: Simple routes for fabricating porous TiO2 film with superhydrophilic and anti-fog properties. Ceramics International, 2015, 41, 7573-7581.	4.8	31
29	Understanding complete oxidation of methane on spinel oxides at a molecular level. Nature Communications, 2015, 6, 7798.	12.8	237
30	Multimorphologies nano-ZnO preparing through a simple solvothermal method for photocatalytic application. Materials Letters, 2015, 141, 294-297.	2.6	24
31	Polymerization-induced phase separation in the preparation of macroporous TiO2/SiO2 thin films. Ceramics International, 2014, 40, 919-927.	4.8	9
32	Synthesis of porous ZnO/TiO2 thin films with superhydrophilicity and photocatalytic activity via a template-free solâ€“gel method. Surface and Coatings Technology, 2014, 258, 531-538.	4.8	67
33	Construction of Heterostructured g-C₃N₄/Ag/TiO₂ Microspheres with Enhanced Photocatalysis Performance under Visible-Light Irradiation. ACS Applied Materials & Interfaces, 2014, 6, 14405-14414.	8.0	595
34	Conversion of Methane to Methanol with a Bent Mono(Î¼-oxo)dinickel Anchored on the Internal Surfaces of Micropores. Langmuir, 2014, 30, 8558-8569.	3.5	87
35	Influence and Removal of Capping Ligands on Catalytic Colloidal Nanoparticles. Catalysis Letters, 2014, 144, 1355-1369.	2.6	84
36	Morphology-dependent surface chemistry and catalysis of CeO₂nanocrystals. Catalysis Science and Technology, 2014, 4, 3772-3784.	4.1	198

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37	Preparation and Formation Mechanism of Superhydrophilic Porous TiO2 Films Using Complexing Agents as Pore-Forming Materials. Science of Advanced Materials, 2014, 6, 9-17.	0.7	4
38	Nanoscale-Phase-Separated Pdâ€“Rh Boxes Synthesized via Metal Migration: An Archetype for Studying Lattice Strain and Composition Effects in Electrocatalysis. Journal of the American Chemical Society, 2013, 135, 14691-14700.	13.7	113
39	WGS Catalysis and In Situ Studies of CoO_{1â€“<i>x</i>}, PtCo_{<i>n</i>}/Co₃O₄, and Pt_{<i>m</i>}Co_{<i>m</i>â€²}/CoO_{1â€“<i>x</i>} Nanorod Catalysts. Journal of the American Chemical Society, 2013, 135, 8283-8293.	13.7	161
40	Restructuring Transition Metal Oxide Nanorods for 100% Selectivity in Reduction of Nitric Oxide with Carbon Monoxide. Nano Letters, 2013, 13, 3310-3314.	9.1	71
41	Superhydrophilicity of TiO2/SiO2 thin films: Synergistic effect of SiO2 and phase-separation-induced porous structure. Surface and Coatings Technology, 2012, 213, 126-132.	4.8	55
42	Superhydrophilic porous TiO2 film prepared by phase separation through two stabilizers. Applied Surface Science, 2011, 257, 4774-4780.	6.1	19
43	Effect of polyethylene glycol on hydrophilic TiO2 films: Porosity-driven superhydrophilicity. Surface and Coatings Technology, 2010, 204, 3954-3961.	4.8	57