Wentao Yuan

List of Publications by Year
in descending order

48 papers	2,080 citations	236925 25 h-index	243625 44 g-index
50 all docs	50 docs citations	50 times ranked	2522 citing authors

#	Article	IF	Citations
1	Stable Isolated Metal Atoms as Active Sites for Photocatalytic Hydrogen Evolution. Chemistry - A European Journal, 2014, 20, 2138-2144.	3.3	173
2	In situ manipulation of the active Au-TiO ₂ interface with atomic precision during CO oxidation. Science, 2021, 371, 517-521.	12.6	165
3	Visualizing H ₂ O molecules reacting at TiO ₂ active sites with transmission electron microscopy. Science, 2020, 367, 428-430.	12.6	149
4	Solutionâ€Grown Organic Singleâ€Crystalline pâ€n Junctions with Ambipolar Charge Transport. Advanced Materials, 2013, 25, 5762-5766.	21.0	112
5	Real-Time Observation of Reconstruction Dynamics on TiO₂(001) Surface under Oxygen via an Environmental Transmission Electron Microscope. Nano Letters, 2016, 16, 132-137.	9.1	109
6	Elucidation of Active Sites for CH₄ Catalytic Oxidation over Pd/CeO₂ Via Tailoring Metalâ€“Support Interactions. ACS Catalysis, 2021, 11, 5666-5677.	11.2	103
7	Direct In Situ TEM Visualization and Insight into the Facetâ€Dependent Sintering Behaviors of Gold on TiO₂. Angewandte Chemie - International Edition, 2018, 57, 16827-16831.	13.8	92
8	Oxide Catalysts with Ultrastrong Resistance to SO₂ Deactivation for Removing Nitric Oxide at Low Temperature. Advanced Materials, 2019, 31, e1903719.	21.0	87
9	Recent Progresses on Structural Reconstruction of Nanosized Metal Catalysts via Controlled-Atmosphere Transmission Electron Microscopy: A Review. ACS Catalysis, 2020, 10, 14419-14450.	11.2	71
10	Functionalizing Single Crystals: Incorporation of Nanoparticles Inside Gelâ€Grown Calcite Crystals. Angewandte Chemie - International Edition, 2014, 53, 4127-4131.	13.8	69
11	Facetâ€Dependent Oxidative Strong Metalâ€Support Interactions of Palladiumâ€“TiO₂ Determined by In Situ Transmission Electron Microscopy. Angewandte Chemie - International Edition, 2021, 60, 22339-22344.	13.8	60
12	High-performance hydrogen evolution electrocatalysis by layer-controlled MoS₂ nanosheets. RSC Advances, 2014, 4, 34733-34738.	3.6	58
13	Insight into Single-Atom-Induced Unconventional Size Dependence over CeO2-Supported Pt Catalysts. CheM, 2020, 6, 752-765.	11.7	55
14	Nanoparticles Incorporated inside Single-Crystals: Enhanced Fluorescent Properties. Chemistry of Materials, 2016, 28, 7537-7543.	6.7	52
15	Recent advances in gas-involved in situ studies via transmission electron microscopy. Nano Research, 2018, 11, 42-67.	10.4	50
16	Reshaping of Metal Nanoparticles Under Reaction Conditions. Angewandte Chemie - International Edition, 2020, 59, 2171-2180.	13.8	48
17	Reversible insulator-metal transition of LaAlO3/SrTiO3 interface for nonvolatile memory. Scientific Reports, 2013, 3, 2870.	3.3	46
18	Atomic-Scale Observation of Vaporâ€“Solid Nanowire Growth <i>via</i> Oscillatory Mass Transport. ACS Nano, 2016, 10, 763-769.	14.6	43

#	Article	IF	Citations
19	Grafting nanometer metal/oxide interface towards enhanced low-temperature acetylene semi-hydrogenation. Nature Communications, 2021, 12, 5770.	12.8	43
20	In Situ STEM Determination of the Atomic Structure and Reconstruction Mechanism of the TiO₂ (001) (1 Ã— 4) Surface. Chemistry of Materials, 2017, 29, 3189-3194.	6.7	40
21	Surface coupling of methyl radicals for efficient low-temperature oxidative coupling of methane. Chinese Journal of Catalysis, 2021, 42, 1117-1125.	14.0	39
22	Surface study of the reconstructed anatase TiO2 (001) surface. Progress in Natural Science: Materials International, 2021, 31, 1-13.	4.4	36
23	Highly Selective Acetylene Semihydrogenation Catalyst with an Operation Window Exceeding 150 Â°C. ACS Catalysis, 2021, 11, 6073-6080.	11.2	33
24	A Rational Solid-State Synthesis of Supported Auâ€“Ni Bimetallic Nanoparticles with Enhanced Activity for Gas-Phase Selective Oxidation of Alcohols. ACS Applied Materials & Interfaces, 2017, 9, 31853-31860.	8.0	31
25	Fast Gasâ€“Solid Reaction Kinetics of Nanoparticles Unveiled by Millisecond Inâ€…Situ Electron Diffraction at Ambient Pressure. Angewandte Chemie - International Edition, 2018, 57, 11344-11348.	13.8	31
26	Unexpected refacetting of palladium nanoparticles under atmospheric N₂ conditions. Chemical Communications, 2018, 54, 8587-8590.	4.1	24
27	Direct observation of Pt nanocrystal coalescence induced by electron-excitation-enhanced van der Waals interactions. Nano Research, 2014, 7, 308-314.	10.4	22
28	Pdâ€“Pt nanoalloy transformation pathways at the atomic scale. Materials Today Nano, 2018, 1, 41-46.	4.6	21
29	Unveiling the gas-dependent sintering behavior of Au-TiO2 catalysts via environmental transmission electron microscopy. Journal of Catalysis, 2020, 388, 84-90.	6.2	18
30	Direct In Situ TEM Visualization and Insight into the Facetâ€Dependent Sintering Behaviors of Gold on TiO₂. Angewandte Chemie, 2018, 130, 17069-17073.	2.0	17
31	In situ TEM observation of dissolution and regrowth dynamics of MoO2 nanowires under oxygen. Nano Research, 2017, 10, 397-404.	10.4	16
32	Unveiling the Atomic Structures of the Minority Surfaces of TiO₂ Nanocrystals. Chemistry of Materials, 2018, 30, 288-295.	6.7	16
33	Facetâ€Dependent Oxidative Strong Metalâ€Support Interactions of Palladiumâ€“TiO 2 Determined by In Situ Transmission Electron Microscopy. Angewandte Chemie, 2021, 133, 22513-22518.	2.0	15
34	<i>In Situ</i> Resolving the Atomic Reconstruction of SnO₂ (110) Surface. Nano Letters, 2021, 21, 7309-7316.	9.1	13
35	Visualizing the toughening origins of gel-grown calcite single-crystal composites. Chinese Chemical Letters, 2018, 29, 1666-1670.	9.0	12
36	Surface faceting and compositional evolution of Pd@Au coreâ€“shell nanocrystals during <i>in situ</i> annealing. Physical Chemistry Chemical Physics, 2019, 21, 3134-3139.	2.8	12

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37	In situ observation of facet-dependent oxidation of graphene on platinum in an environmental TEM. Chemical Communications, 2015, 51, 350-353.	4.1	11
38	An Environmental Transmission Electron Microscopy Study of the Stability of the TiO₂ (1) Tj ETQq0 0 0 rgBT /Overlock 10 T	3.1	11
39	Early Stage Growth of Rutile Titania Mesocrystals. Crystal Growth and Design, 2018, 18, 4209-4214.	3.0	10
40	Observation of Pt-{100}-p(2Ã—2)-O reconstruction by an environmental TEM. Progress in Natural Science: Materials International, 2016, 26, 308-311.	4.4	8
41	Atomic Mechanism in Layer-by-Layer Growth via Surface Reconstruction. Nano Letters, 2019, 19, 4205-4210.	9.1	8
42	Revealing Surface Restraint-Induced Hexagonal Pd Nanocrystals via <i>In Situ</i> Transmission Electron Microscopy. Nano Letters, 2022, 22, 4333-4339.	9.1	8
43	Controllable synthesis of rutile titania with novel curved surfaces. CrystEngComm, 2015, 17, 7254-7257.	2.6	7
44	First-principles study of the interactions of hydrogen with low-index surfaces of PdCu ordered alloy. Progress in Natural Science: Materials International, 2017, 27, 709-713.	4.4	6
45	Fast Gasâ€“Solid Reaction Kinetics of Nanoparticles Unveiled by Millisecond Inâ€…Situ Electron Diffraction at Ambient Pressure. Angewandte Chemie, 2018, 130, 11514-11518.	2.0	5
46	Array of single crystalline anatase TiO2 nanotubes with significant enhancement of photoresponse. Progress in Natural Science: Materials International, 2021, 31, 536-540.	4.4	4
47	Reversible transformation between terrace and step sites of Pt nanoparticles on titanium under CO and O2 environments. Chinese Journal of Catalysis, 2022, 43, 2026-2033.	14.0	2
48	Umformung von Metallnanopartikeln unter Reaktionsbedingungen. Angewandte Chemie, 2020, 132, 2191-2200.	2.0	1