Yung-Kang Peng

List of Publications by Year
in descending order

51	2,765	185998 28	182168 51
papers	citations	h-index	g-index

52	52	52	4339
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Probe-assisted NMR: Recent progress on the surface study of crystalline metal oxides with various terminated facets. Magnetic Resonance Letters, 2022, 2, 9-16.	0.7	23
2	Disclosing the Origin of Transition Metal Oxides as Peroxidase (and Catalase) Mimetics. ACS Applied Materials & Interfaces, 2022, 14, 22728-22736.	4.0	30
3	Cluster Nanozymes with Optimized Reactivity and Utilization of Active Sites for Effective Peroxidase (and Oxidase) Mimicking. Small, 2022, 18, e2104844.	5.2	25
4	Shape Regulation of CeO₂ Nanozymes Boosts Reaction Specificity and Activity. European Journal of Inorganic Chemistry, 2022, 2022, .	1.0	6
5	Bulk-to-nano regulation of layered metal oxide gears H2O2 activation pathway for its stoichiometric utilization in selective oxidation reaction. Applied Catalysis B: Environmental, 2022, 313, 121461.	10.8	11
6	Surface Coordination Chemistry of Nanomaterials and Catalysis. , 2021, , 204-227.		1
7	Surface Fingerprinting of Faceted Metal Oxides and Porous Zeolite Catalysts by Probe-Assisted Solid-State NMR Approaches. Accounts of Chemical Research, 2021, 54, 2421-2433.	7.6	21
8	Rapid Interchangeable Hydrogen, Hydride, and Proton Species at the Interface of Transition Metal Atom on Oxide Surface. Journal of the American Chemical Society, 2021, 143, 9105-9112.	6.6	37
9	Electronicâ€State Manipulation of Surface Titanium Activates Dephosphorylation Over TiO₂ Near Room Temperature. Angewandte Chemie - International Edition, 2021, 60, 16149-16155.	7.2	9
10	Electronicâ€State Manipulation of Surface Titanium Activates Dephosphorylation Over TiO₂ Near Room Temperature. Angewandte Chemie, 2021, 133, 16285-16291.	1.6	11
11	Fast and sensitive immuno-PCR assisted by plasmonic magnetic nanoparticles. Applied Materials Today, 2021, 23, 101054.	2.3	2
12	Unravelling the true active site for CeO2-catalyzed dephosphorylation. Applied Catalysis B: Environmental, 2020, 264, 118508.	10.8	31
13	2D photocatalysts with tuneable supports for enhanced photocatalytic water splitting. Materials Today, 2020, 41, 34-43.	8.3	36
14	Blue ordered/disordered Janus-type TiO₂ nanoparticles for enhanced photocatalytic hydrogen generation. Journal of Materials Chemistry A, 2020, 8, 22828-22839.	5.2	24
15	Hot Electrons, Hot Holes, or Both? Tandem Synthesis of Imines Driven by the Plasmonic Excitation in Au/CeO2 Nanorods. Nanomaterials, 2020, 10, 1530.	1.9	6
16	Unravelling the Role of Structural Geometry and Chemical State of Well-Defined Oxygen Vacancies on Pristine CeO₂ for H₂O₂ Activation. Journal of Physical Chemistry Letters, 2020, 11, 5390-5396.	2.1	30
17	Nanoisozymes: The Origin behind Pristine CeO₂ as Enzyme Mimetics. Chemistry - A European Journal, 2020, 26, 10598-10606.	1.7	16
18	Chemical state tuning of surface Ce species on pristine CeO₂ with 2400% boosting in peroxidase-like activity for glucose detection. Chemical Communications, 2020, 56, 7897-7900.	2.2	15

#	Article	IF	Citations
19	Differentiating Surface Ce Species among CeO₂ Facets by Solid-State NMR for Catalytic Correlation. ACS Catalysis, 2020, 10, 4003-4011.	5.5	59
20	Removal of Hydrogen Poisoning by Electrostatically Polar MgO Support for Low-Pressure NH₃ Synthesis at a High Rate over the Ru Catalyst. ACS Catalysis, 2020, 10, 5614-5622.	5.5	59
21	Photocatalytic water splitting by N-TiO2 on MgO (111) with exceptional quantum efficiencies at elevated temperatures. Nature Communications, 2019, 10, 4421.	5.8	151
22	Unravelling the key role of surface features behind facet-dependent photocatalysis of anatase TiO₂. Chemical Communications, 2019, 55, 4415-4418.	2.2	34
23	Molecular nitrogen promotes catalytic hydrodeoxygenation. Nature Catalysis, 2019, 2, 1078-1087.	16.1	63
24	Differentiating surface titanium chemical states of anatase TiO₂ functionalized with various groups. Chemical Science, 2018, 9, 2493-2500.	3.7	31
25	Facet-dependent photocatalysis of nanosize semiconductive metal oxides and progress of their characterization. Nano Today, 2018, 18, 15-34.	6.2	99
26	Engineered coreâ€“shell magnetic nanoparticle for MR dual-modal tracking and safe magnetic manipulation of ependymal cells in live rodents. Nanotechnology, 2018, 29, 015102.	1.3	5
27	A nonpolar solvent effect by CH/Ï€ interaction inside zeolites: characterization, mechanism and concept. Chemical Communications, 2018, 54, 13435-13438.	2.2	8
28	Zincâ€Incorporated Microporous Molecular Sieve for Mild Catalytic Hydrolysis of Î³â€Valerolactone: A New Selective Route for Biomass Conversion. ChemSusChem, 2018, 11, 4214-4218.	3.6	10
29	Mesoporous Silica Promoted Deposition of Bioinspired Polydopamine onto Contrast Agent: A Universal Strategy to Achieve Both Biocompatibility and Multiple Scale Molecular Imaging. Particle and Particle Systems Characterization, 2017, 34, 1600415.	1.2	13
30	Mapping surface-modified titania nanoparticles with implications for activity and facet control. Nature Communications, 2017, 8, 675.	5.8	62
31	Hydrodeoxygenation of water-insoluble bio-oil to alkanes using a highly dispersed Pdâ€“Mo catalyst. Nature Communications, 2017, 8, 591.	5.8	110
32	Structural Studies of Bulk to Nanosize Niobium Oxides with Correlation to Their Acidity. Journal of the American Chemical Society, 2017, 139, 12670-12680.	6.6	125
33	Engineering of Single Magnetic Particle Carrier for Living Brain Cell Imaging: A Tunable T₁-/T₂-/Dual-Modal Contrast Agent for Magnetic Resonance Imaging Application. Chemistry of Materials, 2017, 29, 4411-4417.	3.2	34
34	Probeâ€Moleculeâ€Assisted NMR Spectroscopy: A Comparison with Photoluminescence and Electron Paramagnetic Resonance Spectroscopy as a Characterization Tool in Facetâ€Specific Photocatalysis. ChemCatChem, 2017, 9, 155-160.	1.8	22
35	Structureâ€“Activity Correlations for BrÃ¸nsted Acid, Lewis Acid, and Photocatalyzed Reactions of Exfoliated Crystalline Niobium Oxides. ChemCatChem, 2017, 9, 144-154.	1.8	22
36	Niobium oxides: Correlation of acidity with structure and catalytic performance in sucrose conversion to 5-hydroxymethylfurfural. Journal of Catalysis, 2016, 338, 329-339.	3.1	92

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37	Importance of the structural integrity of a carbon conjugated mediator for photocatalytic hydrogen generation from water over a CdSâ€“carbon nanotubeâ€“MoS₂ composite. Chemical Communications, 2016, 52, 13596-13599.	2.2	20
38	Chemical design of nanoprobes for T1-weighted magnetic resonance imaging. Materials Today, 2016, 19, 336-348.	8.3	67
39	Trimethylphosphine-Assisted Surface Fingerprinting of Metal Oxide Nanoparticle by ³¹P Solid-State NMR: A Zinc Oxide Case Study. Journal of the American Chemical Society, 2016, 138, 2225-2234.	6.6	83
40	Cooperative catalysis for the direct hydrodeoxygenation of vegetable oils into diesel-range alkanes over Pd/NbOPO₄. Chemical Communications, 2016, 52, 5160-5163.	2.2	43
41	One-step synthesis of degradable T₁-FeOOH functionalized hollow mesoporous silica nanocomposites from mesoporous silica spheres. Nanoscale, 2015, 7, 2676-2687.	2.8	43
42	Multifunctional silica-coated iron oxide nanoparticles: a facile four-in-one system for in situ study of neural stem cell harvesting. Faraday Discussions, 2014, 175, 13-26.	1.6	24
43	Oneâ€Step, Roomâ€Temperature Synthesis of Glutathioneâ€Capped Ironâ€Oxide Nanoparticles and their Application in In Vivo T₁â€Weighted Magnetic Resonance Imaging. Small, 2014, 10, 3962-3969.	5.2	30
44	Comprehensive study of medium-bandgap conjugated polymer merging a fluorinated quinoxaline with branched side chains for highly efficient and air-stable polymer solar cells. Journal of Materials Chemistry A, 2014, 2, 20203-20212.	5.2	17
45	Antiferromagnetic Iron Nanocolloids: A New Generation in Vivo T₁ÂMRI Contrast Agent. Journal of the American Chemical Society, 2013, 135, 18621-18628.	6.6	61
46	Facile synthesis of highly emissive carbon dots from pyrolysis of glycerol; gram scale production of carbon dots/mSiO2 for cell imaging and drug release. Journal of Materials Chemistry, 2012, 22, 14403.	6.7	318
47	A New and Facile Method To Prepare Uniform Hollow MnO/Functionalized mSiO₂ Core/Shell Nanocomposites. ACS Nano, 2011, 5, 4177-4187.	7.3	130
48	Superiority of Branched Side Chains in Spontaneous Nanowire Formation: Exemplified by Poly(3â€2â€methylbutylthiophene) for Highâ€Performance Solar Cells. Small, 2011, 7, 1098-1107.	5.2	57
49	Enhanced Performance and Air Stability of 3.2% Hybrid Solar Cells: How the Functional Polymer and CdTe Nanostructure Boost the Solar Cell Efficiency. Advanced Materials, 2011, 23, 5451-5455.	11.1	107
50	Insulinâ€Directed Synthesis of Fluorescent Gold Nanoclusters: Preservation of Insulin Bioactivity and Versatility in Cell Imaging. Angewandte Chemie - International Edition, 2011, 50, 7056-7060.	7.2	391
51	Multifunctional Mesoporous Silica-Coated Hollow Manganese Oxide Nanoparticles for Targeted Optical Imaging,<I>T</I>₁ Magnetic Resonance Imaging and Photodynamic Therapy. Materials Express, 2011, 1, 136-143.	0.2	15