

Baoshun Liu

List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/269916/publications.pdf>

Version: 2024-02-01

57
papers

1,921
citations

236925

25
h-index

254184

43
g-index

57
all docs

57
docs citations

57
times ranked

2570
citing authors

#	ARTICLE	IF	CITATIONS
1	Thermodynamic and kinetic analysis of heterogeneous photocatalysis for semiconductor systems. <i>Physical Chemistry Chemical Physics</i> , 2014, 16, 8751.	2.8	225
2	Low temperature fabrication of V-doped TiO ₂ nanoparticles, structure and photocatalytic studies. <i>Journal of Hazardous Materials</i> , 2009, 169, 1112-1118.	12.4	135
3	The photoluminescence spectroscopic study of anatase TiO ₂ prepared by magnetron sputtering. <i>Materials Chemistry and Physics</i> , 2007, 106, 350-353.	4.0	124
4	Mesoporous TiO ₂ Core-Shell Spheres Composed of Nanocrystals with Exposed High-Energy Facets: Facile Synthesis and Formation Mechanism. <i>Langmuir</i> , 2011, 27, 8500-8508.	3.5	89
5	Hierarchical TiO ₂ spherical nanostructures with tunable pore size, pore volume, and specific surface area: facile preparation and high-photocatalytic performance. <i>Catalysis Science and Technology</i> , 2012, 2, 1933.	4.1	77
6	The effect of O ₂ partial pressure on the structure and photocatalytic property of TiO ₂ films prepared by sputtering. <i>Materials Chemistry and Physics</i> , 2005, 90, 207-212.	4.0	73
7	Intrinsic intermediate gap states of TiO ₂ materials and their roles in charge carrier kinetics. <i>Journal of Photochemistry and Photobiology C: Photochemistry Reviews</i> , 2019, 39, 1-57.	11.6	70
8	Ice-Quenching Induced Ti ³⁺ Self-doped TiO ₂ with Surface Lattice Distortion and the Increased Photocatalytic Activity. <i>Journal of Physical Chemistry C</i> , 2017, 121, 19836-19848.	3.1	69
9	A low temperature hydrothermal synthesis of delafossite CuCoO ₂ as an efficient electrocatalyst for the oxygen evolution reaction in alkaline solutions. <i>Inorganic Chemistry Frontiers</i> , 2018, 5, 183-188.	6.0	58
10	The structural and photoluminescence studies related to the surface of the TiO ₂ sol prepared by wet chemical method. <i>Materials Science and Engineering B: Solid-State Materials for Advanced Technology</i> , 2006, 134, 27-31.	3.5	55
11	Facile synthesis of mesoporous VO ₂ nanocrystals by a cotton-template method and their enhanced thermochromic properties. <i>Solar Energy Materials and Solar Cells</i> , 2018, 176, 427-434.	6.2	49
12	New Insights into the Fundamental Principle of Semiconductor Photocatalysis. <i>ACS Omega</i> , 2020, 5, 14847-14856.	3.5	44
13	Observation of reduced phase transition temperature in N-doped thermochromic film of monoclinic VO ₂ . <i>Applied Surface Science</i> , 2017, 410, 363-372.	6.1	43
14	The synergetic effect of V and Fe-co-doping in TiO ₂ studied from the DFT + U first-principle calculation. <i>Applied Surface Science</i> , 2017, 399, 654-662.	6.1	43
15	Charge carrier interfacial transfer pathways from TiO ₂ and Au/TiO ₂ nanorod arrays to electrolyte and the association with photocatalysis. <i>Applied Surface Science</i> , 2019, 464, 367-375.	6.1	43
16	Effects of crystallinity, {001}/{101} ratio, and Au decoration on the photocatalytic activity of anatase TiO ₂ crystals. <i>Chinese Journal of Catalysis</i> , 2019, 40, 403-412.	14.0	42
17	Temperature effect on the photocatalytic degradation of methyl orange under UV-vis light irradiation. <i>Journal Wuhan University of Technology, Materials Science Edition</i> , 2010, 25, 210-213.	1.0	41
18	Theoretical Kinetic Analysis of Heterogeneous Photocatalysis: The Effects of Surface Trapping and Bulk Recombination through Defects. <i>Journal of Physical Chemistry C</i> , 2011, 115, 16037-16042.	3.1	40

#	ARTICLE	IF	CITATIONS
19	The effect of sputtering power on the structure and photocatalytic activity of TiO ₂ films prepared by magnetron sputtering. <i>Thin Solid Films</i> , 2009, 517, 6569-6575.	1.8	39
20	Facile process to greatly improve the photocatalytic activity of the TiO ₂ thin film on window glass for the photodegradation of acetone and benzene. <i>Chemical Engineering Journal</i> , 2016, 284, 1156-1164.	12.7	37
21	One-step fabrication of a self-supported Co@CoTe ₂ electrocatalyst for efficient and durable oxygen evolution reactions. <i>Inorganic Chemistry Frontiers</i> , 2020, 7, 2523-2532.	6.0	37
22	Synthesis, Characterization, and Photocatalysis of Fe-Doped : A Combined Experimental and Theoretical Study. <i>International Journal of Photoenergy</i> , 2012, 2012, 1-10.	2.5	34
23	Facile synthesis of VO ₂ (D) and its transformation to VO ₂ (M) with enhanced thermochromic properties for smart windows. <i>Ceramics International</i> , 2020, 46, 14739-14746.	4.8	31
24	Investigation of Electron Behavior in Nano-TiO ₂ Photocatalysis by Using In Situ Open-Circuit Voltage and Photoconductivity Measurements. <i>Chemistry - A European Journal</i> , 2013, 19, 10751-10759.	3.3	26
25	Construction of hierarchical titanium dioxide nanomaterials by tuning the structure of polyvinylpyrrolidone-titanium butoxide complexes from 2- to 3-dimensional. <i>Journal of Materials Chemistry A</i> , 2013, 1, 4993.	10.3	25
26	The role of electron interfacial transfer in mesoporous nano-TiO ₂ photocatalysis: a combined study of in situ photoconductivity and numerical kinetic simulation. <i>Physical Chemistry Chemical Physics</i> , 2017, 19, 8866-8873.	2.8	24
27	TiO ₂ Nanotube Arrays Formed on Ti Meshes with Periodically Arranged Holes for Flexible Dye-Sensitized Solar Cells. <i>ACS Applied Nano Materials</i> , 2019, 2, 3943-3950.	5.0	24
28	High sub-band gap response of TiO ₂ nanorod arrays for visible photoelectrochemical water oxidation. <i>Applied Surface Science</i> , 2019, 465, 192-200.	6.1	24
29	Monte-Carlo modelling of nano-material photocatalysis: bridging photocatalytic activity and microscopic charge kinetics. <i>Physical Chemistry Chemical Physics</i> , 2016, 18, 11520-11527.	2.8	23
30	Ag/epoxy nanocomposite film with aligned Ag nanowires and their polarization property. <i>Journal of Materials Research</i> , 2011, 26, 2691-2700.	2.6	20
31	A visible-light-active Au-Cu(I)@Na ₂ Ti ₆ O ₁₃ nanostructured hybrid plasmonic photocatalytic membrane for acetaldehyde elimination. <i>Chinese Journal of Catalysis</i> , 2017, 38, 2048-2055.	14.0	20
32	Dye-sensitized solar cells fabricated by the TiO ₂ nanostructural materials synthesized by electrospray and hydrothermal post-treatment. <i>Applied Surface Science</i> , 2015, 358, 412-417.	6.1	19
33	In Situ Photoconductivity Kinetic Study of Nano-TiO ₂ during the Photocatalytic Oxidation of Formic Acid: Effects of New Recombination and Current Doubling. <i>Journal of Physical Chemistry C</i> , 2015, 119, 21711-21722.	3.1	19
34	Liquid N ₂ quenching induced oxygen defects and surface distortion in TiO ₂ and the effect on the photocatalysis of methylene blue and acetone. <i>Applied Surface Science</i> , 2019, 494, 266-274.	6.1	18
35	Hydrothermal synthesis of delafossite CuScO ₂ hexagonal plates as an electrocatalyst for the alkaline oxygen evolution reaction. <i>Dalton Transactions</i> , 2020, 49, 3519-3524.	3.3	18
36	Facile Preparation of Zn ₂ V ₂ O ₇ -VO ₂ Composite Films with Enhanced Thermochromic Properties for Smart Windows. <i>ACS Applied Electronic Materials</i> , 2021, 3, 2224-2232.	4.3	17

#	ARTICLE	IF	CITATIONS
37	New Insight into the Role of Electron Transfer to O ₂ in Photocatalytic Oxidations of Acetone over TiO ₂ and the Effect of Au Cocatalyst. Journal of Physical Chemistry C, 2019, 123, 30958-30971.	3.1	16
38	Preparation, characterization and photocatalytic property of Ag-loaded TiO ₂ powders using photodeposition method. Journal Wuhan University of Technology, Materials Science Edition, 2009, 24, 258-263.	1.0	14
39	A stochastic study of electron transfer kinetics in nano-particulate photocatalysis: a comparison of the quasi-equilibrium approximation with a random walking model. Physical Chemistry Chemical Physics, 2016, 18, 31914-31923.	2.8	14
40	WO ₃ Layered Film with Dual Function of Anti-UV Light and High Photoelectrocatalytic Activity: Facile Preparation and Characterization. Journal of the American Ceramic Society, 2012, 95, 3346-3351.	3.8	13
41	Gaseous Photocatalytic Oxidation of Formic Acid over TiO ₂ : A Comparison between the Charge Carrier Transfer and Light-Assisted Mars-van Krevelen Pathways. Journal of Physical Chemistry C, 2019, 123, 22261-22272.	3.1	13
42	The surface change of TiO ₂ film induced by UV illumination and the effects on UV-vis transmission spectra. Applied Surface Science, 2008, 255, 2752-2758.	6.1	11
43	Preparation, Characterization, and Photocatalytic Properties of Self-Standing Pure and Cu-Doped TiO ₂ Nanobelt Membranes. ACS Omega, 2021, 6, 4534-4541.	3.5	9
44	Acid Solution Processed VO ₂ -Based Composite Films with Enhanced Thermochromic Properties for Smart Windows. Materials, 2021, 14, 4927.	2.9	7
45	Can Plasmonic Effect Cause an Increase in the Catalytic Reduction of <i>p</i> -nitrophenol by Sodium Borohydride over Au Nanorods?. ACS Omega, 2020, 5, 11998-12004.	3.5	7
46	The effect of Cu dopants on electron transfer to O ₂ and the connection with acetone photocatalytic oxidations over nano-TiO ₂ . Physical Chemistry Chemical Physics, 2021, 23, 8300-8308.	2.8	6
47	Plasmon-assisted facile selective gaseous isopropanol dehydrogenation over Ag nanocubes. Catalysis Science and Technology, 2022, 12, 94-104.	4.1	6
48	Controlling the crystalline orientation and textual morphologies of the VO ₂ film and the effect on insulator-metal transition properties. Japanese Journal of Applied Physics, 2022, 61, 085504.	1.5	6
49	Comparative study of the metal insulator transition of a VO ₂ film with simultaneous infrared thermography and electric measurements. AIP Advances, 2021, 11, 035026.	1.3	5
50	Kinetics analysis of the electron transfer from nano-TiO ₂ to O ₂ through on-line absorptions and theoretical modeling. Journal of Applied Physics, 2021, 129, .	2.5	5
51	A light-heat synergism in the sub-bandgap photocatalytic response of pristine TiO ₂ : a study of <i>in situ</i> diffusion reflectance and conductance. Physical Chemistry Chemical Physics, 2022, 24, 5618-5626.	2.8	4
52	Observation of the crystalline orientation dependence of the semiconductor-metal transition for thermal oxidation induced VO ₂ films over amorphous quartz glasses. AIP Advances, 2021, 11, 125232.	1.3	4
53	Kinetics and energetic analysis of the slow dispersive electron transfer from nano-TiO ₂ to O ₂ by <i>in situ</i> diffusion reflectance and Laplace transform. Physical Chemistry Chemical Physics, 2021, 23, 19901-19910.	2.8	3
54	Charge carrier transfer in photocatalysis. Interface Science and Technology, 2020, , 103-159.	3.3	2

#	ARTICLE	IF	CITATIONS
55	Exponential and Gaussian traps in nano-TiO ₂ and their function in kinetics of the electron transfer to O ₂ . Journal of Applied Physics, 2021, 130, 035102.	2.5	1
56	Roasting reduction-magnetic separation of oolitic-hematite and preparation of cementitious materials. , 2011, , .		0
57	Application of ArcGIS in Recovery and Management of Geological Environment. , 2012, , .		0