

Andreas Kafizas

List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/1032719/publications.pdf>

Version: 2024-02-01

96
papers

5,281
citations

53794

45
h-index

85541

71
g-index

98
all docs

98
docs citations

98
times ranked

6884
citing authors

#	ARTICLE	IF	CITATIONS
1	The determination of oxidation rates and quantum yields during the photocatalytic oxidation of As(III) over TiO ₂ . Journal of Photochemistry and Photobiology A: Chemistry, 2022, 424, 113628.	3.9	8
2	Systematic Exploration of WO ₃ /TiO ₂ Heterojunction Phase Space for Applications in Photoelectrochemical Water Splitting. Journal of Physical Chemistry C, 2022, 126, 871-884.	3.1	16
3	Parasitic Light Absorption, Rate Laws and Heterojunctions in the Photocatalytic Oxidation of Arsenic(III) Using Composite TiO ₂ /Fe ₂ O ₃ . Chemistry - A European Journal, 2022, 28, .	3.3	8
4	Linking in situ charge accumulation to electronic structure in doped SrTiO ₃ reveals design principles for hydrogen-evolving photocatalysts. Nature Materials, 2021, 20, 511-517.	27.5	82
5	Charge Transport Phenomena in Heterojunction Photocatalysts: The WO ₃ /TiO ₂ System as an Archetypical Model. ACS Applied Materials & Interfaces, 2021, 13, 9781-9793.	8.0	24
6	Zn and N Codoped TiO ₂ Thin Films: Photocatalytic and Bactericidal Activity. ACS Applied Materials & Interfaces, 2021, 13, 10480-10489.	8.0	28
7	A Review of Inorganic Photoelectrode Developments and Reactor Scale-Up Challenges for Solar Hydrogen Production. Advanced Energy Materials, 2021, 11, 2003286.	19.5	51
8	The effect of nanoparticulate PdO co-catalysts on the faradaic and light conversion efficiency of WO ₃ photoanodes for water oxidation. Physical Chemistry Chemical Physics, 2021, 23, 1285-1291.	2.8	6
9	Color-tunable hybrid heterojunctions as semi-transparent photovoltaic windows for photoelectrochemical water splitting. Cell Reports Physical Science, 2021, 2, 100676.	5.6	3
10	Multihole water oxidation catalysis on haematite photoanodes revealed by operando spectroelectrochemistry and DFT. Nature Chemistry, 2020, 12, 82-89.	13.6	189
11	A Hierarchical 3D TiO ₂ /Ni Nanostructure as an Efficient Hole-Extraction and Protection Layer for GaAs Photoanodes. ChemSusChem, 2020, 13, 6028-6036.	6.8	8
12	Towards High Performance Chemical Vapour Deposition V ₂ O ₅ Cathodes for Batteries Employing Aqueous Media. Molecules, 2020, 25, 5558.	3.8	9
13	Improved accuracy in multicomponent surface complexation models using surface-sensitive analytical techniques: Adsorption of arsenic onto a TiO ₂ /Fe ₂ O ₃ multifunctional sorbent. Journal of Colloid and Interface Science, 2020, 580, 834-849.	9.4	17
14	Anisotropic Electron Transport Limits Performance of Bi ₂ WO ₆ Photoanodes. Journal of Physical Chemistry C, 2020, 124, 18859-18867.	3.1	9
15	Photobactericidal activity activated by thiolated gold nanoclusters at low flux levels of white light. Nature Communications, 2020, 11, 1207.	12.8	52
16	Determining the role of oxygen vacancies in the photoelectrocatalytic performance of WO ₃ for water oxidation. Chemical Science, 2020, 11, 2907-2914.	7.4	126
17	Enhanced Photocatalytic and Antibacterial Ability of Cu-Doped Anatase TiO ₂ Thin Films: Theory and Experiment. ACS Applied Materials & Interfaces, 2020, 12, 15348-15361.	8.0	102
18	Charge Separation, Band-Bending, and Recombination in WO ₃ Photoanodes. Journal of Physical Chemistry Letters, 2019, 10, 5395-5401.	4.6	44

#	ARTICLE	IF	CITATIONS
19	Impact of Oxygen Vacancy Occupancy on Charge Carrier Dynamics in BiVO ₄ Photoanodes. <i>Journal of the American Chemical Society</i> , 2019, 141, 18791-18798.	13.7	147
20	Beyond band bending in the WO ₃ /BiVO ₄ heterojunction: insight from DFT and experiment. <i>Sustainable Energy and Fuels</i> , 2019, 3, 264-271.	4.9	17
21	WO ₃ /BiVO ₄ : impact of charge separation at the timescale of water oxidation. <i>Chemical Science</i> , 2019, 10, 2643-2652.	7.4	59
22	Explaining the Enhanced Photoelectrochemical Behavior of Highly Ordered TiO ₂ Nanotube Arrays: Anatase/Rutile Phase Junction. <i>ACS Sustainable Chemistry and Engineering</i> , 2019, 7, 5274-5282.	6.7	48
23	The Effect of Materials Architecture in TiO ₂ /MOF Composites on CO ₂ Photoreduction and Charge Transfer. <i>Small</i> , 2019, 15, e1805473.	10.0	72
24	Heterojunction Fe ₂ O ₃ /ZnO Films with Enhanced Photocatalytic Properties Grown by Aerosol-Assisted Chemical Vapour Deposition. <i>Chemistry - A European Journal</i> , 2019, 25, 11337-11345.	3.3	28
25	Effect of oxygen deficiency on the excited state kinetics of WO ₃ and implications for photocatalysis. <i>Chemical Science</i> , 2019, 10, 5667-5677.	7.4	97
26	MOF-Based Heterojunctions: The Effect of Materials Architecture in TiO ₂ /MOF Composites on CO ₂ Photoreduction and Charge Transfer (<i>Small</i> 11/2019). <i>Small</i> , 2019, 15, 1970060.	10.0	3
27	Titanium dioxide/carbon nitride nanosheet nanocomposites for gas phase CO ₂ photoreduction under UV-visible irradiation. <i>Applied Catalysis B: Environmental</i> , 2019, 242, 369-378.	20.2	111
28	Ultra-thin Al ₂ O ₃ coatings on BiVO ₄ photoanodes: Impact on performance and charge carrier dynamics. <i>Catalysis Today</i> , 2019, 321-322, 59-66.	4.4	28
29	Chemical Vapor Deposition of Photocatalytically Active Pure Brookite TiO ₂ Thin Films. <i>Chemistry of Materials</i> , 2018, 30, 1353-1361.	6.7	79
30	Deeper Understanding of Interstitial Boron-Doped Anatase Thin Films as A Multifunctional Layer Through Theory and Experiment. <i>Journal of Physical Chemistry C</i> , 2018, 122, 714-726.	3.1	16
31	Aerosol-assisted chemical vapor deposition of V ₂ O ₅ cathodes with high rate capabilities for magnesium-ion batteries. <i>Journal of Power Sources</i> , 2018, 384, 355-359.	7.8	48
32	High efficiency water splitting photoanodes composed of nano-structured anatase-rutile TiO ₂ heterojunctions by pulsed-pressure MOCVD. <i>Applied Catalysis B: Environmental</i> , 2018, 224, 904-911.	20.2	51
33	Water Oxidation and Electron Extraction Kinetics in Nanostructured Tungsten Trioxide Photoanodes. <i>Journal of the American Chemical Society</i> , 2018, 140, 16168-16177.	13.7	105
34	Ultraviolet Radiation Induced Dopant Loss in a TiO ₂ Photocatalyst. <i>ACS Catalysis</i> , 2017, 7, 1485-1490.	11.2	18
35	Optimizing the Activity of Nanoneedle Structured WO ₃ Photoanodes for Solar Water Splitting: Direct Synthesis via Chemical Vapor Deposition. <i>Journal of Physical Chemistry C</i> , 2017, 121, 5983-5993.	3.1	71
36	Correlation of Optical Properties, Electronic Structure, and Photocatalytic Activity in Nanostructured Tungsten Oxide. <i>Advanced Materials Interfaces</i> , 2017, 4, 1700064.	3.7	25

#	ARTICLE	IF	CITATIONS
37	Electron transfer dynamics in fuel producing photosystems. <i>Current Opinion in Electrochemistry</i> , 2017, 2, 136-143.	4.8	40
38	Photocatalysis: Evidence and Effect of Photogenerated Charge Transfer for Enhanced Photocatalysis in WO ₃ /TiO ₂ Heterojunction Films: A Computational and Experimental Study (<i>Adv. Funct. Mater.</i> 18/2017). <i>Advanced Functional Materials</i> , 2017, 27, .	14.9	1
39	Water Oxidation Kinetics of Accumulated Holes on the Surface of a TiO ₂ Photoanode: A Rate Law Analysis. <i>ACS Catalysis</i> , 2017, 7, 4896-4903.	11.2	105
40	Evidence and Effect of Photogenerated Charge Transfer for Enhanced Photocatalysis in WO ₃ /TiO ₂ Heterojunction Films: A Computational and Experimental Study. <i>Advanced Functional Materials</i> , 2017, 27, 1605413.	14.9	115
41	CO ₂ capture and photocatalytic reduction using bifunctional TiO ₂ /MOF nanocomposites under UV-vis irradiation. <i>Applied Catalysis B: Environmental</i> , 2017, 210, 131-140.	20.2	288
42	Computational and Experimental Study of Ta ₂ O ₅ Thin Films. <i>Journal of Physical Chemistry C</i> , 2017, 121, 202-210.	3.1	27
43	Charge Carrier Dynamics in Metal Oxide Photoelectrodes for Water Oxidation. <i>Semiconductors and Semimetals</i> , 2017, , 3-46.	0.7	16
44	Kinetics of Photoelectrochemical Oxidation of Methanol on Hematite Photoanodes. <i>Journal of the American Chemical Society</i> , 2017, 139, 11537-11543.	13.7	125
45	Comparing photoelectrochemical water oxidation, recombination kinetics and charge trapping in the three polymorphs of TiO ₂ . <i>Scientific Reports</i> , 2017, 7, 2938.	3.3	46
46	Photoinduced Absorption Spectroscopy of CoPi on BiVO ₄ : The Function of CoPi during Water Oxidation. <i>Advanced Functional Materials</i> , 2016, 26, 4951-4960.	14.9	169
47	Evaluation of Surface State Mediated Charge Recombination in Anatase and Rutile TiO ₂ . <i>Journal of Physical Chemistry Letters</i> , 2016, 7, 3742-3746.	4.6	107
48	Rate Law Analysis of Water Oxidation and Hole Scavenging on a BiVO ₄ Photoanode. <i>ACS Energy Letters</i> , 2016, 1, 618-623.	17.4	76
49	Where Do Photogenerated Holes Go in Anatase:Rutile TiO ₂ ? A Transient Absorption Spectroscopy Study of Charge Transfer and Lifetime. <i>Journal of Physical Chemistry A</i> , 2016, 120, 715-723.	2.5	128
50	Multifunctional P-Doped TiO ₂ Films: A New Approach to Self-Cleaning, Transparent Conducting Oxide Materials. <i>Chemistry of Materials</i> , 2015, 27, 3234-3242.	6.7	113
51	Transient Absorption Spectroscopy of Anatase and Rutile: The Impact of Morphology and Phase on Photocatalytic Activity. <i>Journal of Physical Chemistry C</i> , 2015, 119, 10439-10447.	3.1	135
52	Efficient suppression of back electron/hole recombination in cobalt phosphate surface-modified undoped bismuth vanadate photoanodes. <i>Journal of Materials Chemistry A</i> , 2015, 3, 20649-20657.	10.3	117
53	Combinatorial Atmospheric Pressure Chemical Vapor Deposition of F:TiO ₂ ; the Relationship between Photocatalysis and Transparent Conducting Oxide Properties. <i>Advanced Functional Materials</i> , 2014, 24, 1758-1771.	14.9	44
54	Aerosol-Assisted Chemical Vapour Deposition of Transparent Zinc Gallate Films. <i>ChemPlusChem</i> , 2014, 79, 1024-1029.	2.8	11

#	ARTICLE	IF	CITATIONS
55	Combinatorial Atmospheric Pressure CVD of a Composite TiO ₂ /SnO ₂ Thin Film. Chemical Vapor Deposition, 2014, 20, 69-79.	1.3	12
56	Combinatorial aerosol assisted chemical vapour deposition of a photocatalytic mixed SnO ₂ /TiO ₂ thin film. Journal of Materials Chemistry A, 2014, 2, 5108-5116.	10.3	32
57	Ultrafast Charge Carrier Recombination and Trapping in Hematite Photoanodes under Applied Bias. Journal of the American Chemical Society, 2014, 136, 9854-9857.	13.7	238
58	An EXAFS study on the photo-assisted growth of silver nanoparticles on titanium dioxide thin-films and the identification of their photochromic states. Physical Chemistry Chemical Physics, 2013, 15, 8254.	2.8	16
59	CVD and precursor chemistry of transition metal nitrides. Coordination Chemistry Reviews, 2013, 257, 2073-2119.	18.8	102
60	TiO ₂ -based transparent conducting oxides; the search for optimum electrical conductivity using a combinatorial approach. Journal of Materials Chemistry C, 2013, 1, 6335.	5.5	32
61	The room temperature formation of gold nanoparticles from the reaction of cyclohexanone and auric acid; a transition from dendritic particles to compact shapes and nanoplates. Journal of Materials Chemistry A, 2013, 1, 7351.	10.3	30
62	Air purification by heterogeneous photocatalytic oxidation with multi-doped thin film titanium dioxide. Thin Solid Films, 2013, 537, 131-136.	1.8	15
63	Combinatorial Atmospheric Pressure Chemical Vapor Deposition of Graded TiO ₂ /VO ₂ Mixed-Phase Composites and Their Dual Functional Property as Self-Cleaning and Photochromic Window Coatings. ACS Combinatorial Science, 2013, 15, 309-319.	3.8	53
64	Aerosol assisted chemical vapour deposition of hydrophobic TiO ₂ /SnO ₂ composite film with novel microstructure and enhanced photocatalytic activity. Journal of Materials Chemistry A, 2013, 1, 6271.	10.3	55
65	Photocatalytic activity of needle-like TiO ₂ /WO ₃ ^x thin films prepared by chemical vapour deposition. Journal of Photochemistry and Photobiology A: Chemistry, 2012, 239, 60-64.	3.9	34
66	Does a Photocatalytic Synergy in an Anatase/Rutile TiO ₂ Composite Thin Film Exist?. Chemistry - A European Journal, 2012, 18, 13048-13058.	3.3	45
67	Inorganic thin-film combinatorial studies for rapidly optimising functional properties. Chemical Society Reviews, 2012, 41, 738-781.	38.1	44
68	Superhydrophobic Photocatalytic Surfaces through Direct Incorporation of Titania Nanoparticles into a Polymer Matrix by Aerosol Assisted Chemical Vapor Deposition. Advanced Materials, 2012, 24, 3505-3508.	21.0	167
69	CVD Production of Doped Titanium Dioxide Thin Films. Chemical Vapor Deposition, 2012, 18, 89-101.	1.3	35
70	The use of combinatorial aerosol-assisted chemical vapour deposition for the formation of gallium-indium-oxide thin films. Journal of Materials Chemistry, 2011, 21, 12644.	6.7	22
71	An investigation into the effect of thickness of titanium dioxide and gold-silver nanoparticle titanium dioxide composite thin-films on photocatalytic activity and photo-induced oxygen production in a sacrificial system. Journal of Materials Chemistry, 2011, 21, 6854.	6.7	31
72	The relationship between photocatalytic activity and photochromic state of nanoparticulate silver surface loaded titanium dioxide thin-films. Physical Chemistry Chemical Physics, 2011, 13, 13827.	2.8	36

#	ARTICLE	IF	CITATIONS
73	Combinatorial Atmospheric Pressure Chemical Vapor Deposition (cAPCVD): A Route to Functional Property Optimization. <i>Journal of the American Chemical Society</i> , 2011, 133, 20458-20467.	13.7	54
74	Visible light photocatalystsâ€”N-doped TiO ₂ by solâ€”gel, enhanced with surface bound silver nanoparticle islands. <i>Journal of Materials Chemistry</i> , 2011, 21, 11854.	6.7	56
75	Nanoparticulate silver coated-titania thin filmsâ€”Photo-oxidative destruction of stearic acid under different light sources and antimicrobial effects under hospital lighting conditions. <i>Journal of Photochemistry and Photobiology A: Chemistry</i> , 2011, 220, 113-123.	3.9	69
76	Antibacterial Activity of Light-Activated Silicone Containing Methylene Blue and Gold Nanoparticles of Different Sizes. <i>Journal of Cluster Science</i> , 2010, 21, 427-438.	3.3	62
77	The combinatorial atmospheric pressure chemical vapour deposition (cAPCVD) of a gradating substitutional/interstitial N-doped anatase TiO ₂ thin-film; UVA and visible light photocatalytic activities. <i>Journal of Photochemistry and Photobiology A: Chemistry</i> , 2010, 216, 156-166.	3.9	60
78	A comprehensive aerosol spray method for the rapid photocatalytic grid area analysis of semiconductor photocatalyst thin films. <i>Analytica Chimica Acta</i> , 2010, 663, 69-76.	5.4	24
79	The extended time evolution size decrease of gold nanoparticles formed by the Turkevich method. <i>New Journal of Chemistry</i> , 2010, 34, 1401.	2.8	38
80	The combinatorial atmospheric pressure chemical vapour deposition (cAPCVD) of a gradating N-doped mixed phase titania thin film. <i>Journal of Materials Chemistry</i> , 2010, 20, 2157.	6.7	48
81	The effect of initiation method on the size, monodispersity and shape of gold nanoparticles formed by the Turkevich method. <i>New Journal of Chemistry</i> , 2010, 34, 2906.	2.8	37
82	Combinatorial atmospheric pressure chemical vapour deposition (cAPCVD) of niobium doped anatase; effect of niobium on the conductivity and photocatalytic activity. <i>Journal of Materials Chemistry</i> , 2010, 20, 8336.	6.7	53
83	Combinatorial CVD: New Oxynitride Photocatalysts. <i>ECS Transactions</i> , 2009, 25, 139-154.	0.5	7
84	Combinatorial CVD: New Oxy-nitride Photocatalysts. <i>ECS Transactions</i> , 2009, 25, 1239-1250.	0.5	7
85	Titanium dioxide and composite metal/metal oxide titania thin films on glass: A comparative study of photocatalytic activity. <i>Journal of Photochemistry and Photobiology A: Chemistry</i> , 2009, 204, 183-190.	3.9	107
86	Simple method for the rapid simultaneous screening of photocatalytic activity over multiple positions of self-cleaning films. <i>Physical Chemistry Chemical Physics</i> , 2009, 11, 8367.	2.8	41
87	White light induced photocatalytic activity of sulfur-doped TiO ₂ thin films and their potential for antibacterial application. <i>Journal of Materials Chemistry</i> , 2009, 19, 8747.	6.7	105
88	Combinatorial atmospheric pressure chemical vapour deposition (cAPCVD) of a mixed vanadium oxide and vanadium oxynitride thin film. <i>Journal of Materials Chemistry</i> , 2009, 19, 1399.	6.7	45
89	Investigating the Influence of Nanostructuring on Photoanode Performance. , 0, ,		0
90	Charge Carrier Dynamics in Nanostructured Tungsten Trioxide for Solar Driven Water Oxidation. , 0, ,		0

#	ARTICLE	IF	CITATIONS
91	Using Transient Spectroscopic Techniques to Investigate the Effect of Catalyst Overlayers and Morphology on the Water Oxidation Performance of Bismuth Vanadate. , 0, , .		0
92	Investigating the Enhanced Performance of WO ₃ Photoanodes from the Addition of Pd Co-catalysts. , 0, , .		0
93	Using Transient Spectroscopic Techniques to Investigate the Effect of Catalyst Overlayers and Morphology on the Water Oxidation Performance of Bismuth Vanadate. , 0, , .		0
94	Charge Carrier Dynamics in Nanostructured Tungsten Trioxide for Solar Driven Water Oxidation. , 0, , .		0
95	Investigating the Influence of Nanostructuring on Photoanode Performance. , 0, , .		0
96	Investigating the Enhanced Performance of WO ₃ Photoanodes from the Addition of Pd Co-catalysts. , 0, , .		0