Andreas Kafizas

List of Publications by Citations

86 papers	3,857 citations	38 h-index	60 g-index
98 ext. papers	4,569 ext. citations	9.9 avg, IF	5.71 L-index

#	Paper	IF	Citations
86	CO 2 capture and photocatalytic reduction using bifunctional TiO 2 /MOF nanocomposites under UV□is irradiation. *Applied Catalysis B: Environmental*, **2017**, 210, 131-140	21.8	204
85	Ultrafast charge carrier recombination and trapping in hematite photoanodes under applied bias. *Journal of the American Chemical Society*, **2014**, 136, 9854-7	16.4	204
84	Superhydrophobic photocatalytic surfaces through direct incorporation of titania nanoparticles into a polymer matrix by aerosol assisted chemical vapor deposition. *Advanced Materials*, **2012**, 24, 3505-8	24	146
83	Photoinduced Absorption Spectroscopy of CoPi on BiVO4: The Function of CoPi during Water Oxidation. *Advanced Functional Materials*, **2016**, 26, 4951-4960	15.6	135
82	Transient Absorption Spectroscopy of Anatase and Rutile: The Impact of Morphology and Phase on Photocatalytic Activity. *Journal of Physical Chemistry C*, **2015**, 119, 10439-10447	3.8	107
81	Efficient suppression of back electron/hole recombination in cobalt phosphate surface-modified undoped bismuth vanadate photoanodes. *Journal of Materials Chemistry A*, **2015**, 3, 20649-20657	13	101
80	Where Do Photogenerated Holes Go in Anatase:Rutile TiO2? A Transient Absorption Spectroscopy Study of Charge Transfer and Lifetime. *Journal of Physical Chemistry A*, **2016**, 120, 715-23	2.8	101
79	White light induced photocatalytic activity of sulfur-doped TiO2 thin films and their potential for antibacterial application. *Journal of Materials Chemistry*, **2009**, 19, 8747		99
78	Titanium dioxide and composite metal/metal oxide titania thin films on glass: A comparative study of photocatalytic activity. *Journal of Photochemistry and Photobiology A: Chemistry*, **2009**, 204, 183-190	4.7	98
77	Multihole water oxidation catalysis on haematite photoanodes revealed by operando spectroelectrochemistry and DFT. *Nature Chemistry*, **2020**, 12, 82-89	17.6	93
76	Multifunctional P-Doped TiO2 Films: A New Approach to Self-Cleaning, Transparent Conducting Oxide Materials. *Chemistry of Materials*, **2015**, 27, 3234-3242	9.6	92
75	Titanium dioxide/carbon nitride nanosheet nanocomposites for gas phase CO2 photoreduction under UV-visible irradiation. *Applied Catalysis B: Environmental*, **2019**, 242, 369-378	21.8	86
74	Evaluation of Surface State Mediated Charge Recombination in Anatase and Rutile TiO. *Journal of Physical Chemistry Letters*, **2016**, 7, 3742-3746	6.4	85
73	Impact of Oxygen Vacancy Occupancy on Charge Carrier Dynamics in BiVO Photoanodes. *Journal of the American Chemical Society*, **2019**, 141, 18791-18798	16.4	85
72	CVD and precursor chemistry of transition metal nitrides. *Coordination Chemistry Reviews*, **2013**, 257, 2073-2119	23.2	83
71	Water Oxidation Kinetics of Accumulated Holes on the Surface of a TiO2 Photoanode: A Rate Law Analysis. *ACS Catalysis*, **2017**, 7, 4896-4903	13.1	76
70	Evidence and Effect of Photogenerated Charge Transfer for Enhanced Photocatalysis in WO3/TiO2 Heterojunction Films: A Computational and Experimental Study. *Advanced Functional Materials*, **2017**, 27, 1605413	15.6	76

69	Kinetics of Photoelectrochemical Oxidation of Methanol on Hematite Photoanodes. *Journal of the American Chemical Society*, **2017**, 139, 11537-11543	16.4	76
68	Water Oxidation and Electron Extraction Kinetics in Nanostructured Tungsten Trioxide Photoanodes. *Journal of the American Chemical Society*, **2018**, 140, 16168-16177	16.4	73
67	Nanoparticulate silver coated-titania thin films: Photo-oxidative destruction of stearic acid under different light sources and antimicrobial effects under hospital lighting conditions. *Journal of Photochemistry and Photobiology A: Chemistry*, **2011**, 220, 113-123	4.7	64
66	Antibacterial Activity of Light-Activated Silicone Containing Methylene Blue and Gold Nanoparticles of Different Sizes. *Journal of Cluster Science*, **2010**, 21, 427-438	3	59
65	Optimizing the Activity of Nanoneedle Structured WO3 Photoanodes for Solar Water Splitting: Direct Synthesis via Chemical Vapor Deposition. *Journal of Physical Chemistry C*, **2017**, 121, 5983-5993	3.8	57
64	Determining the role of oxygen vacancies in the photoelectrocatalytic performance of WO for water oxidation. *Chemical Science*, **2020**, 11, 2907-2914	9.4	57
63	Effect of oxygen deficiency on the excited state kinetics of WO and implications for photocatalysis. *Chemical Science*, **2019**, 10, 5667-5677	9.4	56
62	Rate Law Analysis of Water Oxidation and Hole Scavenging on a BiVO4 Photoanode. *ACS Energy Letters*, **2016**, 1, 618-623	20.1	54
61	The combinatorial atmospheric pressure chemical vapour deposition (cAPCVD) of a gradating substitutional/interstitial N-doped anatase TiO2 thin-film; UVA and visible light photocatalytic activities. *Journal of Photochemistry and Photobiology A: Chemistry*, **2010**, 216, 156-166	4.7	53
60	Visible light photocatalysts: N-doped TiO2 by sol–gel, enhanced with surface bound silver nanoparticle islands. *Journal of Materials Chemistry*, **2011**, 21, 11854		52
59	Combinatorial atmospheric pressure chemical vapor deposition (cAPCVD): a route to functional property optimization. *Journal of the American Chemical Society*, **2011**, 133, 20458-67	16.4	51
58	Aerosol assisted chemical vapour deposition of hydrophobic TiO2/SnO2 composite film with novel microstructure and enhanced photocatalytic activity. *Journal of Materials Chemistry A*, **2013**, 1, 6271	13	50
57	Combinatorial atmospheric pressure chemical vapour deposition (cAPCVD) of niobium doped anatase; effect of niobium on the conductivity and photocatalytic activity. *Journal of Materials Chemistry*, **2010**, 20, 8336		50
56	Enhanced Photocatalytic and Antibacterial Ability of Cu-Doped Anatase TiO Thin Films: Theory and Experiment. *ACS Applied Materials & Interfaces*, **2020**, 12, 15348-15361	9.5	49
55	Combinatorial atmospheric pressure chemical vapor deposition of graded TiO2/VO2 mixed-phase composites and their dual functional property as self-cleaning and photochromic window coatings. *ACS Combinatorial Science*, **2013**, 15, 309-19	3.9	47
54	Combinatorial atmospheric pressure chemical vapour deposition (cAPCVD) of a mixed vanadium oxide and vanadium oxynitride thin film. *Journal of Materials Chemistry*, **2009**, 19, 1399		45
53	The combinatorial atmospheric pressure chemical vapour deposition (cAPCVD) of a gradating N-doped mixed phase titania thin film. *Journal of Materials Chemistry*, **2010**, 20, 2157		44
52	Chemical Vapor Deposition of Photocatalytically Active Pure Brookite TiO2 Thin Films. *Chemistry of Materials*, **2018**, 30, 1353-1361	9.6	43

51	The Effect of Materials Architecture in TiO /MOF Composites on CO Photoreduction and Charge Transfer. *Small*, **2019**, 15, e1805473	11	42
50	Does a photocatalytic synergy in an anatase-rutile TiO2 composite thin-film exist?. *Chemistry - A European Journal*, **2012**, 18, 13048-58	4.8	41
49	WO/BiVO: impact of charge separation at the timescale of water oxidation. *Chemical Science*, **2019**, 10, 2643-2652	9.4	39
48	Inorganic thin-film combinatorial studies for rapidly optimising functional properties. *Chemical Society Reviews*, **2012**, 41, 738-81	58.5	38
47	Simple method for the rapid simultaneous screening of photocatalytic activity over multiple positions of self-cleaning films. *Physical Chemistry Chemical Physics*, **2009**, 11, 8367-75	3.6	38
46	High efficiency water splitting photoanodes composed of nano-structured anatase-rutile TiO2 heterojunctions by pulsed-pressure MOCVD. *Applied Catalysis B: Environmental*, **2018**, 224, 904-911	21.8	38
45	Comparing photoelectrochemical water oxidation, recombination kinetics and charge trapping in the three polymorphs of TiO. *Scientific Reports*, **2017**, 7, 2938	4.9	37
44	The extended time evolution size decrease of gold nanoparticles formed by the Turkevich method. *New Journal of Chemistry*, **2010**, 34, 1401	3.6	37
43	The relationship between photocatalytic activity and photochromic state of nanoparticulate silver surface loaded titanium dioxide thin-films. *Physical Chemistry Chemical Physics*, **2011**, 13, 13827-38	3.6	35
42	Aerosol-assisted chemical vapor deposition of V2O5 cathodes with high rate capabilities for magnesium-ion batteries. *Journal of Power Sources*, **2018**, 384, 355-359	8.9	34
41	The effect of initiation method on the size, monodispersity and shape of gold nanoparticles formed by the Turkevich method. *New Journal of Chemistry*, **2010**, 34, 2906	3.6	34
40	Combinatorial Atmospheric Pressure Chemical Vapor Deposition of F:TiO2; the Relationship between Photocatalysis and Transparent Conducting Oxide Properties. *Advanced Functional Materials*, **2014**, 24, 1758-1771	15.6	33
39	Explaining the Enhanced Photoelectrochemical Behavior of Highly Ordered TiO2 Nanotube Arrays: Anatase/Rutile Phase Junction. *ACS Sustainable Chemistry and Engineering*, **2019**, 7, 5274-5282	8.3	32
38	CVD Production of Doped Titanium Dioxide Thin Films. *Chemical Vapor Deposition*, **2012**, 18, 89-101		31
37	Electron transfer dynamics in fuel producing photosystems. *Current Opinion in Electrochemistry*, **2017**, 2, 136-143	7.2	30
36	Photocatalytic activity of needle-like TiO2/WO3 thin films prepared by chemical vapour deposition. *Journal of Photochemistry and Photobiology A: Chemistry*, **2012**, 239, 60-64	4.7	28
35	Combinatorial aerosol assisted chemical vapour deposition of a photocatalytic mixed SnO2/TiO2 thin film. *Journal of Materials Chemistry A*, **2014**, 2, 5108-5116	13	27
34	Photobactericidal activity activated by thiolated gold nanoclusters at low flux levels of white light. *Nature Communications*, **2020**, 11, 1207	17.4	26

33	Charge Separation, Band-Bending, and Recombination in WO Photoanodes. *Journal of Physical Chemistry Letters*, **2019**, 10, 5395-5401	6.4	26
32	TiO2-based transparent conducting oxides; the search for optimum electrical conductivity using a combinatorial approach. *Journal of Materials Chemistry C*, **2013**, 1, 6335	7.1	26
31	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	13	25
30	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		24
29	Linking in situ charge accumulation to electronic structure in doped SrTiO reveals design principles for hydrogen-evolving photocatalysts. *Nature Materials*, **2021**, 20, 511-517	27	24
28	A comprehensive aerosol spray method for the rapid photocatalytic grid area analysis of semiconductor photocatalyst thin films. *Analytica Chimica Acta*, **2010**, 663, 69-76	6.6	23
27	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		21
26	A Review of Inorganic Photoelectrode Developments and Reactor Scale-Up Challenges for Solar Hydrogen Production. *Advanced Energy Materials*, **2021**, 11, 2003286	21.8	20
25	Computational and Experimental Study of Ta2O5 Thin Films. *Journal of Physical Chemistry C*, **2017**, 121, 202-210	3.8	17
24	Ultra-thin Al2O3 coatings on BiVO4 photoanodes: Impact on performance and charge carrier dynamics. *Catalysis Today*, **2019**, 321-322, 59-66	5.3	17
23	Correlation of Optical Properties, Electronic Structure, and Photocatalytic Activity in Nanostructured Tungsten Oxide. *Advanced Materials Interfaces*, **2017**, 4, 1700064	4.6	15
22	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, 8254-63	3.6	15
21	Ultraviolet Radiation Induced Dopant Loss in a TiO2 Photocatalyst. *ACS Catalysis*, **2017**, 7, 1485-1490	13.1	13
20	Charge Carrier Dynamics in Metal Oxide Photoelectrodes for Water Oxidation. *Semiconductors and Semimetals*, **2017**, 3-46	0.6	12
19	Air purification by heterogeneous photocatalytic oxidation with multi-doped thin film titanium dioxide. *Thin Solid Films*, **2013**, 537, 131-136	2.2	12
18	Beyond band bending in the WO3/BiVO4 heterojunction: insight from DFT and experiment. *Sustainable Energy and Fuels*, **2019**, 3, 264-271	5.8	11
17	Combinatorial Atmospheric Pressure CVD of a Composite TiO2/SnO2 Thin Film. *Chemical Vapor Deposition*, **2014**, 20, 69-79		11
16	Zn and N Codoped TiO Thin Films: Photocatalytic and Bactericidal Activity. *ACS Applied Materials & Interfaces*, **2021**, 13, 10480-10489	9.5	9

15	Heterojunction ⊞Fe O /ZnO Films with Enhanced Photocatalytic Properties Grown by Aerosol-Assisted Chemical Vapour Deposition. *Chemistry - A European Journal*, **2019**, 25, 11337-11345	4.8	8
14	Aerosol-Assisted Chemical Vapour Deposition of Transparent Zinc Gallate Films. *ChemPlusChem*, **2014**, 79, 1024-1029	2.8	8
13	Charge Transport Phenomena in Heterojunction Photocatalysts: The WO/TiO System as an Archetypical Model. *ACS Applied Materials & Interfaces*, **2021**, 13, 9781-9793	9.5	8
12	Combinatorial CVD: New Oxynitride Photocatalysts. *ECS Transactions*, **2009**, 25, 139-154	1	7
11	Combinatorial CVD: New Oxy-nitride Photocatalysts. *ECS Transactions*, **2009**, 25, 1239-1250	1	7
10	Deeper Understanding of Interstitial Boron-Doped Anatase Thin Films as A Multifunctional Layer Through Theory and Experiment. *Journal of Physical Chemistry C*, **2018**, 122, 714-726	3.8	5
9	Improved accuracy in multicomponent surface complexation models using surface-sensitive analytical techniques: Adsorption of arsenic onto a TiO/FeO multifunctional sorbent. *Journal of Colloid and Interface Science*, **2020**, 580, 834-849	9.3	5
8	MOF-Based Heterojunctions: The Effect of Materials Architecture in TiO2/MOF Composites on CO2 Photoreduction and Charge Transfer (Small 11/2019). *Small*, **2019**, 15, 1970060	11	3
7	Anisotropic Electron Transport Limits Performance of Bi2WO6 Photoanodes. *Journal of Physical Chemistry C*, **2020**, 124, 18859-18867	3.8	3
6	The effect of nanoparticulate PdO co-catalysts on the faradaic and light conversion efficiency of WO photoanodes for water oxidation. *Physical Chemistry Chemical Physics*, **2021**, 23, 1285-1291	3.6	3
5	A Hierarchical 3D TiO /Ni Nanostructure as an Efficient Hole-Extraction and Protection Layer for GaAs Photoanodes. *ChemSusChem*, **2020**, 13, 6028-6036	8.3	2
4	Photocatalysis: Evidence and Effect of Photogenerated Charge Transfer for Enhanced Photocatalysis in WO3/TiO2 Heterojunction Films: A Computational and Experimental Study (Adv. Funct. Mater. 18/2017). *Advanced Functional Materials*, **2017**, 27,	15.6	1
3	The determination of oxidation rates and quantum yields during the photocatalytic oxidation of As(III) over TiO2. *Journal of Photochemistry and Photobiology A: Chemistry*, **2022**, 424, 113628	4.7	1
2	Towards High Performance Chemical Vapour Deposition VO Cathodes for Batteries Employing Aqueous Media. *Molecules*, **2020**, 25,	4.8	1
1	Color-tunable hybrid heterojunctions as semi-transparent photovoltaic windows for photoelectrochemical water splitting. *Cell Reports Physical Science*, **2021**, 2, 100676	6.1	1