# Andreas Kafizas

List of Publications by Year
in descending order

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| 96 | 5,281 | 53794 | 85541 |
|---|---|---|---|
| papers | citations | 45 h-index | 71 g-index |

| 98 | 98 | 98 | 6884 |
|---|---|---|---|
| all docs | docs citations | times ranked | citing authors |

| # | Article | IF | Citations |
|---|---|---|---|
| 1 | CO 2 capture and photocatalytic reduction using bifunctional TiO 2 /MOF nanocomposites under UVâ€“vis irradiation. Applied Catalysis B: Environmental, 2017, 210, 131-140. | 20.2 | 288 |
| 2 | 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 |
| 3 | Multihole water oxidation catalysis on haematite photoanodes revealed by operando spectroelectrochemistry and DFT. Nature Chemistry, 2020, 12, 82-89. | 13.6 | 189 |
| 4 | Photoinduced Absorption Spectroscopy of CoPi on BiVO<sub>4</sub>: The Function of CoPi during Water Oxidation. Advanced Functional Materials, 2016, 26, 4951-4960. | 14.9 | 169 |
| 5 | 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 |
| 6 | Impact of Oxygen Vacancy Occupancy on Charge Carrier Dynamics in BiVO<sub>4</sub> Photoanodes. Journal of the American Chemical Society, 2019, 141, 18791-18798. | 13.7 | 147 |
| 7 | 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. | 3.1 | 135 |
| 8 | Where Do Photogenerated Holes Go in Anatase:Rutile TiO<sub>2</sub>? A Transient Absorption Spectroscopy Study of Charge Transfer and Lifetime. Journal of Physical Chemistry A, 2016, 120, 715-723. | 2.5 | 128 |
| 9 | Determining the role of oxygen vacancies in the photoelectrocatalytic performance of WO<sub>3</sub> for water oxidation. Chemical Science, 2020, 11, 2907-2914. | 7.4 | 126 |
| 10 | Kinetics of Photoelectrochemical Oxidation of Methanol on Hematite Photoanodes. Journal of the American Chemical Society, 2017, 139, 11537-11543. | 13.7 | 125 |
| 11 | 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. | 10.3 | 117 |
| 12 | Evidence and Effect of Photogenerated Charge Transfer for Enhanced Photocatalysis in WO<sub>3</sub>/TiO<sub>2</sub> Heterojunction Films: A Computational and Experimental Study. Advanced Functional Materials, 2017, 27, 1605413. | 14.9 | 115 |
| 13 | Multifunctional P-Doped TiO<sub>2</sub> Films: A New Approach to Self-Cleaning, Transparent Conducting Oxide Materials. Chemistry of Materials, 2015, 27, 3234-3242. | 6.7 | 113 |
| 14 | Titanium dioxide/carbon nitride nanosheet nanocomposites for gas phase CO2 photoreduction under UV-visible irradiation. Applied Catalysis B: Environmental, 2019, 242, 369-378. | 20.2 | 111 |
| 15 | 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. | 3.9 | 107 |
| 16 | Evaluation of Surface State Mediated Charge Recombination in Anatase and Rutile TiO<sub>2</sub>. Journal of Physical Chemistry Letters, 2016, 7, 3742-3746. | 4.6 | 107 |
| 17 | White light induced photocatalytic activity of sulfur-doped TiO2 thin films and their potential for antibacterial application. Journal of Materials Chemistry, 2009, 19, 8747. | 6.7 | 105 |
| 18 | Water Oxidation Kinetics of Accumulated Holes on the Surface of a TiO<sub>2</sub> Photoanode: A Rate Law Analysis. ACS Catalysis, 2017, 7, 4896-4903. | 11.2 | 105 |

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|---|---|---|---|
| 19 | Water Oxidation and Electron Extraction Kinetics in Nanostructured Tungsten Trioxide Photoanodes. Journal of the American Chemical Society, 2018, 140, 16168-16177. | 13.7 | 105 |
| 20 | CVD and precursor chemistry of transition metal nitrides. Coordination Chemistry Reviews, 2013, 257, 2073-2119. | 18.8 | 102 |
| 21 | Enhanced Photocatalytic and Antibacterial Ability of Cu-Doped Anatase TiO<sub>2</sub> Thin Films: Theory and Experiment. ACS Applied Materials & Interfaces, 2020, 12, 15348-15361. | 8.0 | 102 |
| 22 | Effect of oxygen deficiency on the excited state kinetics of WO<sub>3</sub> and implications for photocatalysis. Chemical Science, 2019, 10, 5667-5677. | 7.4 | 97 |
| 23 | Linking in situ charge accumulation to electronic structure in doped SrTiO3 reveals design principles for hydrogen-evolving photocatalysts. Nature Materials, 2021, 20, 511-517. | 27.5 | 82 |
| 24 | Chemical Vapor Deposition of Photocatalytically Active Pure Brookite TiO<sub>2</sub> Thin Films. Chemistry of Materials, 2018, 30, 1353-1361. | 6.7 | 79 |
| 25 | Rate Law Analysis of Water Oxidation and Hole Scavenging on a BiVO<sub>4</sub> Photoanode. ACS Energy Letters, 2016, 1, 618-623. | 17.4 | 76 |
| 26 | The Effect of Materials Architecture in TiO<sub>2</sub>/MOF Composites on CO<sub>2</sub> Photoreduction and Charge Transfer. Small, 2019, 15, e1805473. | 10.0 | 72 |
| 27 | Optimizing the Activity of Nanoneedle Structured WO<sub>3</sub> Photoanodes for Solar Water Splitting: Direct Synthesis via Chemical Vapor Deposition. Journal of Physical Chemistry C, 2017, 121, 5983-5993. | 3.1 | 71 |
| 28 | Nanoparticulate silver coated-titania thin filmsâ€"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. | 3.9 | 69 |
| 29 | Antibacterial Activity of Light-Activated Silicone Containing Methylene Blue and Gold Nanoparticles of Different Sizes. Journal of Cluster Science, 2010, 21, 427-438. | 3.3 | 62 |
| 30 | 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. | 3.9 | 60 |
| 31 | WO<sub>3</sub>/BiVO<sub>4</sub>: impact of charge separation at the timescale of water oxidation. Chemical Science, 2019, 10, 2643-2652. | 7.4 | 59 |
| 32 | Visible light photocatalystsâ€"N-doped TiO2 by solâ€“gel, enhanced with surface bound silver nanoparticle islands. Journal of Materials Chemistry, 2011, 21, 11854. | 6.7 | 56 |
| 33 | Aerosol assisted chemical vapour deposition of hydrophobic TiO2â€“SnO2 composite film with novel microstructure and enhanced photocatalytic activity. Journal of Materials Chemistry A, 2013, 1, 6271. | 10.3 | 55 |
| 34 | Combinatorial Atmospheric Pressure Chemical Vapor Deposition (cAPCVD): A Route to Functional Property Optimization. Journal of the American Chemical Society, 2011, 133, 20458-20467. | 13.7 | 54 |
| 35 | 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. | 6.7 | 53 |
| 36 | Combinatorial Atmospheric Pressure Chemical Vapor Deposition of Graded TiO<sub>2</sub>â€“VO<sub>2</sub> 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 |

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| 37 | Photobactericidal activity activated by thiolated gold nanoclusters at low flux levels of white light. Nature Communications, 2020, 11, 1207. | 12.8 | 52 |
| 38 | 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. | 20.2 | 51 |
| 39 | A Review of Inorganic Photoelectrode Developments and Reactor Scaleâ€Up Challenges for Solar Hydrogen Production. Advanced Energy Materials, 2021, 11, 2003286. | 19.5 | 51 |
| 40 | 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. | 6.7 | 48 |
| 41 | Aerosol-assisted chemical vapor deposition of V2O5 cathodes with high rate capabilities for magnesium-ion batteries. Journal of Power Sources, 2018, 384, 355-359. | 7.8 | 48 |
| 42 | Explaining the Enhanced Photoelectrochemical Behavior of Highly Ordered TiO<sub>2</sub> Nanotube Arrays: Anatase/Rutile Phase Junction. ACS Sustainable Chemistry and Engineering, 2019, 7, 5274-5282. | 6.7 | 48 |
| 43 | Comparing photoelectrochemical water oxidation, recombination kinetics and charge trapping in the three polymorphs of TiO2. Scientific Reports, 2017, 7, 2938. | 3.3 | 46 |
| 44 | Combinatorial atmospheric pressure chemical vapour deposition (cAPCVD) of a mixed vanadium oxide and vanadium oxynitride thin film. Journal of Materials Chemistry, 2009, 19, 1399. | 6.7 | 45 |
| 45 | Does a Photocatalytic Synergy in an Anataseâ€“Rutile TiO<sub>2</sub> Composite Thinâ€Film Exist?. Chemistry - A European Journal, 2012, 18, 13048-13058. | 3.3 | 45 |
| 46 | Inorganic thin-film combinatorial studies for rapidly optimising functional properties. Chemical Society Reviews, 2012, 41, 738-781. | 38.1 | 44 |
| 47 | Combinatorial Atmospheric Pressure Chemical Vapor Deposition of F:TiO<sub>2</sub>; the Relationship between Photocatalysis and Transparent Conducting Oxide Properties. Advanced Functional Materials, 2014, 24, 1758-1771. | 14.9 | 44 |
| 48 | Charge Separation, Band-Bending, and Recombination in WO<sub>3</sub> Photoanodes. Journal of Physical Chemistry Letters, 2019, 10, 5395-5401. | 4.6 | 44 |
| 49 | Simple method for the rapid simultaneous screening of photocatalytic activity over multiple positions of self-cleaning films. Physical Chemistry Chemical Physics, 2009, 11, 8367. | 2.8 | 41 |
| 50 | Electron transfer dynamics in fuel producing photosystems. Current Opinion in Electrochemistry, 2017, 2, 136-143. | 4.8 | 40 |
| 51 | The extended time evolution size decrease of gold nanoparticles formed by the Turkevich method. New Journal of Chemistry, 2010, 34, 1401. | 2.8 | 38 |
| 52 | 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. | 2.8 | 37 |
| 53 | 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 |
| 54 | CVD Production of Doped Titanium Dioxide Thin Films. Chemical Vapor Deposition, 2012, 18, 89-101. | 1.3 | 35 |

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| 55 | Photocatalytic activity of needle-like TiO2/WO3â^'x thin films prepared by chemical vapour deposition. Journal of Photochemistry and Photobiology A: Chemistry, 2012, 239, 60-64. | 3.9 | 34 |
| 56 | TiO2-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 |
| 57 | Combinatorial aerosol assisted chemical vapour deposition of a photocatalytic mixed SnO<sub>2</sub>/TiO<sub>2</sub> thin film. Journal of Materials Chemistry A, 2014, 2, 5108-5116. | 10.3 | 32 |
| 58 | An investigation into the effect of thickness of titanium dioxide and goldâ€"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 |
| 59 | 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 |
| 60 | Heterojunction Î±â€Fe<sub>2</sub>O<sub>3</sub>/ZnO Films with Enhanced Photocatalytic Properties Grown by Aerosolâ€Assisted Chemical Vapour Deposition. Chemistry - A European Journal, 2019, 25, 11337-11345. | 3.3 | 28 |
| 61 | Ultra-thin Al2O3 coatings on BiVO4 photoanodes: Impact on performance and charge carrier dynamics. Catalysis Today, 2019, 321-322, 59-66. | 4.4 | 28 |
| 62 | Zn and N Codoped TiO<sub>2</sub> Thin Films: Photocatalytic and Bactericidal Activity. ACS Applied Materials & Interfaces, 2021, 13, 10480-10489. | 8.0 | 28 |
| 63 | Computational and Experimental Study of Ta<sub>2</sub>O<sub>5</sub> Thin Films. Journal of Physical Chemistry C, 2017, 121, 202-210. | 3.1 | 27 |
| 64 | Correlation of Optical Properties, Electronic Structure, and Photocatalytic Activity in Nanostructured Tungsten Oxide. Advanced Materials Interfaces, 2017, 4, 1700064. | 3.7 | 25 |
| 65 | A comprehensive aerosol spray method for the rapid photocatalytic grid area analysis of semiconductor photocatalyst thin films. Analytica Chimica Acta, 2010, 663, 69-76. | 5.4 | 24 |
| 66 | Charge Transport Phenomena in Heterojunction Photocatalysts: The WO<sub>3</sub>/TiO<sub>2</sub> System as an Archetypical Model. ACS Applied Materials & Interfaces, 2021, 13, 9781-9793. | 8.0 | 24 |
| 67 | 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 |
| 68 | Ultraviolet Radiation Induced Dopant Loss in a TiO<sub>2</sub> Photocatalyst. ACS Catalysis, 2017, 7, 1485-1490. | 11.2 | 18 |
| 69 | Beyond band bending in the WO<sub>3</sub>/BiVO<sub>4</sub> heterojunction: insight from DFT and experiment. Sustainable Energy and Fuels, 2019, 3, 264-271. | 4.9 | 17 |
| 70 | Improved accuracy in multicomponent surface complexation models using surface-sensitive analytical techniques: Adsorption of arsenic onto a TiO2/Fe2O3 multifunctional sorbent. Journal of Colloid and Interface Science, 2020, 580, 834-849. | 9.4 | 17 |
| 71 | 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 |
| 72 | Charge Carrier Dynamics in Metal Oxide Photoelectrodes for Water Oxidation. Semiconductors and Semimetals, 2017, , 3-46. | 0.7 | 16 |

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| 73 | 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. | 3.1 | 16 |
| 74 | Systematic Exploration of WO<sub>3</sub>/TiO<sub>2</sub> Heterojunction Phase Space for Applications in Photoelectrochemical Water Splitting. Journal of Physical Chemistry C, 2022, 126, 871-884. | 3.1 | 16 |
| 75 | Air purification by heterogeneous photocatalytic oxidation with multi-doped thin film titanium dioxide. Thin Solid Films, 2013, 537, 131-136. | 1.8 | 15 |
| 76 | Combinatorial Atmospheric Pressure CVD of a Composite TiO<sub>2</sub>/SnO<sub>2</sub> Thin Film. Chemical Vapor Deposition, 2014, 20, 69-79. | 1.3 | 12 |
| 77 | Aerosolâ€Assisted Chemical Vapour Deposition of Transparent Zinc Gallate Films. ChemPlusChem, 2014, 79, 1024-1029. | 2.8 | 11 |
| 78 | Towards High Performance Chemical Vapour Deposition V2O5 Cathodes for Batteries Employing Aqueous Media. Molecules, 2020, 25, 5558. | 3.8 | 9 |
| 79 | Anisotropic Electron Transport Limits Performance of Bi<sub>2</sub>WO<sub>6</sub> Photoanodes. Journal of Physical Chemistry C, 2020, 124, 18859-18867. | 3.1 | 9 |
| 80 | A Hierarchical 3D TiO<sub>2</sub>/Ni Nanostructure as an Efficient Holeâ€Extraction and Protection Layer for GaAs Photoanodes. ChemSusChem, 2020, 13, 6028-6036. | 6.8 | 8 |
| 81 | 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. | 3.9 | 8 |
| 82 | Parasitic Light Absorption, Rate Laws and Heterojunctions in the Photocatalytic Oxidation of Arsenic(III) Using Composite TiO<sub>2</sub>/Fe<sub>2</sub>O<sub>3</sub>. Chemistry - A European Journal, 2022, 28, . | 3.3 | 8 |
| 83 | Combinatorial CVD: New Oxynitride Photocatalysts. ECS Transactions, 2009, 25, 139-154. | 0.5 | 7 |
| 84 | Combinatorial CVD: New Oxy-nitride Photocatalysts. ECS Transactions, 2009, 25, 1239-1250. | 0.5 | 7 |
| 85 | The effect of nanoparticulate PdO co-catalysts on the faradaic and light conversion efficiency of WO<sub>3</sub> photoanodes for water oxidation. Physical Chemistry Chemical Physics, 2021, 23, 1285-1291. | 2.8 | 6 |
| 86 | MOFâ€Based Heterojunctions: The Effect of Materials Architecture in TiO<sub>2</sub>/MOF Composites on CO<sub>2</sub> Photoreduction and Charge Transfer (Small 11/2019). Small, 2019, 15, 1970060. | 10.0 | 3 |
| 87 | Color-tunable hybrid heterojunctions as semi-transparent photovoltaic windows for photoelectrochemical water splitting. Cell Reports Physical Science, 2021, 2, 100676. | 5.6 | 3 |
| 88 | Photocatalysis: Evidence and Effect of Photogenerated Charge Transfer for Enhanced Photocatalysis in WO<sub>3</sub>/TiO<sub>2</sub> Heterojunction Films: A Computational and Experimental Study (Adv. Funct. Mater. 18/2017). Advanced Functional Materials, 2017, 27, . | 14.9 | 1 |
| 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 |

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| 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 WO3 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 WO3 Photoanodes from the Addition of Pd Co-catalysts. , 0, , . | | 0 |