Andreas Kaltzoglou

List of Publications by Year in descending order

105	7,779	87888 38	49909 87
papers	citations	h-index	g-index

110	110	110	11559
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	A review on the visible light active titanium dioxide photocatalysts for environmental applications. Applied Catalysis B: Environmental, 2012, 125, 331-349.	20.2	3,320
2	Binary Polyethylene Oxide/Titania Solid-State Redox Electrolyte for Highly Efficient Nanocrystalline TiO2 Photoelectrochemical Cells. Nano Letters, 2002, 2, 1259-1261.	9.1	365
3	Optical-Vibrational Properties of the Cs₂SnX₆ (X = Cl, Br, I) Defect Perovskites and Hole-Transport Efficiency in Dye-Sensitized Solar Cells. Journal of Physical Chemistry C, 2016, 120, 11777-11785.	3.1	222
4	Dynamic Stereochemical Activity of the Sn²⁺ Lone Pair in Perovskite CsSnBr₃. Journal of the American Chemical Society, 2016, 138, 11820-11832.	13.7	217
5	Halogen Effects on Ordering and Bonding of CH₃NH₃⁺ in CH₃NH₃PbX₃ (X = Cl, Br, I) Hybrid Perovskites: A Vibrational Spectroscopic Study. Journal of Physical Chemistry C, 2016, 120, 2509-2519.	3.1	188
6	Use of selected scavengers for the determination of NF-TiO2 reactive oxygen species during the degradation of microcystin-LR under visible light irradiation. Journal of Molecular Catalysis A, 2016, 425, 183-189.	4.8	157
7	Structural stability of the synthetic thermoelectric ternary and nickel-substituted tetrahedrite phases. Journal of Alloys and Compounds, 2015, 634, 253-262.	5.5	147
8	Molecular materials as interfacial layers and additives in perovskite solar cells. Chemical Society Reviews, 2020, 49, 4496-4526.	38.1	130
9	Reentrant Structural and Optical Properties and Large Positive Thermal Expansion in Perovskite Formamidinium Lead Iodide. Angewandte Chemie - International Edition, 2016, 55, 15392-15396.	13.8	128
10	Photocatalytic degradation of salicylic acid and caffeine emerging contaminants using titania nanotubes. Chemical Engineering Journal, 2017, 310, 525-536.	12.7	119
11	Phase Composition, Size, Orientation, and Antenna Effects of Self-Assembled Anodized Titania Nanotube Arrays: A Polarized Micro-Raman Investigation. Journal of Physical Chemistry C, 2008, 112, 12687-12696.	3.1	109
12	Structural Stability, Vibrational Properties, and Photoluminescence in CsSnI₃ Perovskite upon the Addition of SnF₂. Inorganic Chemistry, 2017, 56, 84-91.	4.0	105
13	Magnetically separable TiO2/CoFe2O4/Ag nanocomposites for the photocatalytic reduction of hexavalent chromium pollutant under UV and artificial solar light. Chemical Engineering Journal, 2020, 381, 122730.	12.7	88
14	Minimizing Energy Losses in Dyeâ€Sensitized Solar Cells Using Coordination Compounds as Alternative Redox Mediators Coupled with Appropriate Organic Dyes. Advanced Energy Materials, 2012, 2, 616-627.	19.5	87
15	TiO2, surface modified TiO2 and graphene oxide-TiO2 photocatalysts for degradation of water pollutants under near-UV/Vis and visible light. Chemical Engineering Journal, 2013, 224, 17-23.	12.7	87
16	A Multiwalledâ€Carbonâ€Nanotubeâ€Based Biosensor for Monitoring Microcystinâ€LR in Sources of Drinking Water Supplies. Advanced Functional Materials, 2013, 23, 1807-1816.	14.9	87
17	CLEAN WATER: water detoxification using innovative photocatalysts. Reviews in Environmental Science and Biotechnology, 2010, 9, 87-94.	8.1	69
18	The Influence of Mobile Copper Ions on the Glass-Like Thermal Conductivity of Copper-Rich Tetrahedrites. Chemistry of Materials, 2017, 29, 4080-4090.	6.7	66

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19	Photocatalysis as an advanced reduction process (ARP): The reduction of 4-nitrophenol using titania nanotubes-ferrite nanocomposites. Journal of Hazardous Materials, 2019, 372, 37-44.	12.4	66
20	Thermoelectric Materials: A New Rapid Synthesis Process for Nontoxic and Highâ€Performance Tetrahedrite Compounds. Journal of the American Ceramic Society, 2016, 99, 51-56.	3.8	62
21	A 3D graphene-based biosensor as an early microcystin-LR screening tool in sources of drinking water supply. Electrochimica Acta, 2017, 236, 319-327.	5.2	62
22	Recent developments of TiO2 photocatalysis involving advanced oxidation and reduction reactions in water. Journal of Environmental Chemical Engineering, 2018, 6, 7386-7394.	6.7	59
23	Suppressing the Photocatalytic Activity of Zinc Oxide Electron-Transport Layer in Nonfullerene Organic Solar Cells with a Pyrene-Bodipy Interlayer. ACS Applied Materials & Interfaces, 2020, 12, 21961-21973.	8.0	57
24	Controlling and Quantifying Oxygen Functionalities on Hydrothermally and Thermally Treated Single-Wall Carbon Nanotubes. Journal of Physical Chemistry C, 2011, 115, 8534-8546.	3.1	55
25	Trimethylsulfonium Lead Triiodide: An Air-Stable Hybrid Halide Perovskite. Inorganic Chemistry, 2017, 56, 6302-6309.	4.0	52
26	Lithium Doping of ZnO for High Efficiency and Stability Fullerene and Non-fullerene Organic Solar Cells. ACS Applied Energy Materials, 2019, 2, 1663-1675.	5.1	52
27	Mixed-halide Cs2SnI3Br3 perovskite as low resistance hole-transporting material in dye-sensitized solar cells. Electrochimica Acta, 2015, 184, 466-474.	5.2	49
28	Bleaching Properties of Alumina-Pillared Acid-Activated Montmorillonite. Clays and Clay Minerals, 2000, 48, 549-556.	1.3	48
29	Investigating the role of reduced graphene oxide as a universal additive in planar perovskite solar cells. Journal of Photochemistry and Photobiology A: Chemistry, 2020, 386, 112141.	3.9	47
30	Effects of the orderâ€“disorder phase transition on the physical properties of A8Sn44â–¡2 (A = Rb, Cs). Journal of Materials Chemistry, 2008, 18, 5630.	6.7	46
31	Avoiding ambient air and light induced degradation in high-efficiency polymer solar cells by the use of hydrogen-doped zinc oxide as electron extraction material. Nano Energy, 2017, 34, 500-514.	16.0	45
32	Stability Improvement and Performance Reproducibility Enhancement of Perovskite Solar Cells Following (FA/MA/Cs)PbI_{3â€“x}Br_x/(CH₃)₃SPbI₃ Dimensionality Engineering. ACS Applied Energy Materials, 2020, 3, 2465-2477.	5.1	44
33	Slow-photon enhancement of dye sensitized TiO 2 photocatalysis. Materials Letters, 2017, 197, 123-126.	2.6	42
34	Defect Perovskites under Pressure: Structural Evolution of Cs₂SnX₆ (X = Cl,) Tj ETQq0 0 0 rgBT /Overlock 10 T	3.1	42
35	Enhancing efficiency and decreasing photocatalytic degradation of perovskite solar cells using a hydrophobic copper-modified titania electron transport layer. Applied Catalysis B: Environmental, 2021, 284, 119714.	20.2	42
36	Copper(I) bromide complexes from 1,2-bis(diphenylphosphano) benzene and some heterocyclic thiones. Inorganica Chimica Acta, 2005, 358, 3048-3056.	2.4	41

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37	Dye Sensitization of Titania Compact Layer for Efficient and Stable Perovskite Solar Cells. ACS Applied Energy Materials, 2018, 1, 6161-6171.	5.1	41
38	Orderâ€Disorder Phase Transition in Typeâ€I Clathrate Cs₈Sn₄₄â–¡₂. European Journal of Inorganic Chemistry, 2007, 2007, 4162-4167.	2.0	39
39	Fabrication and Evaluation of a Skutterudite-Based Thermoelectric Module for High-Temperature Applications. Journal of Electronic Materials, 2013, 42, 1369-1374.	2.2	36
40	Triazine-Substituted Zinc Porphyrin as an Electron Transport Interfacial Material for Efficiency Enhancement and Degradation Retardation in Planar Perovskite Solar Cells. ACS Applied Energy Materials, 2018, 1, 3216-3229.	5.1	33
41	Raman Resonance Effect in a Monolayer of Polypyridyl Ruthenium(II) Complex Adsorbed on Nanocrystalline TiO2via Phosphonated Terpyridyl Ligands. Journal of Physical Chemistry B, 1999, 103, 9569-9575.	2.6	32
42	Degradation of cylindrospermopsin by using polymorphic titanium dioxide under UVâ€“Vis irradiation. Catalysis Today, 2014, 224, 49-55.	4.4	32
43	Bifunctional g-C3N4/WO3 Thin Films for Photocatalytic Water Purification. Water (Switzerland), 2019, 11, 2439.	2.7	32
44	Halogenâ€“NH₂⁺ Interaction, Temperature-Induced Phase Transition, and Ordering in (NH₂CHNH₂)PbX₃ (X = Cl, Br, I) Hybrid Perovskites. Journal of Physical Chemistry C, 2020, 124, 8479-8487.	3.1	32
45	Synthesis, characterization and use of highly stable trimethyl sulfonium tin(IV) halide defect perovskites in dye sensitized solar cells. Polyhedron, 2018, 150, 83-91.	2.2	31
46	Silver decorated TiO2/g-C3N4 bifunctional nanocomposites for photocatalytic elimination of water pollutants under UV and artificial solar light. Results in Engineering, 2022, 14, 100470.	5.1	30
47	Copper(I) halide chelates of the wide bite angle diphosphane xantphos: Crystal structures of [CuBr(xantphos)(dmpymtH)] and [CuI(xantphos)(imdtH2)]·CH3CN. Inorganica Chimica Acta, 2006, 359, 3183-3190.	2.4	28
48	Design and optimization of a photocatalytic reactor for water purification combining optical fiber and membrane technologies. Chemical Engineering Journal, 2016, 305, 92-103.	12.7	28
49	Enhanced Organic and Perovskite Solar Cell Performance through Modification of the Electron-Selective Contact with a Bodipyâ€“Porphyrin Dyad. ACS Applied Materials & Interfaces, 2020, 12, 1120-1131.	8.0	27
50	Dynamic Disorder, Band Gap Widening, and Persistent Near-IR Photoluminescence up to At Least 523 K in ASnI₃ Perovskites (A = Cs⁺, CH₃NH₃⁺) Tj ETQq0 0 0 rgBT /Overlock 26353-26361.	3.1	26
51	An Experimental and Theoretical (DFT) Investigation of the Coordination Mode of 2,4-Dithiouracil (2,4-dtucH2) in Copper(I) Complexes with1,2-Bis(diphenylphosphanyl)benzene (dppbz): The Crystal Structures of [Cu(μ-Br)(dppbz)]2 and [CuBr(dppbz)(2,4-dtucH2)]. European Journal of Inorganic Chemistry, 2006, 2006, 334-344.	2.0	25
52	Enhanced Efficiency in Solidâ€State Dyeâ€Sensitized Solar Cells Based on Fractal Nanostructured TiO₂ Thin Films. Small, 2008, 4, 770-776.	10.0	25
53	A silanol-functionalized polyoxometalate with excellent electron transfer mediating behavior to ZnO and TiO₂ cathode interlayers for highly efficient and extremely stable polymer solar cells. Journal of Materials Chemistry C, 2018, 6, 1459-1469.	5.5	25
54	Synthesis, characterization and optoelectronic properties of chemically stable (CH 3) 3 SPbI 3â˜' x Br x and (CH 3) 3 SPbI 3â˜' x Cl x (x â€¯=â€¯0, 1, 2, 3) perovskites. Polyhedron, 2018, 140, 67-73.	2.2	25

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55	Optimal Performance Emulation of PSCs using the Elephant Herd Algorithm Associated with Experimental Validation. ECS Journal of Solid State Science and Technology, 2019, 8, Q249-Q255.	1.8	25
56	Photocatalytic properties of copperâ€"Modified core-shell titania nanocomposites. Journal of Photochemistry and Photobiology A: Chemistry, 2019, 370, 145-155.	3.9	25
57	Synthesis and Crystal Structure of Mercury-Substituted Type-I Clathrates A8Hg4Sn42 (A = K, Rb, Cs). European Journal of Inorganic Chemistry, 2008, 2008, 538-542.	2.0	24
58	Ordered-Defect Sulfides as Thermoelectric Materials. Journal of Electronic Materials, 2014, 43, 2029-2034.	2.2	23
59	Low Work Function Lacunary Polyoxometalates as Electron Transport Interlayers for Inverted Polymer Solar Cells of Improved Efficiency and Stability. ACS Applied Materials & Interfaces, 2017, 9, 22773-22787.	8.0	23
60	Engineering of Porphyrin Molecules for Use as Effective Cathode Interfacial Modifiers in Organic Solar Cells of Enhanced Efficiency and Stability. ACS Applied Materials & Interfaces, 2018, 10, 20728-20739.	8.0	22
61	Boosting perovskite nanomorphology and charge transport properties via a functional Dâ€"Ï€-A organic layer at the absorber/hole transporter interface. Nanoscale, 2020, 12, 15137-15149.	5.6	21
62	Catechol-Bearing Dipyrazinylpyridine Complexes of Ruthenium(II). European Journal of Inorganic Chemistry, 2007, 2007, 2121-2128.	2.0	20
63	Insights into the passivation effect of atomic layer deposited hafnium oxide for efficiency and stability enhancement in organic solar cells. Journal of Materials Chemistry C, 2018, 6, 8051-8059.	5.5	20
64	Surfactant Effects on the Synthesis of Redox Bifunctional V2O5 Photocatalysts. Materials, 2020, 13, 4665.	2.9	20
65	Defect passivation and humidity protection for perovskite solar cells enabled by 1-dodecanethiol. Journal of Materials Chemistry C, 2021, 9, 9584-9591.	5.5	20
66	A₄Ge₉ (A = K, Rb) as Precursors for Hgâ€Substituted Clathrateâ€Synthesis: Crystal Structure of A₈Hg₃Ge₄₃. European Journal of Inorganic Chemistry, 2008, 2008, 4507-4510.	2.0	19
67	Enhanced Openâ€Circuit Photopotential in Quasiâ€Solidâ€State Dyeâ€Sensitized Solar Cells Based on Polymer Redox Electrolytes Filled with Anodic Titania Nanotubes. Advanced Energy Materials, 2011, 1, 569-572.	19.5	19
68	Energy efficiency improvement of water pumping system using synchronous reluctance motor fed by perovskite solar cells. International Journal of Energy Research, 2020, 44, 11629-11642.	4.5	19
69	Synthesis, characterization and physical properties of the skutterudites YbxFe2Ni2Sb12 (0â‰¤xâ‰¤0.4). Journal of Solid State Chemistry, 2012, 193, 36-41.	2.9	18
70	Influence of Fluorine Plasma Treatment of TiO₂ Films on the Behavior of Dye Solar Cells Employing the Co(II)/(III) Redox Couple. Journal of Physical Chemistry C, 2014, 118, 16760-16775.	3.1	17
71	Manganese Porphyrin Interface Engineering in Perovskite Solar Cells. ACS Applied Energy Materials, 2020, 3, 7353-7363.	5.1	17
72	Synthesis, characterization of ((CH3)3S)2SnI6-nCln and ((CH3)3S)2SnI6-nBrn (n=1, 2) perovskites and use in dye-sensitized solar cells. Materials Chemistry and Physics, 2020, 239, 122310.	4.0	16

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73	A Review on Emerging Efficient and Stable Perovskite Solar Cells Based on g-C3N4 Nanostructures. Materials, 2021, 14, 1679.	2.9	16
74	Investigation of substitution effects and the phase transition in type-I clathrates Rb Cs8â€“Sn44â–¡2 (1.3â‰¤â‰¤2.1) using single-crystal X-ray diffraction, Raman spectroscopy, heat capacity and electrical resistivity measurements. Journal of Solid State Chemistry, 2009, 182, 2924-2929.	2.9	15
75	Silver(I) bromide complexes of the rigid diphosphanes 1,2-bis(diphenylphosphano)benzene (dppbz) and 4,5-bis(diphenylphosphano)-9,9-dimethyl-xanthene (xantphos): Crystal structures of [Ag(Î¼2-Br)(dppbz)]2, [AgBr(xantphos)] and [AgBr(xantphos)(py2SH)]. Polyhedron, 2007, 26, 1634-1642.	2.2	14
76	Raman spectroscopy study of type-I clathrates A8Sn44â–¡2 (A = Rb, Cs) and Rb8Hg4Sn42. Chemical Physics Letters, 2008, 464, 54-57.	2.6	14
77	Influence of controlled-charge anodization processes on the morphology of TiO2 nanotubes and their efficiency in dye-sensitized solar cells. Electrochimica Acta, 2013, 113, 490-496.	5.2	14
78	Dye solar cells combining a TiO2 surface-blocking organic sensitizer and solvent-free ionic liquid-based redox electrolyte. RSC Advances, 2013, 3, 15014.	3.6	14
79	Stress Tests on Dye-sensitized Solar Cells with the Cs2SnI6 Defect Perovskite as Hole-transporting Material. Energy Procedia, 2016, 102, 49-55.	1.8	14
80	Synthesis and Characterization of Lead-Free (CH3)3SSnI3 1-D Perovskite. Journal of Electronic Materials, 2019, 48, 7533-7538.	2.2	13
81	Dye Engineered Perovskite Solar Cells under Accelerated Thermal Stress and Prolonged Light Exposure. ChemistrySelect, 2020, 5, 4454-4462.	1.5	13
82	Cost-efficient platinum-free DSCs using colloidal graphite counter electrodes combined with D35 organic dye and cobalt (II/III) redox couple. Electrochimica Acta, 2017, 232, 517-527.	5.2	12
83	A Rutheniumâ€Based Lightâ€Harvesting Antenna Bearing an Anthracene Moiety in Dyeâ€Sensitized Solar Cells. Asian Journal of Organic Chemistry, 2014, 3, 953-962.	2.7	11
84	Synthesis of novel semi-squaraine derivatives and application in efficient dye-sensitized solar cells. Dyes and Pigments, 2019, 165, 308-318.	3.7	11
85	Recent developments on hybrid perovskite materials for solar energy conversion and environmental protection. Current Opinion in Chemical Engineering, 2021, 33, 100708.	7.8	11
86	Guest host interaction and low energy host structure dynamics in tin clathrates. Journal of Applied Physics, 2013, 113, 084902.	2.5	10
87	Synthesis and spectroscopic characterization of new heteroleptic ruthenium(II) complexes incorporating 2-(2â€²-pyridyl)quinoxaline and 4-carboxy-2-(2â€²-pyridyl)quinoline. Journal of Coordination Chemistry, 2012, 65, 2535-2548.	2.2	8
88	Improved Stability of Polymer Solar Cells in Ambient Air via Atomic Layer Deposition of Ultrathin Dielectric Layers. Advanced Materials Interfaces, 2017, 4, 1700231.	3.7	8
89	Mixing cations and halide anions in perovskite solar cells. Materials Today: Proceedings, 2019, 19, 73-78.	1.8	8
90	A luminescent copper(I) bromide complex chelated with 4,5- bis (diphenylphosphano)-9,9-dimethyl-xanthene. Journal of Coordination Chemistry, 2008, 61, 1774-1781.	2.2	7

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91	High-temperature orderâ€“disorder transitions in the skutterudites CoGe1.5Q1.5 (Q=S, Te). Journal of Solid State Chemistry, 2013, 198, 525-531.	2.9	7
92	A Ru(II) molecular antenna bearing a novel bipyridineâ€“acrylonitrile ligand: Synthesis and application in dye solar cells. Polyhedron, 2014, 82, 12-18.	2.2	7
93	A Family of Potent Ru(<scp>II</scp>) Photosensitizers with Enhanced <scp>DNA</scp> Intercalation: Bimodal Photokillers. Photochemistry and Photobiology, 2015, 91, 1191-1202.	2.5	7
94	A Modified Triple-Diode Model Parameters Identification for Perovskite Solar Cells via Nature-Inspired Search Optimization Algorithms. Sustainability, 2021, 13, 12969.	3.2	6
95	Energy band tuning induced by g-C3N4 interface engineering for efficient and stable perovskite solar cells. Materials Today Communications, 2022, 32, 103899.	1.9	6
96	High performance solid state solar cells incorporating CdS quantum dots and CH3NH3PbI3 perovskite. Materials Today: Proceedings, 2019, 19, 79-85.	1.8	3
97	Synthesis, Crystal Structure, and Broadband Emission of (CH₃)₃SSnCl₃. Inorganic Chemistry, 2022, 61, 4769-4777.	4.0	3
98	Perovskite Solar Cells and Thermoelectric Generator Hybrid Array Feeding a Synchronous Reluctance Motor for an Efficient Water Pumping System. Mathematics, 2022, 10, 2417.	2.2	3
99	Synthesis and Characterization of New Rareâ€Earth Sandwichâ€Type Tungstoarsenates. Synthesis and Reactivity in Inorganic, Metal Organic, and Nano Metal Chemistry, 2006, 36, 335-344.	0.6	2
100	Structural stability of tin clathrates under high pressure. Journal of Physics and Chemistry of Solids, 2010, 71, 587-589.	4.0	2
101	Thermoelectric exhaust-gas energy recovery: An integrated approach. , 2012, , .		2
102	New Organotin Derivatives of Trilacunary Keggin Polyanions. Synthesis and Reactivity in Inorganic, Metal Organic, and Nano Metal Chemistry, 2005, 35, 651-659.	0.6	0
103	Highly Photoactive Monodidisperse Titania Hollow Nanospheres. Journal of Advanced Oxidation Technologies, 2008, 11, .	0.5	0
104	Synthesis and thermoelectric properties of the new skutterudites YbxFe2Ni2Sb12 (0 â‰¤ x â‰¤ 0.4). , 2012, , .		0
105	Synthesis, characterization and optoelectronic properties of 2D hybrid RPbX4 semiconductors based on an isomer mixture of hexanediamine-based dications. Zeitschrift Fur Naturforschung - Section B Journal of Chemical Sciences, 2021, .	0.7	0