Dmitry Aldakov

List of Publications by Year
in descending order

52 papers	2,349 citations	201674 27 h-index	206112 48 g-index
53 all docs	53 docs citations	53 times ranked	4216 citing authors

#	Article	IF	Citations
1	Room-Temperature Doping of CsPbBr₃ Nanocrystals with Aluminum. Journal of Physical Chemistry Letters, 2022, 13, 4495-4500.	4.6	1
2	A cobalt oxideâ€“polypyrrole nanocomposite as an efficient and stable electrode material for electrocatalytic water oxidation. Sustainable Energy and Fuels, 2021, 5, 4710-4723.	4.9	5
3	Doped Bilayer Tin(IV) Oxide Electron Transport Layer for High Openâ€Circuit Voltage Planar Perovskite Solar Cells with Reduced Hysteresis. Small, 2021, 17, e2005671.	10.0	34
4	Hydrogen Production at a NiO Photocathode Based on a Ruthenium Dyeâ€“Cobalt Diimine Dioxime Catalyst Assembly: Insights from Advanced Spectroscopy and Post-operando Characterization. ACS Applied Materials & Interfaces, 2021, 13, 49802-49815.	8.0	16
5	Nonprecious Bimetallic Ironâ€“Molybdenum Sulfide Electrocatalysts for the Hydrogen Evolution Reaction in Proton Exchange Membrane Electrolyzers. ACS Catalysis, 2020, 10, 14336-14348.	11.2	50
6	A Scalable Silicon Nanowires-Grown-On-Graphite Composite for High-Energy Lithium Batteries. ACS Nano, 2020, 14, 12006-12015.	14.6	66
7	Hydrothermal Synthesis of Aqueous-Soluble Copper Indium Sulfide Nanocrystals and Their Use in Quantum Dot Sensitized Solar Cells. Nanomaterials, 2020, 10, 1252.	4.1	14
8	Achieving visible light-driven hydrogen evolution at positive bias with a hybrid copperâ€“iron oxide|TiO2-cobaloxime photocathode. Green Chemistry, 2020, 22, 3141-3149.	9.0	9
9	Ligand induced switching of the band alignment in aqueous synthesized CdTe/CdS core/shell nanocrystals. Scientific Reports, 2019, 9, 8332.	3.3	26
10	A robust ALD-protected silicon-based hybrid photoelectrode for hydrogen evolution under aqueous conditions. Chemical Science, 2019, 10, 4469-4475.	7.4	25
11	Eu2+: A suitable substituent for Pb2+ in CsPbX3 perovskite nanocrystals?. Journal of Chemical Physics, 2019, 151, 231101.	3.0	28
12	Safer-by-Design Fluorescent Nanocrystals: Metal Halide Perovskites vs Semiconductor Quantum Dots. Journal of Physical Chemistry C, 2019, 123, 12527-12541.	3.1	66
13	Cadmium-free CuInS₂/ZnS quantum dots as efficient and robust photosensitizers in combination with a molecular catalyst for visible light-driven H₂ production in water. Energy and Environmental Science, 2018, 11, 1752-1761.	30.8	76
14	CuSCN Nanowires as Electrodes for p-Type Quantum Dot Sensitized Solar Cells: Charge Transfer Dynamics and Alumina Passivation. Journal of Physical Chemistry C, 2018, 122, 5161-5170.	3.1	8
15	Hydrogen Evolution from Aqueous Solutions Mediated by a Heterogenized [NiFe]â€Hydrogenase Model: Low pH Enables Catalysis through an Enzymeâ€Relevant Mechanism. Angewandte Chemie - International Edition, 2018, 57, 16001-16004.	13.8	45
16	Hydrogen Evolution from Aqueous Solutions Mediated by a Heterogenized [NiFe]â€Hydrogenase Model: Low pH Enables Catalysis through an Enzymeâ€Relevant Mechanism. Angewandte Chemie, 2018, 130, 16233-16236.	2.0	9
17	Plasma Heavily Nitrogen-Doped Vertically Oriented Graphene Nanosheets (N-VOGNs) for High Volumetric Performance On-Chip Supercapacitors in Ionic Liquid. Current Smart Materials, 2018, 3, 32-39.	0.5	1
18	Doping and Surface Effects of CuFeS₂ Nanocrystals Used in Thermoelectric Nanocomposites. ChemNanoMat, 2018, 4, 982-991.	2.8	26

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19	Activation Energy of Organic Cation Rotation in CH₃NH₃PbI₃ and CD₃NH₃PbI₃: Quasi-Elastic Neutron Scattering Measurements and First-Principles Analysis Including Nuclear Quantum Effects. Journal of Physical Chemistry Letters, 2018, 9, 3969-3977.	4.6	34
20	Alternative Binary and Ternary Metal Oxides for Dye- and Quantum Dot-Sensitized Solar Cells. , 2018, , 85-115.		5
21	Atomic Layer Deposition Alumina-Passivated Silicon Nanowires: Probing the Transition from Electrochemical Double-Layer Capacitor to Electrolytic Capacitor. ACS Applied Materials & Interfaces, 2017, 9, 13761-13769.	8.0	32
22	Prospects of Chalcopyrite-Type Nanocrystals for Energy Applications. ACS Energy Letters, 2017, 2, 1076-1088.	17.4	104
23	Direct Evidence of Chlorine-Induced Preferential Crystalline Orientation in Methylammonium Lead Iodide Perovskites Grown on TiO₂. Journal of Physical Chemistry C, 2017, 121, 7596-7602.	3.1	23
24	Toward Efficient Solid-State p-Type Dye-Sensitized Solar Cells: The Dye Matters. Journal of Physical Chemistry C, 2017, 121, 129-139.	3.1	42
25	Growth Mechanism and Surface State of CuInS₂ Nanocrystals Synthesized with Dodecanethiol. Journal of the American Chemical Society, 2017, 139, 15748-15759.	13.7	58
26	Designing 3D Multihierarchical Heteronanostructures for High-Performance On-Chip Hybrid Supercapacitors: Poly(3,4-(ethylenedioxy)thiophene)-Coated Diamond/Silicon Nanowire Electrodes in an Aprotic Ionic Liquid. ACS Applied Materials & Interfaces, 2016, 8, 18069-18077.	8.0	64
27	Efficient eco-friendly inverted quantum dot sensitized solar cells. Journal of Materials Chemistry A, 2016, 4, 827-837.	10.3	30
28	Synthesis, Internal Structure, and Formation Mechanism of Monodisperse Tin Sulfide Nanoplatelets. Journal of the American Chemical Society, 2015, 137, 9943-9952.	13.7	65
29	Mercaptophosphonic acids as efficient linkers in quantum dot sensitized solar cells. Journal of Materials Chemistry A, 2015, 3, 19050-19060.	10.3	25
30	Polymer solar cells with electrodeposited CuSCN nanowires as new efficient hole transporting layer. Solar Energy Materials and Solar Cells, 2014, 120, 163-167.	6.2	46
31	Properties of Electrodeposited CuSCN 2D Layers and Nanowires Influenced by Their Mixed Domain Structure. Journal of Physical Chemistry C, 2014, 118, 16095-16103.	3.1	55
32	Sensitization of ZnO nanowire arrays with CuInS2 for extremely thin absorber solar cells. Journal of Renewable and Sustainable Energy, 2013, 5, .	2.0	7
33	Ternary and quaternary metal chalcogenide nanocrystals: synthesis, properties and applications. Journal of Materials Chemistry C, 2013, 1, 3756.	5.5	548
34	Electrodeposited Wide-Bandgap Semiconducting ZnO and CuSCN Thin Films and Nanowires for Interface Engineering of Polymer Solar Cells. ECS Transactions, 2013, 53, 107-117.	0.5	3
35	Fabrication of ZnO/Absorber Heterostructures for Nanostructured Solar Cells. ECS Transactions, 2013, 53, 31-48.	0.5	3
36	Ethanol-Mediated Metal Transfer Printing on Organic Films. ACS Applied Materials & Interfaces, 2011, 3, 740-745.	8.0	4

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37	Solution, Solid State, and Film Properties of a Structurally Characterized Highly Luminescent Molecular Europium Plastic Material Excitable with Visible Light. Inorganic Chemistry, 2011, 50, 4851-4856.	4.0	77
38	White electroluminescence of lanthanide complexes resulting from exciplex formation. Journal of Materials Chemistry, 2010, 20, 2114.	6.7	45
39	Hybrid nanocomposites of CdSe nanocrystals distributed in complexing thiophene-based copolymers. Physical Chemistry Chemical Physics, 2010, 12, 7497.	2.8	24
40	Selective Electroless Copper Deposition on Self-Assembled Dithiol Monolayers. ACS Applied Materials & Interfaces, 2009, 1, 584-589.	8.0	52
41	Oligothiophene-functionalized CdSe nanocrystals: preparation and electrochemical properties. Mikrochimica Acta, 2008, 160, 335-344.	5.0	16
42	Fabrication of Oriented and Periodic Hybrid Nanostructures of Regioregular Poly(3â€hexylthiophene) and CdSe Nanocrystals by Directional Epitaxial Solidification. Advanced Materials, 2007, 19, 3819-3823.	21.0	35
43	Hybrid organic-inorganic nanomaterials: ligand effects. EPJ Applied Physics, 2006, 36, 261-265.	0.7	26
44	Benzothiadiazoles and Dipyrrolyl Quinoxalines with Extended Conjugated Chromophoresâˆ’Fluorophores and Anion Sensors. Chemistry of Materials, 2005, 17, 5238-5241.	6.7	117
45	Materials chemistry approach to anion-sensor design. Tetrahedron, 2004, 60, 11163-11168.	1.9	44
46	Strategies toward improving the performance of fluorescence-based sensors for inorganic anions. Chemical Communications, 2004, , 1282-1283.	4.1	43
47	Sensing of Aqueous Phosphates by Polymers with Dual Modes of Signal Transduction. Journal of the American Chemical Society, 2004, 126, 4752-4753.	13.7	129
48	Dipyrrolyl Quinoxalines with Extended Chromophores are Efficient Fluorimetric Sensors for Pyrophosphate.. ChemInform, 2003, 34, no.	0.0	2
49	Dipyrrolyl quinoxalines with extended chromophores are efficient fluorimetric sensors for pyrophosphateElectronic supplementary information (ESI) available: experimental data. See http://www.rsc.org/suppdata/cc/b3/b301362f/. Chemical Communications, 2003, , 1394.	4.1	80
50	Dipyrrolyl quinoxalines with extended chromophores are efficient fluorimetric sensors for pyrophosphate. Chemical Communications, 2003, , 1394-5.	4.1	5
51	Efficient Hydrogen Photoproduction in Water with Hybrid Systems Composed of Quantum Dots and Molecular Catalysts. , 0, , .		0
52	Efficient Hydrogen Photoproduction in Water with Hybrid Systems Composed of Quantum Dots and Molecular Catalysts. , 0, , .		0