Elijah Thimsen

List of Publications by Year
in descending order

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46	4,771	361413	233421
papers	citations	20 h-index	45 g-index

47	47	47	7762
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Highly active oxide photocathode for photoelectrochemical water reduction. Nature Materials, 2011, 10, 456-461.	27.5	1,894
2	Plasmonic solar water splitting. Energy and Environmental Science, 2012, 5, 5133-5146.	30.8	766
3	Influence of Plasmonic Au Nanoparticles on the Photoactivity of Fe₂O₃ Electrodes for Water Splitting. Nano Letters, 2011, 11, 35-43.	9.1	428
4	Synthesis and Characterization of High-Photoactivity Electrodeposited Cu₂O Solar Absorber by Photoelectrochemistry and Ultrafast Spectroscopy. Journal of Physical Chemistry C, 2012, 116, 7341-7350.	3.1	305
5	Nanostructured TiO₂Films with Controlled Morphology Synthesized in a Single Step Process:â€‰ Performance of Dye-Sensitized Solar Cells and Photo Watersplitting. Journal of Physical Chemistry C, 2008, 112, 4134-4140.	3.1	142
6	Predicting the Band Structure of Mixed Transition Metal Oxides: Theory and Experiment. Journal of Physical Chemistry C, 2009, 113, 2014-2021.	3.1	116
7	Shortwave-infrared (SWIR) emitters for biological imaging: a review of challenges and opportunities. Nanophotonics, 2017, 6, 1043-1054.	6.0	116
8	Structural, optical, and electronic stability of copper sulfide thin films grown by atomic layer deposition. Energy and Environmental Science, 2013, 6, 1868.	30.8	91
9	Energy Levels, Electronic Properties, and Rectification in Ultrathin p-NiO Films Synthesized by Atomic Layer Deposition. Journal of Physical Chemistry C, 2012, 116, 16830-16840.	3.1	88
10	Aerosol-Chemical Vapor Deposition Method For Synthesis of Nanostructured Metal Oxide Thin Films With Controlled Morphology. Journal of Physical Chemistry Letters, 2010, 1, 249-253.	4.6	87
11	High electron mobility in thin films formed via supersonic impact deposition of nanocrystals synthesized in nonthermal plasmas. Nature Communications, 2014, 5, 5822.	12.8	77
12	Atomic Layer Deposition of the Quaternary Chalcogenide Cu₂ZnSnS₄. Chemistry of Materials, 2012, 24, 3188-3196.	6.7	75
13	Nanostructured photoactive films synthesized by a flame aerosol reactor. AICHE Journal, 2007, 53, 1727-1735.	3.6	74
14	Stabilizing Cu₂S for Photovoltaics One Atomic Layer at a Time. ACS Applied Materials & Interfaces, 2013, 5, 10302-10309.	8.0	51
15	Ion Exchange in Ultrathin Films of Cu₂S and ZnS under Atomic Layer Deposition Conditions. Chemistry of Materials, 2011, 23, 4411-4413.	6.7	49
16	Impact of Different Electrolytes on Photocatalytic Water Splitting. Journal of the Electrochemical Society, 2009, 156, H346.	2.9	39
17	Transparent Conductive Oxide Nanocrystals Coated with Insulators by Atomic Layer Deposition. Chemistry of Materials, 2016, 28, 5549-5553.	6.7	39
18	Interfaces and Composition Profiles in Metalâ€“Sulfide Nanolayers Synthesized by Atomic Layer Deposition. Chemistry of Materials, 2013, 25, 313-319.	6.7	37

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19	Contact Radius and the Insulatorâ€“Metal Transition in Films Comprised of Touching Semiconductor Nanocrystals. ACS Nano, 2016, 10, 6744-6752.	14.6	25
20	Enthalpy of Formation for Cuâ€“Znâ€“Snâ€“S (CZTS) Calculated from Surface Binding Energies Experimentally Measured by Ion Sputtering. Chemistry of Materials, 2015, 27, 2294-2298.	6.7	22
21	Nonthermal plasma synthesis of metal sulfide nanocrystals from metalorganic vapor and elemental sulfur. Journal Physics D: Applied Physics, 2015, 48, 314004.	2.8	21
22	In-Flight Size Focusing of Aerosols by a Low Temperature Plasma. Journal of Physical Chemistry C, 2017, 121, 12936-12944.	3.1	20
23	Plasma synthesis of stoichiometric Cu2S nanocrystals stabilized by oleylamine. Chemical Communications, 2014, 50, 8346.	4.1	18
24	Highly Conductive Sbâ€“SnO₂ Nanocrystals Synthesized by Dual Nonthermal Plasmas. ACS Applied Materials & Interfaces, 2020, 12, 25168-25177.	8.0	18
25	Nonequilibrium plasma aerotaxy of size controlled GaN nanocrystals. Journal Physics D: Applied Physics, 2020, 53, 095201.	2.8	18
26	Single-Step Aerosol Synthesis and Deposition of Au Nanoparticles with Controlled Size and Separation Distributions. Chemistry of Materials, 2011, 23, 4612-4617.	6.7	17
27	Particle charge distributions in the effluent of a flow-through atmospheric pressure low temperature plasma. Plasma Sources Science and Technology, 2021, 30, 075030.	3.1	15
28	Measurement of sub-2 nm stable clusters during silane pyrolysis in a furnace aerosol reactor. Journal of Chemical Physics, 2020, 152, 024304.	3.0	14
29	Nonequilibrium Plasma Aerotaxy of InN Nanocrystals and Their Photonic Properties. Journal of Physical Chemistry C, 2019, 123, 30613-30622.	3.1	13
30	Beyond equilibrium thermodynamics in the low temperature plasma processor. Journal of Vacuum Science and Technology B:Nanotechnology and Microelectronics, 2018, 36, .	1.2	11
31	Highly Uniform Activation of Carbon Fiber Reinforced Thermoplastics by Low-Temperature Plasma. ACS Applied Polymer Materials, 2019, 1, 2638-2648.	4.4	11
32	Accessing unconventional biofuels via reactions far from local equilibrium. Fuel, 2018, 226, 472-478.	6.4	7
33	Electrochemical characterization of the plasma-water interface. Journal Physics D: Applied Physics, 2020, 53, 165202.	2.8	7
34	Particle trapping, size-filtering, and focusing in the nonthermal plasma synthesis of sub-10 nanometer particles. Journal Physics D: Applied Physics, 2022, 55, 235202.	2.8	7
35	Superlocal chemical reaction equilibrium in low temperature plasma. AICHE Journal, 2020, 66, e16948.	3.6	6
36	Entropy production and chemical reactions in nonequilibrium plasma. AICHE Journal, 2021, 67, e17291.	3.6	6

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37	Electrochemical Structure of the Plasmaâ€“Liquid Interface. Journal of Physical Chemistry C, 2022, 126, 1222-1229.	3.1	6
38	Characterization of plasma in RF jet interacting with water: Thomson scattering versus spectral line broadening. Plasma Sources Science and Technology, 2022, 31, 035018.	3.1	6
39	Visualizing Current Flow at the Mesoscale in Disordered Assemblies of Touching Semiconductor Nanocrystals. Journal of Physical Chemistry C, 2017, 121, 15619-15629.	3.1	5
40	Aerosol-synthesized siliceous nanoparticles: impact of morphology and functionalization on biodistribution. International Journal of Nanomedicine, 2018, Volume 13, 7375-7393.	6.7	5
41	Modeling atomic layer deposition process parameters to achieve dense nanocrystal-based nanocomposites. Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 2021, 39, .	2.1	5
42	Plasma parameters and the reduction potential at a plasmaâ€“liquid interface. Physical Chemistry Chemical Physics, 2022, 24, 14257-14268.	2.8	5
43	Phase mixing in GaSb nanocrystals synthesized by nonequilibrium plasma aerotaxy. Plasma Processes and Polymers, 2020, 17, 1900233.	3.0	4
44	Predicting plasma conditions necessary for synthesis of Î³-Al₂O₃ nanocrystals. Nanoscale, 2021, 13, 11387-11395.	5.6	4
45	(Invited) Electrochemical Characterization of the Interface between Atmospheric Noble Gas Plasma Jet and Aqueous Solution. ECS Meeting Abstracts, 2020, MA2020-01, 1107-1107.	0.0	0
46	Isolating Organic Half-Reaction Products in Aqueous Solutions Exposed to Nonthermal Plasma. ECS Meeting Abstracts, 2020, MA2020-01, 1127-1127.	0.0	0