Assaf Y Anderson

List of Publications by Year
in descending order

39 papers	2,655 citations	257450 24 h-index	289244 40 g-index
42 all docs	42 docs citations	42 times ranked	3616 citing authors

#	Article	IF	Citations
1	All-Oxide Photovoltaics. Journal of Physical Chemistry Letters, 2012, 3, 3755-3764.	4.6	263
2	Interpretation of Optoelectronic Transient and Charge Extraction Measurements in Dyeâ€Sensitized Solar Cells. Advanced Materials, 2013, 25, 1881-1922.	21.0	262
3	Structure/Function Relationships in Dyes for Solar Energy Conversion: A Two-Atom Change in Dye Structure and the Mechanism for Its Effect on Cell Voltage. Journal of the American Chemical Society, 2009, 131, 3541-3548.	13.7	221
4	Electron Injection Efficiency and Diffusion Length in Dye-Sensitized Solar Cells Derived from Incident Photon Conversion Efficiency Measurements. Journal of Physical Chemistry C, 2009, 113, 1126-1136.	3.1	205
5	Quantifying Regeneration in Dye-Sensitized Solar Cells. Journal of Physical Chemistry C, 2011, 115, 2439-2447.	3.1	203
6	Waterâ€Based Electrolytes for Dyeâ€Sensitized Solar Cells. Advanced Materials, 2010, 22, 4505-4509.	21.0	156
7	TiO2/Cu2O all-oxide heterojunction solar cells produced by spray pyrolysis. Solar Energy Materials and Solar Cells, 2015, 132, 549-556.	6.2	155
8	Simulation and measurement of complete dye sensitised solar cells: including the influence of trapping, electrolyte, oxidised dyes and light intensity on steady state and transient device behaviour. Physical Chemistry Chemical Physics, 2011, 13, 5798.	2.8	115
9	Re-evaluation of Recombination Losses in Dye-Sensitized Cells: The Failure of Dynamic Relaxation Methods to Correctly Predict Diffusion Length in Nanoporous Photoelectrodes. Nano Letters, 2009, 9, 3532-3538.	9.1	88
10	Thin Film Co₃O₄/TiO₂ Heterojunction Solar Cells. Advanced Energy Materials, 2015, 5, 1401007.	19.5	86
11	Simultaneous Transient Absorption and Transient Electrical Measurements on Operating Dye-Sensitized Solar Cells: Elucidating the Intermediates in Iodide Oxidation. Journal of Physical Chemistry C, 2010, 114, 1953-1958.	3.1	85
12	Quantum Efficiency and Bandgap Analysis for Combinatorial Photovoltaics: Sorting Activity of Cuâ€“O Compounds in All-Oxide Device Libraries. ACS Combinatorial Science, 2014, 16, 53-65.	3.8	83
13	Effect of Mg doping on Cu 2 O thin films and their behavior on the TiO 2 /Cu 2 O heterojunction solar cells. Solar Energy Materials and Solar Cells, 2016, 147, 27-36.	6.2	73
14	Factors controlling charge recombination under dark and light conditions in dye sensitised solar cells. Physical Chemistry Chemical Physics, 2011, 13, 3547-3558.	2.8	68
15	The Mechanism of Iodine Reduction by TiO₂ Electrons and the Kinetics of Recombination in Dye-Sensitized Solar Cells. Journal of Physical Chemistry Letters, 2012, 3, 1980-1984.	4.6	64
16	Open Circuit Potential Build-Up in Perovskite Solar Cells from Dark Conditions to 1 Sun. Journal of Physical Chemistry Letters, 2015, 6, 4640-4645.	4.6	48
17	Combinatorial Investigation and Modelling of MoO₃ Holeâ€Selective Contact in TiO₂|Co₃O₄|MoO₃ Allâ€Oxide Solar Cells. Advanced Materials Interfaces, 2016, 3, 1500405.	3.7	48
18	2000 hours photostability testing of dye sensitised solar cells using a cobalt bipyridine electrolyte. Journal of Materials Chemistry A, 2014, 2, 4751-4757.	10.3	43

#	Article	IF	Citations
19	One-step synthesis of crystalline Mn2O3 thin film by ultrasonic spray pyrolysis. Thin Solid Films, 2016, 615, 261-264.	1.8	41
20	Data Mining and Machine Learning Tools for Combinatorial Material Science of Allâ€Oxide Photovoltaic Cells. Molecular Informatics, 2015, 34, 367-379.	2.5	39
21	Near-infrared absorbing squaraine dye with extended Ï€ conjugation for dye-sensitized solar cells. Renewable Energy, 2013, 60, 672-678.	8.9	34
22	New insight into the regeneration kinetics of organic dye sensitised solar cells. Chemical Communications, 2012, 48, 2406.	4.1	32
23	Universal Work Function of Metal Oxides Exposed to Air. Advanced Materials Interfaces, 2019, 6, 1802058.	3.7	29
24	Efficient dye regeneration in solid-state dye-sensitized solar cells fabricated with melt processed hole conductors. Organic Electronics, 2012, 13, 23-30.	2.6	28
25	Hot Electronâ€Based Solid State TiO₂ | Ag Solar Cells. Advanced Materials Interfaces, 2016, 3, 1500789.	3.7	26
26	Utilizing Pulsed Laser Deposition Lateral Inhomogeneity as a Tool in Combinatorial Material Science. ACS Combinatorial Science, 2015, 17, 209-216.	3.8	22
27	Co₃O₄ Based All-Oxide PV: A Numerical Simulation Analyzed Combinatorial Material Science Study. Journal of Physical Chemistry C, 2016, 120, 9053-9060.	3.1	22
28	Effect of Spinel Inversion on (Co_xFe_{1â^’x})₃O₄ Allâ€Oxide Solar Cell Performance. Energy Technology, 2016, 4, 809-815.	3.8	16
29	Four-point probe electrical resistivity scanning system for large area conductivity and activation energy mapping. Review of Scientific Instruments, 2014, 85, 055103.	1.3	15
30	A combined computational and experimental investigation of Mg doped Î±-Fe₂O₃. Physical Chemistry Chemical Physics, 2016, 18, 781-791.	2.8	15
31	Solid state ITO | Au-NPs | TiO2 plasmonic based solar cells. Solar Energy Materials and Solar Cells, 2018, 179, 254-259.	6.2	12
32	How Transparent Oxides Gain Some Color: Discovery of a CeNiO₃ Reduced Bandgap Phase As an Absorber for Photovoltaics. ACS Combinatorial Science, 2018, 20, 366-376.	3.8	12
33	Process-Function Data Mining for the Discovery of Solid-State Iron-Oxide PV. ACS Combinatorial Science, 2017, 19, 755-762.	3.8	9
34	Oxygen concentration as a combinatorial parameter: The effect of continuous oxygen vacancy variation on SnO2 layer conductivity. Materials Chemistry and Physics, 2018, 208, 289-293.	4.0	9
35	Highâ€Throughput Electrical Potential Depthâ€Profiling in Air. Advanced Materials Interfaces, 2017, 4, 1700136.	3.7	5
36	Electron-Hybridization-Induced Enhancement of Photoactivity in Indium-Doped Co₃O₄. Journal of Physical Chemistry C, 2016, 120, 28983-28991.	3.1	4

#	Article	IF	Citations
37	Direct observation of patterned self-assembled monolayers and bilayers on silica-on-silicon surfaces. Optical Materials Express, 2015, 5, 149.	3.0	1
38	Thinâ€Film Photovoltaics: Combinatorial Investigation and Modelling of MoO₃ Holeâ€Selective Contact in TiO₂|Co₃O₄|MoO₃ Allâ€Oxide Solar Cells (Adv. Mater. Interfaces 1/2016). Advanced Materials Interfaces, 2016, 3, .	3.7	1
39	Plasmonic Hot Electrons Photovoltaics via Spontaneous Templating. , 2016, , .		0