K Xerxes Steirer

List of Publications by Year
in descending order

37 papers	3,466 citations	279798 23 h-index	414414 32 g-index
37 all docs	37 docs citations	37 times ranked	6516 citing authors

#	Article	IF	Citations
1	Charge Compensation by Iodine Covalent Bonding in Lead Iodide Perovskite Materials. Crystals, 2022, 12, 88.	2.2	2
2	Mechanical Pulverization of Co-Free Nickel-Rich Cathodes for Improved High-Voltage Cycling of Lithium-Ion Batteries. ACS Applied Energy Materials, 2022, 5, 6996-7005.	5.1	12
3	Improving Photostability of Cesium-Doped Formamidinium Lead Triiodide Perovskite. ACS Energy Letters, 2021, 6, 574-580.	17.4	22
4	Advances in Multiscale Modeling of Lignocellulosic Biomass. ACS Sustainable Chemistry and Engineering, 2020, 8, 3512-3531.	6.7	79
5	Electrochemical Properties and Challenges of Type II Silicon Clathrate Anode in Sodium Ion Batteries. Journal of the Electrochemical Society, 2019, 166, A3051-A3058.	2.9	6
6	Simultaneous ozone and granular activated carbon for advanced treatment of micropollutants in municipal wastewater effluent. Chemosphere, 2019, 234, 845-854.	8.2	46
7	An artificial interphase enables reversible magnesium chemistry in carbonate electrolytes. Nature Chemistry, 2018, 10, 532-539.	13.6	347
8	Operando X-ray photoelectron spectroscopy of solid electrolyte interphase formation and evolution in Li2S-P2S5 solid-state electrolytes. Nature Communications, 2018, 9, 2490.	12.8	170
9	A graded catalyticâ€“protective layer for an efficient and stable water-splitting photocathode. Nature Energy, 2017, 2, .	39.5	135
10	Covalent Surface Modification of Gallium Arsenide Photocathodes for Water Splitting in Highly Acidic Electrolyte. ChemSusChem, 2017, 10, 767-773.	6.8	27
11	Critical Interface States Controlling Rectification of Ultrathin NiOâ€“ZnO pâ€“n Heterojunctions. ACS Applied Materials & Interfaces, 2017, 9, 31111-31118.	8.0	12
12	Ru-Sn/AC for the Aqueous-Phase Reduction of Succinic Acid to 1,4-Butanediol under Continuous Process Conditions. ACS Catalysis, 2017, 7, 6207-6219.	11.2	44
13	Defect Tolerance in Methylammonium Lead Triiodide Perovskite. ACS Energy Letters, 2016, 1, 360-366.	17.4	500
14	Effects of humidity during formation of zinc oxide electron contact layers from a diethylzinc precursor solution. Organic Electronics, 2016, 31, 63-70.	2.6	4
15	Experimental and Computational Investigation of Acetic Acid Deoxygenation over Oxophilic Molybdenum Carbide: Surface Chemistry and Active Site Identity. ACS Catalysis, 2016, 6, 1181-1197.	11.2	76
16	Quantitative Study on the Chemical Solution Deposition of Zinc Oxysulfide. ECS Journal of Solid State Science and Technology, 2016, 5, P58-P66.	1.8	10
17	cis,cis-Muconic acid: separation and catalysis to bio-adipic acid for nylon-6,6 polymerization. Green Chemistry, 2016, 18, 3397-3413.	9.0	147
18	Water reduction by a p-GaInP2 photoelectrode stabilized by an amorphous TiO2 coating and a molecular cobalt catalyst. Nature Materials, 2016, 15, 456-460.	27.5	215

#	Article	IF	Citations
19	Co-solvent enhanced zinc oxysulfide buffer layers in Kesterite copper zinc tin selenide solar cells. Physical Chemistry Chemical Physics, 2015, 17, 15355-15364.	2.8	23
20	Phosphonic Acid Modification of GaInP₂ Photocathodes Toward Unbiased Photoelectrochemical Water Splitting. ACS Applied Materials & Interfaces, 2015, 7, 11346-11350.	8.0	62
21	Nickel oxide interlayer films from nickel formateâ€“ethylenediamine precursor: influence of annealing on thin film properties and photovoltaic device performance. Journal of Materials Chemistry A, 2015, 3, 10949-10958.	10.3	45
22	Photoelectron spectroscopy, and photovoltaic device study of Cu<inf>2</inf>ZnSnSe<inf>4</inf> and ZnO<inf>x</inf>S<inf>1−x</inf> buffer layer interface. , 2014, , .		0
23	Band alignment of CBD deposited Zn(O,S)/Cu(In<inf>1−x</inf>Ga<inf>x</inf>)Se<inf>2</inf> interface. , 2014, , .		1
24	Pentafluorophenoxy Boron Subphthalocyanine (F₅BsubPc) as a Multifunctional Material for Organic Photovoltaics. ACS Applied Materials & Interfaces, 2014, 6, 1515-1524.	8.0	45
25	Structureâ€“processingâ€“property correlations in solution-processed, small-molecule, organic solar cells. Journal of Materials Chemistry C, 2013, 1, 5250.	5.5	22
26	Highlyâ€Tunable Nickel Cobalt Oxide as a Lowâ€Temperature Pâ€Type Contact in Organic Photovoltaic Devices. Advanced Energy Materials, 2013, 3, 524-531.	19.5	38
27	Titanium dioxide electron-selective interlayers created by chemical vapor deposition for inverted configuration organic solar cells. Journal of Materials Chemistry A, 2013, 1, 6794.	10.3	35
28	Energy Level Alignment and Morphology of Ag and Au Nanoparticle Recombination Contacts in Tandem Planar Heterojunction Solar Cells. Journal of Physical Chemistry C, 2013, 117, 22331-22340.	3.1	10
29	Energy level alignment in PCDTBT:PC70BM solar cells: Solution processed NiOx for improved hole collection and efficiency. Organic Electronics, 2012, 13, 744-749.	2.6	135
30	Evidence for near-Surface NiOOH Species in Solution-Processed NiO_x Selective Interlayer Materials: Impact on Energetics and the Performance of Polymer Bulk Heterojunction Photovoltaics. Chemistry of Materials, 2011, 23, 4988-5000.	6.7	343
31	Enhanced Efficiency in Plastic Solar Cells via Energy Matched Solution Processed NiO_x Interlayers. Advanced Energy Materials, 2011, 1, 813-820.	19.5	299
32	The interface science of interlayer materials and contacts in organic solar cells. , 2011, , .		0
33	Solution deposited NiO thin-films as hole transport layers in organic photovoltaics. Organic Electronics, 2010, 11, 1414-1418.	2.6	282
34	Optimization of organic photovoltaic devices using tuned mixed metal oxide contact layers. , 2010, , .		2
35	Enhanced lifetime in unencapsulated organic photovoltaics with air stable electrodes. , 2010, , .		6
36	Ultrasonically sprayed and inkjet printed thin film electrodes for organic solar cells. Thin Solid Films, 2009, 517, 2781-2786.	1.8	99

#	Article	IF	Citations
37	Ultrasonic spray deposition for production of organic solar cells. Solar Energy Materials and Solar Cells, 2009, 93, 447-453.	6.2	165