

K Xerxes Steirer

List of Publications by Year in descending order

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37
papers

3,466
citations

279798

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414414

32
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37
all docs

37
docs citations

37
times ranked

6516
citing authors

#	ARTICLE	IF	CITATIONS
1	Defect Tolerance in Methylammonium Lead Triiodide Perovskite. ACS Energy Letters, 2016, 1, 360-366.	17.4	500
2	An artificial interphase enables reversible magnesium chemistry in carbonate electrolytes. Nature Chemistry, 2018, 10, 532-539.	13.6	347
3	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
4	Enhanced Efficiency in Plastic Solar Cells via Energy Matched Solution Processed NiO _x Interlayers. Advanced Energy Materials, 2011, 1, 813-820.	19.5	299
5	Solution deposited NiO thin-films as hole transport layers in organic photovoltaics. Organic Electronics, 2010, 11, 1414-1418.	2.6	282
6	Water reduction by a p-GaN/P2 photoelectrode stabilized by an amorphous TiO ₂ coating and a molecular cobalt catalyst. Nature Materials, 2016, 15, 456-460.	27.5	215
7	Operando X-ray photoelectron spectroscopy of solid electrolyte interphase formation and evolution in Li ₂ S-P ₂ S ₅ solid-state electrolytes. Nature Communications, 2018, 9, 2490.	12.8	170
8	Ultrasonic spray deposition for production of organic solar cells. Solar Energy Materials and Solar Cells, 2009, 93, 447-453.	6.2	165
9	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
10	Energy level alignment in PCDTBT:PC70BM solar cells: Solution processed NiO _x for improved hole collection and efficiency. Organic Electronics, 2012, 13, 744-749.	2.6	135
11	A graded catalytic "protective layer for an efficient and stable water-splitting photocathode. Nature Energy, 2017, 2, .	39.5	135
12	Ultrasonically sprayed and inkjet printed thin film electrodes for organic solar cells. Thin Solid Films, 2009, 517, 2781-2786.	1.8	99
13	Advances in Multiscale Modeling of Lignocellulosic Biomass. ACS Sustainable Chemistry and Engineering, 2020, 8, 3512-3531.	6.7	79
14	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
15	Phosphonic Acid Modification of GaInP ₂ Photocathodes Toward Unbiased Photoelectrochemical Water Splitting. ACS Applied Materials & Interfaces, 2015, 7, 11346-11350.	8.0	62
16	Simultaneous ozone and granular activated carbon for advanced treatment of micropollutants in municipal wastewater effluent. Chemosphere, 2019, 234, 845-854.	8.2	46
17	Pentafluorophenoxy Boron Subphthalocyanine (F ₅ BsubPc) as a Multifunctional Material for Organic Photovoltaics. ACS Applied Materials & Interfaces, 2014, 6, 1515-1524.	8.0	45
18	Nickel oxide interlayer films from nickel formate "ethylene diamine precursor: influence of annealing on thin film properties and photovoltaic device performance. Journal of Materials Chemistry A, 2015, 3, 10949-10958.	10.3	45

#	ARTICLE	IF	CITATIONS
19	Ru-Sn/AC for the Aqueous-Phase Reduction of Succinic Acid to 1,4-Butanediol under Continuous Process Conditions. <i>ACS Catalysis</i> , 2017, 7, 6207-6219.	11.2	44
20	Highly-tunable Nickel Cobalt Oxide as a Low-temperature p-type Contact in Organic Photovoltaic Devices. <i>Advanced Energy Materials</i> , 2013, 3, 524-531.	19.5	38
21	Titanium dioxide electron-selective interlayers created by chemical vapor deposition for inverted configuration organic solar cells. <i>Journal of Materials Chemistry A</i> , 2013, 1, 6794.	10.3	35
22	Covalent Surface Modification of Gallium Arsenide Photocathodes for Water Splitting in Highly Acidic Electrolyte. <i>ChemSusChem</i> , 2017, 10, 767-773.	6.8	27
23	Co-solvent enhanced zinc oxysulfide buffer layers in Kesterite copper zinc tin selenide solar cells. <i>Physical Chemistry Chemical Physics</i> , 2015, 17, 15355-15364.	2.8	23
24	Structure-processing-property correlations in solution-processed, small-molecule, organic solar cells. <i>Journal of Materials Chemistry C</i> , 2013, 1, 5250.	5.5	22
25	Improving Photostability of Cesium-Doped Formamidinium Lead Triiodide Perovskite. <i>ACS Energy Letters</i> , 2021, 6, 574-580.	17.4	22
26	Critical Interface States Controlling Rectification of Ultrathin NiO/ZnO Heterojunctions. <i>ACS Applied Materials & Interfaces</i> , 2017, 9, 31111-31118.	8.0	12
27	Mechanical Pulverization of Co-Free Nickel-Rich Cathodes for Improved High-Voltage Cycling of Lithium-Ion Batteries. <i>ACS Applied Energy Materials</i> , 2022, 5, 6996-7005.	5.1	12
28	Energy Level Alignment and Morphology of Ag and Au Nanoparticle Recombination Contacts in Tandem Planar Heterojunction Solar Cells. <i>Journal of Physical Chemistry C</i> , 2013, 117, 22331-22340.	3.1	10
29	Quantitative Study on the Chemical Solution Deposition of Zinc Oxysulfide. <i>ECS Journal of Solid State Science and Technology</i> , 2016, 5, P58-P66.	1.8	10
30	Enhanced lifetime in unencapsulated organic photovoltaics with air stable electrodes. , 2010, , .		6
31	Electrochemical Properties and Challenges of Type II Silicon Clathrate Anode in Sodium Ion Batteries. <i>Journal of the Electrochemical Society</i> , 2019, 166, A3051-A3058.	2.9	6
32	Effects of humidity during formation of zinc oxide electron contact layers from a diethylzinc precursor solution. <i>Organic Electronics</i> , 2016, 31, 63-70.	2.6	4
33	Optimization of organic photovoltaic devices using tuned mixed metal oxide contact layers. , 2010, , .		2
34	Charge Compensation by Iodine Covalent Bonding in Lead Iodide Perovskite Materials. <i>Crystals</i> , 2022, 12, 88.	2.2	2
35	Band alignment of CBD deposited Zn(O,S)/Cu(In _{1-x} Ga _x)Se ₂ interface. , 2014, , .		1
36	The interface science of interlayer materials and contacts in organic solar cells. , 2011, , .		0

#	ARTICLE	IF	CITATIONS
37	Photoelectron spectroscopy, and photovoltaic device study of Cu ₂ ZnSnSe ₄ and ZnO _x S _{1-x} buffer layer interface. , 2014, , .		0