Nicolas Gaillard

List of Publications by Year
in descending order

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32 papers	1,732 citations	567281 15 h-index	454955 30 g-index
35 all docs	35 docs citations	35 times ranked	2923 citing authors

#	Article	IF	Citations
1	Tungsten oxide-coated copper gallium selenide sustains long-term solar hydrogen evolution. Sustainable Energy and Fuels, 2021, 5, 384-390.	4.9	7
2	In situ Al₂O₃ incorporation enhances the efficiency of CuIn(S,Se)₂ solar cells prepared from molecular-ink solutions. Journal of Materials Chemistry A, 2021, 9, 10419-10426.	10.3	6
3	Performance and limits of 2.0 eV bandgap CuInGaS₂ solar absorber integrated with CdS buffer on F:SnO₂ substrate for multijunction photovoltaic and photoelectrochemical water splitting devices. Materials Advances, 2021, 2, 5752-5763.	5.4	4
4	A perspective on ordered vacancy compound and parent chalcopyrite thin film absorbers for photoelectrochemical water splitting. Applied Physics Letters, 2021, 119, 090501.	3.3	4
5	Mg _x Zn_{1â"'x}O contact to CuGa₃Se₅ absorber for photovoltaic and photoelectrochemical devices. JPhys Energy, 2021, 3, 024001.	5.3	10
6	Assessing the roles of Cu- and Ag-deficient layers in chalcopyrite-based solar cells through first principles calculations. Journal of Applied Physics, 2020, 127, .	2.5	23
7	Wide-Bandgap Cu(In,Ga)S₂ Photocathodes Integrated on Transparent Conductive F:SnO₂ Substrates for Chalcopyrite-Based Water Splitting Tandem Devices. ACS Applied Energy Materials, 2019, 2, 5515-5524.	5.1	21
8	Molybdenum Disulfide Catalytic Coatings via Atomic Layer Deposition for Solar Hydrogen Production from Copper Gallium Diselenide Photocathodes. ACS Applied Energy Materials, 2019, 2, 1060-1066.	5.1	17
9	Low-Cost, Efficient, and Durable H₂ Production by Photoelectrochemical Water Splitting with CuGa₃Se₅ Photocathodes. ACS Applied Materials & Interfaces, 2018, 10, 19573-19579.	8.0	33
10	Wide Band Gap CuGa(S,Se)₂ Thin Films on Transparent Conductive Fluorinated Tin Oxide Substrates as Photocathode Candidates for Tandem Water Splitting Devices. Journal of Physical Chemistry C, 2018, 122, 14304-14312.	3.1	26
11	Antimony(III) Sulfide Thin Films as a Photoanode Material in Photocatalytic Water Splitting. ACS Applied Materials & Interfaces, 2016, 8, 8445-8451.	8.0	73
12	Photoelectrochemical Water Splitting Using Photovoltaic Materials. Lecture Notes in Energy, 2016, , 261-279.	0.3	3
13	Between photocatalysis and photosynthesis: Synchrotron spectroscopy methods on molecules and materials for solar hydrogen generation. Journal of Electron Spectroscopy and Related Phenomena, 2013, 190, 93-105.	1.7	18
14	Incident Photon-to-Current Efficiency and Photocurrent Spectroscopy. SpringerBriefs in Energy, 2013, , 87-97.	0.3	9
15	A nanocomposite photoelectrode made of 2.2ÂeV band gap copper tungstate (CuWO4) and multi-wall carbon nanotubes for solar-assisted water splitting. International Journal of Hydrogen Energy, 2013, 38, 3166-3176.	7.1	113
16	UV-Vis Spectroscopy. SpringerBriefs in Energy, 2013, , 49-62.	0.3	22
17	Development of Chalcogenide Thin Film Materials for Photoelectrochemical Hydrogen Production. Materials Research Society Symposia Proceedings, 2013, 1558, 1.	0.1	9
18	Surface Modification to a-SiC Photocathode Using Ruthenium Nanoparticles. Materials Research Society Symposia Proceedings, 2013, 1539, 7301.	0.1	2

#	Article	IF	Citations
19	PEC Characterization Flowchart. SpringerBriefs in Energy, 2013, , 45-47.	0.3	2
20	Flat-Band Potential Techniques. SpringerBriefs in Energy, 2013, , 63-85.	0.3	10
21	Experimental Considerations. SpringerBriefs in Energy, 2013, , 17-44.	0.3	2
22	Stability Testing. SpringerBriefs in Energy, 2013, , 115-118.	0.3	0
23	Photoelectrochemical reforming of glucose for hydrogen production using a WO3-based tandem cell device. Energy and Environmental Science, 2012, 5, 9091.	30.8	63
24	Copper Tungstate (CuWO4)â€“Based Materials for Photoelectrochemical Hydrogen Production. Materials Research Society Symposia Proceedings, 2012, 1446, 31.	0.1	6
25	Effect of Thermal Treatment on the Crystallographic, Surface Energetics, and Photoelectrochemical Properties of Reactively Cosputtered Copper Tungstate for Water Splitting. Journal of Physical Chemistry C, 2011, 115, 25490-25495.	3.1	75
26	Hydrogen production from photo-driven electrolysis of biomass-derived oxygenates: A case study on methanol using Pt-modified WO3 thin film electrodes. International Journal of Hydrogen Energy, 2011, 36, 9632-9644.	7.1	23
27	Advances in copper-chalcopyrite thin films for solar energy conversion. Solar Energy Materials and Solar Cells, 2010, 94, 12-16.	6.2	77
28	Copper-silver chalcporyites as top cell absorbers in tandem photovoltaic and hybrid photovoltaic/photoelectrochemical devices. , 2010, , .		1
29	Improved current collection in WO₃:Mo/WO₃ bilayer photoelectrodes. Journal of Materials Research, 2010, 25, 45-51.	2.6	31
30	Accelerating materials development for photoelectrochemical hydrogen production: Standards for methods, definitions, and reporting protocols. Journal of Materials Research, 2010, 25, 3-16.	2.6	1,032
31	Measurement of the sodium concentration in CIGS solar cells via laser induced breakdown spectroscopy. , 2010, , .		3
32	Development of a hybrid photoelectrochemical (PEC) device with amorphous silicon carbide as the photoelectrode for water splitting. Materials Research Society Symposia Proceedings, 2009, 1171, 29.	0.1	4