Nicolas Wyrsch

List of Publications by Year in descending order

Source: https://exaly.com/author-pdf/4591930/publications.pdf

Version: 2024-02-01

44 papers

2,373 citations

³⁹⁴²⁸⁶
19
h-index

243529 44 g-index

45 all docs

45 docs citations

45 times ranked

3043 citing authors

#	Article	IF	Citations
1	Photovoltaic Technology: The Case for Thin-Film Solar Cells. Science, 1999, 285, 692-698.	6.0	1,105
2	Influence of plasma excitation frequency fora-Si:H thin film deposition. Plasma Chemistry and Plasma Processing, 1987, 7, 267-273.	1.1	166
3	High-rate deposition of amorphous hydrogenated silicon: effect of plasma excitation frequency. Electronics Letters, 1987, 23, 228-230.	0.5	139
4	Review: Progress in solar cells from hydrogenated amorphous silicon. Renewable and Sustainable Energy Reviews, 2017, 76, 1497-1523.	8.2	134
5	Nanocrystalline Silicon Carrier Collectors for Silicon Heterojunction Solar Cells and Impact on Low-Temperature Device Characteristics. IEEE Journal of Photovoltaics, 2016, 6, 1654-1662.	1.5	82
6	The impact of silicon solar cell architecture and cell interconnection on energy yield in hot & amp; sunny climates. Energy and Environmental Science, 2017, 10, 1196-1206.	15.6	76
7	Mobility lifetime product—A tool for correlatingaâ€6i:H film properties and solar cell performances. Journal of Applied Physics, 1996, 79, 9361-9368.	1.1	69
8	Techno-economic analysis of battery storage and curtailment in a distribution grid with high PV penetration. Journal of Energy Storage, 2018, 17, 73-83.	3.9	57
9	Deep reinforcement learning control of electric vehicle charging in the presence of photovoltaic generation. Applied Energy, 2021, 301, 117504.	5.1	52
10	Hole drift mobility in νc-Si:H. Journal of Applied Physics, 2001, 89, 4971-4974.	1.1	44
11	Evaluation of building technology for mass producible millimetre-sized robots using flexible printed circuit boards. Journal of Micromechanics and Microengineering, 2009, 19, 075011.	1.5	37
12	Control algorithm for a residential photovoltaic system with storage. Applied Energy, 2017, 202, 78-87.	5.1	34
13	Plastic and Elastic Strain Fields in GaAs/Si Core–Shell Nanowires. Nano Letters, 2014, 14, 1859-1864.	4.5	32
14	Ambipolar diffusion length and photoconductivity measurements on â€~â€~midgap'' hydrogenated microcrystalline silicon. Journal of Applied Physics, 1996, 80, 5111-5115.	1.1	30
15	Radiation hardness of amorphous silicon particle sensors. Journal of Non-Crystalline Solids, 2006, 352, 1797-1800.	1.5	30
16	Unsupervised algorithm for disaggregating low-sampling-rate electricity consumption of households. Sustainable Energy, Grids and Networks, 2019, 19, 100244.	2.3	25
17	Subbandgap absorption spectra of slightly doped a-Si:H measured with constant photocurrent method (CPM) and photothermal deflection spectroscopy (PDS). Solid State Communications, 1993, 85, 219-222.	0.9	21
18	Rule-based scheduling of air conditioning using occupancy forecasting. Energy and Al, 2020, 2, 100022.	5.8	21

#	Article	IF	Citations
19	Review of amorphous silicon based particle detectors: the quest for single particle detection. Semiconductor Science and Technology, 2016, 31, 103005.	1.0	20
20	Hydrogenated Amorphous Silicon Sensor Deposited on Integrated Circuit for Radiation Detection. IEEE Transactions on Nuclear Science, 2008, 55, 802-811.	1.2	19
21	Fabrication and characterization of monolithically integrated microchannel plates based on amorphous silicon. Scientific Reports, 2014, 4, 4597.	1.6	17
22	Hybrid axial and radial Si–GaAs heterostructures in nanowires. Nanoscale, 2013, 5, 9633.	2.8	15
23	Field test and electrode optimization of electrodynamic cleaning systems for solar panels. Progress in Photovoltaics: Research and Applications, 2019, 27, 1020-1033.	4.4	15
24	Mitigating the impact of distributed PV in a low-voltage grid using electricity tariffs. Electric Power Systems Research, 2020, 189, 106763.	2.1	13
25	Optimised Heat Pump Management for Increasing Photovoltaic Penetration into the Electricity Grid. Energies, 2019, 12, 1571.	1.6	12
26	A 3D indicator for guiding Al applications in the energy sector. Energy and Al, 2022, 9, 100167.	5.8	11
27	FEEdBACk: An ICT-Based Platform to Increase Energy Efficiency through Buildings' Consumer Engagement. Energies, 2021, 14, 1524.	1.6	10
28	A Blockchain-Supported Framework for Charging Management of Electric Vehicles. Energies, 2021, 14, 7144.	1.6	10
29	Amorphous silicon-based microchannel plates. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2012, 695, 74-77.	0.7	8
30	Fabrication of a Hydrogenated Amorphous Silicon Detector in 3-D Geometry and Preliminary Test on Planar Prototypes. Instruments, 2021, 5, 32.	0.8	8
31	Routing of Electric Vehicles With Intermediary Charging Stations: A Reinforcement Learning Approach. Frontiers in Big Data, 2021, 4, 586481.	1.8	7
32	Drift mobility and Staebler-Wronski effect in hydrogenated amorphous silicon. Solid State Communications, 1991, 80, 807-809.	0.9	6
33	Limits of the Constant Photocurrent Method (CPM) for the determination of the deep defect density in amorphous hydrogenated silicon (a-Si:H). Journal of Non-Crystalline Solids, 1993, 164-166, 427-430.	1.5	6
34	Modeling a Thick Hydrogenated Amorphous Silicon Substrate for Ionizing Radiation Detectors. Frontiers in Physics, 2020, 8, .	1.0	6
35	Real-World Implementation of an ICT-Based Platform to Promote Energy Efficiency. Energies, 2021, 14, 2416.	1.6	6
36	Micro-Channel Plate Detectors Based on Hydrogenated Amorphous Silicon. Materials Research Society Symposia Proceedings, 2010, 1245, 1.	0.1	5

#	Article	IF	CITATIONS
37	Charge collection in amorphous silicon solar cells: Cell analysis and simulation of high-efficiency pin devices. Journal of Non-Crystalline Solids, 2012, 358, 2187-2189.	1.5	5
38	Performance and Transient Behavior of Vertically Integrated Thin-film Silicon Sensors. Sensors, 2008, 8, 4656-4668.	2.1	4
39	High Spatial Resolution of Thin-Film-on-ASIC Particle Detectors. IEEE Transactions on Nuclear Science, 2012, 59, 2614-2621.	1.2	4
40	Deep defect determination by the constant photocurrent method (CPM) in annealed or light soaked amorphous hydrogenated silicon (a-Si:H). Solar Energy Materials and Solar Cells, 1994, 34, 533-539.	3.0	3
41	A highly sensitive a-Si photodetector array with integrated filter for optical detection in MEMS. Procedia Chemistry, 2009, 1, 1367-1370.	0.7	3
42	THE GRIDPIX DETECTOR: HISTORY AND PERSPECTIVE. Modern Physics Letters A, 2013, 28, 1340021.	0.5	3
43	Micro Photovoltaic Modules for Micro Systems. Materials Research Society Symposia Proceedings, 2008, 1066, 1.	0.1	2
44	Photovoltaic power generation. Plasma Physics and Controlled Fusion, 1992, 34, 1837-1844.	0.9	1