Richard P Corkish

List of Publications by Year
in descending order

50 papers	2,139 citations	393982 19 h-index	315357 38 g-index
54 all docs	54 docs citations	54 times ranked	2576 citing authors

#	Article	IF	Citations
1	Silicon nanostructures for third generation photovoltaic solar cells. Thin Solid Films, 2006, 511-512, 654-662.	0.8	542
2	Temperature dependence of the radiative recombination coefficient of intrinsic crystalline silicon. Journal of Applied Physics, 2003, 94, 4930.	1.1	257
3	Very efficient light emission from bulk crystalline silicon. Applied Physics Letters, 2003, 82, 2996-2998.	1.5	151
4	Solar energy collection by antennas. Solar Energy, 2002, 73, 395-401.	2.9	141
5	Point-of-use water disinfection using ultraviolet and visible light-emitting diodes. Science of the Total Environment, 2016, 553, 626-635.	3.9	93
6	Major challenges and opportunities in silicon solar module recycling. Progress in Photovoltaics: Research and Applications, 2020, 28, 1077-1088.	4.4	82
7	Comparative Life Cycle Assessment of End-of-Life Silicon Solar Photovoltaic Modules. Applied Sciences (Switzerland), 2018, 8, 1396.	1.3	76
8	A life cycle assessment of perovskite/silicon tandem solar cells. Progress in Photovoltaics: Research and Applications, 2017, 25, 679-695.	4.4	74
9	Photovoltaic powered ultraviolet and visible light-emitting diodes for sustainable point-of-use disinfection of drinking waters. Science of the Total Environment, 2014, 493, 185-196.	3.9	71
10	The impurity photovoltaic (IPV) effect in wide-bandgap semiconductors: an opportunity for very-high-efficiency solar cells?. Progress in Photovoltaics: Research and Applications, 2002, 10, 345-353.	4.4	62
11	Limiting efficiency for a multi-band solar cell containing three and four bands. Physica E: Low-Dimensional Systems and Nanostructures, 2002, 14, 121-125.	1.3	60
12	Detailed balance efficiency limits with quasi-Fermi level variations [QW solar cell]. IEEE Transactions on Electron Devices, 1999, 46, 1932-1939.	1.6	56
13	A Review of Recycling Processes for Photovoltaic Modules. , 0, , .		50
14	Comprehensive recycling of silicon photovoltaic modules incorporating organic solvent delamination â€“ technical, environmental and economic analyses. Resources, Conservation and Recycling, 2021, 165, 105241.	5.3	50
15	Clear quantum-confined luminescence from crystalline silicon/SiO2 single quantum wells. Applied Physics Letters, 2004, 84, 2286-2288.	1.5	47
16	Excitons in silicon diodes and solar cells: A threeâ€particle theory. Journal of Applied Physics, 1996, 79, 195-203.	1.1	41
17	Quantitative interpretation of electron-beam-induced current grain boundary contrast profiles with application to silicon. Journal of Applied Physics, 1998, 84, 5473-5481.	1.1	27
18	Life cycle assessment on PERC solar modules. Solar Energy Materials and Solar Cells, 2018, 187, 154-159.	3.0	27

#	Article	IF	Citations
19	A comparative life cycle assessment of chalcogenide/Si tandem solar modules. Energy, 2018, 145, 700-709.	4.5	26
20	Economic viability of building integrated photovoltaics: A review of forty-five (45) non-domestic buildings in twelve (12) western countries. Renewable and Sustainable Energy Reviews, 2021, 137, 110622.	8.2	23
21	Junction recombination current in abrupt junction diodes under forward bias. Journal of Applied Physics, 1996, 80, 3083-3090.	1.1	19
22	Design trade-offs and rules for multiple energy level solar cells. Physica E: Low-Dimensional Systems and Nanostructures, 2002, 14, 136-141.	1.3	18
23	Band edge optical absorption in intrinsic silicon: Assessment of the indirect transition and disorder models. Journal of Applied Physics, 1993, 73, 3988-3996.	1.1	16
24	Sustainable End of Life Management of Crystalline Silicon and Thin Film Solar Photovoltaic Waste: The Impact of Transportation. Applied Sciences (Switzerland), 2020, 10, 5465.	1.3	16
25	Photoluminescence in crystalline silicon quantum wells. Journal of Applied Physics, 2007, 101, 024321.	1.1	15
26	Atomistic structure of SiO2âˆ•Siâˆ•SiO2 quantum wells with an apparently crystalline silicon oxide. Journal of Applied Physics, 2004, 96, 3211-3216.	1.1	14
27	A survey of the effects of reflector surface distortions on sidelobe levels. IEEE Antennas and Propagation Magazine, 1990, 32, 6-11.	1.2	13
28	Thin semiconducting layers and nanostructures as active and passive emitters for thermophotonics and thermophotovoltaics. Physica E: Low-Dimensional Systems and Nanostructures, 2002, 14, 91-95.	1.3	10
29	Some candidate materials for lattice-matched liquid-phase epitaxial growth on silicon. Solar Cells, 1991, 31, 537-548.	0.6	9
30	Life Cycle Assessment of tandem LSC-Si devices. Energy, 2019, 181, 1-10.	4.5	9
31	Integrated Solar Photovoltaics for Buildings. Journal of Green Building, 2006, 1, 63-76.	0.4	9
32	An Environmental and Societal Analysis of the US Electrical Energy Industry Based on the Waterâ€“Energy Nexus. Energies, 2021, 14, 2633.	1.6	7
33	Numerical simulation of electron-beam-induced current near a silicon grain boundary and impact of a pâ€“n junction space charge region. Solar Energy Materials and Solar Cells, 2001, 65, 63-69.	3.0	5
34	Thin semiconducting layers as active and passive emitters for thermophotonics and thermophotovoltaics. Solar Energy, 2004, 76, 251-254.	2.9	5
35	The use of conical tips to improve the impedance matching of cassegrain subreflectors. Microwave and Optical Technology Letters, 1990, 3, 310-313.	0.9	4
36	Life Cycle Environmental Assessment of Different Solar Photovoltaic Technologies. , 2021, , 5-1-5-34.		3

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37	Life Cycle Assessment of Silicon-Based Tandem Solar Photovoltaics and their End-of-Life. Indonesian Journal of Life Cycle Assessment and Sustainability, 0, , .	0.0	2
38	The effect of electron range on electron beam induced current collection and a simple method to extract an electron range for any generation function. Ultramicroscopy, 2011, 111, 1343-1351.	0.8	1
39	An overview of the Australian Centre for Advanced Photovoltaics and the Australia-US Institute for Advanced Photovoltaics. Materials Research Society Symposia Proceedings, 2015, 1771, 33-44.	0.1	1
40	Life Cycle Assessment on Hydrogenation Processes on Silicon Solar Modules. , 2018, , .		1
41	Recombination via discrete defect levels with application to semiconductor material characterisation. , 0, , .		0
42	Optical transitions from SiO/sub 2//crystalline Si/SiO/sub 2/ quantum wells. , 0, , .		0
43	Evidence for crystalline silicon oxide growth on thin silicon. , 0, , .		0
44	Materials Engineering Education in Two New Engineering Degree Programs at the Centre for Photovoltaic Engineering. Materials Research Society Symposia Proceedings, 2005, 909, 1.	0.1	0
45	New education opportunities and research activities at UNSW. Proceedings of SPIE, 2007, , .	0.8	0
46	β-NaYF<inf>4</inf>:Er³⁺ nanocrystal films as a spectral converter to improve photoconversion efficiency of crystalline silicon solar cells. , 2013, , .		0
47	The genesis of the first specialist PV Bachelor of Engineering programâ€"The educational legacy of Stuart Ross Wenham. Progress in Photovoltaics: Research and Applications, 2019, , .	4.4	0
48	Undergraduate and Postgraduate Education in Renewable Energy. , 2017, , 81-92.		0
49	Life Cycle Assessment of Two Experimental Recycling Processes for c-Si Solar Modules. , 2019, , .		0
50	Undergraduate and Postgraduate Education in Renewable Energy. Advances in Higher Education and Professional Development Book Series, 0, , 85-95.	0.1	0