Pere Roca I Cabarrocas

List of Publications by Year
in descending order

362 papers	8,846 citations	44069 48 h-index	85541 71 g-index
363 all docs	363 docs citations	363 times ranked	4772 citing authors

#	Article	IF	Citations
1	In situ observation of droplet nanofluidics for yielding low-dimensional nanomaterials. Applied Surface Science, 2022, 573, 151510.	6.1	4
2	Ultrathin Ge epilayers on Si produced by low-temperature PECVD acting as virtual substrates for III-V / c-Si tandem solar cells. Solar Energy Materials and Solar Cells, 2022, 236, 111535.	6.2	3
3	Investigation of Sn-containing precursors for in-plane GeSn nanowire growth. Journal of Alloys and Compounds, 2022, 899, 163273.	5.5	2
4	Visualizing the effects of plasma-generated H atoms in situ in a transmission electron microscope. EPJ Applied Physics, 2022, 97, 7.	0.7	2
5	Tapering-free monocrystalline Ge nanowires synthesized via plasma-assisted VLS using In and Sn catalysts. Nanotechnology, 2022, , .	2.6	0
6	Precise morphology control of in-plane silicon nanowires via a simple plasma pre-treatment. Applied Surface Science, 2022, 593, 153435.	6.1	4
7	Bulk Defects and Hydrogenation Kinetics in Crystalline Silicon Solar Cells With Fired Passivating Contacts. IEEE Journal of Photovoltaics, 2022, 12, 711-721.	2.5	1
8	Controlling solidâ€“liquidâ€“solid GeSn nanowire growth modes by changing deposition sequences of a-Ge:H layer and SnO₂ nanoparticles. Nanotechnology, 2021, 32, 345602.	2.6	5
9	Impact of PECVD-prepared interfacial Si and SiGe layers on epitaxial Si films grown by PECVD (200ÂÂ°C) and APCVD (1130ÂÂ°C). Applied Surface Science, 2021, 546, 149056.	6.1	5
10	Role of H3 + ions in deposition of silicon thin films from SiH4/H2 discharges: modeling and experiments. Plasma Sources Science and Technology, 2021, 30, 075024.	3.1	4
11	Coupled Investigation of Contact Potential and Microstructure Evolution of Ultra-Thin AlOx for Crystalline Si Passivation. Nanomaterials, 2021, 11, 1803.	4.1	0
12	Silicon Nanowire Solar Cells with Î¼câ€Si:H Absorbers for Radial Junction Devices. Physica Status Solidi (A) Applications and Materials Science, 2021, 218, 2100231.	1.8	1
13	Highly flexible radial tandem junction thin film solar cells with excellent power-to-weight ratio. Nano Energy, 2021, 86, 106121.	16.0	18
14	Liquid-Assisted Vaporâ€“Solidâ€“Solid Silicon Nanowire Growth Mechanism Revealed by In Situ TEM When Using Cuâ€“Sn Bimetallic Catalysts. Journal of Physical Chemistry C, 2021, 125, 19773-19779.	3.1	9
15	Detection of stable positive fixed charges in AlOx activated during annealing with in situ modulated PhotoLuminescence. Solar Energy Materials and Solar Cells, 2021, 230, 111172.	6.2	5
16	Formation of inverse cones in crystalline silicon by selective etching of amorphous regions resulting from epitaxial breakdown. Journal Physics D: Applied Physics, 2021, 54, 495103.	2.8	0
17	Room temperature growth of silica nanowires on top of ultrathin Si nanowires synthesized with Snâ€Cu bimetallic seeds. Physica Status Solidi (A) Applications and Materials Science, 2021, 218, 2100409.	1.8	3
18	High Density of Quantum-Sized Silicon Nanowires with Different Polytypes Grown with Bimetallic Catalysts. ACS Omega, 2021, 6, 26381-26390.	3.5	4

#	Article	IF	Citations
19	Comparative Study on the Quality of Microcrystalline and Epitaxial Silicon Films Produced by PECVD Using Identical SiF4 Based Process Conditions. Materials, 2021, 14, 6947.	2.9	2
20	Plasma-Enhanced Chemical Vapor Deposition in a Transmission Electron Microscope?. Microscopy and Microanalysis, 2021, 27, 25-26.	0.4	1
21	Effect of strain on the dark current-voltage characteristic of silicon heterojunction solar cells. Solar Energy, 2020, 196, 457-461.	6.1	3
22	Germanium quantum dot infrared photodetectors addressed by self-aligned silicon nanowire electrodes. Nanotechnology, 2020, 31, 145602.	2.6	14
23	Low-Temperature Plasma-Assisted Growth of Coreâ€“Shell GeSn Nanowires with 30% Sn. Journal of Physical Chemistry C, 2020, 124, 1220-1226.	3.1	17
24	Transmission electron microscopy characterization of low temperature boron doped silicon epitaxial films. CrystEngComm, 2020, 22, 5464-5472.	2.6	3
25	Electrical characterization of low temperature plasma epitaxial Si grown on highly doped Si substrates. EPJ Photovoltaics, 2020, 11, 4.	1.6	0
26	Impact of PECVD Î¼c-Si:H deposition on tunnel oxide for passivating contacts. EPJ Photovoltaics, 2020, 11, 3.	1.6	2
27	Interfacial hydrogen incorporation in epitaxial silicon for layer transfer. Applied Surface Science, 2020, 518, 146057.	6.1	4
28	Hydrogen Plasma-Assisted Growth of Gold Nanowires. Crystal Growth and Design, 2020, 20, 4185-4192.	3.0	3
29	In Situ Modulated PhotoLuminescence For Process Optimization Of Crystalline Silicon Passivation. , 2020, , .		1
30	Rational design of nanowire solar cells: from single nanowire to nanowire arrays. Nanotechnology, 2019, 30, 194002.	2.6	29
31	Meandering growth of in-plane silicon nanowire springs. Applied Physics Letters, 2019, 114, .	3.3	11
32	Influence of p- and n-type doping gases on nanoparticle formation in SiH4/H2 radiofrequency plasma discharges used for polymorphous silicon thin film deposition. Journal of Applied Physics, 2019, 125, 163307.	2.5	3
33	Advanced radial junction thin film photovoltaics and detectors built on standing silicon nanowires. Nanotechnology, 2019, 30, 302001.	2.6	13
34	Molecular Beam Epitaxy of Germanium in the Atomic-Resolution Transmission Electron Microscope. Microscopy and Microanalysis, 2019, 25, 47-48.	0.4	1
35	Impact of charged species transport coefficients on self-bias voltage in an electrically asymmetric RF discharge. Plasma Sources Science and Technology, 2019, 28, 055003.	3.1	4
36	Annealing of Boron-Doped Hydrogenated Crystalline Silicon Grown at Low Temperature by PECVD. Materials, 2019, 12, 3795.	2.9	3

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37	In situ Photoluminescence Study of Plasma Effects on Passivation of Crystalline Silicon Coated with Aluminum Oxide. Physica Status Solidi (A) Applications and Materials Science, 2019, 216, 1800612.	1.8	1
38	Toward Efficient Radial Junction Silicon Nanowireâ€Based Solar Miniâ€Modules. Physica Status Solidi - Rapid Research Letters, 2019, 13, 1800402.	2.4	10
39	Heteroepitaxial growth of silicon on GaAs via low-temperature plasma-enhanced chemical vapor deposition. , 2019, , .		2
40	Effect of Pressure and Flow Rates on Polymorphous Siliconâ€Germanium (pmâ€Si_xGe_{1â^'x}:H) Thin Films for Infrared Detection Applications. Physica Status Solidi (A) Applications and Materials Science, 2018, 215, 1700735.	1.8	4
41	Nanostructured back reflectors produced using polystyrene assisted lithography for enhanced light trapping in silicon thin film solar cells. Solar Energy, 2018, 167, 108-115.	6.1	6
42	Comments on â€œNanoscale Investigation of Carrier Lifetime on the Cross Section of Epitaxial Silicon Solar Cells Using Kelvin Probe Force Microscopyâ€• IEEE Journal of Photovoltaics, 2018, 8, 661-663.	2.5	2
43	Large Area Radial Junction Silicon Nanowire Solar Mini-Modules. Scientific Reports, 2018, 8, 1651.	3.3	14
44	Influence of N-type Î¼c-SiOx:H intermediate reflector and top cell material properties on the electrical performance of â€œmicromorphâ€•tandem solar cells. AIP Advances, 2018, 8, 015115.	1.3	2
45	Optical properties and performance of pyramidal texture silicon heterojunction solar cells: <scp>K</scp>ey role of vertex angles. Progress in Photovoltaics: Research and Applications, 2018, 26, 369-376.	8.1	24
46	Powder free PECVD epitaxial silicon by plasma pulsing or increasing the growth temperature. Journal Physics D: Applied Physics, 2018, 51, 235203.	2.8	4
47	In situ spectroscopic ellipsometry study of low-temperature epitaxial silicon growth. Photonics and Nanostructures - Fundamentals and Applications, 2018, 30, 73-77.	2.0	2
48	Structural study of NiOx thin films fabricated by radio frequency sputtering at low temperature. Thin Solid Films, 2018, 646, 209-215.	1.8	9
49	Growth of In-Plane Ge_{1â€“x}Sn_x Nanowires with 22 at. % Sn Using a Solidâ€“Liquidâ€“Solid Mechanism. Journal of Physical Chemistry C, 2018, 122, 26236-26242.	3.1	18
50	Nanodroplet Hydrodynamic Transformation of Uniform Amorphous Bilayer into Highly Modulated Ge/Si Island-Chains. Nano Letters, 2018, 18, 6931-6940.	9.1	16
51	Assessment of High Sn Incorporation in Ge NanoWires Synthesized via In Plane Solid-Liquid-Solid Mechanism by In-Situ TEM. Microscopy and Microanalysis, 2018, 24, 306-307.	0.4	2
52	Tin dioxide nanoparticles as catalyst precursors for plasma-assisted vaporâ€“liquidâ€“solid growth of silicon nanowires with well-controlled density. Nanotechnology, 2018, 29, 435301.	2.6	3
53	Low temperature epitaxial growth of boron-doped silicon thin films. AIP Conference Proceedings, 2018, , .	0.4	5
54	Firmly standing three-dimensional radial junctions on soft aluminum foils enable extremely low cost flexible thin film solar cells with very high power-to-weight performance. Nano Energy, 2018, 53, 83-90.	16.0	25

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55	Optimization and optical characterization of vertical nanowire arrays for core-shell structure solar cells. Solar Energy Materials and Solar Cells, 2017, 159, 640-648.	6.2	10
56	Current-induced and light-induced macroscopic changes in thin film solar cells: Device degradation mechanism. Solar Energy, 2017, 143, 86-92.	6.1	4
57	High quality boron-doped epitaxial layers grown at 200Â°C from SiF4/H2/Ar gas mixtures for emitter formation in crystalline silicon solar cells. AIP Advances, 2017, 7, .	1.3	9
58	Unravelling a simple method for the low temperature synthesis of silicon nanocrystals and monolithic nanocrystalline thin films. Scientific Reports, 2017, 7, 40553.	3.3	18
59	Influence of deposition rate on the structural properties of plasma-enhanced CVD epitaxial silicon. Scientific Reports, 2017, 7, 43968.	3.3	16
60	Plasma-enhanced chemical vapor deposition epitaxy of Si on GaAs for tunnel junction applications in tandem solar cells. Journal of Photonics for Energy, 2017, 7, 022504.	1.3	8
61	High performance transparent in-plane silicon nanowire Fin-TFTs via a robust nano-droplet-scanning crystallization dynamics. Nanoscale, 2017, 9, 10350-10357.	5.6	33
62	Natural occurrence of the diamond hexagonal structure in silicon nanowires grown by a plasma-assisted vapourâ€“liquidâ€“solid method. Nanoscale, 2017, 9, 8113-8118.	5.6	34
63	A Solar Cell Architecture for Enhancing Performance While Reducing Absorber Thickness and Back Contact Requirements. IEEE Journal of Photovoltaics, 2017, 7, 974-979.	2.5	2
64	In-situ Mueller matrix ellipsometry of silicon nanowires grown by plasma-enhanced vapor-liquid-solid method for radial junction solar cells. Applied Surface Science, 2017, 421, 667-673.	6.1	10
65	On the Mechanism of In Nanoparticle Formation by Exposing ITO Thin Films to Hydrogen Plasmas. Langmuir, 2017, 33, 12114-12119.	3.5	5
66	Deleterious electrostatic interaction in silicon passivation stack between thin ALD Al2O3 and its a-SiNX:H capping layer: numerical and experimental evidences. Energy Procedia, 2017, 124, 91-98.	1.8	3
67	Sunlight-thin nanophotonic monocrystalline silicon solar cells. Nano Futures, 2017, 1, 021001.	2.2	20
68	Biomimetic Radial Tandem Junction Photodetector with Natural RGB Color Discrimination Capability. Advanced Optical Materials, 2017, 5, 1700390.	7.3	15
69	Deterministic Line-Shape Programming of Silicon Nanowires for Extremely Stretchable Springs and Electronics. Nano Letters, 2017, 17, 7638-7646.	9.1	41
70	Growth of Tetragonal Si via Plasma-Enhanced Epitaxy. Crystal Growth and Design, 2017, 17, 4265-4269.	3.0	8
71	Ultrathin PECVD epitaxial Si solar cells on glass via low-temperature transfer process. Progress in Photovoltaics: Research and Applications, 2016, 24, 1075-1084.	8.1	32
72	Towards 12% stabilised efficiency in single junction polymorphous silicon solar cells: experimental developments and model predictions. EPJ Photovoltaics, 2016, 7, 70302.	1.6	12

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73	Insights into gold-catalyzed plasma-assisted CVD growth of silicon nanowires. Applied Physics Letters, 2016, 109, .	3.3	5
74	Plasma-Assisted Growth of Silicon Nanowires by Sn Catalyst: Step-by-Step Observation. Nanoscale Research Letters, 2016, 11, 455.	5.7	29
75	Quasi-fivefold symmetric electron diffraction patterns due to multiple twinning in silicon thin films grown from hexamethyldisiloxane. Journal of Applied Crystallography, 2016, 49, 2226-2234.	4.5	1
76	Hybrid kinetic/fluid modeling of silicon nanoparticles dynamics in silane plasma discharges. AIP Conference Proceedings, 2016, , .	0.4	2
77	Robustness up to 400Â°C of the passivation of c-Si by p-type a-Si:H thanks to ion implantation. AIP Advances, 2016, 6, 125107.	1.3	2
78	Low temperature plasma enhanced CVD epitaxial growth of silicon on GaAs: a new paradigm for III-V/Si integration. Scientific Reports, 2016, 6, 25674.	3.3	28
79	Excellent Surface Passivation and Light Absorption in Crystalline Si via Low-Temperature Si Nanowire Growth. IEEE Journal of Photovoltaics, 2016, 6, 823-829.	2.5	5
80	Nanoscale Investigation of Carrier Lifetime on the Cross Section of Epitaxial Silicon Solar Cells Using Kelvin Probe Force Microscopy. IEEE Journal of Photovoltaics, 2016, 6, 1576-1580.	2.5	4
81	Modeling of Mueller Matrix Response from Diffracting Structures. Journal of Nanoscience and Nanotechnology, 2016, 16, 7805-7809.	0.9	0
82	Electronic properties of embedded graphene: doped amorphous silicon/CVD graphene heterostructures. Journal of Physics Condensed Matter, 2016, 28, 404001.	1.8	6
83	Ultrathin Epitaxial Silicon Solar Cells with Inverted Nanopyramid Arrays for Efficient Light Trapping. Nano Letters, 2016, 16, 5358-5364.	9.1	78
84	Heteroepitaxial Writing of Silicon-on-Sapphire Nanowires. Nano Letters, 2016, 16, 7317-7324.	9.1	18
85	Engineering island-chain silicon nanowires via a droplet mediated Plateau-Rayleigh transformation. Nature Communications, 2016, 7, 12836.	12.8	49
86	Use of hexamethyldisiloxane for p-type microcrystalline silicon oxycarbide layers. EPJ Photovoltaics, 2016, 7, 70301.	1.6	5
87	Three-dimensional atomic mapping of hydrogenated polymorphous silicon solar cells. Applied Physics Letters, 2016, 108, 253110.	3.3	2
88	Inâ€Plane Selfâ€Turning and Twin Dynamics Renders Large Stretchability to Monoâ€Like Zigzag Silicon Nanowire Springs. Advanced Functional Materials, 2016, 26, 5352-5359.	14.9	34
89	Influence of anodic bonding on the surface passivation quality of crystalline silicon. Solar Energy Materials and Solar Cells, 2016, 157, 154-160.	6.2	8
90	Cross-Sectional Investigations on Epitaxial Silicon Solar Cells by Kelvin and Conducting Probe Atomic Force Microscopy: Effect of Illumination. Nanoscale Research Letters, 2016, 11, 55.	5.7	17

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91	Effect of substrate temperature on the plasma texturing process of câ€Si wafers for black silicon solar cells. Physica Status Solidi (A) Applications and Materials Science, 2016, 213, 1937-1941.	1.8	2
92	Nanophotonics-based low-temperature PECVD epitaxial crystalline silicon solar cells. Journal Physics D: Applied Physics, 2016, 49, 125603.	2.8	8
93	Coreâ€“Shell Heterojunction Solar Cells Based on Disordered Silicon Nanowire Arrays. Journal of Physical Chemistry C, 2016, 120, 2962-2972.	3.1	32
94	Effect of deposition temperature on polymorphous silicon thin films by PECVD: Role of hydrogen. Materials Science in Semiconductor Processing, 2016, 41, 390-397.	4.0	15
95	Performance Analysis of AlxGa1-xAs/epi-Si(Ge) Tandem Solar Cells: A Simulation Study. Energy Procedia, 2015, 84, 41-46.	1.8	8
96	Atomic characterization of Au clusters in vapor-liquid-solid grown silicon nanowires. Journal of Applied Physics, 2015, 118, 104301.	2.5	8
97	Bi-Sn alloy catalyst for simultaneous morphology and doping control of silicon nanowires in radial junction solar cells. Applied Physics Letters, 2015, 107, .	3.3	18
98	Plasma-Texturing Processes and a-Si:H Surface Passivation on c-Si Wafers for Photovoltaic Applications. Journal of Solar Energy Engineering, Transactions of the ASME, 2015, 137, .	1.8	2
99	Operating principles of in-plane silicon nanowires at simple step-edges. Nanoscale, 2015, 7, 5197-5202.	5.6	22
100	Understanding Light Harvesting in Radial Junction Amorphous Silicon Thin Film Solar Cells. Scientific Reports, 2015, 4, 4357.	3.3	44
101	Boosting light emission from Si-based thin film over Si and SiO_2 nanowires architecture. Optics Express, 2015, 23, 5388.	3.4	8
102	How tilting and cavity-mode-resonant absorption contribute to light harvesting in 3D radial junction solar cells. Optics Express, 2015, 23, A1288.	3.4	15
103	Full potential of radial junction Si thin film solar cells with advanced junction materials and design. Applied Physics Letters, 2015, 107, .	3.3	20
104	Effect of light-soaking on the hydrogen effusion mechanisms inÂpolymorphous silicon thin film structures. Materials Chemistry and Physics, 2015, 163, 311-316.	4.0	2
105	New Approaches to Improve the Performance of Thin-Film Radial Junction Solar Cells Built Over Silicon Nanowire Arrays. IEEE Journal of Photovoltaics, 2015, 5, 40-45.	2.5	35
106	Low temperature epitaxial growth of SiGe absorber for thin film heterojunction solar cells. Solar Energy Materials and Solar Cells, 2015, 134, 15-21.	6.2	25
107	Photonic nanostructures for advanced light trapping in thin crystalline silicon solar cells. Physica Status Solidi (A) Applications and Materials Science, 2015, 212, 140-155.	1.8	57
108	A review on plasma-assisted VLS synthesis of silicon nanowires and radial junction solar cells. Journal Physics D: Applied Physics, 2014, 47, 393001.	2.8	73

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109	Ion Energy Threshold in Low-Temperature Silicon Epitaxy for Thin-Film Crystalline Photovoltaics. IEEE Journal of Photovoltaics, 2014, 4, 1361-1367.	2.5	16
110	Understanding the amorphous-to-microcrystalline silicon transition in SiF4/H2/Ar gas mixtures. Journal of Chemical Physics, 2014, 140, 234706.	3.0	17
111	Structural properties of relaxed thin film germanium layers grown by low temperature RF-PECVD epitaxy on Si and Ge (100) substrates. AIP Advances, 2014, 4, .	1.3	16
112	In-situ spectroscopic ellipsometry of microcrystalline silicon deposited by plasma-enhanced chemical vapor deposition on flexible Feâ€“Ni alloy substrate for photovoltaic applications. Thin Solid Films, 2014, 571, 749-755.	1.8	7
113	Deposition of microcrystalline silicon in electron-cyclotron resonance discharge (24GHz) plasma from silicon tetrafluoride precursor. Thin Solid Films, 2014, 562, 114-117.	1.8	10
114	A comparative study of wet and dry texturing processes of c-Si wafers for the fabrication of solar cells. Solar Energy, 2014, 101, 182-191.	6.1	44
115	In-Plane Epitaxial Growth of Silicon Nanowires and Junction Formation on Si(100) Substrates. Nano Letters, 2014, 14, 6469-6474.	9.1	31
116	Solâ€“Gel Route Toward Efficient and Robust Distributed Bragg Reflectors for Light Management Applications. Advanced Optical Materials, 2014, 2, 1105-1112.	7.3	36
117	Incorporation and redistribution of impurities into silicon nanowires during metal-particle-assisted growth. Nature Communications, 2014, 5, 4134.	12.8	91
118	Effect of Wettability on the Agglomeration of Silicon Nanowire Arrays Fabricated by Metal-Assisted Chemical Etching. Langmuir, 2014, 30, 10290-10298.	3.5	60
119	Influence of sputtering conditions on the optical and electrical properties of laser-annealed and wet-etched room temperature sputtered ZnO:Al thin films. Thin Solid Films, 2014, 555, 13-17.	1.8	5
120	Raman spectra of amorphous isotope-enriched 74Ge with low-strained Ge nanocrystals. Thin Solid Films, 2014, 552, 46-49.	1.8	4
121	Substrate and p-layer effects on polymorphous silicon solar cells. EPJ Photovoltaics, 2014, 5, 55206.	1.6	7
122	Snâ€catalyzed silicon nanowire solar cells with 4.9% efficiency grown on glass. Progress in Photovoltaics: Research and Applications, 2013, 21, 77-81.	8.1	37
123	Wetting Layer: The Key Player in Plasma-Assisted Silicon Nanowire Growth Mediated by Tin. Journal of Physical Chemistry C, 2013, 117, 17786-17790.	3.1	44
124	Microstructural, optical and electrical properties of annealed ZnO:Al thin films. Thin Solid Films, 2013, 531, 424-429.	1.8	32
125	Measurement of the specific heat and determination of the thermodynamic functions of relaxed amorphous silicon. Journal of Applied Physics, 2013, 113, .	2.5	2
126	Hybrid System and Environmental Evaluation Case House in South of Algeria. Energy Procedia, 2013, 36, 1328-1338.	1.8	8

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127	Microscopic measurements of variations in local (photo)electronic properties in nanostructured solar cells. Solar Energy Materials and Solar Cells, 2013, 119, 228-234.	6.2	11
128	Polarized Raman spectroscopy analysis of SiHX bonds in nanocrystalline silicon thin films. Thin Solid Films, 2013, 537, 145-148.	1.8	2
129	Influence of the fabrication conditions of polymorphous silicon films on their structural, electrical and optical properties. Semiconductors, 2013, 47, 1271-1274.	0.5	4
130	Substrate versus superstrate configuration for stable thin film silicon solar cells. Solar Energy Materials and Solar Cells, 2013, 119, 124-128.	6.2	24
131	Doped semiconductor nanocrystal junctions. Journal of Applied Physics, 2013, 114, .	2.5	10
132	High efficiency and stable hydrogenated amorphous silicon radial junction solar cells built on VLS-grown silicon nanowires. Solar Energy Materials and Solar Cells, 2013, 118, 90-95.	6.2	107
133	Assessing individual radial junction solar cells over millions on VLS-grown silicon nanowires. Nanotechnology, 2013, 24, 275401.	2.6	23
134	Theoretical short-circuit current density for different geometries and organizations of silicon nanowires in solar cells. Solar Energy Materials and Solar Cells, 2013, 117, 645-651.	6.2	33
135	Fine-tuning of the interface in high-quality epitaxial silicon films deposited by plasma-enhanced chemical vapor deposition at 200 Â°C. Journal of Materials Research, 2013, 28, 1626-1632.	2.6	17
136	Investigation of silicon heterojunction solar cells by photoluminescence under DC-bias. EPJ Photovoltaics, 2013, 4, 45106.	1.6	0
137	Feasibility of using thin crystalline silicon films epitaxially grown at 165 Â°C in solar cells: A computer simulation study. EPJ Photovoltaics, 2013, 4, 45103.	1.6	8
138	A modelling study of the performance of conventional diffused P/N junction and heterojunction solar cells at different temperatures. EPJ Photovoltaics, 2013, 4, 40101.	1.6	0
139	Nanopatterned front contact for broadband absorption in ultra-thin amorphous silicon solar cells. Applied Physics Letters, 2012, 101, 163901.	3.3	46
140	Low Temperature Plasma Synthesis of Nanocrystals and their Application to the Growth of Crystalline Silicon and Germanium Thin Films. Materials Research Society Symposia Proceedings, 2012, 1426, 319-329.	0.1	14
141	Probing dusty-plasma/surface interactions with a heat flux microsensor. Applied Physics Letters, 2012, 100, .	3.3	7
142	Epitaxial growth of silicon and germanium on (100)-oriented crystalline substrates by RF PECVD at 175 Â°C. EPJ Photovoltaics, 2012, 3, 30303.	1.6	12
143	Effect of annealing on silicon heterojunction solar cells with textured ZnO:Al as transparent conductive oxide. EPJ Photovoltaics, 2012, 3, 35002.	1.6	4
144	Light induced electrical and macroscopic changes in hydrogenated polymorphous silicon solar cells. EPJ Photovoltaics, 2012, 3, 30301.	1.6	13

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145	Hydrogen related crystallization in intrinsic hydrogenated amorphous silicon films prepared by reactive radiofrequency magnetron sputtering at low temperature. Thin Solid Films, 2012, 522, 186-192.	1.8	10
146	Mechanisms of Threshold Voltage Shift in Polymorphous and Microcrystalline Silicon Bottom Gate Thin-Film Transistors. Journal of Display Technology, 2012, 8, 23-26.	1.2	5
147	Bismuth-Catalyzed and Doped Silicon Nanowires for One-Pump-Down Fabrication of Radial Junction Solar Cells. Nano Letters, 2012, 12, 4153-4158.	9.1	76
148	Black Silicon formation using dry etching for solar cells applications. Materials Science and Engineering B: Solid-State Materials for Advanced Technology, 2012, 177, 1509-1513.	3.5	37
149	Irreversible light-induced degradation and stabilization of hydrogenated polymorphous silicon solar cells. Solar Energy Materials and Solar Cells, 2012, 105, 208-212.	6.2	35
150	Silicon nanowire solar cells grown by PECVD. Journal of Non-Crystalline Solids, 2012, 358, 2299-2302.	3.1	47
151	Amorphous silicon diamond based heterojunctions with high rectification ratio. Journal of Non-Crystalline Solids, 2012, 358, 2110-2113.	3.1	12
152	Photoluminescence spectrum from heterojunction with intrinsic thin layer solar cells: An efficient tool for estimating wafer surface defects. Journal of Non-Crystalline Solids, 2012, 358, 2241-2244.	3.1	7
153	Low temperature plasma deposition of silicon thin films: From amorphous to crystalline. Journal of Non-Crystalline Solids, 2012, 358, 2000-2003.	3.1	34
154	Radial junction amorphous silicon solar cells on PECVD-grown silicon nanowires. Nanotechnology, 2012, 23, 194011.	2.6	42
155	Study of the effects of different fractions of large grains of Î¼c-Si:H:F films on the infrared absorption on thin film solar cells. Solar Energy Materials and Solar Cells, 2012, 100, 16-20.	6.2	17
156	Morphology control and growth dynamics of in-plane solidâ€“liquidâ€“solid silicon nanowires. Physica E: Low-Dimensional Systems and Nanostructures, 2012, 44, 1045-1049.	2.7	8
157	X-Ray diffraction and Raman spectroscopy for a better understanding of ZnO:Al growth process. EPJ Photovoltaics, 2011, 2, 25002.	1.6	34
158	Geometrical optimization and electrical performance comparison of thin-film tandem structures based on pm-Si:H andÎ¼c-Si:H using computer simulation. EPJ Photovoltaics, 2011, 2, 20301.	1.6	5
159	Factors limiting the open-circuit voltage in microcrystalline silicon solar cells. EPJ Photovoltaics, 2011, 2, 20101.	1.6	9
160	Thin crystalline silicon solar cells based on epitaxial films grown at 165Â°C by RF-PECVD. Solar Energy Materials and Solar Cells, 2011, 95, 2260-2263.	6.2	32
161	Absorbing photonic crystals for silicon thin-film solar cells: Design, fabrication and experimental investigation. Solar Energy Materials and Solar Cells, 2011, 95, S32-S38.	6.2	56
162	Structural properties of microcrystalline Si films prepared by hot-wire/catalytic chemical vapor deposition under conditions close to the transition from amorphous to microcrystalline growth. Thin Solid Films, 2011, 519, 4502-4505.	1.8	2

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163	High deposition rate hydrogenated polymorphous silicon characterized by different capacitance techniques. Thin Solid Films, 2011, 519, 5364-5370.	1.8	4
164	Characterization of defects in hydrogenated amorphous silicon deposited on different substrates by capacitance techniques. Thin Solid Films, 2011, 519, 5473-5480.	1.8	2
165	Growth-in-place deployment of in-plane silicon nanowires. Applied Physics Letters, 2011, 99, .	3.3	38
166	Stability and evolution of low-surface-tension metal catalyzed growth of silicon nanowires. Applied Physics Letters, 2011, 98, .	3.3	31
167	(Invited) In-plane Silicon Nanowires for Field Effect Transistor Application. ECS Transactions, 2011, 37, 147-154.	0.5	0
168	Ultra-thin crystalline silicon films produced by plasma assisted epitaxial growth on silicon wafers and their transfer to foreign substrates. EPJ Photovoltaics, 2010, 1, 10301.	1.6	26
169	Growth study of indium-catalyzed silicon nanowires by plasma enhanced chemical vapor deposition. Applied Physics A: Materials Science and Processing, 2010, 100, 287-296.	2.3	49
170	Ultra-shallow junctions formed by quasi-epitaxial growth of boron and phosphorous-doped silicon films at 175 Ã°C by rf-PECVD. Thin Solid Films, 2010, 518, 2528-2530.	1.8	24
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