Nikhil Jain

List of Publications by Year
in descending order

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30	724	567281 15	677142 22
papers	citations	h-index	g-index

31	31	31	849
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Building a Six-Junction Inverted Metamorphic Concentrator Solar Cell. IEEE Journal of Photovoltaics, 2018, 8, 626-632.	2.5	148
2	Controlled exfoliation of (100) GaAs-based devices by spalling fracture. Applied Physics Letters, 2016, 108, .	3.3	60
3	IIIâ€“V Multijunction Solar Cell Integration with Silicon: Present Status, Challenges and Future Outlook. Energy Harvesting and Systems, 2014, 1, .	2.7	56
4	High-efficiency inverted metamorphic 1.7/1.1 eV GaInAsP/GaInAs dual-junction solar cells. Applied Physics Letters, 2018, 112, .	3.3	47
5	X-ray photoelectron spectroscopy analysis and band offset determination of CeO₂deposited on epitaxial (100), (110), and (111)Ge. Journal of Vacuum Science and Technology B:Nanotechnology and Microelectronics, 2014, 32, 011217.	1.2	46
6	Upright and Inverted Single-Junction GaAs Solar Cells Grown by Hydride Vapor Phase Epitaxy. IEEE Journal of Photovoltaics, 2017, 7, 157-161.	2.5	36
7	Impact of Threading Dislocations on the Design of GaAs and InGaP/GaAs Solar Cells on Si Using Finite Element Analysis. IEEE Journal of Photovoltaics, 2013, 3, 528-534.	2.5	35
8	Reduced erbium-doped ceria nanoparticles: one nano-host applicable for simultaneous optical down- and up-conversions. Nanoscale Research Letters, 2014, 9, 231.	5.7	33
9	Strain-Engineered Biaxial Tensile Epitaxial Germanium for High-Performance Ge/InGaAs Tunnel Field-Effect Transistors. IEEE Journal of the Electron Devices Society, 2015, 3, 184-193.	2.1	33
10	Heterogeneous Integration of Epitaxial Ge on Si using AlAs/GaAs Buffer Architecture: Suitability for Low-power Fin Field-Effect Transistors. Scientific Reports, 2014, 4, 6964.	3.3	26
11	Enhanced Current Collection in 1.7 eV GaInAsP Solar Cells Grown on GaAs by Metalorganic Vapor Phase Epitaxy. IEEE Journal of Photovoltaics, 2017, 7, 927-933.	2.5	26
12	Development of GaInP Solar Cells Grown by Hydride Vapor Phase Epitaxy. IEEE Journal of Photovoltaics, 2017, 7, 1153-1158.	2.5	23
13	GaAs Solar Cells on Nanopatterned Si Substrates. IEEE Journal of Photovoltaics, 2018, 8, 1635-1640.	2.5	23
14	(Al)GaInP/GaAs Tandem Solar Cells for Power Conversion at Elevated Temperature and High Concentration. IEEE Journal of Photovoltaics, 2018, 8, 640-645.	2.5	17
15	100-period InGaAsP/InGaP superlattice solar cell with sub-bandgap quantum efficiency approaching 80%. Applied Physics Letters, 2017, 111, .	3.3	16
16	Pathway to 50% efficient inverted metamorphic concentrator solar cells. AIP Conference Proceedings, 2017, , .	0.4	15
17	Tunnel Junction Development Using Hydride Vapor Phase Epitaxy. IEEE Journal of Photovoltaics, 2018, 8, 322-326.	2.5	13
18	Tunable Bandgap GaInAsP Solar Cells With 18.7% Photoconversion Efficiency Synthesized by Low-Cost and High-Growth Rate Hydride Vapor Phase Epitaxy. IEEE Journal of Photovoltaics, 2018, 8, 1577-1583.	2.5	13

#	Article	IF	Citations
19	Design and Modeling of Metamorphic Dual-Junction InGaP/GaAs Solar Cells on Si Substrate for Concentrated Photovoltaic Application. IEEE Journal of Photovoltaics, 2014, 4, 1683-1689.	2.5	11
20	IIIâ€“V Solar Cells Grown on Unpolished and Reusable Spalled Ge Substrates. IEEE Journal of Photovoltaics, 2018, 8, 1384-1389.	2.5	11
21	Development of lattice-matched 1.7 eV GaInAsP solar cells grown on GaAs by MOVPE. , 2016, , .		10
22	AlGaInP/GaAs tandem solar cells for power conversion at 400Â°C and high concentration. AIP Conference Proceedings, 2017, , .	0.4	8
23	InGaAsP solar cells grown by hydride vapor phase epitaxy. , 2016, , .		6
24	A kinetic model for GaAs growth by hydride vapor phase epitaxy. , 2016, , .		4
25	Transport Across Heterointerfaces of Amorphous Niobium Oxide and Crystallographically Oriented Epitaxial Germanium. ACS Applied Materials & Interfaces, 2017, 9, 43315-43324.	8.0	4
26	III-V/Si Tandem Cells Utilizing Interdigitated Back Contact Si Cells and Varying Terminal Configurations. , 2019, , .		2
27	Notice of Removal Upright and inverted single junction GaAs solar cells grown by hydride vapor phase epitaxy. , 2017, , .		1
28	Absorption Enhancement in inGaAsP/InGaP Quantum Well Solar Cells. , 2017, , .		1
29	AlGaInP/GaAs Tandem Solar Cells for Power Conversion at 400Â°C and 1000X Concentration. , 2017, , .		0
30	GaInAsP Solar Cells Grown by Hydride Vapor Phase Epitaxy for One-Sun & Low-Concentration III-V/Si Photovoltaics. , 2017, , .		0