

Sanjay K Ram

List of Publications by Year in descending order

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40
papers

403
citations

687363

13
h-index

794594

19
g-index

40
all docs

40
docs citations

40
times ranked

549
citing authors

#	ARTICLE	IF	CITATIONS
1	Silicon thin film solar cells on commercial tiles. Energy and Environmental Science, 2011, 4, 4620.	30.8	65
2	Mott and Efros-Shklovskii hopping conduction in porous silicon nanostructures. Physica E: Low-Dimensional Systems and Nanostructures, 2009, 41, 1025-1028.	2.7	25
3	Band edge discontinuities and carrier transport in Si/porous silicon heterojunctions. Journal of Physics D: Applied Physics, 2007, 40, 5840-5846.	2.8	22
4	Normal and anti-Meyer-Rohrbaugh rule in conductivity of highly crystallized undoped microcrystalline silicon films. Journal of Non-Crystalline Solids, 2008, 354, 2263-2267.	3.1	22
5	Improving the efficiency of solar cells by upconverting sunlight using field enhancement from optimized nanostructures. Optical Materials, 2018, 83, 279-289.	3.6	21
6	Influence of TiO ₂ host crystallinity on Er ³⁺ light emission. Optical Materials Express, 2016, 6, 1664.	3.0	19
7	Investigations of the electron transport behavior in microcrystalline Si films. Journal of Non-Crystalline Solids, 2002, 299-302, 411-415.	3.1	18
8	Optimization of Er ³⁺ -doped TiO ₂ -thin films for infrared light up-conversion. Thin Solid Films, 2014, 550, 499-503.	1.8	18
9	Discharge characteristics of plasma display panels with Si-doped MgO protective layers. Thin Solid Films, 2009, 517, 6252-6255.	1.8	16
10	Infrared upconversion in radio frequency magnetron sputtered Er-doped zinc oxide thin films. Applied Physics Letters, 2014, 104, 102106.	3.3	16
11	Efficient light-trapping with quasi-periodic uniaxial nanowrinkles for thin-film silicon solar cells. Nano Energy, 2017, 35, 341-349.	16.0	16
12	Structural determination of nanocrystalline Si films using ellipsometry and Raman spectroscopy. Thin Solid Films, 2008, 516, 6863-6868.	1.8	13
13	Influence of the statistical shift of Fermi level on the conductivity behavior in microcrystalline silicon. Physical Review B, 2008, 77, .	3.2	13
14	Structural, optical and secondary electron emission properties of diamond like carbon thin films deposited by pulsed-DC plasma CVD technique. Solid State Sciences, 2010, 12, 1449-1454.	3.2	12
15	Study of anomalous behavior of steady state photoconductivity in highly crystallized undoped microcrystalline Si films. Journal of Non-Crystalline Solids, 2006, 352, 1172-1175.	3.1	10
16	Role of microstructure in electronic transport behavior of highly crystallized undoped microcrystalline Si films. Thin Solid Films, 2007, 515, 7469-7474.	1.8	10
17	Novel back-reflector architecture with nanoparticle based buried light-scattering microstructures for improved solar cell performance. Nanoscale, 2016, 8, 12035-12046.	5.6	10
18	Directly patterned TiO ₂ nanostructures for efficient light harvesting in thin film solar cells. Journal of Physics D: Applied Physics, 2015, 48, 365101.	2.8	9

#	ARTICLE	IF	CITATIONS
19	Microstructure and surface roughness study of highly crystallized $\hat{1}/4c$ -Si:H Films. Thin Solid Films, 2007, 515, 7619-7624.	1.8	8
20	Room-temperature rf-magnetron sputter-deposited W-doped indium oxide: decoupling the influence of W dopant and O vacancies on the film properties. Applied Physics A: Materials Science and Processing, 2016, 122, 1.	2.3	8
21	Numerical modeling of steady state photoconductivity process in highly crystallized undoped $\hat{1}/4c$ -Si:H films. Thin Solid Films, 2007, 515, 7576-7580.	1.8	7
22	The Meyer-Neldel Rule in Conductivity of Microcrystalline Silicon. Materials Research Society Symposia Proceedings, 2002, 715, 2141.	0.1	6
23	Evidence of bimodal crystallite size distribution in $\hat{1}/4c$ -Si:H films. Materials Science and Engineering B: Solid-State Materials for Advanced Technology, 2009, 159-160, 34-37.	3.5	6
24	Ion-induced secondary electrons emission measurement from MgO films deposited on multiwalled carbon nanotubes. Materials Letters, 2012, 76, 131-134.	2.6	6
25	Recombination traffic in highly crystallized undoped microcrystalline Si films studied by steady state photoconductivity. Thin Solid Films, 2006, 511-512, 556-561.	1.8	5
26	Raman spectroscopy study of growth of multiwalled carbon nano-tubes using Plasma Enhanced Chemical vapour depositon. , 2011, , .		5
27	Microcrystalline silicon films and solar cells deposited at high rate by Matrix Distributed Electron Cyclotron Resonance (MDECR) plasma. Physica Status Solidi C: Current Topics in Solid State Physics, 2010, 7, 517-520.	0.8	3
28	Plasma emission diagnostics during fast deposition of microcrystalline silicon thin films in matrix distributed electron cyclotron resonance plasma CVD system. Physica Status Solidi C: Current Topics in Solid State Physics, 2010, 7, 553-556.	0.8	3
29	Effect of ion energy on structural and electrical properties of intrinsic microcrystalline silicon layer deposited in a matrix distributed electron cyclotron resonance plasma reactor. Physica Status Solidi (A) Applications and Materials Science, 2010, 207, 591-594.	1.8	2
30	Combining light-harvesting with detachability in high-efficiency thin-film silicon solar cells. Nanoscale, 2017, 9, 7169-7178.	5.6	2
31	Nanomolded buried light-scattering (BLiS) back-reflectors using dielectric nanoparticles for light harvesting in thin-film silicon solar cells. EPJ Photovoltaics, 2020, 11, 2.	1.6	2
32	Electrical Transport in Porous Silicon. , 2018, , 403-419.		2
33	Model calculation of phototransport properties of minority carriers of fully crystalline undoped $\hat{A}c$ -Si:H. Thin Solid Films, 2009, 517, 6248-6251.	1.8	1
34	Influence of the properties of p-a-Si:H layer and the work function of front contact on silicon heterojunction solar cell performance. Materials Today: Proceedings, 2021, 49, 1617-1617.	1.8	1
35	Electrical Transport in Porous Silicon. , 2014, , 263-279.		1
36	Electronic Transport Across Porous/Crystalline Silicon Heterojunctions. Materials Research Society Symposia Proceedings, 2002, 716, 1171.	0.1	0

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37	Fractional composition of large crystallite grains: A unique microstructural parameter to explain conduction behavior in single phase undoped microcrystalline silicon. Journal of Non-Crystalline Solids, 2008, 354, 2242-2247.	3.1	0
38	Effect of Si, Sc, Cr doping on the structural, optical and discharge characteristics of MgO thin films as protective layer for plasma display panels. , 2012, , .		0
39	Effect of temperature conditions on the emission of ion-induced secondary electrons from MgO films. , 2012, , .		0
40	Electrical Transport in Porous Silicon. , 2014, , 1-15.		0