

# Sanjay K Ram

## List of Publications by Year in descending order

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Version: 2024-02-01

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	Influence of the properties of p-a-Si:H layer and the work function of front contact on silicon heterojunction solar cell performance. <i>Materials Today: Proceedings</i> , 2021, 49, 1617-1617.	1.8	1
2	Nanomolded buried light-scattering (BLiS) back-reflectors using dielectric nanoparticles for light harvesting in thin-film silicon solar cells. <i>EPJ Photovoltaics</i> , 2020, 11, 2.	1.6	2
3	Improving the efficiency of solar cells by upconverting sunlight using field enhancement from optimized nano structures. <i>Optical Materials</i> , 2018, 83, 279-289.	3.6	21
4	Electrical Transport in Porous Silicon. , 2018, , 403-419.		2
5	Combining light-harvesting with detachability in high-efficiency thin-film silicon solar cells. <i>Nanoscale</i> , 2017, 9, 7169-7178.	5.6	2
6	Efficient light-trapping with quasi-periodic uniaxial nanowrinkles for thin-film silicon solar cells. <i>Nano Energy</i> , 2017, 35, 341-349.	16.0	16
7	Influence of TiO <sub>2</sub> host crystallinity on Er <sup>3+</sup> light emission. <i>Optical Materials Express</i> , 2016, 6, 1664.	3.0	19
8	Room-temperature rf-magnetron sputter-deposited W-doped indium oxide: decoupling the influence of W dopant and O vacancies on the film properties. <i>Applied Physics A: Materials Science and Processing</i> , 2016, 122, 1.	2.3	8
9	Novel back-reflector architecture with nanoparticle based buried light-scattering microstructures for improved solar cell performance. <i>Nanoscale</i> , 2016, 8, 12035-12046.	5.6	10
10	Directly patterned TiO <sub>2</sub> nanostructures for efficient light harvesting in thin film solar cells. <i>Journal Physics D: Applied Physics</i> , 2015, 48, 365101.	2.8	9
11	Infrared upconversion in radio frequency magnetron sputtered Er-doped zinc oxide thin films. <i>Applied Physics Letters</i> , 2014, 104, 102106.	3.3	16
12	Electrical Transport in Porous Silicon. , 2014, , 1-15.		0
13	Optimization of Er <sup>3+</sup> -doped TiO <sub>2</sub> -thin films for infrared light up-conversion. <i>Thin Solid Films</i> , 2014, 550, 499-503.	1.8	18
14	Electrical Transport in Porous Silicon. , 2014, , 263-279.		1
15	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
16	Effect of temperature conditions on the emission of ion-induced secondary electrons from MgO films. , 2012, , .		0
17	Ion-induced secondary electrons emission measurement from MgO films deposited on multiwalled carbon nanotubes. <i>Materials Letters</i> , 2012, 76, 131-134.	2.6	6
18	Raman spectroscopy study of growth of multiwalled carbon nano-tubes using Plasma Enhanced Chemical vapour depositon. , 2011, , .		5

#	ARTICLE	IF	CITATIONS
19	Silicon thin film solar cells on commercial tiles. Energy and Environmental Science, 2011, 4, 4620.	30.8	65
20	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
21	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
22	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
23	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
24	Model calculation of phototransport properties of minority carriers of fully crystalline undoped $\hat{1}/4c$ -Si:H. Thin Solid Films, 2009, 517, 6248-6251.	1.8	1
25	Discharge characteristics of plasma display panels with Si-doped MgO protective layers. Thin Solid Films, 2009, 517, 6252-6255.	1.8	16
26	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
27	Mott and Efros-Shklovskii hopping conduction in porous silicon nanostructures. Physica E: Low-Dimensional Systems and Nanostructures, 2009, 41, 1025-1028.	2.7	25
28	Structural determination of nanocrystalline Si films using ellipsometry and Raman spectroscopy. Thin Solid Films, 2008, 516, 6863-6868.	1.8	13
29	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
30	Normal and anti Meyer's rule in conductivity of highly crystallized undoped microcrystalline silicon films. Journal of Non-Crystalline Solids, 2008, 354, 2263-2267.	3.1	22
31	Influence of the statistical shift of Fermi level on the conductivity behavior in microcrystalline silicon. Physical Review B, 2008, 77, .	3.2	13
32	Band edge discontinuities and carrier transport in $c$ -Si/porous silicon heterojunctions. Journal Physics D: Applied Physics, 2007, 40, 5840-5846.	2.8	22
33	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
34	Microstructure and surface roughness study of highly crystallized $\hat{1}/4c$ -Si:H Films. Thin Solid Films, 2007, 515, 7619-7624.	1.8	8
35	Role of microstructure in electronic transport behavior of highly crystallized undoped microcrystalline Si Films. Thin Solid Films, 2007, 515, 7469-7474.	1.8	10
36	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

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37	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
38	The Meyer-Neldel Rule in Conductivity of Microcrystalline Silicon. Materials Research Society Symposia Proceedings, 2002, 715, 2141.	0.1	6
39	Electronic Transport Across Porous/Crystalline Silicon Heterojunctions. Materials Research Society Symposia Proceedings, 2002, 716, 1171.	0.1	0
40	Investigations of the electron transport behavior in microcrystalline Si films. Journal of Non-Crystalline Solids, 2002, 299-302, 411-415.	3.1	18