Shashi Paul

List of Publications by Year in Descending Order

74 papers	1,059 citations	15 h-index	31 g-index
85 ext. papers	1,220 ext. citations	3.3 avg, IF	4.34 L-index

#	Paper	IF	Citations
74	To Be or Not to Be - Review of Electrical Bistability Mechanisms in Polymer Memory Devices.. *Small*, **2022**, e2106442	11	4
73	Rational design on materials for developing next generation lithium-ion secondary battery. *Progress in Solid State Chemistry*, **2021**, 62, 100298	8	18
72	Single step ohmic contact for heavily doped n-type silicon. *Applied Surface Science*, **2020**, 506, 144686	6.7	6
71	Comparative Study of Silicon Nanowires Grown From Ga, In, Sn, and Bi for Energy Harvesting. *IEEE Journal of Photovoltaics*, **2020**, 10, 1667-1674	3.7	1
70	e-Information on Wires: A First Step toward Two-Terminal Silicon Nanowires for Electronic Memory Devices. *ACS Applied Electronic Materials*, **2019**, 1, 2018-2024	4	2
69	Wire-bar coating of doped Nickle oxide thin films from metal organic compounds. *Applied Surface Science*, **2019**, 488, 903-910	6.7	2
68	Inkjet Printing of Functional Electronic Memory Cells: A Step Forward to Green Electronics. *Micromachines*, **2019**, 10,	3.3	9
67	Carrier selective metal-oxides for self-doped silicon nanowire solar cells. *Applied Surface Science*, **2019**, 492, 856-861	6.7	2
66	3-D Printing of Flexible Two Terminal Electronic Memory Devices. *MRS Advances*, **2018**, 3, 1603-1608	0.7	
65	Stability of hydrogenated amorphous carbon thin films for application in electronic devices. *Diamond and Related Materials*, **2018**, 90, 172-180	3.5	8
64	Binder-free Sn-Si heterostructure films for high capacity Li-ion batteries.. *RSC Advances*, **2018**, 8, 16726-16737	3.7	5
63	In-situ catalyst mediated growth and self-doped silicon nanowires for use in nanowire solar cells. *Vacuum*, **2017**, 139, 178-184	3.7	12
62	Creating Electrical Bistability Using Nano-bits Application in 2-Terminal Memory Devices. *MRS Advances*, **2017**, 2, 195-208	0.7	2
61	A study of selenium nanoparticles as charge storage element for flexible semi-transparent memory devices. *Applied Surface Science*, **2017**, 424, 330-336	6.7	5
60	Stability study: Transparent conducting oxides in chemically reactive plasmas. *Applied Surface Science*, **2017**, 424, 316-323	6.7	5
59	Birth of silicon nanowires covered with protective insulating blanket. *MRS Communications*, **2017**, 7, 854-861	2.7	
58	Charge-Trap-Non-volatile Memory and Focus on Flexible Flash Memory Devices **2017**, 55-89		1

57	A new approach for two-terminal electronic memory devices - Storing information on silicon nanowires. *Scientific Reports*, **2016**, 6, 27506	4.9	9
56	A new application of high-efficient silver salts-based photocatalyst under natural indoor weak light for wastewater cleaning. *Water Research*, **2015**, 81, 366-74	12.5	33
55	Investigation of optical properties of nickel oxide thin films deposited on different substrates. *Applied Surface Science*, **2015**, 352, 10-15	6.7	41
54	Bayesian Estimation of Density via Multiple Sequential Inversions of Two-Dimensional Images With Application to Electron Microscopy. *Technometrics*, **2015**, 57, 217-233	1.4	1
53	Bayesian Learning of Material Density Function by Multiple Sequential Inversions of 2-D Images in Electron Microscopy. *Springer Proceedings in Mathematics and Statistics*, **2015**, 35-48	0.2	
52	Porous Ag3PO4 microtubes with improved photocatalytic properties. *Catalysis Communications*, **2014**, 52, 49-52	3.2	22
51	Route to enhance the efficiency of organic photovoltaic solar cells - by adding ferroelectric nanoparticles to P3HT/PCBM admixture. *EPJ Photovoltaics*, **2014**, 5, 50403	0.7	2
50	Switching in Polymer Memory Devices Based on Polymer and Nanoparticles Admixture. *Advances in Science and Technology*, **2014**, 95, 107-112	0.1	
49	Two Terminal Non-Volatile Memory Devices Using Diamond-Like Carbon and Silicon Nanostructures. *Advances in Science and Technology*, **2014**, 95, 100-106	0.1	2
48	Two-Terminal Non-Volatile Memory Devices Using Silicon Nanowires as the Storage Medium. *Advances in Science and Technology*, **2014**, 95, 78-83	0.1	2
47	Growth of low temperature silicon nano-structures for electronic and electrical energy generation applications. *Nanoscale Research Letters*, **2013**, 8, 83	5	13
46	(Invited) Electrical Conductivity Bistability in Nano-Composite. *ECS Transactions*, **2013**, 53, 141-148	1	2
45	Rare-earth substituted HfO2 thin films grown by metalorganic chemical vapor deposition. *Thin Solid Films*, **2012**, 520, 4512-4517	2.2	9
44	Sc2O3, Er2O3, and Y2O3 thin films by MOCVD from volatile guanidinate class of rare-earth precursors. *Dalton Transactions*, **2012**, 41, 13936-47	4.3	35
43	Memory Effect of a Different Materials as Charge Storage Elements for Memory Applications. *Advances in Science and Technology*, **2012**, 77, 205-208	0.1	0
42	Fabrication of Photovoltaic Devices using Novel Organic Polymer/Nanostructure Blends. *Materials Research Society Symposia Proceedings*, **2011**, 1303, 75		
41	High Mobility ZnO thin film transistors using the novel deposition of high-k dielectrics. *Materials Research Society Symposia Proceedings*, **2011**, 1315, 1		2
40	Small Organic Molecules for Electrically Re-writable Non-volatile Polymer Memory Devices. *Materials Research Society Symposia Proceedings*, **2010**, 1250, 1		4

39	Low Temperature Growth of Silicon Structures for Application in Flash Memory Devices. *Materials Research Society Symposia Proceedings*, **2010**, 1250, 1		
38	Photoconductivity Measurements of Organic Polymer/Nanostructure Blends. *Materials Research Society Symposia Proceedings*, **2010**, 1270, 1		
37	Ferroelectric Nanoparticles in Polyvinyl Acetate (PVAc) Matrix: A Method to Enhance the Dielectric Constant of Polymers. *Nanoscience and Nanotechnology Letters*, **2010**, 2, 41-45	0.8	3
36	First contact-charging of gold nanoparticles by electrostatic force microscopy. *Applied Physics Letters*, **2010**, 96, 043120	3.4	7
35	Electronic polymer memory devices: Easy to fabricate, difficult to understand. *Thin Solid Films*, **2010**, 519, 587-590	2.2	5
34	Memory devices based on small organic molecules donor-acceptor system. *Thin Solid Films*, **2010**, 519, 559-562	2.2	14
33	Electrical and morphological properties of polystyrene thin films for organic electronic applications. *Vacuum*, **2010**, 84, 1240-1243	3.7	19
32	Optimising the Low Temperature Growth of Uniform ZnO Nanowires. *Materials Research Society Symposia Proceedings*, **2009**, 1201, 260		
31	Capacitance-Voltage Analysis of ZrO2 Thin Films Deposited by Thermal MOCVD Technique. *ECS Transactions*, **2009**, 25, 901-907	1	3
30	Gold nanoparticle charge trapping and relation to organic polymer memory devices. *Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences*, **2009**, 367, 4215-25	3	25
29	Rare-Earth Based Oxide and Nitride Thin Films Employing Volatile Homoleptic Guanidinate Precursors. *ECS Transactions*, **2009**, 25, 143-150	1	3
28	Overview of organic memory devices. *Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences*, **2009**, 367, 4141-57	3	58
27	Lanthanide Oxide Thin Films by Metalorganic Chemical Vapor Deposition Employing Volatile Guanidinate Precursors. *Chemistry of Materials*, **2009**, 21, 5443-5455	9.6	38
26	Electrical bistability in a composite of polymer and barium titanate nanoparticles. *Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences*, **2009**, 367, 4227-34	3	15
25	Electrical properties of nanometre thin film polystyrene for organic electronic applications. *IEEE Transactions on Dielectrics and Electrical Insulation*, **2008**, 15, 905-909	2.3	12
24	A Novel Method for the growth of Low Temperature Silicon Structures for 3-D Flash Memory Devices. *Materials Research Society Symposia Proceedings*, **2008**, 1112, 1		
23	Gold Nanoparticle Based Electrically Rewritable Polymer Memory Devices. *Advances in Science and Technology*, **2008**, 54, 480-485	0.1	8
22	Electrically Re-Writable Non-Volatile Memory Device - Using a Blend of Sea Salt and Polymer. *Advances in Science and Technology*, **2008**, 54, 486-490	0.1	4

21	Realization of Nonvolatile Memory Devices Using Small Organic Molecules and Polymer. *IEEE Nanotechnology Magazine*, **2007**, 6, 191-195	2.6	35
20	Substrate selection for the infra-red analysis in amorphous hydrogenated carbon films. *Materials Letters*, **2007**, 61, 2638-2640	3.3	
19	Making Plastic Remember: Electrically Rewritable Polymer Memory Devices. *Materials Research Society Symposia Proceedings*, **2007**, 997, 1		3
18	Effect of DC self-bias on the adhesion of diamond-like carbon deposited on metal tracks by RF-PECVD. *IET Science, Measurement and Technology*, **2006**, 153, 164-167		2
17	Determination of Density of States in Amorphous Carbon. *IEEE Transactions on Electron Devices*, **2006**, 53, 1775-1781	2.9	4
16	Memory effect in thin films of insulating polymer and C60 nanocomposites. *Nanotechnology*, **2006**, 17, 145-151	3.4	142
15	Nanoscale patterning of gold nanoparticles using an atomic force microscope. *Materials Science and Engineering C*, **2005**, 25, 33-38	8.3	14
14	Instability measurements in amorphous hydrogenated silicon using capacitance-voltage techniques. *Applied Physics Letters*, **2005**, 86, 202110	3.4	4
13	Field effect devices with metal nanoparticles integrated by Langmuir–Blodgett technique for non-volatile memory applications. *Journal of Physics: Conference Series*, **2005**, 10, 57-60	0.3	5
12	Organic Memory Devices Using C60 and Insulating Polymer. *Materials Research Society Symposia Proceedings*, **2004**, 830, 338		4
11	Use of amorphous carbon as a gate insulator for GaAs and related compounds. *Microelectronic Engineering*, **2003**, 70, 78-82	2.5	1
10	Langmuir–Blodgett Film Deposition of Metallic Nanoparticles and Their Application to Electronic Memory Structures. *Nano Letters*, **2003**, 3, 533-536	11.5	247
9	Hybrid silicon–organic nanoparticle memory device. *Journal of Applied Physics*, **2003**, 94, 5234	2.5	91
8	A reliability of different metal contacts with amorphous carbon. *Microelectronics Reliability*, **2002**, 42, 141-143	1.2	2
7	A technique to investigate inhomogeneity in materials: An arrangement of microtip and scanning electron microscope. *Review of Scientific Instruments*, **2001**, 72, 3543-3545	1.7	2
6	Schottky contacts on amorphous carbon: A more reliable approach. *Applied Physics Letters*, **2001**, 78, 1415-1417	3.4	5
5	Substrate Sensitivity of the Adhesion and Material Properties of RF-PECVD Amorphous Carbon. *Materials Research Society Symposia Proceedings*, **1999**, 558, 149		6
4	High Reverse Breakdown a-C:H/Si Diodes Manufactured by rf-PECVD. *Materials Research Society Symposia Proceedings*, **1999**, 593, 427		

3	Schottky barrier formation on r.f.-plasma enhanced chemical vapour deposited hydrogenated amorphous carbon. *Diamond and Related Materials*, **1998**, 7, 1734-1738	3.5	15
2	Pattern Formation by Changing V/III Ratio During Growth of GaAs by MOVPE. *Materials Research Society Symposia Proceedings*, **1995**, 417, 153		
1	Zinc oxide nanowires for biosensor applications **1899**, 8414, 68		1