

Asim K Ray

List of Publications by Year in descending order

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56
papers

780
citations

567281

15
h-index

552781

26
g-index

60
all docs

60
docs citations

60
times ranked

910
citing authors

#	ARTICLE	IF	CITATIONS
1	Invited paper A critical review of the observed electrical properties of MIM devices showing VCNR. International Journal of Electronics, 1984, 57, 1-77.	1.4	94
2	High density, non-porous anatase titania thin films for device applications. Journal Physics D: Applied Physics, 2000, 33, 2683-2686.	2.8	57
3	A liquid crystalline copper phthalocyanine derivative for high performance organic thin film transistors. Journal of Materials Chemistry, 2012, 22, 19179.	6.7	43
4	Optical dispersion in spun nanocrystalline titania thin films. Semiconductor Science and Technology, 2004, 19, 198-202.	2.0	40
5	Structural and electrical studies on sol-gel derived spun TiO ₂ thin films. Journal Physics D: Applied Physics, 2003, 36, 1120-1125.	2.8	39
6	Solution processable lutetium phthalocyanine organic field-effect transistors. Organic Electronics, 2010, 11, 434-438.	2.6	36
7	Low cost zinc oxide for memristors with high On/Off ratios. Materials Letters, 2014, 130, 40-42.	2.6	36
8	High-mobility solution-processed copper phthalocyanine-based organic field-effect transistors. Science and Technology of Advanced Materials, 2011, 12, 025001.	6.1	31
9	Sol-gel derived nanocrystalline titania thin films on silicon. Semiconductor Science and Technology, 2005, 20, 788-792.	2.0	26
10	Surface plasmon resonance imaging for biosensing. IET Nanobiotechnology, 2009, 3, 71.	3.8	24
11	On the analysis of experimental data for optical absorption in non-crystalline materials. Journal Physics D: Applied Physics, 1990, 23, 458-459.	2.8	23
12	Transport mechanisms in porous silicon. Journal of Applied Physics, 1998, 84, 3232-3235.	2.5	22
13	Graphene films printable on flexible substrates for sensor applications. 2D Materials, 2017, 4, 015036.	4.4	21
14	A simply constructed lead phthalocyanine memory diode. Journal of Applied Physics, 2008, 103, 074507.	2.5	20
15	Preparation and crystallization of sol-gel C12A7 thin films. Journal Physics D: Applied Physics, 2008, 41, 035404.	2.8	17
16	Solution processed tetrasubstituted zinc phthalocyanine as an active layer in organic field effect transistors. Journal of Applied Physics, 2010, 107, .	2.5	16
17	Plasma treated graphene oxide films: structural and electrical studies. Journal of Materials Science: Materials in Electronics, 2015, 26, 4810-4815.	2.2	15
18	Charge transport in lead sulfide quantum dots/phthalocyanines hybrid nanocomposites. Organic Electronics, 2017, 44, 132-143.	2.6	13

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19	Compact Modeling of Organic Thin-Film Transistors with Solution Processed Octadecyl Substituted Tetrabenzotriazaporphyrin as an Active Layer. IEEE Transactions on Electron Devices, 2017, 64, 2629-2634.	3.0	12
20	<i>In situ</i> chemichromic studies of interactions between a lutetium bis-octaalkyl-substituted phthalocyanine and selected biological cofactors. Journal of the Royal Society Interface, 2012, 9, 183-189.	3.4	11
21	A Tetrabenzotriazaporphyrin Based Organic Thin Film Transistor: Comparison with a Device of the Phthalocyanine Analogue. ECS Journal of Solid State Science and Technology, 2015, 4, P3086-P3090.	1.8	11
22	Memory effects in thin film organic transistor characteristics. Journal Physics D: Applied Physics, 2009, 42, 125103.	2.8	10
23	Organic thin film transistors using a liquid crystalline palladium phthalocyanine as active layer. Journal of Applied Physics, 2018, 123, .	2.5	10
24	Effect of plasma power on reduction of printable graphene oxide thin films on flexible substrates. Materials Research Express, 2018, 5, 056405.	1.6	10
25	Electron beam induced synthesis of Ru-rGO and its super capacitive behavior. 2D Materials, 2019, 6, 045030.	4.4	10
26	Octaoctyl-Substituted Lutetium Bisphthalocyanine for NADH Biosensing. Journal of Physical Chemistry B, 2013, 117, 15033-15040.	2.6	9
27	Kinetic study of crystallisation of sol-gel derived calcia-alumina binary compounds. Journal of Alloys and Compounds, 2014, 582, 277-282.	5.5	9
28	Sputtered rutile stoichiometric TiO ₂ nanocrystalline films. Journal of Materials Science: Materials in Electronics, 2006, 17, 851-855.	2.2	8
29	Ambipolar charge transport in non-peripherally substituted octahexyl zinc phthalocyanine. Europhysics Letters, 2013, 104, 57005.	2.0	8
30	Newly synthesised gadolinium bis-phthalocyanine sandwich complex: ambipolar organic semiconductor. Semiconductor Science and Technology, 2018, 33, 095010.	2.0	8
31	High temperature optical absorption investigation into the electronic transitions in sol-gel derived C12A7 thin films. Journal of Materials Science: Materials in Electronics, 2015, 26, 4691-4697.	2.2	7
32	Hysteresis-free DC conduction in zinc oxide films with a conducting polymer counter electrode. Journal of Materials Science: Materials in Electronics, 2018, 29, 2797-2805.	2.2	7
33	Optical absorption in solution processed thin films of calcia-alumina binary compounds. Journal of Sol-Gel Science and Technology, 2010, 55, 317-321.	2.4	6
34	Effects of annealing on device parameters of organic field effect transistors using liquid-crystalline tetrasubstituted zinc phthalocyanine. Europhysics Letters, 2014, 106, 58002.	2.0	6
35	Flexible zinc oxide photoelectrode for photo electrochemical energy conversion. Journal of Materials Science: Materials in Electronics, 2021, 32, 15386-15392.	2.2	6
36	Novel Binary Calcia-Alumina Systems for Device Applications. Science of Advanced Materials, 2009, 1, 107-120.	0.7	6

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37	AC Impedance Studies on Metal/Nanoporous Silicon/p-Silicon Structures. Journal of Electronic Materials, 2017, 46, 2106-2111.	2.2	5
38	Thin Films. Springer Handbooks, 2017, , 1-1.	0.6	5
39	Vibrational spectroscopic studies on crystallisation of sol-gel derived thin films of calcium alumina binary compound. Journal of Materials Science: Materials in Electronics, 2014, 25, 2261-2266.	2.2	4
40	Organic Materials for Chemical Sensing. Springer Handbooks, 2017, , 1-1.	0.6	4
41	Solution processed copper tetrabenzotriazaporphyrin films for organic field effect transistors. Journal of Applied Physics, 2018, 124, 235501.	2.5	4
42	Evolutionary Computation for Parameter Extraction of Organic Thin-Film Transistors Using Newly Synthesized Liquid Crystalline Nickel Phthalocyanine. Micromachines, 2019, 10, 683.	2.9	3
43	Channel length-dependent characterisations of organic thin-film transistors with solution processable gadolinium phthalocyanine derivatives. Journal of Materials Science: Materials in Electronics, 2020, 31, 265-273.	2.2	3
44	Electron Charge Transport in Non-Peripherally Substituted Copper Phthalocyanine. ECS Journal of Solid State Science and Technology, 2020, 9, 065003.	1.8	3
45	Surface plasmon resonance imaging for medical and biosensing. , 2009, , .		2
46	Formation of Hybrid Inorganic/Organic Nanocomposites. Journal of Electronic Materials, 2010, 39, 145-148.	2.2	2
47	Extraction of the optical parameters of sol-gel processed $12\text{CaO}\cdot 7\text{Al}_2\text{O}_3$ thin film for optoelectronic applications. Journal of Materials Science: Materials in Electronics, 2015, 26, 7837-7843.	2.2	2
48	Dielectric Measurements on Sol-Gel Derived Titania Films. Journal of Electronic Materials, 2017, 46, 6646-6652.	2.2	2
49	Synthesis and dielectric characterisation of triiodide perovskite methylammonium lead iodide for energy applications. Journal of Materials Science: Materials in Electronics, 2018, 29, 18693-18698.	2.2	2
50	Surface Plasmon Resonance for Human Bone Marrow Cells Imaging. IEEE Sensors Journal, 2020, 20, 11625-11631.	4.7	2
51	Morphological and Elemental Studies on Titania Thin Films Electrodeposited at Different Bath Temperatures. Journal of the Electrochemical Society, 2011, 159, E30-E36.	2.9	1
52	Study of dielectric relaxation processes in printable zinc oxide films on transparent substrates. Journal of Materials Science: Materials in Electronics, 2015, 26, 7109-7116.	2.2	1
53	Steady state charge conduction through solution processed liquid crystalline lanthanide bisphthalocyanine films. Journal of Porphyrins and Phthalocyanines, 2019, 23, 1603-1615.	0.8	1
54	Dielectric measurements on stearic acid/eicosylamine alternate layer Langmuir-Blodgett films incorporating CdS nanoparticles. Journal of Materials Science: Materials in Electronics, 2021, 32, 8798-8806.	2.2	1

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55	Viscoelastic property and hydration level variations of proteins multilayer adsorbed on liquid crystal phthalocyanine thin film. Materials Research Society Symposia Proceedings, 2008, 1093, 40401.	0.1	0
56	Effect of Cd ²⁺ ions on AC conductivity of stearic acid metal-insulator-semiconductor diode. AIP Conference Proceedings, 2020, , .	0.4	0