Abhay A Sagade

List of Publications by Year
in descending order

51 papers	1,975 citations	257450 24 h-index	243625 44 g-index
51 all docs	51 docs citations	51 times ranked	3522 citing authors

#	Article	IF	Citations
1	On the Contact Optimization of ALD-Based MoS₂ FETs: Correlation of Processing Conditions and Interface Chemistry with Device Electrical Performance. ACS Applied Electronic Materials, 2021, 3, 3185-3199.	4.3	8
2	100â€‰GHz zinc oxide Schottky diodes processed from solution on a wafer scale. Nature Electronics, 2020, 3, 718-725.	26.0	45
3	Templating effect of single-layer graphene supported by an insulating substrate on the molecular orientation of lead phthalocyanine. Beilstein Journal of Nanotechnology, 2020, 11, 814-820.	2.8	4
4	On the indentation-assisted phase engineered Si for solar applications. Scripta Materialia, 2020, 184, 19-23.	5.2	4
5	A carbon nanotubeâ€“graphene nanoribbon seamless junction transistor. Nanoscale Advances, 2020, 2, 659-663.	4.6	3
6	Dirac-Point Shift by Carrier Injection Barrier in Graphene Field-Effect Transistor Operation at Room Temperature. ACS Applied Materials & Interfaces, 2018, 10, 10618-10621.	8.0	5
7	Encapsulation of graphene transistors and vertical device integration by interface engineering with atomic layer deposited oxide. 2D Materials, 2017, 4, 011008.	4.4	39
8	Graphene-based nanolaminates as ultra-high permeation barriers. Npj 2D Materials and Applications, 2017, 1, .	7.9	21
9	Atomic layer deposited oxide films as protective interface layers for integrated graphene transfer. Nanotechnology, 2017, 28, 485201.	2.6	18
10	Low Resistive Edge Contacts to CVDâ€Grown Graphene Using a CMOS Compatible Metal. Annalen Der Physik, 2017, 529, 1600410.	2.4	29
11	Engineering the Photoresponse of InAs Nanowires. ACS Applied Materials & Interfaces, 2017, 9, 43993-44000.	8.0	49
12	Towards a Graphene-Based Low Intensity Photon Counting Photodetector. Sensors, 2016, 16, 1351.	3.8	3
13	Defining Switching Efficiency of Multilevel Resistive Memory with PdO as an Example. Advanced Electronic Materials, 2016, 2, 1500286.	5.1	14
14	Working towards graphene-based detectors for high sensitivity photodetection. , 2016, , .		0
15	Parameter Space of Atomic Layer Deposition of Ultrathin Oxides on Graphene. ACS Applied Materials & Interfaces, 2016, 8, 30564-30575.	8.0	47
16	Electronic properties of CVD graphene: The role of grain boundaries, atmospheric doping, and encapsulation by ALD. Physica Status Solidi (B): Basic Research, 2016, 253, 2321-2325.	1.5	17
17	Infrared transparent graphene heater for silicon photonic integrated circuits. Optics Express, 2016, 24, 7871.	3.4	44
18	On the origin of contact resistances in graphene devices fabricated by optical lithography. Applied Physics A: Materials Science and Processing, 2016, 122, 1.	2.3	17

#	Article	IF	Citations
19	A physics-based model of gate-tunable metalâ€“graphene contact resistance benchmarked against experimental data. 2D Materials, 2015, 2, 025006.	4.4	30
20	Graphene-based MMIC process development and RF passives design. , 2015, , .		1
21	Highly air stable passivation of graphene based field effect devices. Nanoscale, 2015, 7, 3558-3564.	5.6	120
22	Experimental verification of electro-refractive phase modulation in graphene. Scientific Reports, 2015, 5, 10967.	3.3	83
23	Ultra-sensitive Hall sensors based on graphene encapsulated in hexagonal boron nitride. Applied Physics Letters, 2015, 106, .	3.3	127
24	Experimental demonstration of electro-refractive phase modulators based on graphene. , 2015, , .		0
25	Metal-organic molecular device for non-volatile memory storage. Applied Physics Letters, 2014, 105, .	3.3	7
26	Ultrafast response humidity sensor using supramolecular nanofibre and its application in monitoring breath humidity and flow. Scientific Reports, 2014, 4, 4103.	3.3	224
27	A charge transfer single crystal field effect transistor operating at low voltages. Chemical Communications, 2013, 49, 5847.	4.1	48
28	Highâ€Mobility Field Effect Transistors Based on Supramolecular Charge Transfer Nanofibres. Advanced Materials, 2013, 25, 559-564.	21.0	74
29	A low cost optical hydrogen sensing device using nanocrystalline Pd grating. International Journal of Hydrogen Energy, 2012, 37, 9443-9449.	7.1	25
30	Flexible and Semitransparent Strain Sensors Based on Micromolded Pd Nanoparticleâ€“Carbon Î¼-Stripes. ACS Applied Materials & Interfaces, 2011, 3, 2173-2178.	8.0	48
31	Direct Micromolding of Pd Î¼-Stripes for Electronic Applications. Journal of Nanoscience and Nanotechnology, 2011, 11, 152-157.	0.9	3
32	Ultrafast Direct Ablative Patterning of HOPG by Single Laser Pulses to Produce Graphene Ribbons. Advanced Functional Materials, 2011, 21, 3836-3842.	14.9	15
33	Dynamic Selfâ€Assembly of Chargeâ€Transfer Nanofibers of Tetrathiafulvalene Derivatives with F₄TCNQ. Chemistry - A European Journal, 2011, 17, 12355-12361.	3.3	35
34	Intricate nature of Pd nanocrystalâ€“hydrogen interaction investigated using thermolysed Pd hexadecylthiolate films. Sensors and Actuators B: Chemical, 2010, 149, 345-351.	7.8	6
35	Electrical characterization of 100ÂMeV heavy ion irradiated Au/p-Cu_{1.4}S Schottky barrier diodes. Radiation Effects and Defects in Solids, 2009, 164, 31-37.	1.2	1
36	Modifications of structural, optical and electrical properties of nanocrystalline bismuth sulphide by using swift heavy ions. Current Applied Physics, 2009, 9, 374-379.	2.4	24

#	Article	IF	Citations
37	Effect of high electronic energy loss of 100MeV gold heavy ions in copper chalcogenides (CuX, X=S,) Tj ETQq1 1 0.784314 rgBT /Over 1653-1658.	3.1	8
38	Effect of annealing on structural and optical properties of zinc oxide thin film deposited by successive ionic layer adsorption and reaction technique. Journal of Alloys and Compounds, 2009, 469, 56-60.	5.5	77
39	Room temperature electrosynthesis of ZnSe thin films. Journal of Alloys and Compounds, 2009, 488, 157-162.	5.5	25
40	Enhancement in sensitivity of copper sulfide thin film ammonia gas sensor: Effect of swift heavy ion irradiation. Journal of Applied Physics, 2009, 105, .	2.5	40
41	Evidence of Phonon Condensers at Nanoscale. , 2009, , .		0
42	Zinc Oxide Nano Particle Grown By Soft Solution Route at Room Temperature. , 2009, , .		0
43	Effect of Different Substrates on Performance of Copper Sulfide Thin Film Ammonia Gas Sensor. Sensor Letters, 2009, 7, 550-556.	0.4	1
44	Copper sulphide (CuxS) as an ammonia gas sensor working at room temperature. Sensors and Actuators B: Chemical, 2008, 133, 135-143.	7.8	230
45	Engineering of nanocrystalline cadmium sulfide thin films by using swift heavy ions. Journal Physics D: Applied Physics, 2007, 40, 4850-4854.	2.8	39
46	Growth and characterization of CdZn(S1â^'xSex)2 alloy film deposited by solution growth technique. Journal of Alloys and Compounds, 2007, 436, 400-406.	5.5	18
47	Growth and characterization of tin disulfide (SnS2) thin film deposited by successive ionic layer adsorption and reaction (SILAR) technique. Journal of Alloys and Compounds, 2007, 436, 421-426.	5.5	174
48	Gigantic irradiation effect of 100ÂMeV Au8+swift heavy ions on the copper sulfide thin films with different chemical compositions. Radiation Effects and Defects in Solids, 2007, 162, 77-85.	1.2	16
49	Structural damage studies in conducting indium-tin oxide (ITO) thin films induced by Au8+ swift heavy ions (SHI) irradiation. Vacuum, 2007, 82, 39-44.	3.5	22
50	A comparative study of the physical properties of CdS, Bi2S3 and composite CdSâ€"Bi2S3 thin films for photosensor application. Sensors and Actuators A: Physical, 2007, 140, 207-214.	4.1	49
51	Photoelectrochemical (PEC) studies on CdSe thin films electrodeposited from non-aqueous bath on different substrates. Bulletin of Materials Science, 2007, 30, 321-327.	1.7	38