Sandeep Gorantla

List of Publications by Year in Descending Order

52 papers	2,051 citations	21 h-index	45 g-index
56 ext. papers	2,262 ext. citations	7.5 avg, IF	4.42 L-index

#	Paper	IF	Citations
52	Detailed surface studies on the reduction of Al incorporation into AlGaN grown by molecular beam epitaxy in the Ga-droplet regime. *Vacuum*, **2022**, 111168	3.7	0
51	Magnetic interactions in graphene decorated with iron oxide nanoparticles. *Nanotechnology*, **2021**, 32,	3.4	3
50	Arsenic-Induced Growth of Dodecagonal GaN Microrods with Stable a-Plane Walls. *Advanced Optical Materials*, **2021**, 9, 2001348	8.1	3
49	Chemical stability of CaCo O /CaMnO p-n junction for oxide-based thermoelectric generators.. *RSC Advances*, **2020**, 10, 5026-5031	3.7	2
48	Sensitivity of N-polar GaN surface barrier to ambient gases. *Sensors and Actuators B: Chemical*, **2019** , 281, 561-567	8.5	5
47	The effect of Eu doping on the growth, structure and red-ox activity of ceria nanocubes. *CrystEngComm*, **2018**, 20, 1698-1704	3.3	12
46	Improving carrier transport in CuO thin films by rapid thermal annealing. *Journal of Physics Condensed Matter*, **2018**, 30, 075702	1.8	17
45	Synthesis of large area AB stacked bilayer graphene by SiC epitaxy and transfer. *Nano Futures*, **2018** , 2, 035001	3.6	4
44	Interface phenomena in magnetron sputtered CuO/ZnO heterostructures. *Journal of Physics Condensed Matter*, **2017**, 29, 435002	1.8	2
43	Electronic properties and morphology of copper oxide/n-type silicon heterostructures. *Journal of Physics Condensed Matter*, **2017**, 29, 315701	1.8	3
42	Atomic scale study of Cu2O/ZnO heterojunction interfaces by TEM, STEM and DFT **2016**, 676-677		
41	Electrical Properties of Hybrid Nanomembrane/Nanoparticle Heterojunctions: The Role of Inhomogeneous Arrays. *Journal of Physical Chemistry C*, **2016**, 120, 6891-6899	3.8	7
40	Structural properties of Cu2O epitaxial films grown on c-axis single crystal ZnO by magnetron sputtering. *Applied Physics Letters*, **2016**, 108, 152110	3.4	9
39	Thin film Cu2O for solar cell applications **2016**,		2
38	Epitaxial Strain-Induced Growth of CuO at Cu2O/ZnO Interfaces. *Journal of Physical Chemistry C*, **2016**, 120, 23552-23558	3.8	11
37	Stranski-Krastanov and Volmer-Weber CVD Growth Regimes To Control the Stacking Order in Bilayer Graphene. *Nano Letters*, **2016**, 16, 6403-6410	11.5	73
36	Catalyst-free Growth of Single Crystalline Bi2Se3 Nanostructures for Quantum Transport Studies. *Crystal Growth and Design*, **2015**, 15, 4272-4278	3.5	16

35	Two-dimensional membrane as elastic shell with proof on the folds revealed by three-dimensional atomic mapping. *Nature Communications*, **2015**, 6, 8935	17.4	48
34	Low voltage transmission electron microscopy of graphene. *Small*, **2015**, 11, 515-42	11	37
33	Amorphous (Glassy) Carbon, a Promising Material for Sodium Ion Battery Anodes: a Combined First-Principles and Experimental Study. *Journal of Physical Chemistry C*, **2015**, 119, 13496-13501	3.8	44
32	Synthesis and Optical Properties of Linker-Free TiO2/CdSe Nanorods. *Journal of Physical Chemistry C*, **2014**, 118, 3347-3358	3.8	12
31	Free-standing single-atom-thick iron membranes suspended in graphene pores. *Science*, **2014**, 343, 1228-32	33.5	223
30	Thermal conductivity of mechanically joined semiconducting/metal nanomembrane superlattices. *Nano Letters*, **2014**, 14, 2387-93	11.5	19
29	Room temperature in situ growth of B/BOx nanowires and BOx nanotubes. *Nano Letters*, **2014**, 14, 799-805	11.5	12
28	A universal transfer route for graphene. *Nanoscale*, **2014**, 6, 889-96	7.7	46
27	Dominantly epitaxial growth of graphene on Ni (1 1 1) substrate. *Applied Surface Science*, **2014**, 314, 490-499	6.7	21
26	Chemical Structure of Nitrogen-Doped Graphene with Single Platinum Atoms and Atomic Clusters as a Platform for the PEMFC Electrode. *Journal of Physical Chemistry C*, **2014**, 118, 3890-3900	3.8	105
25	In situ observations of Pt nanoparticles coalescing inside carbon nanotubes. *RSC Advances*, **2014**, 4, 49442-49445	3.7	5
24	Plastic Flow of a Cu50Zr45Ti5 Bulk Metallic Glass Composite. *Journal of Materials Science and Technology*, **2014**, 30, 609-615	9.1	23
23	Insights into the Early Growth of Homogeneous Single-Layer Graphene over Ni/Mo Binary Substrates. *Chemistry of Materials*, **2013**, 25, 3880-3887	9.6	27
22	Rolled-up nanomembranes as compact 3D architectures for field effect transistors and fluidic sensing applications. *Nano Letters*, **2013**, 13, 213-8	11.5	104
21	On the Role of Vapor Trapping for Chemical Vapor Deposition (CVD) Grown Graphene over Copper. *Chemistry of Materials*, **2013**, 25, 4861-4866	9.6	52
20	van der Waals epitaxial growth of graphene on sapphire by chemical vapor deposition without a metal catalyst. *ACS Nano*, **2013**, 7, 385-95	16.7	182
19	Mechanically driven phase transformation in single phase Al62.5Cu25Fe12.5 quasi-crystals: Effect of milling intensity. *Acta Materialia*, **2013**, 61, 3819-3830	8.4	12
18	Retro-fitting an older (S)TEM with two Cs aberration correctors for 80 kV and 60 kV operation. *Journal of Microscopy*, **2013**, 249, 87-92	1.9	16

17	Novel Approach for Alternating Current (AC)-Driven Organic Light-Emitting Devices. *Advanced Functional Materials*, **2012**, 22, 210-217	15.6	68
16	Microstructure and magnetic properties of GdHfCoAl phase separated metallic glasses. *Intermetallics*, **2012**, 20, 115-122	3.5	14
15	Triple yielding and deformation mechanisms in metastable Cu47.5Zr47.5Al5 composites. *Acta Materialia*, **2012**, 60, 6000-6012	8.4	113
14	Programmable sub-nanometer sculpting of graphene with electron beams. *ACS Nano*, **2012**, 6, 10327-34	16.7	49
13	Understanding the growth of amorphous SiO2 nanofibers and crystalline binary nanoparticles produced by laser ablation. *Nanotechnology*, **2012**, 23, 035601	3.4	6
12	The filling of carbon nanotubes with magnetoelectric Cr2O3. *Carbon*, **2012**, 50, 1706-1709	10.4	10
11	Defect assisted thermal synthesis of crystalline aluminum borate nanowires. *Journal of Applied Physics*, **2012**, 112, 024308	2.5	3
10	Epitaxial Electrodeposition of Fe3O4 on Single-Crystal Ni(111). *Chemistry of Materials*, **2011**, 23, 2017-2019	9.6	11
9	In-situ Observations of Restructuring Carbon Nanotubes via Low-voltage Aberration-corrected Transmission Electron Microscopy. *Materials Research Society Symposia Proceedings*, **2011**, 1284, 101		
8	Transformation-mediated ductility in CuZr-based bulk metallic glasses. *Nature Materials*, **2010**, 9, 473-7	27	407
7	Single-wall-carbon-nanotube/single-carbon-chain molecular junctions. *Physical Review B*, **2010**, 81,	3.3	47
6	In situ observations of self-repairing single-walled carbon nanotubes. *Physical Review B*, **2010**, 81,	3.3	24
5	In situ observations of fullerene fusion and ejection in carbon nanotubes. *Nanoscale*, **2010**, 2, 2077-9	7.7	13
4	Interface-driven magnetoelectric effects in granular CrO 2. *Europhysics Letters*, **2010**, 91, 17006	1.6	8
3	Criteria for tensile plasticity in CuZrAl bulk metallic glasses. *Acta Materialia*, **2010**, 58, 4883-4890	8.4	69
2	Enhanced interactions between a C60 fullerene and a buckle bend on a double-walled carbon nanotube. *Nano Research*, **2010**, 3, 92-97	10	14
1	Sexithiophene encapsulated in a single-walled carbon nanotube: an in situ Raman spectroelectrochemical study of a peapod structure. *Chemistry - A European Journal*, **2010**, 16, 11753-9	4.8	36