

Ajay Singh

List of Publications by Year in descending order

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44
papers

2,606
citations

257101

24
h-index

233125

45
g-index

49
all docs

49
docs citations

49
times ranked

4085
citing authors

#	ARTICLE	IF	CITATIONS
1	Compound Copper Chalcogenide Nanocrystals. <i>Chemical Reviews</i> , 2017, 117, 5865-6109.	23.0	670
2	Colloidal Synthesis of Wurtzite Cu ₂ ZnSnS ₄ Nanorods and Their Perpendicular Assembly. <i>Journal of the American Chemical Society</i> , 2012, 134, 2910-2913.	6.6	381
3	Defect Engineering in Plasmonic Metal Oxide Nanocrystals. <i>Nano Letters</i> , 2016, 16, 3390-3398.	4.5	122
4	Compositionally Tunable Photoluminescence Emission in Cu ₂ ZnSn(S _{1-x} Se _x) ₄ Nanocrystals. <i>Angewandte Chemie - International Edition</i> , 2013, 52, 9120-9124.	7.2	98
5	Phase-transition-driven growth of compound semiconductor crystals from ordered metastable nanorods. <i>Nature Communications</i> , 2014, 5, 3133.	5.8	98
6	Resonant Coupling between Molecular Vibrations and Localized Surface Plasmon Resonance of Faceted Metal Oxide Nanocrystals. <i>Nano Letters</i> , 2017, 17, 2611-2620.	4.5	94
7	Assembly of CuIn _{1-x} Ga _x S ₂ Nanorods into Highly Ordered 2D and 3D Superstructures. <i>ACS Nano</i> , 2012, 6, 6977-6983.	7.3	76
8	Controlled semiconductor nanorod assembly from solution: influence of concentration, charge and solvent nature. <i>Journal of Materials Chemistry</i> , 2012, 22, 1562-1569.	6.7	76
9	Colloidal Synthesis of Cu ₂ SnSe ₃ Tetrapod Nanocrystals. <i>Journal of the American Chemical Society</i> , 2013, 135, 7835-7838.	6.6	74
10	Highly Ordered Nanorod Assemblies Extending over Device Scale Areas and in Controlled Multilayers by Electrophoretic Deposition. <i>Journal of Physical Chemistry B</i> , 2013, 117, 1608-1615.	1.2	64
11	Systematic Study into the Synthesis and Shape Development in Colloidal CuIn _x Ga _{1-x} S ₂ Nanocrystals. <i>Chemistry of Materials</i> , 2013, 25, 653-661.	3.2	53
12	Directing semiconductor nanorod assembly into 1D or 2D supercrystals by altering the surface charge. <i>Chemical Communications</i> , 2010, 46, 7193.	2.2	49
13	Colloidal Cu ₂ ZnSn(SSe) ₄ (CZTSSe) Nanocrystals: Shape and Crystal Phase Control to Form Dots, Arrows, Ellipsoids, and Rods. <i>Chemistry of Materials</i> , 2015, 27, 4742-4748.	3.2	49
14	Large-scale synthesis of soluble graphitic hollow carbon nanorods with tunable photoluminescence for the selective fluorescent detection of DNA. <i>New Journal of Chemistry</i> , 2016, 40, 1571-1579.	1.4	49
15	Giant PbSe/CdSe/CdSe Quantum Dots: Crystal-Structure-Defined Ultrastable Near-Infrared Photoluminescence from Single Nanocrystals. <i>Journal of the American Chemical Society</i> , 2017, 139, 11081-11088.	6.6	48
16	High Density Growth of Indium seeded Silicon Nanowires in the Vapor phase of a High Boiling Point Solvent. <i>Chemistry of Materials</i> , 2012, 24, 2204-2210.	3.2	45
17	Insight into the 3D Architecture and Quasicrystal Symmetry of Multilayer Nanorod Assemblies from Moiré Interference Patterns. <i>ACS Nano</i> , 2012, 6, 3339-3345.	7.3	45
18	Linking Semiconductor Nanocrystals into Gel Networks through All-organic Bridges. <i>Angewandte Chemie - International Edition</i> , 2015, 54, 14840-14844.	7.2	45

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19	Size controlled gold tip growth onto II-VI nanorods. Journal of Materials Chemistry, 2010, 20, 7875.	6.7	38
20	Solution Synthesis and Assembly of Wurtzite-Derived Cu-In-Zn S Nanorods with Tunable Composition and Band Gap. Chemistry of Materials, 2015, 27, 1517-1523.	3.2	38
21	A facile spin-cast route for cation exchange of multilayer perpendicularly-aligned nanorod assemblies. Nanoscale, 2011, 3, 4580.	2.8	35
22	Synergistic Role of Dopants on the Morphology of Alloyed Copper Chalcogenide Nanocrystals. Journal of the American Chemical Society, 2015, 137, 6464-6467.	6.6	32
23	Growth of Crystalline Copper Silicide Nanowires in High Yield within a High Boiling Point Solvent System. Chemistry of Materials, 2012, 24, 4319-4325.	3.2	31
24	Photophysics of Thermally-Assisted Photobleaching in Giant Quantum Dots Revealed in Single Nanocrystals. ACS Nano, 2018, 12, 4206-4217.	7.3	31
25	Colloidal synthesis of homogeneously alloyed Cd _{1-x} Se _x nanorods with compositionally tunable photoluminescence. Chemical Communications, 2013, 49, 10293.	2.2	23
26	PbS/CdS Quantum Dot Room-Temperature Single-Emitter Spectroscopy Reaches the Telecom O and S Bands via an Engineered Stability. ACS Nano, 2021, 15, 575-587.	7.3	22
27	Assembly of binary, ternary and quaternary compound semiconductor nanorods: From local to device scale ordering influenced by surface charge. CrystEngComm, 2014, 16, 9446-9454.	1.3	21
28	Ordering in Polymer Micelle-Directed Assemblies of Colloidal Nanocrystals. Nano Letters, 2015, 15, 8240-8244.	4.5	21
29	Dopant Mediated Assembly of Cu ₂ ZnSnS ₄ Nanorods into Atomically Coupled 2D Sheets in Solution. Nano Letters, 2017, 17, 3421-3428.	4.5	19
30	Fabrication of Noble metal-semiconductor hybrid nanostructures using phase transfer. Nano Research, 2013, 6, 121-130.	5.8	18
31	Water dispersible semiconductor nanorod assemblies via a facile phase transfer and their application as fluorescent biomarkers. Journal of Materials Chemistry, 2009, 19, 8974.	6.7	17
32	Photoluminescence Enhancement of CuInS ₂ Quantum Dots in Solution Coupled to Plasmonic Gold Nanocup Array. Small, 2017, 13, 1700660.	5.2	17
33	Silver tip formation on colloidal CdSe nanorods by a facile phase transfer protocol. Journal of Materials Chemistry, 2011, 21, 6815.	6.7	12
34	Crystallization of Semiconductor Nanorods into Perfectly Faceted Hexagonal Superstructures. Particle and Particle Systems Characterization, 2013, 30, 624-629.	1.2	12
35	Intrinsic Exciton Photophysics of PbS Quantum Dots Revealed by Low-Temperature Single Nanocrystal Spectroscopy. Nano Letters, 2019, 19, 8519-8525.	4.5	12
36	Protein immobilisation on perpendicularly aligned gold tipped nanorod assemblies. Chemical Communications, 2011, 47, 2655.	2.2	11

#	ARTICLE	IF	CITATIONS
37	Influence of morphology on the blinking mechanisms and the excitonic fine structure of single colloidal nanoplatelets. <i>Nanoscale</i> , 2018, 10, 22861-22870.	2.8	11
38	Electrophoretic Deposition of Poly(3-decylthiophene) onto Gold-Mounted Cadmium Selenide Nanorods. <i>Langmuir</i> , 2011, 27, 13506-13513.	1.6	7
39	Interplay of Bright Triplet and Dark Excitons Revealed by Magneto-Photoluminescence of Individual PbS/CdS Quantum Dots. <i>Small</i> , 2021, 17, e2006977.	5.2	6
40	Complete Synthesis of Germanium Nanocrystal Encrusted Carbon Colloids in Supercritical CO ₂ and their Superhydrophobic Properties. <i>Langmuir</i> , 2011, 27, 11166-11173.	1.6	5
41	Electrophoretic Deposition of Spherical and Rod-Shaped Nanocrystals into Close Packed Superlattices. <i>ECS Transactions</i> , 2009, 19, 209-219.	0.3	4
42	Controlling Morphology in Polycrystalline Films by Nucleation and Growth from Metastable Nanocrystals. <i>Nano Letters</i> , 2018, 18, 5530-5537.	4.5	4
43	Impact of Non-Uniform Doping on the Plasmonic Properties of In ₂ O ₃ Nanoparticles: A Study by Electron Energy Loss Spectroscopy. <i>Microscopy and Microanalysis</i> , 2018, 24, 1684-1685.	0.2	1
44	Plasmonic Enhancement: Photoluminescence Enhancement of CuInS ₂ Quantum Dots in Solution Coupled to Plasmonic Gold Nanocup Array (<i>Small</i> 33/2017). <i>Small</i> , 2017, 13, .	5.2	0