

Ajay Singh

List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/4870167/publications.pdf>

Version: 2024-02-01

44
papers

2,606
citations

257450

24
h-index

233421

45
g-index

49
all docs

49
docs citations

49
times ranked

4085
citing authors

#	ARTICLE	IF	CITATIONS
1	Interplay of Bright Triplet and Dark Excitons Revealed by Magneto-Photoluminescence of Individual PbS/CdS Quantum Dots. <i>Small</i> , 2021, 17, e2006977.	10.0	6
2	PbS/CdS Quantum Dot Room-Temperature Single-Emitter Spectroscopy Reaches the Telecom O and S Bands via an Engineered Stability. <i>ACS Nano</i> , 2021, 15, 575-587.	14.6	22
3	Intrinsic Exciton Photophysics of PbS Quantum Dots Revealed by Low-Temperature Single Nanocrystal Spectroscopy. <i>Nano Letters</i> , 2019, 19, 8519-8525.	9.1	12
4	Photophysics of Thermally-Assisted Photobleaching in "Giant" Quantum Dots Revealed in Single Nanocrystals. <i>ACS Nano</i> , 2018, 12, 4206-4217.	14.6	31
5	Influence of morphology on the blinking mechanisms and the excitonic fine structure of single colloidal nanoplatelets. <i>Nanoscale</i> , 2018, 10, 22861-22870.	5.6	11
6	Controlling Morphology in Polycrystalline Films by Nucleation and Growth from Metastable Nanocrystals. <i>Nano Letters</i> , 2018, 18, 5530-5537.	9.1	4
7	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.	0.4	1
8	Compound Copper Chalcogenide Nanocrystals. <i>Chemical Reviews</i> , 2017, 117, 5865-6109.	47.7	670
9	Dopant Mediated Assembly of Cu ₂ ZnSnS ₄ Nanorods into Atomically Coupled 2D Sheets in Solution. <i>Nano Letters</i> , 2017, 17, 3421-3428.	9.1	19
10	Resonant Coupling between Molecular Vibrations and Localized Surface Plasmon Resonance of Faceted Metal Oxide Nanocrystals. <i>Nano Letters</i> , 2017, 17, 2611-2620.	9.1	94
11	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, .	10.0	0
12	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.	13.7	48
13	Photoluminescence Enhancement of CuInS ₂ Quantum Dots in Solution Coupled to Plasmonic Gold Nanocup Array. <i>Small</i> , 2017, 13, 1700660.	10.0	17
14	Defect Engineering in Plasmonic Metal Oxide Nanocrystals. <i>Nano Letters</i> , 2016, 16, 3390-3398.	9.1	122
15	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.	2.8	49
16	Linking Semiconductor Nanocrystals into Gel Networks through All-Inorganic Bridges. <i>Angewandte Chemie - International Edition</i> , 2015, 54, 14840-14844.	13.8	45
17	Ordering in Polymer Micelle-Directed Assemblies of Colloidal Nanocrystals. <i>Nano Letters</i> , 2015, 15, 8240-8244.	9.1	21
18	Solution Synthesis and Assembly of Wurtzite-Derived Cu ²⁺ In ²⁺ Zn ²⁺ S Nanorods with Tunable Composition and Band Gap. <i>Chemistry of Materials</i> , 2015, 27, 1517-1523.	6.7	38

#	ARTICLE	IF	CITATIONS
19	Colloidal Cu ₂ ZnSn(SSe) ₄ (CZTSSe) Nanocrystals: Shape and Crystal Phase Control to Form Dots, Arrows, Ellipsoids, and Rods. Chemistry of Materials, 2015, 27, 4742-4748.	6.7	49
20	Synergistic Role of Dopants on the Morphology of Alloyed Copper Chalcogenide Nanocrystals. Journal of the American Chemical Society, 2015, 137, 6464-6467.	13.7	32
21	Phase-transition-driven growth of compound semiconductor crystals from ordered metastable nanorods. Nature Communications, 2014, 5, 3133.	12.8	98
22	Assembly of binary, ternary and quaternary compound semiconductor nanorods: From local to device scale ordering influenced by surface charge. CrystEngComm, 2014, 16, 9446-9454.	2.6	21
23	Colloidal synthesis of homogeneously alloyed CdSexS1-x nanorods with compositionally tunable photoluminescence. Chemical Communications, 2013, 49, 10293.	4.1	23
24	Systematic Study into the Synthesis and Shape Development in Colloidal CuIn _{1-x} Ga _x S ₂ Nanocrystals. Chemistry of Materials, 2013, 25, 653-661.	6.7	53
25	Fabrication of Noble metal-semiconductor hybrid nanostructures using phase transfer. Nano Research, 2013, 6, 121-130.	10.4	18
26	Highly Ordered Nanorod Assemblies Extending over Device Scale Areas and in Controlled Multilayers by Electrophoretic Deposition. Journal of Physical Chemistry B, 2013, 117, 1608-1615.	2.6	64
27	Compositionally Tunable Photoluminescence Emission in Cu ₂ ZnSn(S _{1-x} Se _x) ₄ Nanocrystals. Angewandte Chemie - International Edition, 2013, 52, 9120-9124.	13.8	98
28	Colloidal Synthesis of Cu ₂ SnSe ₃ Tetrapod Nanocrystals. Journal of the American Chemical Society, 2013, 135, 7835-7838.	13.7	74
29	Crystallization of Semiconductor Nanorods into Perfectly Faceted Hexagonal Superstructures. Particle and Particle Systems Characterization, 2013, 30, 624-629.	2.3	12
30	High Density Growth of Indium seeded Silicon Nanowires in the Vapor phase of a High Boiling Point Solvent. Chemistry of Materials, 2012, 24, 2204-2210.	6.7	45
31	Assembly of CuIn _{1-x} Ga _x S ₂ Nanorods into Highly Ordered 2D and 3D Superstructures. ACS Nano, 2012, 6, 6977-6983.	14.6	76
32	Controlled semiconductor nanorod assembly from solution: influence of concentration, charge and solvent nature. Journal of Materials Chemistry, 2012, 22, 1562-1569.	6.7	76
33	Growth of Crystalline Copper Silicide Nanowires in High Yield within a High Boiling Point Solvent System. Chemistry of Materials, 2012, 24, 4319-4325.	6.7	31
34	Insight into the 3D Architecture and Quasicrystal Symmetry of Multilayer Nanorod Assemblies from Moiré Interference Patterns. ACS Nano, 2012, 6, 3339-3345.	14.6	45
35	Colloidal Synthesis of Wurtzite Cu ₂ ZnSnS ₄ Nanorods and Their Perpendicular Assembly. Journal of the American Chemical Society, 2012, 134, 2910-2913.	13.7	381
36	Silver tip formation on colloidal CdSe nanorods by a facile phase transfer protocol. Journal of Materials Chemistry, 2011, 21, 6815.	6.7	12

#	ARTICLE	IF	CITATIONS
37	Complete Synthesis of Germanium Nanocrystal Encrusted Carbon Colloids in Supercritical CO ₂ and their Superhydrophobic Properties. Langmuir, 2011, 27, 11166-11173.	3.5	5
38	A facile spin-cast route for cation exchange of multilayer perpendicularly-aligned nanorod assemblies. Nanoscale, 2011, 3, 4580.	5.6	35
39	Electrophoretic Deposition of Poly(3-decylthiophene) onto Gold-Mounted Cadmium Selenide Nanorods. Langmuir, 2011, 27, 13506-13513.	3.5	7
40	Protein immobilisation on perpendicularly aligned gold tipped nanorod assemblies. Chemical Communications, 2011, 47, 2655.	4.1	11
41	Size controlled gold tip growth onto II-VI nanorods. Journal of Materials Chemistry, 2010, 20, 7875.	6.7	38
42	Directing semiconductor nanorod assembly into 1D or 2D supercrystals by altering the surface charge. Chemical Communications, 2010, 46, 7193.	4.1	49
43	Electrophoretic Deposition of Spherical and Rod-Shaped Nanocrystals into Close Packed Superlattices. ECS Transactions, 2009, 19, 209-219.	0.5	4
44	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