Suman Kalyan Pal

List of Publications by Year
in descending order

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44 papers	1,013 citations	471061 17 h-index	433756 31 g-index
44 all docs	44 docs citations	44 times ranked	1844 citing authors

#	Article	IF	Citations
1	Through Structural Isomerism: Positional Effect of Alkyne Functionality on Molecular Optical Properties. Physical Chemistry Chemical Physics, 2022, , .	1.3	2
2	Anomalous emission behavior of excitons at low temperature in monolayer WS₂. Journal Physics D: Applied Physics, 2022, 55, 235105.	1.3	4
3	Valley degree of freedom in two-dimensional van der Waals materials. Journal Physics D: Applied Physics, 2022, 55, 303003.	1.3	10
4	Ultrafast Many-Particle Phenomena in Lead Bromide Hybrid Perovskite Nanocrystals Under Strong Optical Excitation. Journal of Physical Chemistry C, 2021, 125, 3198-3205.	1.5	9
5	Ultrafast and nonlinear optical properties of two-dimensional CdSe nanostructures prepared using MoS2 nanosheets as template. Physica E: Low-Dimensional Systems and Nanostructures, 2021, 130, 114682.	1.3	8
6	Solution-Processed Photoinduced Multilevel Resistive Switching Devices Based on Lead-Free All-Inorganic Perovskite. IEEE Electron Device Letters, 2021, 42, 1284-1287.	2.2	6
7	High-performance perovskite photodetectors based on CH₃NH₃PbBr₃ quantum dot/TiO₂ heterojunction. Nanotechnology, 2021, 32, 085201.	1.3	13
8	Ultrafast Exciton Trapping and Excitonâ€“Exciton Annihilation in Large-Area CVD-Grown Monolayer WS₂. Journal of Physical Chemistry C, 2021, 125, 23880-23888.	1.5	15
9	Third-Order Nonlinear Optical Properties and Saturation of Two-Photon Absorption in Lead-Free Double Perovskite Nanocrystals under Femtosecond Excitation. ACS Photonics, 2021, 8, 3365-3374.	3.2	30
10	Excitation dependent photoluminescence from quantum confined ultrasmall SnS sheets. Applied Physics Letters, 2021, 119, 241902.	1.5	3
11	New Nonlinear Optical Crystal of Rhodamine 590 Acid Phthalate. ACS Omega, 2020, 5, 20863-20873.	1.6	4
12	Three-Dimensional Carbonaceous Aerogels Embedded with Rh-SrTiO₃ for Enhanced Hydrogen Evolution Triggered by Efficient Charge Transfer and Light Absorption. ACS Applied Energy Materials, 2020, 3, 12134-12147.	2.5	49
13	Improving carrier transport in polymer films by incorporating MoS₂ nanosheets. Journal Physics D: Applied Physics, 2020, 53, 275109.	1.3	5
14	Light-Induced Defect Healing and Strong Many-Body Interactions in Formamidinium Lead Bromide Perovskite Nanocrystals. Journal of Physical Chemistry Letters, 2020, 11, 1239-1246.	2.1	18
15	Liquid exfoliation of electronic grade ultrathin tin(II) sulfide (SnS) with intriguing optical response. Npj 2D Materials and Applications, 2020, 4, .	3.9	51
16	Improving performance and moisture stability of perovskite solar cells through interface engineering with polymer-2D MoS2 nanohybrid. Solar Energy, 2019, 193, 95-101.	2.9	30
17	Nonlinear optical properties of benzylamine lead(II) bromide perovskite microdisks in femtosecond regime. Applied Physics Letters, 2019, 114, .	1.5	31
18	Postsynthesis Spontaneous Coalescence of Mixed-Halide Perovskite Nanocubes into Phase-Stable Single-Crystalline Uniform Luminescent Nanowires. Journal of Physical Chemistry Letters, 2019, 10, 1805-1812.	2.1	41

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19	Role of ZnS Segment on Charge Carrier Dynamics and Photoluminescence Property of CdSe@CdS/ZnS Quantum Rods. Journal of Physical Chemistry C, 2018, 122, 6379-6387.	1.5	6
20	Phonon shift in chemically exfoliated WS2 nanosheet. AIP Conference Proceedings, 2018, , .	0.3	2
21	Variation in the Photocurrent Response Due to Different Emissive States in Methylammonium Lead Bromide Perovskites. Journal of Physical Chemistry C, 2018, 122, 3818-3823.	1.5	11
22	Facile embedding of gold nanostructures in the hole transporting layer for efficient polymer solar cells. Organic Electronics, 2018, 54, 148-153.	1.4	7
23	Variations in the Composition of the Phases Lead to the Differences in the Optoelectronic Properties of MAPbBr3 Thin Films and Crystals. Journal of Physical Chemistry C, 2018, 122, 21817-21823.	1.5	15
24	Perovskite Quantum Dots Embedded in PMMA Matrix for Resistive Switching Device. , 2018, , .		2
25	Phonon Coupling with Excitons and Free Carriers in Formamidinium Lead Bromide Perovskite Nanocrystals. Journal of Physical Chemistry Letters, 2018, 9, 4245-4250.	2.1	56
26	Unravelling the Role of Surface Traps on Carrier Relaxation and Transfer Dynamics in Ultrasmall Semiconductor Nanocrystals. Journal of Physical Chemistry C, 2018, 122, 21677-21685.	1.5	11
27	Ion Migration Heals Trapping Centers in CH₃NH₃PbBr₃ Perovskite. ACS Energy Letters, 2017, 2, 2133-2139.	8.8	51
28	A van der Waals pâ€“n Heterojunction Based on Polymer-2D Layered MoS₂ for Solution Processable Electronics. Journal of Physical Chemistry C, 2017, 121, 21945-21954.	1.5	22
29	Multiple Exciton Harvesting at Zero-Dimensional/Two-Dimensional Heterostructures. ACS Energy Letters, 2017, 2, 1879-1885.	8.8	29
30	Electronâ€“Phonon Interaction in Organic/2D-Transition Metal Dichalcogenide Heterojunctions: A Temperature-Dependent Raman Spectroscopic Study. ACS Omega, 2017, 2, 4333-4340.	1.6	15
31	Exploring an Emissive Charge Transfer Process in Zero-Twist Donorâ€“Acceptor Molecular Design as a Dual-State Emitter. Journal of Physical Chemistry C, 2016, 120, 12723-12733.	1.5	46
32	Ion mediated charge carrier transport in a novel radiation sensitive polyoxometalateâ€“polymer hybrid. RSC Advances, 2016, 6, 44838-44842.	1.7	2
33	Ultrafast multiexponential electron injection dynamics at a dye and ZnO QD interface: a combined spectroscopic and first principles study. Physical Chemistry Chemical Physics, 2016, 18, 29571-29581.	1.3	9
34	Quenching of the Excitonic Emission of ZnO Quantum Dots Due to Auger-Assisted Hole Transfer to CdS Quantum Dots. Journal of Physical Chemistry C, 2016, 120, 27717-27723.	1.5	11
35	Femtosecond insights into direct electron injection in dye anchored ZnO QDs following charge transfer excitation. Physical Chemistry Chemical Physics, 2016, 18, 20672-20681.	1.3	11
36	Exponentially distributed trap-controlled space charge limited conduction in graphene oxide films. Journal Physics D: Applied Physics, 2015, 48, 445501.	1.3	19

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37	Versatile photoluminescence from graphene and its derivatives. Carbon, 2015, 88, 86-112.	5.4	76
38	Ab Initio Assessment of the Structural and Optoelectronic Properties of Organicâ€“ZnO Nanoclusters. Journal of Physical Chemistry A, 2015, 119, 10067-10075.	1.1	12
39	Global analysis of quenching of the time-resolved emission of ZnO nanocrystals by adsorbed rhodamine B on the basis of Tachiya theory. Journal of Photochemistry and Photobiology A: Chemistry, 2015, 296, 35-39.	2.0	4
40	Role of decoupled defect transitions of ZnO nanocrystals in energy transfer. Journal of Photochemistry and Photobiology A: Chemistry, 2014, 278, 46-52.	2.0	10
41	Excited state electron transfer from aminopyrene to graphene: a combined experimental and theoretical study. Physical Chemistry Chemical Physics, 2013, 15, 19932.	1.3	20
42	Interfacing water soluble nanomaterials with fluorescence chemosensing: Graphene quantum dot to detect Hg2+ in 100% aqueous solution. Materials Letters, 2013, 97, 78-80.	1.3	84
43	Geminate Charge Recombination in Polymer/Fullerene Bulk Heterojunction Films and Implications for Solar Cell Function. Journal of the American Chemical Society, 2010, 132, 12440-12451.	6.6	130
44	Calculations of interfacial interactions in pyrene-Ipa rod sensitized nanostructured TiO2. Dalton Transactions, 2009, , 10021.	1.6	23