Sunandan Sarkar

List of Publications by Year
in descending order

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36	1,217	471371	395590
papers	citations	17	33
		h-index	g-index

36	36	36	1817
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Graphitic Nitrogen Doping in Carbon Dots Causes Red-Shifted Absorption. Journal of Physical Chemistry C, 2016, 120, 1303-1308.	1.5	207
2	Energetic and electronic structure of penta-graphene nanoribbons. Carbon, 2016, 100, 118-125.	5.4	97
3	Nature of Absorption Bands in Oxygen-Functionalized Graphitic Carbon Dots. Journal of Physical Chemistry C, 2015, 119, 13369-13373.	1.5	96
4	Doped GNR pâ€“n Junction as High Performance NDR and Rectifying Device. Journal of Physical Chemistry C, 2012, 116, 18064-18069.	1.5	78
5	Theoretical prediction of a new two-dimensional carbon allotrope and NDR behaviour of its one-dimensional derivatives. Physical Chemistry Chemical Physics, 2013, 15, 21001.	1.3	63
6	Theoretical Studies on Understanding the Feasibility of Porphyrin-Sensitized Graphene Quantum Dot Solar Cell. Journal of Physical Chemistry C, 2015, 119, 3400-3407.	1.5	60
7	The electronic and optical properties of MoS_{2(1â^'x)}Se_{2x}and MoS_{2(1â^'x)}Te_{2x}monolayers. Physical Chemistry Chemical Physics, 2015, 17, 26166-26174.	1.3	60
8	Exploring the electronic structure of graphene quantum dots. Journal of Nanoparticle Research, 2012, 14, 1.	0.8	59
9	Tuning the Energy Levels of ZnO/ZnS Core/Shell Nanowires To Design an efficient Nanowire-Based Dye-Sensitized Solar Cell. Journal of Physical Chemistry C, 2013, 117, 15890-15900.	1.5	51
10	Phosphorescence in Bromobenzaldehyde Can Be Enhanced through Intramolecular Heavy Atom Effect. Journal of Physical Chemistry C, 2017, 121, 3771-3777.	1.5	49
11	Self-Consistent-Charge Density-Functional Tight-Binding Parameters for Cdâ€“X (X = S, Se, Te) Compounds and Their Interaction with H, O, C, and N. Journal of Chemical Theory and Computation, 2011, 7, 2262-2276.	2.3	45
12	Electronic structure and band gap engineering of CdTe semiconductor nanowires. Journal of Materials Chemistry, 2012, 22, 10716.	6.7	32
13	Pentaceneâ€“fullerene bulk-heterojunction solar cell: A computational study. Physics Letters, Section A: General, Atomic and Solid State Physics, 2015, 379, 1036-1042.	0.9	32
14	Explicit Spectral Response of the Geometrical Isomers of a Bio-Active Pyrazoline Derivative Encapsulated in Î²-Cyclodextrin Nanocavity: A Photophysical and Quantum Chemical Analysis. Journal of Physical Chemistry A, 2012, 116, 10371-10382.	1.1	30
15	Band gap engineering of grapheneâ€“CdTe quantum dot hybrid nanostructures. Journal of Materials Chemistry C, 2014, 2, 8967-8975.	2.7	30
16	Enhancing charge mobilities in organic semiconductors by selective fluorination: a design approach based on a quantum mechanical perspective. Chemical Science, 2017, 8, 6947-6953.	3.7	20
17	Electronic Structure of Thiol-Capped CdTe Quantum Dots and CdTeQDâ€“Carbon Nanotube Nanocomposites. Journal of Physical Chemistry C, 2012, 116, 21601-21608.	1.5	19
18	Electronic structure and bandgap engineering of CdTe nanotubes and designing the CdTe nanotubeâ€“fullerene hybrid nanostructures for photovoltaic applications. RSC Advances, 2014, 4, 14673.	1.7	18

#	Article	IF	Citations
19	Controlling the Emissive Activity in Heterocyclic Systems Bearing Câ•P Bonds. Journal of Physical Chemistry Letters, 2018, 9, 3567-3572.	2.1	18
20	Understanding the electronic structure of CdSe quantum dot-fullerene (C60) hybrid nanostructure for photovoltaic applications. Journal of Applied Physics, 2014, 116, .	1.1	16
21	Effect of edge states on the transport properties of pentaceneâ€“graphene nanojunctions. Chemical Physics Letters, 2014, 597, 1-5.	1.2	16
22	Probing the spectral response of a new class of bioactive pyrazoline derivative in homogeneous solvents and cyclodextrin nanocavities: a spectroscopic exploration appended by quantum chemical calculations and molecular docking analysis. RSC Advances, 2013, 3, 8071.	1.7	15
23	Energetics and Electronic Structure of Encapsulated Graphene Nanoribbons in Carbon Nanotube. Journal of Physical Chemistry A, 2013, 117, 8568-8575.	1.1	15
24	Ligand mediated tuning of the electronic energy levels of ZnO nanoparticles. RSC Advances, 2013, 3, 532-539.	1.7	14
25	Electronic structure and transport properties of sulfur-passivated graphene nanoribbons. Journal of Applied Physics, 2012, 112, .	1.1	13
26	Doped defective graphene nanoribbons: a new class of materials with novel spin filtering properties. RSC Advances, 2014, 4, 49946-49952.	1.7	13
27	Highly Efficient Inorganicâ€“Organic Heterojunction Solar Cells Based on Polymer and CdX (X = Se, Te) Quantum Dots: An Insight from a Theoretical Study. Journal of Physical Chemistry C, 2020, 124, 11350-11357.	1.5	12
28	Intersystem Crossing in Tetrapyrrolic Macrocycles. A First-Principles Analysis. Journal of Physical Chemistry C, 2021, 125, 13493-13500.	1.5	12
29	Pure carbon-based Schottky diode, an implication of stretched carbon nanowire. Journal of Applied Physics, 2013, 114, .	1.1	6
30	Quantum transport behavior of Ni-based dinuclear complexes in presence of zigzag graphene nanoribbon as electrode. Chemical Physics, 2016, 478, 173-177.	0.9	6
31	Enhancing fluorescence and lowering the optical gap through C P doping of a <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" altimg="si26.svg"><mml:mi>Ï€</mml:mi></mml:math>-conjugated molecular backbone: A computational-based design approach. Journal of Photochemistry and Photobiology, 2021, 8, 100089.	1.1	5
32	Isoelectronically doped CdSe/Te nanoalloys as alternative solar cell materials: insight from computational analysis. RSC Advances, 2016, 6, 86494-86501.	1.7	4
33	Size-dependent electronic structure of semiconductor nanoparticles. Chemical Modelling, 0, , 135-167.	0.2	3
34	Charge transport through nanocontacts. Chemical Modelling, 2019, , 70-130.	0.2	3
35	Exploring the electronic structure of nanohybrid materials for their application in solar cell. Chemical Modelling, 2016, , 27-71.	0.2	0
36	Computational design of a nanoconjugate model of pyrene-linked CdTe quantum dot for the detection of trinitrotoluene. Computational and Theoretical Chemistry, 2022, 1211, 113681.	1.1	0