Tapas K Purkait

List of Publications by Year in descending order

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28	931	18	27
papers	citations	h-index	g-index
30	30	30	1614
all docs	docs citations	times ranked	citing authors

#	Article	IF	CITATIONS
1	Cytotoxicity of surface-functionalized silicon and germanium nanoparticles: the dominant role of surface charges. Nanoscale, 2013, 5, 4870.	5.6	161
2	Borane-Catalyzed Room-Temperature Hydrosilylation of Alkenes/Alkynes on Silicon Nanocrystal Surfaces. Journal of the American Chemical Society, 2014, 136, 17914-17917.	13.7	80
3	Low temperature synthesis of silicon carbide nanomaterials using a solid-state method. Chemical Communications, 2013, 49, 7004.	4.1	70
4	Spherical nitrogen-doped hollow mesoporous carbon as an efficient bifunctional electrocatalyst for Zn–air batteries. Nanoscale, 2015, 7, 20547-20556.	5.6	68
5	From Hydrogen Silsesquioxane to Functionalized Silicon Nanocrystals. Chemistry of Materials, 2017, 29, 80-89.	6.7	60
6	Radical Initiated Hydrosilylation on Silicon Nanocrystal Surfaces: An Evaluation of Functional Group Tolerance and Mechanistic Study. Langmuir, 2015, 31, 10540-10548.	3.5	51
7	One-pot synthesis of functionalized germanium nanocrystals from a single source precursor. Nanoscale, 2015, 7, 2241-2244.	5.6	50
8	Alkoxy-Terminated Si Surfaces: A New Reactive Platform for the Functionalization and Derivatization of Silicon Quantum Dots. Journal of the American Chemical Society, 2016, 138, 7114-7120.	13.7	41
9	Water-soluble photoluminescent $\langle scp \rangle d \langle scp \rangle$ -mannose and $\langle scp \rangle l \langle scp \rangle$ -alanine functionalized silicon nanocrystals and their application to cancer cell imaging. Journal of Materials Chemistry B, 2014, 2, 8427-8433.	5.8	37
10	Direct Evaluation of the Quantum Confinement Effect in Single Isolated Ge Nanocrystals. Journal of Physical Chemistry Letters, 2015, 6, 3396-3402.	4.6	36
11	Phosphorus Pentachloride Initiated Functionalization of Silicon Nanocrystals. Langmuir, 2017, 33, 8766-8773.	3.5	34
12	Synthesis and Properties of Luminescent Silicon Nanocrystal/Silica Aerogel Hybrid Materials. Chemistry of Materials, 2016, 28, 3877-3886.	6.7	31
13	Application of Engineered Si Nanoparticles in Light-Induced Advanced Oxidation Remediation of a Water-Borne Model Contaminant. ACS Nano, 2016, 10, 5405-5412.	14.6	24
14	Instantaneous Functionalization of Chemically Etched Silicon Nanocrystal Surfaces. Angewandte Chemie - International Edition, 2017, 56, 6073-6077.	13.8	24
15	Superhydrophobic Silicon Nanocrystal–Silica Aerogel Hybrid Materials: Synthesis, Properties, and Sensing Application. Langmuir, 2018, 34, 4888-4896.	3.5	23
16	Photoluminescent silicon nanocrystals with chlorosilane surfaces $\hat{a} \in \text{``synthesis'}$ and reactivity. Nanoscale, 2015, 7, 914-918.	5 . 6	22
17	Chloride Surface Terminated Silicon Nanocrystal Mediated Synthesis of Poly(3-hexylthiophene). Journal of the American Chemical Society, 2014, 136, 15130-15133.	13.7	21
18	Lewis Acid Induced Functionalization of Photoluminescent 2D Silicon Nanosheets for the Fabrication of Functional Hybrid Films. Advanced Functional Materials, 2017, 27, 1606764.	14.9	20

#	Article	IF	CITATIONS
19	Low-Energy Electronic Transition in SiB Rings. Organometallics, 2019, 38, 1688-1698.	2.3	19
20	Grafting Poly(3â€hexylthiophene) from Silicon Nanocrystal Surfaces: Synthesis and Properties of a Functional Hybrid Material with Direct Interfacial Contact. Angewandte Chemie - International Edition, 2016, 55, 7393-7397.	13.8	12
21	Cooperative Noncovalent Interactions Induce Ion Pair Separation in Diphenylsilanides. Chemistry - A European Journal, 2017, 23, 15633-15637.	3.3	11
22	Water-soluble PEGylated silicon nanoparticles and their assembly into swellable nanoparticle aggregates. Journal of Nanoparticle Research, 2015, 17, 1.	1.9	9
23	Cellulose nanocrystal-derived hollow mesoporous carbon spheres and their application as a metal-free catalyst. Nanotechnology, 2017, 28, 505606.	2.6	9
24	In situ IR-spectroscopy as a tool for monitoring the radical hydrosilylation process on silicon nanocrystal surfaces. Nanoscale, 2017, 9, 8489-8495.	5.6	7
25	Instantaneous Functionalization of Chemically Etched Silicon Nanocrystal Surfaces. Angewandte Chemie, 2017, 129, 6169-6173.	2.0	6
26	Grafting Poly(3â€hexylthiophene) from Silicon Nanocrystal Surfaces: Synthesis and Properties of a Functional Hybrid Material with Direct Interfacial Contact. Angewandte Chemie, 2016, 128, 7519-7523.	2.0	3
27	Lewis Acid Protection: A Method Toward Synthesizing Phase Transferable Luminescent Silicon Nanocrystals. Physica Status Solidi (A) Applications and Materials Science, 2018, 215, 1700620.	1.8	2
28	A Nanoscale Adventure with Silicon: Synthesis, Surface Chemistry, and other Surprises. Solid State Phenomena, 2015, 242, 383-390.	0.3	0