

Avik Das

List of Publications by Year in descending order

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35
papers

314
citations

933447

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888059

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35
all docs

35
docs citations

35
times ranked

312
citing authors

#	ARTICLE	IF	CITATIONS
1	Unraveling the Formation Mechanism of Dendritic Fibrous Nanosilica. <i>Langmuir</i> , 2017, 33, 13774-13782.	3.5	59
2	A green approach for the preparation of a surfactant embedded sulfonated carbon catalyst towards glycerol acetalization reactions. <i>Catalysis Science and Technology</i> , 2020, 10, 4827-4844.	4.1	37
3	Nano-scale physicochemical attributes and their impact on pore heterogeneity in shale. <i>Fuel</i> , 2022, 314, 123070.	6.4	24
4	Formation of nano-structured core-shell micro-granules by evaporation induced assembly. <i>RSC Advances</i> , 2015, 5, 85052-85060.	3.6	21
5	Spray drying of colloidal dispersions containing ellipsoids. <i>Journal of Colloid and Interface Science</i> , 2019, 551, 242-250.	9.4	20
6	Evaporation-induced structural evolution of the lamellar mesophase: a time-resolved small-angle X-ray scattering study. <i>Journal of Applied Crystallography</i> , 2019, 52, 1169-1175.	4.5	19
7	Origin of the Hierarchical Structure of Dendritic Fibrous Nanosilica: A Small-Angle X-ray Scattering Perspective. <i>Langmuir</i> , 2021, 37, 6423-6434.	3.5	17
8	Crystal Size-Dependent Pore Architecture and Surface Chemical Characteristics of Desolvated ZIF-8 Investigated Using Positron Annihilation Spectroscopy. <i>Journal of Physical Chemistry C</i> , 2020, 124, 25291-25298.	3.1	15
9	Mesoporous electroactive silver doped calcium borosilicates: Structural, antibacterial and myogenic potential relationship of improved bio-ceramics. <i>Ceramics International</i> , 2021, 47, 3586-3596.	4.8	14
10	Tailoring magnetic and dielectric properties of SrFe ₁₂ O ₁₉ /NiFe ₂ O ₄ ferrite nanocomposites synthesized in presence of <i>Calotropis gigantea</i> (crown) flower extract. <i>Journal of Alloys and Compounds</i> , 2022, 900, 163415.	5.5	13
11	Organic-inorganic composite micro-granules by evaporation induced assembly: role of trapped water in structural evolution. <i>RSC Advances</i> , 2015, 5, 22884-22891.	3.6	11
12	<i>E. coli</i> imprinted nano-structured silica micro-granules by spray drying: Optimization of calcination temperature. <i>Colloids and Surfaces B: Biointerfaces</i> , 2015, 127, 164-171.	5.0	11
13	Confinement induced formation of silver nanoparticles in self-assembled micro-granules. <i>Colloids and Surfaces A: Physicochemical and Engineering Aspects</i> , 2019, 577, 185-193.	4.7	6
14	Role of trapped water on electroresponsive characteristic of silica-graphene oxide composite microspheres. <i>Journal of Applied Physics</i> , 2019, 126, .	2.5	6
15	Quantitative evaluation of spinodal decomposition in thermally aged binary Fe-35 at.% Cr alloys by correlative atom probe tomography and small angle neutron scattering analyses. <i>Materialia</i> , 2021, 15, 101014.	2.7	6
16	Micro-structural investigations of spray hydrolyzed TiO ₂ . <i>Journal of Alloys and Compounds</i> , 2014, 584, 101-107.	5.5	5
17	Dynamic modulation of inter-particle correlation during colloidal assembly in a confined medium: revealed by real time SAXS. <i>Physical Chemistry Chemical Physics</i> , 2018, 20, 13271-13278.	2.8	5
18	Unravelling the structural hierarchy in microemulsion droplet templated dendritic fibrous nano silica. <i>Microporous and Mesoporous Materials</i> , 2021, 323, 111234.	4.4	4

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19	Mesoscopic structural investigations using neutrons at Trombay. <i>Neutron News</i> , 2014, 25, 26-30.	0.2	3
20	Jamming of Nano-Ellipsoids in a Microsphere: A Quantitative Analysis of Packing Fraction by Small-Angle Scattering. <i>Langmuir</i> , 2022, 38, 3832-3843.	3.5	3
21	Pattern of an Evaporated Colloidal Droplet on a Porous Membrane Dictated by Competitive Processes of Flow and Absorption. <i>Langmuir</i> , 2022, 38, 7121-7128.	3.5	3
22	An iterative method to extract the size distribution of non-interacting polydisperse spherical particles from small-angle scattering data. <i>Journal of Applied Crystallography</i> , 2014, 47, 712-718.	4.5	2
23	Enhanced blue photoluminescence of cobalt-reduced graphene oxide hybrid material and observation of rare plasmonic response by tailoring morphology. <i>Applied Physics A: Materials Science and Processing</i> , 2021, 127, 1.	2.3	2
24	Interlocking dendritic fibrous nanosilica into microgranules by polyethylenimine assisted assembly: <i>in situ</i> neutron diffraction and CO ₂ capture studies. <i>Materials Advances</i> , 2022, 3, 6506-6517.	5.4	2
25	Nano-structured silica coated mesoporous carbon micro-granules for potential application in water filtration. <i>AIP Conference Proceedings</i> , 2017, , .	0.4	1
26	Dissolution of amorphous SiO ₂ nanoparticles at high alkaline pH: Real time SAXS investigation. <i>AIP Conference Proceedings</i> , 2019, , .	0.4	1
27	Existence of local hexagonal packing of nanoparticles even under rapid random evaporative jamming. <i>AIP Conference Proceedings</i> , 2020, , .	0.4	1
28	Anomalous magnetic behaviour at nano-scale of Mn ²⁺ -substituted magnesio-ferrite synthesized by auto-combustion technique. <i>Indian Journal of Physics</i> , 2022, 96, 2323-2335.	1.8	1
29	Polymer-mediated interaction between nanoparticles during hydration and dehydration: a small-angle X-ray scattering study. <i>Physical Chemistry Chemical Physics</i> , 2021, 23, 14818-14829.	2.8	1
30	Time-resolved SAXS investigation on structural evolution of plant fibrillar-network during dehydration. <i>Surfaces and Interfaces</i> , 2022, 29, 101737.	3.0	1
31	In-situ small angle x-ray scattering investigation on nucleation and growth of silica colloids. <i>AIP Conference Proceedings</i> , 2018, , .	0.4	0
32	Concentration gradient of Bi-colloidal dispersion during drying in fibrous medium. <i>AIP Conference Proceedings</i> , 2019, , .	0.4	0
33	Small-angle x-ray scattering investigation of poly(methyl methacrylate)-alumina nanocomposite. <i>AIP Conference Proceedings</i> , 2019, , .	0.4	0
34	Arrest of growth of Ag nanoparticles in polymer matrix: A small-angle x-ray scattering study. <i>AIP Conference Proceedings</i> , 2020, , .	0.4	0
35	Estimation and fingerprinting of the size distribution of non-interacting spherical particles from small-angle scattering data. <i>Journal of Applied Crystallography</i> , 2021, 54, 1298-1305.	4.5	0