Avik Das

List of Publications by Year
in descending order

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35	314	933447 10	888059 17
papers	citations	h-index	g-index

35	35	35	312
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Anomalous magnetic behaviour at nano-scale of Mn2+-substituted magnesio-ferrite synthesized by auto-combustion technique. Indian Journal of Physics, 2022, 96, 2323-2335.	1.8	1
2	Tailoring magnetic and dielectric properties of SrFe12O19/NiFe2O4 ferrite nanocomposites synthesized in presence of Calotropis gigantea (crown) flower extract. Journal of Alloys and Compounds, 2022, 900, 163415.	5.5	13
3	Nano-scale physicochemical attributes and their impact on pore heterogeneity in shale. Fuel, 2022, 314, 123070.	6.4	24
4	Time-resolved SAXS investigation on structural evolution of plant fibrillar-network during dehydration. Surfaces and Interfaces, 2022, 29, 101737.	3.0	1
5	Jamming of Nano-Ellipsoids in a Microsphere: A Quantitative Analysis of Packing Fraction by Small-Angle Scattering. Langmuir, 2022, 38, 3832-3843.	3.5	3
6	Pattern of an Evaporated Colloidal Droplet on a Porous Membrane Dictated by Competitive Processes of Flow and Absorption. Langmuir, 2022, 38, 7121-7128.	3.5	3
7	Interlocking dendritic fibrous nanosilica into microgranules by polyethylenimine assisted assembly: in situ neutron diffraction and CO₂ capture studies. Materials Advances, 2022, 3, 6506-6517.	5.4	2
8	Mesoporous electroactive silver doped calcium borosilicates: Structural, antibacterial and myogenic potential relationship of improved bio-ceramics. Ceramics International, 2021, 47, 3586-3596.	4.8	14
9	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. Materialia, 2021, 15, 101014.	2.7	6
10	Origin of the Hierarchical Structure of Dendritic Fibrous Nanosilica: A Small-Angle X-ray Scattering Perspective. Langmuir, 2021, 37, 6423-6434.	3.5	17
11	Enhanced blue photoluminescence of cobalt-reduced graphene oxide hybrid material and observation of rare plasmonic response by tailoring morphology. Applied Physics A: Materials Science and Processing, 2021, 127, 1.	2.3	2
12	Estimation and fingerprinting of the size distribution of non-interacting spherical particles from small-angle scattering data. Journal of Applied Crystallography, 2021, 54, 1298-1305.	4.5	0
13	Unravelling the structural hierarchy in microemulsion droplet templated dendritic fibrous nano silica. Microporous and Mesoporous Materials, 2021, 323, 111234.	4.4	4
14	Polymer-mediated interaction between nanoparticles during hydration and dehydration: a small-angle X-ray scattering study. Physical Chemistry Chemical Physics, 2021, 23, 14818-14829.	2.8	1
15	Existence of local hexagonal packing of nanoparticles even under rapid random evaporative jamming. AIP Conference Proceedings, 2020, , .	0.4	1
16	Arrest of growth of Ag nanoparticles in polymer matrix: A small-angle x-ray scattering study. AIP Conference Proceedings, 2020, , .	0.4	0
17	Crystal Size-Dependent Pore Architecture and Surface Chemical Characteristics of Desolvated ZIF-8 Investigated Using Positron Annihilation Spectroscopy. Journal of Physical Chemistry C, 2020, 124, 25291-25298.	3.1	15
18	A green approach for the preparation of a surfactant embedded sulfonated carbon catalyst towards glycerol acetalization reactions. Catalysis Science and Technology, 2020, 10, 4827-4844.	4.1	37

#	Article	IF	Citations
19	Evaporation-induced structural evolution of the lamellar mesophase: a time-resolved small-angle X-ray scattering study. Journal of Applied Crystallography, 2019, 52, 1169-1175.	4.5	19
20	Dissolution of amorphous SiO2 nanoparticles at high alkaline pH: Real time SAXS investigation. AIP Conference Proceedings, 2019, , .	0.4	1
21	Concentration gradient of Bi-colloidal dispersion during drying in fibrous medium. AIP Conference Proceedings, 2019, , .	0.4	0
22	Small-angle x-ray scattering investigation of poly(methyl methacrylate)-alumina nanocomposite. AIP Conference Proceedings, 2019, , .	0.4	0
23	Confinement induced formation of silver nanoparticles in self-assembled micro-granules. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 2019, 577, 185-193.	4.7	6
24	Spray drying of colloidal dispersions containing ellipsoids. Journal of Colloid and Interface Science, 2019, 551, 242-250.	9.4	20
25	Role of trapped water on electroresponsive characteristic of silica-graphene oxide composite microspheres. Journal of Applied Physics, 2019, 126, .	2.5	6
26	Dynamic modulation of inter-particle correlation during colloidal assembly in a confined medium: revealed by real time SAXS. Physical Chemistry Chemical Physics, 2018, 20, 13271-13278.	2.8	5
27	In-situ small angle x-ray scattering investigation on nucleation and growth of silica colloids. AIP Conference Proceedings, 2018, , .	0.4	0
28	Nano-structured silica coated mesoporous carbon micro-granules for potential application in water filtration. AIP Conference Proceedings, 2017, , .	0.4	1
29	Unraveling the Formation Mechanism of Dendritic Fibrous Nanosilica. Langmuir, 2017, 33, 13774-13782.	3.5	59
30	Organicâ€“inorganic composite micro-granules by evaporation induced assembly: role of trapped water in structural evolution. RSC Advances, 2015, 5, 22884-22891.	3.6	11
31	E. coli imprinted nano-structured silica micro-granules by spray drying: Optimization of calcination temperature. Colloids and Surfaces B: Biointerfaces, 2015, 127, 164-171.	5.0	11
32	Formation of nano-structured coreâ€“shell micro-granules by evaporation induced assembly. RSC Advances, 2015, 5, 85052-85060.	3.6	21
33	Mesoscopic structural investigations using neutrons at Trombay. Neutron News, 2014, 25, 26-30.	0.2	3
34	Micro-structural investigations of spray hydrolyzed TiO2. Journal of Alloys and Compounds, 2014, 584, 101-107.	5.5	5
35	An iterative method to extract the size distribution of non-interacting polydisperse spherical particles from small-angle scattering data. Journal of Applied Crystallography, 2014, 47, 712-718.	4.5	2