Debasis Sen

List of Publications by Year
in descending order

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235 papers	3,621 citations	136950 32 h-index	223800 46 g-index
237 all docs	237 docs citations	237 times ranked	3578 citing authors

#	Article	IF	Citations
1	Cobalt nanoparticles for biomedical applications: Facile synthesis, physiochemical characterization, cytotoxicity behavior and biocompatibility. Applied Surface Science, 2017, 414, 171-187.	6.1	128
2	Evaporation Driven Self-Assembly of a Colloidal Dispersion during Spray Drying: Volume Fraction Dependent Morphological Transition. Langmuir, 2009, 25, 6690-6695.	3.5	123
3	Performance and calibration of the newly installed medium resolution double crystal based small-angle neutron scattering instrument at trombay. Journal of Neutron Research, 2001, 9, 39-57.	1.1	87
4	Effect of heat treatment on pore structure in nano-crystalline NiO: A small angle neutron scattering study. Journal of Solid State Chemistry, 2008, 181, 1227-1235.	2.9	75
5	Particle Size, Morphology, and Chemical Composition Controlled CoFe₂O₄ Nanoparticles with Tunable Magnetic Properties via Oleic Acid Based Solvothermal Synthesis for Application in Electronic Devices. ACS Applied Nano Materials, 2019, 2, 1828-1843.	5.0	73
6	Origin of Buckling Phenomenon during Drying of Micrometer-Sized Colloidal Droplets. Langmuir, 2011, 27, 8404-8414.	3.5	72
7	Slow Drying of a Spray of Nanoparticles Dispersion. In Situ SAXS Investigation. Langmuir, 2007, 23, 4296-4302.	3.5	71
8	Interpreting Pore Dimensions in Gas Shales Using a Combination of SEM Imaging, Small-Angle Neutron Scattering, and Low-Pressure Gas Adsorption. Energy & Fuels, 2019, 33, 4835-4848.	5.1	67
9	Barium, calcium and magnesium doped mesoporous ceria supported gold nanoparticle for benzyl alcoholoxidation using molecular O₂. Catalysis Science and Technology, 2013, 3, 360-370.	4.1	61
10	Unraveling the Formation Mechanism of Dendritic Fibrous Nanosilica. Langmuir, 2017, 33, 13774-13782.	3.5	59
11	Formation and characterization of highly crosslinked anion-exchange membranes. Journal of Membrane Science, 2003, 217, 117-130.	8.2	57
12	Nanocomposite silicasurfactant microcapsules by evaporation induced self assembly: tuning the morphological buckling by modifying viscosity and surface charge. Soft Matter, 2012, 8, 1955-1963.	2.7	57
13	Control of Buckling in Colloidal Droplets during Evaporation-Induced Assembly of Nanoparticles. Langmuir, 2012, 28, 1914-1923.	3.5	54
14	Eco-Friendly Synthesis, Crystal Chemistry, and Magnetic Properties of Manganese-Substituted CoFe₂O₄ Nanoparticles. ACS Omega, 2020, 5, 19315-19330.	3.5	54
15	Structural variations in lignite coal: a small angle X-ray scattering investigation. Solid State Communications, 2000, 114, 329-333.	1.9	53
16	Redox Decomposition of Silver Citrate Complex in Nanoscale Confinement: An Unusual Mechanism of Formation and Growth of Silver Nanoparticles. Langmuir, 2014, 30, 2460-2469.	3.5	50
17	A novel approach to identify accessible and inaccessible pores in gas shales using combined low-pressure sorption and SAXS/SANS analysis. International Journal of Coal Geology, 2020, 228, 103556.	5.0	49
18	Formation of hollow spherical and doughnut microcapsules by evaporation induced self-assembly of nanoparticles: effects of particle size and polydispersity. Soft Matter, 2012, 8, 10036.	2.7	48

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19	Evidence of clustering in an aqueous electrolyte solution: a small-angle X-ray scattering study. Chemical Physics Letters, 1999, 304, 180-186.	2.6	46
20	Size and Chemistry Controlled Cobalt-Ferrite Nanoparticles and Their Anti-proliferative Effect against the MCF-7 Breast Cancer Cells. ACS Biomaterials Science and Engineering, 2016, 2, 2139-2152.	5.2	46
21	Arrest of morphological transformation during evaporation-induced self-assembly of mixed colloids in micrometric droplets by charge tuning. Soft Matter, 2011, 7, 5423.	2.7	45
22	Structure at Interphase of Poly(vinyl alcohol)â€“SiC Nanofiber Composite and Its Impact on Mechanical Properties: Positron Annihilation and Small-Angle X-ray Scattering Studies. Macromolecules, 2015, 48, 5706-5713.	4.8	45
23	Temperature Mediated Morphological Transition during Drying of Spray Colloidal Droplets. Langmuir, 2016, 32, 2464-2473.	3.5	41
24	One-Step Fabrication of Thermally Stable TiO₂/SiO₂ Nanocomposite Microspheres by Evaporation-Induced Self-Assembly. Langmuir, 2012, 28, 11343-11353.	3.5	38
25	Title is missing!. Journal of Materials Science, 2002, 37, 941-947.	3.7	37
26	Evaporation-induced self assembly of nanoparticles in non-buckling regime: Volume fraction dependent packing. Journal of Colloid and Interface Science, 2010, 351, 357-364.	9.4	37
27	Probing evaporation induced assembly across a drying colloidal droplet using in situ small-angle X-ray scattering at the synchrotron source. Soft Matter, 2014, 10, 1621.	2.7	37
28	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
29	Buckling-driven morphological transformation of droplets of a mixed colloidal suspension during evaporation-induced self-assembly by spray drying. European Physical Journal E, 2010, 31, 393-402.	1.6	36
30	Highly active Ga promoted Co-HMS-X catalyst towards styrene epoxidation reaction using molecular O2. Applied Catalysis A: General, 2014, 482, 61-68.	4.3	36
31	Use of small-angle neutron scattering to investigate modifications of internal structure in self-assembled grains of nanoparticles synthesized by spray drying. Journal of Colloid and Interface Science, 2010, 347, 25-30.	9.4	35
32	Study of pore structure in grafted polymer membranes using slow positron beam and small-angle X-ray scattering techniques. Nuclear Instruments & Methods in Physics Research B, 2007, 254, 278-282.	1.4	34
33	Temperature Effects on the Composition and Microstructure of Spray-Dried Nanocomposite Powders. Langmuir, 2006, 22, 3798-3806.	3.5	32
34	Mesoporous Alumina (MA) Based Double Column Approach for Development of a Clinical Scale ⁹⁹Mo/^{99m}Tc Generator Using (n,Î³)⁹⁹Mo: An Enticing Application of Nanomaterial. Industrial & Engineering Chemistry Research, 2013, 52, 11673-11684.	3.7	31
35	Use of a Modified SIRD Model to Analyze COVID-19 Data. Industrial & Engineering Chemistry Research, 2021, 60, 4251-4260.	3.7	31
36	Dynamical Scaling of the Structure Factor of Some Non-Euclidean Systems. Physical Review Letters, 2004, 93, 255704.	7.8	30

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37	Pore morphology in sintered ZrO2â€“8 mol% Y2O3 ceramic: a small-angle neutron scattering investigation. Journal of Alloys and Compounds, 2002, 340, 236-241.	5.5	28
38	Niobium doped hexagonal mesoporous silica (HMS-X) catalyst for vapor phase Beckmann rearrangement reaction. RSC Advances, 2014, 4, 845-854.	3.6	28
39	Mesoporous TUD-1 supported indium oxide nanoparticles for epoxidation of styrene using molecular O₂. RSC Advances, 2015, 5, 46850-46860.	3.6	28
40	Field emission properties of nano-structured cobalt ferrite (CoFe2O4) synthesized by low-temperature chemical method. Chemical Physics Letters, 2018, 701, 151-156.	2.6	28
41	Characterizing Microvoids in Regenerated Cellulose Fibers Obtained from Viscose and Lyocell Processes. Macromolecules, 2019, 52, 3987-3994.	4.8	28
42	Pore growth during initial and intermediate stages of sintering in ZrO2â€“3 mol% Y2O3 compact: a small-angle neutron scattering investigation. Journal of Alloys and Compounds, 2003, 361, 270-275.	5.5	26
43	Controlled surface/interface structure and spin enabled superior properties and biocompatibility of cobalt ferrite nanoparticles. Applied Surface Science, 2018, 459, 788-801.	6.1	26
44	Title is missing!. Journal of Nanoparticle Research, 2002, 4, 91-97.	1.9	25
45	Colloidal Nanoparticle Interaction Transition during Solvent Evaporation Investigated by in-Situ Small-Angle X-ray Scattering. Langmuir, 2015, 31, 4612-4618.	3.5	24
46	Nano-scale physicochemical attributes and their impact on pore heterogeneity in shale. Fuel, 2022, 314, 123070.	6.4	24
47	Phase-separation kinetics of a multicomponent alloy. Physical Review B, 1999, 60, 822-830.	3.2	23
48	Effect of sintering temperature on pore growth in ZrO2â€“8 mol% Y2O3 ceramic compact prepared by citric acid gel route: a small-angle neutron scattering investigation. Journal of Alloys and Compounds, 2004, 364, 304-310.	5.5	22
49	Properties and morphology studies of proton exchange membranes based on cross-linked sulfonated poly (ether ether ketone) for electrochemical application: Effect of cross-linker chain length. Solid State Ionics, 2018, 316, 75-84.	2.7	22
50	Fabrication of highly ordered nanoporous alumina membranes: Probing microstructures by SAXS, FESEM and AFM. Microporous and Mesoporous Materials, 2018, 264, 13-21.	4.4	22
51	Evaluating the mechanism of nucleation and growth of silver nanoparticles in a polymer membrane under continuous precursor supply: tuning of multiple to single nucleation pathway. Physical Chemistry Chemical Physics, 2019, 21, 4193-4199.	2.8	22
52	Manifestation of the statistical nature of a medium in multiple small-angle scattering. Journal of Physics Condensed Matter, 2001, 13, 5089-5102.	1.8	21
53	Small angle neutron scattering investigation and the low frequency dielectric response of sintered ZrO2â€“8 mol% Y2O3ceramic compacts: the effect of pore characteristics. Journal of Physics Condensed Matter, 2004, 16, 6229-6242.	1.8	21
54	Aerobic Baeyerâ€“Villiger oxidation of cyclic ketones over periodic mesoporous silica Cu/Fe/Ni/Co-HMS-X. Applied Catalysis A: General, 2015, 505, 515-523.	4.3	21

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55	Formation of nano-structured coreâ€“shell micro-granules by evaporation induced assembly. RSC Advances, 2015, 5, 85052-85060.	3.6	21
56	Silver nanoparticles stabilized in porous polymer support: A highly active catalytic nanoreactor. Applied Catalysis A: General, 2016, 524, 214-222.	4.3	21
57	Temporal evolution of coherent precipitates in an aluminum alloy W319: A correlative anisotropic small angle X-ray scattering, transmission electron microscopy and atom-probe tomography study. Acta Materialia, 2016, 116, 219-230.	7.9	21
58	Solution quenched structure of wrought PH 13â€“8 Mo stainless steel. Scripta Materialia, 2004, 51, 349-353.	5.2	20
59	Influence of doping on crystal growth, structure and optical properties of nanocrystalline CaTiO₃: a case study using small-angle neutron scattering. Journal of Applied Crystallography, 2015, 48, 836-843.	4.5	20
60	Bismuth supported SBA-15 catalyst for vapour phase Beckmann rearrangement reaction of cyclohexanone oxime to Ɛ-caprolactam. Applied Catalysis A: General, 2015, 497, 51-57.	4.3	20
61	Highly stable In-SBA-15 catalyst for vapor phase Beckmann rearrangement reaction. Microporous and Mesoporous Materials, 2016, 234, 293-302.	4.4	20
62	Spray drying of colloidal dispersions containing ellipsoids. Journal of Colloid and Interface Science, 2019, 551, 242-250.	9.4	20
63	Small-angle x-ray scattering of porous silicon at two different wavelengths. Journal of Physics Condensed Matter, 1998, 10, 9969-9974.	1.8	19
64	Evaporation induced self assembled microstructures of silica nanoparticles and Streptococcus lactis cells as sorbent for uranium (VI). Journal of Colloid and Interface Science, 2014, 414, 33-40.	9.4	19
65	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
66	Polysulfoneâ€“Ceria Mixed-Matrix Membrane with Enhanced Radiation Resistance Behavior. ACS Applied Polymer Materials, 2019, 1, 1854-1865.	4.4	19
67	Probing the effect of a room temperature ionic liquid on phospholipid membranes in multilamellar vesicles. European Biophysics Journal, 2019, 48, 119-129.	2.2	19
68	Role of free volumes and segmental dynamics on ion conductivity of PEO/LiTFSI solid polymer electrolytes filled with SiO₂ nanoparticles: a positron annihilation and broadband dielectric spectroscopy study. Physical Chemistry Chemical Physics, 2021, 23, 8585-8597.	2.8	19
69	SANS study of fractal microstructure and pore morphology in porous titania. Journal of Alloys and Compounds, 2005, 397, 300-305.	5.5	18
70	Spray drying as a novel technique for obtaining microbial imprinted microspheres and its application in filtration. Soft Matter, 2013, 9, 805-810.	2.7	18
71	Influence of aging on phase transformation and microstructure of Ni 50.3 Ti 29.7 Hf 20 high temperature shape memory alloy. Journal of Alloys and Compounds, 2014, 615, 469-474.	5.5	18
72	Solid state synthesis of mesoporous alumina: A viable strategy for preparation of an advanced nanosorbent for 99Mo/99mTc generator technology. Microporous and Mesoporous Materials, 2019, 287, 271-279.	4.4	17

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73	Origin of the Hierarchical Structure of Dendritic Fibrous Nanosilica: A Small-Angle X-ray Scattering Perspective. Langmuir, 2021, 37, 6423-6434.	3.5	17
74	Non-Debye to Debye transition of ac dielectric response in YCrO₃nanoceramic under sintering: effect of pore structure. Journal of Physics Condensed Matter, 2008, 20, 345201.	1.8	16
75	Temporal evolution of characteristic length and fractal dimension for a non-Euclidean system. Physical Review B, 2009, 79, .	3.2	16
76	Optimization of Parameters by Taguchi Method for Controlling Purity of Carbon Nanotubes in Chemical Vapour Deposition Technique. Journal of Nanoscience and Nanotechnology, 2010, 10, 4030-4037.	0.9	16
77	Solvent evaporation driven entrapment of magnetic nanoparticles in mesoporous frame for designing a highly efficient MRI contrast probe. Applied Surface Science, 2019, 464, 567-576.	6.1	16
78	Investigation on precipitation in Zircaloy-2 fuel cladding tube. Journal of Alloys and Compounds, 2000, 308, 250-258.	5.5	15
79	Pore morphology in pressurized lignite coal: A small angle x-ray scattering investigation. Journal of Materials Science, 2001, 36, 909-912.	3.7	15
80	Anomalous agglomeration characteristics observed in iron oxide nanoclusters. Philosophical Magazine Letters, 2006, 86, 491-499.	1.2	15
81	A comparative study of conventionally sintered, microwave sintered and hot isostatic press sintered NZP and CZP structures interacted with fluoride. Ceramics International, 2013, 39, 9351-9359.	4.8	15
82	Novel polysulfoneâ€“spray-dried silica composite membrane for water purification: Preparation, characterization and performance evaluation. Separation and Purification Technology, 2014, 123, 79-86.	7.9	15
83	Time resolved growth of membrane stabilized silver NPs and their catalytic activity. RSC Advances, 2014, 4, 59379-59386.	3.6	15
84	Effect of Hf solute addition on the phase transformation behavior and hardness of a Ni-rich NiTi alloy. Materials Chemistry and Physics, 2020, 247, 122890.	4.0	15
85	Temporal evolution of mesoscopic structure and dynamical scaling of the structure factor of some non-Euclidean systems. Physical Review B, 2005, 72, .	3.2	14
86	Correlative SANS and TEM investigation on precipitation kinetics of H-phase in Ni50.3Ti29.7Hf20 high temperature shape memory alloy. Journal of Alloys and Compounds, 2019, 779, 630-642.	5.5	14
87	Preparation and application of silica nanoparticles-Ocimum basilicum seeds bio-hybrid for the efficient immobilization of invertase enzyme. Colloids and Surfaces B: Biointerfaces, 2020, 188, 110796.	5.0	14
88	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
89	Precipitation and growth study of intermetallics and their effect on oxidation behavior in Zrâ€“Snâ€“Feâ€“Cr alloy. Journal of Nuclear Materials, 2012, 430, 205-215.	2.7	13
90	Reassembling nanometric magnetic subunits into secondary nanostructures with controlled interparticle spacing. RSC Advances, 2015, 5, 694-705.	3.6	13

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91	Effect of excess lithium on sintering behaviour of lithium-titanate pebbles: Modifications of microstructure and pore morphology. Fusion Engineering and Design, 2016, 112, 520-526.	1.9	13
92	Porous microcapsules comprised inter-locked nano-particles by evaporation-induced assembly: Evaluation of dye sorption. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 2017, 520, 279-288.	4.7	13
93	Structure and short time degradation studies of sodium zirconium phosphate ceramics loaded with simulated fast breeder (FBR) waste. Journal of Nuclear Materials, 2017, 487, 5-12.	2.7	13
94	Microenvironment of mesopores of MCM-41 supported CuO catalyst: An investigation using positronium probe. Journal of Solid State Chemistry, 2019, 274, 10-17.	2.9	13
95	First-principles calculations of the electronic structure and magnetism of nanostructured <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mrow><mml:mi>Co</mml:mi><mml:msub><mml:mi>Fe</mml:mi><mml:mrow><mml:mn mathvariant="normal">O</mml:mi><mml:mn>4</mml:mn></mml:msub></mml:mrow></mml:math> microgranules and nanoparticles. Physical Review B, 2020, 102, .	3.2	13
96	Effects of calcination on microscopic and mesoscopic structures in Ca- and Sr-doped nano-crystalline lanthanum chromites. Journal of Solid State Chemistry, 2011, 184, 204-213.	2.9	12
97	Understanding Nitric Acid-Induced Changes in the Arrangement of Monomeric and Polymeric Methacryloyl Diglycolamides on Their Affinity toward f-Element Ions. Journal of Physical Chemistry B, 2015, 119, 212-218.	2.6	12
98	Phytosynthesis of Silver Nanoparticles Using Walnut (Juglans regia) Bark with Characterization of the Antibacterial Activity against Streptococcus mutans. Analytical Letters, 2017, 50, 690-711.	1.8	12
99	Porous nano-structured micro-granules from silica-milk bi-colloidal suspension: Synthesis and characterization. Colloids and Surfaces B: Biointerfaces, 2017, 154, 421-428.	5.0	12
100	Palladium Nanoparticles Hosted in Poly(ethylenimine) and Poly(ethylene glycol methacrylate) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50 387 Reaction. ACS Applied Nano Materials, 2018, 1, 3259-3268.	5.0	12
101	Influence of molecular interactions on structure, controlled release and cytotoxicity of curcumin encapsulated chitosan - Silica nanostructured microspheres. Colloids and Surfaces B: Biointerfaces, 2021, 208, 112067.	5.0	12
102	Smoothening of the non-Euclidean surface of Nd2O3doped CeO2nanoceramic grains under sintering: an ultra-small angle x-ray scattering investigation and a computer simulation study. Journal of Physics Condensed Matter, 2008, 20, 035103.	1.8	11
103	Temporal evolution of mesoscopic structure of some non-Euclidean systems using a Monte Carlo model. Physical Review B, 2011, 83, .	3.2	11
104	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
105	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
106	Controllable synthesis of niobium doped mesoporous silica materials with various morphologies and its activity for oxidative catalysis. Microporous and Mesoporous Materials, 2016, 226, 169-178.	4.4	11
107	Revisiting Temporal Evolution of Cu-Rich Precipitates in Feâ€“Cu Alloy: Correlative Small Angle Neutron Scattering and Atom-Probe Tomography Studies. Microscopy and Microanalysis, 2019, 25, 840-848.	0.4	11
108	Magnetic ordering of the martensite phase in Niâ€“Coâ€“Mnâ€“Sn-based ferromagnetic shape memory alloys. Journal of Physics Condensed Matter, 2020, 32, 115801.	1.8	11

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109	Dynamic spin freezing and magnetic memory effect in ensembles of interacting anisotropic magnetic nanoparticles. Physical Review B, 2020, 102, .	3.2	11
110	Nafion membrane incorporated with silver nanoparticles as optical test strip for dissolved hydrogen peroxide: Preparation, deployment and the mechanism of action. Sensors and Actuators B: Chemical, 2018, 255, 605-615.	7.8	10
111	Palladium Impregnated Amine Coâ€condensed Hexagonal Mesoporous Silica: A Novel Catalyst in Tailoring Suzuki and Heck Coupling Reactions in Base Free Condition. ChemistrySelect, 2019, 4, 3823-3832.	1.5	10
112	Fractal behavior of nanocrystalline ceriaâ€“yttria solid solution. Journal of Solid State Chemistry, 2003, 176, 57-61.	2.9	9
113	Structural characterization of manganese-substituted nanocrystalline zinc oxide using small-angle neutron scattering and high-resolution transmission electron microscopy. Journal of Applied Crystallography, 2009, 42, 1085-1091.	4.5	9
114	Design and Performance of a Laboratory Spray Dryer to Realize Evaporation-Induced Self-Assembly of Nanoparticles. Drying Technology, 2012, 30, 679-686.	3.1	9
115	Effects of pressure and temperature on pore structure of ceramic synthesized from rice husk: A small angle neutron scattering investigation. Journal of Alloys and Compounds, 2013, 564, 125-129.	5.5	9
116	Local Conditions Influencing In Situ Formation of Different Shaped Silver Nanostructures and Subsequent Reorganizations in Ionomer Membrane. Journal of Physical Chemistry C, 2013, 117, 12026-12037.	3.1	9
117	Hydrotrope induced structural modifications in CTAB/butanol/water/isooctane reverse micellar systems. Physical Chemistry Chemical Physics, 2017, 19, 22033-22048.	2.8	9
118	Non-suitability of high-energy (MeV) irradiation for property enhancement of structurally stable poly (ethylene oxide) polyvinylidene fluoride blend bromide composite electrolyte membrane. Ionics, 2019, 25, 2159-2170.	2.4	9
119	Enhancement in Î²-galactosidase activity of Streptococcus lactis cells by entrapping in microcapsules comprising of correlated silica nanoparticles. Colloids and Surfaces B: Biointerfaces, 2020, 195, 111245.	5.0	9
120	Nanodiamonds as a state-of-the-art material for enhancing the gamma radiation resistance properties of polymeric membranes. Nanoscale Advances, 2020, 2, 1214-1227.	4.6	9
121	Small-Angle X-Ray Scattering Study of Porous Polysulfone and Poly(Vinyl Pyrrolidone)/Polysulfone Blend Membranes. Journal of Macromolecular Science - Physics, 2000, 39, 235-243.	1.0	8
122	Anomalous toluene transport in model segmented polyurethaneâ€“urea/clay nanocomposites. Soft Matter, 2018, 14, 3870-3881.	2.7	8
123	Fractal morphology in porous membranes: A small-angle X-Ray scattering investigation. Journal of Macromolecular Science - Physics, 1999, 38, 341-348.	1.0	7
124	Some key issues pertaining to analysis of small-angle scattering data affected by multiple scattering. Journal of Applied Crystallography, 2003, 36, 840-844.	4.5	7
125	Characterization of porous materials by small-angle scattering. Pramana - Journal of Physics, 2004, 63, 165-173.	1.8	7
126	Small angle X-ray scattering study on the pore characteristics of U-substituted MCM-48 metallosilicates. Microporous and Mesoporous Materials, 2006, 89, 132-137.	4.4	7

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127	Single scattering profile from small-angle scattering data affected by multiple scattering: use of a basis function set. European Physical Journal B, 2009, 71, 75-84.	1.5	7
128	Nonlinearity and isotope effect in temporal evolution of mesoscopic structure during hydration of cement. Physical Review B, 2010, 82, .	3.2	7
129	Decoration of Carbon Nanotubes with Metal Nanoparticles by Wet Chemical Method: A Small-Angle Neutron Scattering Study. Journal of Nanoscience and Nanotechnology, 2010, 10, 2963-2971.	0.9	7
130	Influence of annealing on structure and optical properties of Mn-substituted ZnO nanoparticles. Journal of Applied Crystallography, 2011, 44, 991-998.	4.5	7
131	Exclusion from Hexagonal Mesophase Surfactant Domains Drives End-to-End Enchainment of Rod-Like Particles. Journal of Physical Chemistry B, 2013, 117, 12661-12668.	2.6	7
132	Small-angle neutron scattering as a probe to decide the maximum limit of chemical waste immobilization in a cement matrix. Journal of Applied Crystallography, 2014, 47, 421-429.	4.5	7
133	Critical fluctuation in daily incidence of acute myocardial infarction. Chaos, Solitons and Fractals, 2000, 11, 1175-1182.	5.1	6
134	Morphology of carbide precipitates in solution quenched PH13-8 Mo stainless steel: A small-angle neutron scattering investigation. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2005, 397, 370-375.	5.6	6
135	Small-angle neutron scattering investigation on pore growth in nickel-aluminide during SHS: Effect of heat removal. Journal of Alloys and Compounds, 2005, 403, 288-295.	5.5	6
136	Small-angle neutron scattering investigations on fractal aggregation and sintering behavior of La1â^'xCaxCrO3 synthesized by a combustion process. Materials Science and Engineering B: Solid-State Materials for Advanced Technology, 2006, 127, 180-185.	3.5	6
137	Evolution of a fractal system with conserved order parameter under thermal annealing. Journal of Physics Condensed Matter, 2010, 22, 195107.	1.8	6
138	Fatty acid as structure directing agent for controlled secondary growth of CoFe2O4 nanoparticles to achieve mesoscale assemblies: A facile approach for developing hierarchical structures. Applied Surface Science, 2016, 379, 530-539.	6.1	6
139	Spray-dried encapsulated starch and subsequent synthesis of carbon-silica core-shell micro-granules. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 2017, 529, 696-704.	4.7	6
140	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
141	Role of trapped water on electroresponsive characteristic of silica-graphene oxide composite microspheres. Journal of Applied Physics, 2019, 126, .	2.5	6
142	Revisiting galvanic replacement between silver nanoparticles and mercury(II) ions in a cellulose membrane intended for optical assay application: Some new insights into silver-mercury interaction. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 2020, 602, 125140.	4.7	6
143	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
144	SANS investigation on pore surface roughening in rocks. Applied Physics A: Materials Science and Processing, 2002, 74, s1049-s1051.	2.3	5

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145	Identification of mass fractal in chemically synthesized ZnS quantum dots. Journal of Materials Science, 2002, 37, 4545-4553.	3.7	5
146	Micro-structural investigations of spray hydrolyzed TiO2. Journal of Alloys and Compounds, 2014, 584, 101-107.	5.5	5
147	Modifications of microstructure and pore morphology in lithium-orthosilicate pebbles, due to the addition of excess lithium. Fusion Engineering and Design, 2016, 112, 613-620.	1.9	5
148	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
149	Hydrotrope-Driven Self-Assembly in CTAB/n-Hexanol/Water/Heptane Reverse Micellar System. Langmuir, 2019, 35, 6683-6692.	3.5	5
150	Structural characterization of spray-dried microgranules by spin-echo small-angle neutron scattering. Powder Technology, 2021, 378, 680-684.	4.2	5
151	Ultra-high strength steel made from AISI 304L using a novel thermo-mechanical processing technique. Acta Materialia, 2021, 221, 117379.	7.9	5
152	Effect of porosity and pore morphology on the low-frequency dielectric response in sintered ZrO2â€”8 mol% Y2O3 ceramic compact. Pramana - Journal of Physics, 2004, 63, 309-314.	1.8	4
153	Dynamical scaling and isotope effect in temporal evolution of mesoscopic structure during hydration of cement. Physical Review B, 2011, 84, .	3.2	4
154	Formation of bamboo-shaped carbon nanotubes on carbon black in a fluidized bed. Journal of Nanoparticle Research, 2012, 14, 1.	1.9	4
155	Biopolymer assisted synthesis of silica-carbon composite by spray drying. Colloids and Surfaces B: Biointerfaces, 2018, 165, 182-190.	5.0	4
156	Experimental evaluation of orientation and temperature dependent material stress-strain curves of Zr2.5%Nb Indian pressure tube material and development of a suitable anisotropic material model. Journal of Nuclear Materials, 2020, 530, 151970.	2.7	4
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