Dhriti Nepal

List of Publications by Year
in descending order

55 papers	3,418 citations	159585 30 h-index	161849 54 g-index
55 all docs	55 docs citations	55 times ranked	5382 citing authors

#	Article	IF	Citations
1	Using surface grafted poly(acrylamide) to simultaneously enhance the tensile strength, tensile modulus, and interfacial adhesion of carbon fibres in epoxy composites. Carbon, 2022, 186, 367-379.	10.3	24
2	Carbon Fiber Surface Functional Landscapes: Nanoscale Topography and Property Distribution. ACS Applied Materials & Interfaces, 2022, 14, 4699-4713.	8.0	10
3	Modeling Approach to Capture Hyperelasticity and Temporary Bonds in Soft Polymer Networks. Macromolecules, 2022, 55, 3573-3587.	4.8	5
4	Creep Mechanics of Epoxy Vitrimer Materials. ACS Applied Polymer Materials, 2022, 4, 4254-4263.	4.4	21
5	Gas cluster etching for the universal preparation of polymer composites for nano chemical and mechanical analysis with AFM. Applied Surface Science, 2022, 599, 153954.	6.1	1
6	Multichannel hollow carbon fibers: Processing, structure, and properties. Carbon, 2021, 174, 730-740.	10.3	14
7	Halogen Etch of Ti₃AlC₂ MAX Phase for MXene Fabrication. ACS Nano, 2021, 15, 2771-2777.	14.6	154
8	Transesterification in Vitrimer Polymers Using Bifunctional Catalysts: Modeled with Solution-Phase Experimental Rates and Theoretical Analysis of Efficiency and Mechanisms. Journal of Physical Chemistry B, 2021, 125, 2411-2424.	2.6	30
9	Vitrimer Transition Temperature Identification: Coupling Various Thermomechanical Methodologies. ACS Applied Polymer Materials, 2021, 3, 1756-1766.	4.4	47
10	Surface Functionalization of Ti₃C₂T<i>_x</i> MXene Nanosheets with Catechols: Implication for Colloidal Processing. Langmuir, 2021, 37, 5447-5456.	3.5	17
11	Ab initio molecular dynamics modeling of single polyethylene chains: Scission kinetics and influence of radical under mechanical strain. Journal of Chemical Physics, 2021, 155, 024102.	3.0	3
12	Switchable Photonic Bioâ€Adhesive Materials. Advanced Materials, 2021, 33, e2103674.	21.0	33
13	Toward Architected Nanocomposites: MXenes and Beyond. ACS Nano, 2021, 15, 21-28.	14.6	28
14	Monolithic Chiral Nematic Organization of Cellulose Nanocrystals under Capillary Confinement. ACS Nano, 2021, 15, 19418-19429.	14.6	23
15	Hierarchical Assembly of Gold Nanoparticles on Graphene Nanoplatelets by Spontaneous Reduction: Implications for Smart Composites and Biosensing. ACS Applied Nano Materials, 2020, 3, 8753-8762.	5.0	13
16	Chiral Cellulose Nanocrystals with Intercalated Amorphous Polysaccharides for Controlled Iridescence and Enhanced Mechanics. Advanced Functional Materials, 2020, 30, 2003597.	14.9	73
17	Effective response of heterogeneous materials using the recursive projection method. Computer Methods in Applied Mechanics and Engineering, 2020, 364, 112946.	6.6	4
18	Co-assembling Polysaccharide Nanocrystals and Nanofibers for Robust Chiral Iridescent Films. ACS Applied Materials & Interfaces, 2020, 12, 35345-35353.	8.0	17

#	Article	IF	Citations
19	Self-Assembly of Emissive Nanocellulose/Quantum Dot Nanostructures for Chiral Fluorescent Materials. ACS Nano, 2019, 13, 9074-9081.	14.6	115
20	Electron-Withdrawing Effect of Native Terminal Groups on the Lattice Structure of Ti₃C₂T_{<i>x</i>} MXenes Studied by Resonance Raman Scattering: Implications for Embedding MXenes in Electronic Composites. ACS Applied Nano Materials, 2019, 2, 6087-6091.	5.0	55
21	Conductive Polyamideâ€“Graphene Composite Fabric via Interface Engineering. Langmuir, 2019, 35, 2261-2269.	3.5	18
22	Molecular engineering of interphases in polymer/carbon nanotube composites to reach the limits of mechanical performance. Composites Science and Technology, 2018, 166, 86-94.	7.8	59
23	Cellulose nanocrystals with different morphologies and chiral properties. Polymer, 2018, 145, 334-347.	3.8	66
24	Analyticalâ€Based Methodologies for Examining the In Vitro Absorption, Distribution, Metabolism, and Elimination (ADME) of Silver Nanoparticles. Small, 2017, 13, 1603093.	10.0	8
25	A Review of In Situ Mechanical Characterization of Polymer Nanocomposites: Prospect and Challenges. Applied Mechanics Reviews, 2017, 69, .	10.1	16
26	The use of carbon nanotube yarn as a filter medium to treat nitroaromatic-contaminated water. New Carbon Materials, 2016, 31, 415-423.	6.1	14
27	Rheology of lyotropic cholesteric liquid crystal forming single-wall carbon nanotube dispersions stabilized by double-stranded DNA. Rheologica Acta, 2016, 55, 717-725.	2.4	8
28	Mechanism for Liquid Phase Exfoliation of MoS₂. Chemistry of Materials, 2016, 28, 337-348.	6.7	340
29	Engineering the Optical Properties of Gold Nanorods: Independent Tuning of Surface Plasmon Energy, Extinction Coefficient, and Scattering Cross Section. Journal of Physical Chemistry C, 2014, 118, 5918-5926.	3.1	80
30	Silver deposited titanium dioxide thin film for photocatalysis of organic compounds using natural light. Solar Energy, 2013, 88, 242-249.	6.1	41
31	Plasmon-Induced Transparency in the Visible Region via Self-Assembled Gold Nanorod Heterodimers. Nano Letters, 2013, 13, 6287-6291.	9.1	101
32	Large Scale Solution Assembly of Quantum Dotâ€“Gold Nanorod Architectures with Plasmon Enhanced Fluorescence. ACS Nano, 2013, 7, 9064-9074.	14.6	91
33	Growth Mechanism of Gold Nanorods. Chemistry of Materials, 2013, 25, 555-563.	6.7	186
34	Surface Assembly and Plasmonic Properties in Strongly Coupled Segmented Gold Nanorods. Small, 2013, 9, 2979-2990.	10.0	31
35	Plasmonic Resonances in Self-Assembled Reduced Symmetry Gold Nanorod Structures. Nano Letters, 2013, 13, 2220-2225.	9.1	41
36	Orientation Sensing with Color Using Plasmonic Gold Nanorods and Assemblies. Journal of Physical Chemistry Letters, 2012, 3, 2568-2574.	4.6	30

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37	Control over Position, Orientation, and Spacing of Arrays of Gold Nanorods Using Chemically Nanopatterned Surfaces and Tailored Particleâ€"Particleâ€"Surface Interactions. ACS Nano, 2012, 6, 5693-5701.	14.6	126
38	Chemistry of Carbon Nanotubes for Everyone. Journal of Chemical Education, 2012, 89, 221-229.	2.3	35
39	Highâ€Yield Assembly of Soluble and Stable Gold Nanorod Pairs for Highâ€Temperature Plasmonics. Small, 2012, 8, 1013-1020.	10.0	56
40	Gold Nanorods: High-Yield Assembly of Soluble and Stable Gold Nanorod Pairs for High-Temperature Plasmonics (Small 7/2012). Small, 2012, 8, 1012-1012.	10.0	1
41	Computational Prediction of Molecular Photoresponse upon Proximity to Gold Nanorods. Journal of Physical Chemistry C, 2011, 115, 13961-13967.	3.1	13
42	Cholesteric and Nematic Liquid Crystalline Phase Behavior of Double-Stranded DNA Stabilized Single-Walled Carbon Nanotube Dispersions. ACS Nano, 2011, 5, 1450-1458.	14.6	57
43	Lysozyme Coated DNA and DNA/SWNT Fibers by Solution Spinning. Macromolecular Bioscience, 2011, 11, 875-881.	4.1	9
44	Enhanced stability of enzyme organophosphate hydrolase interfaced on the carbon nanotubes. Colloids and Surfaces B: Biointerfaces, 2010, 77, 69-74.	5.0	127
45	Lyotropic Liquid Crystalline Self-Assembly in Dispersions of Silver Nanowires and Nanoparticles. Langmuir, 2010, 26, 11176-11183.	3.5	39
46	Strong Antimicrobial Coatings: Single-Walled Carbon Nanotubes Armored with Biopolymers. Nano Letters, 2008, 8, 1896-1901.	9.1	189
47	Poly(azomethine) Rotaxanes: Novel Water Soluble Supramolecular Polymers with High Molar Mass. Macromolecular Rapid Communications, 2007, 28, 2074-2079.	3.9	7
48	Proteins and Carbon Nanotubes: Close Encounter in Water. Small, 2007, 3, 1259-1265.	10.0	175
49	Transport of surface-modified iron nanoparticle in porous media and application to arsenic(III) remediation. Journal of Nanoparticle Research, 2007, 9, 725-735.	1.9	226
50	pH-Sensitive Dispersion and Debundling of Single-Walled Carbon Nanotubes: Lysozyme as a Tool. Small, 2006, 2, 406-412.	10.0	203
51	Radiation hardness of the electrical properties of carbon nanotube network field effect transistors under high-energy proton irradiation. Nanotechnology, 2006, 17, 5675-5680.	2.6	54
52	Individualization of Single-Walled Carbon Nanotubes: Is the Solvent Important?. Small, 2005, 1, 1117-1124.	10.0	103
53	Supramolecular Conjugates of Carbon Nanotubes and DNA by a Solid-State Reaction. Biomacromolecules, 2005, 6, 2919-2922.	5.4	62
54	Hollow porous carbon nanospheres with large surface area and stability, assembled from oxidized fullerenes. Journal of Materials Chemistry, 2005, 15, 1049.	6.7	31

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55	The First Fullerene-Terminated Soluble Poly(azomethine) Rotaxane. Macromolecules, 2003, 36, 3800-3802.	4.8	88