Arindam Banerjee

List of Publications by Year
in descending order

100	5,555	71102	82547
papers	citations	41 h-index	72 g-index

101	101	101	5902
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Tunning of Optoelectronic Properties in Nanohybrids of Peptide-Appended Perylenebisimides and Carbon Nanodots. Journal of Physical Chemistry C, 2022, 126, 5906-5915.	3.1	5
2	Yellow-Emitting Carbon Dots for Selective Fluorescence Imaging of Lipid Droplets in Living Cells. Langmuir, 2022, 38, 8829-8836.	3.5	8
3	Tuning of the optoelectronic properties of peptide-appended core-substituted naphthalenediimides: the role of self-assembly of two positional isomers. Soft Matter, 2021, 17, 7168-7176.	2.7	9
4	Development of Polythiopheneâ€“Tripeptide Covalent Conjugates Showing Excellent Structure-Dependent Photophysical and Photocurrent Properties. Journal of Physical Chemistry C, 2021, 125, 17518-17529.	3.1	8
5	Solvent-Directed Transformation of the Self-assembly and Optical Property of a Peptide-Appended Core-Substituted Naphthelenediimide and Selective Detection of Nitrite Ions in an Aqueous Medium. Langmuir, 2021, 37, 9577-9587.	3.5	8
6	Aggregation-Induced Modulation of the Optoelectronic Properties of Carbon Dots and Removal of Cd²⁺ Ions with Sustainable Use in Photocurrent Generation. ACS Sustainable Chemistry and Engineering, 2021, 9, 12912-12921.	6.7	15
7	Stimuli responsive multicolour fluorescence emission in carbon nanodots and application in metal free hydrogen evolution from water. Nanoscale Advances, 2021, 3, 611-617.	4.6	9
8	Carbon dot mediated trihybrid formation by reduction of GO and in situ gold nanocluster fabrication: photo-switching behaviour and degradation of chemical warfare agent stimulants. Journal of Materials Chemistry C, 2020, 8, 15735-15741.	5.5	12
9	Peptide-Based Gel in Environmental Remediation: Removal of Toxic Organic Dyes and Hazardous Pb²⁺ and Cd²⁺ Ions from Wastewater and Oil Spill Recovery. Langmuir, 2020, 36, 12942-12953.	3.5	56
10	The aging effect on the enhancement of thermal stability, mechanical stiffness and fluorescence properties of histidine-appended naphthalenediimide based two-component hydrogels. Soft Matter, 2020, 16, 10106-10114.	2.7	15
11	Modulation of the optoelectronic properties of a donorâ€“acceptor conjugate between a cationic polythiophene and a peptide appended perylene bisimide ampiphile. Journal of Materials Chemistry C, 2020, 8, 3748-3757.	5.5	18
12	Introduction to peptide soft materials. Soft Matter, 2020, 16, 9998-10000.	2.7	2
13	Modulation of Semiconducting Behavior and a Change in Morphology upon Gelation of a Peptide Appended Naphthalenediimide. Journal of Physical Chemistry C, 2019, 123, 20558-20566.	3.1	14
14	A Selfâ€Assembled Peptideâ€Appended Naphthalene Diimide: A Fluorescent Switch for Sensing Acid and Base Vapors. ChemPlusChem, 2019, 84, 1673-1680.	2.8	14
15	Self-Assembling Peptide-Based Hydrogel: Regulation of Mechanical Stiffness and Thermal Stability and 3D Cell Culture of Fibroblasts. ACS Applied Bio Materials, 2019, 2, 5235-5244.	4.6	43
16	Assembly of amino acid containing naphthalene diimide-based molecules: the role of intervening amide groups in self-assembly, gelation, optical and semiconducting properties. Soft Matter, 2019, 15, 3018-3026.	2.7	19
17	Red-Emitting Copper Nanoclusters: From Bulk-Scale Synthesis to Catalytic Reduction. ACS Sustainable Chemistry and Engineering, 2019, 7, 1998-2007.	6.7	46
18	Luminescent Naphthalene Diimide-Based Peptide in Aqueous Medium and in Solid State: Rewritable Fluorescent Color Code. ACS Omega, 2018, 3, 2174-2182.	3.5	25

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19	Carbon nanodot-induced gelation of a histidine-based amphiphile: application as a fluorescent ink, and modulation of gel stiffness. Chemical Communications, 2018, 54, 4341-4344.	4.1	23
20	Amino-Acid-Based Metallo-Hydrogel That Acts Like an Esterase. ACS Applied Bio Materials, 2018, 1, 1717-1724.	4.6	35
21	Peptideâ€Based Hydrogels as a Scaffold for In Situ Synthesis of Metal Nanoparticles: Catalytic Activity of the Nanohybrid System. ChemNanoMat, 2018, 4, 882-887.	2.8	27
22	TiO₂ Nanoparticles Incorporated Peptide Appended Perylene Bisimide-Based Nanohybrid System: Enhancement of Photo-Switching Behavior. Journal of Physical Chemistry C, 2017, 121, 5428-5435.	3.1	17
23	Size specific emission in peptide capped gold quantum clusters with tunable photoswitching behavior. Nanoscale, 2017, 9, 4419-4429.	5.6	32
24	A tripeptide-based self-shrinking hydrogel for waste-water treatment: removal of toxic organic dyes and lead (Pb²⁺) ions. Chemical Communications, 2017, 53, 5910-5913.	4.1	85
25	Amino acid-based amphiphilic hydrogels: metal ion induced tuning of mechanical and thermal stability. RSC Advances, 2017, 7, 14461-14465.	3.6	30
26	Blue Emitting Gold Cluster formation from Gold Nanorods: Selective and Sensitive Detection of Iron(III) ions in Aqueous Medium. ACS Sustainable Chemistry and Engineering, 2017, 5, 1628-1637.	6.7	24
27	Amphiphilic Peptide-Based Supramolecular, Noncytotoxic, Stimuli-Responsive Hydrogels with Antibacterial Activity. Biomacromolecules, 2017, 18, 3621-3629.	5.4	127
28	Different Color Emissive Copper Nanoclusters for Cancer Cell Imaging. ChemNanoMat, 2017, 3, 808-814.	2.8	19
29	Peptide-based ambidextrous bifunctional gelator: applications in oil spill recovery and removal of toxic organic dyes for waste water management. Interface Focus, 2017, 7, 20160128.	3.0	36
30	A dipeptideâ€based superhydrogel: Removal of toxic dyes and heavy metal ions from waste water. Biopolymers, 2017, 108, e22915.	2.4	36
31	Two-Component Fluorescent-Semiconducting Hydrogel from Naphthalene Diimide-Appended Peptide with Long-Chain Amines: Variation in Thermal and Mechanical Strengths of Gels. Langmuir, 2016, 32, 13226-13233.	3.5	42
32	A Peptide-Based Mechano-sensitive, Proteolytically Stable Hydrogel with Remarkable Antibacterial Properties. Langmuir, 2016, 32, 1836-1845.	3.5	99
33	Peptide based hydrogels for cancer drug release: modulation of stiffness, drug release and proteolytic stability of hydrogels by incorporating <scp>d</scp>-amino acid residue(s). Chemical Communications, 2016, 52, 5045-5048.	4.1	106
34	Sunlight induced unique morphological transformation in graphene based nanohybrids: appearance of a new tetra-nanohybrid and tuning of functional property of these nanohybrids. Soft Matter, 2015, 11, 4226-4234.	2.7	17
35	Time-dependent gel to gel transformation of a peptide based supramolecular gelator. Soft Matter, 2015, 11, 4944-4951.	2.7	57
36	Fluorescence from an H-aggregated naphthalenediimide based peptide: photophysical and computational investigation of this rare phenomenon. Physical Chemistry Chemical Physics, 2015, 17, 30398-30403.	2.8	40

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37	Tailor-made design of J- or H-aggregated naphthalenediimide-based gels and remarkable fluorescence turn on/off behaviour depending on solvents. Chemical Communications, 2015, 51, 780-783.	4.1	58
38	Carbon nanodots, Ru nanodots and hybrid nanodots: preparation and catalytic properties. Journal of Materials Chemistry A, 2015, 3, 15074-15081.	10.3	31
39	Preparation of multi-coloured different sized fluorescent gold clusters from blue to NIR, structural analysis of the blue emitting Au₇cluster, and cell-imaging by the NIR gold cluster. Nanoscale, 2015, 7, 1912-1920.	5.6	51
40	Chargeâ€Transfer Complex Formation in Gelation: The Role of Solvent Molecules with Different Electronâ€Donating Capacities. Chemistry - A European Journal, 2014, 20, 5721-5726.	3.3	44
41	Peptide stabilized Ag@Au Coreâ€shell Nanoparticles: Synthesis, Variation of Shell Thickness, and Catalysis. Zeitschrift Fur Anorganische Und Allgemeine Chemie, 2014, 640, 1205-1211.	1.2	7
42	Selective binding of hydrogen chloride and its trapping through supramolecular gelation. Chemical Communications, 2014, 50, 6917.	4.1	19
43	A fluorescent gold-cluster containing a new three-component system for white light emission through a cascade of energy transfer. Journal of Materials Chemistry C, 2014, 2, 6574.	5.5	22
44	A bolaamphiphilic amino acid appended photo-switching supramolecular gel and tuning of photo-switching behaviour. Physical Chemistry Chemical Physics, 2014, 16, 6041.	2.8	24
45	Multi-stimuli responsive self-healing metallo-hydrogels: tuning of the gel recovery property. Chemical Communications, 2014, 50, 2356-2359.	4.1	176
46	Assembly of an Injectable Noncytotoxic Peptide-Based Hydrogelator for Sustained Release of Drugs. Langmuir, 2014, 30, 929-936.	3.5	143
47	Tuning of Silver Cluster Emission from Blue to Red Using a Bio-Active Peptide in Water. ACS Applied Materials & Interfaces, 2014, 6, 4050-4056.	8.0	46
48	Modulation of Fluorescence Resonance Energy Transfer Efficiency for White Light Emission from a Series of Stilbene-Perylene Based Donorâ€“Acceptor Pair. Journal of Physical Chemistry C, 2013, 117, 23178-23189.	3.1	46
49	Single amino acid based thixotropic hydrogel formation and pH-dependent morphological change of gel nanofibers. Soft Matter, 2013, 9, 4198.	2.7	142
50	A Gelâ€Based Trihybrid System Containing Nanofibers, Nanosheets, and Nanoparticles: Modulation of the Rheological Property and Catalysis. Angewandte Chemie - International Edition, 2013, 52, 5041-5045.	13.8	129
51	Assembly of naphthalenediimide conjugated peptides: aggregation induced changes in fluorescence. Chemical Communications, 2013, 49, 6891.	4.1	59
52	Functionalized single walled carbon nanotube containing amino acid based hydrogel: a hybrid nanomaterial. RSC Advances, 2012, 2, 2105.	3.6	41
53	A new hydrogel from an amino acid-based perylene bisimide and its semiconducting, photo-switching behaviour. RSC Advances, 2012, 2, 11053.	3.6	53
54	Formation of Hybrid Hydrogels Consisting of Tripeptide and Different Silver Nanoparticle-Capped Ligands: Modulation of the Mechanical Strength of Gel Phase Materials. Journal of Physical Chemistry B, 2012, 116, 12235-12244.	2.6	50

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55	Graphene Oxide-Based Hydrogels to Make Metal Nanoparticle-Containing Reduced Graphene Oxide-Based Functional Hybrid Hydrogels. ACS Applied Materials & Interfaces, 2012, 4, 5472-5482.	8.0	171
56	The as-prepared gold cluster-based fluorescent sensor for the selective detection of AsIII ions in aqueous solution. Nanoscale, 2012, 4, 2734.	5.6	113
57	A new aromatic amino acid based organogel for oil spill recovery. Journal of Materials Chemistry, 2012, 22, 11658.	6.7	218
58	Amino acid based smart hydrogel: formation, characterization and fluorescence properties of silver nanoclusters within the hydrogel matrix. Soft Matter, 2011, 7, 5300.	2.7	165
59	Self-assembling dipeptide-based nontoxic vesicles as carriers for drugs and other biologically important molecules. Organic and Biomolecular Chemistry, 2011, 9, 6610.	2.8	42
60	Multicomponent hydrogels from enantiomeric amino acid derivatives: helical nanofibers, handedness and self-sorting. Soft Matter, 2011, 7, 8913.	2.7	133
61	Short peptide based hydrogels: incorporation of graphene into the hydrogel. Soft Matter, 2011, 7, 9259.	2.7	151
62	Template-directed nucleation and growth of CdS nanocrystal: the role of helical and nonhelical nanofibers on their shape and size. Journal of Nanoparticle Research, 2010, 12, 713-718.	1.9	2
63	Shortâ€Peptideâ€Based Hydrogel: A Template for the In Situ Synthesis of Fluorescent Silver Nanoclusters by Using Sunlight. Chemistry - A European Journal, 2010, 16, 13698-13705.	3.3	171
64	Facile Synthesis of Water-Soluble Fluorescent Silver Nanoclusters and Hg^{II} Sensing. Chemistry of Materials, 2010, 22, 4364-4371.	6.7	352
65	Fabrication of Luminescent CdS Nanoparticles on Shortâ€Peptideâ€Based Hydrogel Nanofibers: Tuning of Optoelectronic Properties. Chemistry - A European Journal, 2009, 15, 6902-6909.	3.3	92
66	Macroporous Materials from Selfâ€Assembling Synthetic Cyclic Peptideâ€Based Compounds and Deposition of Dipeptideâ€Capped Gold Nanoparticles on the Surfaces. Macromolecular Chemistry and Physics, 2009, 210, 1422-1432.	2.2	5
67	Concentration Dependent Transformation of Oligopeptide based Nanovesicles to Nanotubes and an Application of Nanovesicles. Chemistry - an Asian Journal, 2009, 4, 1817-1823.	3.3	36
68	Tetrapeptide-Based Hydrogels: for Encapsulation and Slow Release of an Anticancer Drug at Physiological pH. Journal of Physical Chemistry B, 2009, 113, 11787-11792.	2.6	163
69	Synthesis of multiple shaped gold nanoparticles using wet chemical method by different dendritic peptides at room temperature. Journal of Materials Chemistry, 2009, 19, 3457.	6.7	52
70	Solvent-induced dynamic single-crystal-to-single-crystal transformation of a synthetic peptide-based cyclic compound. CrystEngComm, 2009, 11, 756.	2.6	13
71	Self-assembling tripeptide based hydrogels and their use in removal of dyes from waste-water. Soft Matter, 2009, 5, 3452.	2.7	240
72	Size tuning of Au nanoparticles formed by electron beam irradiation of Au25 quantum clusters anchored within and outside of dipeptide nanotubes. Journal of Materials Chemistry, 2009, 19, 8456.	6.7	55

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73	Water soluble synthetic dieptide-based biodegradable nanoporous materials. Green Chemistry, 2009, 11, 1139.	9.0	15
74	Organogelators from self-assembling peptide based dendrimers: structural and morphological features. Tetrahedron, 2008, 64, 175-185.	1.9	26
75	Pentapeptide based organogels: the role of adjacently located phenylalanine residues in gel formation. Soft Matter, 2008, 4, 1430.	2.7	65
76	pH-Responsive, Bolaamphiphile-Based Smart Metallo-Hydrogels as Potential Dye-Adsorbing Agents, Water Purifier, and Vitamin B12 Carrier. Chemistry of Materials, 2007, 19, 1633-1639.	6.7	219
77	pH-Sensitive Nanostructural Transformation of a Synthetic Self-Assembling Water-Soluble Tripeptide: Nanotube to Nanovesicle. Chemistry of Materials, 2007, 19, 6150-6157.	6.7	40
78	The role of protecting groups in the formation of organogels through a nano-fibrillar network formed by self-assembling terminally protected tripeptides. Tetrahedron, 2007, 63, 7432-7442.	1.9	43
79	Intrinsic Amyloidogenic Behavior of Terminally Protected Alzheimerâ€™s AÎ²17â€“21 Peptide: Self-Aggregation and Amyloid-Like Fibril Formation. International Journal of Peptide Research and Therapeutics, 2007, 13, 439-446.	1.9	14
80	Smart oligopeptide gels: in situ formation and stabilization of gold and silver nanoparticles within supramolecular organogel networks. Chemical Communications, 2006, , 2816.	4.1	148
81	Î±-Aminoisobutyric acid modified protected analogues of Î²-amyloid residue 17â€“20: a change from sheet to helix. Tetrahedron, 2006, 62, 6370-6378.	1.9	27
82	l-Ala Modified Analogues of Amyloid Î²-Peptide Residue 17-20: Self-Association and Amyloid-like Fibril Formation. International Journal of Peptide Research and Therapeutics, 2006, 12, 341-348.	1.9	23
83	Supramolecular Î²-Sheet and Nanofibril Formation by Self-assembling Tripeptides Containing an N-terminally Located Î³-Aminobutyric acid Residue. Supramolecular Chemistry, 2006, 18, 455-464.	1.2	11
84	Low Molecular Weight Organogelators from Self-assembling Synthetic Tripeptides With Coded Amino Acids: Morphological, Structural, Thermodynamic and Spectroscopic Investigations. Supramolecular Chemistry, 2006, 18, 645-655.	1.2	18
85	Self-Assembling Synthetic Oligopeptide-Based Gelators. Macromolecular Symposia, 2006, 241, 14-22.	0.7	6
86	Stepwise Self-assembly of a Tripeptide from Molecular Dimers to Supramolecular Î²-sheets in Crystals and Amyloid-like Fibrils in the Solid State. Supramolecular Chemistry, 2004, 16, 331-335.	1.2	13
87	A synthetic tripeptide as organogelator: elucidation of gelation mechanismElectronic supplementary information (ESI) available: the 500 MHz 1-D 1H NMR spectrum, the 500 MHz 1Hâ€“1H DQF COSY spectrum of the tripeptide in CDCl3 and the MALDI-MS spectrum of the tripeptide. See http://www.rsc.org/suppdata/p2/b1/b111598g/. Perkin Transactions II RSC, 2002, , 1177-1186.	1.1	41
88	First crystallographic signature of amyloid-like fibril forming Î²-sheet assemblage from a tripeptide with non-coded amino acids. Chemical Communications, 2001, , 1946-1947.	4.1	49
89	A unique example of a pseudo-peptide containing noncoded amino acids self-assembling into a supramolecular Î²-sheet-like structure in crystals. International Journal of Peptide Research and Therapeutics, 2001, 8, 61-67.	0.1	0
90	Title is missing!. International Journal of Peptide Research and Therapeutics, 2000, 7, 353-358.	0.1	5

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91	5-Membered NHâ€¦N hydrogen bonded molecular scaffold in a model dipeptide containing 3-aminophenylacetic acid: Crystal and solution conformations. International Journal of Peptide Research and Therapeutics, 2000, 7, 353-358.	0.1	0
92	Solid state and solution conformations of a helical peptide with a central gly-gly segment. , 1998, 38, 515-526.		26
93	Ambidextrous molecules: Cylindrical peptide structures formed by fusing left- and right-handed helices. , 1998, 39, 279-285.		21
94	Peptide design. Helixâ€“helix motifs in synthetic sequences. Journal of the Chemical Society Perkin Transactions II, 1997, , 2087-2094.	0.9	21
95	Conformational variability of Gly-Gly segments in peptides: A comparison of the crystal structures of an acyclic pentapeptide and an octapeptide. Biopolymers, 1997, 41, 331-336.	2.4	6
96	Heterogeneity and Stability of Helical Conformations in Peptides:Â Crystallographic and NMR Studies of a Model Heptapeptide. Journal of the American Chemical Society, 1996, 118, 9477-9483.	13.7	41
97	Omega amino acids in peptide design: incorporation into helices. Biopolymers, 1996, 39, 769-777.	2.4	40
98	Solid state and solution conformations of a helical peptide with a central glyâ€gly segment. Biopolymers, 1996, 38, 515-526.	2.4	17
99	Omega amino acids in peptide design: incorporation into helices. Biopolymers, 1996, 39, 769-777.	2.4	13
100	Copper Nanoclusters for Catalytic Carbonâ€“Carbon and Carbonâ€“Nitrogen Bond Formations. ACS Applied Nano Materials, 0, , .	5.0	3