Samir K Maji

List of Publications by Year
in descending order

126 papers	7,795 citations	81900 39 h-index	54911 84 g-index
139 all docs	139 docs citations	139 times ranked	8330 citing authors

#	Article	IF	Citations
1	Liquid-liquid Phase Separation of Î±-Synuclein: A New Mechanistic Insight for Î±-Synuclein Aggregation Associated with Parkinson's Disease Pathogenesis. Journal of Molecular Biology, 2023, 435, 167713.	4.2	44
2	Intermediates of Î±-synuclein aggregation: Implications in Parkinson's disease pathogenesis. Biophysical Chemistry, 2022, 281, 106736.	2.8	22
3	An efficient chemodosimeter for the detection of Hg(<scp>ii</scp>) <i>via</i> diselenide oxidation. Dalton Transactions, 2022, 51, 2269-2277.	3.3	5
4	Breakage dependent amyloid growth kinetics: a computational study. Biophysical Journal, 2022, 121, 351a.	0.5	0
5	Probing the role of non-specific interactions in promoting functional protein-protein complexes. Biophysical Journal, 2022, 121, 526a.	0.5	0
6	Co-aggregation and secondary nucleation in the life cycle of human prolactin/galanin functional amyloids. ELife, 2022, 11, .	6.0	9
7	Role of non-specific interactions in the phase-separation and maturation of macromolecules. PLoS Computational Biology, 2022, 18, e1010067.	3.2	2
8	Direct Demonstration of Seed Size-Dependent Î±-Synuclein Amyloid Amplification. Journal of Physical Chemistry Letters, 2022, 13, 6427-6438.	4.6	6
9	Oncogenic gain of function due to p53 amyloids occurs through aberrant alteration of cell cycle and proliferation. Journal of Cell Science, 2022, 135, .	2.0	11
10	Benzimidazoleâ€based fluorophores for the detection of amyloid fibrils with higher sensitivity than Thioflavinâ€T. Journal of Neurochemistry, 2021, 156, 1003-1019.	3.9	7
11	A generic approach to decipher the mechanistic pathway of heterogeneous protein aggregation kinetics. Chemical Science, 2021, 12, 13530-13545.	7.4	2
12	Organoselenium-based BOPHY as a sensor for detection of hypochlorous acid in mammalian cells. Analytica Chimica Acta, 2021, 1150, 338205.	5.4	17
13	Direct evidence of cellular transformation by prion-like p53 amyloid infection. Journal of Cell Science, 2021, 134, .	2.0	15
14	Modulating Î±-Synuclein Liquidâ€"Liquid Phase Separation. Biochemistry, 2021, 60, 3676-3696.	2.5	67
15	Structural and Functional Insights into Î±-Synuclein Fibril Polymorphism. Biomolecules, 2021, 11, 1419.	4.0	39
16	Investigation of Structural Heterogeneity in Individual Amyloid Fibrils Using Polarization-Resolved Microscopy. Journal of Physical Chemistry B, 2021, 125, 13406-13414.	2.6	3
17	Prion-like p53 Amyloids in Cancer. Biochemistry, 2020, 59, 146-155.	2.5	42
18	Bioactive growth hormone in humans: Controversies, complexities and concepts. Growth Hormone and IGF Research, 2020, 50, 9-22.	1.1	10

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19	Computational Model for Studying Breakage-Dependent Amyloid Growth. ACS Chemical Neuroscience, 2020, 11, 3615-3622.	3.5	3
20	The three-dimensional structure of human Î²-endorphin amyloid fibrils. Nature Structural and Molecular Biology, 2020, 27, 1178-1184.	8.2	46
21	Machine-Free Polymerase Chain Reaction with Triangular Gold and Silver Nanoparticles. Journal of Physical Chemistry Letters, 2020, 11, 10489-10496.	4.6	11
22	Predictable phase-separated proteins. Nature Chemistry, 2020, 12, 787-789.	13.6	15
23	Effect of Disease-Associated P123H and V70M Mutations on Î²-Synuclein Fibrillation. ACS Chemical Neuroscience, 2020, 11, 2836-2848.	3.5	11
24	Fabrication of Silver Nanowire/Polydimethylsiloxane Dry Electrodes by a Vacuum Filtration Method for Electrophysiological Signal Monitoring. ACS Omega, 2020, 5, 10260-10265.	3.5	43
25	Cyclic Organoselenide BODIPY-Based Probe: Targeting Superoxide in MCF-7 Cancer Cells. ACS Omega, 2020, 5, 14186-14193.	3.5	16
26	Î±-Synuclein aggregation nucleates through liquidâ€"liquid phase separation. Nature Chemistry, 2020, 12, 705-716.	13.6	440
27	Biophysical characterization of p53 core domain aggregates. Biochemical Journal, 2020, 477, 111-120.	3.7	17
28	Amyloid Fibrils with Positive Charge Enhance Retroviral Transduction in Mammalian Cells. ACS Biomaterials Science and Engineering, 2019, 5, 126-138.	5.2	10
29	Analysis of drugâ€"protein interaction in bio-inspired microwells. SN Applied Sciences, 2019, 1, 1.	2.9	7
30	Î±â€Synuclein Spontaneously Adopts Stable and Reversible Î±â€Helical Structure in Waterâ€Less Environment. ChemPhysChem, 2019, 20, 2783-2790.	2.1	4
31	Fabrication of an amyloid fibril-palladium nanocomposite: a sustainable catalyst for Câ€"H activation and the electrooxidation of ethanol. Journal of Materials Chemistry A, 2019, 7, 4486-4493.	10.3	28
32	Î±-Synuclein misfolding and aggregation: Implications in Parkinsonâ€™s disease pathogenesis. Biochimica Et Biophysica Acta - Proteins and Proteomics, 2019, 1867, 890-908.	2.3	241
33	Lipopolysaccharide from Gut Microbiota Modulates Î±-Synuclein Aggregation and Alters Its Biological Function. ACS Chemical Neuroscience, 2019, 10, 2229-2236.	3.5	73
34	Phenylselenyl containing turn-on dibodipy probe for selective detection of superoxide in mammalian breast cancer cell line. Sensors and Actuators B: Chemical, 2019, 281, 8-13.	7.8	25
35	Protein Nanofibrils as Storage Forms of Peptide Drugs and Hormones. Advances in Experimental Medicine and Biology, 2019, 1174, 265-290.	1.6	18
36	Cytotoxic Oligomers and Fibrils Trapped in a Gelâ€like State of Î±â€Synuclein Assemblies. Angewandte Chemie - International Edition, 2018, 57, 5262-5266.	13.8	31

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37	Complexation of NAC-Derived Peptide Ligands with the C-Terminus of Î±-Synuclein Accelerates Its Aggregation. Biochemistry, 2018, 57, 791-804.	2.5	11
38	Amyloid Fibrils: Versatile Biomaterials for Cell Adhesion and Tissue Engineering Applications. Biomacromolecules, 2018, 19, 1826-1839.	5.4	99
39	Multitude NMR studies of Î±-synuclein familial mutants: probing their differential aggregation propensities. Chemical Communications, 2018, 54, 3605-3608.	4.1	33
40	Cytotoxic Oligomers and Fibrils Trapped in a Gelâ€like State of Î±â€Synuclein Assemblies. Angewandte Chemie, 2018, 130, 5360-5364.	2.0	2
41	Detection and differentiation of Î±-Synuclein monomer and fibril by chitosan film coated nanogold array on optical sensor platform. Sensors and Actuators B: Chemical, 2018, 255, 692-700.	7.8	37
42	Amyloids Are Novel Cell-Adhesive Matrices. Advances in Experimental Medicine and Biology, 2018, 1112, 79-97.	1.6	6
43	Comparison of Kinetics, Toxicity, Oligomer Formation, and Membrane Binding Capacity of Î±-Synuclein Familial Mutations at the A53 Site, Including the Newly Discovered A53V Mutation. Biochemistry, 2018, 57, 5183-5187.	2.5	36
44	Cell Alignment on Grapheneâ€“Amyloid Composites. Advanced Materials Interfaces, 2018, 5, 1800621.	3.7	10
45	Glycosaminoglycans have variable effects on Î±-synuclein aggregation and differentially affect the activities of the resulting amyloid fibrils. Journal of Biological Chemistry, 2018, 293, 12975-12991.	3.4	54
46	The Familial Î±-Synuclein A53E Mutation Enhances Cell Death in Response to Environmental Toxins Due to a Larger Population of Oligomers. Biochemistry, 2018, 57, 5014-5028.	2.5	19
47	A magnet-actuated biomimetic device for isolating biological entities in microwells. Scientific Reports, 2018, 8, 12717.	3.3	14
48	Parkinsonâ€™s Disease Associated Î±-Synuclein Familial Mutants Promote Dopaminergic Neuronal Death in <i>Drosophila melanogaster</i>. ACS Chemical Neuroscience, 2018, 9, 2628-2638.	3.5	28
49	Evidence of a Prion-Like Transmission of p53 Amyloid in <i>Saccharomyces cerevisiae</i>. Molecular and Cellular Biology, 2017, 37, .	2.3	6
50	p53 amyloid formation leading to its loss of function: implications in cancer pathogenesis. Cell Death and Differentiation, 2017, 24, 1784-1798.	11.2	99
51	Differential copper binding to alpha-synuclein and its disease-associated mutants affect the aggregation and amyloid formation. Biochimica Et Biophysica Acta - General Subjects, 2017, 1861, 365-374.	2.4	16
52	Stem Cells: Controlled Exposure of Bioactive Growth Factor in 3D Amyloid Hydrogel for Stem Cells Differentiation (Adv. Healthcare Mater. 18/2017). Advanced Healthcare Materials, 2017, 6, .	7.6	1
53	Comparison of Î±-Synuclein Fibril Inhibition by Four Different Amyloid Inhibitors. ACS Chemical Neuroscience, 2017, 8, 2722-2733.	3.5	52
54	Controlled Exposure of Bioactive Growth Factor in 3D Amyloid Hydrogel for Stem Cells Differentiation. Advanced Healthcare Materials, 2017, 6, 1700368.	7.6	32

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55	Î±-synuclein aggregation and its modulation. International Journal of Biological Macromolecules, 2017, 100, 37-54.	7.5	106
56	Alteration of Structure and Aggregation of Î±-Synuclein by Familial Parkinsonâ€™s Disease Associated Mutations. Current Protein and Peptide Science, 2017, 18, 656-676.	1.4	31
57	Amyloid formation of growth hormone in presence of zinc: Relevance to its storage in secretory granules. Scientific Reports, 2016, 6, 23370.	3.3	62
58	Implantable amyloid hydrogels for promoting stem cell differentiation to neurons. NPG Asia Materials, 2016, 8, e304-e304.	7.9	65
59	Defining a Physical Basis for Diversity in Protein Self-Assemblies Using a Minimal Model. Journal of the American Chemical Society, 2016, 138, 13911-13922.	13.7	23
60	Adhesion of Human Mesenchymal Stem Cells and Differentiation of SHâ€SY5Y Cells on Amyloid Fibrils. Macromolecular Symposia, 2016, 369, 35-42.	0.7	3
61	Effect of curcumin analogs onÎ±-synuclein aggregation and cytotoxicity. Scientific Reports, 2016, 6, 28511.	3.3	56
62	Site-specific structural dynamics of<i>Î±</i>-Synuclein revealed by time-resolved fluorescence spectroscopy: a review. Methods and Applications in Fluorescence, 2016, 4, 042002.	2.3	9
63	A minimal conformational switching-dependent model for amyloid self-assembly. Scientific Reports, 2016, 6, 21103.	3.3	9
64	A Minimalistic Kinetic Model for Amyloid Self-Assembly. Biophysical Journal, 2016, 110, 220a.	0.5	0
65	Cell Adhesion on Amyloid Fibrils Lacking Integrin Recognition Motif. Journal of Biological Chemistry, 2016, 291, 5278-5298.	3.4	49
66	Influence of retinoic acid on mesenchymal stem cell differentiation in amyloid hydrogels. Data in Brief, 2015, 5, 954-958.	1.0	6
67	Cytotoxic Helix-Rich Oligomer Formation by Melittin and Pancreatic Polypeptide. PLoS ONE, 2015, 10, e0120346.	2.5	6
68	Familial Parkinson Disease-associated Mutations Alter the Site-specific Microenvironment and Dynamics of Î±-Synuclein. Journal of Biological Chemistry, 2015, 290, 7804-7822.	3.4	44
69	Structure based aggregation studies reveal the presence of helix-rich intermediate during Î±-Synuclein aggregation. Scientific Reports, 2015, 5, 9228.	3.3	172
70	Water soluble perylene bisimide and its turn off/on fluorescence are used to detect cysteine and homocysteine. New Journal of Chemistry, 2015, 39, 5084-5087.	2.8	13
71	Self healing hydrogels composed of amyloid nano fibrils for cell culture and stem cell differentiation. Biomaterials, 2015, 54, 97-105.	11.4	162
72	Modulation of the mitochondrial voltage dependent anion channel (VDAC) by curcumin. Biochimica Et Biophysica Acta - Biomembranes, 2015, 1848, 151-158.	2.6	39

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73	Identification and Functional Characterization of Genetic Variants of the Catecholamine Release-Inhibitory Peptide Catestatin in an Indian Population. , 2014, , 198-199.		0
74	Complexation of Amyloid Fibrils with Charged Conjugated Polymers. Langmuir, 2014, 30, 3775-3786.	3.5	37
75	Fluorene-based chemodosimeter for â€œturn-onâ€•sensing of cyanide by hampering ESIPT and live cell imaging. Journal of Materials Chemistry B, 2014, 2, 4733.	5.8	54
76	Investigating the Intrinsic Aggregation Potential of Evolutionarily Conserved Segments in p53. Biochemistry, 2014, 53, 5995-6010.	2.5	51
77	Site-Specific Fluorescence Dynamics of Î±-Synuclein Fibrils Using Time-Resolved Fluorescence Studies: Effect of Familial Parkinsonâ€™s Disease-Associated Mutations. Biochemistry, 2014, 53, 807-809.	2.5	20
78	The Newly Discovered Parkinsonâ€™s Disease Associated Finnish Mutation (A53E) Attenuates Î±-Synuclein Aggregation and Membrane Binding. Biochemistry, 2014, 53, 6419-6421.	2.5	137
79	Naturally Occurring Variants of the Dysglycemic Peptide Pancreastatin. Journal of Biological Chemistry, 2014, 289, 4455-4469.	3.4	19
80	Elucidating the Role of Disulfide Bond on Amyloid Formation and Fibril Reversibility of Somatostatin-14. Journal of Biological Chemistry, 2014, 289, 16884-16903.	3.4	65
81	Curcumin Modulates Î±-Synuclein Aggregation and Toxicity. ACS Chemical Neuroscience, 2013, 4, 393-407.	3.5	252
82	Understanding the Mechanism of Somatostatin-14 Amyloid Formation InÂVitro. Biophysical Journal, 2013, 104, 50a.	0.5	2
83	Amyloid Formation by Human Growth Hormone. Biophysical Journal, 2013, 104, 72a-73a.	0.5	0
84	The Parkinsonâ€™s Disease-Associated H50Q Mutation Accelerates Î±-Synuclein Aggregation <i>in Vitro</i>. Biochemistry, 2013, 52, 6925-6927.	2.5	164
85	Aggregation induced chirality in a self assembled perylene based hydrogel: application of the intracellular pH measurement. Journal of Materials Chemistry B, 2013, 1, 153-156.	5.8	52
86	Characterization of Amyloid Formation by Glucagon-Like Peptides: Role of Basic Residues in Heparin-Mediated Aggregation. Biochemistry, 2013, 52, 8800-8810.	2.5	38
87	Conjugated Polyfluorene-based Reversible Fluorescent Sensor for Cu(II) and Cyanide Ions in Aqueous Medium. Chemistry Letters, 2013, 42, 1355-1357.	1.3	15
88	Molecular interactions of the physiological anti-hypertensive peptide catestatin with the neuronal nicotinic acetylcholine receptor. Journal of Cell Science, 2012, 125, 2787-2787.	2.0	11
89	Functional Genetic Variants of the Catecholamine-Release-Inhibitory Peptide Catestatin in an Indian Population. Journal of Biological Chemistry, 2012, 287, 43840-43852.	3.4	23
90	Molecular mechanism of interactions of the physiological anti-hypertensive peptide catestatin with the neuronal nicotinic acetylcholine receptor. Journal of Cell Science, 2012, 125, 2323-37.	2.0	29

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91	Amyloid-Like Fibril Formation by Tachykinin Neuropeptides and Its Relevance to Amyloid Î²-Protein Aggregation and Toxicity. Cell Biochemistry and Biophysics, 2012, 64, 29-44.	1.8	22
92	Molecular Interpretation of ACTH-Î²-Endorphin Coaggregation: Relevance to Secretory Granule Biogenesis. PLoS ONE, 2012, 7, e31924.	2.5	11
93	Nanomaterials: amyloids reflect their brighter side. Nano Reviews, 2011, 2, 6032.	3.7	151
94	AMYLOID: A NATURAL NANOMATERIAL. International Journal of Nanoscience, 2011, 10, 909-917.	0.7	1
95	In vivo demonstration that Î±-synuclein oligomers are toxic. Proceedings of the National Academy of Sciences of the United States of America, 2011, 108, 4194-4199.	7.1	1,252
96	CSF Biomarkers for Alzheimer's Disease Diagnosis. International Journal of Alzheimer's Disease, 2010, 2010, 1-12.	2.0	92
97	Amino Acid Position-specific Contributions to Amyloid Î²-Protein Oligomerization. Journal of Biological Chemistry, 2009, 284, 23580-23591.	3.4	79
98	Structureâ€"activity relationship of amyloid fibrils. FEBS Letters, 2009, 583, 2610-2617.	2.8	114
99	Mistic: Cellular localization, solution behavior, polymerization, and fibril formation. Protein Science, 2009, 18, 1564-1570.	7.6	19
100	Functional Amyloids As Natural Storage of Peptide Hormones in Pituitary Secretory Granules. Science, 2009, 325, 328-332.	12.6	903
101	Bacterial Inclusion Bodies Contain Amyloid-Like Structure. PLoS Biology, 2008, 6, e195.	5.6	189
102	Amyloid as a Depot for the Formulation of Long-Acting Drugs. PLoS Biology, 2008, 6, e17.	5.6	196
103	The fold of Î±-synuclein fibrils. Proceedings of the National Academy of Sciences of the United States of America, 2008, 105, 8637-8642.	7.1	499
104	Distinct Structural and Functional Roles of Conserved Residues in the First Extracellular Domain of Receptors for Corticotropin-releasing Factor and Related G-protein-coupled Receptors. Journal of Biological Chemistry, 2007, 282, 37529-37536.	3.4	16
105	Conformational Dynamics of Amyloid Î²-Protein Assembly Probed Using Intrinsic Fluorescenceâ€. Biochemistry, 2005, 44, 13365-13376.	2.5	60
106	Self-assembly of Î²-turn forming synthetic tripeptides into supramolecular Î²-sheets and amyloid-like fibrils in the solid state. Tetrahedron, 2004, 60, 3251-3259.	1.9	38
107	Hydrogen-bonded dimer can mediate supramolecular Î²-sheet formation and subsequent amyloid-like fibril formation: a model study. Tetrahedron, 2004, 60, 5935-5944.	1.9	26
108	Conformational Heterogeneity of a Tripeptide in the Solid State and in Solution: Characterization of a g-Turn Containing Incipient Hairpin in Solution. Journal of Structural Chemistry, 2003, 44, 790-795.	1.0	1

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109	Amyloid-like fibril-forming supramolecular Î²-sheets from a Î²-turn forming tripeptide containing non-coded amino acids: the crystallographic signature. Tetrahedron Letters, 2003, 44, 335-339.	1.4	26
110	Supramolecular peptide helix from a novel double turn forming peptide containing a Î²-amino acid. Tetrahedron Letters, 2003, 44, 699-702.	1.4	21
111	A synthetic tripeptide as a novel organo-gelator: a structural investigation. Tetrahedron Letters, 2003, 44, 4103-4107.	1.4	38
112	An amyloid-like fibril forming antiparallel supramolecular Î²-sheet from a synthetic tripeptide: a crystallographic signature. Tetrahedron Letters, 2003, 44, 6741-6744.	1.4	25
113	Conformational heterogeneity of a turn mimetic pseudo-peptide: comparison of crystal state, solution and theoretically derived structures. Journal of Molecular Structure, 2003, 646, 111-123.	3.6	17
114	Peptide Design Using Ï‰-Amino Acids:Â Unusual Turn Structures Nucleated by an N-Terminal Single Î³-Aminobutyric Acid Residue in Short Model Peptides. Journal of Organic Chemistry, 2002, 67, 633-639.	3.2	34
115	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
116	Fibril-forming model synthetic peptides containing 3-aminophenylacetic acid. Tetrahedron, 2002, 58, 8695-8702.	1.9	24
117	First crystallographic signature of the highly ordered supramolecular helical assemblage from a tripeptide containing a non-coded amino acid. Tetrahedron Letters, 2002, 43, 2653-2656.	1.4	34
118	Self-assembly of a short peptide monomer into a continuous hydrogen bonded supramolecular helix: the crystallographic signature. Tetrahedron Letters, 2002, 43, 5465-5468.	1.4	26
119	Self-assembly of a tetrapeptide in which a unique supramolecular helical structure is formed via intermolecular hydrogen bonding in the solid state. Tetrahedron Letters, 2002, 43, 6759-6762.	1.4	21
120	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
121	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
122	Title is missing!. International Journal of Peptide Research and Therapeutics, 2001, 8, 61-67.	0.1	2
123	tert-ButylN-{2-[N-(N,Nâ€²-dicyclohexylureidocarbonylethyl)carbamoyl]prop-2-yl}carbamate. Acta Crystallographica Section C: Crystal Structure Communications, 2000, 56, 1120-1121.	0.4	2
124	Title is missing!. International Journal of Peptide Research and Therapeutics, 2000, 7, 353-358.	0.1	5
125	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
126	Preparation of aggregate-free Î± -synuclein for in vitro aggregation study. Protocol Exchange, 0, , .	0.3	2