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	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
2	Functional Amyloids As Natural Storage of Peptide Hormones in Pituitary Secretory Granules. Science, 2009, 325, 328-332.	12.6	903
3	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
4	Î±-Synuclein aggregation nucleates through liquidâ€"liquid phase separation. Nature Chemistry, 2020, 12, 705-716.	13.6	440
5	Curcumin Modulates Î±-Synuclein Aggregation and Toxicity. ACS Chemical Neuroscience, 2013, 4, 393-407.	3.5	252
6	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
7	Amyloid as a Depot for the Formulation of Long-Acting Drugs. PLoS Biology, 2008, 6, e17.	5.6	196
8	Bacterial Inclusion Bodies Contain Amyloid-Like Structure. PLoS Biology, 2008, 6, e195.	5.6	189
9	Structure based aggregation studies reveal the presence of helix-rich intermediate during Î±-Synuclein aggregation. Scientific Reports, 2015, 5, 9228.	3.3	172
10	The Parkinsonâ€™s Disease-Associated H50Q Mutation Accelerates Î±-Synuclein Aggregation <i>in Vitro</i>. Biochemistry, 2013, 52, 6925-6927.	2.5	164
11	Self healing hydrogels composed of amyloid nano fibrils for cell culture and stem cell differentiation. Biomaterials, 2015, 54, 97-105.	11.4	162
12	Nanomaterials: amyloids reflect their brighter side. Nano Reviews, 2011, 2, 6032.	3.7	151
13	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
14	Structureâ€"activity relationship of amyloid fibrils. FEBS Letters, 2009, 583, 2610-2617.	2.8	114
15	Î±-synuclein aggregation and its modulation. International Journal of Biological Macromolecules, 2017, 100, 37-54.	7.5	106
16	p53 amyloid formation leading to its loss of function: implications in cancer pathogenesis. Cell Death and Differentiation, 2017, 24, 1784-1798.	11.2	99
17	Amyloid Fibrils: Versatile Biomaterials for Cell Adhesion and Tissue Engineering Applications. Biomacromolecules, 2018, 19, 1826-1839.	5.4	99
18	CSF Biomarkers for Alzheimer's Disease Diagnosis. International Journal of Alzheimer's Disease, 2010, 2010, 1-12.	2.0	92

#	ARTICLE	IF	CITATIONS
19	Amino Acid Position-specific Contributions to Amyloid Î²-Protein Oligomerization. Journal of Biological Chemistry, 2009, 284, 23580-23591.	3.4	79
20	Lipopolysaccharide from Gut Microbiota Modulates Î±-Synuclein Aggregation and Alters Its Biological Function. ACS Chemical Neuroscience, 2019, 10, 2229-2236.	3.5	73
21	Modulating Î±-Synuclein Liquidâ€"Liquid Phase Separation. Biochemistry, 2021, 60, 3676-3696.	2.5	67
22	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
23	Implantable amyloid hydrogels for promoting stem cell differentiation to neurons. NPG Asia Materials, 2016, 8, e304-e304.	7.9	65
24	Amyloid formation of growth hormone in presence of zinc: Relevance to its storage in secretory granules. Scientific Reports, 2016, 6, 23370.	3.3	62
25	Conformational Dynamics of Amyloid Î²-Protein Assembly Probed Using Intrinsic Fluorescenceâ€. Biochemistry, 2005, 44, 13365-13376.	2.5	60
26	Effect of curcumin analogs onÎ±-synuclein aggregation and cytotoxicity. Scientific Reports, 2016, 6, 28511.	3.3	56
27	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
28	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
29	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
30	Comparison of Î±-Synuclein Fibril Inhibition by Four Different Amyloid Inhibitors. ACS Chemical Neuroscience, 2017, 8, 2722-2733.	3.5	52
31	Investigating the Intrinsic Aggregation Potential of Evolutionarily Conserved Segments in p53. Biochemistry, 2014, 53, 5995-6010.	2.5	51
32	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
33	Cell Adhesion on Amyloid Fibrils Lacking Integrin Recognition Motif. Journal of Biological Chemistry, 2016, 291, 5278-5298.	3.4	49
34	The three-dimensional structure of human Î²-endorphin amyloid fibrils. Nature Structural and Molecular Biology, 2020, 27, 1178-1184.	8.2	46
35	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
36	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

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37	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
38	Prion-like p53 Amyloids in Cancer. Biochemistry, 2020, 59, 146-155.	2.5	42
39	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
40	Modulation of the mitochondrial voltage dependent anion channel (VDAC) by curcumin. Biochimica Et Biophysica Acta - Biomembranes, 2015, 1848, 151-158.	2.6	39
41	Structural and Functional Insights into Î±-Synuclein Fibril Polymorphism. Biomolecules, 2021, 11, 1419.	4.0	39
42	A synthetic tripeptide as a novel organo-gelator: a structural investigation. Tetrahedron Letters, 2003, 44, 4103-4107.	1.4	38
43	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
44	Characterization of Amyloid Formation by Glucagon-Like Peptides: Role of Basic Residues in Heparin-Mediated Aggregation. Biochemistry, 2013, 52, 8800-8810.	2.5	38
45	Complexation of Amyloid Fibrils with Charged Conjugated Polymers. Langmuir, 2014, 30, 3775-3786.	3.5	37
46	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
47	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
48	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
49	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
50	Multitude NMR studies of Î±-synuclein familial mutants: probing their differential aggregation propensities. Chemical Communications, 2018, 54, 3605-3608.	4.1	33
51	Controlled Exposure of Bioactive Growth Factor in 3D Amyloid Hydrogel for Stem Cells Differentiation. Advanced Healthcare Materials, 2017, 6, 1700368.	7.6	32
52	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
53	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
54	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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55	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
56	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
57	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
58	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
59	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
60	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
61	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
62	Fibril-forming model synthetic peptides containing 3-aminophenylacetic acid. Tetrahedron, 2002, 58, 8695-8702.	1.9	24
63	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
64	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
65	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
66	Intermediates of Î±-synuclein aggregation: Implications in Parkinson's disease pathogenesis. Biophysical Chemistry, 2022, 281, 106736.	2.8	22
67	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
68	Supramolecular peptide helix from a novel double turn forming peptide containing a Î²-amino acid. Tetrahedron Letters, 2003, 44, 699-702.	1.4	21
69	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
70	Mistic: Cellular localization, solution behavior, polymerization, and fibril formation. Protein Science, 2009, 18, 1564-1570.	7.6	19
71	Naturally Occurring Variants of the Dysglycemic Peptide Pancreastatin. Journal of Biological Chemistry, 2014, 289, 4455-4469.	3.4	19
72	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

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73	Protein Nanofibrils as Storage Forms of Peptide Drugs and Hormones. Advances in Experimental Medicine and Biology, 2019, 1174, 265-290.	1.6	18
74	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
75	Organoselenium-based BOPHY as a sensor for detection of hypochlorous acid in mammalian cells. Analytica Chimica Acta, 2021, 1150, 338205.	5.4	17
76	Biophysical characterization of p53 core domain aggregates. Biochemical Journal, 2020, 477, 111-120.	3.7	17
77	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
78	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
79	Cyclic Organoselenide BODIPY-Based Probe: Targeting Superoxide in MCF-7 Cancer Cells. ACS Omega, 2020, 5, 14186-14193.	3.5	16
80	Conjugated Polyfluorene-based Reversible Fluorescent Sensor for Cu(II) and Cyanide Ions in Aqueous Medium. Chemistry Letters, 2013, 42, 1355-1357.	1.3	15
81	Predictable phase-separated proteins. Nature Chemistry, 2020, 12, 787-789.	13.6	15
82	Direct evidence of cellular transformation by prion-like p53 amyloid infection. Journal of Cell Science, 2021, 134, .	2.0	15
83	A magnet-actuated biomimetic device for isolating biological entities in microwells. Scientific Reports, 2018, 8, 12717.	3.3	14
84	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
85	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
86	Complexation of NAC-Derived Peptide Ligands with the C-Terminus of Î±-Synuclein Accelerates Its Aggregation. Biochemistry, 2018, 57, 791-804.	2.5	11
87	Machine-Free Polymerase Chain Reaction with Triangular Gold and Silver Nanoparticles. Journal of Physical Chemistry Letters, 2020, 11, 10489-10496.	4.6	11
88	Effect of Disease-Associated P123H and V70M Mutations on Î²-Synuclein Fibrillation. ACS Chemical Neuroscience, 2020, 11, 2836-2848.	3.5	11
89	Molecular Interpretation of ACTH-Î²-Endorphin Coaggregation: Relevance to Secretory Granule Biogenesis. PLoS ONE, 2012, 7, e31924.	2.5	11
90	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

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91	Cell Alignment on Grapheneâ€"Amyloid Composites. Advanced Materials Interfaces, 2018, 5, 1800621.	3.7	10
92	Amyloid Fibrils with Positive Charge Enhance Retroviral Transduction in Mammalian Cells. ACS Biomaterials Science and Engineering, 2019, 5, 126-138.	5.2	10
93	Bioactive growth hormone in humans: Controversies, complexities and concepts. Growth Hormone and IGF Research, 2020, 50, 9-22.	1.1	10
94	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
95	A minimal conformational switching-dependent model for amyloid self-assembly. Scientific Reports, 2016, 6, 21103.	3.3	9
96	Co-aggregation and secondary nucleation in the life cycle of human prolactin/galanin functional amyloids. ELife, 2022, 11, .	6.0	9
97	Analysis of drugâ€"protein interaction in bio-inspired microwells. SN Applied Sciences, 2019, 1, 1.	2.9	7
98	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
99	Influence of retinoic acid on mesenchymal stem cell differentiation in amyloid hydrogels. Data in Brief, 2015, 5, 954-958.	1.0	6
100	Cytotoxic Helix-Rich Oligomer Formation by Melittin and Pancreatic Polypeptide. PLoS ONE, 2015, 10, e0120346.	2.5	6
101	Evidence of a Prion-Like Transmission of p53 Amyloid in <i>Saccharomyces cerevisiae</i>. Molecular and Cellular Biology, 2017, 37, .	2.3	6
102	Amyloids Are Novel Cell-Adhesive Matrices. Advances in Experimental Medicine and Biology, 2018, 1112, 79-97.	1.6	6
103	Direct Demonstration of Seed Size-Dependent Î±-Synuclein Amyloid Amplification. Journal of Physical Chemistry Letters, 2022, 13, 6427-6438.	4.6	6
104	Title is missing!. International Journal of Peptide Research and Therapeutics, 2000, 7, 353-358.	0.1	5
105	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
106	Î±â€Synuclein Spontaneously Adopts Stable and Reversible Î±â€Helical Structure in Waterâ€Less Environment. ChemPhysChem, 2019, 20, 2783-2790.	2.1	4
107	Adhesion of Human Mesenchymal Stem Cells and Differentiation of SHâ€SY5Y Cells on Amyloid Fibrils. Macromolecular Symposia, 2016, 369, 35-42.	0.7	3
108	Computational Model for Studying Breakage-Dependent Amyloid Growth. ACS Chemical Neuroscience, 2020, 11, 3615-3622.	3.5	3

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109	Investigation of Structural Heterogeneity in Individual Amyloid Fibrils Using Polarization-Resolved Microscopy. Journal of Physical Chemistry B, 2021, 125, 13406-13414.	2.6	3
110	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
111	Title is missing!. International Journal of Peptide Research and Therapeutics, 2001, 8, 61-67.	0.1	2
112	Understanding the Mechanism of Somatostatin-14 Amyloid Formation InÂVitro. Biophysical Journal, 2013, 104, 50a.	0.5	2
113	Cytotoxic Oligomers and Fibrils Trapped in a Gelâ€like State of Î±â€Synuclein Assemblies. Angewandte Chemie, 2018, 130, 5360-5364.	2.0	2
114	A generic approach to decipher the mechanistic pathway of heterogeneous protein aggregation kinetics. Chemical Science, 2021, 12, 13530-13545.	7.4	2
115	Preparation of aggregate-free Î± -synuclein for in vitro aggregation study. Protocol Exchange, 0, , .	0.3	2
116	Role of non-specific interactions in the phase-separation and maturation of macromolecules. PLoS Computational Biology, 2022, 18, e1010067.	3.2	2
117	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
118	AMYLOID: A NATURAL NANOMATERIAL. International Journal of Nanoscience, 2011, 10, 909-917.	0.7	1
119	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
120	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
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	Amyloid Formation by Human Growth Hormone. Biophysical Journal, 2013, 104, 72a-73a.	0.5	0
123	Identification and Functional Characterization of Genetic Variants of the Catecholamine Release-Inhibitory Peptide Catestatin in an Indian Population. , 2014, , 198-199.		0
124	A Minimalistic Kinetic Model for Amyloid Self-Assembly. Biophysical Journal, 2016, 110, 220a.	0.5	0
125	Breakage dependent amyloid growth kinetics: a computational study. Biophysical Journal, 2022, 121, 351a.	0.5	0
126	Probing the role of non-specific interactions in promoting functional protein-protein complexes. Biophysical Journal, 2022, 121, 526a.	0.5	0