

Lihi Adler-Abramovich

List of Publications by Year in descending order

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105
papers

7,557
citations

61857

43
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53109

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112
all docs

112
docs citations

112
times ranked

6598
citing authors

#	ARTICLE	IF	CITATIONS
1	The physical properties of supramolecular peptide assemblies: from building block association to technological applications. <i>Chemical Society Reviews</i> , 2014, 43, 6881-6893.	18.7	580
2	Self-Assembled Peptide Nanotubes Are Uniquely Rigid Bioinspired Supramolecular Structures. <i>Nano Letters</i> , 2005, 5, 1343-1346.	4.5	392
3	Self-assembled arrays of peptide nanotubes by vapour deposition. <i>Nature Nanotechnology</i> , 2009, 4, 849-854.	15.6	372
4	Fmoc-modified amino acids and short peptides: simple bio-inspired building blocks for the fabrication of functional materials. <i>Chemical Society Reviews</i> , 2016, 45, 3935-3953.	18.7	366
5	Phenylalanine assembly into toxic fibrils suggests amyloid etiology in phenylketonuria. <i>Nature Chemical Biology</i> , 2012, 8, 701-706.	3.9	354
6	Thermal and Chemical Stability of Diphenylalanine Peptide Nanotubes: Implications for Nanotechnological Applications. <i>Langmuir</i> , 2006, 22, 1313-1320.	1.6	349
7	Self-assembling dipeptide antibacterial nanostructures with membrane disrupting activity. <i>Nature Communications</i> , 2017, 8, 1365.	5.8	299
8	Self-Assembled Fmoc-Peptides as a Platform for the Formation of Nanostructures and Hydrogels. <i>Biomacromolecules</i> , 2009, 10, 2646-2651.	2.6	297
9	Self-Assembly of Phenylalanine Oligopeptides: Insights from Experiments and Simulations. <i>Biophysical Journal</i> , 2009, 96, 5020-5029.	0.2	212
10	Ostwald's rule of stages governs structural transitions and morphology of dipeptide supramolecular polymers. <i>Nature Communications</i> , 2014, 5, 5219.	5.8	197
11	Blue Luminescence Based on Quantum Confinement at Peptide Nanotubes. <i>Nano Letters</i> , 2009, 9, 3111-3115.	4.5	187
12	The Rheological and Structural Properties of Fmoc-Peptide-Based Hydrogels: The Effect of Aromatic Molecular Architecture on Self-Assembly and Physical Characteristics. <i>Langmuir</i> , 2012, 28, 2015-2022.	1.6	158
13	A Self-Healing, All-Organic, Conducting, Composite Peptide Hydrogel as Pressure Sensor and Electrogenic Cell Soft Substrate. <i>ACS Nano</i> , 2019, 13, 163-175.	7.3	149
14	Expanding the Solvent Chemical Space for Self-Assembly of Dipeptide Nanostructures. <i>ACS Nano</i> , 2014, 8, 1243-1253.	7.3	146
15	Why Are Diphenylalanine-Based Peptide Nanostructures so Rigid? Insights from First Principles Calculations. <i>Journal of the American Chemical Society</i> , 2014, 136, 963-969.	6.6	136
16	Light-emitting self-assembled peptide nucleic acids exhibit both stacking interactions and Watson-Crick base pairing. <i>Nature Nanotechnology</i> , 2015, 10, 353-360.	15.6	136
17	Self-Assembled Organic Nanostructures with Metallic-Like Stiffness. <i>Angewandte Chemie - International Edition</i> , 2010, 49, 9939-9942.	7.2	128
18	Peptide-based hydrogel nanoparticles as effective drug delivery agents. <i>Bioorganic and Medicinal Chemistry</i> , 2013, 21, 3517-3522.	1.4	119

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19	Extension of the generic amyloid hypothesis to nonproteinaceous metabolite assemblies. <i>Science Advances</i> , 2015, 1, e1500137.	4.7	119
20	Direct Observation of the Release of Phenylalanine from Diphenylalanine Nanotubes. <i>Journal of the American Chemical Society</i> , 2006, 128, 6903-6908.	6.6	112
21	Formation of functional super-helical assemblies by constrained single heptad repeat. <i>Nature Communications</i> , 2015, 6, 8615.	5.8	101
22	Design of metal-binding sites onto self-assembled peptide fibrils. <i>Biopolymers</i> , 2009, 92, 164-172.	1.2	95
23	Injectable Alginate-Peptide Composite Hydrogel as a Scaffold for Bone Tissue Regeneration. <i>Nanomaterials</i> , 2019, 9, 497.	1.9	94
24	Controlled patterning of peptide nanotubes and nanospheres using inkjet printing technology. <i>Journal of Peptide Science</i> , 2008, 14, 217-223.	0.8	91
25	Controlling the Physical Dimensions of Peptide Nanotubes by Supramolecular Polymer Coassembly. <i>ACS Nano</i> , 2016, 10, 7436-7442.	7.3	91
26	Dynamic microfluidic control of supramolecular peptide self-assembly. <i>Nature Communications</i> , 2016, 7, 13190.	5.8	89
27	Alignment of Aromatic Peptide Tubes in Strong Magnetic Fields. <i>Advanced Materials</i> , 2007, 19, 4474-4479.	11.1	87
28	UV Light-Responsive Peptide-Based Supramolecular Hydrogel for Controlled Drug Delivery. <i>Macromolecular Rapid Communications</i> , 2018, 39, e1800588.	2.0	85
29	Expanding the Nanoarchitectural Diversity Through Aromatic Di- and Tri-Peptide Coassembly: Nanostructures and Molecular Mechanisms. <i>ACS Nano</i> , 2016, 10, 8316-8324.	7.3	84
30	Arginine-Presenting Peptide Hydrogels Decorated with Hydroxyapatite as Biomimetic Scaffolds for Bone Regeneration. <i>Biomacromolecules</i> , 2017, 18, 3541-3550.	2.6	78
31	Molecular co-assembly as a strategy for synergistic improvement of the mechanical properties of hydrogels. <i>Chemical Communications</i> , 2017, 53, 9586-9589.	2.2	78
32	Characterization of Peptide-Nanostructure-Modified Electrodes and Their Application for Ultrasensitive Environmental Monitoring. <i>Small</i> , 2010, 6, 825-831.	5.2	75
33	Structural Polymorphism in a Self-Assembled Tri-Aromatic Peptide System. <i>ACS Nano</i> , 2018, 12, 3253-3262.	7.3	72
34	Fmoc-FF and hexapeptide-based multicomponent hydrogels as scaffold materials. <i>Soft Matter</i> , 2019, 15, 487-496.	1.2	70
35	Seamless Metallic Coating and Surface Adhesion of Self-Assembled Bioinspired Nanostructures Based on Di-(3,4-dihydroxy-phenylalanine) Peptide Motif. <i>ACS Nano</i> , 2014, 8, 7220-7228.	7.3	68
36	Improving the Mechanical Rigidity of Hyaluronic Acid by Integration of a Supramolecular Peptide Matrix. <i>ACS Applied Materials & Interfaces</i> , 2018, 10, 41883-41891.	4.0	65

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37	Spontaneous structural transition and crystal formation in minimal supramolecular polymer model. <i>Science Advances</i> , 2016, 2, e1500827.	4.7	62
38	Diphenylalanine as a Reductionist Model for the Mechanistic Characterization of β -Amyloid Modulators. <i>ACS Nano</i> , 2017, 11, 5960-5969.	7.3	62
39	Formation of Apoptosis-Inducing Amyloid Fibrils by Tryptophan. <i>Israel Journal of Chemistry</i> , 2017, 57, 729-737.	1.0	56
40	The self-assembling zwitterionic form of L-phenylalanine at neutral pH. <i>Acta Crystallographica Section C, Structural Chemistry</i> , 2014, 70, 326-331.	0.2	55
41	Differential inhibition of metabolite amyloid formation by generic fibrillation-modifying polyphenols. <i>Communications Chemistry</i> , 2018, 1, .	2.0	52
42	A minimal length rigid helical peptide motif allows rational design of modular surfactants. <i>Nature Communications</i> , 2017, 8, 14018.	5.8	49
43	Spectral Transition in Bio-Inspired Self-Assembled Peptide Nucleic Acid Photonic Crystals. <i>Advanced Materials</i> , 2016, 28, 2195-2200.	11.1	47
44	Controlled Assembly of Peptide Nanotubes Triggered by Enzymatic Activation of Self-Immolative Dendrimers. <i>ChemBioChem</i> , 2007, 8, 859-862.	1.3	43
45	Composite of Peptide-Supramolecular Polymer and Covalent Polymer Comprises a New Multifunctional, Bio-Inspired Soft Material. <i>Macromolecular Rapid Communications</i> , 2019, 40, e1900175.	2.0	37
46	Exploring the self-assembly of glycopeptides using a diphenylalanine scaffold. <i>Organic and Biomolecular Chemistry</i> , 2011, 9, 5755.	1.5	36
47	Enhanced Nanoassembly-Incorporated Antibacterial Composite Materials. <i>ACS Applied Materials & Interfaces</i> , 2019, 11, 21334-21342.	4.0	36
48	Synergetic functional properties of two-component single amino acid-based hydrogels. <i>CrystEngComm</i> , 2015, 17, 8105-8112.	1.3	34
49	Doxycycline hinders phenylalanine fibril assemblies revealing a potential novel therapeutic approach in phenylketonuria. <i>Scientific Reports</i> , 2015, 5, 15902.	1.6	33
50	Elastic instability-mediated actuation by a supra-molecular polymer. <i>Nature Physics</i> , 2016, 12, 926-930.	6.5	32
51	Improvement of the Mechanical Properties of Epoxy by Peptide Nanotube Fillers. <i>Small</i> , 2011, 7, 1007-1011.	5.2	29
52	Cathepsin nanofiber substrates as potential agents for targeted drug delivery. <i>Journal of Controlled Release</i> , 2017, 257, 60-67.	4.8	28
53	Amyloid-Like Fibrillary Morphology Originated by Tyrosine-Containing Aromatic Hexapeptides. <i>Chemistry - A European Journal</i> , 2018, 24, 6804-6817.	1.7	28
54	Bioinspired Flexible and Tough Layered Peptide Crystals. <i>Advanced Materials</i> , 2018, 30, 1704551.	11.1	28

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55	Diphenylalanine Peptide Nanotube: Charge Transport, Band Gap And Its Relevance To Potential Biomedical Applications. <i>Advanced Materials Letters</i> , 2011, 2, 100-105.	0.3	27
56	Formation of bacterial pilus-like nanofibres by designed minimalistic self-assembling peptides. <i>Nature Communications</i> , 2016, 7, 13482.	5.8	27
57	Molecular Engineering of Self-Assembling Diphenylalanine Analogues Results in the Formation of Distinctive Microstructures. <i>Chemistry of Materials</i> , 2016, 28, 4341-4348.	3.2	27
58	Protection of Oxygen-Sensitive Enzymes by Peptide Hydrogel. <i>ACS Nano</i> , 2021, 15, 6530-6539.	7.3	26
59	Optical property modulation of Fmoc group by pH-dependent self-assembly. <i>RSC Advances</i> , 2015, 5, 73914-73918.	1.7	25
60	Rosmarinic Acid Restores Complete Transparency of Sonicated Human Cataract Ex Vivo and Delays Cataract Formation In Vivo. <i>Scientific Reports</i> , 2018, 8, 9341.	1.6	25
61	Collagen-Inspired Helical Peptide Coassembly Forms a Rigid Hydrogel with Twisted Polyproline II Architecture. <i>ACS Nano</i> , 2020, 14, 9990-10000.	7.3	25
62	Disruption of diphenylalanine assembly by a Boc-modified variant. <i>Soft Matter</i> , 2016, 12, 9451-9457.	1.2	23
63	Transition of Metastable Cross- β Crystals into Cross- β Fibrils by β -Turn Flipping. <i>Journal of the American Chemical Society</i> , 2019, 141, 363-369.	6.6	22
64	Phase Transition and Crystallization Kinetics of a Supramolecular System in a Microfluidic Platform. <i>Chemistry of Materials</i> , 2020, 32, 8342-8349.	3.2	22
65	Dipeptide Nanostructure Assembly and Dynamics <i>via in Situ</i> Liquid-Phase Electron Microscopy. <i>ACS Nano</i> , 2021, 15, 16542-16551.	7.3	21
66	Bi-functional peptide-based 3D hydrogel-scaffolds. <i>Soft Matter</i> , 2020, 16, 7006-7017.	1.2	20
67	Spontaneous Structural Transition in Phospholipid-Inspired Aromatic Phosphopeptide Nanostructures. <i>ACS Nano</i> , 2015, 9, 4085-4095.	7.3	19
68	Hyaluronic Acid and a Short Peptide Improve the Performance of a PCL Electrospun Fibrous Scaffold Designed for Bone Tissue Engineering Applications. <i>International Journal of Molecular Sciences</i> , 2021, 22, 2425.	1.8	19
69	From Folding to Assembly: Functional Supramolecular Architectures of Peptides Comprised of Non-Canonical Amino Acids. <i>Macromolecular Bioscience</i> , 2021, 21, e2100090.	2.1	19
70	Opal-like Multicolor Appearance of Self-Assembled Photonic Array. <i>ACS Applied Materials & Interfaces</i> , 2018, 10, 20783-20789.	4.0	17
71	Mechanical Enhancement and Kinetics Regulation of Fmoc-Diphenylalanine Hydrogels by Thioflavin...T. <i>Angewandte Chemie - International Edition</i> , 2021, 60, 25339-25345.	7.2	16
72	Correction: The physical properties of supramolecular peptide assemblies: from building block association to technological applications. <i>Chemical Society Reviews</i> , 2014, 43, 7236-7236.	18.7	14

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73	Pillararene-Based Two-Component Thixotropic Supramolecular Organogels: Complementarity and Multivalency as Prominent Motifs. <i>Chemistry - A European Journal</i> , 2018, 24, 15750-15755.	1.7	14
74	Self-Assembly-Mediated Release of Peptide Nanoparticles through Jets Across Microdroplet Interfaces. <i>ACS Applied Materials & Interfaces</i> , 2018, 10, 27578-27583.	4.0	14
75	Induction of retinopathy by fibrillar oxalate assemblies. <i>Communications Chemistry</i> , 2020, 3, .	2.0	14
76	Directed Enzyme Evolution and Encapsulation in Peptide Nanospheres of Quorum Quenching Lactonase as an Antibacterial Treatment against Plant Pathogen. <i>ACS Applied Materials & Interfaces</i> , 2021, 13, 2179-2188.	4.0	14
77	Patterned Arrays of Ordered Peptide Nanostructures. <i>Journal of Nanoscience and Nanotechnology</i> , 2009, 9, 1701-1708.	0.9	13
78	Rheological analysis of the interplay between the molecular weight and concentration of hyaluronic acid in formulations of supramolecular HA/FmocFF hybrid hydrogels. <i>Polymer Journal</i> , 2020, 52, 1007-1012.	1.3	13
79	The Effects of a Short Self-Assembling Peptide on the Physical and Biological Properties of Biopolymer Hydrogels. <i>Pharmaceutics</i> , 2021, 13, 1602.	2.0	13
80	Formation of peptide-based oligomers in dimethylsulfoxide: identifying the precursor of fibril formation. <i>Soft Matter</i> , 2020, 16, 7860-7868.	1.2	12
81	Thixotropic Red Microalgae Sulfated Polysaccharide-Peptide Composite Hydrogels as Scaffolds for Tissue Engineering. <i>Biomedicines</i> , 2022, 10, 1388.	1.4	12
82	Spacer driven morphological twist in Phe-Phe dipeptide conjugates. <i>Tetrahedron</i> , 2013, 69, 2004-2009.	1.0	11
83	Solvent-Induced Self-Assembly of Highly Hydrophobic Tetra- and Pentaphenylalanine Peptides. <i>Israel Journal of Chemistry</i> , 2015, 55, 756-762.	1.0	11
84	The retinal toxicity profile towards assemblies of Amyloid- β^2 indicate the predominant pathophysiological activity of oligomeric species. <i>Scientific Reports</i> , 2020, 10, 20954.	1.6	11
85	Effect of peptide nanotube filler on structural and ion-transport properties of solid polymer electrolytes. <i>Solid State Ionics</i> , 2012, 220, 39-46.	1.3	10
86	Bio Mimicking of Extracellular Matrix. <i>Advances in Experimental Medicine and Biology</i> , 2019, 1174, 371-399.	0.8	10
87	Molecular Co-Assembly of Two Building Blocks Harnesses Both their Attributes into a Functional Supramolecular Hydrogel. <i>Macromolecular Bioscience</i> , 2022, 22, e2100439.	2.1	10
88	The Use of the Calcitonin Minimal Recognition Module for the Design of DOPA-Containing Fibrillar Assemblies. <i>Nanomaterials</i> , 2014, 4, 726-740.	1.9	9
89	Modification of a Single Atom Affects the Physical Properties of Double Fluorinated Fmoc-Phe Derivatives. <i>International Journal of Molecular Sciences</i> , 2021, 22, 9634.	1.8	9
90	Stabilizing gelatin-based bioinks under physiological conditions by incorporation of ethylene-glycol-conjugated Fmoc-FF peptides. <i>Nanoscale</i> , 2022, 14, 8525-8533.	2.8	9

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91	Sonochemical Functionalization of Cotton and Nonwoven Fabrics with Bioinspired Self-Assembled Nanostructures. <i>Israel Journal of Chemistry</i> , 2020, 60, 1190-1196.	1.0	8
92	Disordered Protein Stabilization by Co-Assembly of Short Peptides Enables Formation of Robust Membranes. <i>ACS Applied Materials & Interfaces</i> , 2022, 14, 464-473.	4.0	8
93	Surface Modification by Nano-Structures Reduces Viable Bacterial Biofilm in Aerobic and Anaerobic Environments. <i>International Journal of Molecular Sciences</i> , 2020, 21, 7370.	1.8	7
94	Controllable Phase Separation by Boc-Modified Lipophilic Acid as a Multifunctional Extractant. <i>Scientific Reports</i> , 2015, 5, 17509.	1.6	4
95	Photonic Crystals: Spectral Transition in Bioinspired Self-Assembled Peptide Nucleic Acid Photonic Crystals (<i>Adv. Mater.</i> 11/2016). <i>Advanced Materials</i> , 2016, 28, 2276-2276.	11.1	3
96	Molecular Engineering of Somatostatin Analogue with Minimal Dipeptide Motif Induces the Formation of Functional Nanoparticles. <i>ChemNanoMat</i> , 2017, 3, 27-32.	1.5	3
97	Resilient Women and the Resiliency of Science. <i>Chemistry of Materials</i> , 2021, 33, 6585-6588.	3.2	3
98	Mechanical Enhancement and Kinetics Regulation of Fmoc-Diphenylalanine Hydrogels by Thioflavin T. <i>Angewandte Chemie</i> , 0, , .	1.6	3
99	FtsZ Cytoskeletal Filaments as a Template for Metallic Nanowire Fabrication. <i>Journal of Nanoscience and Nanotechnology</i> , 2015, 15, 556-561.	0.9	2
100	Advantages of Self-assembled Supramolecular Polymers Toward Biological Applications. , 2017, , 9-35.		2
101	Atomic insight into short helical peptide comprised of consecutive multiple aromatic residues. <i>Chemical Communications</i> , 2022, 58, 6445-6448.	2.2	2
102	Inside Cover: Self-Assembled Organic Nanostructures with Metallic-Like Stiffness (<i>Angew. Chem. Int.</i>) $T_j ETQq0 0 0 rgBT / Overlock 10 Tf$	7.9	1
103	Pillararene-Based Two-Component Thixotropic Supramolecular Organogels: Complementarity and Multivalency as Prominent Motifs. <i>Chemistry - A European Journal</i> , 2018, 24, 15695-15695.	1.7	1
104	Bionanostructures: Bioinspired Flexible and Tough Layered Peptide Crystals (<i>Adv. Mater.</i> 5/2018). <i>Advanced Materials</i> , 2018, 30, 1870035.	11.1	0
105	Structural Transformation and Morphology of Dipeptide Supramolecular Assemblies by Liquid-phase TEM. <i>Microscopy and Microanalysis</i> , 2020, 26, 1442-1443.	0.2	0