Lihi Adler-Abramovich

List of Publications by Year
in descending order

105 papers	7,557 citations	61984 43 h-index	53230 85 g-index
112 all docs	112 docs citations	112 times ranked	6598 citing authors

#	Article	IF	Citations
1	Molecular Coâ€Assembly of Two Building Blocks Harnesses Both their Attributes into a Functional Supramolecular Hydrogel. Macromolecular Bioscience, 2022, 22, e2100439.	4.1	10
2	Disordered Protein Stabilization by Co-Assembly of Short Peptides Enables Formation of Robust Membranes. ACS Applied Materials & Interfaces, 2022, 14, 464-473.	8.0	8
3	Atomic insight into short helical peptide comprised of consecutive multiple aromatic residues. Chemical Communications, 2022, 58, 6445-6448.	4.1	2
4	Stabilizing gelatin-based bioinks under physiological conditions by incorporation of ethylene-glycol-conjugated Fmoc-FF peptides. Nanoscale, 2022, 14, 8525-8533.	5.6	9
5	Thixotropic Red Microalgae Sulfated Polysaccharide-Peptide Composite Hydrogels as Scaffolds for Tissue Engineering. Biomedicines, 2022, 10, 1388.	3.2	12
6	Directed Enzyme Evolution and Encapsulation in Peptide Nanospheres of Quorum Quenching Lactonase as an Antibacterial Treatment against Plant Pathogen. ACS Applied Materials & Interfaces, 2021, 13, 2179-2188.	8.0	14
7	Hyaluronic Acid and a Short Peptide Improve the Performance of a PCL Electrospun Fibrous Scaffold Designed for Bone Tissue Engineering Applications. International Journal of Molecular Sciences, 2021, 22, 2425.	4.1	19
8	Protection of Oxygen-Sensitive Enzymes by Peptide Hydrogel. ACS Nano, 2021, 15, 6530-6539.	14.6	26
9	From Folding to Assembly: Functional Supramolecular Architectures of Peptides Comprised of Nonâ€Canonical Amino Acids. Macromolecular Bioscience, 2021, 21, e2100090.	4.1	19
10	Resilient Women and the Resiliency of Science. Chemistry of Materials, 2021, 33, 6585-6588.	6.7	3
11	Mechanical Enhancement and Kinetics Regulation of Fmocâ€Diphenylalanine Hydrogels by Thioflavinâ€…T. Angewandte Chemie - International Edition, 2021, 60, 25339-25345.	13.8	16
12	Modification of a Single Atom Affects the Physical Properties of Double Fluorinated Fmoc-Phe Derivatives. International Journal of Molecular Sciences, 2021, 22, 9634.	4.1	9
13	The Effects of a Short Self-Assembling Peptide on the Physical and Biological Properties of Biopolymer Hydrogels. Pharmaceutics, 2021, 13, 1602.	4.5	13
14	Dipeptide Nanostructure Assembly and Dynamics <i>via in Situ</i> Liquid-Phase Electron Microscopy. ACS Nano, 2021, 15, 16542-16551.	14.6	21
15	Sonochemical Functionalization of Cotton and Nonâ€Woven Fabrics with Bioâ€Inspired Selfâ€Assembled Nanostructures. Israel Journal of Chemistry, 2020, 60, 1190-1196.	2.3	8
16	Surface Modification by Nano-Structures Reduces Viable Bacterial Biofilm in Aerobic and Anaerobic Environments. International Journal of Molecular Sciences, 2020, 21, 7370.	4.1	7
17	Phase Transition and Crystallization Kinetics of a Supramolecular System in a Microfluidic Platform. Chemistry of Materials, 2020, 32, 8342-8349.	6.7	22
18	Formation of peptide-based oligomers in dimethylsulfoxide: identifying the precursor of fibril formation. Soft Matter, 2020, 16, 7860-7868.	2.7	12

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19	Collagen-Inspired Helical Peptide Coassembly Forms a Rigid Hydrogel with Twisted Polyproline II Architecture. ACS Nano, 2020, 14, 9990-10000.	14.6	25
20	The retinal toxicity profile towards assemblies of Amyloid-Î² indicate the predominant pathophysiological activity of oligomeric species. Scientific Reports, 2020, 10, 20954.	3.3	11
21	Structural Transformation and Morphology of Dipeptide Supramolecular Assemblies by Liquid-phase TEM. Microscopy and Microanalysis, 2020, 26, 1442-1443.	0.4	0
22	Bi-functional peptide-based 3D hydrogel-scaffolds. Soft Matter, 2020, 16, 7006-7017.	2.7	20
23	Induction of retinopathy by fibrillar oxalate assemblies. Communications Chemistry, 2020, 3, .	4.5	14
24	Rheological analysis of the interplay between the molecular weight and concentration of hyaluronic acid in formulations of supramolecular HA/FmocFF hybrid hydrogels. Polymer Journal, 2020, 52, 1007-1012.	2.7	13
25	Composite of Peptideâ€Supramolecular Polymer and Covalent Polymer Comprises a New Multifunctional, Bioâ€Inspired Soft Material. Macromolecular Rapid Communications, 2019, 40, e1900175.	3.9	37
26	Fmoc-FF and hexapeptide-based multicomponent hydrogels as scaffold materials. Soft Matter, 2019, 15, 487-496.	2.7	70
27	Enhanced Nanoassembly-Incorporated Antibacterial Composite Materials. ACS Applied Materials & Interfaces, 2019, 11, 21334-21342.	8.0	36
28	Injectable Alginate-Peptide Composite Hydrogel as a Scaffold for Bone Tissue Regeneration. Nanomaterials, 2019, 9, 497.	4.1	94
29	A Self-Healing, All-Organic, Conducting, Composite Peptide Hydrogel as Pressure Sensor and Electrogenic Cell Soft Substrate. ACS Nano, 2019, 13, 163-175.	14.6	149
30	Transition of Metastable Cross-Î± Crystals into Cross-Î² Fibrils by Î²-Turn Flipping. Journal of the American Chemical Society, 2019, 141, 363-369.	13.7	22
31	Bio Mimicking of Extracellular Matrix. Advances in Experimental Medicine and Biology, 2019, 1174, 371-399.	1.6	10
32	Amyloidâ€Like Fibrillary Morphology Originated by Tyrosineâ€Containing Aromatic Hexapeptides. Chemistry - A European Journal, 2018, 24, 6804-6817.	3.3	28
33	Bionanostructures: Bioinspired Flexible and Tough Layered Peptide Crystals (Adv. Mater. 5/2018). Advanced Materials, 2018, 30, 1870035.	21.0	0
34	Differential inhibition of metabolite amyloid formation by generic fibrillation-modifying polyphenols. Communications Chemistry, 2018, 1, .	4.5	52
35	Structural Polymorphism in a Self-Assembled Tri-Aromatic Peptide System. ACS Nano, 2018, 12, 3253-3262.	14.6	72
36	Bioinspired Flexible and Tough Layered Peptide Crystals. Advanced Materials, 2018, 30, 1704551.	21.0	28

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37	UV Lightâ€“Responsive Peptideâ€Based Supramolecular Hydrogel for Controlled Drug Delivery. Macromolecular Rapid Communications, 2018, 39, e1800588.	3.9	85
38	Pillarareneâ€Based Twoâ€Component Thixotropic Supramolecular Organogels: Complementarity and Multivalency as Prominent Motifs. Chemistry - A European Journal, 2018, 24, 15695-15695.	3.3	1
39	Improving the Mechanical Rigidity of Hyaluronic Acid by Integration of a Supramolecular Peptide Matrix. ACS Applied Materials & Interfaces, 2018, 10, 41883-41891.	8.0	65
40	Opal-like Multicolor Appearance of Self-Assembled Photonic Array. ACS Applied Materials & Interfaces, 2018, 10, 20783-20789.	8.0	17
41	Rosmarinic Acid Restores Complete Transparency of Sonicated Human Cataract Ex Vivo and Delays Cataract Formation In Vivo. Scientific Reports, 2018, 8, 9341.	3.3	25
42	Pillarareneâ€Based Twoâ€Component Thixotropic Supramolecular Organogels: Complementarity and Multivalency as Prominent Motifs. Chemistry - A European Journal, 2018, 24, 15750-15755.	3.3	14
43	Self-Assembly-Mediated Release of Peptide Nanoparticles through Jets Across Microdroplet Interfaces. ACS Applied Materials & Interfaces, 2018, 10, 27578-27583.	8.0	14
44	A minimal length rigid helical peptide motif allows rational design of modular surfactants. Nature Communications, 2017, 8, 14018.	12.8	49
45	Diphenylalanine as a Reductionist Model for the Mechanistic Characterization of Î²<i>-</i>Amyloid Modulators. ACS Nano, 2017, 11, 5960-5969.	14.6	62
46	Cathepsin nanofiber substrates as potential agents for targeted drug delivery. Journal of Controlled Release, 2017, 257, 60-67.	9.9	28
47	Advantages of Self-assembled Supramolecular Polymers Toward Biological Applications. , 2017, , 9-35.		2
48	Arginine-Presenting Peptide Hydrogels Decorated with Hydroxyapatite as Biomimetic Scaffolds for Bone Regeneration. Biomacromolecules, 2017, 18, 3541-3550.	5.4	78
49	Molecular co-assembly as a strategy for synergistic improvement of the mechanical properties of hydrogels. Chemical Communications, 2017, 53, 9586-9589.	4.1	78
50	Self-assembling dipeptide antibacterial nanostructures with membrane disrupting activity. Nature Communications, 2017, 8, 1365.	12.8	299
51	Formation of Apoptosisâ€Inducing Amyloid Fibrils by Tryptophan. Israel Journal of Chemistry, 2017, 57, 729-737.	2.3	56
52	Molecular Engineering of Somatostatin Analogue with Minimal Dipeptide Motif Induces the Formation of Functional Nanoparticles. ChemNanoMat, 2017, 3, 27-32.	2.8	3
53	Controlling the Physical Dimensions of Peptide Nanotubes by Supramolecular Polymer Coassembly. ACS Nano, 2016, 10, 7436-7442.	14.6	91
54	Elastic instability-mediated actuation by a supra-molecular polymer. Nature Physics, 2016, 12, 926-930.	16.7	32

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55	Spectral Transition in Bioâ€Inspired Selfâ€Assembled Peptide Nucleic Acid Photonic Crystals. Advanced Materials, 2016, 28, 2195-2200.	21.0	47
56	Fmoc-modified amino acids and short peptides: simple bio-inspired building blocks for the fabrication of functional materials. Chemical Society Reviews, 2016, 45, 3935-3953.	38.1	366
57	Expanding the Nanoarchitectural Diversity Through Aromatic Di- and Tri-Peptide Coassembly: Nanostructures and Molecular Mechanisms. ACS Nano, 2016, 10, 8316-8324.	14.6	84
58	Disruption of diphenylalanine assembly by a Boc-modified variant. Soft Matter, 2016, 12, 9451-9457.	2.7	23
59	Spontaneous structural transition and crystal formation in minimal supramolecular polymer model. Science Advances, 2016, 2, e1500827.	10.3	62
60	Formation of bacterial pilus-like nanofibres by designed minimalistic self-assembling peptides. Nature Communications, 2016, 7, 13482.	12.8	27
61	Dynamic microfluidic control of supramolecular peptide self-assembly. Nature Communications, 2016, 7, 13190.	12.8	89
62	Molecular Engineering of Self-Assembling Diphenylalanine Analogues Results in the Formation of Distinctive Microstructures. Chemistry of Materials, 2016, 28, 4341-4348.	6.7	27
63	Photonic Crystals: Spectral Transition in Bioâ€Inspired Selfâ€Assembled Peptide Nucleic Acid Photonic Crystals (Adv. Mater. 11/2016). Advanced Materials, 2016, 28, 2276-2276.	21.0	3
64	Doxycycline hinders phenylalanine fibril assemblies revealing a potential novel therapeutic approach in phenylketonuria. Scientific Reports, 2015, 5, 15902.	3.3	33
65	Controllable Phase Separation by Boc-Modified Lipophilic Acid as a Multifunctional Extractant. Scientific Reports, 2015, 5, 17509.	3.3	4
66	FtsZ Cytoskeletal Filaments as a Template for Metallic Nanowire Fabrication. Journal of Nanoscience and Nanotechnology, 2015, 15, 556-561.	0.9	2
67	Solventâ€Induced Selfâ€Assembly of Highly Hydrophobic Tetraâ€•and Pentaphenylalanine Peptides. Israel Journal of Chemistry, 2015, 55, 756-762.	2.3	11
68	Light-emitting self-assembled peptide nucleic acids exhibit both stacking interactions and Watsonâ€"Crick base pairing. Nature Nanotechnology, 2015, 10, 353-360.	31.5	136
69	Synergetic functional properties of two-component single amino acid-based hydrogels. CrystEngComm, 2015, 17, 8105-8112.	2.6	34
70	Spontaneous Structural Transition in Phospholipid-Inspired Aromatic Phosphopeptide Nanostructures. ACS Nano, 2015, 9, 4085-4095.	14.6	19
71	Extension of the generic amyloid hypothesis to nonproteinaceous metabolite assemblies. Science Advances, 2015, 1, e1500137.	10.3	119
72	Formation of functional super-helical assemblies by constrained single heptad repeat. Nature Communications, 2015, 6, 8615.	12.8	101

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73	Optical property modulation of Fmoc group by pH-dependent self-assembly. RSC Advances, 2015, 5, 73914-73918.	3.6	25
74	The Use of the Calcitonin Minimal Recognition Module for the Design of DOPA-Containing Fibrillar Assemblies. Nanomaterials, 2014, 4, 726-740.	4.1	9
75	The self-assembling zwitterionic form of<scp>L</scp>-phenylalanine at neutral pH. Acta Crystallographica Section C, Structural Chemistry, 2014, 70, 326-331.	0.5	55
76	Expanding the Solvent Chemical Space for Self-Assembly of Dipeptide Nanostructures. ACS Nano, 2014, 8, 1243-1253.	14.6	146
77	The physical properties of supramolecular peptide assemblies: from building block association to technological applications. Chemical Society Reviews, 2014, 43, 6881-6893.	38.1	580
78	Ostwaldâ€™s rule of stages governs structural transitions and morphology of dipeptide supramolecular polymers. Nature Communications, 2014, 5, 5219.	12.8	197
79	Correction: The physical properties of supramolecular peptide assemblies: from building block association to technological applications. Chemical Society Reviews, 2014, 43, 7236-7236.	38.1	14
80	Why Are Diphenylalanine-Based Peptide Nanostructures so Rigid? Insights from First Principles Calculations. Journal of the American Chemical Society, 2014, 136, 963-969.	13.7	136
81	Seamless Metallic Coating and Surface Adhesion of Self-Assembled Bioinspired Nanostructures Based on Di-(3,4-dihydroxy-<scp>l</scp>-phenylalanine) Peptide Motif. ACS Nano, 2014, 8, 7220-7228.	14.6	68
82	Spacer driven morphological twist in Phe-Phe dipeptide conjugates. Tetrahedron, 2013, 69, 2004-2009.	1.9	11
83	Peptide-based hydrogel nanoparticles as effective drug delivery agents. Bioorganic and Medicinal Chemistry, 2013, 21, 3517-3522.	3.0	119
84	Effect of peptide nanotube filler on structural and ion-transport properties of solid polymer electrolytes. Solid State Ionics, 2012, 220, 39-46.	2.7	10
85	The Rheological and Structural Properties of Fmoc-Peptide-Based Hydrogels: The Effect of Aromatic Molecular Architecture on Self-Assembly and Physical Characteristics. Langmuir, 2012, 28, 2015-2022.	3.5	158
86	Phenylalanine assembly into toxic fibrils suggests amyloid etiology in phenylketonuria. Nature Chemical Biology, 2012, 8, 701-706.	8.0	354
87	Diphenylalanine Peptide Nanotube: Charge Transport, Band Gap And Its Relevance To Potential Biomedical Applications. Advanced Materials Letters, 2011, 2, 100-105.	0.6	27
88	Exploring the self-assembly of glycopeptides using a diphenylalanine scaffold. Organic and Biomolecular Chemistry, 2011, 9, 5755.	2.8	36
89	Improvement of the Mechanical Properties of Epoxy by Peptide Nanotube Fillers. Small, 2011, 7, 1007-1011.	10.0	29
90	Selfâ€Assembled Organic Nanostructures with Metallicâ€Like Stiffness. Angewandte Chemie - International Edition, 2010, 49, 9939-9942.	13.8	128

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91	Inside Cover: Self-Assembled Organic Nanostructures with Metallic-Like Stiffness (Angew. Chem. Int.) Tj ETQq1 1 0.784314 rgBT /Overlo	13.8	1
92	Characterization of Peptideâ€Nanostructureâ€Modified Electrodes and Their Application for Ultrasensitive Environmental Monitoring. Small, 2010, 6, 825-831.	10.0	75
93	Patterned Arrays of Ordered Peptide Nanostructures. Journal of Nanoscience and Nanotechnology, 2009, 9, 1701-1708.	0.9	13
94	Design of metalâ€binding sites onto selfâ€assembled peptide fibrils. Biopolymers, 2009, 92, 164-172.	2.4	95
95	Self-assembled arrays of peptide nanotubes by vapour deposition. Nature Nanotechnology, 2009, 4, 849-854.	31.5	372
96	Blue Luminescence Based on Quantum Confinement at Peptide Nanotubes. Nano Letters, 2009, 9, 3111-3115.	9.1	187
97	Self-Assembly of Phenylalanine Oligopeptides: Insights from Experiments and Simulations. Biophysical Journal, 2009, 96, 5020-5029.	0.5	212
98	Self-Assembled Fmoc-Peptides as a Platform for the Formation of Nanostructures and Hydrogels. Biomacromolecules, 2009, 10, 2646-2651.	5.4	297
99	Controlled patterning of peptide nanotubes and nanospheres using inkjet printing technology. Journal of Peptide Science, 2008, 14, 217-223.	1.4	91
100	Controlled Assembly of Peptide Nanotubes Triggered by Enzymatic Activation of Self-Immolative Dendrimers. ChemBioChem, 2007, 8, 859-862.	2.6	43
101	Alignment of Aromatic Peptide Tubes in Strong Magnetic Fields. Advanced Materials, 2007, 19, 4474-4479.	21.0	87
102	Direct Observation of the Release of Phenylalanine from Diphenylalanine Nanotubes. Journal of the American Chemical Society, 2006, 128, 6903-6908.	13.7	112
103	Thermal and Chemical Stability of Diphenylalanine Peptide Nanotubes:â€‰ Implications for Nanotechnological Applications. Langmuir, 2006, 22, 1313-1320.	3.5	349
104	Self-Assembled Peptide Nanotubes Are Uniquely Rigid Bioinspired Supramolecular Structures. Nano Letters, 2005, 5, 1343-1346.	9.1	392
105	Mechanical Enhancement and Kinetics Regulation of Fmocâ€•Diphenylalanine Hydrogels by Thioflavin T. Angewandte Chemie, 0, , .	2.0	3