Meital Reches

List of Publications by Year
in descending order

97 papers	8,974 citations	117625 34 h-index	42399 92 g-index
105 all docs	105 docs citations	105 times ranked	8359 citing authors

#	Article	IF	Citations
1	Casting Metal Nanowires Within Discrete Self-Assembled Peptide Nanotubes. Science, 2003, 300, 625-627.	12.6	2,321
2	Rigid, Self-Assembled Hydrogel Composed of a Modified Aromatic Dipeptide. Advanced Materials, 2006, 18, 1365-1370.	21.0	742
3	Low-Cost Printing of Poly(dimethylsiloxane) Barriers To Define Microchannels in Paper. Analytical Chemistry, 2008, 80, 3387-3392.	6.5	535
4	Controlled patterning of aligned self-assembled peptide nanotubes. Nature Nanotechnology, 2006, 1, 195-200.	31.5	529
5	Formation of Closed-Cage Nanostructures by Self-Assembly of Aromatic Dipeptides. Nano Letters, 2004, 4, 581-585.	9.1	401
6	Thermal and Chemical Stability of Diphenylalanine Peptide Nanotubes:â€‰ Implications for Nanotechnological Applications. Langmuir, 2006, 22, 1313-1320.	3.5	349
7	Amyloid Fibril Formation by Pentapeptide and Tetrapeptide Fragments of Human Calcitonin. Journal of Biological Chemistry, 2002, 277, 35475-35480.	3.4	315
8	Novel Electrochemical Biosensing Platform Using Self-Assembled Peptide Nanotubes. Nano Letters, 2005, 5, 183-186.	9.1	289
9	Peptide Nanotube-Modified Electrodes for Enzymeâ˜Biosensor Applications. Analytical Chemistry, 2005, 77, 5155-5159.	6.5	252
10	Thread as a Matrix for Biomedical Assays. ACS Applied Materials & Interfaces, 2010, 2, 1722-1728.	8.0	224
11	Self-Assembly of Phenylalanine Oligopeptides: Insights from Experiments and Simulations. Biophysical Journal, 2009, 96, 5020-5029.	0.5	212
12	Self-assembly of peptide nanotubes and amyloid-like structures by charged-termini-capped diphenylalanine peptide analogues. Israel Journal of Chemistry, 2005, 45, 363-371.	2.3	201
13	Designed aromatic homo-dipeptides: formation of ordered nanostructures and potential nanotechnological applications. Physical Biology, 2006, 3, S10-S19.	1.8	182
14	Molecular Self-Assembly of Peptide Nanostructures: Mechanism of Association and Potential Uses. Current Nanoscience, 2006, 2, 105-111.	1.2	168
15	Bioinspired Design of Nanocages by Self-Assembling Triskelion Peptide Elements. Angewandte Chemie - International Edition, 2007, 46, 2002-2004.	13.8	133
16	Bio-inspired antifouling approaches: the quest towards non-toxic and non-biocidal materials. Current Opinion in Biotechnology, 2016, 39, 48-55.	6.6	116
17	Energy landscape of amyloidogenic peptide oligomerization by parallel-tempering molecular dynamics simulation: Significant role of Asn ladder. Proceedings of the National Academy of Sciences of the United States of America, 2005, 102, 8174-8179.	7.1	109
18	Tailorâ€Made Functional Peptide Selfâ€Assembling Nanostructures. Advanced Materials, 2018, 30, e1707083.	21.0	104

#	Article	IF	Citations
19	Peptideâ€Based Approaches to Fight Biofouling. Advanced Materials Interfaces, 2018, 5, 1800073.	3.7	94
20	Synthesis, coating, and drug-release of hydroxyapatite nanoparticles loaded with antibiotics. Journal of Materials Chemistry B, 2017, 5, 7819-7830.	5.8	87
21	Nanoscale kinetic segregation of TCR and CD45 in engaged microvilli facilitates early T cell activation. Nature Communications, 2018, 9, 732.	12.8	84
22	Coassembly of Aromatic Dipeptides into Biomolecular Necklaces. ACS Nano, 2012, 6, 9559-9566.	14.6	82
23	Formation of Well-Organized Self-Assembled Films from Peptide Nanotubes. Advanced Materials, 2007, 19, 1485-1488.	21.0	78
24	Amyloidogenic hexapeptide fragment of medin: homology to functional islet amyloid polypeptide fragments. Amyloid: the International Journal of Experimental and Clinical Investigation: the Official Journal of the International Society of Amyloidosis, 2004, 11, 81-89.	3.0	74
25	Self-assembly of a tripeptide into a functional coating that resists fouling. Chemical Communications, 2014, 50, 11154-11157.	4.1	68
26	Evaluating Efficacy of Antimicrobial and Antifouling Materials for Urinary Tract Medical Devices: Challenges and Recommendations. Macromolecular Bioscience, 2019, 19, e1800384.	4.1	66
27	Dipeptide Nanotubes Containing Unnatural Fluorine-Substituted Î²^{2,3}-Diarylamino Acid and <scp>l</scp>-Alanine as Candidates for Biomedical Applications. Organic Letters, 2015, 17, 4468-4471.	4.6	50
28	Probing the Interaction of Individual Amino Acids with Inorganic Surfaces Using Atomic Force Spectroscopy. Langmuir, 2013, 29, 10102-10109.	3.5	48
29	Integrating peptide nanotubes in micro-fabrication processes. Journal of Micromechanics and Microengineering, 2007, 17, 2360-2365.	2.6	45
30	AFMâ€Based Spinâ€Exchange Microscopy Using Chiral Molecules. Advanced Materials, 2019, 31, e1904206.	21.0	45
31	Revealing the role of catechol moieties in the interactions between peptides and inorganic surfaces. Nanoscale, 2016, 8, 15309-15316.	5.6	42
32	Biological and Chemical Decoration of Peptide Nanostructures via Biotinâ€“Avidin Interactions. Journal of Nanoscience and Nanotechnology, 2007, 7, 2239-2245.	0.9	40
33	Elucidating the mechanism of interaction between peptides and inorganic surfaces. Physical Chemistry Chemical Physics, 2015, 17, 15305-15315.	2.8	39
34	Inversion of Supramolecular Chirality by Sonication-Induced Organogelation. Scientific Reports, 2015, 5, 16365.	3.3	36
35	The Preferred Conformation of the Tripeptide Ala-Phe-Ala in Water Is an Inverse Î³-Turn:Â Implications for Protein Folding and Drug Designâ€. Biochemistry, 2005, 44, 14170-14178.	2.5	34
36	Self-assembly of an amphipathic Î±Î±Î²-tripeptide into cationic spherical particles for intracellular delivery. Organic and Biomolecular Chemistry, 2017, 15, 6773-6779.	2.8	34

#	Article	IF	Citations
37	Preventing Biofilm Formation by Dairy-Associated Bacteria Using Peptide-Coated Surfaces. Frontiers in Microbiology, 2019, 10, 1405.	3.5	34
38	Sticky tubes and magnetic hydrogels co-assembled by a short peptide and melanin-like nanoparticles. Chemical Communications, 2015, 51, 5432-5435.	4.1	33
39	Electrochemical Approach for Effective Antifouling and Antimicrobial Surfaces. ACS Applied Materials & Interfaces, 2017, 9, 26503-26509.	8.0	33
40	Co-assembly of aromatic dipeptides into spherical structures that are similar in morphology to red and white blood cells. Journal of Materials Chemistry B, 2014, 2, 2583.	5.8	30
41	Bionanocomposite Films from Resilin-CBD Bound to Cellulose Nanocrystals. Industrial Biotechnology, 2015, 11, 44-58.	0.8	29
42	T Cell Activation through Isolated Tight Contacts. Cell Reports, 2019, 29, 3506-3521.e6.	6.4	27
43	Folding of electrostatically charged beads-on-a-string as an experimental realization of a theoretical model in polymer science. Proceedings of the National Academy of Sciences of the United States of America, 2009, 106, 17644-17649.	7.1	26
44	Triangular correlation (TrC) between cancer aggressiveness, cell uptake capability, and cell deformability. Science Advances, 2020, 6, eaax2861.	10.3	24
45	Resisting Bacteria and Attracting Cells: Spontaneous Formation of a Bifunctional Peptide-Based Coating by On-Surface Assembly Approach. ACS Biomaterials Science and Engineering, 2018, 4, 4051-4061.	5.2	23
46	Cell wall associated protein TasA provides an initial binding component to extracellular polysaccharides in dual-species biofilm. Scientific Reports, 2018, 8, 9350.	3.3	23
47	Phase separation of 2D meso-scale Coulombic crystals from meso-scale polarizable â€œsolventâ€• Soft Matter, 2009, 5, 1188-1191.	2.7	22
48	Tailoring the self-assembly of a tripeptide for the formation of antimicrobial surfaces. Nanoscale, 2019, 11, 8752-8759.	5.6	22
49	Fundamentals and Applications of FluidFM Technology in Singleâ€Cell Studies. Advanced Materials Interfaces, 2020, 7, 2001115.	3.7	19
50	Durable, Stable, and Functional Nanopores Decorated by Self-Assembled Dipeptides. ACS Applied Materials & Interfaces, 2020, 12, 14563-14568.	8.0	19
51	Amphiphilic Peptide with Dual Functionality Resists Biofouling. Langmuir, 2020, 36, 4201-4206.	3.5	18
52	Evidence for new enantiospecific interaction force in chiral biomolecules. CheM, 2021, 7, 2787-2799.	11.7	17
53	Phase separation of two-dimensional Coulombic crystals of mesoscale dipolar particles from mesoscale polarizable â€œsolventâ€• Applied Physics Letters, 2009, 94, .	3.3	16
54	Self-assembly of a metallo-peptide into a drug delivery system using a â€œswitch onâ€•displacement strategy. Journal of Materials Chemistry B, 2018, 6, 8228-8237.	5.8	16

#	Article	IF	Citations
55	Analog modeling of Worm-Like Chain molecules using macroscopic beads-on-a-string. Physical Chemistry Chemical Physics, 2012, 14, 9041.	2.8	15
56	Review insights into the interactions of amino acids and peptides with inorganic materials using single molecule force spectroscopy. Biopolymers, 2015, 104, 480-494.	2.4	15
57	The role of hydrophobic, aromatic and electrostatic interactions between amino acid residues and a titanium dioxide surface. Physical Chemistry Chemical Physics, 2018, 20, 29811-29816.	2.8	15
58	Rational Design of Amphiphilic Peptides and Its Effect on Antifouling Performance. Biomacromolecules, 2018, 19, 3620-3627.	5.4	15
59	Combining chemistry and topography to fight biofilm formation: Fabrication of micropatterned surfaces with a peptide-based coating. Colloids and Surfaces B: Biointerfaces, 2020, 196, 111365.	5.0	15
60	Nucleobase morpholino Î² amino acids as molecular chimeras for the preparation of photoluminescent materials from ribonucleosides. Scientific Reports, 2020, 10, 19331.	3.3	15
61	Detection of Au Nanoparticles Using Peptide-Modified Si₃N₄ Nanopores. ACS Applied Nano Materials, 2021, 4, 1000-1008.	5.0	13
62	Antiviral Polymers Based on N-Halamine Polyurea. Biomacromolecules, 2021, 22, 4357-4364.	5.4	13
63	The effects of fluid composition and shear conditions on bacterial adhesion to an antifouling peptide-coated surface. MRS Communications, 2018, 8, 938-946.	1.8	12
64	ForSDAT: an automated platform for analyzing force spectroscopy measurements. Analytical Methods, 2019, 11, 4709-4718.	2.7	12
65	A peptide coating preventing the attachment of Porphyromonas gingivalis on the surfaces of dental implants. Journal of Periodontal Research, 2020, 55, 503-510.	2.7	12
66	Understanding the Adhesion Mechanism of Hydroxyapatite-Binding Peptide. Langmuir, 2022, 38, 968-978.	3.5	12
67	Optimization of Liganded Polyethylenimine Polyethylene Glycol Vector for Nucleic Acid Delivery. Bioconjugate Chemistry, 2014, 25, 1644-1654.	3.6	10
68	Single-stranded DNA detection by solvent-induced assemblies of a metallo-peptide-based complex. Nanoscale, 2016, 8, 9527-9536.	5.6	10
69	Electrically Responsive, Nanopatterned Surfaces for Triggered Delivery of Biologically Active Molecules into Cells. ACS Applied Materials & Interfaces, 2019, 11, 1201-1208.	8.0	10
70	Miscibility, interactions and antimicrobial activity of poly(Îµ-caprolactone)/chloramphenicol blends. European Polymer Journal, 2018, 102, 30-37.	5.4	9
71	Antifouling and antimicrobial coatings based on solâ€“gel films. Journal of Sol-Gel Science and Technology, 2020, 95, 609-619.	2.4	8
72	Antiviral Activity of Peptide-Based Assemblies. ACS Applied Materials & Interfaces, 2021, 13, 48469-48477.	8.0	8

#	Article	IF	Citations
73	Nano-patterned polyelectrolyte multilayers assembled using block copolymer templates: The combined effect of ionic strength and nano-confinement. Polymer, 2017, 126, 56-64.	3.8	6
74	Selfâ€assembly of azide containing dipeptides. Journal of Peptide Science, 2014, 20, 479-486.	1.4	5
75	Covalent Inhibition of HIVâ€1 Integrase by Nâ€Succinimidyl Peptides. ChemMedChem, 2016, 11, 1987-1994.	3.2	5
76	Electrochemical Cycling Induced Surface Segregation of AuPt Nanoparticles in HClO4and H2SO4. Journal of the Electrochemical Society, 2016, 163, F752-F760.	2.9	5
77	Quickly Manufactured, Drug Eluting, Calcium Phosphate Composite Coating. ChemistrySelect, 2017, 2, 753-758.	1.5	5
78	Nanoscale Topographyâ€“Rigidity Correlation at the Surface of T Cells. ACS Nano, 2019, 13, 346-356.	14.6	5
79	Formation of Ordered Biomolecular Structures by the Self-assembly of Short Peptides. Journal of Visualized Experiments, 2013, , e50946.	0.3	4
80	The effect of endâ€group substitution on surface selfâ€assembly of peptides. Journal of Peptide Science, 2019, 25, e3212.	1.4	4
81	Fast and synchronized fluctuations of cortical actin negatively correlate with nucleoli liquidâ€“liquid phase separation in T cells. European Biophysics Journal, 2020, 49, 409-423.	2.2	4
82	A Novel Copper-Binding Peptide That Self-Assembles Into a Transparent Antibacterial and Antiviral Coating. Frontiers in Bioengineering and Biotechnology, 2021, 9, 736679.	4.1	4
83	Electrochemical Triggered Dissolution of Hydroxyapatite/Doxorubicin Nanocarriers. ACS Applied Bio Materials, 2019, 2, 1956-1966.	4.6	3
84	Non-covalently embedded oxytocin in alkanethiol monolayer as Zn2+ selective biosensor. Scientific Reports, 2021, 11, 7051.	3.3	3
85	Thread Based Devices for Low-Cost Diagnostics. Methods in Molecular Biology, 2013, 949, 197-205.	0.9	3
86	Peptide fibrils as monomer storage of the covalent HIVâ€1 integrase inhibitor. Journal of Peptide Science, 2017, 23, 117-121.	1.4	2
87	Insights into the Interactions of Amino Acids and Peptides with Inorganic Materials Using Single-Molecule Force Spectroscopy. Journal of Visualized Experiments, 2017, , .	0.3	2
88	Structural preferences of an anti-fouling peptide: From single chain to small molecular assemblies. Biophysical Chemistry, 2021, 272, 106555.	2.8	2
89	Urinary Stent Development and Evaluation Models: In Vitro, Ex Vivo and In Vivoâ€”A European Network of Multidisciplinary Research to Improve Urinary Stents (ENIUS) Initiative. Polymers, 2022, 14, 1641.	4.5	2
90	Biomaterials: Fundamentals and Applications of FluidFM Technology in Singleâ€Cell Studies (Adv. Mater.) Tj ETQq0 0 0 rgBT /Overlock 1	3.7	1

#	Article	IF	Citations
91	An Individual Amino Acid as a Possible Prebiotic Catalyst. ChemSystemsChem, 2021, 3, e2100005.	2.6	1
92	Fighting Bacteria: How Can We Prevent Hospital-Acquired Infections?. Frontiers for Young Minds, 0, 6, .	0.8	1
93	Inside Cover: Bioinspired Design of Nanocages by Self-Assembling Triskelion Peptide Elements (Angew.) Tj ETQq1 1 0.784314 rgBT /O	13.8	0
94	Physical-organic studies of ionic electrets: Mechanism of formation, molecular design, and applications. , 2008, , .		0
95	Multiplex optical detection and quantification of DNA fragments by metallo-peptide assemblies. Scientific Reports, 2019, 9, 8789.	3.3	0
96	An Individual Amino Acid as a Possible Prebiotic Catalyst. ChemSystemsChem, 2021, 3, e2100018.	2.6	0
97	Interactions of Microorganisms with Lipid Langmuir Layers. Langmuir, 2021, 37, 10340-10347.	3.5	0