

Meital Reches

List of Publications by Year in descending order

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97
papers

8,974
citations

117453

34
h-index

42291

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. <i>Science</i> , 2003, 300, 625-627.	6.0	2,321
2	Rigid, Self-Assembled Hydrogel Composed of a Modified Aromatic Dipeptide. <i>Advanced Materials</i> , 2006, 18, 1365-1370.	11.1	742
3	Low-Cost Printing of Poly(dimethylsiloxane) Barriers To Define Microchannels in Paper. <i>Analytical Chemistry</i> , 2008, 80, 3387-3392.	3.2	535
4	Controlled patterning of aligned self-assembled peptide nanotubes. <i>Nature Nanotechnology</i> , 2006, 1, 195-200.	15.6	529
5	Formation of Closed-Cage Nanostructures by Self-Assembly of Aromatic Dipeptides. <i>Nano Letters</i> , 2004, 4, 581-585.	4.5	401
6	Thermal and Chemical Stability of Diphenylalanine Peptide Nanotubes: Implications for Nanotechnological Applications. <i>Langmuir</i> , 2006, 22, 1313-1320.	1.6	349
7	Amyloid Fibril Formation by Pentapeptide and Tetrapeptide Fragments of Human Calcitonin. <i>Journal of Biological Chemistry</i> , 2002, 277, 35475-35480.	1.6	315
8	Novel Electrochemical Biosensing Platform Using Self-Assembled Peptide Nanotubes. <i>Nano Letters</i> , 2005, 5, 183-186.	4.5	289
9	Peptide Nanotube-Modified Electrodes for Enzyme Biosensor Applications. <i>Analytical Chemistry</i> , 2005, 77, 5155-5159.	3.2	252
10	Thread as a Matrix for Biomedical Assays. <i>ACS Applied Materials & Interfaces</i> , 2010, 2, 1722-1728.	4.0	224
11	Self-Assembly of Phenylalanine Oligopeptides: Insights from Experiments and Simulations. <i>Biophysical Journal</i> , 2009, 96, 5020-5029.	0.2	212
12	Self-assembly of peptide nanotubes and amyloid-like structures by charged-termini-capped diphenylalanine peptide analogues. <i>Israel Journal of Chemistry</i> , 2005, 45, 363-371.	1.0	201
13	Designed aromatic homo-dipeptides: formation of ordered nanostructures and potential nanotechnological applications. <i>Physical Biology</i> , 2006, 3, S10-S19.	0.8	182
14	Molecular Self-Assembly of Peptide Nanostructures: Mechanism of Association and Potential Uses. <i>Current Nanoscience</i> , 2006, 2, 105-111.	0.7	168
15	Bioinspired Design of Nanocages by Self-Assembling Triskelion Peptide Elements. <i>Angewandte Chemie - International Edition</i> , 2007, 46, 2002-2004.	7.2	133
16	Bio-inspired antifouling approaches: the quest towards non-toxic and non-biocidal materials. <i>Current Opinion in Biotechnology</i> , 2016, 39, 48-55.	3.3	116
17	Energy landscape of amyloidogenic peptide oligomerization by parallel-tempering molecular dynamics simulation: Significant role of Asn ladder. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2005, 102, 8174-8179.	3.3	109
18	Tailor-Made Functional Peptide Self-Assembling Nanostructures. <i>Advanced Materials</i> , 2018, 30, e1707083.	11.1	104

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19	Peptide-Based Approaches to Fight Biofouling. <i>Advanced Materials Interfaces</i> , 2018, 5, 1800073.	1.9	94
20	Synthesis, coating, and drug-release of hydroxyapatite nanoparticles loaded with antibiotics. <i>Journal of Materials Chemistry B</i> , 2017, 5, 7819-7830.	2.9	87
21	Nanoscale kinetic segregation of TCR and CD45 in engaged microvilli facilitates early T cell activation. <i>Nature Communications</i> , 2018, 9, 732.	5.8	84
22	Coassembly of Aromatic Dipeptides into Biomolecular Necklaces. <i>ACS Nano</i> , 2012, 6, 9559-9566.	7.3	82
23	Formation of Well-Organized Self-Assembled Films from Peptide Nanotubes. <i>Advanced Materials</i> , 2007, 19, 1485-1488.	11.1	78
24	Amyloidogenic hexapeptide fragment of medin: homology to functional islet amyloid polypeptide fragments. <i>Amyloid: the International Journal of Experimental and Clinical Investigation: the Official Journal of the International Society of Amyloidosis</i> , 2004, 11, 81-89.	1.4	74
25	Self-assembly of a tripeptide into a functional coating that resists fouling. <i>Chemical Communications</i> , 2014, 50, 11154-11157.	2.2	68
26	Evaluating Efficacy of Antimicrobial and Antifouling Materials for Urinary Tract Medical Devices: Challenges and Recommendations. <i>Macromolecular Bioscience</i> , 2019, 19, e1800384.	2.1	66
27	Dipeptide Nanotubes Containing Unnatural Fluorine-Substituted β -Diarylamino Acid and α -Alanine as Candidates for Biomedical Applications. <i>Organic Letters</i> , 2015, 17, 4468-4471.	2.4	50
28	Probing the Interaction of Individual Amino Acids with Inorganic Surfaces Using Atomic Force Spectroscopy. <i>Langmuir</i> , 2013, 29, 10102-10109.	1.6	48
29	Integrating peptide nanotubes in micro-fabrication processes. <i>Journal of Micromechanics and Microengineering</i> , 2007, 17, 2360-2365.	1.5	45
30	AFM-Based Spin-Exchange Microscopy Using Chiral Molecules. <i>Advanced Materials</i> , 2019, 31, e1904206.	11.1	45
31	Revealing the role of catechol moieties in the interactions between peptides and inorganic surfaces. <i>Nanoscale</i> , 2016, 8, 15309-15316.	2.8	42
32	Biological and Chemical Decoration of Peptide Nanostructures via Biotin-Avidin Interactions. <i>Journal of Nanoscience and Nanotechnology</i> , 2007, 7, 2239-2245.	0.9	40
33	Elucidating the mechanism of interaction between peptides and inorganic surfaces. <i>Physical Chemistry Chemical Physics</i> , 2015, 17, 15305-15315.	1.3	39
34	Inversion of Supramolecular Chirality by Sonication-Induced Organogelation. <i>Scientific Reports</i> , 2015, 5, 16365.	1.6	36
35	The Preferred Conformation of the Tripeptide Ala-Phe-Ala in Water Is an Inverse β -Turn: Implications for Protein Folding and Drug Design. <i>Biochemistry</i> , 2005, 44, 14170-14178.	1.2	34
36	Self-assembly of an amphipathic β -tripeptide into cationic spherical particles for intracellular delivery. <i>Organic and Biomolecular Chemistry</i> , 2017, 15, 6773-6779.	1.5	34

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37	Preventing Biofilm Formation by Dairy-Associated Bacteria Using Peptide-Coated Surfaces. <i>Frontiers in Microbiology</i> , 2019, 10, 1405.	1.5	34
38	Sticky tubes and magnetic hydrogels co-assembled by a short peptide and melanin-like nanoparticles. <i>Chemical Communications</i> , 2015, 51, 5432-5435.	2.2	33
39	Electrochemical Approach for Effective Antifouling and Antimicrobial Surfaces. <i>ACS Applied Materials & Interfaces</i> , 2017, 9, 26503-26509.	4.0	33
40	Co-assembly of aromatic dipeptides into spherical structures that are similar in morphology to red and white blood cells. <i>Journal of Materials Chemistry B</i> , 2014, 2, 2583.	2.9	30
41	Bionanocomposite Films from Resilin-CBD Bound to Cellulose Nanocrystals. <i>Industrial Biotechnology</i> , 2015, 11, 44-58.	0.5	29
42	T Cell Activation through Isolated Tight Contacts. <i>Cell Reports</i> , 2019, 29, 3506-3521.e6.	2.9	27
43	Folding of electrostatically charged beads-on-a-string as an experimental realization of a theoretical model in polymer science. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2009, 106, 17644-17649.	3.3	26
44	Triangular correlation (TrC) between cancer aggressiveness, cell uptake capability, and cell deformability. <i>Science Advances</i> , 2020, 6, eaax2861.	4.7	24
45	Resisting Bacteria and Attracting Cells: Spontaneous Formation of a Bifunctional Peptide-Based Coating by On-Surface Assembly Approach. <i>ACS Biomaterials Science and Engineering</i> , 2018, 4, 4051-4061.	2.6	23
46	Cell wall associated protein TasA provides an initial binding component to extracellular polysaccharides in dual-species biofilm. <i>Scientific Reports</i> , 2018, 8, 9350.	1.6	23
47	Phase separation of 2D meso-scale Coulombic crystals from meso-scale polarizable ϵ -solvent. <i>Soft Matter</i> , 2009, 5, 1188-1191.	1.2	22
48	Tailoring the self-assembly of a tripeptide for the formation of antimicrobial surfaces. <i>Nanoscale</i> , 2019, 11, 8752-8759.	2.8	22
49	Fundamentals and Applications of FluidFM Technology in Single-Cell Studies. <i>Advanced Materials Interfaces</i> , 2020, 7, 2001115.	1.9	19
50	Durable, Stable, and Functional Nanopores Decorated by Self-Assembled Dipeptides. <i>ACS Applied Materials & Interfaces</i> , 2020, 12, 14563-14568.	4.0	19
51	Amphiphilic Peptide with Dual Functionality Resists Biofouling. <i>Langmuir</i> , 2020, 36, 4201-4206.	1.6	18
52	Evidence for new enantiospecific interaction force in chiral biomolecules. <i>CheM</i> , 2021, 7, 2787-2799.	5.8	17
53	Phase separation of two-dimensional Coulombic crystals of mesoscale dipolar particles from mesoscale polarizable ϵ -solvent. <i>Applied Physics Letters</i> , 2009, 94, .	1.5	16
54	Self-assembly of a metallo-peptide into a drug delivery system using a ϵ -switch on-displacement strategy. <i>Journal of Materials Chemistry B</i> , 2018, 6, 8228-8237.	2.9	16

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55	Analog modeling of Worm-Like Chain molecules using macroscopic beads-on-a-string. <i>Physical Chemistry Chemical Physics</i> , 2012, 14, 9041.	1.3	15
56	Review insights into the interactions of amino acids and peptides with inorganic materials using single molecule force spectroscopy. <i>Biopolymers</i> , 2015, 104, 480-494.	1.2	15
57	The role of hydrophobic, aromatic and electrostatic interactions between amino acid residues and a titanium dioxide surface. <i>Physical Chemistry Chemical Physics</i> , 2018, 20, 29811-29816.	1.3	15
58	Rational Design of Amphiphilic Peptides and Its Effect on Antifouling Performance. <i>Biomacromolecules</i> , 2018, 19, 3620-3627.	2.6	15
59	Combining chemistry and topography to fight biofilm formation: Fabrication of micropatterned surfaces with a peptide-based coating. <i>Colloids and Surfaces B: Biointerfaces</i> , 2020, 196, 111365.	2.5	15
60	Nucleobase morpholino \hat{I}^2 amino acids as molecular chimeras for the preparation of photoluminescent materials from ribonucleosides. <i>Scientific Reports</i> , 2020, 10, 19331.	1.6	15
61	Detection of Au Nanoparticles Using Peptide-Modified Si ₃ N ₄ Nanopores. <i>ACS Applied Nano Materials</i> , 2021, 4, 1000-1008.	2.4	13
62	Antiviral Polymers Based on <i>N</i> -Halamine Polyurea. <i>Biomacromolecules</i> , 2021, 22, 4357-4364.	2.6	13
63	The effects of fluid composition and shear conditions on bacterial adhesion to an antifouling peptide-coated surface. <i>MRS Communications</i> , 2018, 8, 938-946.	0.8	12
64	ForSDAT: an automated platform for analyzing force spectroscopy measurements. <i>Analytical Methods</i> , 2019, 11, 4709-4718.	1.3	12
65	A peptide coating preventing the attachment of <i>Porphyromonas gingivalis</i> on the surfaces of dental implants. <i>Journal of Periodontal Research</i> , 2020, 55, 503-510.	1.4	12
66	Understanding the Adhesion Mechanism of Hydroxyapatite-Binding Peptide. <i>Langmuir</i> , 2022, 38, 968-978.	1.6	12
67	Optimization of Liganded Polyethylenimine Polyethylene Glycol Vector for Nucleic Acid Delivery. <i>Bioconjugate Chemistry</i> , 2014, 25, 1644-1654.	1.8	10
68	Single-stranded DNA detection by solvent-induced assemblies of a metallo-peptide-based complex. <i>Nanoscale</i> , 2016, 8, 9527-9536.	2.8	10
69	Electrically Responsive, Nanopatterned Surfaces for Triggered Delivery of Biologically Active Molecules into Cells. <i>ACS Applied Materials & Interfaces</i> , 2019, 11, 1201-1208.	4.0	10
70	Miscibility, interactions and antimicrobial activity of poly($\hat{\mu}$ -caprolactone)/chloramphenicol blends. <i>European Polymer Journal</i> , 2018, 102, 30-37.	2.6	9
71	Antifouling and antimicrobial coatings based on sol-gel films. <i>Journal of Sol-Gel Science and Technology</i> , 2020, 95, 609-619.	1.1	8
72	Antiviral Activity of Peptide-Based Assemblies. <i>ACS Applied Materials & Interfaces</i> , 2021, 13, 48469-48477.	4.0	8

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73	Nano-patterned polyelectrolyte multilayers assembled using block copolymer templates: The combined effect of ionic strength and nano-confinement. <i>Polymer</i> , 2017, 126, 56-64.	1.8	6
74	Self-assembly of azide containing dipeptides. <i>Journal of Peptide Science</i> , 2014, 20, 479-486.	0.8	5
75	Covalent Inhibition of HIV-1 Integrase by N-Succinimidyl Peptides. <i>ChemMedChem</i> , 2016, 11, 1987-1994.	1.6	5
76	Electrochemical Cycling Induced Surface Segregation of AuPt Nanoparticles in HClO ₄ and H ₂ SO ₄ . <i>Journal of the Electrochemical Society</i> , 2016, 163, F752-F760.	1.3	5
77	Quickly Manufactured, Drug Eluting, Calcium Phosphate Composite Coating. <i>ChemistrySelect</i> , 2017, 2, 753-758.	0.7	5
78	Nanoscale Topography-Rigidity Correlation at the Surface of T Cells. <i>ACS Nano</i> , 2019, 13, 346-356.	7.3	5
79	Formation of Ordered Biomolecular Structures by the Self-assembly of Short Peptides. <i>Journal of Visualized Experiments</i> , 2013, , e50946.	0.2	4
80	The effect of end-group substitution on surface self-assembly of peptides. <i>Journal of Peptide Science</i> , 2019, 25, e3212.	0.8	4
81	Fast and synchronized fluctuations of cortical actin negatively correlate with nucleoli liquid-liquid phase separation in T cells. <i>European Biophysics Journal</i> , 2020, 49, 409-423.	1.2	4
82	A Novel Copper-Binding Peptide That Self-Assembles Into a Transparent Antibacterial and Antiviral Coating. <i>Frontiers in Bioengineering and Biotechnology</i> , 2021, 9, 736679.	2.0	4
83	Electrochemical Triggered Dissolution of Hydroxyapatite/Doxorubicin Nanocarriers. <i>ACS Applied Bio Materials</i> , 2019, 2, 1956-1966.	2.3	3
84	Non-covalently embedded oxytocin in alkanethiol monolayer as Zn ²⁺ selective biosensor. <i>Scientific Reports</i> , 2021, 11, 7051.	1.6	3
85	Thread Based Devices for Low-Cost Diagnostics. <i>Methods in Molecular Biology</i> , 2013, 949, 197-205.	0.4	3
86	Peptide fibrils as monomer storage of the covalent HIV-1 integrase inhibitor. <i>Journal of Peptide Science</i> , 2017, 23, 117-121.	0.8	2
87	Insights into the Interactions of Amino Acids and Peptides with Inorganic Materials Using Single-Molecule Force Spectroscopy. <i>Journal of Visualized Experiments</i> , 2017, , .	0.2	2
88	Structural preferences of an anti-fouling peptide: From single chain to small molecular assemblies. <i>Biophysical Chemistry</i> , 2021, 272, 106555.	1.5	2
89	Urinary Stent Development and Evaluation Models: In Vitro, Ex Vivo and In Vivo—A European Network of Multidisciplinary Research to Improve Urinary Stents (ENIUS) Initiative. <i>Polymers</i> , 2022, 14, 1641.	2.0	2
90	Biomaterials: Fundamentals and Applications of FluidFM Technology in Single-Cell Studies (Adv. Mater.) Tj ETQq0,0,0 rgBT /Overlock 1	1.9	1

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91	An Individual Amino Acid as a Possible Prebiotic Catalyst. ChemSystemsChem, 2021, 3, e2100005.	1.1	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 7.2	1.0	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.	1.6	0
96	An Individual Amino Acid as a Possible Prebiotic Catalyst. ChemSystemsChem, 2021, 3, e2100018.	1.1	0
97	Interactions of Microorganisms with Lipid Langmuir Layers. Langmuir, 2021, 37, 10340-10347.	1.6	0