M Reza Ghadiri

List of Publications by Citations

103 papers	15,893 citations	62 h-index	107 g-index
107 ext. papers	16,747 ext. citations	14.3 avg, IF	6.3 L-index

#	Paper	IF	Citations
103	Self-assembling organic nanotubes based on a cyclic peptide architecture. *Nature*, **1993**, 366, 324-7	50.4	1469
102	A porous silicon-based optical interferometric biosensor. *Science*, **1997**, 278, 840-3	33.3	1073
101	Self-Assembling Organic Nanotubes. *Angewandte Chemie - International Edition*, **2001**, 40, 988-1011	16.4	944
100	Antibacterial agents based on the cyclic D,L-alpha-peptide architecture. *Nature*, **2001**, 412, 452-5	50.4	827
99	Artificial transmembrane ion channels from self-assembling peptide nanotubes. *Nature*, **1994**, 369, 301-4	50.4	810
98	Self-Assembling Peptide Nanotubes. *Journal of the American Chemical Society*, **1996**, 118, 43-50	16.4	536
97	A self-replicating peptide. *Nature*, **1996**, 382, 525-8	50.4	507
96	Heterocyclic peptide backbone modifications in an alpha-helical coiled coil. *Journal of the American Chemical Society*, **2004**, 126, 15366-7	16.4	406
95	Macroporous p-Type Silicon Fabry□Perot Layers. Fabrication, Characterization, and Applications in Biosensing. *Journal of the American Chemical Society*, **1998**, 120, 12108-12116	16.4	345
94	A heterocyclic peptide nanotube. *Journal of the American Chemical Society*, **2003**, 125, 9372-6	16.4	287
93	Self-Assembling Cyclic □-Peptide Nanotubes as Artificial Transmembrane Ion Channels. *Journal of the American Chemical Society*, **1998**, 120, 651-656	16.4	270
92	A chiroselective peptide replicator. *Nature*, **2001**, 409, 797-801	50.4	250
91	Secondary structure nucleation in peptides. Transition metal ion stabilized .alpha.-helices. *Journal of the American Chemical Society*, **1990**, 112, 1630-1632	16.4	245
90	DNA-based photonic logic gates: AND, NAND, and INHIBIT. *Journal of the American Chemical Society* , **2003**, 125, 346-7	16.4	239
89	Ion channel models based on self-assembling cyclic peptide nanotubes. *Accounts of Chemical Research*, **2013**, 46, 2955-65	24.3	235
88	Channel-Mediated Transport of Glucose across Lipid Bilayers. *Journal of the American Chemical Society*, **1994**, 116, 10785-10786	16.4	232
87	Peptide Nanotubes and Beyond. *Chemistry - A European Journal*, **1998**, 4, 1367-1372	4.8	225

86	Modular multi-level circuits from immobilized DNA-based logic gates. *Journal of the American Chemical Society*, **2007**, 129, 14875-9	16.4	225
85	The Structural and Thermodynamic Basis for the Formation of Self-Assembled Peptide Nanotubes. *Angewandte Chemie International Edition in English*, **1995**, 34, 93-95		216
84	Organische Nanorhren durch Selbstorganisation. *Angewandte Chemie*, **2001**, 113, 1016-1041	3.6	206
83	Nanoscale Tubular Ensembles with Specified Internal Diameters. Design of a Self-Assembled Nanotube with a 13-.ANG. Pore. *Journal of the American Chemical Society*, **1994**, 116, 6011-6012	16.4	205
82	Emergence of symbiosis in peptide self-replication through a hypercyclic network. *Nature*, **1997**, 390, 591-4	50.4	199
81	Boolean logic functions of a synthetic peptide network. *Journal of the American Chemical Society*, **2004**, 126, 11140-1	16.4	193
80	A single-molecule nanopore device detects DNA polymerase activity with single-nucleotide resolution. *Journal of the American Chemical Society*, **2008**, 130, 818-20	16.4	190
79	Oriented Self-Assembly of Cyclic Peptide Nanotubes in Lipid Membranes. *Journal of the American Chemical Society*, **1998**, 120, 4417-4424	16.4	190
78	DNA detection and signal amplification via an engineered allosteric enzyme. *Journal of the American Chemical Society*, **2003**, 125, 344-5	16.4	178
77	Design of self-assembling peptide nanotubes with delocalized electronic states. *Small*, **2006**, 2, 99-102	11	176
76	Supramolecular Design by Covalent Capture. Design of a Peptide Cylinder via Hydrogen-Bond-Promoted Intermolecular Olefin Metathesis. *Journal of the American Chemical Society*, **1995**, 117, 12364-12365	16.4	176
75	Design of a directed molecular network. *Proceedings of the National Academy of Sciences of the United States of America*, **2004**, 101, 10872-7	11.5	170
74	Self-assembling sequence-adaptive peptide nucleic acids. *Science*, **2009**, 325, 73-7	33.3	165
73	Cylindrical hsheet Peptide Assemblies. *Journal of the American Chemical Society*, **1998**, 120, 8949-8962	16.4	163
72	Recognizing a single base in an individual DNA strand: a step toward DNA sequencing in nanopores. *Angewandte Chemie - International Edition*, **2005**, 44, 1401-4	16.4	157
71	Photoswitchable Hydrogen-Bonding in Self-Organized Cylindrical Peptide Systems. *Angewandte Chemie - International Edition*, **1999**, 38, 1598-1601	16.4	152
70	Structure and Dynamics of Self-Assembling Peptide Nanotubes and the Channel-Mediated Water Organization and Self-Diffusion. A Molecular Dynamics Study. *Journal of the American Chemical Society*, **1995**, 117, 9151-9158	16.4	152
69	Modulating ion channel properties of transmembrane peptide nanotubes through heteromeric supramolecular assemblies. *Journal of the American Chemical Society*, **2002**, 124, 10004-5	16.4	143

68	Diffusion-Limited Size-Selective Ion Sensing Based on SAM-Supported Peptide Nanotubes. *Journal of the American Chemical Society*, **1997**, 119, 11306-11312	16.4	138
67	Efficient route to C2 symmetric heterocyclic backbone modified cyclic peptides. *Organic Letters*, **2005**, 7, 4503-6	6.2	137
66	Systemic antibacterial activity of novel synthetic cyclic peptides. *Antimicrobial Agents and Chemotherapy*, **2005**, 49, 3302-10	5.9	131
65	Probing the bioactive conformation of an archetypal natural product HDAC inhibitor with conformationally homogeneous triazole-modified cyclic tetrapeptides. *Angewandte Chemie - International Edition*, **2009**, 48, 4718-24	16.4	127
64	A synthetic peptide ligase. *Nature*, **1997**, 389, 706-9	50.4	127
63	Cyclic Peptides as Molecular Adapters for a Pore-Forming Protein. *Journal of the American Chemical Society*, **2000**, 122, 11757-11766	16.4	121
62	Peptide architecture. Design of stable .alpha.-helical metallopeptides via a novel exchange-inert ruthenium(III) complex. *Journal of the American Chemical Society*, **1990**, 112, 9633-9635	16.4	119
61	A virocidal amphipathic {alpha}-helical peptide that inhibits hepatitis C virus infection in vitro. *Proceedings of the National Academy of Sciences of the United States of America*, **2008**, 105, 3088-93	11.5	117
60	Modulating charge transfer through cyclic D,L-alpha-peptide self-assembly. *Chemistry - A European Journal*, **2005**, 11, 1137-44	4.8	110
59	Antiviral cyclic D,L-alpha-peptides: targeting a general biochemical pathway in virus infections. *Bioorganic and Medicinal Chemistry*, **2005**, 13, 5145-53	3.4	100
58	Autocatalytic networks: the transition from molecular self-replication to molecular ecosystems. *Current Opinion in Chemical Biology*, **1997**, 1, 491-6	9.7	99
57	□Sheet Peptide Architecture: Measuring the Relative Stability of Parallel vs. Antiparallel □Sheets. *Angewandte Chemie International Edition in English*, **1995**, 34, 95-98		98
56	A Synthetic Pore-Mediated Transmembrane Transport of Glutamic Acid. *Angewandte Chemie - International Edition*, **2001**, 40, 2503-2506	16.4	95
55	Peptide Self-Replication Via Template-Directed Ligation. *Chemistry - A European Journal*, **1997**, 3, 1017-1024	4.8	94
54	De Novo Design of a Novel Heterodinuclear Three-Helix Bundle Metalloprotein. *Angewandte Chemie International Edition in English*, **1993**, 32, 1594-1597		86
53	Conformationally homogeneous heterocyclic pseudotetrapeptides as three-dimensional scaffolds for rational drug design: receptor-selective somatostatin analogues. *Angewandte Chemie - International Edition*, **2009**, 48, 4725-9	16.4	85
52	DNA hybridization-enhanced porous silicon corrosion: mechanistic investigations and prospect for optical interferometric biosensing. *Tetrahedron*, **2004**, 60, 11259-11267	2.4	84
51	Dynamic Error Correction in Autocatalytic Peptide Networks. *Angewandte Chemie - International Edition*, **1998**, 37, 126-128	16.4	75

50	Peptide Macrocyclization Inspired by Non-Ribosomal Imine Natural Products. *Journal of the American Chemical Society*, **2017**, 139, 5233-5241	16.4	71
49	Design, synthesis, biological evaluation, and structural characterization of potent histone deacetylase inhibitors based on cyclic alpha/beta-tetrapeptide architectures. *Journal of the American Chemical Society*, **2009**, 131, 3033-41	16.4	69
48	Discovery of potent and selective histone deacetylase inhibitors via focused combinatorial libraries of cyclic alpha3beta-tetrapeptides. *Journal of Medicinal Chemistry*, **2009**, 52, 7836-46	8.3	69
47	Sequence-addressable DNA logic. *Small*, **2008**, 4, 427-31	11	69
46	Single DNA rotaxanes of a transmembrane pore protein. *Angewandte Chemie - International Edition*, **2004**, 43, 3063-7	16.4	69
45	Self-Assembling Organic Nanotubes. *Angewandte Chemie - International Edition*, **2001**, 40, 988-1011	16.4	67
44	Design of molecular logic devices based on a programmable DNA-regulated semisynthetic enzyme. *Angewandte Chemie - International Edition*, **2007**, 46, 3955-8	16.4	64
43	Reversible Photoisomerization of Self-Organized Cylindrical Peptide Assemblies at Air□Water and Solid Interfaces. *Langmuir*, **1999**, 15, 3956-3964	4	63
42	Covalent Capture and Stabilization of Cylindrical □Sheet Peptide Assemblies. *Chemistry - A European Journal*, **1999**, 5, 782-792	4.8	61
41	Strukturelle und thermodynamische Voraussetzungen f□ die Bildung selbstorganisierter r□renf□miger Peptid-Nanostrukturen. *Angewandte Chemie*, **1995**, 107, 76-78	3.6	57
40	Universal translators for nucleic acid diagnosis. *Journal of the American Chemical Society*, **2009**, 131, 9368-77	16.4	55
39	A combinatorial approach to the discovery of biocidal six-residue cyclic D,L-alpha-peptides against the bacteria methicillin-resistant Staphylococcus aureus (MRSA) and E. coli and the biofouling algae Ulva linza and Navicula perminuta. *Chemistry - A European Journal*, **2007**, 13, 4008-13	4.8	55
38	Automated mass spectrometric sequence determination of cyclic peptide library members. *ACS Combinatorial Science*, **2003**, 5, 33-40		54
37	Antibacterial cyclic D,L-alpha-glycopeptides. *Chemical Communications*, **2009**, 3693-5	5.8	53
36	Self-Assembling Cyclic Peptide Cylinders as Nuclei for Crystal Engineering. *Angewandte Chemie - International Edition*, **2001**, 40, 2163-2166	16.4	50
35	Photoschaltbare Wasserstoffbr□ken-Verkn□fung in selbstorganisierten zylindrischen Peptidanordnungen. *Angewandte Chemie*, **1999**, 111, 1703-1706	3.6	47
34	A de novo designed peptide ligase: a mechanistic investigation. *Journal of the American Chemical Society*, **2001**, 123, 1797-803	16.4	45
33	Crystalline Cyclic Peptide Nanotubes at Interfaces. *Journal of the American Chemical Society*, **1999**, 121, 1186-1191	16.4	45

32	Real-time monitoring of DNA polymerase function and stepwise single-nucleotide DNA strand translocation through a protein nanopore. *Angewandte Chemie - International Edition*, **2010**, 49, 10106-9	16.4	42
31	Self-assembling peptide nanotubes with antiviral activity against hepatitis C virus. *Chemistry and Biology*, **2011**, 18, 1453-62		40
30	Structure-based engineering of internal cavities in coiled-coil peptides. *Biochemistry*, **2005**, 44, 9723-32	3.2	38
29	Discovery of HDAC Inhibitors That Lack an Active Site Zn(2+)-Binding Functional Group. *ACS Medicinal Chemistry Letters*, **2012**, 3, 505-8	4.3	37
28	Recognizing a Single Base in an Individual DNA Strand: A Step Toward DNA Sequencing in Nanopores. *Angewandte Chemie*, **2005**, 117, 1425-1428	3.6	35
27	Catalyzed oxidative corrosion of porous silicon used as an optical transducer for ligand-receptor interactions. *ChemBioChem*, **2008**, 9, 1776-86	3.8	33
26	Stereoselection in designed three-helix bundle metalloproteins. *Chirality*, **1998**, 10, 35-40	2.1	30
25	Natural and Synthetic Macrocyclic Inhibitors of the Histone Deacetylase Enzymes. *ChemBioChem*, **2017**, 18, 5-49	3.8	28
24	Macrocyclic peptoid-Peptide hybrids as inhibitors of class I histone deacetylases. *ACS Medicinal Chemistry Letters*, **2012**, 3, 749-53	4.3	28
23	Transition metal mediated surface modification of porous silicon. *Tetrahedron*, **2001**, 57, 5131-5136	2.4	27
22	Biomimetic catalysis of intermodular aminoacyl transfer. *Journal of the American Chemical Society*, **2007**, 129, 748-9	16.4	26
21	Directed remodeling of the mouse gut microbiome inhibits the development of atherosclerosis. *Nature Biotechnology*, **2020**, 38, 1288-1297	44.5	24
20	Potential Agents for Treating Cystic Fibrosis: Cyclic Tetrapeptides that Restore Trafficking and Activity of ΔF508-CFTR. *ACS Medicinal Chemistry Letters*, **2011**, 2, 703-707	4.3	23
19	Biomimetic catalysis of diketopiperazine and dipeptide syntheses. *Angewandte Chemie - International Edition*, **2008**, 47, 1758-61	16.4	23
18	Functional and mechanistic analyses of biomimetic aminoacyl transfer reactions in de novo designed coiled coil peptides via rational active site engineering. *Journal of the American Chemical Society*, **2007**, 129, 2959-66	16.4	23
17	Zur Architektur von Peptiden: Bestimmung der relativen Stabilität von parallelen und antiparallelen β-Faltblättern. *Angewandte Chemie*, **1995**, 107, 79-81	3.6	22
16	Cyclic tetrapeptide HDAC inhibitors as potential therapeutics for spinal muscular atrophy: Screening with iPSC-derived neuronal cells. *Bioorganic and Medicinal Chemistry Letters*, **2017**, 27, 3289-3293	2.9	21
15	Self-Assembling Cyclic d,l-α-Peptides as Modulators of Plasma HDL Function. A Supramolecular Approach toward Antiatherosclerotic Agents. *ACS Central Science*, **2017**, 3, 639-646	16.8	19

14	Self-assembly of peptide based nanotubes. *Materials Science and Engineering C*, **1997**, 4, 207-212	8.3	19
13	A Synthetic Pore-Mediated Transmembrane Transport of Glutamic Acid. *Angewandte Chemie*, **2001**, 113, 2571-2574	3.6	19
12	Single DNA Rotaxanes of a Transmembrane Pore Protein. *Angewandte Chemie*, **2004**, 116, 3125-3129	3.6	13
11	Design of a DNA-Programmed Plasminogen Activator. *Journal of the American Chemical Society*, **2018**, 140, 15516-15524	16.4	13
10	Peptide Bond Formation in Water Mediated by Carbon Disulfide. *Astrobiology*, **2015**, 15, 709-16	3.7	11
9	Self-Assembling Cyclic Peptide Cylinders as Nuclei for Crystal Engineering. *Angewandte Chemie*, **2001**, 113, 2221-2224	3.6	8
8	Potentially Prebiotic Synthesis of Amino Thioacids in Water. *Synlett*, **2016**, 28, 68-72	2.2	6
7	Real-Time Monitoring of DNA Polymerase Function and Stepwise Single-Nucleotide DNA Strand Translocation through a Protein Nanopore. *Angewandte Chemie*, **2010**, 122, 10304-10307	3.6	4
6	Templated Self-Assembly of Dynamic Peptide Nucleic Acids. *Biochemistry*, **2018**, 57, 160-172	3.2	3
5	Self Assembling Organic Nanotubes **1996**, 181-188		1
4	Peptide Nanotubes and Beyond **1998**, 4, 1367		1
3	A kinetically controlled, isothermal method for the detection of single nucleotide mismatches. *Bioorganic and Medicinal Chemistry Letters*, **2018**, 28, 2754-2758	2.9	
2	Cover Picture: Single DNA Rotaxanes of a Transmembrane Pore Protein (Angew. Chem. Int. Ed. 23/2004). *Angewandte Chemie - International Edition*, **2004**, 43, 2977-2977	16.4	
1	Titelbild: Single DNA Rotaxanes of a Transmembrane Pore Protein (Angew. Chem. 23/2004). *Angewandte Chemie*, **2004**, 116, 3037-3037	3.6	