Maxim G Ryadnov

List of Publications by Year
in descending order

70 papers	2,616 citations	201674 27 h-index	197818 49 g-index
76 all docs	76 docs citations	76 times ranked	3196 citing authors

#	Article	IF	Citations
1	Engineering the morphology of a self-assembling protein fibre. Nature Materials, 2003, 2, 329-332.	27.5	256
2	Engineering nanoscale order into a designed protein fiber. Proceedings of the National Academy of Sciences of the United States of America, 2007, 104, 10853-10858.	7.1	234
3	Peptide self-assembly for nanomaterials: the old new kid on the block. Chemical Society Reviews, 2015, 44, 8288-8300.	38.1	212
4	Cicada-inspired cell-instructive nanopatterned arrays. Scientific Reports, 2014, 4, 7122.	3.3	211
5	Introducing Branches into a Self-Assembling Peptide Fiber. Angewandte Chemie - International Edition, 2003, 42, 3021-3023.	13.8	125
6	Nanoscale imaging reveals laterally expanding antimicrobial pores in lipid bilayers. Proceedings of the National Academy of Sciences of the United States of America, 2013, 110, 8918-8923.	7.1	112
7	Fiber Recruiting Peptides:Â Noncovalent Decoration of an Engineered Protein Scaffold. Journal of the American Chemical Society, 2004, 126, 7454-7455.	13.7	99
8	Templating Silica Nanostructures on Rationally Designed Self-Assembled Peptide Fibers. Langmuir, 2008, 24, 11778-11783.	3.5	79
9	MaP Peptides:Â Programming the Self-Assembly of Peptide-Based Mesoscopic Matrices. Journal of the American Chemical Society, 2005, 127, 12407-12415.	13.7	68
10	Antimicrobial peptide capsids of de novo design. Nature Communications, 2017, 8, 2263.	12.8	63
11	A Self-Assembling Peptide Polynanoreactor. Angewandte Chemie - International Edition, 2007, 46, 969-972.	13.8	60
12	A De Novo Virus-Like Topology for Synthetic Virions. Journal of the American Chemical Society, 2016, 138, 12202-12210.	13.7	59
13	Phase separation in the outer membrane of <i>Escherichia coli</i>. Proceedings of the National Academy of Sciences of the United States of America, 2021, 118, .	7.1	53
14	Modular Design of Peptide Fibrillar Nano- to Microstructures. Journal of the American Chemical Society, 2009, 131, 13240-13241.	13.7	48
15	A microfluidic platform for the characterisation of membrane active antimicrobials. Lab on A Chip, 2019, 19, 837-844.	6.0	46
16	Structurally plastic peptide capsules for synthetic antimicrobial viruses. Chemical Science, 2016, 7, 1707-1711.	7.4	43
17	DNA Origami Inside-Out Viruses. ACS Synthetic Biology, 2018, 7, 767-773.	3.8	42
18	Engineering Chirally Blind Protein Pseudocapsids into Antibacterial Persisters. ACS Nano, 2020, 14, 1609-1622.	14.6	42

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19	Stable isotope imaging of biological samples with high resolution secondary ion mass spectrometry and complementary techniques. Methods, 2014, 68, 317-324.	3.8	41
20	Self-Assembled Templates for Polypeptide Synthesis. Journal of the American Chemical Society, 2007, 129, 14074-14081.	13.7	39
21	Atomic force microscopy to elucidate how peptides disrupt membranes. Biochimica Et Biophysica Acta - Biomembranes, 2021, 1863, 183447.	2.6	36
22	Engineering monolayer poration for rapid exfoliation of microbial membranes. Chemical Science, 2017, 8, 1105-1115.	7.4	35
23	Differentially Instructive Extracellular Protein Micro-nets. Journal of the American Chemical Society, 2014, 136, 7889-7898.	13.7	34
24	Arbitrary Selfâ€Assembly of Peptide Extracellular Microscopic Matrices. Angewandte Chemie - International Edition, 2012, 51, 428-431.	13.8	33
25	Binary Encoding of Random Peptide Sequences for Selective and Differential Antimicrobial Mechanisms. Angewandte Chemie - International Edition, 2017, 56, 8099-8103.	13.8	33
26	Anti-antimicrobial Peptides. Journal of Biological Chemistry, 2013, 288, 20162-20172.	3.4	31
27	Selfâ€Assembling Viral Mimetics: One Long Journey with Short Steps. Macromolecular Bioscience, 2011, 11, 503-513.	4.1	30
28	What Is the â€˜Minimum Inhibitory Concentrationâ€™ (MIC) of Pexiganan Acting on Escherichia coli?â€"A Cautionary Case Study. Advances in Experimental Medicine and Biology, 2016, 915, 33-48.	1.6	28
29	Cholesterol Anchors Enable Efficient Binding and Intracellular Uptake of DNA Nanostructures. Bioconjugate Chemistry, 2019, 30, 1836-1844.	3.6	25
30	Tuneable poration: host defense peptides as sequence probes for antimicrobial mechanisms. Scientific Reports, 2018, 8, 14926.	3.3	24
31	A new synthetic all-d-peptide with high bacterial and low mammalian cytotoxicity. Peptides, 2002, 23, 1869-1871.	2.4	21
32	Peptide Î±-helices for synthetic nanostructures. Biochemical Society Transactions, 2007, 35, 487-491.	3.4	21
33	Imaging live bacteria at the nanoscale: comparison of immobilisation strategies. Analyst, The, 2019, 144, 6944-6952.	3.5	21
34	Supramolecular amphipathicity for probing antimicrobial propensity of host defence peptides. Physical Chemistry Chemical Physics, 2015, 17, 15608-15614.	2.8	19
35	Switching Cytolytic Nanopores into Antimicrobial Fractal Ruptures by a Single Side Chain Mutation. ACS Nano, 2021, 15, 9679-9689.	14.6	17
36	Flowering Porationâ€"A Synergistic Multi-Mode Antibacterial Mechanism by a Bacteriocin Fold. IScience, 2020, 23, 101423.	4.1	16

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37	REâ€…Coil: An Antimicrobial Peptide Regulator. Angewandte Chemie - International Edition, 2009, 48, 9676-9679.	13.8	15
38	Exploitable length correlations in peptide nanofibres. Nanoscale, 2014, 6, 11425-11430.	5.6	14
39	Filming protein fibrillogenesis in real time. Scientific Reports, 2015, 4, 7529.	3.3	14
40	CREIM: Coffee Ring Effect Imaging Model for Monitoring Protein Self-Assembly <i>in Situ</i>. Journal of Physical Chemistry Letters, 2017, 8, 4846-4851.	4.6	14
41	GeT peptides: a single-domain approach to gene delivery. Chemical Communications, 2011, 47, 9045.	4.1	13
42	The Leucine Zipper as a Building Block for Self-Assembled Protein Fibers. Methods in Molecular Biology, 2008, 474, 35-51.	0.9	12
43	Probing label-free intracellular quantification of free peptide by MALDI-ToF mass spectrometry. Methods, 2014, 68, 331-337.	3.8	11
44	Interfacial zippering-up of coiled-coil protein filaments. Physical Chemistry Chemical Physics, 2015, 17, 31055-31060.	2.8	11
45	Helminth Defense Molecules as Design Templates for Membrane Active Antibiotics. ACS Infectious Diseases, 2019, 5, 1471-1479.	3.8	11
46	Accelerating molecular discovery through data and physical sciences: Applications to peptide-membrane interactions. Journal of Chemical Physics, 2018, 148, 241744.	3.0	10
47	Cellular Metrology: Scoping for a Value Proposition in Extra- and Intracellular Measurements. Frontiers in Bioengineering and Biotechnology, 2019, 7, 456.	4.1	10
48	Membrane Binding of Antimicrobial Peptides Is Modulated by Lipid Charge Modification. Journal of Chemical Theory and Computation, 2021, 17, 1218-1228.	5.3	10
49	Self-Assembling Nanostructures from Coiled-Coil Peptides. , 0, , 17-38.		9
50	Membrane mediated regulation in free peptides of HIV-1 gp41: minimal modulation of the hemifusion phase. Physical Chemistry Chemical Physics, 2012, 14, 1277-1285.	2.8	9
51	Annexin V Drives Stabilization of Damaged Asymmetric Phospholipid Bilayers. Langmuir, 2020, 36, 5454-5465.	3.5	9
52	An ultrasensitive microfluidic approach reveals correlations between the physico-chemical and biological activity of experimental peptide antibiotics. Scientific Reports, 2022, 12, 4005.	3.3	9
53	Autonomously folded Î±-helical lockers promote RNAi*. Scientific Reports, 2016, 6, 35012.	3.3	7
54	An SI-traceable reference material for virus-like particles. IScience, 2022, 25, 104294.	4.1	7

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55	Measuring Thousands of Single-Vesicle Leakage Events Reveals the Mode of Action of Antimicrobial Peptides. Analytical Chemistry, 2022, 94, 9530-9539.	6.5	7
56	Peptide Nanoparticles for Gene Packaging and Intracellular Delivery. Methods in Molecular Biology, 2021, 2208, 33-48.	0.9	6
57	Natively Unfolded State for Engineering Nanoscale Fibrillar Arrays. Macromolecular Bioscience, 2012, 12, 195-201.	4.1	5
58	Insulin aggregation tracked by its intrinsic TRES. Applied Physics Letters, 2017, 111, 263701.	3.3	5
59	Modulating charge-dependent and folding-mediated antimicrobial interactions at peptideâ€“lipid interfaces. European Biophysics Journal, 2017, 46, 375-382.	2.2	3
60	Tracking Insulin Glycation in Real Time by Time-Resolved Emission Spectroscopy. Journal of Physical Chemistry B, 2019, 123, 7812-7817.	2.6	3
61	Designer protein pseudo-capsids targeting intracellular bacteria. Biomaterials Science, 2021, 9, 6807-6812.	5.4	3
62	Where is the drug gone? â€“ Measuring intracellular delivery and localization. Methods, 2014, 68, 281-282.	3.8	2
63	Nano-mechanical in-process monitoring of antimicrobial poration in model phospholipid bilayers. RSC Advances, 2017, 7, 19081-19084.	3.6	2
64	Linear and orthogonal peptide templating of silicified protein fibres. Organic and Biomolecular Chemistry, 2017, 15, 5380-5385.	2.8	2
65	Protein fibrillogenesis model tracked by its intrinsic time-resolved emission spectra. Methods and Applications in Fluorescence, 2019, 7, 035003.	2.3	2
66	Revealing Sources of Variation for Reproducible Imaging of Protein Assemblies by Electron Microscopy. Micromachines, 2020, 11, 251.	2.9	2
67	Imaging and 3D Reconstruction of De Novo Peptide Capsids. Methods in Molecular Biology, 2021, 2208, 149-165.	0.9	2
68	Ultramicrotomy Analysis of Peptide-Treated Cells. Methods in Molecular Biology, 2021, 2208, 255-264.	0.9	2
69	Investigating Membraneâ€Mediated Antimicrobial Peptide Interactions with Synchrotron Radiation Farâ€Infrared Spectroscopy. ChemPhysChem, 2022, 23, e202100815.	2.1	2
70	In-situ nanoscale imaging reveals self-concentrating nanomolar antimicrobial pores. Nanoscale, 2022, , .	5.6	0