List of Publications by Year in descending order

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<u> Римни Гиг</u>

#	Article	IF	CITATIONS
1	Versatile Antibacterial Materials: An Emerging Arsenal for Combatting Bacterial Pathogens. Advanced Functional Materials, 2018, 28, 1802140.	14.9	372
2	Tuning the Biological Activity Profile of Antibacterial Polymers via Subunit Substitution Pattern. Journal of the American Chemical Society, 2014, 136, 4410-4418.	13.7	175
3	Poly(2â€Oxazoline)â€Based Functional Peptide Mimics: Eradicating MRSA Infections and Persisters while Alleviating Antimicrobial Resistance. Angewandte Chemie - International Edition, 2020, 59, 6412-6419.	13.8	162
4	Lithium hexamethyldisilazide initiated superfast ring opening polymerization of alpha-amino acid N-carboxyanhydrides. Nature Communications, 2018, 9, 5297.	12.8	136
5	Impact of Antifouling PEG Layer on the Performance of Functional Peptides in Regulating Cell Behaviors. Journal of the American Chemical Society, 2019, 141, 16772-16780.	13.7	133
6	Nylon-3 Polymers with Selective Antifungal Activity. Journal of the American Chemical Society, 2013, 135, 5270-5273.	13.7	127
7	Nylon-3 Polymers Active against Drug-Resistant <i>Candida albicans</i> Biofilms. Journal of the American Chemical Society, 2015, 137, 2183-2186.	13.7	123
8	Surface Modified with a Host Defense Peptide-Mimicking β-Peptide Polymer Kills Bacteria on Contact with High Efficacy. ACS Applied Materials & Interfaces, 2018, 10, 15395-15400.	8.0	117
9	Dealing with the Foreignâ€Body Response to Implanted Biomaterials: Strategies and Applications of New Materials. Advanced Functional Materials, 2021, 31, 2007226.	14.9	114
10	Structure–Activity Relationships among Antifungal Nylon-3 Polymers: Identification of Materials Active against Drug-Resistant Strains of <i>Candida albicans</i> . Journal of the American Chemical Society, 2014, 136, 4333-4342.	13.7	113
11	Ternary Nylon-3 Copolymers as Host-Defense Peptide Mimics: Beyond Hydrophobic and Cationic Subunits. Journal of the American Chemical Society, 2014, 136, 14530-14535.	13.7	108
12	Addressing MRSA infection and antibacterial resistance with peptoid polymers. Nature Communications, 2021, 12, 5898.	12.8	97
13	Therapeutic strategies against bacterial biofilms. Fundamental Research, 2021, 1, 193-212.	3.3	84
14	Host defense peptide mimicking poly-β-peptides with fast, potent and broad spectrum antibacterial activities. Biomaterials Science, 2019, 7, 2144-2151.	5.4	83
15	Practical Preparation of Infection-Resistant Biomedical Surfaces from Antimicrobial β-Peptide Polymers. ACS Applied Materials & Interfaces, 2019, 11, 18907-18913.	8.0	77
16	Synthetic Polymers Active against <i>Clostridium difficile</i> Vegetative Cell Growth and Spore Outgrowth. Journal of the American Chemical Society, 2014, 136, 14498-14504.	13.7	62
17	Silkâ€Inspired βâ€Peptide Materials Resist Fouling and the Foreignâ€Body Response. Angewandte Chemie - International Edition, 2020, 59, 9586-9593.	13.8	56
18	Secondary Amine Pendant β-Peptide Polymers Displaying Potent Antibacterial Activity and Promising Therapeutic Potential in Treating MRSA-Induced Wound Infections and Keratitis. Journal of the American Chemical Society, 2022, 144, 1690-1699.	13.7	56

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19	Dual mechanism $\hat{I}^2$ -amino acid polymers promoting cell adhesion. Nature Communications, 2021, 12, 562.	12.8	54
20	Manganese dioxide nanozyme for reactive oxygen therapy of bacterial infection and wound healing. Biomaterials Science, 2021, 9, 5965-5976.	5.4	52
21	Waterâ€Insensitive Synthesis of Polyâ€Î²â€Peptides with Defined Architecture. Angewandte Chemie - International Edition, 2020, 59, 7240-7244.	13.8	50
22	Correlating antimicrobial activity and model membrane leakage induced by nylon-3 polymers and detergents. Soft Matter, 2015, 11, 6840-6851.	2.7	48
23	Interplay among Subunit Identity, Subunit Proportion, Chain Length, and Stereochemistry in the Activity Profile of Sequence-Random Peptide Mixtures. Journal of the American Chemical Society, 2013, 135, 11748-11751.	13.7	47
24	Single-Cell, Time-Resolved Antimicrobial Effects of a Highly Cationic, Random Nylon-3 Copolymer on Live <i>Escherichia coli</i> . ACS Chemical Biology, 2016, 11, 113-120.	3.4	44
25	Effects of Cyclic vs Acyclic Hydrophobic Subunits on the Chemical Structure and Biological Properties of Nylon-3 Copolymers. ACS Macro Letters, 2013, 2, 753-756.	4.8	40
26	Polymer Chain Length Effects on Fibroblast Attachment on Nylon-3-Modified Surfaces. Biomacromolecules, 2012, 13, 1100-1105.	5.4	39
27	Host Defense Peptide Mimicking Peptide Polymer Exerting Fast, Broad Spectrum, and Potent Activities toward Clinically Isolated Multidrug-Resistant Bacteria. ACS Infectious Diseases, 2020, 6, 479-488.	3.8	39
28	Peptide polymer displaying potent activity against clinically isolated multidrug resistant <i>Pseudomonas aeruginosa in vitro</i> and <i>in vivo</i> . Biomaterials Science, 2020, 8, 739-745.	5.4	39
29	Short Guanidiniumâ€Functionalized Poly(2â€oxazoline)s Displaying Potent Therapeutic Efficacy on Drugâ€Resistant Fungal Infections. Angewandte Chemie - International Edition, 2022, 61, e202200778.	13.8	37
30	Nylon-3 Polymers That Enable Selective Culture of Endothelial Cells. Journal of the American Chemical Society, 2013, 135, 16296-16299.	13.7	35
31	Effective and biocompatible antibacterial surfaces via facile synthesis and surface modification of peptide polymers. Bioactive Materials, 2021, 6, 4531-4541.	15.6	34
32	Alpha-beta chimeric polypeptide molecular brushes display potent activity against superbugs-methicillin resistant Staphylococcus aureus. Science China Materials, 2019, 62, 604-610.	6.3	33
33	Bio-inspired poly-DL-serine materials resist the foreign-body response. Nature Communications, 2021, 12, 5327.	12.8	33
34	Superfast and Waterâ€Insensitive Polymerization on αâ€Amino Acid <i>N</i> â€Carboxyanhydrides to Prepare Polypeptides Using Tetraalkylammonium Carboxylate as the Initiator. Angewandte Chemie - International Edition, 2021, 60, 26063-26071.	13.8	33
35	Breaking or following the membrane-targeting mechanism: Exploring the antibacterial mechanism of host defense peptide mimicking poly(2-oxazoline)s. Journal of Materials Science and Technology, 2020, 59, 220-226.	10.7	30
36	Structural design and antimicrobial properties of polypeptides and saccharide–polypeptide conjugates. Journal of Materials Chemistry B, 2020, 8, 9173-9196.	5.8	27

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37	Peptide Polymerâ€Doped Cement Acting as an Effective Treatment of MRSAâ€Infected Chronic Osteomyelitis. Advanced Functional Materials, 2022, 32, 2107942.	14.9	27
38	A sandcastle worm-inspired strategy to functionalize wet hydrogels. Nature Communications, 2021, 12, 6331.	12.8	27
39	Heterochiral β-Peptide Polymers Combating Multidrug-Resistant Cancers Effectively without Inducing Drug Resistance. Journal of the American Chemical Society, 2022, 144, 7283-7294.	13.7	26
40	Screening Nylon-3 Polymers, a New Class of Cationic Amphiphiles, for siRNA Delivery. Molecular Pharmaceutics, 2015, 12, 362-374.	4.6	25
41	Host Defense Peptide-Mimicking Amphiphilic β-Peptide Polymer (Bu:DM) Exhibiting Anti-Biofilm, Immunomodulatory, and <i>in Vivo</i> Anti-Infective Activity. Journal of Medicinal Chemistry, 2020, 63, 12921-12928.	6.4	25
42	The impact of antifouling layers in fabricating bioactive surfaces. Acta Biomaterialia, 2021, 126, 45-62.	8.3	25
43	An alpha/beta chimeric peptide molecular brush for eradicating MRSA biofilms and persister cells to mitigate antimicrobial resistance. Biomaterials Science, 2020, 8, 6883-6889.	5.4	23
44	Peptideâ€Mimicking Poly(2â€oxazoline)s Displaying Potent Antimicrobial Properties. ChemMedChem, 2021, 16, 309-315.	3.2	22
45	Dual functional β-peptide polymer-modified resin beads for bacterial killing and endotoxin adsorption. BMC Materials, 2019, 1, .	6.8	20
46	Alkali-metal hexamethyldisilazide initiated polymerization on alpha-amino acid N-substituted N-carboxyanhydrides for facile polypeptoid synthesis. Chinese Chemical Letters, 2021, 32, 1675-1678.	9.0	20
47	Light-Cross-linked Enediyne Small-Molecule Micelle-Based Drug-Delivery System. ACS Applied Materials & Interfaces, 2019, 11, 8896-8903.	8.0	19
48	Microbial Metabolite Inspired <i>β</i> â€Peptide Polymers Displaying Potent and Selective Antifungal Activity. Advanced Science, 2022, 9, e2104871.	11.2	19
49	An Effective Strategy to Develop Potent and Selective Antifungal Agents from Cell Penetrating Peptides in Tackling Drug-Resistant Invasive Fungal Infections. Journal of Medicinal Chemistry, 2022, 65, 7296-7311.	6.4	19
50	The Impact of Nylon-3 Copolymer Composition on the Efficiency of siRNA Delivery to Glioblastoma Cells. Nanomaterials, 2019, 9, 986.	4.1	18
51	Introduction to Antibacterial Biomaterials. Biomaterials Science, 2020, 8, 6812-6813.	5.4	18
52	Using <i>In Vivo</i> Assessment on Host Defense Peptide Mimicking Polymer-Modified Surfaces for Combating Implant Infections. ACS Applied Bio Materials, 2021, 4, 3811-3829.	4.6	16
53	Efficient synthesis of amino acid polymers for protein stabilization. Biomaterials Science, 2019, 7, 3675-3682.	5.4	15
54	Synthesis of poly-α/β-peptides with tunable sequence via the copolymerization on N-carboxyanhydride and N-thiocarboxyanhydride. IScience, 2021, 24, 103124.	4.1	15

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5	5	Quaternized Polysaccharideâ€Based Cationic Micelles as a Macromolecular Approach to Eradicate Multidrugâ€Resistant Bacterial Infections while Mitigating Antimicrobial Resistance. Small, 2022, 18, e2104885.	10.0	15
5	6	Poly(2â€Oxazoline)â€Based Functional Peptide Mimics: Eradicating MRSA Infections and Persisters while Alleviating Antimicrobial Resistance. Angewandte Chemie, 2020, 132, 6474-6481.	2.0	14
5	7	The membrane-targeting mechanism of host defense peptides inspiring the design of polypeptide-conjugated gold nanoparticles exhibiting effective antibacterial activity against methicillin-resistant <i>Staphylococcus aureus</i> . Journal of Materials Chemistry B, 2021, 9, 5092-5101.	5.8	10
5	8	Biodegradable peptide polymers as alternatives to antibiotics used in aquaculture. Biomaterials Science, 2022, 10, 4193-4207.	5.4	10
5	9	In vitro and in vivo evaluation of implantable bacterial-killing coatings based on host defense peptides and their synthetic mimics. Journal of Materials Science and Technology, 2021, 91, 90-104.	10.7	9
6	0	Hidden complexity in membrane permeabilization behavior of antimicrobial polycations. Physical Chemistry Chemical Physics, 2021, 23, 1475-1488.	2.8	8
6	1	Facile synthesis of polypeptoids bearing bulky sidechains <i>via</i> urea accelerated ring-opening polymerization of α-amino acid <i>N</i> -substituted <i>N</i> -carboxyanhydrides. Polymer Chemistry, 2022, 13, 420-426.	3.9	8
6	2	Controllable Polymerization of <i>N</i> -Substituted β-Alanine <i>N</i> -Thiocarboxyanhydrides for Convenient Synthesis of Functional Poly(β-peptoid)s. CCS Chemistry, 2023, 5, 994-1004.	7.8	8
6	3	Silkâ€Inspired βâ€Peptide Materials Resist Fouling and the Foreignâ€Body Response. Angewandte Chemie, 2020, 132, 9673-9680.	2.0	7
6	4	Cationic Homopolymers Inhibit Spore and Vegetative Cell Growth of <i>Clostridioides difficile</i> . ACS Infectious Diseases, 2021, 7, 1236-1247.	3.8	7
6	5	Interplay of Fusion, Leakage, and Electrostatic Lipid Clustering: Membrane Perturbations by a Hydrophobic Antimicrobial Polycation. Langmuir, 2022, 38, 2379-2391.	3.5	6
6	6	Antifouling zwitterionic poly-β-peptides. Applied Materials Today, 2022, 27, 101511.	4.3	6
6	7	Superfast and Waterâ€Insensitive Polymerization on αâ€Amino Acid <i>N</i> â€Carboxyanhydrides to Prepare Polypeptides Using Tetraalkylammonium Carboxylate as the Initiator. Angewandte Chemie, 2021, 133, 26267-26275.	2.0	5
6	8	Statistic Copolymers Working as Growth Factorâ€Binding Mimics of Fibronectin. Advanced Science, 2022, 9, e2200775.	11.2	5
6	9	Controlled copolymerization of α-NCAs and α-NNTAs for preparing peptide/peptoid hybrid polymers with adjustable proteolysis. Polymer Chemistry, 2022, 13, 388-394.	3.9	4
7	0	Amphipathic poly-β-peptides for intracellular protein delivery. Chemical Communications, 2022, 58, 4320-4323.	4.1	4
7	1	Host defense peptide mimicking cyclic peptoid polymers exerting strong activity against drug-resistant bacteria. Biomaterials Science, 2022, 10, 4515-4524.	5.4	4
7	2	Waterâ€Insensitive Synthesis of Polyâ€Î²â€Peptides with Defined Architecture. Angewandte Chemie, 2020, 132, 7307-7311.	2.0	3

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73	Foreignâ€Body Responses: Dealing with the Foreignâ€Body Response to Implanted Biomaterials: Strategies and Applications of New Materials (Adv. Funct. Mater. 6/2021). Advanced Functional Materials, 2021, 31, 2170040.	14.9	3
74	Short Guanidiniumâ€Functionalized Poly(2â€oxazoline)s Displaying Potent Therapeutic Efficacy on Drugâ€Resistant Fungal Infections. Angewandte Chemie, 2022, 134, .	2.0	3
75	Innentitelbild: Poly(2â€Oxazoline)â€Based Functional Peptide Mimics: Eradicating MRSA Infections and Persisters while Alleviating Antimicrobial Resistance (Angew. Chem. 16/2020). Angewandte Chemie, 2020, 132, 6354-6354.	2.0	2
76	Facile one-pot synthesis of 2-oxazoline. Tetrahedron Letters, 2022, 91, 153637.	1.4	2