

# Ziyuan Song

## List of Publications by Year in Descending Order

**Source:** <https://exaly.com/author-pdf/3911305/ziyuan-song-publications-by-year.pdf>

**Version:** 2024-04-09

This document has been generated based on the publications and citations recorded by exaly.com. For the latest version of this publication list, visit the link given above.

The third column is the impact factor (IF) of the journal, and the fourth column is the number of citations of the article.

68 papers	2,926 citations	30 h-index	53 g-index
69 ext. papers	3,483 ext. citations	11.6 avg, IF	5.3 L-index

#	Paper	IF	Citations
68	Generalized Model of Cooperative Covalent Polymerization: Connecting the Supramolecular Binding Interactions with the Catalytic Behavior. <i>Macromolecules</i> , <b>2022</b> , 55, 2041-2050	5.5	
67	Facile Preparation of Polysaccharide-Polypeptide Conjugates via a Biphasic Solution Ring-Opening Polymerization.. <i>ACS Macro Letters</i> , <b>2022</b> , 11, 663-668	6.6	1
66	Recent advances in design of antimicrobial peptides and polypeptides toward clinical translation. <i>Advanced Drug Delivery Reviews</i> , <b>2021</b> , 170, 261-280	18.5	37
65	Open-air synthesis of oligo(ethylene glycol)-functionalized polypeptides from non-purified -carboxyanhydrides. <i>Biomaterials Science</i> , <b>2021</b> , 9, 4120-4126	7.4	
64	Guanidine-rich helical polypeptides bearing hydrophobic amino acid pendants for efficient gene delivery. <i>Biomaterials Science</i> , <b>2021</b> , 9, 2670-2678	7.4	0
63	A sulfonate-based polypeptide toward infection-resistant coatings. <i>Biomaterials Science</i> , <b>2021</b> , 9, 6425-6433	7.4	0
62	Accelerated polymerization of N-carboxyanhydrides catalyzed by crown ether. <i>Nature Communications</i> , <b>2021</b> , 12, 732	17.4	11
61	Nanoengineered polypeptides from tetraphenylethylene-functionalized N-carboxyanhydride: Synthesis, self-assembly and intrinsic aggregation-induced emission. <i>Progress in Natural Science: Materials International</i> , <b>2021</b> , 31, 541-545	3.6	0
60	Polypeptide-based drug delivery systems for programmed release. <i>Biomaterials</i> , <b>2021</b> , 275, 120913	15.6	11
59	Efficient synthesis and excellent antimicrobial activity of star-shaped cationic polypeptides with improved biocompatibility. <i>Biomaterials Science</i> , <b>2021</b> , 9, 2721-2731	7.4	7
58	Biological applications of water-soluble polypeptides with ordered secondary structures. <i>Journal of Materials Chemistry B</i> , <b>2020</b> , 8, 6530-6547	7.3	16
57	Unimolecular Polypeptide Micelles via Ultrafast Polymerization of -Carboxyanhydrides. <i>Journal of the American Chemical Society</i> , <b>2020</b> , 142, 8570-8574	16.4	26
56	Manipulating the helix-coil transition profile of synthetic polypeptides by leveraging side-chain molecular interactions. <i>Polymer Chemistry</i> , <b>2020</b> , 11, 1445-1449	4.9	4
55	Topology-assisted, photo-strengthened DNA/siRNA delivery mediated by branched poly(β-amino ester)s via synchronized intracellular kinetics. <i>Biomaterials Science</i> , <b>2020</b> , 8, 290-301	7.4	11
54	"Metaphilic" Cell-Penetrating Polypeptide-Vancomycin Conjugate Efficiently Eradicates Intracellular Bacteria via a Dual Mechanism. <i>ACS Central Science</i> , <b>2020</b> , 6, 2267-2276	16.8	8
53	Induction of a higher-ordered architecture in glatiramer acetate improves its biological efficiency in an animal model of multiple sclerosis. <i>Biomaterials Science</i> , <b>2020</b> , 8, 5271-5281	7.4	1
52	Streamlined Synthesis of PEG-Polypeptides Directly from Amino Acids. <i>Macromolecules</i> , <b>2020</b> , 53, 6589-6597	6.5	6

51	Potential bleach activators with improved imide hydrolytic stability. <i>International Journal of Industrial Chemistry</i> , <b>2020</b> , 11, 177-185	3.1	1
50	Recent Advances and Future Perspectives of Synthetic Polypeptides from N-Carboxyanhydrides. <i>Macromolecules</i> , <b>2019</b> , 52, 8521-8539	5.5	50
49	Synthesis of polypeptides via bioinspired polymerization of in situ purified -carboxyanhydrides. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , <b>2019</b> , 116, 10658-10663	11.5	52
48	Proximity-Induced Cooperative Polymerization in "Hinged" Helical Polypeptides. <i>Journal of the American Chemical Society</i> , <b>2019</b> , 141, 8680-8683	16.4	26
47	Facile synthesis of helical multiblock copolypeptides: minimal side reactions with accelerated polymerization of -carboxyanhydrides. <i>ACS Macro Letters</i> , <b>2019</b> , 8, 1517-1521	6.6	16
46	Enzyme-mimetic self-catalyzed polymerization of polypeptide helices. <i>Nature Communications</i> , <b>2019</b> , 10, 5470	17.4	23
45	Nonviral gene editing via CRISPR/Cas9 delivery by membrane-disruptive and endosomolytic helical polypeptide. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , <b>2018</b> , 115, 4903-4908	11.5	153
44	Effective and Selective Anti-Cancer Protein Delivery via All-Functions-in-One Nanocarriers Coupled with Visible Light-Responsive, Reversible Protein Engineering. <i>Advanced Functional Materials</i> , <b>2018</b> , 28, 1706710	15.6	74
43	Systemic siRNA delivery to tumors by cell-penetrating helical polypeptide-based metastable nanoparticles. <i>Nanoscale</i> , <b>2018</b> , 10, 15339-15349	7.7	28
42	Photodynamic therapy-mediated remote control of chemotherapy toward synergistic anticancer treatment. <i>Nanoscale</i> , <b>2018</b> , 10, 14554-14562	7.7	21
41	Efficient Gene Delivery Mediated by a Helical Polypeptide: Controlling the Membrane Activity via Multivalency and Light-Assisted Photochemical Internalization (PCI). <i>ACS Applied Materials &amp; Interfaces</i> , <b>2018</b> , 10, 256-266	9.5	27
40	Secondary structures in synthetic polypeptides from N-carboxyanhydrides: design, modulation, association, and material applications. <i>Chemical Society Reviews</i> , <b>2018</b> , 47, 7401-7425	58.5	65
39	Gene delivery into isolated Arabidopsis thaliana protoplasts and intact leaves using cationic, helical polypeptide. <i>Frontiers of Chemical Science and Engineering</i> , <b>2017</b> , 11, 521-528	4.5	14
38	Interactions between Membranes and "Metaphilic" Polypeptide Architectures with Diverse Side-Chain Populations. <i>ACS Nano</i> , <b>2017</b> , 11, 2858-2871	16.7	33
37	Cooperative polymerization of helices induced by macromolecular architecture. <i>Nature Chemistry</i> , <b>2017</b> , 9, 614-622	17.6	79
36	Investigation on the controlled synthesis and post-modification of poly-[(N-2-hydroxyethyl)-aspartamide]-based polymers. <i>Polymer Chemistry</i> , <b>2017</b> , 8, 1872-1877	4.9	10
35	Manipulating the membrane penetration mechanism of helical polypeptides via aromatic modification for efficient gene delivery. <i>Acta Biomaterialia</i> , <b>2017</b> , 58, 146-157	10.8	22
34	Super-swelled lyotropic single crystals. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , <b>2017</b> , 114, 10834-10839	11.5	31

33	Synthetic polypeptides: from polymer design to supramolecular assembly and biomedical application. <i>Chemical Society Reviews</i> , <b>2017</b> , 46, 6570-6599	58.5	193
32	Modulation of polypeptide conformation through donor-acceptor transformation of side-chain hydrogen bonding ligands. <i>Nature Communications</i> , <b>2017</b> , 8, 92	17.4	33
31	Bacteria-Assisted Activation of Antimicrobial Polypeptides by a Random-Coil to Helix Transition. <i>Angewandte Chemie</i> , <b>2017</b> , 129, 10966-10969	3.6	6
30	Selective killing of with pH-responsive helix-coil conformation transitionable antimicrobial polypeptides. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , <b>2017</b> , 114, 12675-12680	11.5	73
29	Bacteria-Assisted Activation of Antimicrobial Polypeptides by a Random-Coil to Helix Transition. <i>Angewandte Chemie - International Edition</i> , <b>2017</b> , 56, 10826-10829	16.4	77
28	Pamidronate functionalized nanoconjugates for targeted therapy of focal skeletal malignant osteolysis. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , <b>2016</b> , 113, E4601-9	11.5	53
27	Suppression of Hepatic Inflammation via Systemic siRNA Delivery by Membrane-Disruptive and Endosomolytic Helical Polypeptide Hybrid Nanoparticles. <i>ACS Nano</i> , <b>2016</b> , 10, 1859-70	16.7	82
26	A delayed curing ROMP based thermosetting resin. <i>Polymer Chemistry</i> , <b>2016</b> , 7, 5093-5098	4.9	4
25	UV-responsive degradable polymers derived from 1-(4-aminophenyl) ethane-1,2-diol. <i>Journal of Polymer Science Part A</i> , <b>2015</b> , 53, 1161-1168	2.5	13
24	Functional polyesters derived from alternating copolymerization of norbornene anhydride and epoxides. <i>Polymer Chemistry</i> , <b>2015</b> , 6, 3586-3590	4.9	30
23	Dimeric drug polymeric nanoparticles with exceptionally high drug loading and quantitative loading efficiency. <i>Journal of the American Chemical Society</i> , <b>2015</b> , 137, 3458-61	16.4	240
22	New frontiers for encapsulation in the chemical industry. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2015</b> , 7, 6359-68	9.5	52
21	Polypeptide vesicles with densely packed multilayer membranes. <i>Soft Matter</i> , <b>2015</b> , 11, 4091-8	3.6	31
20	Helical antimicrobial polypeptides with radial amphiphilicity. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , <b>2015</b> , 112, 13155-60	11.5	120
19	Self-Assembly of Helical Polypeptides Driven by Complex Coacervation. <i>Angewandte Chemie</i> , <b>2015</b> , 127, 11280-11284	3.6	21
18	Self-assembly of Helical polypeptides driven by complex coacervation. <i>Angewandte Chemie - International Edition</i> , <b>2015</b> , 54, 11128-32	16.4	68
17	Ionic Helical polypeptides toward nonviral gene delivery. <i>Wiley Interdisciplinary Reviews: Nanomedicine and Nanobiotechnology</i> , <b>2015</b> , 7, 98-110	9.2	13
16	Redox-Responsive Self-Assembled Chain-Shattering Polymeric Therapeutics. <i>Biomaterials Science</i> , <b>2015</b> , 3, 1061-5	7.4	30

15	Development of Polypeptide-based Nanoparticles for Non-viral Delivery of CD22 RNA Trans-splicing Molecule as a New Precision Medicine Candidate Against B-lineage ALL. <i>EBioMedicine</i> , <b>2015</b> , 2, 649-59	8.8	6
14	Redox-responsive, reversibly-crosslinked thiolated cationic helical polypeptides for efficient siRNA encapsulation and delivery. <i>Journal of Controlled Release</i> , <b>2015</b> , 205, 231-9	11.7	43
13	Recent advances in amino acid N-carboxyanhydrides and synthetic polypeptides: chemistry, self-assembly and biological applications. <i>Chemical Communications</i> , <b>2014</b> , 50, 139-55	5.8	224
12	Polypeptides with quaternary phosphonium side chains: synthesis, characterization, and cell-penetrating properties. <i>Biomacromolecules</i> , <b>2014</b> , 15, 1491-7	6.9	22
11	The effect of side-chain functionality and hydrophobicity on the gene delivery capabilities of cationic helical polypeptides. <i>Biomaterials</i> , <b>2014</b> , 35, 3443-54	15.6	71
10	Trigger-responsive, fast-degradable poly(β-amino ester)s for enhanced DNA unpacking and reduced toxicity. <i>Biomaterials</i> , <b>2014</b> , 35, 5006-15	15.6	81
9	Maximizing gene delivery efficiencies of cationic helical polypeptides via balanced membrane penetration and cellular targeting. <i>Biomaterials</i> , <b>2014</b> , 35, 1302-14	15.6	43
8	Novel delivery system for T-oligo using a nanocomplex formed with an alpha helical peptide for melanoma therapy. <i>International Journal of Nanomedicine</i> , <b>2014</b> , 9, 43-53	7.3	9
7	Non-viral gene delivery via membrane-penetrating, mannose-targeting supramolecular self-assembled nanocomplexes. <i>Advanced Materials</i> , <b>2013</b> , 25, 3063-70	24	113
6	Light-responsive helical polypeptides capable of reducing toxicity and unpacking DNA: toward nonviral gene delivery. <i>Angewandte Chemie - International Edition</i> , <b>2013</b> , 52, 9182-9186	16.4	135
5	Reconfiguring the architectures of cationic helical polypeptides to control non-viral gene delivery. <i>Biomaterials</i> , <b>2013</b> , 34, 2340-9	15.6	73
4	Non-Viral Gene Delivery via Membrane-Penetrating, Mannose-Targeting Supramolecular Self-Assembled Nanocomplexes (Adv. Mater. 22/2013). <i>Advanced Materials</i> , <b>2013</b> , 25, 3062-3062	24	1
3	Supramolecular self-assembled nanoparticles mediate oral delivery of therapeutic TNF-βiRNA against systemic inflammation. <i>Angewandte Chemie - International Edition</i> , <b>2013</b> , 52, 5757-61	16.4	77
2	Supramolecular Self-Assembled Nanoparticles Mediate Oral Delivery of Therapeutic TNF-βiRNA against Systemic Inflammation. <i>Angewandte Chemie</i> , <b>2013</b> , 125, 5869-5873	3.6	6
1	Light-Responsive Helical Polypeptides Capable of Reducing Toxicity and Unpacking DNA: Toward Nonviral Gene Delivery. <i>Angewandte Chemie</i> , <b>2013</b> , 125, 9352-9356	3.6	19