Yong-beom Lim

List of Publications by Year
in descending order

84 papers	3,599 citations	147726 31 h-index	138417 58 g-index
94 all docs	94 docs citations	94 times ranked	4108 citing authors

#	Article	IF	Citations
1	Recent advances in functional supramolecular nanostructures assembled from bioactive building blocks. Chemical Society Reviews, 2009, 38, 925.	18.7	204
2	Biodegradable, Endosome Disruptive, and Cationic Network-type Polymer as a Highly Efficient and Nontoxic Gene Delivery Carrier. Bioconjugate Chemistry, 2002, 13, 952-957.	1.8	184
3	A Self-Destroying Polycationic Polymer:Â Biodegradable Poly(4-hydroxy-l-proline ester). Journal of the American Chemical Society, 1999, 121, 5633-5639.	6.6	178
4	Biodegradable polyester, poly[alpha-(4-aminobutyl)-L-glycolic acid], as a non-toxic gene carrier. Pharmaceutical Research, 2000, 17, 811-816.	1.7	172
5	Polyplexes Assembled with Internally Quaternized PAMAM-OH Dendrimer and Plasmid DNA Have a Neutral Surface and Gene Delivery Potency. Bioconjugate Chemistry, 2003, 14, 1214-1221.	1.8	171
6	Development of a Safe Gene Delivery System Using Biodegradable Polymer, Poly[Î±-(4-aminobutyl)-l-glycolic acid]. Journal of the American Chemical Society, 2000, 122, 6524-6525.	6.6	159
7	Cationic Hyperbranched Poly(amino ester):Â A Novel Class of DNA Condensing Molecule with Cationic Surface, Biodegradable Three-Dimensional Structure, and Tertiary Amine Groups in the Interior. Journal of the American Chemical Society, 2001, 123, 2460-2461.	6.6	151
8	Self-Assembling Peptides and Their Application in the Treatment of Diseases. International Journal of Molecular Sciences, 2019, 20, 5850.	1.8	131
9	Carbohydrate-Coated Supramolecular Structures:Â Transformation of Nanofibers into Spherical Micelles Triggered by Guest Encapsulation. Journal of the American Chemical Society, 2007, 129, 4808-4814.	6.6	117
10	Supramolecular Capsules with Gated Pores from an Amphiphilic Rod Assembly. Angewandte Chemie - International Edition, 2008, 47, 4662-4666.	7.2	117
11	Rodâ€“coil block molecules: their aqueous self-assembly and biomaterials applications. Journal of Materials Chemistry, 2008, 18, 2909.	6.7	116
12	Self-Assembled Ternary Complex of Cationic Dendrimer, Cucurbituril, and DNA:â€‰ Noncovalent Strategy in Developing a Gene Delivery Carrier. Bioconjugate Chemistry, 2002, 13, 1181-1185.	1.8	114
13	Cell-Penetrating-Peptide-Coated Nanoribbons for Intracellular Nanocarriers. Angewandte Chemie - International Edition, 2007, 46, 3475-3478.	7.2	100
14	Filamentous Artificial Virus from a Selfâ€Assembled Discrete Nanoribbon. Angewandte Chemie - International Edition, 2008, 47, 4525-4528.	7.2	85
15	Controlled Bioactive Nanostructures from Selfâ€Assembly of Peptide Building Blocks. Angewandte Chemie - International Edition, 2007, 46, 9011-9014.	7.2	84
16	Comparative studies on the genotoxicity and cytotoxicity of polymeric gene carriers polyethylenimine (PEI) and polyamidoamine (PAMAM) dendrimer in Jurkat T-cells. Drug and Chemical Toxicology, 2010, 33, 357-366.	1.2	78
17	Selfâ€assembly of supramolecular polymers into tunable helical structures. Journal of Polymer Science Part A, 2008, 46, 1925-1935.	2.5	73
18	Stabilization of an Î±â€…Helix by Î²â€Sheetâ€Mediated Selfâ€Assembly of a Macrocyclic Peptide. Angewandte Chemie - International Edition, 2009, 48, 1601-1605.	7.2	72

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19	Glycoconjugate Nanoribbons from the Self-Assembly of Carbohydrateâ"Peptide Block Molecules for Controllable Bacterial Cell Cluster Formation. Biomacromolecules, 2007, 8, 1404-1408.	2.6	66
20	Self-assembly of a peptide rodâ€"coil: a polyproline rod and a cell-penetrating peptide Tat coil. Chemical Communications, 2008, , 1892.	2.2	56
21	Nanostructures of Î²-sheet peptides: steps towards bioactive functional materials. Journal of Materials Chemistry, 2008, 18, 723-727.	6.7	54
22	Self-assembled multivalent carbohydrate ligands. Organic and Biomolecular Chemistry, 2007, 5, 401-405.	1.5	50
23	The inhibition of prions through blocking prion conversion by permanently charged branched polyamines of low cytotoxicity. Biomaterials, 2010, 31, 2025-2033.	5.7	48
24	Differential Self-Assembly Behaviors of Cyclic and Linear Peptides. Biomacromolecules, 2012, 13, 1991-1995.	2.6	42
25	Chameleon-like Self-Assembling Peptides for Adaptable Biorecognition Nanohybrids. ACS Nano, 2013, 7, 6850-6857.	7.3	38
26	Cyto-/Genotoxic Effect of CdSe/ZnS Quantum Dots in Human Lung Adenocarcinoma Cells for Potential Photodynamic UV Therapy Applications. Journal of Nanoscience and Nanotechnology, 2012, 12, 2160-2168.	0.9	37
27	Tunable Bacterial Agglutination and Motility Inhibition by Selfâ€Assembled Glycoâ€Nanoribbons. Chemistry - an Asian Journal, 2007, 2, 1363-1369.	1.7	36
28	Designer Nanorings with Functional Cavities from Selfâ€Assembling Î²â€Sheet Peptides. Chemistry - an Asian Journal, 2011, 6, 452-458.	1.7	35
29	Helix Stabilized, Thermostable, and Protease-Resistant Self-Assembled Peptide Nanostructures as Potential Inhibitors of Proteinâ€"Protein Interactions. Biomacromolecules, 2013, 14, 2684-2689.	2.6	33
30	Reciprocal Self-Assembly of Peptide-DNA Conjugates into a Programmable Sub-10-nm Supramolecular Deoxyribonucleoprotein. Angewandte Chemie - International Edition, 2016, 55, 12003-12007.	7.2	33
31	Cyclic Peptide Facial Amphiphile Preprogrammed to Selfâ€Assemble into Bioactive Peptide Capsules. Chemistry - A European Journal, 2010, 16, 5305-5309.	1.7	29
32	A cyclic RGD-coated peptide nanoribbon as a selective intracellular nanocarrier. Organic and Biomolecular Chemistry, 2008, 6, 1944.	1.5	27
33	Self-assembled filamentous nanostructures for drug/gene delivery applications. Expert Opinion on Drug Delivery, 2010, 7, 341-351.	2.4	27
34	A CMOS VEGF Sensor for Cancer Diagnosis Using a Peptide Aptamer-Based Functionalized Microneedle. IEEE Transactions on Biomedical Circuits and Systems, 2019, 13, 1288-1299.	2.7	27
35	New cationic lipids for gene transfer with high efficiency and low toxicity: T-shape cholesterol ester derivatives. Bioorganic and Medicinal Chemistry Letters, 2004, 14, 2637-2641.	1.0	26
36	Toroidal Nanostructures from Selfâ€Assembly of Block Copolypeptides Based on Poly(<scp>L</scp>â€Arginine) and Î²â€Sheet Peptide. Macromolecular Rapid Communications, 2011, 32, 191-196.	2.0	25

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37	Structural and Conformational Dynamics of Self-Assembling Bioactive Î²-Sheet Peptide Nanostructures Decorated with Multivalent RNA-Binding Peptides. Journal of the American Chemical Society, 2012, 134, 16047-16053.	6.6	22
38	Photoactivation of Noncovalently Assembled Peptide Ligands on Carbon Nanotubes Enables the Dynamic Regulation of Stem Cell Differentiation. ACS Applied Materials & Interfaces, 2016, 8, 26470-26481.	4.0	22
39	A fluorescent supramolecular biosensor for bacterial detection via binding-induced changes in coiled-coil molecular assembly. Sensors and Actuators B: Chemical, 2019, 290, 93-99.	4.0	21
40	Stabilization of Î±-helices by the self-assembly of macrocyclic peptides on the surface of gold nanoparticles for molecular recognition. Chemical Communications, 2013, 49, 7617.	2.2	20
41	Bioactive molecular sheets from self-assembly of polymerizable peptides. Chemical Communications, 2008, , 4001.	2.2	19
42	Macrocyclic Peptides Self-Assemble into Robust Vesicles with Molecular Recognition Capabilities. Bioconjugate Chemistry, 2014, 25, 1996-2003.	1.8	19
43	Controlled self-assembly of Î±-helix-decorated peptide nanostructures. Soft Matter, 2011, 7, 1675.	1.2	18
44	Bioinspired Self-Assembled Peptide Nanofibers with Thermostable Multivalent Î±-Helices. Biomacromolecules, 2013, 14, 1594-1599.	2.6	18
45	Liposome fusion induced by pH-sensitive copolymer: Poly(4-vinylpyridine-co-N,N?-diethylaminoethyl) Tj ETQq1 1 0.784314 rgBT /Over	2.5	17
46	Modular Selfâ€Assembling Peptide Platform with a Tunable Thermoresponsiveness via a Single Amino Acid Substitution. Advanced Functional Materials, 2018, 28, 1803114.	7.8	17
47	BBr3-promoted cyclization to produce ladder-type conjugated polymer. Tetrahedron Letters, 2006, 47, 8689-8692.	0.7	16
48	pH-Dependent In-Cell Self-Assembly of Peptide Inhibitors Increases the Anti-Prion Activity While Decreasing the Cytotoxicity. Biomacromolecules, 2017, 18, 943-950.	2.6	16
49	Toroidal Î²-barrels from self-assembling Î²-sheet peptides. Journal of Materials Chemistry, 2011, 21, 11680.	6.7	15
50	Cytotoxicity and Genotoxicity Induced by Photothermal Effects of Colloidal Gold Nanorods. Journal of Nanoscience and Nanotechnology, 2013, 13, 4437-4445.	0.9	15
51	Combination Selfâ€Assembly of Î²â€Sheet Peptides and Carbon Nanotubes: Functionalizing Carbon Nanotubes with Bioactive Î²â€Sheet Block Copolypeptides. Macromolecular Bioscience, 2012, 12, 49-54.	2.1	14
52	Cell-Penetrating Cross-Î² Peptide Assemblies with Controlled Biodegradable Properties. Biomacromolecules, 2017, 18, 27-35.	2.6	13
53	Terminally-crosslinked sulfonated poly(fluorenyl ether sulfone) as a highly conductive and stable proton exchange membrane. Macromolecular Research, 2010, 18, 992-1000.	1.0	12
54	Multiplexing Natural Orientation: Oppositely Directed Self-Assembling Peptides. Biomacromolecules, 2014, 15, 2138-2145.	2.6	11

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55	Tuning Oligovalent Biomacromolecular Interfaces Using Double-Layered Î±-Helical Coiled-Coil Nanoassemblies from Lariat-Type Building Blocks. ACS Macro Letters, 2016, 5, 1406-1410.	2.3	11
56	Sensitive and Selective Detection of HIV-1 RRE RNA Using Vertical Silicon Nanowire Electrode Array. Nanoscale Research Letters, 2016, 11, 341.	3.1	11
57	3D² Selfâ€Assembling Janus Peptide Dendrimers with Tailorable Supermultivalency. Advanced Functional Materials, 2019, 29, 1808020.	7.8	11
58	Large current difference in Au-coated vertical silicon nanowire electrode array with functionalization of peptides. Nanoscale Research Letters, 2013, 8, 502.	3.1	10
59	Real-Time Detection of Markers in Blood. Nano Letters, 2019, 19, 2291-2298.	4.5	9
60	Inhibition of Multimolecular RNAâ€“Protein Interactions Using Multitarget-Directed Nanohybrid System. ACS Applied Materials & Interfaces, 2017, 9, 11537-11545.	4.0	8
61	Age and Gender Effects on Genotoxicity in Diesel Exhaust Particles Exposed C57BL/6 Mice. Biomolecules, 2021, 11, 374.	1.8	8
62	Highly efficient and fast pre-activation cyclization of the long peptide: Succinimidyl ester-amine reaction revisited. Bioorganic and Medicinal Chemistry Letters, 2015, 25, 5335-5338.	1.0	7
63	Nanomorphological Diversity of Self-Assembled Cyclopeptisomes Investigated via Thermodynamic and Kinetic Controls. Macromolecules, 2016, 49, 7426-7433.	2.2	7
64	A Dodecapeptide Selected by Phage Display as a Potential Theranostic Probe for Colon Cancers. Translational Oncology, 2020, 13, 100798.	1.7	7
65	Molecular Recognition in Selfâ€Assembled Integrated Circuits: Getting Smaller while under Control. Angewandte Chemie - International Edition, 2009, 48, 3394-3396.	7.2	6
66	Facile synthesis, optical and conformational characteristics, and efficient intracellular delivery of a peptideâ€“DNA conjugate. Bioorganic and Medicinal Chemistry, 2014, 22, 4204-4209.	1.4	6
67	Reciprocal Self-Assembly of Peptide-DNA Conjugates into a Programmable Sub-10-nm Supramolecular Deoxyribonucleoprotein. Angewandte Chemie, 2016, 128, 12182-12186.	1.6	6
68	Synthesis and purification of selfâ€assembling peptideâ€oligonucleotide conjugates by solidâ€phase peptide fragment condensation. Journal of Peptide Science, 2018, 24, e3092.	0.8	6
69	Slow-Motion Self-Assembly: Access to Intermediates with Heterochiral Peptides to Gain Control over Alignment Media Development. ACS Nano, 2020, 14, 3344-3352.	7.3	6
70	Fabrication of Multicomponent Multivesicular Peptidoliposomes and Their Directed Cytoplasmic Delivery. ACS Macro Letters, 2017, 6, 359-364.	2.3	5
71	Disaggregation of Amyloid-Î² Plaques by a Local Electric Field Generated by a Vertical Nanowire Electrode Array. ACS Applied Materials & Interfaces, 2020, 12, 55596-55604.	4.0	5
72	Unique behaviour of the Î±-helix in bending deformation. Chemical Communications, 2022, 58, 4368-4371.	2.2	5

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73	Structural control of self-assembled peptide nanostructures to develop peptide vesicles for photodynamic therapy of cancer. Materials Today Bio, 2022, 16, 100337.	2.6	5
74	Covalent capture of Î±-helical peptides in polymer hydrogel network for polyacrylamide gel stabilization electrophoresis. Journal of Polymer Science Part A, 2014, 52, 596-599.	2.5	4
75	Synthesis and conformational analysis of macrocyclic peptides consisting of both Î±â€helix and polyproline helix segments. Biopolymers, 2014, 101, 279-286.	1.2	4
76	Cyclic Peptide-Decorated Self-Assembled Nanohybrids for Selective Recognition and Detection of Multivalent RNAs. Bioconjugate Chemistry, 2016, 27, 799-808.	1.8	4
77	Investigation of the Hydration State of Self-Assembled Peptide Nanostructures with Advanced Electron Paramagnetic Resonance Spectroscopy. ACS Omega, 2019, 4, 114-120.	1.6	4
78	Determination of Genotoxicity Attributed to Diesel Exhaust Particles in Normal Human Embryonic Lung Cell (WI-38) Line. Biomolecules, 2021, 11, 291.	1.8	4
79	Selfâ€assembling cyclic peptideâ€oligonucleotide conjugates: Synthetic strategies and the effect of cyclic topology on selfâ€assembly and base pairing. Peptide Science, 2021, 113, e24193.	1.0	3
80	Simultaneous Stabilization and Multimerization of a Peptide Î±â€Helix by Stapling Polymerization. Macromolecular Rapid Communications, 2016, 37, 1021-1026.	2.0	2
81	Macromolecular Sensing of RNAs by Exploiting Conformational Changes in Supramolecular Nanostructures. Biomacromolecules, 2014, 15, 2642-2647.	2.6	1
82	A Three-Dimensional Sensor to Recognize Amyloid-Î² in Blood Plasma of Patients. ACS Omega, 2020, 5, 27295-27303.	1.6	1
83	Liposome fusion induced by pHâ€sensitive copolymer: Poly(4â€vinylpyridineâ€coN,Nâ€²â€diethylaminoethyl) Tj ETQq1 1 0.784314 r	2.5	1
84	Partial purification and characterization of an 80-kDa transcription factor binding to bHLH motif in the rat p53 promoter. Molecular Biology Reports, 2002, 29, 337-345.	1.0	0