Makoto Oba

List of Publications by Year
in descending order

101 papers	5,262 citations	81889 39 h-index	85537 71 g-index
107 all docs	107 docs citations	107 times ranked	5089 citing authors

#	Article	IF	Citations
1	E-Selective Ring-Closing Metathesis in Î±-Helical Stapled Peptides Using Carbocyclic Î±,Î±-Disubstituted Î±-Amino Acids. Organic Letters, 2022, 24, 1049-1054.	4.6	5
2	Design and Synthesis of Amino Acids Having an Unnatural Side Chain Structure and Their Applications to Functional Peptides. Yuki Gosei Kagaku Kyokaishi/Journal of Synthetic Organic Chemistry, 2022, 80, 36-45.	0.1	0
3	Selective degradation of histone deacetylase 8 mediated by a proteolysis targeting chimera (PROTAC). Chemical Communications, 2022, 58, 4635-4638.	4.1	25
4	Cell-Penetrating Peptides: Emerging Tools for mRNA Delivery. Pharmaceutics, 2022, 14, 78.	4.5	49
5	A helix foldamer oligopeptide improves intracellular stability and prolongs protein expression of the delivered mRNA. Nanoscale, 2021, 13, 18941-18946.	5.6	10
6	Design, Synthesis, and Biological Evaluation of Lysine Demethylase 5â€…C Degraders. ChemMedChem, 2021, 16, 1609-1618.	3.2	14
7	Synthesis and Characterization of Radiogallium-Labeled Cationic Amphiphilic Peptides as Tumor Imaging Agents. Cancers, 2021, 13, 2388.	3.7	4
8	Synthesis of (S)-(â˜)-Cucurbitine and Conformation of Its Homopeptides. Organic Letters, 2021, 23, 4358-4362.	4.6	6
9	Synthesis of six-membered carbocyclic ring Î±,Î±-disubstituted amino acids and arginine-rich peptides to investigate the effect of ring size on the properties of the peptide. Bioorganic and Medicinal Chemistry, 2021, 38, 116111.	3.0	10
10	Identification of Potent and Selective Inhibitors of Fat Mass Obesity-Associated Protein Using a Fragment-Merging Approach. Journal of Medicinal Chemistry, 2021, 64, 15810-15824.	6.4	19
11	Synthesis of Chiral Î±â€Trifluoromethyl Î±,Î±â€Disubstituted Î±â€Amino Acids and Conformational Analysis of Lâ€Leuâ€Based Peptides with (R)â€or (S)â€Î±â€Trifluoromethylalanine. ChemistrySelect, 2020, 5, 10882-10886.	1.5	5
12	siRNA delivery using amphipathic cell-penetrating peptides into human hepatoma cells. Bioorganic and Medicinal Chemistry, 2020, 28, 115402.	3.0	20
13	Helical foldamer-catalyzed enantioselective 1,4-addition reaction of dialkyl malonates to cyclic enones. Tetrahedron Letters, 2019, 60, 151301.	1.4	15
14	Development of 2-aminoisobutyric acid (Aib)-rich cell-penetrating foldamers for efficient siRNA delivery. Chemical Communications, 2019, 55, 7792-7795.	4.1	22
15	Cellâ€Penetrating Peptide Foldamers: Drugâ€Delivery Tools. ChemBioChem, 2019, 20, 2041-2045.	2.6	26
16	Plasmid DNA Delivery Using Cell-Penetrating Peptide Foldamers Composed of Argâ€“Argâ€“Aib Repeating Sequences. ACS Biomaterials Science and Engineering, 2019, 5, 5660-5668.	5.2	19
17	Secondary structures and cell-penetrating abilities of arginine-rich peptide foldamers. Scientific Reports, 2019, 9, 1349.	3.3	31
18	Effects of five-membered ring amino acid incorporation into peptides for coiled coil formation. Bioorganic and Medicinal Chemistry Letters, 2018, 28, 875-877.	2.2	3

#	Article	IF	Citations
19	Structural Development of Cell-Penetrating Peptides Containing Cationic Proline Derivatives. Chemical and Pharmaceutical Bulletin, 2018, 66, 575-580.	1.3	11
20	Cell-Penetrating Peptides Using Cyclic Î±,Î±-Disubstituted Î±-Amino Acids with Basic Functional Groups. ACS Biomaterials Science and Engineering, 2018, 4, 1368-1376.	5.2	18
21	Left-Handed Helix of Three-Membered Ring Amino Acid Homopeptide Interrupted by an Nâ€“HÂ·Â·Â·Ethereal O-Type Hydrogen Bond. Organic Letters, 2018, 20, 7830-7834.	4.6	7
22	Development of helix-stabilized cell-penetrating peptides containing cationic Î±,Î±-disubstituted amino acids as helical promoters. Bioorganic and Medicinal Chemistry, 2017, 25, 1846-1851.	3.0	21
23	Enhanced and Prolonged Cell-Penetrating Abilities of Arginine-Rich Peptides by Introducing Cyclic Î±,Î±-Disubstituted Î±-Amino Acids with Stapling. Bioconjugate Chemistry, 2017, 28, 1801-1806.	3.6	34
24	Diastereomeric Rightâ€•and Leftâ€Handed Helical Structures with Fourteen (R)â€Chiral Centers. Chemistry - A European Journal, 2017, 23, 18120-18124.	3.3	10
25	Low pH-triggering changes in peptide secondary structures. Organic and Biomolecular Chemistry, 2017, 15, 6302-6305.	2.8	7
26	Polyplex micelle installing intracellular self-processing functionalities without free catiomers for safe and efficient systemic gene therapy through tumor vasculature targeting. Biomaterials, 2017, 113, 253-265.	11.4	55
27	Helical <scp>l</scp>â€“Leuâ€Based Peptides Having Chiral Fiveâ€Membered Carbocyclic Ring Amino Acids with an Ethylene Acetal Moiety. ChemistrySelect, 2017, 2, 8108-8114.	1.5	4
28	Cyclic Î±,Î±â€Disubstituted Î±â€Amino Acids with Menthone in Their Sideâ€Chains Linked through an Acetal Moiety, and Helical Structures of Their Peptides. European Journal of Organic Chemistry, 2016, 2016, 2988-2998.	2.4	4
29	The sideâ€chain hydroxy groups of a cyclic Î±,Î±â€disubstituted Î±â€amino acid promote oligopeptide 3₁₀â€helix packing in the crystalline state. Biopolymers, 2016, 106, 757-768.	2.4	1
30	Conformational studies on peptides having dipropylglycine (Dpg) or 1â€aminocycloheptanecarboxylic acid (Ac₇c) within the sequence of <scp>l</scp>â€leucine (Leu) residues. Biopolymers, 2016, 106, 210-218.	2.4	5
31	Handedness Preferences of Heterochiral Helical Peptides Containing Homochiral Peptide Segments. European Journal of Organic Chemistry, 2016, 2016, 840-846.	2.4	4
32	Synthesis of chiral fiveâ€membered carbocyclic ring amino acids with an acetal moiety and helical conformations of its homoâ€chiral homopeptides. Biopolymers, 2016, 106, 555-562.	2.4	11
33	A Cell-Penetrating Peptide with a Guanidinylethyl Amine Structure Directed to Gene Delivery. Scientific Reports, 2016, 6, 19913.	3.3	22
34	Plasmid DNA delivery by arginine-rich cell-penetrating peptides containing unnatural amino acids. Bioorganic and Medicinal Chemistry, 2016, 24, 2681-2687.	3.0	46
35	Helical structures of l-Leu-based peptides having chiral six-membered ring amino acids. Tetrahedron, 2016, 72, 3124-3131.	1.9	2
36	Helical structures of homo-chiral isotope-labeled Î±-aminoisobutyric acid peptides. Tetrahedron, 2016, 72, 5864-5871.	1.9	5

#	Article	IF	Citations
37	Influence of Lâ€Leu to Dâ€Leu Replacement on the Helical Secondary Structures of Lâ€Leuâ€Aibâ€Based Dodecapeptides. ChemistrySelect, 2016, 1, 5805-5811.	1.5	1
38	Development of a Cell-penetrating Peptide that Exhibits Responsive Changes in its Secondary Structure in the Cellular Environment. Scientific Reports, 2016, 6, 33003.	3.3	53
39	Î±â€Helical Structures of Oligopeptides with an Alternating lâ€Leuâ€Aib Segment. European Journal of Organic Chemistry, 2016, 2016, 2815-2820.	2.4	10
40	A Helixâ€Stabilized Cellâ€Penetrating Peptide as an Intracellular Delivery Tool. ChemBioChem, 2016, 17, 137-140.	2.6	55
41	Synthetic Polyamines to Regulate mRNA Translation through the Preservative Binding of Eukaryotic Initiation Factor 4E to the Cap Structure. Journal of the American Chemical Society, 2016, 138, 1478-1481.	13.7	33
42	Peptide foldamers composed of six-membered ring Î±,Î±-disubstituted Î±-amino acids with two changeable chiral acetalÂmoieties. Tetrahedron, 2015, 71, 3909-3914.	1.9	9
43	Plasmid DNA delivery using fluorescein-labeled arginine-rich peptides. Bioorganic and Medicinal Chemistry, 2015, 23, 4911-4918.	3.0	25
44	A preorganized Î²-amino acid bearing a guanidinium side chain and its use in cell-penetrating peptides. Organic and Biomolecular Chemistry, 2015, 13, 5617-5620.	2.8	39
45	Amino equatorial effect of a six-membered ring amino acid on its peptide 310- and Î±-helices. Tetrahedron, 2015, 71, 2409-2420.	1.9	9
46	Topological Study of the Structures of Heterochiral Peptides Containing Equal Amounts of <scp>l</scp>-Leu and <scp>d</scp>-Leu. Journal of Organic Chemistry, 2015, 80, 8597-8603.	3.2	15
47	Conformational studies on peptides having chiral five-membered ring amino acid with two azido or triazole functional groups within the sequence of Aib residues. Tetrahedron, 2014, 70, 8900-8907.	1.9	8
48	Cell-Penetrating Helical Peptides Having <scp>l</scp>-Arginines and Five-Membered Ring Î±,Î±-Disubstituted Î±-Amino Acids. Bioconjugate Chemistry, 2014, 25, 1761-1768.	3.6	34
49	Modulated Protonation of Side Chain Aminoethylene Repeats in N-Substituted Polyaspartamides Promotes mRNA Transfection. Journal of the American Chemical Society, 2014, 136, 12396-12405.	13.7	113
50	Helical Peptide-Foldamers Having a Chiral Five-Membered Ring Amino Acid with Two Azido Functional Groups. Journal of Organic Chemistry, 2014, 79, 9125-9140.	3.2	18
51	Amphipathic short helix-stabilized peptides with cell-membrane penetrating ability. Bioorganic and Medicinal Chemistry, 2014, 22, 2403-2408.	3.0	62
52	Optimized rod length of polyplex micelles for maximizing transfection efficiency and their performance in systemic gene therapy against stroma-rich pancreatic tumors. Biomaterials, 2014, 35, 5359-5368.	11.4	62
53	Targeted gene delivery by polyplex micelles with crowded PEG palisade and cRGD moiety for systemic treatment of pancreatic tumors. Biomaterials, 2014, 35, 3416-3426.	11.4	121
54	Three-layered polyplex micelle as a multifunctional nanocarrier platform for light-induced systemic gene transfer. Nature Communications, 2014, 5, 3545.	12.8	167

#	Article	IF	Citations
55	Synthesis of both enantiomers of cyclic methionine analogue: (R)- and (S)-3-aminotetrahydrothiophene-3-carboxylic acids. Tetrahedron: Asymmetry, 2013, 24, 464-467.	1.8	11
56	Helical Oligomers with a Changeable Chiral Acetal Moiety. European Journal of Organic Chemistry, 2013, 2013, 7679-7682.	2.4	10
57	Study on Development of Polymeric Micellar Gene Carrier and Evaluation of Its Functionality. Biological and Pharmaceutical Bulletin, 2013, 36, 1045-1051.	1.4	16
58	Protein Transfection Study Using Multicellular Tumor Spheroids of Human Hepatoma Huh-7 Cells. PLoS ONE, 2013, 8, e82876.	2.5	12
59	Intracellular Internalization Mechanism of Protein Transfection Reagents. Biological and Pharmaceutical Bulletin, 2012, 35, 1064-1068.	1.4	33
60	Impact of polyplex micelles installed with cyclic RGD peptide as ligand on gene delivery to vascular lesions. Gene Therapy, 2012, 19, 61-69.	4.5	49
61	Helical Structures of Bicyclic Î±â€Amino Acid Homochiral Oligomers with the Stereogenic Centers at the Sideâ€Chain Fusedâ€Ring Junctions. Helvetica Chimica Acta, 2012, 95, 1694-1713.	1.6	17
62	PEG-detachable cationic polyaspartamide derivatives bearing stearoyl moieties for systemic siRNA delivery toward subcutaneous BxPC3 pancreatic tumor. Journal of Drug Targeting, 2012, 20, 33-42.	4.4	38
63	Homo-catiomer integration into PEGylated polyplex micelle from block-catiomer for systemic anti-angiogenic gene therapy for fibrotic pancreatic tumors. Biomaterials, 2012, 33, 4722-4730.	11.4	61
64	Size-controlled long-circulating PICsome as a ruler to measure critical cut-off disposition size into normal and tumor tissues. Chemical Communications, 2011, 47, 6054.	4.1	97
65	Oddâ€“Even Effect of Repeating Aminoethylene Units in the Side Chain of N-Substituted Polyaspartamides on Gene Transfection Profiles. Journal of the American Chemical Society, 2011, 133, 15524-15532.	13.7	199
66	Gene Transfer Using Micellar Nanovectors Inhibits Choroidal Neovascularization In Vivo. PLoS ONE, 2011, 6, e28560.	2.5	15
67	Gene Transfer Using Micellar Nanovectors Inhibits Corneal Neovascularization In Vivo. Cornea, 2011, 30, 1423-1427.	1.7	23
68	Antiangiogenic gene therapy of experimental pancreatic tumor by sFlt-1 plasmid DNA carried by RGD-modified crosslinked polyplex micelles. Journal of Controlled Release, 2011, 149, 51-57.	9.9	86
69	In situ quantitative monitoring of polyplexes and polyplex micelles in the blood circulation using intravital real-time confocal laser scanning microscopy. Journal of Controlled Release, 2011, 151, 104-109.	9.9	110
70	Disulfide crosslinked polyion complex micelles encapsulating dendrimer phthalocyanine directed to improved efficiency of photodynamic therapy. Journal of Controlled Release, 2011, 155, 449-457.	9.9	66
71	Effect of integrin targeting and PEG shielding on polyplex micelle internalization studied by live-cell imaging. Journal of Controlled Release, 2011, 156, 364-373.	9.9	41
72	Polyplex micelles prepared from Ï‰-cholesteryl PEG-polycation block copolymers for systemic gene delivery. Biomaterials, 2011, 32, 652-663.	11.4	101

#	Article	IF	Citations
73	Antiangiogenic Gene Therapy of Solid Tumor by Systemic Injection of Polyplex Micelles Loading Plasmid DNA Encoding Soluble Flt-1. Molecular Pharmaceutics, 2010, 7, 501-509.	4.6	67
74	Enhanced transfection with silica-coated polyplexes loading plasmid DNA. Biomaterials, 2010, 31, 4764-4770.	11.4	29
75	Polyion complex stability and gene silencing efficiency with a siRNA-grafted polymer delivery system. Biomaterials, 2010, 31, 8097-8105.	11.4	122
76	Solid-state conformation of diastereomeric -Pro-Pro-(Aib)4 sequences. Tetrahedron, 2010, 66, 2293-2296.	1.9	16
77	Introduction of stearoyl moieties into a biocompatible cationic polyaspartamide derivative, PAsp(DET), with endosomal escaping function for enhanced siRNA-mediated gene knockdown. Journal of Controlled Release, 2010, 145, 141-148.	9.9	114
78	pDNA/poly(<scp>L</scp>â€lysine) Polyplexes Functionalized with a pHâ€Sensitive Chargeâ€Conversional Poly(aspartamide) Derivative for Controlled Gene Delivery to Human Umbilical Vein Endothelial Cells. Macromolecular Rapid Communications, 2010, 31, 1181-1186.	3.9	58
79	Impact of polyplex micelles installed with cyclic RGD peptide as ligand on gene delivery to vascular lesions. Nature Precedings, 2010, , .	0.1	0
80	siRNA-Based Therapy Ameliorates Glomerulonephritis. Journal of the American Society of Nephrology: JASN, 2010, 21, 622-633.	6.1	84
81	Spontaneous Formation of Nanosized Unilamellar Polyion Complex Vesicles with Tunable Size and Properties. Journal of the American Chemical Society, 2010, 132, 1631-1636.	13.7	219
82	Direct and instantaneous observation of intravenously injected substances using intravital confocal micro-videography. Biomedical Optics Express, 2010, 1, 1209.	2.9	62
83	Enhanced Percolation and Gene Expression in Tumor Hypoxia by PEGylated Polyplex Micelles. Molecular Therapy, 2009, 17, 1404-1410.	8.2	30
84	Environment-Responsive Block Copolymer Micelles with a Disulfide Cross-Linked Core for Enhanced siRNA Delivery. Biomacromolecules, 2009, 10, 119-127.	5.4	301
85	Polyplex Micelles from Triblock Copolymers Composed of Tandemly Aligned Segments with Biocompatible, Endosomal Escaping, and DNA-Condensing Functions for Systemic Gene Delivery to Pancreatic Tumor Tissue. Pharmaceutical Research, 2008, 25, 2924-2936.	3.5	45
86	Chargeâ€Conversion Ternary Polyplex with Endosome Disruption Moiety: A Technique for Efficient and Safe Gene Delivery. Angewandte Chemie - International Edition, 2008, 47, 5163-5166.	13.8	206
87	Polyplex Micelles with Cyclic RGD Peptide Ligands and Disulfide Cross-Links Directing to the Enhanced Transfection via Controlled Intracellular Trafficking. Molecular Pharmaceutics, 2008, 5, 1080-1092.	4.6	131
88	PEG-Detachable Polyplex Micelles Based on Disulfide-Linked Block Catiomers as Bioresponsive Nonviral Gene Vectors. Journal of the American Chemical Society, 2008, 130, 6001-6009.	13.7	387
89	Controlled Delivery of bFGF Remodeled Vascular Network in Muscle Flap and Increased Perfusion Capacity Via Minor Pedicle. Journal of Surgical Research, 2008, 147, 132-137.	1.6	18
90	Polyplexes from Poly(aspartamide) Bearing 1,2-Diaminoethane Side Chains Induce pH-Selective, Endosomal Membrane Destabilization with Amplified Transfection and Negligible Cytotoxicity. Journal of the American Chemical Society, 2008, 130, 16287-16294.	13.7	328

#	Article	IF	Citations
91	Biocompatible micellar nanovectors achieve efficient gene transfer to vascular lesions without cytotoxicity and thrombus formation. Gene Therapy, 2007, 14, 1029-1038.	4.5	96
92	Cyclic RGD Peptide-Conjugated Polyplex Micelles as a Targetable Gene Delivery System Directed to Cells Possessing Î±vÎ²3 and Î±vÎ²5 Integrins. Bioconjugate Chemistry, 2007, 18, 1415-1423.	3.6	180
93	Study of the quantitative aminolysis reaction of poly(Î²-benzyl l-aspartate) (PBLA) as a platform polymer for functionality materials. Reactive and Functional Polymers, 2007, 67, 1361-1372.	4.1	80
94	Transfection study using multicellular tumor spheroids for screening non-viral polymeric gene vectors with low cytotoxicity and high transfection efficiencies. Journal of Controlled Release, 2007, 121, 38-48.	9.9	79
95	Concise synthetic strategy toward cyclic Î±,Î±-disubstituted Î±-amino acids bearing a Î´-nitrogen atom: chiral 1-substituted 4-aminopiperidine-4-carboxylic acids. Tetrahedron, 2005, 61, 593-598.	1.9	12
96	Concise Synthetic Strategy Toward Cyclic Î±,Î±-Disubstituted Î±-Amino Acids Bearing a Î´-Nitrogen Atom: Chiral 1-Substituted 4-Aminopiperidine-4-carboxylic Acids.. ChemInform, 2005, 36, no.	0.0	0
97	An Extended Planar C5 Conformation and a 310-Helical Structure of Peptide Foldamer Composed of Diverse -Ethylated ,-Disubstituted -Amino Acids. Chemistry - A European Journal, 2003, 9, 3082-3090.	3.3	41
98	Conformation of Peptides Containing a Chiral -Ethylated ,-Disubstituted -Amino Acid: (S)--Ethylleucine (=(2S)-2-Amino-2-ethyl-4-methylpentanoic Acid) within Sequences of Dimethylglycine and Diethylglycine Residues. Helvetica Chimica Acta, 2002, 85, 3197-3218.	1.6	35
99	Asymmetric Synthesis of Î±,Î±-Disubstituted Î±-Amino Acids Using (S,S)-Cyclohexane-1,2-diol as a Chiral Auxiliary. Journal of Organic Chemistry, 2001, 66, 2667-2673.	3.2	53
100	Solid-State Conformation of a Hybrid Tripeptide between .BETA.-Amino Acid; 8-Aminocyclooct-4-enecarboxylic Acid and 2-Aminoisobutyric Acid.. Chemical and Pharmaceutical Bulletin, 2001, 49, 1178-1181.	1.3	14
101	Conformational Study of Heteropentapeptides Containing anÎ±-EthylatedÎ±,Î±-Disubstituted Amino Acid: (S)-Butylethylglycine (=2-Amino-2-ethylhexanoic Acid) within a Sequence of Dimethylglycine (=2-Aminoisobutyric Acid) Residues. Helvetica Chimica Acta, 2001, 84, 32-46.	1.6	14