Antoine Kichler

List of Publications by Year
in descending order

85 papers	4,256 citations	126907 33 h-index	110387 64 g-index
87 all docs	87 docs citations	87 times ranked	4222 citing authors

#	Article	IF	Citations
1	Polyethylenimine-mediated gene delivery: a mechanistic study. Journal of Gene Medicine, 2001, 3, 135-144.	2.8	485
2	Coupling of cell-binding ligands to polyethylenimine for targeted gene delivery. Gene Therapy, 1997, 4, 409-418.	4.5	358
3	Targeted gene transfer into hepatoma cells with lipopolyamine-condensed DNA particles presenting galactose ligands: a stage toward artificial viruses.. Proceedings of the National Academy of Sciences of the United States of America, 1995, 92, 1744-1748.	7.1	264
4	Histidine-rich amphipathic peptide antibiotics promote efficient delivery of DNA into mammalian cells. Proceedings of the National Academy of Sciences of the United States of America, 2003, 100, 1564-1568.	7.1	212
5	Synthesis of Linear Polyethylenimine Derivatives for DNA Transfection. Bioconjugate Chemistry, 2003, 14, 581-587.	3.6	195
6	Membrane Permeabilization and Efficient Gene Transfer by a Peptide Containing Several Histidines. Bioconjugate Chemistry, 1998, 9, 260-267.	3.6	193
7	Efficient inÂvitro and inÂvivo pulmonary delivery of nucleic acid by carbon dot-based nanocarriers. Biomaterials, 2015, 51, 290-302.	11.4	147
8	Recent Developments in Nucleic Acid Delivery with Polyethylenimines. Advances in Genetics, 2014, 88, 263-288.	1.8	131
9	Intranasal gene delivery with a polyethylenimineâ€"PEG conjugate. Journal of Controlled Release, 2002, 81, 379-388.	9.9	125
10	Cationic amphipathic histidine-rich peptides for gene delivery. Biochimica Et Biophysica Acta - Biomembranes, 2006, 1758, 301-307.	2.6	116
11	The antibiotic and DNAâ€transfecting peptide LAH4 selectively associates with, and disorders, anionic lipids in mixed membranes. FASEB Journal, 2006, 20, 320-322.	0.5	90
12	Design and Evaluation of Histidine-Rich Amphipathic Peptides for siRNA Delivery. Pharmaceutical Research, 2010, 27, 1426-1436.	3.5	87
13	Enhanced Membrane Disruption and Antibiotic Action against Pathogenic Bacteria by Designed Histidine-Rich Peptides at Acidic pH. Antimicrobial Agents and Chemotherapy, 2006, 50, 3305-3311.	3.2	86
14	Influence of Membrane-Active Peptides on Lipospermine/DNA Complex Mediated Gene Transfer. Bioconjugate Chemistry, 1997, 8, 213-221.	3.6	82
15	Structural Determinants of Antimicrobial and Antiplasmodial Activity and Selectivity in Histidine-rich Amphipathic Cationic Peptides. Journal of Biological Chemistry, 2009, 284, 119-133.	3.4	79
16	Glycerol Enhancement of Ligand-Polylysine/DNA Transfection. BioTechniques, 1996, 20, 905-913.	1.8	75
17	Efficient DNA Transfection Mediated by the C-Terminal Domain of Human Immunodeficiency Virus Type 1 Viral Protein R. Journal of Virology, 2000, 74, 5424-5431.	3.4	65
18	A Cellâ€Penetrating Foldamer with a Bioreducible Linkage for Intracellular Delivery of DNA. Angewandte Chemie - International Edition, 2015, 54, 11133-11137.	13.8	63

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19	Glycerol and Polylysine Synergize in Their Ability to Rupture Vesicular Membranes: A Mechanism for Increased Transferrinâ€"Polylysine-Mediated Gene Transfer1. Experimental Cell Research, 1997, 232, 137-145.	2.6	58
20	Optimising histidine rich peptides for efficient DNA delivery in the presence of serum. Journal of Controlled Release, 2007, 118, 95-104.	9.9	56
21	Characterization of the gene transfer process mediated by histidine-rich peptides. Journal of Molecular Medicine, 2007, 85, 191-201.	3.9	56
22	Self-aggregating 1.8 kDa polyethylenimines with dissolution switch at endosomal acidic pH are delivery carriers for plasmid DNA, mRNA, siRNA and exon-skipping oligonucleotides. Journal of Controlled Release, 2017, 246, 60-70.	9.9	55
23	The Cationic Amphipathic Î±-Helix of HIV-1 Viral Protein R (Vpr) Binds to Nucleic Acids, Permeabilizes Membranes, and Efficiently Transfects Cells. Journal of Biological Chemistry, 2003, 278, 18110-18116.	3.4	53
24	Vectofusin-1, a New Viral Entry Enhancer, Strongly Promotes Lentiviral Transduction of Human Hematopoietic Stem Cells. Molecular Therapy - Nucleic Acids, 2013, 2, e90.	5.1	53
25	Self-Promoted Cellular Uptake of Peptide/DNA Transfection Complexes. Biochemistry, 2007, 46, 11253-11262.	2.5	50
26	Efficient Gene Delivery with Neutral Complexes of Lipospermine and Thiol-Reactive Phospholipids. Biochemical and Biophysical Research Communications, 1995, 209, 444-450.	2.1	47
27	Histidineâ€rich designer peptides of the LAH4 family promote cell delivery of a multitude of cargo. Journal of Peptide Science, 2017, 23, 320-328.	1.4	44
28	Influence of the DNA complexation medium on the transfection efficiency of lipospermine/DNA particles. Gene Therapy, 1998, 5, 855-860.	4.5	43
29	Glycoproteomics Reveals Decorin Peptides With Anti-Myostatin Activity in Human Atrial Fibrillation. Circulation, 2016, 134, 817-832.	1.6	43
30	Incorporation of 2,3â€Diaminopropionic Acid into Linear Cationic Amphipathic Peptides Produces pHâ€Sensitive Vectors. ChemBioChem, 2010, 11, 1266-1272.	2.6	36
31	Linear Topology Confers in Vivo Gene Transfer Activity to Polyethylenimines. Bioconjugate Chemistry, 2006, 17, 759-765.	3.6	35
32	Development and Characterization of New Cyclodextrin Polymer-Based DNA Delivery Systems. Bioconjugate Chemistry, 2008, 19, 2311-2320.	3.6	33
33	â€œHFPâ€•Fluorinated Cationic Lipids for Enhanced Lipoplex Stability and Gene Delivery. Bioconjugate Chemistry, 2010, 21, 360-371.	3.6	33
34	pH-Responsive Nanometric Polydiacetylenic Micelles Allow for Efficient Intracellular siRNA Delivery. ACS Applied Materials & Interfaces, 2016, 8, 30665-30670.	8.0	32
35	Molecular Determinants of Vectofusin-1 and Its Derivatives for the Enhancement of Lentivirally Mediated Gene Transfer into Hematopoietic Stem/Progenitor Cells. Journal of Biological Chemistry, 2016, 291, 2161-2169.	3.4	30
36	Synthesis, Characterization, and Gene Transfer Application of Poly(ethylene glycol-b-ethylenimine) with High Molar Mass Polyamine Block. Biomacromolecules, 2006, 7, 2863-2870.	5.4	29

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37	Cationic steroid antibiotics demonstrate DNA delivery properties. Journal of Controlled Release, 2005, 107, 174-182.	9.9	28
38	Inhibition of the myostatin/Smad signaling pathway by short decorin-derived peptides. Experimental Cell Research, 2016, 341, 187-195.	2.6	26
39	An imidazole modified lipid confers enhanced mRNA-LNP stability and strong immunization properties in mice and non-human primates. Biomaterials, 2022, 286, 121570.	11.4	26
40	Nucleic acid transfer with hemifluorinated polycationic lipids. Biomaterials, 2010, 31, 4781-4788.	11.4	24
41	Synthesis and Evaluation of Amphiphilic Poly(tetrahydrofuran-b-ethylene oxide) Copolymers for DNA Delivery into Skeletal Muscle. Pharmaceutical Research, 2008, 25, 2963-2971.	3.5	22
42	Quantitative measurement of delivery and gene silencing activities of siRNA polyplexes containing pyridylthiourea-grafted polyethylenimines. Journal of Controlled Release, 2014, 182, 1-12.	9.9	22
43	Control of pH responsive peptide self-association during endocytosis is required for effective gene transfer. Biochimica Et Biophysica Acta - Biomembranes, 2012, 1818, 1332-1341.	2.6	21
44	Infectivity enhancement of different HIV-1-based lentiviral pseudotypes in presence of the cationic amphipathic peptide LAH4-L1. Journal of Virological Methods, 2013, 189, 375-378.	2.1	21
45	Membrane pore-formation correlates with the hydrophilic angle of histidine-rich amphipathic peptides with multiple biological activities. Biochimica Et Biophysica Acta - Biomembranes, 2020, 1862, 183212.	2.6	21
46	A new family of peptideâ€“nucleic acid nanostructures with potent transfection activities. Journal of Peptide Science, 2011, 17, 88-93.	1.4	20
47	Polydiacetylenic nanofibers as new siRNA vehicles for <i>in vitro</i> and <i>in vivo</i> delivery. Nanoscale, 2018, 10, 1587-1590.	5.6	20
48	Evaluation of the muscle gene transfer activity of a series of amphiphilic triblock copolymers. Journal of Gene Medicine, 2009, 11, 1114-1124.	2.8	18
49	DNAJB2 Expression in Normal and Diseased Human and Mouse Skeletal Muscle. American Journal of Pathology, 2010, 176, 2901-2910.	3.8	18
50	Hybrid Cell-Penetrating Foldamer with Superior Intracellular Delivery Properties and Serum Stability. Bioconjugate Chemistry, 2019, 30, 1133-1139.	3.6	18
51	Rational Design of Vector and Antibiotic Peptides Using Solid-State NMR. Mini-Reviews in Medicinal Chemistry, 2007, 7, 491-497.	2.4	17
52	Liposomes: from membrane models to gene therapy. Pure and Applied Chemistry, 1998, 70, 89-96.	1.9	16
53	GlycofectionTM in the presence of anionic fusogenic peptides: a study of the parameters affecting the peptide-mediated enhancement of the transfection efficiency. Journal of Gene Medicine, 1999, 1, 134-143.	2.8	16
54	Amphiphilic Poly[(propylene glycol)â€<i>block</i>â€(2â€methylâ€2â€oxazoline)] Copolymers for Gene Transfer in Skeletal Muscle. ChemMedChem, 2007, 2, 1202-1207.	3.2	16

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55	Identification of decorin derived peptides with a zinc dependent anti-myostatin activity. Neuromuscular Disorders, 2012, 22, 1057-1068.	0.6	16
56	Induction of tumor-specific CTL responses using the C-terminal fragment of Viral protein R as cell penetrating peptide. Scientific Reports, 2019, 9, 3937.	3.3	15
57	Peptides derived from the C-terminal domain of HIV-1 Viral Protein R in lipid bilayers: Structure, membrane positioning and gene delivery. Biochimica Et Biophysica Acta - Biomembranes, 2020, 1862, 183149.	2.6	14
58	Pre-treatment of cells with pluronic L64 increases DNA transfection mediated by electrotransfer. Journal of Controlled Release, 2011, 149, 117-125.	9.9	13
59	Polymers for Improving the In Vivo Transduction Efficiency of AAV2 Vectors. PLoS ONE, 2010, 5, e15576.	2.5	13
60	Preparation and evaluation of a new class of gene transfer reagents: poly(-alkylaminosiloxanes). Journal of Controlled Release, 2003, 93, 403-414.	9.9	12
61	The Reverse Block Copolymer Pluronic 25R2 Promotes DNA Transfection of Skeletal Muscle. Macromolecular Bioscience, 2011, 11, 590-594.	4.1	12
62	Delivery of siRNA by tailored cell-penetrating urea-based foldamers. Chemical Communications, 2021, 57, 1458-1461.	4.1	11
63	Synthesis of Poly(propylene glycol)â€‹<i>block</i>â€Polyethylenimine Triblock Copolymers for the Delivery of Nucleic Acids. Macromolecular Bioscience, 2011, 11, 652-661.	4.1	10
64	Receptor-Mediated Gene Delivery with Non-Viral DNA Carriers. Journal of Liposome Research, 2000, 10, 443-460.	3.3	9
65	Real-time monitoring of cell transplantation in mouse dystrophic muscles by a secreted alkaline phosphatase reporter gene. Gene Therapy, 2009, 16, 815-819.	4.5	9
66	Co-delivery of anti-PLK-1 siRNA and camptothecin by nanometric polydiacetylenic micelles results in a synergistic cell killing. RSC Advances, 2018, 8, 20758-20763.	3.6	9
67	Design and evaluation of ionizable peptide amphiphiles for siRNA delivery. International Journal of Pharmaceutics, 2019, 566, 141-148.	5.2	9
68	Design of a new cell penetrating peptide for DNA, siRNA and mRNA delivery. Journal of Gene Medicine, 2022, 24, e3401.	2.8	9
69	Soluble TNF-Î± receptor secretion from healthy or dystrophic mice after AAV6-mediated muscle gene transfer. Gene Therapy, 2010, 17, 1400-1410.	4.5	6
70	Smart DNA Vectors Based on Cyclodextrin Polymers: Compaction and Endosomal Release. Pharmaceutical Research, 2012, 29, 384-396.	3.5	6
71	Characterization of the DNA and Membrane Interactions of a Bioreducible Cell-Penetrating Foldamer in its Monomeric and Dimeric Form. Journal of Physical Chemistry B, 2020, 124, 4476-4486.	2.6	6
72	Different Biological Activities of Histidine-Rich Peptides Are Favored by Variations in Their Design. Toxins, 2021, 13, 363.	3.4	6

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73	Design of Oligourea-Based Foldamers with Antibacterial and Antifungal Activities. Molecules, 2022, 27, 1749.	3.8	6
74	Comparative Affinity of Synthetic Multi-Antennary Galactosyl Derivatives for the Gal/GalNAc Receptor of Rat Hepatocytes and Peritoneal Macrophages. Journal of Drug Targeting, 1998, 6, 201-205.	4.4	5
75	Improvement of Synthetic Vectors for Gene Therapy Using Ring-Opening Cationic Polymerization. Macromolecular Symposia, 2006, 240, 166-177.	0.7	5
76	Investigation of DNA Condensing Properties of Amphiphilic Triblock Cationic Polymers by Atomic Force Microscopy. Langmuir, 2010, 26, 17552-17557.	3.5	5
77	Straightforward Synthesis of L-PEI-Coated Gold Nanoparticles and Their Biological Evaluation. European Journal of Inorganic Chemistry, 2018, 2018, 2972-2975.	2.0	5
78	Histidine-Rich Cationic Cell-Penetrating Peptides for Plasmid DNA and siRNA Delivery. Methods in Molecular Biology, 2019, 1943, 39-59.	0.9	5
79	Targeted transfection of human hepatoma cells with a combination of lipospermine and neo-galactolipids. Journal of Liposome Research, 1995, 5, 735-745.	3.3	3
80	The absorption enhancer sodium deoxycholate promotes high gene transfer in skeletal muscles. International Journal of Pharmaceutics, 2017, 523, 291-299.	5.2	3
81	Ir^{III}â^'Pyridoannelated Nâ€Heterocyclic Carbene Complexes: Potent Theranostic Agents via Mitochondria Targeting. European Journal of Inorganic Chemistry, 2021, 2021, 1551-1564.	2.0	3
82	Cationic Photopolymerized Polydiacetylenic (PDA) Micelles for siRNA Delivery. Methods in Molecular Biology, 2019, 1943, 101-122.	0.9	2
83	Insertion of hydrophobic spacers on dodecalysines as potential transfection enhancers. European Polymer Journal, 2021, 157, 110654.	5.4	2
84	Synthesis and Evaluation as a Gene Transfer Agent of a 1,2-Dimyristoyl-sn-glycero-3-pentalysine Salt. Chemistry Letters, 1995, 24, 473-474.	1.3	1
85	Cell-Penetrating Peptides with Antimicrobial, Transfection and Transduction Activities. Biophysical Journal, 2018, 114, 267a.	0.5	0