Xue-Hai Liang

List of Publications by Year
in descending order

57 papers	3,983 citations	125106 35 h-index	162838 57 g-index
57 all docs	57 docs citations	57 times ranked	3513 citing authors

#	Article	IF	Citations
1	Structural basis of dimerization and nucleic acid binding of human DBHS proteins NONO and PSPC1. Nucleic Acids Research, 2022, 50, 522-535.	6.5	10
2	RNA modifications can affect RNase H1-mediated PS-ASO activity. Molecular Therapy - Nucleic Acids, 2022, 28, 814-828.	2.3	7
3	Insights into innate immune activation via PS-ASOâ€“proteinâ€“TLR9 interactions. Nucleic Acids Research, 2022, 50, 8107-8126.	6.5	7
4	Antisense drug discovery and development technology considered in a pharmacological context. Biochemical Pharmacology, 2021, 189, 114196.	2.0	55
5	Binding of phosphorothioate oligonucleotides with RNase H1 can cause conformational changes in the protein and alter the interactions of RNase H1 with other proteins. Nucleic Acids Research, 2021, 49, 2721-2739.	6.5	10
6	Site-specific incorporation of 5â€²-methyl DNA enhances the therapeutic profile of gapmer ASOs. Nucleic Acids Research, 2021, 49, 1828-1839.	6.5	26
7	Antisense technology: an overview and prospectus. Nature Reviews Drug Discovery, 2021, 20, 427-453.	21.5	299
8	Site-specific Incorporation of 2â€²,5â€²-Linked Nucleic Acids Enhances Therapeutic Profile of Antisense Oligonucleotides. ACS Medicinal Chemistry Letters, 2021, 12, 922-927.	1.3	13
9	Solid-Phase Separation of Toxic Phosphorothioate Antisense Oligonucleotide-Protein Nucleolar Aggregates Is Cytoprotective. Nucleic Acid Therapeutics, 2021, 31, 126-144.	2.0	10
10	Golgi-58K can re-localize to late endosomes upon cellular uptake of PS-ASOs and facilitates endosomal release of ASOs. Nucleic Acids Research, 2021, 49, 8277-8293.	6.5	7
11	Hsc70 Facilitates Mannose-6-Phosphate Receptor-Mediated Intracellular Trafficking and Enhances Endosomal Release of Phosphorothioate-Modified Antisense Oligonucleotides. Nucleic Acid Therapeutics, 2021, 31, 284-297.	2.0	4
12	Towards next generation antisense oligonucleotides: mesylphosphoramidate modification improves therapeutic index and duration of effect of gapmer antisense oligonucleotides. Nucleic Acids Research, 2021, 49, 9026-9041.	6.5	61
13	Antisense technology: A review. Journal of Biological Chemistry, 2021, 296, 100416.	1.6	149
14	Perinuclear positioning of endosomes can affect PS-ASO activities. Nucleic Acids Research, 2021, 49, 12970-12985.	6.5	3
15	Golgi-endosome transport mediated by M6PR facilitates release of antisense oligonucleotides from endosomes. Nucleic Acids Research, 2020, 48, 1372-1391.	6.5	32
16	The Interaction of Phosphorothioate-Containing RNA Targeted Drugs with Proteins Is a Critical Determinant of the Therapeutic Effects of These Agents. Journal of the American Chemical Society, 2020, 142, 14754-14771.	6.6	77
17	Some ASOs that bind in the coding region of mRNAs and induce RNase H1 cleavage can cause increases in the pre-mRNAs that may blunt total activity. Nucleic Acids Research, 2020, 48, 9840-9858.	6.5	14
18	Phosphorothioate modified oligonucleotideâ€“protein interactions. Nucleic Acids Research, 2020, 48, 5235-5253.	6.5	163

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19	Origins of the Increased Affinity of Phosphorothioate-Modified Therapeutic Nucleic Acids for Proteins. Journal of the American Chemical Society, 2020, 142, 7456-7468.	6.6	56
20	Gapmer Antisense Oligonucleotides Targeting 5S Ribosomal RNA Can Reduce Mature 5S Ribosomal RNA by Two Mechanisms. Nucleic Acid Therapeutics, 2020, 30, 312-324.	2.0	7
21	Understanding the effect of controlling phosphorothioate chirality in the DNA gap on the potency and safety of gapmer antisense oligonucleotides. Nucleic Acids Research, 2020, 48, 1691-1700.	6.5	63
22	Phosphorothioate Antisense Oligonucleotides Bind P-Body Proteins and Mediate P-Body Assembly. Nucleic Acid Therapeutics, 2019, 29, 343-358.	2.0	9
23	Site-specific replacement of phosphorothioate with alkyl phosphonate linkages enhances the therapeutic profile of gapmer ASOs by modulating interactions with cellular proteins. Nucleic Acids Research, 2019, 47, 5465-5479.	6.5	77
24	Lipid Conjugates Enhance Endosomal Release of Antisense Oligonucleotides Into Cells. Nucleic Acid Therapeutics, 2019, 29, 245-255.	2.0	48
25	mRNA levels can be reduced by antisense oligonucleotides via no-go decay pathway. Nucleic Acids Research, 2019, 47, 6900-6916.	6.5	32
26	Chemical modification of PS-ASO therapeutics reduces cellular protein-binding and improves the therapeutic index. Nature Biotechnology, 2019, 37, 640-650.	9.4	205
27	Cellular uptake mediated by epidermal growth factor receptor facilitates the intracellular activity of phosphorothioate-modified antisense oligonucleotides. Nucleic Acids Research, 2018, 46, 3579-3594.	6.5	58
28	Acute hepatotoxicity of 2â€² fluoro-modified 5â€“10â€“5 gapmer phosphorothioate oligonucleotides in mice correlates with intracellular protein binding and the loss of DBHS proteins. Nucleic Acids Research, 2018, 46, 2204-2217.	6.5	71
29	Translation can affect the antisense activity of RNase H1-dependent oligonucleotides targeting mRNAs. Nucleic Acids Research, 2018, 46, 293-313.	6.5	15
30	Membrane Destabilization Induced by Lipid Species Increases Activity of Phosphorothioate-Antisense Oligonucleotides. Molecular Therapy - Nucleic Acids, 2018, 13, 686-698.	2.3	15
31	COPII vesicles can affect the activity of antisense oligonucleotides by facilitating the release of oligonucleotides from endocytic pathways. Nucleic Acids Research, 2018, 46, 10225-10245.	6.5	31
32	Cellular uptake and trafficking of antisense oligonucleotides. Nature Biotechnology, 2017, 35, 230-237.	9.4	416
33	Intra-endosomal trafficking mediated by lysobisphosphatidic acid contributes to intracellular release of phosphorothioate-modified antisense oligonucleotides. Nucleic Acids Research, 2017, 45, 5309-5322.	6.5	60
34	Antisense oligonucleotides targeting translation inhibitory elements in 5â€² UTRs can selectively increase protein levels. Nucleic Acids Research, 2017, 45, 9528-9546.	6.5	83
35	RNase H1-Dependent Antisense Oligonucleotides Are Robustly Active in Directing RNA Cleavage in Both the Cytoplasm and the Nucleus. Molecular Therapy, 2017, 25, 2075-2092.	3.7	168
36	Nucleic acid binding proteins affect the subcellular distribution of phosphorothioate antisense oligonucleotides. Nucleic Acids Research, 2017, 45, 10649-10671.	6.5	50

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37	Dynamic nucleoplasmic and nucleolar localization of mammalian RNase H1 in response to RNAP I transcriptional R-loops. Nucleic Acids Research, 2017, 45, 10672-10692.	6.5	44
38	Specific Increase of Protein Levels by Enhancing Translation Using Antisense Oligonucleotides Targeting Upstream Open Frames. Advances in Experimental Medicine and Biology, 2017, 983, 129-146.	0.8	15
39	Depletion of NEAT1 lncRNA attenuates nucleolar stress by releasing sequestered P54nrb and PSF to facilitate c-Myc translation. PLoS ONE, 2017, 12, e0173494.	1.1	26
40	Translation efficiency of mRNAs is increased by antisense oligonucleotides targeting upstream open reading frames. Nature Biotechnology, 2016, 34, 875-880.	9.4	137
41	Annexin A2 facilitates endocytic trafficking of antisense oligonucleotides. Nucleic Acids Research, 2016, 44, gkw595.	6.5	58
42	ViableRNaseH1knockout mice show RNaseH1 is essential for R loop processing, mitochondrial and liver function. Nucleic Acids Research, 2016, 44, 5299-5312.	6.5	84
43	RNA cleavage products generated by antisense oligonucleotides and siRNAs are processed by the RNA surveillance machinery. Nucleic Acids Research, 2016, 44, 3351-3363.	6.5	57
44	Hsp90 protein interacts with phosphorothioate oligonucleotides containing hydrophobic 2â€²-modifications and enhances antisense activity. Nucleic Acids Research, 2016, 44, 3892-3907.	6.5	65
45	Identification and characterization of intracellular proteins that bind oligonucleotides with phosphorothioate linkages. Nucleic Acids Research, 2015, 43, 2927-2945.	6.5	151
46	2â€²-Fluoro-modified phosphorothioate oligonucleotide can cause rapid degradation of P54nrb and PSF. Nucleic Acids Research, 2015, 43, 4569-4578.	6.5	97
47	TCP1 complex proteins interact with phosphorothioate oligonucleotides and can co-localize in oligonucleotide-induced nuclear bodies in mammalian cells. Nucleic Acids Research, 2014, 42, 7819-7832.	6.5	80
48	Phosphorothioate oligonucleotides can displaceNEAT1RNA and form nuclear paraspeckle-like structures. Nucleic Acids Research, 2014, 42, 8648-8662.	6.5	87
49	Transfection of siRNAs can alter miRNA levels and trigger non-specific protein degradation in mammalian cells. Biochimica Et Biophysica Acta - Gene Regulatory Mechanisms, 2013, 1829, 455-468.	0.9	36
50	RNA helicase A is not required for RISC activity. Biochimica Et Biophysica Acta - Gene Regulatory Mechanisms, 2013, 1829, 1092-1101.	0.9	10
51	Human RNase H1 Is Associated with Protein P32 and Is Involved in Mitochondrial Pre-rRNA Processing. PLoS ONE, 2013, 8, e71006.	1.1	43
52	Depletion of key protein components of the RISC pathway impairs pre-ribosomal RNA processing. Nucleic Acids Research, 2011, 39, 4875-4889.	6.5	50
53	Efficient and specific knockdown of small non-coding RNAs in mammalian cells and in mice. Nucleic Acids Research, 2011, 39, e13-e13.	6.5	62
54	Strong dependence between functional domains in a dual-function snoRNA infers coupling of rRNA processing and modification events. Nucleic Acids Research, 2010, 38, 3376-3387.	6.5	17

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55	Loss of rRNA modifications in the decoding center of the ribosome impairs translation and strongly delays pre-rRNA processing. Rna, 2009, 15, 1716-1728.	1.6	186
56	rRNA Modifications in an Intersubunit Bridge of the Ribosome Strongly Affect Both Ribosome Biogenesis and Activity. Molecular Cell, 2007, 28, 965-977.	4.5	192
57	The Helicase Has1p Is Required for snoRNA Release from Pre-rRNA. Molecular and Cellular Biology, 2006, 26, 7437-7450.	1.1	75