Katalin KarikÃ³

List of Publications by Year
in descending order

74 papers	16,872 citations	66343 42 h-index	79698 73 g-index
77 all docs	77 docs citations	77 times ranked	16655 citing authors

#	Article	IF	Citations
1	Ribozyme Assays to Quantify the Capping Efficiency of In Vitro-Transcribed mRNA. Pharmaceutics, 2022, 14, 328.	4.5	20
2	Lyophilization provides long-term stability for a lipid nanoparticle-formulated, nucleoside-modified mRNA vaccine. Molecular Therapy, 2022, 30, 1941-1951.	8.2	98
3	Developing mRNA for Therapy. Keio Journal of Medicine, 2022, 71, 31-31.	1.1	5
4	A systematic dissection of determinants and consequences of snoRNA-guided pseudouridylation of human mRNA. Nucleic Acids Research, 2022, 50, 4900-4916.	14.5	11
5	Lipid nanoparticles enhance the efficacy of mRNA and protein subunit vaccines by inducing robust T follicular helper cell and humoral responses. Immunity, 2022, 55, 1136-1138.	14.3	15
6	A noninflammatory mRNA vaccine for treatment of experimental autoimmune encephalomyelitis. Science, 2021, 371, 145-153.	12.6	253
7	BNT162b2 vaccine induces neutralizing antibodies and poly-specific T cells in humans. Nature, 2021, 595, 572-577.	27.8	583
8	Nucleoside-modified VEGFC mRNA induces organ-specific lymphatic growth and reverses experimental lymphedema. Nature Communications, 2021, 12, 3460.	12.8	30
9	What does the success of mRNA vaccines tell us about the future of biological therapeutics?. Cell Systems, 2021, 12, 757-758.	6.2	10
10	Local delivery of mRNA-encoded cytokines promotes antitumor immunity and tumor eradication across multiple preclinical tumor models. Science Translational Medicine, 2021, 13, eabc7804.	12.4	79
11	Modified uridines are the key to a successful message. Nature Reviews Immunology, 2021, 21, 619-619.	22.7	7
12	Lipid nanoparticles enhance the efficacy of mRNA and protein subunit vaccines by inducing robust T follicular helper cell and humoral responses. Immunity, 2021, 54, 2877-2892.e7.	14.3	260
13	COVID-19 vaccine BNT162b1 elicits human antibody and TH1 T cell responses. Nature, 2020, 586, 594-599.	27.8	1,520
14	A Single Immunization with Nucleoside-Modified mRNA Vaccines Elicits Strong Cellular and Humoral Immune Responses against SARS-CoV-2 in Mice. Immunity, 2020, 53, 724-732.e7.	14.3	267
15	Purification of mRNA Encoding Chimeric Antigen Receptor Is Critical for Generation of a Robust T-Cell Response. Human Gene Therapy, 2019, 30, 168-178.	2.7	81
16	The Emerging Role of InÂVitro-Transcribed mRNA in Adoptive T Cell Immunotherapy. Molecular Therapy, 2019, 27, 747-756.	8.2	66
17	Characterization of HIV-1 Nucleoside-Modified mRNA Vaccines in Rabbits and Rhesus Macaques. Molecular Therapy - Nucleic Acids, 2019, 15, 36-47.	5.1	79
18	InÂvitro-Transcribed mRNA Therapeutics: Out of the Shadows and Into the Spotlight. Molecular Therapy, 2019, 27, 691-692.	8.2	39

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19	A Facile Method for the Removal of dsRNA Contaminant from InÂVitro-Transcribed mRNA. Molecular Therapy - Nucleic Acids, 2019, 15, 26-35.	5.1	271
20	Oxidative damage of SP-D abolishes control of eosinophil extracellular DNA trap formation. Journal of Leukocyte Biology, 2018, 104, 205-214.	3.3	28
21	Nucleoside-modified mRNA vaccines induce potent T follicular helper and germinal center B cell responses. Journal of Experimental Medicine, 2018, 215, 1571-1588.	8.5	366
22	Nucleoside-modified mRNA immunization elicits influenza virus hemagglutinin stalk-specific antibodies. Nature Communications, 2018, 9, 3361.	12.8	189
23	Zika virus protection by a single low-dose nucleoside-modified mRNA vaccination. Nature, 2017, 543, 248-251.	27.8	699
24	Administration of nucleoside-modified mRNA encoding broadly neutralizing antibody protects humanized mice from HIV-1 challenge. Nature Communications, 2017, 8, 14630.	12.8	259
25	Elimination of large tumors in mice by mRNA-encoded bispecific antibodies. Nature Medicine, 2017, 23, 815-817.	30.7	182
26	Measuring Hematocrit in Mice Injected with In Vitro-Transcribed Erythropoietin mRNA. Methods in Molecular Biology, 2016, 1428, 297-306.	0.9	2
27	Transfection of Human Keratinocytes with Nucleoside-Modified mRNA Encoding CPD-Photolyase to Repair DNA Damage. Methods in Molecular Biology, 2016, 1428, 219-228.	0.9	3
28	Identification of Cyclobutane Pyrimidine Dimer-Responsive Genes Using UVB-Irradiated Human Keratinocytes Transfected with In Vitro-Synthesized Photolyase mRNA. PLoS ONE, 2015, 10, e0131141.	2.5	8
29	Expression kinetics of nucleoside-modified mRNA delivered in lipid nanoparticles to mice by various routes. Journal of Controlled Release, 2015, 217, 345-351.	9.9	629
30	mRNA: Fulfilling the Promise of Gene Therapy. Molecular Therapy, 2015, 23, 1416-1417.	8.2	77
31	Generating an Anti-HIV Vaccine Using Nucleoside-modified mRNA Encoding Envelope. AIDS Research and Human Retroviruses, 2014, 30, A249-A249.	1.1	1
32	mRNA-based therapeutics â€" developing a new class of drugs. Nature Reviews Drug Discovery, 2014, 13, 759-780.	46.4	1,501
33	Transfection of pseudouridine-modified mRNA encoding CPD-photolyase leads to repair of DNA damage in human keratinocytes: A new approach with future therapeutic potential. Journal of Photochemistry and Photobiology B: Biology, 2013, 129, 93-99.	3.8	24
34	In Vitro Transcription of Long RNA Containing Modified Nucleosides. Methods in Molecular Biology, 2013, 969, 29-42.	0.9	130
35	HPLC Purification of In Vitro Transcribed Long RNA. Methods in Molecular Biology, 2013, 969, 43-54.	0.9	130
36	Increased Erythropoiesis in Mice Injected With Submicrogram Quantities of Pseudouridine-containing mRNA Encoding Erythropoietin. Molecular Therapy, 2012, 20, 948-953.	8.2	240

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37	DICER1 deficit induces Alu RNA toxicity in age-related macular degeneration. Nature, 2011, 471, 325-330.	27.8	573
38	Tollâ€like receptor 4 contributes to poor outcome after intracerebral hemorrhage. Annals of Neurology, 2011, 70, 646-656.	5.3	146
39	Generating the optimal mRNA for therapy: HPLC purification eliminates immune activation and improves translation of nucleoside-modified, protein-encoding mRNA. Nucleic Acids Research, 2011, 39, e142-e142.	14.5	586
40	Nucleoside modifications in RNA limit activation of 2'-5'-oligoadenylate synthetase and increase resistance to cleavage by RNase L. Nucleic Acids Research, 2011, 39, 9329-9338.	14.5	227
41	Incorporation of pseudouridine into mRNA enhances translation by diminishing PKR activation. Nucleic Acids Research, 2010, 38, 5884-5892.	14.5	400
42	Sequence- and target-independent angiogenesis suppression by siRNA via TLR3. Nature, 2008, 452, 591-597.	27.8	868
43	Incorporation of Pseudouridine Into mRNA Yields Superior Nonimmunogenic Vector With Increased Translational Capacity and Biological Stability. Molecular Therapy, 2008, 16, 1833-1840.	8.2	1,106
44	gp340 Expressed on Human Genital Epithelia Binds HIV-1 Envelope Protein and Facilitates Viral Transmission. Journal of Immunology, 2007, 179, 3126-3132.	0.8	85
45	Cerebral preconditioning using cortical application of hypertonic salt solutions: Upregulation of mRNAs encoding inhibitors of inflammation. Brain Research, 2006, 1097, 31-38.	2.2	3
46	Suppression of RNA Recognition by Toll-like Receptors: The Impact of Nucleoside Modification and the Evolutionary Origin of RNA. Immunity, 2005, 23, 165-175.	14.3	1,650
47	A small cortical lesion increases the expression of feedback inhibitors of proinflammatory cytokineâ€“signaling. Journal of Cerebral Blood Flow and Metabolism, 2005, 25, S295-S295.	4.3	0
48	mRNA Is an Endogenous Ligand for Toll-like Receptor 3. Journal of Biological Chemistry, 2004, 279, 12542-12550.	3.4	892
49	Cutting Edge: Innate Immune System Discriminates between RNA Containing Bacterial versus Eukaryotic Structural Features That Prime for High-Level IL-12 Secretion by Dendritic Cells. Journal of Immunology, 2004, 172, 3989-3993.	0.8	112
50	Small Interfering RNAs Mediate Sequence-Independent Gene Suppression and Induce Immune Activation by Signaling through Toll-Like Receptor 3. Journal of Immunology, 2004, 172, 6545-6549.	0.8	418
51	Short Interfering RNA-Mediated Inhibition of Herpes Simplex Virus Type 1 Gene Expression and Function during Infection of Human Keratinocytes. Journal of Virology, 2004, 78, 10276-10281.	3.4	52
52	Induction of Tolerance to Focal Ischemia in Rat Brain: Dissociation between Cortical Lesioning and Spreading Depression. Journal of Cerebral Blood Flow and Metabolism, 2004, 24, 1167-1171.	4.3	27
53	Inhibition of Toll-like Receptor and Cytokine Signalingâ€"A Unifying Theme in Ischemic Tolerance. Journal of Cerebral Blood Flow and Metabolism, 2004, 24, 1288-1304.	4.3	238
54	Exogenous siRNA Mediates Sequence-Independent Gene Suppression by Signaling through Toll-Like Receptor 3. Cells Tissues Organs, 2004, 177, 132-138.	2.3	73

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55	Inhibition of HIV-1 Infection by Small Interfering RNA-Mediated RNA Interference. Journal of Immunology, 2002, 169, 5196-5201.	0.8	290
56	Extracellular mRNA Induces Dendritic Cell Activation by Stimulating Tumor Necrosis Factor-Î± Secretion and Signaling through a Nucleotide Receptor. Journal of Biological Chemistry, 2002, 277, 12689-12696.	3.4	49
57	Platelet factor 4 binds to low-density lipoprotein receptors and disrupts the endocytic itinerary, resulting in retention of low-density lipoprotein on the cell surface. Blood, 2002, 99, 3613-3622.	1.4	93
58	Dose-dependent induction of mRNAs encoding brain-derived neurotrophic factor and heat-shock protein-72 after cortical spreading depression in the rat. Molecular Brain Research, 2001, 88, 103-112.	2.3	17
59	Preconditioning with cortical spreading depression does not upregulate Cu/Zn-SOD or Mn-SOD in the cerebral cortex of rats. Molecular Brain Research, 2001, 96, 50-58.	2.3	11
60	In vivo protein expression from mRNA delivered into adult rat brain. Journal of Neuroscience Methods, 2001, 105, 77-86.	2.5	18
61	HIV Gag mRNA Transfection of Dendritic Cells (DC) Delivers Encoded Antigen to MHC Class I and II Molecules, Causes DC Maturation, and Induces a Potent Human In Vitro Primary Immune Response. Journal of Immunology, 2000, 165, 4710-4717.	0.8	154
62	Positive and negative elements mediate control of alternative splicing in the AMPD1 gene. Gene, 2000, 246, 365-372.	2.2	4
63	Effect of Cortical Spreading Depression on the Levels of mRNA Coding for Putative Neuroprotective Proteins in Rat Brain. Journal of Cerebral Blood Flow and Metabolism, 1998, 18, 1308-1315.	4.3	38
64	Phosphate-enhanced transfection of cationic lipid-complexed mRNA and plasmid DNA. Biochimica Et Biophysica Acta - Biomembranes, 1998, 1369, 320-334.	2.6	43
65	Thermal Preconditioning Before Rat Arterial Balloon Injury. Arteriosclerosis, Thrombosis, and Vascular Biology, 1998, 18, 120-126.	2.4	30
66	Sequence analysis of the 5.34-kb 5â€² flanking region of the human rhodopsin-encoding gene. Gene, 1995, 167, 317-320.	2.2	12
67	Stimulatory effect of unsaturated fatty acids on the level of plasminogen activator inhibitor-1 mRNA in cultured human endothelial cells. FEBS Letters, 1995, 361, 118-122.	2.8	24
68	Rapid method for screening and cloning cDNAs generated in differential mRNA display: application of Northern blot for affinity capturing of cDNAs. Nucleic Acids Research, 1994, 22, 1764-1765.	14.5	93
69	Lipofectin-aided cell delivery of ribozyme targeted to human urokinase receptor mRNA. FEBS Letters, 1994, 352, 41-44.	2.8	33
70	Increased radioresistance of ej<i>ras</i>â€transformed human osteosarcoma cells and its modulation by lovastatin, an inhibitor of p21^{ras} isoprenylation. International Journal of Cancer, 1993, 53, 302-307.	5.1	127
71	Decreased Epstein-Barr virus-induced transformation, and elevated 2â€“5A synthetase and RNase L activity in peripheral blood mononuclear cells from patients treated with recombinant interferon alfa 2b. Biochemical and Biophysical Research Communications, 1988, 153, 448-453.	2.1	2
72	Cordycepin Analogs of 2â€“5 a as Activators of RNase L: Study of the Structural Requirements for RNase L Activation. Nucleosides & Nucleotides, 1987, 6, 497-500.	0.5	2

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73	Phosphorothioate Analogs of 2â€“5A: Elucidation of the Stereochemical Course of the Enzymes of the 2â€“5A Synthetase/RNase L System. Nucleosides & Nucleotides, 1987, 6, 173-184.	0.5	5
74	n-Decyl-NHpppA2â€²p5â€²A2â€²p5â€²A a phosphatase-resistant, active pppA2â€²p5â€²A2â€²p5â€²A analog. Biochemical and Biophysical Research Communications, 1985, 128, 695-698.	2.1	28