

Alexander L Klibanov

List of Publications by Year in Descending Order

Source: <https://exaly.com/author-pdf/1946203/alexander-l-klibanov-publications-by-year.pdf>

Version: 2024-04-27

This document has been generated based on the publications and citations recorded by exaly.com. For the latest version of this publication list, visit the link given above.

The third column is the impact factor (IF) of the journal, and the fourth column is the number of citations of the article.

92
papers

7,596
citations

40
h-index

87
g-index

114
ext. papers

8,421
ext. citations

7.9
avg, IF

6.04
L-index

#	Paper	IF	Citations
92	Noninvasive disconnection of targeted neuronal circuitry sparing axons of passage and nonneuronal cells. <i>Journal of Neurosurgery</i> , 2021 , 1-11	3.2	
91	Vancomycin-decorated microbubbles as a theranostic agent for Staphylococcus aureus biofilms. <i>International Journal of Pharmaceutics</i> , 2021 , 609, 121154	6.5	3
90	Pulsed ultrasound attenuates the hyperglycemic exacerbation of myocardial ischemia-reperfusion injury. <i>Journal of Thoracic and Cardiovascular Surgery</i> , 2021 , 161, e297-e306	1.5	6
89	Bubble Cloud Behavior and Ablation Capacity for Histotripsy Generated from Intrinsic or Artificial Cavitation Nuclei. <i>Ultrasound in Medicine and Biology</i> , 2021 , 47, 620-639	3.5	8
88	Identification of Novel Ligands for Targeted Antifibrotic Therapy of Chronic Pancreatitis. <i>International Journal of Nanomedicine</i> , 2021 , 16, 5495-5512	7.3	0
87	Dynamic Filtering of Adherent and Non-adherent Microbubble Signals Using Singular Value Thresholding and Normalized Singular Spectrum Area Techniques. <i>Ultrasound in Medicine and Biology</i> , 2021 , 47, 3240-3252	3.5	1
86	Ultrasound Contrast: Gas Microbubbles in the Vasculature. <i>Investigative Radiology</i> , 2021 , 56, 50-61	10.1	12
85	Augmentation of brain tumor interstitial flow via focused ultrasound promotes brain-penetrating nanoparticle dispersion and transfection. <i>Science Advances</i> , 2020 , 6, eaay1344	14.3	43
84	Closed-loop feedback control of microbubble diameter from a flow-focusing microfluidic device. <i>Biomicrofluidics</i> , 2020 , 14, 034101	3.2	2
83	Sonoselective transfection of cerebral vasculature without blood-brain barrier disruption. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2020 , 117, 5644-5654	11.5	24
82	Preparation, Administration, and Assessment of In vivo Tissue-Specific Cellular Uptake of Fluorescent Dye-Labeled Liposomes. <i>Journal of Visualized Experiments</i> , 2020 ,	1.6	1
81	Ultrasound Molecular Imaging of Cancer: Design and Formulation Strategies of Targeted Contrast Agents. <i>Recent Results in Cancer Research</i> , 2020 , 216, 319-336	1.5	2
80	Targeted Ultrasound Contrast Imaging of Tumor Vasculature With Positively Charged Microbubbles. <i>Investigative Radiology</i> , 2020 , 55, 736-740	10.1	5
79	From Anatomy to Functional and Molecular Biomarker Imaging and Therapy: Ultrasound Is Safe, Ultrafast, Portable, and Inexpensive. <i>Investigative Radiology</i> , 2020 , 55, 559-572	10.1	12
78	Monitoring Oxygenation Levels Deep in the Tumor Core: Noninvasive Imaging of Hypoxia, Now in Real-Time 3D. <i>Cancer Research</i> , 2019 , 79, 4577-4579	10.1	2
77	Efficacy of Sonothrombolysis Using Microbubbles Produced by a Catheter-Based Microfluidic Device in a Rat Model of Ischemic Stroke. <i>Annals of Biomedical Engineering</i> , 2019 , 47, 1012-1022	4.7	8
76	Moving toward Noninvasive, Focused Ultrasound Therapeutic Delivery of Drugs in the Brain: Prolonged Opening of Blood-Brain Barrier May Not Be Needed. <i>Radiology</i> , 2019 , 291, 467-468	20.5	4

75	Validation of Normalized Singular Spectrum Area as a Classifier for Molecularly Targeted Microbubble Adherence. <i>Ultrasound in Medicine and Biology</i> , 2019 , 45, 2493-2501	3.5	8
74	Importance of thorough tissue and cellular level characterization of targeted drugs in the evaluation of pharmacodynamic effects. <i>PLoS ONE</i> , 2019 , 14, e0224917	3.7	1
73	Formation of Microbubbles for Targeted Ultrasound Contrast Imaging: Practical Translation Considerations. <i>Langmuir</i> , 2019 , 35, 10034-10041	4	18
72	Targeting of microbubbles: contrast agents for ultrasound molecular imaging. <i>Journal of Drug Targeting</i> , 2018 , 26, 420-434	5.4	50
71	Plectin-targeted liposomes enhance the therapeutic efficacy of a PARP inhibitor in the treatment of ovarian cancer. <i>Theranostics</i> , 2018 , 8, 2782-2798	12.1	40
70	In Vitro Sonothrombolysis Enhancement by Transiently Stable Microbubbles Produced by a Flow-Focusing Microfluidic Device. <i>Annals of Biomedical Engineering</i> , 2018 , 46, 222-232	4.7	10
69	Novel Focused Ultrasound Gene Therapy Approach Noninvasively Restores Dopaminergic Neuron Function in a Rat Parkinson Disease Model. <i>Nano Letters</i> , 2017 , 17, 3533-3542	11.5	87
68	Muscle-derived extracellular superoxide dismutase inhibits endothelial activation and protects against multiple organ dysfunction syndrome in mice. <i>Free Radical Biology and Medicine</i> , 2017 , 113, 212-223	7.8	14
67	Evaluation of pharmacokinetic and pharmacodynamic profiles of liposomes for the cell type-specific delivery of small molecule drugs. <i>Nanomedicine: Nanotechnology, Biology, and Medicine</i> , 2017 , 13, 2565-2574	6	8
66	Focal areas of increased lipid concentration on the coating of microbubbles during short tone-burst ultrasound insonification. <i>PLoS ONE</i> , 2017 , 12, e0180747	3.7	13
65	Non-Invasive, Focal Disconnection of Brain Circuitry Using Magnetic Resonance-Guided Low-Intensity Focused Ultrasound to Deliver a Neurotoxin. <i>Ultrasound in Medicine and Biology</i> , 2016 , 42, 2261-9	3.5	11
64	Macrophages redirect phagocytosis by non-professional phagocytes and influence inflammation. <i>Nature</i> , 2016 , 539, 570-574	50.4	121
63	Ultra-Low-Dose Ultrasound Molecular Imaging for the Detection of Angiogenesis in a Mouse Murine Tumor Model: How Little Can We See?. <i>Investigative Radiology</i> , 2016 , 51, 758-766	10.1	19
62	Targeted gene transfer to the brain via the delivery of brain-penetrating DNA nanoparticles with focused ultrasound. <i>Journal of Controlled Release</i> , 2016 , 223, 109-117	11.7	104
61	Microglial Cells Prevent Hemorrhage in Neonatal Focal Arterial Stroke. <i>Journal of Neuroscience</i> , 2016 , 36, 2881-93	6.6	59
60	Synthesis and Testing of Modular Dual-Modality Nanoparticles for Magnetic Resonance and Multispectral Photoacoustic Imaging. <i>Bioconjugate Chemistry</i> , 2016 , 27, 383-90	6.3	13
59	Co-administration of Microbubbles and Drugs in Ultrasound-Assisted Drug Delivery: Comparison with Drug-Carrying Particles. <i>Advances in Experimental Medicine and Biology</i> , 2016 , 880, 205-20	3.6	17
58	Histamine induces microglia activation and dopaminergic neuronal toxicity via H1 receptor activation. <i>Journal of Neuroinflammation</i> , 2016 , 13, 137	10.1	52

57	Photoacoustic imaging of stimuli-responsive red blood cell drug delivery agents 2016 ,		1
56	Development of target-specific liposomes for delivering small molecule drugs after reperfused myocardial infarction. <i>Journal of Controlled Release</i> , 2015 , 220, 556-567	11.7	39
55	Methyl-CpG Binding Protein 2 Regulates Microglia and Macrophage Gene Expression in Response to Inflammatory Stimuli. <i>Immunity</i> , 2015 , 42, 679-91	32.3	125
54	Reducing Neointima Formation in a Swine Model with IVUS and Sirolimus Microbubbles. <i>Annals of Biomedical Engineering</i> , 2015 , 43, 2642-51	4.7	12
53	Ultrasound-based measurement of molecular marker concentration in large blood vessels: a feasibility study. <i>Ultrasound in Medicine and Biology</i> , 2015 , 41, 222-34	3.5	14
52	Regulation of L-selectin-dependent hydrodynamic shear thresholding by leukocyte deformability and shear dependent bond number. <i>Biorheology</i> , 2015 , 52, 415-32	1.7	
51	Size Exclusion HPLC Detection of Small-Size Impurities as a Complementary Means for Quality Analysis of Extracellular Vesicles. <i>Journal of Circulating Biomarkers</i> , 2015 , 4, 6	3.3	8
50	Ultrasound in Radiology: From Anatomic, Functional, Molecular Imaging to Drug Delivery and Image-Guided Therapy. <i>Investigative Radiology</i> , 2015 , 50, 657-70	10.1	52
49	Oscillatory Dynamics and In Vivo Photoacoustic Imaging Performance of Plasmonic Nanoparticle-Coated Microbubbles. <i>Small</i> , 2015 , 11, 3066-77	11	37
48	The use of acoustic radiation force decorrelation weighted pulse inversion (ADW-PI) in enhancing microbubble contrast 2015 ,		1
47	Acoustically active red blood cell carriers for ultrasound-triggered drug delivery with photoacoustic tracking 2015 ,		2
46	Therapy of prostate cancer using a novel cancer terminator virus and a small molecule BH-3 mimetic. <i>Oncotarget</i> , 2015 , 6, 10712-27	3.3	25
45	Localized in vivo model drug delivery with intravascular ultrasound and microbubbles. <i>Ultrasound in Medicine and Biology</i> , 2014 , 40, 2458-67	3.5	16
44	Non-invasive delivery of stealth, brain-penetrating nanoparticles across the blood-brain barrier using MRI-guided focused ultrasound. <i>Journal of Controlled Release</i> , 2014 , 189, 123-132	11.7	177
43	Nanoengineering at the Gas/Liquid Interface: Gas-Filled Microbubbles as Tools for Molecular Imaging and Drug Delivery. <i>Frontiers in Nanobiomedical Research</i> , 2014 , 127-143		
42	The local effects of ovarian diathermy in an ovine model of polycystic ovary syndrome. <i>PLoS ONE</i> , 2014 , 9, e111280	3.7	9
41	Synthesis and characterization of transiently stable albumin-coated microbubbles via a flow-focusing microfluidic device. <i>Ultrasound in Medicine and Biology</i> , 2014 , 40, 400-9	3.5	19
40	Ultrasound contrast materials in cardiovascular medicine: from perfusion assessment to molecular imaging. <i>Journal of Cardiovascular Translational Research</i> , 2013 , 6, 729-39	3.3	11

39	MR-guided focused ultrasound surgery, present and future. <i>Medical Physics</i> , 2013 , 40, 080901	4.4	75
38	Shear Forces from Flow Are Responsible for a Distinct Statistical Signature of Adherent Microbubbles in Large Vessels. <i>Molecular Imaging</i> , 2013 , 12, 7290.2013.00057	3.7	13
37	Nanobody-coupled microbubbles as novel molecular tracer. <i>Journal of Controlled Release</i> , 2012 , 158, 346-53	11.7	70
36	Markedly enhanced skeletal muscle transfection achieved by the ultrasound-targeted delivery of non-viral gene nanocarriers with microbubbles. <i>Journal of Controlled Release</i> , 2012 , 162, 414-21	11.7	33
35	Intravascular ultrasound catheter to enhance microbubble-based drug delivery via acoustic radiation force. <i>IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control</i> , 2012 , 59, 2156-66	3.2	15
34	Multifunction intravascular ultrasound for microbubble based drug delivery 2012 ,		1
33	scVEGF microbubble ultrasound contrast agents: a novel probe for ultrasound molecular imaging of tumor angiogenesis. <i>Investigative Radiology</i> , 2010 , 45, 579-85	10.1	104
32	Ultrasound-triggered release of materials entrapped in microbubble-liposome constructs: a tool for targeted drug delivery. <i>Journal of Controlled Release</i> , 2010 , 148, 13-17	11.7	137
31	Preparation of targeted microbubbles: ultrasound contrast agents for molecular imaging. <i>Medical and Biological Engineering and Computing</i> , 2009 , 47, 875-82	3.1	101
30	VEGFR-2 Targeted Microbubble Contrast Agents for Ultrasound Molecular Imaging of Tumor Angiogenesis. <i>FASEB Journal</i> , 2009 , 23, LB337	0.9	
29	Intravascular ultrasound mediated delivery of DNA via microbubble carriers to an injured porcine artery in vivo 2008 ,		5
28	Therapeutic Arteriogenesis via the Ultrasound-Microbubble-Targeted Delivery of Fibroblast Growth Factor-2 (FGF-2) Bearing Poly(Lactic-Co-Glycolic Acid) Nanoparticles. <i>FASEB Journal</i> , 2008 , 22, 1147.1	0.9	
27	Dual targeted molecular imaging for atherosclerotic plaque detection. <i>FASEB Journal</i> , 2008 , 22, 924.22	0.9	
26	High-resolution myocardial perfusion imaging in mice with high-frequency echocardiographic detection of a depot contrast agent. <i>Journal of the American Society of Echocardiography</i> , 2007 , 20, 136-43	5.8	23
25	Enhanced targeting of ultrasound contrast agents using acoustic radiation force. <i>Ultrasound in Medicine and Biology</i> , 2007 , 33, 1132-9	3.5	102
24	Ultrasound molecular imaging with targeted microbubble contrast agents. <i>Journal of Nuclear Cardiology</i> , 2007 , 14, 876-84	2.1	105
23	Therapeutic arteriogenesis by ultrasound-mediated VEGF165 plasmid gene delivery to chronically ischemic skeletal muscle. <i>Circulation Research</i> , 2007 , 101, 295-303	15.7	145
22	Deformable gas-filled microbubbles targeted to P-selectin. <i>Journal of Controlled Release</i> , 2006 , 114, 288-99	11.7	110

21	Targeting mucosal addressin cellular adhesion molecule (MAdCAM)-1 to noninvasively image experimental Crohn's disease. <i>Gastroenterology</i> , 2006 , 130, 8-16	13.3	92
20	Microbubble contrast agents: targeted ultrasound imaging and ultrasound-assisted drug-delivery applications. <i>Investigative Radiology</i> , 2006 , 41, 354-62	10.1	306
19	Acoustic radiation force enhances targeted delivery of ultrasound contrast microbubbles: in vitro verification. <i>IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control</i> , 2005 , 52, 421-33	3.2	108
18	Ligand-carrying gas-filled microbubbles: ultrasound contrast agents for targeted molecular imaging. <i>Bioconjugate Chemistry</i> , 2005 , 16, 9-17	6.3	198
17	Binding and detachment dynamics of microbubbles targeted to P-selectin under controlled shear flow. <i>Journal of Controlled Release</i> , 2004 , 96, 473-82	11.7	182
16	Detection of individual microbubbles of ultrasound contrast agents: imaging of free-floating and targeted bubbles. <i>Investigative Radiology</i> , 2004 , 39, 187-95	10.1	156
15	Ultrasound imaging of acute cardiac transplant rejection with microbubbles targeted to intercellular adhesion molecule-1. <i>Circulation</i> , 2003 , 108, 218-24	16.7	217
14	Targeted in vivo labeling of receptors for vascular endothelial growth factor: approach to identification of ischemic tissue. <i>Circulation</i> , 2003 , 108, 97-103	16.7	105
13	Targeted tissue transfection with ultrasound destruction of plasmid-bearing cationic microbubbles. <i>Ultrasound in Medicine and Biology</i> , 2003 , 29, 1759-67	3.5	231
12	Imaging tumor angiogenesis with contrast ultrasound and microbubbles targeted to alpha(v)beta3. <i>Circulation</i> , 2003 , 108, 336-41	16.7	400
11	Microbubbles induce renal hemorrhage when exposed to diagnostic ultrasound in anesthetized rats. <i>Ultrasound in Medicine and Biology</i> , 2002 , 28, 1535-46	3.5	79
10	Noninvasive imaging of myocardial reperfusion injury using leukocyte-targeted contrast echocardiography. <i>Circulation</i> , 2002 , 105, 1764-7	16.7	147
9	Influence of microbubble surface charge on capillary transit and myocardial contrast enhancement. <i>Journal of the American College of Cardiology</i> , 2002 , 40, 811-9	15.1	106
8	Ultrasound assessment of inflammation and renal tissue injury with microbubbles targeted to P-selectin. <i>Circulation</i> , 2001 , 104, 2107-12	16.7	372
7	Microbubble persistence in the microcirculation during ischemia/reperfusion and inflammation is caused by integrin- and complement-mediated adherence to activated leukocytes. <i>Circulation</i> , 2000 , 101, 668-75	16.7	201
6	Noninvasive ultrasound imaging of inflammation using microbubbles targeted to activated leukocytes. <i>Circulation</i> , 2000 , 102, 2745-50	16.7	261
5	Optical observation of contrast agent destruction. <i>Applied Physics Letters</i> , 2000 , 77, 1056	3.4	113
4	The Influence of Tiered Layers of Surface-Grafted Poly(ethylene glycol) on Receptor-Ligand-Mediated Adhesion between Phospholipid Monolayer-Stabilized Microbubbles and Coated Glass Beads. <i>Langmuir</i> , 2000 , 16, 2808-2817	4	78

3	Targeting and ultrasound imaging of microbubble-based contrast agents. <i>Magnetic Resonance Materials in Physics, Biology, and Medicine</i> , 1999 , 8, 177-84	2.8	58
2	Targeted delivery of gas-filled microspheres, contrast agents for ultrasound imaging. <i>Advanced Drug Delivery Reviews</i> , 1999 , 37, 139-157	18.5	234
1	Amphipathic polyethyleneglycols effectively prolong the circulation time of liposomes. <i>FEBS Letters</i> , 1990 , 268, 235-7	3.8	1570