

Guanshu Liu

List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/6313950/publications.pdf>

Version: 2024-02-01

92
papers

4,670
citations

66315

42
h-index

102432

66
g-index

98
all docs

98
docs citations

98
times ranked

4681
citing authors

#	ARTICLE	IF	CITATIONS
1	Natural D-glucose as a biodegradable MRI contrast agent for detecting cancer. <i>Magnetic Resonance in Medicine</i> , 2012, 68, 1764-1773.	1.9	295
2	Nuts and bolts of chemical exchange saturation transfer MRI. <i>NMR in Biomedicine</i> , 2013, 26, 810-828.	1.6	254
3	The role of imaging in 2019 novel coronavirus pneumonia (COVID-19). <i>European Radiology</i> , 2020, 30, 4874-4882.	2.3	223
4	MRI-detectable pH nanosensors incorporated into hydrogels for in vivo sensing of transplanted-cell viability. <i>Nature Materials</i> , 2013, 12, 268-275.	13.3	189
5	Furin-mediated intracellular self-assembly of olsalazine nanoparticles for enhanced magnetic resonance imaging and tumour therapy. <i>Nature Materials</i> , 2019, 18, 1376-1383.	13.3	164
6	Dynamic Glucose-Enhanced (DGE) MRI: Translation to Human Scanning and First Results in Glioma Patients. <i>Tomography</i> , 2015, 1, 105-114.	0.8	153
7	The cytotoxicity and mechanisms of 1,2-naphthoquinone thiosemicarbazone and its metal derivatives against MCF-7 human breast cancer cells. <i>Toxicology and Applied Pharmacology</i> , 2004, 197, 40-48.	1.3	117
8	Design and characterization of a new irreversible responsive PARACEST MRI contrast agent that detects nitric oxide. <i>Magnetic Resonance in Medicine</i> , 2007, 58, 1249-1256.	1.9	112
9	In vivo multicolor molecular MR imaging using diamagnetic chemical exchange saturation transfer liposomes. <i>Magnetic Resonance in Medicine</i> , 2012, 67, 1106-1113.	1.9	104
10	Using Two Chemical Exchange Saturation Transfer Magnetic Resonance Imaging Contrast Agents for Molecular Imaging Studies. <i>Accounts of Chemical Research</i> , 2009, 42, 915-924.	7.6	103
11	High-throughput screening of chemical exchange saturation transfer MR contrast agents. <i>Contrast Media and Molecular Imaging</i> , 2010, 5, 162-170.	0.4	103
12	Multiwalled Nanotubes Formed by Catanionic Mixtures of Drug Amphiphiles. <i>ACS Nano</i> , 2014, 8, 12690-12700.	7.3	98
13	One-Component Supramolecular Filament Hydrogels as Theranostic Label-Free Magnetic Resonance Imaging Agents. <i>ACS Nano</i> , 2017, 11, 797-805.	7.3	95
14	Dynamic glucose enhanced (DGE) MRI for combined imaging of blood-brain barrier break down and increased blood volume in brain cancer. <i>Magnetic Resonance in Medicine</i> , 2015, 74, 1556-1563.	1.9	94
15	Vaginal Delivery of Paclitaxel via Nanoparticles with Non-mucoadhesive Surfaces Suppresses Cervical Tumor Growth. <i>Advanced Healthcare Materials</i> , 2014, 3, 1044-1052.	3.9	85
16	Monitoring Enzyme Activity Using a Diamagnetic Chemical Exchange Saturation Transfer Magnetic Resonance Imaging Contrast Agent. <i>Journal of the American Chemical Society</i> , 2011, 133, 16326-16329.	6.6	83
17	Transforming Thymidine into a Magnetic Resonance Imaging Probe for Monitoring Gene Expression. <i>Journal of the American Chemical Society</i> , 2013, 135, 1617-1624.	6.6	80
18	PARACEST MRI with improved temporal resolution. <i>Magnetic Resonance in Medicine</i> , 2009, 61, 399-408.	1.9	74

#	ARTICLE	IF	CITATIONS
19	Label-free CEST MRI Detection of Citicoline-Liposome Drug Delivery in Ischemic Stroke. <i>Theranostics</i> , 2016, 6, 1588-1600.	4.6	74
20	Salicylic Acid and Analogues as diaCEST MRI Contrast Agents with Highly Shifted Exchangeable Proton Frequencies. <i>Angewandte Chemie - International Edition</i> , 2013, 52, 8116-8119.	7.2	73
21	Establishing the Lysine-rich Protein CEST Reporter Gene as a CEST MR Imaging Detector for Oncolytic Virotherapy. <i>Radiology</i> , 2015, 275, 746-754.	3.6	70
22	Metal Ion Sensing Using Ion Chemical Exchange Saturation Transfer ¹⁹ F Magnetic Resonance Imaging. <i>Journal of the American Chemical Society</i> , 2013, 135, 12164-12167.	6.6	67
23	Imaging in Vivo Extracellular pH with a Single Paramagnetic Chemical Exchange Saturation Transfer Magnetic Resonance Imaging Contrast Agent. <i>Molecular Imaging</i> , 2012, 11, 7290.2011.00026.	0.7	64
24	Human Protamine-1 as an MRI Reporter Gene Based on Chemical Exchange. <i>ACS Chemical Biology</i> , 2014, 9, 134-138.	1.6	64
25	Imaging in vivo extracellular pH with a single paramagnetic chemical exchange saturation transfer magnetic resonance imaging contrast agent. <i>Molecular Imaging</i> , 2012, 11, 47-57.	0.7	63
26	Label-free in vivo molecular imaging of underglycosylated mucin-1 expression in tumour cells. <i>Nature Communications</i> , 2015, 6, 6719.	5.8	62
27	Improved pH measurements with a single PARACEST MRI contrast agent. <i>Contrast Media and Molecular Imaging</i> , 2012, 7, 26-34.	0.4	59
28	Multimodal imaging of sustained drug release from 3-D poly(propylene fumarate) (PPF) scaffolds. <i>Journal of Controlled Release</i> , 2011, 156, 239-245.	4.8	58
29	A dextran-based probe for the targeted magnetic resonance imaging of tumours expressing prostate-specific membrane antigen. <i>Nature Biomedical Engineering</i> , 2017, 1, 977-982.	11.6	58
30	Recent developments in the determination of urinary cancer biomarkers by capillary electrophoresis. <i>Electrophoresis</i> , 2004, 25, 1473-1484.	1.3	56
31	MRI biosensor for protein kinase A encoded by a single synthetic gene. <i>Magnetic Resonance in Medicine</i> , 2012, 68, 1919-1923.	1.9	55
32	A self-calibrating PARACEST MRI contrast agent that detects esterase enzyme activity. <i>Contrast Media and Molecular Imaging</i> , 2011, 6, 219-228.	0.4	54
33	A diaCEST MRI approach for monitoring liposomal accumulation in tumors. <i>Journal of Controlled Release</i> , 2014, 180, 51-59.	4.8	52
34	Simultaneous determination of catecholamines and polyamines in PC-12 cell extracts by micellar electrokinetic capillary chromatography with ultraviolet absorbance detection. <i>Journal of Chromatography B: Analytical Technologies in the Biomedical and Life Sciences</i> , 2004, 805, 281-288.	1.2	51
35	CEST phase mapping using a length and offset varied saturation (LOVARS) scheme. <i>Magnetic Resonance in Medicine</i> , 2012, 68, 1074-1086.	1.9	51
36	Protein aggregation linked to Alzheimer's disease revealed by saturation transfer MRI. <i>NeuroImage</i> , 2019, 188, 380-390.	2.1	50

#	ARTICLE	IF	CITATIONS
37	CEST-MRI detects metabolite levels altered by breast cancer cell aggressiveness and chemotherapy response. <i>NMR in Biomedicine</i> , 2016, 29, 806-816.	1.6	49
38	Monitoring Tumor Response to Antivascular Therapy Using Non-Contrast Intravoxel Incoherent Motion Diffusion-Weighted MRI. <i>Cancer Research</i> , 2017, 77, 3491-3501.	0.4	49
39	CEST theranostics: label-free MR imaging of anticancer drugs. <i>Oncotarget</i> , 2016, 7, 6369-6378.	0.8	49
40	Synthesis of a probe for monitoring HSV1-tk reporter gene expression using chemical exchange saturation transfer MRI. <i>Nature Protocols</i> , 2013, 8, 2380-2391.	5.5	47
41	Developing imidazoles as CEST MRI pH sensors. <i>Contrast Media and Molecular Imaging</i> , 2016, 11, 304-312.	0.4	47
42	Carbon Dots as a New Class of Diamagnetic Chemical Exchange Saturation Transfer (diaCEST) MRI Contrast Agents. <i>Angewandte Chemie - International Edition</i> , 2019, 58, 9871-9875.	7.2	45
43	Highly efficient magnetic labelling allows MRI tracking of the homing of stem cell-derived extracellular vesicles following systemic delivery. <i>Journal of Extracellular Vesicles</i> , 2021, 10, e12054.	5.5	43
44	Noninvasive imaging of infection after treatment with tumor-homing bacteria using Chemical Exchange Saturation Transfer (CEST) MRI. <i>Magnetic Resonance in Medicine</i> , 2013, 70, 1690-1698.	1.9	39
45	On-resonance variable delay multipulse scheme for imaging of fast-exchanging protons and semisolid macromolecules. <i>Magnetic Resonance in Medicine</i> , 2017, 77, 730-739.	1.9	35
46	Optimization of osmotic blood-brain barrier opening to enable intravital microscopy studies on drug delivery in mouse cortex. <i>Journal of Controlled Release</i> , 2020, 317, 312-321.	4.8	35
47	Non-invasive temperature mapping using temperature-responsive water saturation shift referencing (T-WASSR) MRI. <i>NMR in Biomedicine</i> , 2014, 27, 320-331.	1.6	33
48	Characterization of tumor vascular permeability using natural dextrans and CEST MRI. <i>Magnetic Resonance in Medicine</i> , 2018, 79, 1001-1009.	1.9	33
49	Photophysical and photochemical processes of riboflavin (vitamin B2) by means of the transient absorption spectra in aqueous solution. <i>Science in China Series B: Chemistry</i> , 2001, 44, 39-48.	0.8	30
50	High-resolution creatine mapping of mouse brain at 11.7 T using non-steady-state chemical exchange saturation transfer. <i>NMR in Biomedicine</i> , 2019, 32, e4168.	1.6	29
51	Real-Time MRI Guidance for Reproducible Hyperosmolar Opening of the Blood-Brain Barrier in Mice. <i>Frontiers in Neurology</i> , 2018, 9, 921.	1.1	28
52	CEST MRI of sepsis-induced acute kidney injury. <i>NMR in Biomedicine</i> , 2018, 31, e3942.	1.6	28
53	Detection and Quantification of Hydrogen Peroxide in Aqueous Solutions Using Chemical Exchange Saturation Transfer. <i>Analytical Chemistry</i> , 2017, 89, 7758-7764.	3.2	27
54	Separation and Quantitation of Short-Chain Coenzyme A's in Biological Samples by Capillary Electrophoresis. <i>Analytical Chemistry</i> , 2003, 75, 78-82.	3.2	26

#	ARTICLE	IF	CITATIONS
55	GlucocEST imaging with on-resonance variable delay multiple pulse (onVDMP) MRI. <i>Magnetic Resonance in Medicine</i> , 2019, 81, 47-56.	1.9	26
56	Hyperosmolar blood-brain barrier opening using intra-arterial injection of hyperosmotic mannitol in mice under real-time MRI guidance. <i>Nature Protocols</i> , 2022, 17, 76-94.	5.5	26
57	MRI detection of bacterial brain abscesses and monitoring of antibiotic treatment using bacCEST. <i>Magnetic Resonance in Medicine</i> , 2018, 80, 662-671.	1.9	25
58	Extradomain-B Fibronectin-Targeted Dextran-Based Chemical Exchange Saturation Transfer Magnetic Resonance Imaging Probe for Detecting Pancreatic Cancer. <i>Bioconjugate Chemistry</i> , 2019, 30, 1425-1433.	1.8	25
59	CT and CEST MRI bimodal imaging of the intratumoral distribution of iodinated liposomes. <i>Quantitative Imaging in Medicine and Surgery</i> , 2019, 9, 1579-1591.	1.1	24
60	Reversible blood-brain barrier opening utilizing the membrane active peptide melittin in vitro and in vivo. <i>Biomaterials</i> , 2021, 275, 120942.	5.7	24
61	GlucocEST magnetic resonance imaging in vivo may be diagnostic of acute renal allograft rejection. <i>Kidney International</i> , 2017, 92, 757-764.	2.6	21
62	Imaging the DNA Alkylator Melphalan by CEST MRI: An Advanced Approach to Theranostics. <i>Molecular Pharmaceutics</i> , 2016, 13, 3043-3053.	2.3	20
63	Non-contrast-enhanced abdominal MRA at 3 T using velocity-selective pulse trains. <i>Magnetic Resonance in Medicine</i> , 2020, 84, 1173-1183.	1.9	19
64	Detection of dynamic substrate binding using MRI. <i>Scientific Reports</i> , 2017, 7, 10138.	1.6	18
65	CEST MRI monitoring of tumor response to vascular disrupting therapy using high molecular weight dextrans. <i>Magnetic Resonance in Medicine</i> , 2019, 82, 1471-1479.	1.9	18
66	Repurposing Clinical Agents for Chemical Exchange Saturation Transfer Magnetic Resonance Imaging: Current Status and Future Perspectives. <i>Pharmaceutics</i> , 2021, 14, 11.	1.7	18
67	In vivo tracking of unlabelled mesenchymal stromal cells by mannose-weighted chemical exchange saturation transfer MRI. <i>Nature Biomedical Engineering</i> , 2022, 6, 658-666.	11.6	18
68	NORmalized MAgnetization Ratio (NOMAR) filtering for creation of tissue selective contrast maps. <i>Magnetic Resonance in Medicine</i> , 2013, 69, 516-523.	1.9	16
69	Magnetization transfer contrast MRI for non-invasive assessment of innate and adaptive immune responses against alginate-encapsulated cells. <i>Biomaterials</i> , 2014, 35, 7811-7818.	5.7	16
70	Sugar-based biopolymers as novel imaging agents for molecular magnetic resonance imaging. <i>Wiley Interdisciplinary Reviews: Nanomedicine and Nanobiotechnology</i> , 2019, 11, e1551.	3.3	15
71	Phenols as Diamagnetic T_2 -Exchange Magnetic Resonance Imaging Contrast Agents. <i>Chemistry - A European Journal</i> , 2018, 24, 1259-1263.	1.7	13
72	Detecting acid phosphatase enzymatic activity with phenol as a chemical exchange saturation transfer magnetic resonance imaging contrast agent (PhenolCEST MRI). <i>Biosensors and Bioelectronics</i> , 2019, 141, 111442.	5.3	13

#	ARTICLE	IF	CITATIONS
73	The effect of the mTOR inhibitor rapamycin on glucoCEST signal in a preclinical model of glioblastoma. <i>Magnetic Resonance in Medicine</i> , 2019, 81, 3798-3807.	1.9	13
74	Molecular imaging of deoxycytidine kinase activity using deoxycytidine-enhanced CEST MRI. <i>Cancer Research</i> , 2019, 79, canres.3565.2018.	0.4	12
75	CEST MRI Reporter Genes. <i>Methods in Molecular Biology</i> , 2011, 711, 271-280.	0.4	12
76	Deep learning-based classification of preclinical breast cancer tumor models using chemical exchange saturation transfer magnetic resonance imaging. <i>NMR in Biomedicine</i> , 2022, 35, e4626.	1.6	12
77	CEST MRI trackable nanoparticle drug delivery systems. <i>Biomedical Materials (Bristol)</i> , 2021, 16, 024103.	1.7	10
78	Fronodoside A Inhibits an MYC-Driven Medulloblastoma Model Derived from Human-Induced Pluripotent Stem Cells. <i>Molecular Cancer Therapeutics</i> , 2021, 20, 1199-1209.	1.9	10
79	A snapshot of the vast array of diamagnetic CEST MRI contrast agents. <i>NMR in Biomedicine</i> , 2023, 36, e4715.	1.6	10
80	Deuterium oxide as a contrast medium for real-time MRI-guided endovascular neurointervention. <i>Theranostics</i> , 2021, 11, 6240-6250.	4.6	7
81	Dynamic contrast-enhanced CEST MRI using a low molecular weight dextran. <i>NMR in Biomedicine</i> , 2021, e4649.	1.6	7
82	Triazoles as Exchange Magnetic Resonance Imaging Contrast Agents for the Detection of Nitrilase Activity. <i>Chemistry - A European Journal</i> , 2018, 24, 15013-15018.	1.7	6
83	MRI of CEST-Based Reporter Gene. <i>Methods in Molecular Biology</i> , 2011, 771, 733-746.	0.4	6
84	Quantitative cerebrovascular reactivity MRI in mice using acetazolamide challenge. <i>Magnetic Resonance in Medicine</i> , 2022, 88, 2233-2241.	1.9	5
85	Radiosensitization mechanism of riboflavin in vitro. <i>Science in China Series C: Life Sciences</i> , 2002, 45, 344.	1.3	4
86	N-Aryl Amides as Chemical Exchange Saturation Transfer Magnetic Resonance Imaging Contrast Agents. <i>Chemistry - A European Journal</i> , 2020, 26, 11705-11709.	1.7	4
87	Neutrophil depletion enhanced the Clostridium novyi-NT therapy in mouse and rabbit tumor models. <i>Neuro-Oncology Advances</i> , 2022, 4, vdab184.	0.4	3
88	Carbon Dots as a New Class of Diamagnetic Chemical Exchange Saturation Transfer (diaCEST) MRI Contrast Agents. <i>Angewandte Chemie</i> , 2019, 131, 9976-9980.	1.6	1
89	Cancer Therapy: Vaginal Delivery of Paclitaxel via Nanoparticles with Non-Mucoadhesive Surfaces Suppresses Cervical Tumor Growth (<i>Adv. Healthcare Mater.</i> 7/2014). <i>Advanced Healthcare Materials</i> , 2014, 3, 1120-1120.	3.9	0
90	InnenrÄ¼cktitelbild: Carbon Dots as a New Class of Diamagnetic Chemical Exchange Saturation Transfer (diaCEST) MRI Contrast Agents (<i>Angew. Chem.</i> 29/2019). <i>Angewandte Chemie</i> , 2019, 131, 10113-10113.	1.6	0

#	ARTICLE	IF	CITATIONS
91	CEST (Chemical Exchange Saturation Transfer) MR Molecular Imaging. , 2021, , 325-341.		0
92	Chapter 6 General Theory of CEST Image Acquisition and Post-Processing. , 2017, , 55-96.		0