Alan Pradip Jasanoff

List of Publications by Year
in descending order

60 papers	3,440 citations	201674 27 h-index	144013 57 g-index
66 all docs	66 docs citations	66 times ranked	5417 citing authors

#	Article	IF	Citations
1	Functional dissection of neural circuitry using a genetic reporter for fMRI. Nature Neuroscience, 2022, 25, 390-398.	14.8	11
2	Customizing MRIâ€Compatible Multifunctional Neural Interfaces through Fiber Drawing. Advanced Functional Materials, 2021, 31, 2104857.	14.9	21
3	Molecular fMRI of neurochemical signaling. Journal of Neuroscience Methods, 2021, 364, 109372.	2.5	7
4	Single-nanometer iron oxide nanoparticles as tissue-permeable MRI contrast agents. Proceedings of the National Academy of Sciences of the United States of America, 2021, 118, .	7.1	20
5	Hemodynamic molecular imaging of tumor-associated enzyme activity in the living brain. ELife, 2021, 10, .	6.0	1
6	Metallotexaphyrins as MRI-Active Catalytic Antioxidants for Neurodegenerative Disease: A Study on Alzheimerâ€™s Disease. CheM, 2020, 6, 703-724.	11.7	17
7	Image-guided neural activity manipulation with a paramagnetic drug. Nature Communications, 2020, 11, 136.	12.8	9
8	Pro-organic radical contrast agents (â€œpro-ORCAsâ€) for real-time MRI of pro-drug activation in biological systems. Polymer Chemistry, 2020, 11, 4768-4779.	3.9	20
9	Molecular Magnetic Resonance Imaging of Nitric Oxide in Biological Systems. ACS Sensors, 2020, 5, 1674-1682.	7.8	18
10	Local and global consequences of reward-evoked striatal dopamine release. Nature, 2020, 580, 239-244.	27.8	55
11	Target-responsive vasoactive probes for ultrasensitive molecular imaging. Nature Communications, 2020, 11, 2399.	12.8	13
12	Neurotransmitter-Responsive Nanosensors for <i>T</i>₂-Weighted Magnetic Resonance Imaging. Journal of the American Chemical Society, 2019, 141, 15751-15754.	13.7	30
13	Polyoxazoline-Based Bottlebrush and Brush-Arm Star Polymers via ROMP: Syntheses and Applications as Organic Radical Contrast Agents. ACS Macro Letters, 2019, 8, 473-478.	4.8	55
14	Sensing intracellular calcium ions using a manganese-based MRI contrast agent. Nature Communications, 2019, 10, 897.	12.8	75
15	Wireless resonant circuits for the minimally invasive sensing of biophysical processes in magnetic resonance imaging. Nature Biomedical Engineering, 2019, 3, 69-78.	22.5	20
16	Probing the brain with molecular fMRI. Current Opinion in Neurobiology, 2018, 50, 201-210.	4.2	30
17	Calcium-dependent molecular fMRI using a magnetic nanosensor. Nature Nanotechnology, 2018, 13, 473-477.	31.5	71
18	Triply Loaded Nitroxide Brush-Arm Star Polymers Enable Metal-Free Millimetric Tumor Detection by Magnetic Resonance Imaging. ACS Nano, 2018, 12, 11343-11354.	14.6	56

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19	Bacterial encapsulins as orthogonal compartments for mammalian cell engineering. Nature Communications, 2018, 9, 1990.	12.8	88
20	Exceedingly small iron oxide nanoparticles as positive MRI contrast agents. Proceedings of the National Academy of Sciences of the United States of America, 2017, 114, 2325-2330.	7.1	374
21	Nitroxide-Based Macromolecular Contrast Agents with Unprecedented Transverse Relaxivity and Stability for Magnetic Resonance Imaging of Tumors. ACS Central Science, 2017, 3, 800-811.	11.3	126
22	Reward magnitude tracking by neural populations in ventral striatum. NeuroImage, 2017, 146, 1003-1015.	4.2	9
23	Molecular imaging with engineered physiology. Nature Communications, 2016, 7, 13607.	12.8	33
24	Molecular fMRI. Journal of Neuroscience, 2016, 36, 4139-4148.	3.6	39
25	Membrane-Permeable Mn(III) Complexes for Molecular Magnetic Resonance Imaging of Intracellular Targets. Journal of the American Chemical Society, 2016, 138, 5483-5486.	13.7	27
26	Molecular fMRI of Serotonin Transport. Neuron, 2016, 92, 754-765.	8.1	37
27	High-Performance Ferrite Nanoparticles through Nonaqueous Redox Phase Tuning. Nano Letters, 2016, 16, 1345-1351.	9.1	84
28	Problems on the back of an envelope. ELife, 2016, 5, .	6.0	18
29	Engineering intracellular biomineralization and biosensing by a magnetic protein. Nature Communications, 2015, 6, 8721.	12.8	51
30	Contrast Agents for Molecular-Level fMRI. Biological Magnetic Resonance, 2015, , 865-894.	0.4	0
31	Molecular-Level Functional Magnetic Resonance Imaging of Dopaminergic Signaling. Science, 2014, 344, 533-535.	12.6	115
32	Magnetic nanosensors optimized for rapid and reversible self-assembly. Chemical Communications, 2014, 50, 3595-3598.	4.1	10
33	Screen-Based Analysis of Magnetic Nanoparticle Libraries Formed Using Peptidic Iron Oxide Ligands. Journal of the American Chemical Society, 2014, 136, 12516-12519.	13.7	5
34	Magneto-fluorescent core-shell supernanoparticles. Nature Communications, 2014, 5, 5093.	12.8	223
35	MRI-Based Detection of Alkaline Phosphatase Gene Reporter Activity Using a Porphyrin Solubility Switch. Chemistry and Biology, 2014, 21, 422-429.	6.0	26
36	Metalloproteinâ€based MRI probes. FEBS Letters, 2013, 587, 1021-1029.	2.8	23

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37	Profoundly different prion diseases in knock-in mice carrying single PrP codon substitutions associated with human diseases. Proceedings of the National Academy of Sciences of the United States of America, 2013, 110, 14759-14764.	7.1	47
38	Directed Evolution of Protein-Based Neurotransmitter Sensors for MRI. Methods in Molecular Biology, 2013, 995, 193-205.	0.9	3
39	Bioengineered Probes for Molecular Magnetic Resonance Imaging in the Nervous System. ACS Chemical Neuroscience, 2012, 3, 593-602.	3.5	16
40	Structure-Guided Directed Evolution of Highly Selective P450-Based Magnetic Resonance Imaging Sensors for Dopamine and Serotonin. Journal of Molecular Biology, 2012, 422, 245-262.	4.2	40
41	Metal-Substituted Protein MRI Contrast Agents Engineered for Enhanced Relaxivity and Ligand Sensitivity. Journal of the American Chemical Society, 2011, 133, 649-651.	13.7	83
42	Challenges for molecular neuroimaging with MRI. International Journal of Imaging Systems and Technology, 2010, 20, 71-79.	4.1	18
43	A Secreted Enzyme Reporter System for MRI. Angewandte Chemie - International Edition, 2010, 49, 3909-3911.	13.8	26
44	In Vivo Imaging with a Cell-Permeable Porphyrin-Based MRI Contrast Agent. Chemistry and Biology, 2010, 17, 665-673.	6.0	74
45	Directed evolution of a magnetic resonance imaging contrast agent for noninvasive imaging of dopamine. Nature Biotechnology, 2010, 28, 264-270.	17.5	151
46	MRI Sensing Based on the Displacement of Paramagnetic Ions from Chelated Complexes. Inorganic Chemistry, 2010, 49, 2589-2591.	4.0	17
47	Context-dependent perturbation of neural systems in transgenic mice expressing a cytosolic prion protein. NeuroImage, 2010, 49, 2607-2617.	4.2	11
48	Protein Nanoparticles Engineered to Sense Kinase Activity in MRI. Journal of the American Chemical Society, 2009, 131, 2484-2486.	13.7	73
49	Spontaneous Generation of Prion Infectivity in Fatal Familial Insomnia Knockin Mice. Neuron, 2009, 63, 438-450.	8.1	131
50	T2 relaxation induced by clusters of superparamagnetic nanoparticles: Monte Carlo simulations. Magnetic Resonance Imaging, 2008, 26, 994-998.	1.8	128
51	Water-soluble porphyrins as a dual-function molecular imaging platform for MRI and fluorescence zinc sensing. Proceedings of the National Academy of Sciences of the United States of America, 2007, 104, 10780-10785.	7.1	276
52	Bloodless fMRI. Trends in Neurosciences, 2007, 30, 603-610.	8.6	25
53	Genetically controlled MRI contrast mechanisms and their prospects in systems neuroscience research. Magnetic Resonance Imaging, 2007, 25, 1004-1010.	1.8	26
54	Preparation of iron oxide-based calcium sensors for MRI. Nature Protocols, 2007, 2, 2582-2589.	12.0	28

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55	MRI contrast agents for functional molecular imaging of brain activity. Current Opinion in Neurobiology, 2007, 17, 593-600.	4.2	70
56	Dynamic imaging with MRI contrast agents: quantitative considerations. Magnetic Resonance Imaging, 2006, 24, 449-462.	1.8	67
57	Calcium-sensitive MRI contrast agents based on superparamagnetic iron oxide nanoparticles and calmodulin. Proceedings of the National Academy of Sciences of the United States of America, 2006, 103, 14707-14712.	7.1	220
58	Functional MRI using molecular imaging agents. Trends in Neurosciences, 2005, 28, 120-126.	8.6	45
59	In vivo oxygen detection using exogenous hemoglobin as a contrast agent in magnetic resonance microscopy. Magnetic Resonance in Medicine, 2003, 49, 609-614.	3.0	19
60	In vivo magnetic resonance microscopy of brain structure in unanesthetized flies. Journal of Magnetic Resonance, 2002, 158, 79-85.	2.1	27