Sanjay K Jain

List of Publications by Year
in descending order

113 papers	4,424 citations

87888
38 h-index	

133252
59 g-index	

126 all docs	126 docs citations

126 times ranked	5021 citing authors

#	Article	IF	Citations
1	Mouse Model of Necrotic Tuberculosis Granulomas Develops Hypoxic Lesions. Journal of Infectious Diseases, 2012, 205, 595-602.	4.0	215
2	Imaging Enterobacteriaceae infection in vivo with [18] F-fluorodeoxysorbitol positron emission tomography. Science Translational Medicine, 2014, 6, 259ra146.	12.4	183
3	Genetic Requirements for the Survival of Tubercle Bacilli in Primates. Journal of Infectious Diseases, 2010, 201, 1743-1752.	4.0	159
4	Role of the *dosR* - *dosS* Two-Component Regulatory System in *Mycobacterium tuberculosis* Virulence in Three Animal Models. Infection and Immunity, 2009, 77, 1230-1237.	2.2	150
5	Pathogenesis of Central Nervous System Tuberculosis. Current Molecular Medicine, 2009, 9, 94-99.	1.3	135
6	Mycobacterium tuberculosisInvasion and Traversal across an In Vitro Human Blood–Brain Barrier as a Pathogenic Mechanism for Central Nervous System Tuberculosis. Journal of Infectious Diseases, 2006, 193, 1287-1295.	4.0	132
7	Therapeutic Targeting of the Warburg Effect in Pancreatic Cancer Relies on an Absence of p53 Function. Cancer Research, 2015, 75, 3355-3364.	0.9	129
8	Noninvasive Pulmonary [[18] F]-2-Fluoro-Deoxy- d -Glucose Positron Emission Tomography Correlates with Bactericidal Activity of Tuberculosis Drug Treatment. Antimicrobial Agents and Chemotherapy, 2009, 53, 4879-4884.	3.2	125
9	Molecular imaging of bacterial infections: Overcoming the barriers to clinical translation. Science Translational Medicine, 2019, 11, .	12.4	99
10	A World Wide Web–Based Antimicrobial Stewardship Program Improves Efficiency, Communication, and User Satisfaction and Reduces Cost in a Tertiary Care Pediatric Medical Center. Clinical Infectious Diseases, 2008, 47, 747-753.	5.8	97
11	Dynamic imaging in patients with tuberculosis reveals heterogeneous drug exposures in pulmonary lesions. Nature Medicine, 2020, 26, 529-534.	30.7	87
12	*Mycobacterium tuberculosis* dysregulates MMP/TIMP balance to drive rapid cavitation and unrestrained bacterial proliferation. Journal of Pathology, 2015, 235, 431-444.	4.5	86
13	A Systematic Approach for Developing Bacteria-Specific Imaging Tracers. Journal of Nuclear Medicine, 2017, 58, 144-150.	5.0	86
14	Polymeric nanofiber coating with tunable combinatorial antibiotic delivery prevents biofilm-associated infection in vivo. Proceedings of the National Academy of Sciences of the United States of America, 2016, 113, E6919-E6928.	7.1	85
15	Noninvasive [11] C-rifampin positron emission tomography reveals drug biodistribution in tuberculous meningitis. Science Translational Medicine, 2018, 10, .	12.4	73
16	Sex Differences in Lung Imaging and SARS-CoV-2 Antibody Responses in a COVID-19 Golden Syrian Hamster Model. MBio, 2021, 12, e0097421.	4.1	69
17	Cavitary tuberculosis: the gateway of disease transmission. Lancet Infectious Diseases, The, 2020, 20, e117-e128.	9.1	69
18	Adjunctive TNF Inhibition with Standard Treatment Enhances Bacterial Clearance in a Murine Model of Necrotic TB Granulomas. PLoS ONE, 2012, 7, e39680.	2.5	67

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19	Murine Model to Study the Invasion and Survival of *Mycobacterium tuberculosis* in the Central Nervous System. Journal of Infectious Diseases, 2008, 198, 1520-1528.	4.0	65
20	Positron Emission Tomography Imaging with 2-[^{18}F]F-*p*-Aminobenzoic Acid Detects *Staphylococcus aureus* Infections and Monitors Drug Response. ACS Infectious Diseases, 2018, 4, 1635-1644.	3.8	63
21	Role of Mycobacterium tuberculosis pknD in the Pathogenesis of central nervous system tuberculosis. BMC Microbiology, 2012, 12, 7.	3.3	62
22	Bacterial Thymidine Kinase as a Non-Invasive Imaging Reporter for Mycobacterium tuberculosis in Live Animals. PLoS ONE, 2009, 4, e6297.	2.5	59
23	Segmentation of PET Images for Computer-Aided Functional Quantification of Tuberculosis in Small Animal Models. IEEE Transactions on Biomedical Engineering, 2014, 61, 711-724.	4.2	58
24	The Promise of Molecular Imaging in the Study and Treatment of Infectious Diseases. Molecular Imaging and Biology, 2017, 19, 341-347.	2.6	55
25	[^{11}C]Para-Aminobenzoic Acid: A Positron Emission Tomography Tracer Targeting Bacteria-Specific Metabolism. ACS Infectious Diseases, 2018, 4, 1067-1072.	3.8	54
26	Radioiodinated DPA-713 Imaging Correlates with Bactericidal Activity of Tuberculosis Treatments in Mice. Antimicrobial Agents and Chemotherapy, 2015, 59, 642-649.	3.2	53
27	Microglia activation in a pediatric rabbit model of tuberculous meningitis. DMM Disease Models and Mechanisms, 2016, 9, 1497-1506.	2.4	51
28	Characterization of a Novel Necrotic Granuloma Model of Latent Tuberculosis Infection and Reactivation in Mice. American Journal of Pathology, 2014, 184, 2045-2055.	3.8	50
29	Pediatric Tuberculosis in Young Children in India: A Prospective Study. BioMed Research International, 2013, 2013, 1-7.	1.9	49
30	Mouse model of pulmonary cavitary tuberculosis and expression of matrix metalloproteinase-9. DMM Disease Models and Mechanisms, 2016, 9, 779-88.	2.4	49
31	Imaging *Enterobacterales* infections in patients using pathogen-specific positron emission tomography. Science Translational Medicine, 2021, 13, .	12.4	49
32	Determination of [^{11}C]Rifampin Pharmacokinetics within Mycobacterium tuberculosis-Infected Mice by Using Dynamic Positron Emission Tomography Bioimaging. Antimicrobial Agents and Chemotherapy, 2015, 59, 5768-5774.	3.2	47
33	Noninvasive Molecular Imaging of Tuberculosis-Associated Inflammation With Radioiodinated DPA-713. Journal of Infectious Diseases, 2013, 208, 2067-2074.	4.0	45
34	Vaccination with Recombinant Mycobacterium tuberculosis PknD Attenuates Bacterial Dissemination to the Brain in Guinea Pigs. PLoS ONE, 2013, 8, e66310.	2.5	45
35	Design of Selective Substrates and Activity-Based Probes for Hydrolase Important for Pathogenesis 1 (HIP1) from *Mycobacterium tuberculosis*. ACS Infectious Diseases, 2016, 2, 807-815.	3.8	45
36	Modelling kidney disease using ontology: insights from the Kidney Precision Medicine Project. Nature Reviews Nephrology, 2020, 16, 686-696.	9.6	45

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37	Stability and Viability of SARS-CoV-2. New England Journal of Medicine, 2020, 382, 1962-1966.	27.0	45
38	Accelerated Detection of Mycobacterium tuberculosis Genes Essential for Bacterial Survival in Guinea Pigs, Compared with Mice. Journal of Infectious Diseases, 2007, 195, 1634-1642.	4.0	43
39	Sulforaphane exhibits antiviral activity against pandemic SARS-CoV-2 and seasonal HCoV-OC43 coronaviruses in vitro and in mice. Communications Biology, 2022, 5, 242.	4.4	42
40	Oral-Only Linezolid-Rifampin Is Highly Effective Compared with Other Antibiotics for Periprosthetic Joint Infection. Journal of Bone and Joint Surgery - Series A, 2017, 99, 656-665.	3.0	41
41	Pharmacokinetics of rifapentine and rifampin in a rabbit model of tuberculosis and correlation with clinical trial data. Science Translational Medicine, 2018, 10, .	12.4	40
42	Radiotracer Development for Bacterial Imaging. Journal of Medicinal Chemistry, 2020, 63, 1964-1977.	6.4	38
43	Delamanid Central Nervous System Pharmacokinetics in Tuberculous Meningitis in Rabbits and Humans. Antimicrobial Agents and Chemotherapy, 2019, 63, .	3.2	37
44	Extensively drug-resistant tuberculosis in a young child after travel to India. Lancet Infectious Diseases, The, 2015, 15, 1485-1491.	9.1	36
45	Antimicrobial-Resistant Shigella sonnei. Pediatric Infectious Disease Journal, 2005, 24, 494-497.	2.0	34
46	Pathogen-Specific Bacterial Imaging in Nuclear Medicine. Seminars in Nuclear Medicine, 2018, 48, 182-194.	4.6	34
47	A computational pipeline for quantification of pulmonary infections in small animal models using serial PET-CT imaging. EJNMMI Research, 2013, 3, 55.	2.5	31
48	Joint solution for PET image segmentation, denoising, and partial volume correction. Medical Image Analysis, 2018, 46, 229-243.	11.6	31
49	Chemiluminescent Protease Probe for Rapid, Sensitive, and Inexpensive Detection of Live *Mycobacterium tuberculosis*. ACS Central Science, 2021, 7, 803-814.	11.3	31
50	Molecular Imaging: a Novel Tool To Visualize Pathogenesis of Infections *In Situ*. MBio, 2019, 10, .	4.1	30
51	Radiosynthesis and PET Bioimaging of ^{76}Br-Bedaquiline in a Murine Model of Tuberculosis. ACS Infectious Diseases, 2019, 5, 1996-2002.	3.8	29
52	Antibiotic Treatment of Tuberculosis: Old Problems, New Solutions. Microbe Magazine, 2008, 3, 285-292.	0.4	29
53	Nuclear imaging: A powerful novel approach for tuberculosis. Nuclear Medicine and Biology, 2014, 41, 777-784.	0.6	28
54	Management and Outcomes of Intracranial Tuberculomas Developing During Antituberculous Therapy: Case Report and Review. Clinical Pediatrics, 2005, 44, 443-450.	0.8	27

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55	The integrated stress response mediates necrosis in murine Mycobacterium tuberculosis granulomas. Journal of Clinical Investigation, 2021, 131, .	8.2	27
56	Tetracycline-inducible gene expression in mycobacteria within an animal host using modified Streptomyces tcp830 regulatory elements. Archives of Microbiology, 2006, 186, 459-464.	2.2	26
57	Imaging Chronic Tuberculous Lesions Using Sodium [18F]Fluoride Positron Emission Tomography in Mice. Molecular Imaging and Biology, 2015, 17, 609-614.	2.6	26
58	Advanced imaging tools for childhood tuberculosis: potential applications and research needs. Lancet Infectious Diseases, The, 2020, 20, e289-e297.	9.1	26
59	Imaging the Evolution of Reactivation Pulmonary Tuberculosis in Mice Using ^{18}F-FDG PET. Journal of Nuclear Medicine, 2014, 55, 1726-1729.	5.0	24
60	Mobile Phone Incentives for Childhood Immunizations in Rural India. Pediatrics, 2018, 141, .	2.1	24
61	Treatment-Shortening Effect of a Novel Regimen Combining Clofazimine and High-Dose Rifapentine in Pathologically Distinct Mouse Models of Tuberculosis. Antimicrobial Agents and Chemotherapy, 2019, 63, .	3.2	23
62	Nosocomial Malaria and Saline Flush. Emerging Infectious Diseases, 2005, 11, 1097-1099.	4.3	22
63	Biodistribution and Radiation Dosimetry of ^{124}I-DPA-713, a PET Radiotracer for Macrophage-Associated Inflammation. Journal of Nuclear Medicine, 2018, 59, 1751-1756.	5.0	22
64	Matrix Metalloproteinase Inhibition in a Murine Model of Cavitary Tuberculosis Paradoxically Worsens Pathology. Journal of Infectious Diseases, 2019, 219, 633-636.	4.0	22
65	Progression and Resolution of Severe Acute Respiratory Syndrome Coronavirus 2 (SARS-CoV-2) Infection in Golden Syrian Hamsters. American Journal of Pathology, 2022, 192, 195-207.	3.8	22
66	Novel Functional Renal PET Imaging With 18F-FDS in Human Subjects. Clinical Nuclear Medicine, 2019, 44, 410-411.	1.3	21
67	Computer‐aided detection and quantification of cavitary tuberculosis from CT scans. Medical Physics, 2013, 40, 113701.	3.0	19
68	SPECT/CT Imaging of Mycobacterium tuberculosis Infection with [125I]anti-C3d mAb. Molecular Imaging and Biology, 2019, 21, 473-481.	2.6	19
69	High-dose rifampin improves bactericidal activity without increased intracerebral inflammation in animal models of tuberculous meningitis. Journal of Clinical Investigation, 2022, 132, .	8.2	19
70	Expression profiles of podocytes exposed to high glucose reveal new insights into early diabetic glomerulopathy. Laboratory Investigation, 2011, 91, 488-498.	3.7	18
71	Radiosynthesis and Biodistribution of ^{18}F-Linezolid in *Mycobacterium tuberculosis*-Infected Mice Using Positron Emission Tomography. ACS Infectious Diseases, 2020, 6, 916-921.	3.8	17
72	124I-Iodo-DPA-713 Positron Emission Tomography in a Hamster Model of SARS-CoV-2 Infection. Molecular Imaging and Biology, 2022, 24, 135-143.	2.6	16

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73	The biodistribution of 5-[18F]fluoropyrazinamide in Mycobacterium tuberculosis-infected mice determined by positron emission tomography. PLoS ONE, 2017, 12, e0170871.	2.5	16
74	Dynamic PET-facilitated modeling and high-dose rifampin regimens for *Staphylococcus aureus* orthopedic implant–associated infections. Science Translational Medicine, 2021, 13, eabl6851.	12.4	16
75	Strain-dependent CNS dissemination in guinea pigs after Mycobacterium tuberculosis aerosol challenge. Tuberculosis, 2011, 91, 386-389.	1.9	15
76	Computer–aided pulmonary image analysis in small animal models. Medical Physics, 2015, 42, 3896-3910.	3.0	15
77	Adjunct antibody administration with standard treatment reduces relapse rates in a murine tuberculosis model of necrotic granulomas. PLoS ONE, 2018, 13, e0197474.	2.5	15
78	Balancing the Risks of Radiation and Anesthesia in Pediatric Patients. Journal of the American College of Radiology, 2017, 14, 1459-1461.	1.8	14
79	Imaging Macrophage-associated Inflammation. Seminars in Nuclear Medicine, 2018, 48, 242-245.	4.6	14
80	In Vivo Prediction of Tuberculosis-Associated Cavity Formation in Rabbits. Journal of Infectious Diseases, 2015, 211, 481-485.	4.0	13
81	Hamsters as a Model of Severe Acute Respiratory Syndrome Coronavirus-2. Comparative Medicine, 2021, 71, 398-410.	1.0	13
82	Current and future perspectives on functional molecular imaging in nephro-urology: theranostics on the horizon. Theranostics, 2021, 11, 6105-6119.	10.0	13
83	Visualizing the dynamics of tuberculosis pathology using molecular imaging. Journal of Clinical Investigation, 2021, 131, .	8.2	12
84	Kit-based synthesis of 2-deoxy-2-[18F]-fluoro-d-sorbitol for bacterial imaging. Nature Protocols, 2021, 16, 5274-5286.	12.0	12
85	Pharmacokinetics of high-titer anti–SARS-CoV-2 human convalescent plasma in high-risk children. JCI Insight, 2022, 7, .	5.0	12
86	Evaluation of Musculoskeletal and Pulmonary Bacterial Infections With [[124]I]FIAU PET/CT. Molecular Imaging, 2020, 19, 153601212093687.	1.4	11
87	^{11}C-PABA as a PET Radiotracer for Functional Renal Imaging: Preclinical and First-in-Human Study. Journal of Nuclear Medicine, 2020, 61, 1665-1671.	5.0	11
88	11C-Para-aminobenzoic acid PET imaging of S. aureus and MRSA infection in preclinical models and humans. JCI Insight, 2022, 7, .	5.0	11
89	Robust segmentation and accurate target definition for positron emission tomography images using Affinity Propagation. , 2013, , .		10
90	Rabbit model of *Staphylococcus aureus* implant-associated spinal infection. DMM Disease Models and Mechanisms, 2020, 13, .	2.4	10

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91	Flagging Bacteria with Radiolabeled <scp>d</scp>-Amino Acids. ACS Central Science, 2020, 6, 97-99.	11.3	10
92	The antifibrotic drug pirfenidone promotes pulmonary cavitation and drug resistance in a mouse model of chronic tuberculosis. JCI Insight, 2016, 1, e86017.	5.0	10
93	Template registration with missing parts: Application to the segmentation of M. tuberculosis infected lungs. , 2009, 2009, 718-721.		9
94	Efficient ribcage segmentation from CT scans using shape features. , 2014, 2014, 2899-902.		8
95	Radiosynthesis and validation of [<scp><i>Carboxy</i></scp>â€‹¹¹C]4â€‹<scp>A</scp>minobenzoic acid ([¹¹<scp>C</scp>]<scp>PABA</scp>), a <scp>PET</scp> radiotracer for imaging bacterial infections. Journal of Labelled Compounds and Radiopharmaceuticals, 2019, 62, 28-33.	1.0	6
96	Molecular Imaging of Diabetic Foot Infections: New Tools for Old Questions. International Journal of Molecular Sciences, 2019, 20, 5984.	4.1	6
97	Caspase-Based PET for Evaluating Pro-Apoptotic Treatments in a Tuberculosis Mouse Model. Molecular Imaging and Biology, 2020, 22, 1489-1494.	2.6	6
98	Biodistribution and Pharmacokinetics of Antimicrobials. , 2017, , 209-222.		6
99	Evaluation of 2-[18F]-Fluorodeoxysorbitol PET Imaging in Preclinical Models of Aspergillus Infection. Journal of Fungi (Basel, Switzerland), 2022, 8, 25.	3.5	6
100	Effects of primary and recurrent sacral chordoma on the motor and nociceptive function of hindlimbs in rats: an orthotopic spine model. Journal of Neurosurgery: Spine, 2017, 27, 215-226.	1.7	5
101	Incorporating user input in template-based segmentation. , 2011, 2011, 1434-1437.		3
102	Accurate and efficient separation of left and right lungs from 3D CT scans: A generic hysteresis approach. , 2014, 2014, 6036-9.		3
103	Re. Clinical Nuclear Medicine, 2017, 42, 649.	1.3	2
104	Rapid detection of SARS-CoV-2 using a radiolabeled antibody. Nuclear Medicine and Biology, 2021, 98-99, 69-75.	0.6	2
105	Bacterial Imaging. , 2017, , 149-172.		2
106	Novel vaccine strategies against tuberculosis: a road less travelled. Expert Review of Vaccines, 2013, 12, 1373-1375.	4.4	1
107	Management of Tuberculosis in Special Populations. , 2017, , 141-190.		1
108	Successful cure of extensively drug-resistant pulmonary tuberculosis in a young child. Lancet Infectious Diseases, The, 2017, 17, 898-899.	9.1	1

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109	Imaging Pulmonary Foreign Body Reaction Using [125I]iodo-DPA-713 SPECT/CT in Mice. Molecular Imaging and Biology, 2019, 21, 228-231.	2.6	1
110	Imaging of Bacterial Infections. , 2021, , 1469-1485.		1
111	Infectious Disease Imaging. , 2014, , 159-179.		1
112	PET/CT imaging of CSF1R in a mouse model of tuberculosis. European Journal of Nuclear Medicine and Molecular Imaging, 2022, 49, 4088-4096.	6.4	1
113	Adherence to Therapy, Treatment Success, and the Prevention of Resistance. Infectious Diseases in Clinical Practice, 2006, 14, S15-S18.	0.3	0