

# Jefferson Chan

## List of Publications by Year in descending order

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Version: 2024-02-01

65  
papers

5,552  
citations

94381

37  
h-index

118793

62  
g-index

71  
all docs

71  
docs citations

71  
times ranked

6975  
citing authors

#	ARTICLE	IF	CITATIONS
1	Reaction-based small-molecule fluorescent probes for chemoselective bioimaging. <i>Nature Chemistry</i> , 2012, 4, 973-984.	6.6	1,630
2	Wilson Disease Protein ATP7B Utilizes Lysosomal Exocytosis to Maintain Copper Homeostasis. <i>Developmental Cell</i> , 2014, 29, 686-700.	3.1	203
3	Photoacoustic Probes for Ratiometric Imaging of Copper(II). <i>Journal of the American Chemical Society</i> , 2015, 137, 15628-15631.	6.6	200
4	A Reaction-Based Fluorescent Probe for Imaging of Formaldehyde in Living Cells. <i>Journal of the American Chemical Society</i> , 2015, 137, 10890-10893.	6.6	200
5	A bioreducible N-oxide-based probe for photoacoustic imaging of hypoxia. <i>Nature Communications</i> , 2017, 8, 1794.	5.8	177
6	A Ratiometric Acoustogenic Probe for <i>in Vivo</i> Imaging of Endogenous Nitric Oxide. <i>Journal of the American Chemical Society</i> , 2018, 140, 1011-1018.	6.6	172
7	Molecular Imaging of Labile Iron(II) Pools in Living Cells with a Turn-On Fluorescent Probe. <i>Journal of the American Chemical Society</i> , 2013, 135, 15165-15173.	6.6	154
8	Near-Infrared Photoactivatable Nitric Oxide Donors with Integrated Photoacoustic Monitoring. <i>Journal of the American Chemical Society</i> , 2018, 140, 11686-11697.	6.6	153
9	Copper regulates cyclic-AMP-dependent lipolysis. <i>Nature Chemical Biology</i> , 2016, 12, 586-592.	3.9	149
10	Subcellular metal imaging identifies dynamic sites of Cu accumulation in <i>Chlamydomonas</i> . <i>Nature Chemical Biology</i> , 2014, 10, 1034-1042.	3.9	143
11	DNA Aptamer-Based Activatable Probes for Photoacoustic Imaging in Living Mice. <i>Journal of the American Chemical Society</i> , 2017, 139, 17225-17228.	6.6	136
12	The multiple antibiotic resistance regulator MarR is a copper sensor in <i>Escherichia coli</i> . <i>Nature Chemical Biology</i> , 2014, 10, 21-28.	3.9	128
13	Copper is an endogenous modulator of neural circuit spontaneous activity. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2014, 111, 16280-16285.	3.3	118
14	Acoustogenic Probes: A New Frontier in Photoacoustic Imaging. <i>Accounts of Chemical Research</i> , 2018, 51, 2897-2905.	7.6	116
15	Development of NIR-II Photoacoustic Probes Tailored for Deep-Tissue Sensing of Nitric Oxide. <i>Journal of the American Chemical Society</i> , 2021, 143, 7196-7202.	6.6	97
16	A Conformationally Restricted Aza-BODIPY Platform for Stimulus-Responsive Probes with Enhanced Photoacoustic Properties. <i>Journal of the American Chemical Society</i> , 2019, 141, 17601-17609.	6.6	96
17	Copper regulates rest-activity cycles through the locus coeruleus-norepinephrine system. <i>Nature Chemical Biology</i> , 2018, 14, 655-663.	3.9	93
18	Photoacoustic imaging of elevated glutathione in models of lung cancer for companion diagnostic applications. <i>Nature Chemistry</i> , 2021, 13, 1248-1256.	6.6	93

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19	Peptidoglycan Recognition Proteins Kill Bacteria by Inducing Oxidative, Thiol, and Metal Stress. <i>PLoS Pathogens</i> , 2014, 10, e1004280.	2.1	85
20	Disease Modeling and Gene Therapy of Copper Storage Disease in Canine Hepatic Organoids. <i>Stem Cell Reports</i> , 2015, 5, 895-907.	2.3	84
21	Development of Photoacoustic Probes for <i>in Vivo</i> Molecular Imaging. <i>Biochemistry</i> , 2018, 57, 194-199.	1.2	82
22	Photophysical Tuning of <i>N</i> -Oxide-Based Probes Enables Ratiometric Photoacoustic Imaging of Tumor Hypoxia. <i>ACS Chemical Biology</i> , 2018, 13, 1838-1843.	1.6	70
23	A PGAM5-KEAP1-Nrf2 complex is required for stress-induced mitochondrial retrograde trafficking. <i>Journal of Cell Science</i> , 2017, 130, 3467-3480.	1.2	66
24	A General Approach to Convert Hemicyanine Dyes into Highly Optimized Photoacoustic Scaffolds for Analyte Sensing**. <i>Angewandte Chemie - International Edition</i> , 2021, 60, 18860-18866.	7.2	64
25	New directions of activity-based sensing for <i>in vivo</i> NIR imaging. <i>Chemical Science</i> , 2021, 12, 3393-3405.	3.7	63
26	A direct NMR method for the measurement of competitive kinetic isotope effects. <i>Nature Chemical Biology</i> , 2010, 6, 405-407.	3.9	60
27	NitroxylFluor: A Thiol-Based Fluorescent Probe for Live-Cell Imaging of Nitroxyl. <i>Journal of the American Chemical Society</i> , 2017, 139, 18476-18479.	6.6	59
28	Targeted contrast agents and activatable probes for photoacoustic imaging of cancer. <i>Chemical Society Reviews</i> , 2022, 51, 829-868.	18.7	58
29	Nitric oxide imaging in cancer enabled by steric relaxation of a photoacoustic probe platform. <i>Chemical Science</i> , 2020, 11, 1587-1592.	3.7	56
30	Host and Pathogen Copper-Transporting P-Type ATPases Function Antagonistically during Salmonella Infection. <i>Infection and Immunity</i> , 2017, 85, .	1.0	54
31	A Stepwise Solvent-Promoted S <sub>N</sub> i Reaction of $\alpha$ -D-Glucopyranosyl Fluoride: Mechanistic Implications for Retaining Glycosyltransferases. <i>Journal of the American Chemical Society</i> , 2012, 134, 1212-1220.	6.6	53
32	Biodegradable Biliverdin Nanoparticles for Efficient Photoacoustic Imaging. <i>ACS Nano</i> , 2019, 13, 7690-7704.	7.3	51
33	Advances in Activity-Based Sensing Probes for Isoform-Selective Imaging of Enzymatic Activity. <i>Angewandte Chemie - International Edition</i> , 2021, 60, 5000-5009.	7.2	50
34	Copper transporter 2 regulates intracellular copper and sensitivity to cisplatin. <i>Metallomics</i> , 2014, 6, 654.	1.0	45
35	Simultaneous photoacoustic imaging of intravascular and tissue oxygenation. <i>Optics Letters</i> , 2019, 44, 3773.	1.7	44
36	An Activity-Based Sensing Approach for the Detection of Cyclooxygenase-2 in Live Cells. <i>Angewandte Chemie - International Edition</i> , 2020, 59, 3307-3314.	7.2	41

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37	Surveillance of Cancer Stem Cell Plasticity Using an Isoform-Selective Fluorescent Probe for Aldehyde Dehydrogenase 1A1. <i>ACS Central Science</i> , 2018, 4, 1045-1055.	5.3	39
38	Transition-State Structure for the Quintessential S <sub>N</sub> 2 Reaction of a Carbohydrate: Reaction of Î±-Glucopyranosyl Fluoride with Azide Ion in Water. <i>Journal of the American Chemical Society</i> , 2014, 136, 12225-12228.	6.6	37
39	The Intestinal Copper Exporter CUA-1 Is Required for Systemic Copper Homeostasis in <i>Caenorhabditis elegans</i> . <i>Journal of Biological Chemistry</i> , 2017, 292, 1-14.	1.6	31
40	The <i>Aspergillus fumigatus</i> Sialidase Is a 3-Deoxy-d-glycero-d-galacto-2-nonulosonic Acid Hydrolase (KDNase). <i>Journal of Biological Chemistry</i> , 2011, 286, 10783-10792.	1.6	25
41	A Photoactivatable Formaldehyde Donor with Fluorescence Monitoring Reveals Threshold To Arrest Cell Migration. <i>Journal of the American Chemical Society</i> , 2020, 142, 680-684.	6.6	25
42	Metabolism of Vertebrate Amino Sugars with N-Glycolyl Groups. <i>Journal of Biological Chemistry</i> , 2012, 287, 28882-28897.	1.6	23
43	Turnover Is Rate-Limited by Deglycosylation for <i>Micromonospora viridifaciens</i> Sialidase-Catalyzed Hydrolyses: Conformational Implications for the Michaelis Complex. <i>Journal of the American Chemical Society</i> , 2011, 133, 2989-2997.	6.6	21
44	Acoustic-based chemical tools for profiling the tumor microenvironment. <i>Current Opinion in Chemical Biology</i> , 2020, 57, 114-121.	2.8	19
45	Damage-Responsive Microcapsules for Amplified Photoacoustic Detection of Microcracks in Polymers. <i>Chemistry of Materials</i> , 2018, 30, 2198-2202.	3.2	18
46	Activity-based photoacoustic probe for biopsy-free assessment of copper in murine models of Wilson's disease and liver metastasis. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2021, 118, .	3.3	18
47	An Activity-Based Sensing Approach for the Detection of Cyclooxygenase-2 in Live Cells. <i>Angewandte Chemie</i> , 2020, 132, 3333-3340.	1.6	17
48	Transition State Analysis of <i>Vibrio cholerae</i> Sialidase-Catalyzed Hydrolyses of Natural Substrate Analogues. <i>Journal of the American Chemical Society</i> , 2012, 134, 3748-3757.	6.6	16
49	Rational Design of a Red Fluorescent Sensor for ALDH1A1 Displaying Enhanced Cellular Uptake and Reactivity. <i>Bioconjugate Chemistry</i> , 2020, 31, 224-228.	1.8	15
50	Thienylpiperidine Donor NIR Xanthene-Based Dye for Photoacoustic Imaging. <i>Organic Letters</i> , 2021, 23, 7640-7644.	2.4	15
51	Bacterial and Viral Sialidases: Contribution of the Conserved Active Site Glutamate to Catalysis. <i>Biochemistry</i> , 2012, 51, 433-441.	1.2	14
52	Activity-Based NIR Bioluminescence Probe Enables Discovery of Diet-Induced Modulation of the Tumor Microenvironment via Nitric Oxide. <i>ACS Central Science</i> , 2022, 8, 461-472.	5.3	14
53	A General Approach to Convert Hemicyanine Dyes into Highly Optimized Photoacoustic Scaffolds for Analyte Sensing**. <i>Angewandte Chemie</i> , 2021, 133, 19008-19014.	1.6	11
54	Fortschritte bei aktivitätsbasierten Sonden für die isoformselektive Bildgebung enzymatischer Aktivität. <i>Angewandte Chemie</i> , 2021, 133, 5052-5062.	1.6	10

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55	A mechanistic study of sialic acid mutarotation: Implications for mutarotase enzymes. <i>Organic and Biomolecular Chemistry</i> , 2011, 9, 4818.	1.5	8
56	Imaging the Landmarks of Vascular Recovery. <i>Theranostics</i> , 2020, 10, 1733-1745.	4.6	8
57	Transition-state structure for the hydronium-ion-promoted hydrolysis of $\alpha$ -D-glucopyranosyl fluoride. <i>Canadian Journal of Chemistry</i> , 2015, 93, 463-467.	0.6	6
58	Near-infrared photoactivatable nitric oxide donors with photoacoustic readout. <i>Methods in Enzymology</i> , 2020, 641, 113-147.	0.4	3
59	Activity-Based Sensing of Ascorbate by Using Copper-Mediated Oxidative Bond Cleavage. <i>Chemistry - A European Journal</i> , 2020, 26, 8794-8800.	1.7	3
60	Acoustogenic Probes: A Demonstration to Introduce the Photoacoustic Effect <i>via</i> Analyte Sensing. <i>Journal of Chemical Education</i> , 2021, 98, 2618-2624.	1.1	3
61	Enzymology of Influenza Virus Sialidase. , 2012, , 47-66.		1
62	Making light of stress. <i>Nature Biotechnology</i> , 2014, 32, 337-338.	9.4	1
63	Near-infrared II photoacoustic probes for nitric oxide sensing. <i>Methods in Enzymology</i> , 2021, 657, 157-180.	0.4	1
64	Bright Dyes Bring Biology into Focus. <i>ACS Central Science</i> , 2017, 3, 920-921.	5.3	0
65	A general strategy to optimize the performance of aza-BODIPY-based probes for enhanced photoacoustic properties. <i>Methods in Enzymology</i> , 2021, 657, 415-441.	0.4	0