

# Nathalie Y R Agar

## List of Publications by Year in descending order

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66  
papers

4,091  
citations

147786  
31  
h-index

123420  
61  
g-index

68  
all docs

68  
docs citations

68  
times ranked

6085  
citing authors

#	ARTICLE	IF	CITATIONS
1	Multimodal platform for assessing drug distribution and response in clinical trials. <i>Neuro-Oncology</i> , 2022, 24, 64-77.	1.2	4
2	massNet: integrated processing and classification of spatially resolved mass spectrometry data using deep learning for rapid tumor delineation. <i>Bioinformatics</i> , 2022, 38, 2015-2021.	4.1	13
3	A non-dividing cell population with high pyruvate dehydrogenase kinase activity regulates metabolic heterogeneity and tumorigenesis in the intestine. <i>Nature Communications</i> , 2022, 13, 1503.	12.8	22
4	Multiplatform Metabolomics Studies of Human Cancers With NMR and Mass Spectrometry Imaging. <i>Frontiers in Molecular Biosciences</i> , 2022, 9, 785232.	3.5	5
5	Overcoming differential tumor penetration of BRAF inhibitors using computationally guided combination therapy. <i>Science Advances</i> , 2022, 8, eabl6339.	10.3	6
6	Spatial Distribution of Transcytosis Relevant Phospholipids in Response to Omega-3 Dietary Deprivation. <i>ACS Chemical Biology</i> , 2021, 16, 106-115.	3.4	3
7	A unique subset of glycolytic tumour-propagating cells drives squamous cell carcinoma. <i>Nature Metabolism</i> , 2021, 3, 182-195.	11.9	17
8	DDRE-32. THERAPEUTIC TARGETING OF A NOVEL METABOLIC ADDICTION IN DIFFUSE MIDLINE GLIOMA. <i>Neuro-Oncology Advances</i> , 2021, 3, i13-i13.	0.7	0
9	Î2-Cyclodextrin-poly (Î2-Amino Ester) Nanoparticles Are a Generalizable Strategy for High Loading and Sustained Release of HDAC Inhibitors. <i>ACS Applied Materials &amp; Interfaces</i> , 2021, 13, 20960-20973.	8.0	15
10	Heterogeneous delivery across the blood-brain barrier limits the efficacy of an EGFR-targeting antibody drug conjugate in glioblastoma. <i>Neuro-Oncology</i> , 2021, 23, 2042-2053.	1.2	37
11	Bringing Matrix-Assisted Laser Desorption/Ionization Mass Spectrometry Imaging to the Clinics. <i>Clinics in Laboratory Medicine</i> , 2021, 41, 309-324.	1.4	11
12	EPCT-09. CNS LEVELS OF PANOBINOSTAT IN A NON-HUMAN PRIMATE MODEL: COMPARISON OF BLOOD AND CEREBROSPINAL FLUID PHARMACOKINETIC METHODS AND MALDI MSI. <i>Neuro-Oncology</i> , 2021, 23, i48-i48.	1.2	0
13	Abstract 1816: Phenogenomic characterization of immunomodulatory purinergic signaling in glioblastoma. , 2021, , .		0
14	High-Throughput Analysis of Tissue-Embedded Single Cells by Mass Spectrometry with Bimodal Imaging and Object Recognition. <i>Analytical Chemistry</i> , 2021, 93, 9677-9687.	6.5	17
15	Interim clinical trial analysis of intraoperative mass spectrometry for breast cancer surgery. <i>Npj Breast Cancer</i> , 2021, 7, 116.	5.2	10
16	Peak learning of mass spectrometry imaging data using artificial neural networks. <i>Nature Communications</i> , 2021, 12, 5544.	12.8	43
17	NIMG-75. ANALYZING THE INTERFACE BETWEEN MRI AND DRUG DISTRIBUTION USING ORTHOTOPIC GBM-DERIVED XENOGRAFT (PDX) MODELS. <i>Neuro-Oncology</i> , 2021, 23, vi146-vi146.	1.2	0
18	EXTH-64. COMPARISON OF PANOBINOSTAT CSF PENETRATION WITH CNS PENETRATION FOLLOWING SYSTEMIC ADMINISTRATION IN A PRE-CLINICAL NON-HUMAN PRIMATE MODEL. <i>Neuro-Oncology</i> , 2021, 23, vi177-vi178.	1.2	0

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19	Pre- and Postoperative Neratinib for HER2-Positive Breast Cancer Brain Metastases: Translational Breast Cancer Research Consortium 022. <i>Clinical Breast Cancer</i> , 2020, 20, 145-151.e2.	2.4	21
20	PHD3 Loss Promotes Exercise Capacity and Fat Oxidation in Skeletal Muscle. <i>Cell Metabolism</i> , 2020, 32, 215-228.e7.	16.2	22
21	Localized Metabolomic Gradients in Patient-Derived Xenograft Models of Glioblastoma. <i>Cancer Research</i> , 2020, 80, 1258-1267.	0.9	67
22	Rapid MALDI mass spectrometry imaging for surgical pathology. <i>Npj Precision Oncology</i> , 2019, 3, 17.	5.4	59
23	Quantitative Wide-Field Imaging Techniques for Fluorescence Guided Neurosurgery. <i>Frontiers in Surgery</i> , 2019, 6, 31.	1.4	21
24	A large-scale drug screen identifies selective inhibitors of class I HDACs as a potential therapeutic option for SHH medulloblastoma. <i>Neuro-Oncology</i> , 2019, 21, 1150-1163.	1.2	24
25	Metal Oxide Laser Ionization Mass Spectrometry Imaging (MOLI MSI) Using Cerium(IV) Oxide. <i>Analytical Chemistry</i> , 2019, 91, 6800-6807.	6.5	14
26	Genetically Encoded Fluorescent Proteins Enable High-Throughput Assignment of Cell Cohorts Directly from MALDI-MS Images. <i>Analytical Chemistry</i> , 2019, 91, 3810-3817.	6.5	3
27	Automatic 3D Nonlinear Registration of Mass Spectrometry Imaging and Magnetic Resonance Imaging Data. <i>Analytical Chemistry</i> , 2019, 91, 6206-6216.	6.5	45
28	Molecular Characterization of Prostate Cancer with Associated Gleason Score Using Mass Spectrometry Imaging. <i>Molecular Cancer Research</i> , 2019, 17, 1155-1165.	3.4	50
29	Unique Intradural Inflammatory Mass Containing Precipitated Morphine: Confirmatory Analysis by LESA-MS and MALDI-MS. <i>Pain Practice</i> , 2018, 18, 889-894.	1.9	16
30	In Vitro Liquid Extraction Surface Analysis Mass Spectrometry (ivLESA-MS) for Direct Metabolic Analysis of Adherent Cells in Culture. <i>Analytical Chemistry</i> , 2018, 90, 4987-4991.	6.5	18
31	Is the blood-brain barrier really disrupted in all glioblastomas? A critical assessment of existing clinical data. <i>Neuro-Oncology</i> , 2018, 20, 184-191.	1.2	443
32	Prostate cancer diagnosis and characterization with mass spectrometry imaging. <i>Prostate Cancer and Prostatic Diseases</i> , 2018, 21, 297-305.	3.9	19
33	TMOD-07. LOCALIZATION OF ERLONITINIB RELATIVE TO MRI-BASED TUMOR EXTENT IN PDX GLIOBLASTOMA MODEL: TOWARDS A MATHEMATICAL MODEL FOR THE INTERFACE BETWEEN MRI AND DRUG DISTRIBUTION. <i>Neuro-Oncology</i> , 2018, 20, vi269-vi270.	1.2	1
34	ACTR-14. PHASE I STUDY OF AZD1775 WITH RADIATION THERAPY (RT) AND TEMOZOLOMIDE (TMZ) IN PATIENTS WITH NEWLY DIAGNOSED GLIOBLASTOMA (GBM) AND EVALUATION OF INTRATUMORAL DRUG DISTRIBUTION (IDD) IN PATIENTS WITH RECURRENT GBM. <i>Neuro-Oncology</i> , 2018, 20, vi13-vi14.	1.2	6
35	Integrated mapping of pharmacokinetics and pharmacodynamics in a patient-derived xenograft model of glioblastoma. <i>Nature Communications</i> , 2018, 9, 4904.	12.8	62
36	Blood-brain-barrier organoids for investigating the permeability of CNS therapeutics. <i>Nature Protocols</i> , 2018, 13, 2827-2843.	12.0	185

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37	Efficacy of the MDM2 Inhibitor SAR405838 in Glioblastoma Is Limited by Poor Distribution Across the Bloodâ€‘Brain Barrier. <i>Molecular Cancer Therapeutics</i> , 2018, 17, 1893-1901.	4.1	37
38	Rapid discrimination of pediatric brain tumors by mass spectrometry imaging. <i>Journal of Neuro-Oncology</i> , 2018, 140, 269-279.	2.9	45
39	Blood-brain-barrier spheroids as an in vitro screening platform for brain-penetrating agents. <i>Nature Communications</i> , 2017, 8, 15623.	12.8	224
40	Coordinated Splicing of Regulatory Detained Introns within Oncogenic Transcripts Creates an Exploitable Vulnerability in Malignant Glioma. <i>Cancer Cell</i> , 2017, 32, 411-426.e11.	16.8	161
41	Osteoglycin promotes meningioma development through downregulation of NF2 and activation of mTOR signaling. <i>Cell Communication and Signaling</i> , 2017, 15, 34.	6.5	21
42	Multiple spatially related pharmacophores define small molecule inhibitors of OLIG2 in glioblastoma. <i>Oncotarget</i> , 2017, 8, 22370-22384.	1.8	23
43	Increased expression of programmed death ligand 1 (PD-L1) in human pituitary tumors. <i>Oncotarget</i> , 2016, 7, 76565-76576.	1.8	100
44	Label-Free Neurosurgical Pathology with Stimulated Raman Imaging. <i>Cancer Research</i> , 2016, 76, 3451-3462.	0.9	119
45	First <i>In Vivo</i> Testing of Compounds Targeting Group 3 Medulloblastomas Using an Implantable Microdevice as a New Paradigm for Drug Development. <i>Journal of Biomedical Nanotechnology</i> , 2016, 12, 1297-1302.	1.1	36
46	Translational Breast Cancer Research Consortium (TBCRC) 022: A Phase II Trial of Neratinib for Patients With Human Epidermal Growth Factor Receptor 2â€‘Positive Breast Cancer and Brain Metastases. <i>Journal of Clinical Oncology</i> , 2016, 34, 945-952.	1.6	148
47	Profiling of adrenocorticotrophic hormone and arginine vasopressin in human pituitary gland and tumor thin tissue sections using droplet-based liquid-microjunction surface-sampling-HPLCâ€‘ESI-MSâ€‘MS. <i>Analytical and Bioanalytical Chemistry</i> , 2015, 407, 5989-5998.	3.7	24
48	MALDI mass spectrometry imaging analysis of pituitary adenomas for near-real-time tumor delineation. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2015, 112, 9978-9983.	7.1	73
49	Molecular typing of meningiomas by desorption electrospray ionization mass spectrometry imaging for surgical decision-making. <i>International Journal of Mass Spectrometry</i> , 2015, 377, 690-698.	1.5	46
50	The Efficacy of the Wee1 Inhibitor MK-1775 Combined with Temozolomide Is Limited by Heterogeneous Distribution across the Bloodâ€‘Brain Barrier in Glioblastoma. <i>Clinical Cancer Research</i> , 2015, 21, 1916-1924.	7.0	86
51	Efficacy of PARP Inhibitor Rucaparib in Orthotopic Glioblastoma Xenografts Is Limited by Ineffective Drug Penetration into the Central Nervous System. <i>Molecular Cancer Therapeutics</i> , 2015, 14, 2735-2743.	4.1	75
52	Multimodal imaging for improved diagnosis and treatment of cancers. <i>Cancer</i> , 2015, 121, 817-827.	4.1	91
53	Imaging and Mapping of Tissue Constituents at the Single-Cell Level Using MALDI MSI and Quantitative Laser Scanning Cytometry. <i>Methods in Molecular Biology</i> , 2015, 1346, 133-149.	0.9	2
54	Reconstruction and feature selection for desorption electrospray ionization mass spectroscopy imagery. <i>Proceedings of SPIE</i> , 2014, 9036, 90360D.	0.8	3

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55	Application of desorption electrospray ionization mass spectrometry imaging in breast cancer margin analysis. Proceedings of the National Academy of Sciences of the United States of America, 2014, 111, 15184-15189.	7.1	207
56	Intraoperative mass spectrometry mapping of an onco-metabolite to guide brain tumor surgery. Proceedings of the National Academy of Sciences of the United States of America, 2014, 111, 11121-11126.	7.1	230
57	TBCRC 022: Phase II trial of neratinib for patients (Pts) with human epidermal growth factor receptor 2 (HER2+) breast cancer and brain metastases (BCBM).. Journal of Clinical Oncology, 2014, 32, 528-528.	1.6	4
58	Molecular imaging of drug transit through the blood-brain barrier with MALDI mass spectrometry imaging. Scientific Reports, 2013, 3, 2859.	3.3	118
59	Ambient mass spectrometry for the intraoperative molecular diagnosis of human brain tumors. Proceedings of the National Academy of Sciences of the United States of America, 2013, 110, 1611-1616.	7.1	251
60	Classifying Human Brain Tumors by Lipid Imaging with Mass Spectrometry. Cancer Research, 2012, 72, 645-654.	0.9	273
61	Desorption Electrospray Ionization then MALDI Mass Spectrometry Imaging of Lipid and Protein Distributions in Single Tissue Sections. Analytical Chemistry, 2011, 83, 8366-8371.	6.5	142
62	Development of Stereotactic Mass Spectrometry for Brain Tumor Surgery. Neurosurgery, 2011, 68, 280-290.	1.1	58
63	Discrimination of Human Astrocytoma Subtypes by Lipid Analysis Using Desorption Electrospray Ionization Imaging Mass Spectrometry. Angewandte Chemie - International Edition, 2010, 49, 5953-5956.	13.8	116
64	Tissue Preparation for the In Situ MALDI MS Imaging of Proteins, Lipids, and Small Molecules at Cellular Resolution. Methods in Molecular Biology, 2010, 656, 415-431.	0.9	14
65	Imaging of Meningioma Progression by Matrix-Assisted Laser Desorption Ionization Time-of-Flight Mass Spectrometry. Analytical Chemistry, 2010, 82, 2621-2625.	6.5	40
66	Matrix Solution Fixation: A Histology-Compatible Tissue Preparation for MALDI Mass Spectrometry Imaging. Analytical Chemistry, 2007, 79, 7416-7423.	6.5	45