

# Pravat K Mandal

## List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/9574605/publications.pdf>

Version: 2024-02-01

75  
papers

2,697  
citations

201674  
27  
h-index

189892  
50  
g-index

82  
all docs

82  
docs citations

82  
times ranked

3745  
citing authors

#	ARTICLE	IF	CITATIONS
1	Brain Glutathione Levels â€“ A Novel Biomarker for Mild Cognitive Impairment and Alzheimerâ€™s Disease. <i>Biological Psychiatry</i> , 2015, 78, 702-710.	1.3	227
2	Interaction between AÎ² Peptide and Î± Synuclein: Molecular Mechanisms in Overlapping Pathology of Alzheimerâ€™s and Parkinsonâ€™s in Dementia with Lewy Body Disease. <i>Neurochemical Research</i> , 2006, 31, 1153-1162.	3.3	193
3	Brain oxidative stress: Detection and mapping of anti-oxidant marker â€“Glutathioneâ€™ in different brain regions of healthy male/female, MCI and Alzheimer patients using non-invasive magnetic resonance spectroscopy. <i>Biochemical and Biophysical Research Communications</i> , 2012, 417, 43-48.	2.1	164
4	High-Accuracy Detection of Early Parkinson's Disease through Multimodal Features and Machine Learning. <i>International Journal of Medical Informatics</i> , 2016, 90, 13-21.	3.3	146
5	The Emerging Role of Glutathione in Alzheimer's Disease. <i>Journal of Alzheimer's Disease</i> , 2014, 40, 519-529.	2.6	139
6	Anaesthetics and postoperative cognitive dysfunction: a pathological mechanism mimicking Alzheimerâ€™s disease. <i>Anaesthesia</i> , 2010, 65, 388-395.	3.8	136
7	Automatic classification and prediction models for early Parkinsonâ€™s disease diagnosis from SPECT imaging. <i>Expert Systems With Applications</i> , 2014, 41, 3333-3342.	7.6	109
8	A Comprehensive Review of Magnetoencephalography (MEG) Studies for Brain Functionality in Healthy Aging and Alzheimer's Disease (AD). <i>Frontiers in Computational Neuroscience</i> , 2018, 12, 60.	2.1	78
9	Visuospatial Perception: An Emerging Biomarker for Alzheimer's Disease. <i>Journal of Alzheimer's Disease</i> , 2012, 31, S117-S135.	2.6	75
10	Glutathione in Brain: Overview of Its Conformations, Functions, Biochemical Characteristics, Quantitation and Potential Therapeutic Role in Brain Disorders. <i>Neurochemical Research</i> , 2020, 45, 1461-1480.	3.3	75
11	A comprehensive discussion of HSQC and HMQC pulse sequences. <i>Concepts in Magnetic Resonance</i> , 2004, 20A, 1-23.	1.3	71
12	In vivo proton magnetic resonance spectroscopic signal processing for the absolute quantitation of brain metabolites. <i>European Journal of Radiology</i> , 2012, 81, e653-e664.	2.6	67
13	High-Accuracy Classification of Parkinson's Disease Through Shape Analysis and Surface Fitting in 123I-iodoflupane SPECT Imaging. <i>IEEE Journal of Biomedical and Health Informatics</i> , 2017, 21, 794-802.	6.3	66
14	Structural Brain Atlases: Design, Rationale, and Applications in Normal and Pathological Cohorts. <i>Journal of Alzheimer's Disease</i> , 2012, 31, S169-S188.	2.6	65
15	Isoflurane and desflurane at clinically relevant concentrations induce amyloid Î²-peptide oligomerization: An NMR study. <i>Biochemical and Biophysical Research Communications</i> , 2009, 379, 716-720.	2.1	62
16	Alzheimer's Disease: Soluble Oligomeric AÎ²(1-40) Peptide in Membrane Mimic Environment from Solution NMR and Circular Dichroism Studies. <i>Neurochemical Research</i> , 2004, 29, 2267-2272.	3.3	56
17	Magnetic resonance spectroscopy (MRS) and its application in Alzheimer's disease. <i>Concepts in Magnetic Resonance Part A: Bridging Education and Research</i> , 2007, 30A, 40-64.	0.5	54
18	NMR Structures of the Second Transmembrane Domain of the Human Glycine Receptor Î±1 Subunit: Model of Pore Architecture and Channel Gating. <i>Biophysical Journal</i> , 2002, 83, 252-262.	0.5	48

#	ARTICLE	IF	CITATIONS
19	Mapping of Hippocampal pH and Neurochemicals from in vivo Multi-Voxel $^{31}\text{P}$ Study in Healthy Normal Young Male/Female, Mild Cognitive Impairment, and Alzheimer's Disease. <i>Journal of Alzheimer's Disease</i> , 2012, 31, S75-S86.	2.6	48
20	Cognitive Improvement with Glutathione Supplement in Alzheimer's Disease: A Way Forward. <i>Journal of Alzheimer's Disease</i> , 2019, 68, 531-535.	2.6	45
21	Quantitation of in vivo brain glutathione conformers in cingulate cortex among age-matched control, MCI, and AD patients using MEGA-PRESS. <i>Human Brain Mapping</i> , 2020, 41, 194-217.	3.6	45
22	Intravenous Anesthetic Diazepam Does Not Induce Amyloid- $\beta^2$ Peptide Oligomerization but Diazepam Co-administered with Halothane Oligomerizes Amyloid- $\beta^2$ Peptide: An NMR Study. <i>Journal of Alzheimer's Disease</i> , 2010, 20, 127-134.	2.6	44
23	Alzheimer's Disease: NMR Studies of Asialo (GM1) and Trisialo (GT1b) Ganglioside Interactions with A $\beta$ (1-40) Peptide in a Membrane Mimic Environment. <i>Neurochemical Research</i> , 2004, 29, 447-453.	3.3	39
24	A pyrophosphate bridge links the pyruvate-containing secondary cell wall polymer of <i>Paenibacillus alvei</i> CCM 2051 to muramic acid. <i>Glycoconjugate Journal</i> , 2000, 17, 681-690.	2.7	34
25	GABA quantitation using MEGA-PRESS: Regional and hemispheric differences. <i>Journal of Magnetic Resonance Imaging</i> , 2016, 44, 1619-1623.	3.4	31
26	Alzheimer's Disease: Halothane Induces A $\beta^2$ Peptide to Oligomeric Form—Solution NMR Studies. <i>Neurochemical Research</i> , 2006, 31, 883-890.	3.3	29
27	Inhaled anesthesia and cognitive performance. <i>Drugs of Today</i> , 2009, 45, 47.	1.1	29
28	NMR Structure and Backbone Dynamics of the Extended Second Transmembrane Domain of the Human Neuronal Glycine Receptor $\text{GlyR}\alpha 1$ Subunit. <i>Biochemistry</i> , 2003, 42, 3989-3995.	2.5	27
29	NMR Investigations of Amyloid- $\beta^2$ Peptide Interactions with Propofol at Clinically Relevant Concentrations with and without Aqueous Halothane Solution. <i>Journal of Alzheimer's Disease</i> , 2010, 21, 1303-1309.	2.6	27
30	A $\beta^2$ peptide interactions with isoflurane, propofol, thiopental and combined thiopental with halothane: A NMR study. <i>Biochimica Et Biophysica Acta - Biomembranes</i> , 2008, 1778, 2633-2639.	2.6	26
31	A Multi-Center Study on Human Brain Glutathione Conformation using Magnetic Resonance Spectroscopy. <i>Journal of Alzheimer's Disease</i> , 2018, 66, 517-532.	2.6	26
32	A Comprehensive Study of Exchange Coupling in a Macrocyclic Binuclear Copper(II) Complex in the Solid and Solution States. <i>Inorganic Chemistry</i> , 1995, 34, 270-277.	4.0	24
33	Solution $^1\text{H}$ NMR Investigation of the Heme Cavity and Substrate Binding Site in Cyanide-Inhibited Horseradish Peroxidase. <i>Biochemistry</i> , 1999, 38, 1077-1086.	2.5	24
34	Geometry dependent two-dimensional heteronuclear multiplet effects in paramagnetic proteins. <i>Journal of Biomolecular NMR</i> , 2001, 20, 31-37.	2.8	24
35	Smaller molecular-sized anaesthetics oligomerize A $\beta^2$ peptide simulating Alzheimer's disease: a relevant issue. <i>European Journal of Anaesthesiology</i> , 2009, 26, 805-806.	1.7	20
36	Comparison of seven modelling algorithms for $^{13}\text{C}$ -aminobutyric acid-edited proton magnetic resonance spectroscopy. <i>NMR in Biomedicine</i> , 2022, 35, e4702.	2.8	20

#	ARTICLE	IF	CITATIONS
37	Effects of Volatile Anesthetic on Channel Structure of Gramicidin A. Biophysical Journal, 2002, 83, 1413-1420.	0.5	19
38	Clinically Relevant Concentration Determination of Inhaled Anesthetics (Halothane, Isoflurane,) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50 70	1.8	17
39	Cholinergic Central System, Alzheimer's Disease, and Anesthetics Liaison: A Vicious Circle?. Journal of Alzheimer's Disease, 2010, 22, S35-S41.	2.6	17
40	Glutathione Conformations and Its Implications for in vivo Magnetic Resonance Spectroscopy. Journal of Alzheimer's Disease, 2017, 59, 537-541.	2.6	16
41	BRAHMA: Population specific T1, T2, and FLAIR weighted brain templates and their impact in structural and functional imaging studies. Magnetic Resonance Imaging, 2020, 70, 5-21.	1.8	16
42	The GABAâ€œWorking Memory Relationship in Alzheimerâ€™s Disease. Journal of Alzheimer's Disease Reports, 2017, 1, 43-45.	2.2	15
43	BHARAT: An Integrated Big Data Analytic Model for Early Diagnostic Biomarker of Alzheimer's Disease. Frontiers in Neurology, 2019, 10, 9.	2.4	14
44	KALPANA: Advanced Spectroscopic Signal Processing Platform for Improved Accuracy to Aid in Early Diagnosis of Brain Disorders in Clinical Setting. Journal of Alzheimer's Disease, 2020, 75, 397-402.	2.6	13
45	Cross-Correlation Effects Involving Curie Spin Relaxation in Methyl Groups. Journal of Magnetic Resonance, 2002, 155, 29-38.	2.1	12
46	Hippocampal Glutathione Depletion and pH Increment in Alzheimerâ€™s Disease: An in vivo MRS Study. Journal of Alzheimer's Disease, 2021, 84, 1139-1152.	2.6	12
47	Brain Metabolic, Structural, and Behavioral Pattern Learning for Early Predictive Diagnosis of Alzheimerâ€™s Disease. Journal of Alzheimer's Disease, 2018, 63, 935-939.	2.6	10
48	Comparative contribution of magnetoencephalography (MEG) and single-photon emission computed tomography (SPECT) in pre-operative localization for epilepsy surgery: A prospective blinded study. Seizure: the Journal of the British Epilepsy Association, 2021, 86, 181-188.	2.0	10
49	Comprehensive Nuclear Magnetic Resonance Studies on Interactions of Amyloid-Î² with Different Molecular Sized Anesthetics. Journal of Alzheimer's Disease, 2010, 22, S27-S34.	2.6	9
50	Anesthetics and Alzheimer's Disease: Background and Research. Journal of Alzheimer's Disease, 2010, 22, S1-S3.	2.6	9
51	A new experimental approach and signal processing scheme for the detection and quantitation of 31P brain neurochemicals from in vivo MRS studies using dual tuned (1H/31P) head coil. Biochemical and Biophysical Research Communications, 2011, 412, 302-306.	2.1	9
52	Predictive Biomarkers for Alzheimer's Disease Using State-of-the-Art Brain Imaging Techniques. Journal of Alzheimer's Disease, 2012, 31, S1-S3.	2.6	9
53	AD Hypotheses and Suggested Clinical Trials. ACS Chemical Neuroscience, 2021, 12, 3968-3971.	3.5	9
54	Interactions of AÎ²(1-40) with Glycerophosphocholine and Intact Erythrocyte Membranes: Fluorescence and Circular Dichroism Studies. Neurochemical Research, 2004, 29, 2273-2279.	3.3	8

#	ARTICLE	IF	CITATIONS
55	Shape features as biomarkers in early Parkinson's disease. , 2013, , .		8
56	Apps for Dementia Screening: A Cost-effective and Portable Solution. Journal of Alzheimer's Disease, 2015, 47, 869-872.	2.6	8
57	Cohort Profile: The LoCARP—a population-based prospective cohort study in middle-aged and older adults in India. International Journal of Epidemiology, 2022, 51, 29-30m.	1.9	7
58	In Vivo <sup>13</sup> C Magnetic Resonance Spectroscopy for Assessing Brain Biochemistry in Health and Disease. Neurochemical Research, 2022, 47, 1183-1201.	3.3	7
59	Editorial. Journal of Alzheimer's Disease, 2010, 22, S135-S136.	2.6	5
60	BOLDSync: A MATLAB-based toolbox for synchronized stimulus presentation in functional MRI. Journal of Neuroscience Methods, 2014, 223, 123-132.	2.5	5
61	Brain Imaging in COVID-19. ACS Chemical Neuroscience, 2021, 12, 2953-2955.	3.5	5
62	Effect of the fifth coordination site on the spin states of bis(benzoylacetylacetonato)bispyridinedicopper(II) complex. Chemical Physics Letters, 1993, 210, 463-470.	2.6	4
63	Anesthetics and its Impact on the Brain and Alzheimer's Disease. Journal of Alzheimer's Disease, 2014, 39, 223-225.	2.6	4
64	Stimulus-dependent modulation of working memory for identity monitoring: A functional MRI study. Brain and Cognition, 2016, 102, 55-64.	1.8	4
65	Brain Stress Mapping in COVID-19 Survivors Using MR Spectroscopy: New Avenue of Mental Health Status Monitoring\$. Journal of Alzheimer's Disease, 2021, 83, 523-530.	2.6	4
66	Anesthesia Issues in Central Nervous System Disorders. Current Aging Science, 2016, 9, 116-143.	1.2	4
67	SWADESH: A Comprehensive Platform for Multimodal Data and Analytics for Advanced Research in Alzheimer's Disease and Other Brain Disorders. Journal of Alzheimer's Disease, 2021, , 1-5.	2.6	4
68	Complete NMR Spectroscopic Assignment of a Neuronal Transduction Protein. Monatshefte für Chemie, 2002, 133, 205-217.	1.8	3
69	Interplay Between Hippocampal Glutathione Depletion and pH Increment in Alzheimer's Disease. Journal of Alzheimer's Disease, 2022, 88, 1-6.	2.6	3
70	Editorial: Predictive Imagable Biomarkers for Neurodegenerative and Neurodevelopmental Diseases. Frontiers in Neurology, 2019, 10, 583.	2.4	2
71	Comprehensive Account of Sodium Imaging and Spectroscopy for Brain Research. ACS Chemical Neuroscience, 2022, 13, 859-875.	3.5	2
72	ANSH: Multimodal Neuroimaging Database Including MR Spectroscopic Data From Each Continent to Advance Alzheimer's Disease Research. Frontiers in Neuroinformatics, 2020, 14, 571039.	2.5	1

#	ARTICLE	IF	CITATIONS
73	In reply to: Can a call for prudence be simply alarmist?. European Journal of Anaesthesiology, 2010, 27, 309-311.	1.7	0
74	Detection of Anti-Oxidant Marker in Normal Subjects and Patients with Neurodegenerative Disorders using in Vivo Magnetic Resonance Spectroscopy. Biophysical Journal, 2010, 98, 746a.	0.5	0
75	PRATEEK: Integration of Multimodal Neuroimaging Data to Facilitate Advanced Brain Research. Journal of Alzheimer's Disease, 2021, 83, 305-317.	2.6	0