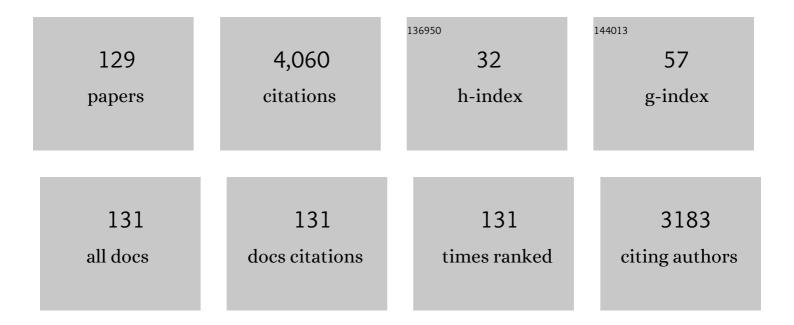
Carles Arus

List of Publications by Year in descending order

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CADIES ADUS

#	Article	IF	CITATIONS
1	Development of a decision support system for diagnosis and grading of brain tumours usingin vivo magnetic resonance single voxel spectra. NMR in Biomedicine, 2006, 19, 411-434.	2.8	216
2	Automated classification of short echo time in in vivo ¹ H brain tumor spectra: A multicenter study. Magnetic Resonance in Medicine, 2003, 49, 29-36.	3.0	169
3	Classification of brain tumours using short echo time 1H MR spectra. Journal of Magnetic Resonance, 2004, 170, 164-175.	2.1	166
4	Brain tumor classification based on long echo proton MRS signals. Artificial Intelligence in Medicine, 2004, 31, 73-89.	6.5	161
5	Brain tumor classification by proton MR spectroscopy: comparison of diagnostic accuracy at short and long TE. American Journal of Neuroradiology, 2004, 25, 1696-704.	2.4	135
6	Proton magnetic resonance spectroscopy (1H MRS) of human brain tumours: assessment of differences between tumour types and its applicability in brain tumour categorization. European Radiology, 2003, 13, 582-591.	4.5	134
7	Comparison between neuroimaging classifications and histopathological diagnoses using an international multicenter brain tumor magnetic resonance imaging database. Journal of Neurosurgery, 2006, 105, 6-14.	1.6	126
8	Multiproject–multicenter evaluation of automatic brain tumor classification by magnetic resonance spectroscopy. Magnetic Resonance Materials in Physics, Biology, and Medicine, 2009, 22, 5-18.	2.0	126
9	Towards a method for automated classification of1H MRS spectra from brain tumours. NMR in Biomedicine, 1998, 11, 177-191.	2.8	109
10	Adult Primitive Neuroectodermal Tumor: Proton MR Spectroscopic Findings with Possible Application for Differential Diagnosis. Radiology, 2002, 225, 556-566.	7.3	105
11	Proton MR Spectroscopy Improves Discrimination between Tumor and Pseudotumoral Lesion in Solid Brain Masses. American Journal of Neuroradiology, 2009, 30, 544-551.	2.4	92
12	Magnetic resonance spectroscopy of brain hemangiopericytomas: high myoinositol concentrations and discrimination from meningiomas. Journal of Neurosurgery, 2001, 94, 55-60.	1.6	86
13	Taurine Detection by Proton Magnetic Resonance Spectroscopy in Medulloblastoma: Contribution to Noninvasive Differential Diagnosis with Cerebellar Astrocytoma. Neurosurgery, 2004, 55, 824-829.	1.1	78
14	A Multi-Centre, Web-Accessible and Quality Control-Checked Database of in vivo MR Spectra of Brain Tumour Patients. Magnetic Resonance Materials in Physics, Biology, and Medicine, 2006, 19, 22-33.	2.0	78
15	HealthAgents: distributed multi-agent brain tumor diagnosis andÂprognosis. Applied Intelligence, 2009, 30, 191-202.	5.3	78
16	Pattern recognition analysis of1H NMR spectra from perchloric acid extracts of human brain tumor biopsies. Magnetic Resonance in Medicine, 1998, 39, 869-877.	3.0	70
17	1H NMR spectroscopy of colon tumors and normal mucosal biopsies; elevated taurine levels and reduced polyethyleneglycol absorption in tumors may have diagnostic significance. NMR in Biomedicine, 1993, 6, 111-118.	2.8	66
18	Quantitative and Qualitative Characterization of1H NMR Spectra of Colon Tumors, Normal Mucosa and their Perchloric Acid Extracts: Decreased Levels of Myo-inositol in Tumours can be Detected in Intact Biopsies. , 1996, 9, 33-45.		66

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19	1 H NMR of intact muscle at 11 T. FEBS Letters, 1984, 165, 231-237.	2.8	56
20	A possible cellular explanation for the NMR-visible mobile lipid (ML) changes in cultured C6 glioma cells with growth. Biochimica Et Biophysica Acta - Molecular and Cell Biology of Lipids, 2007, 1771, 31-44.	2.4	55
21	Prospective diagnostic performance evaluation of singleâ€voxel ¹ H MRS for typing and grading of brain tumours. NMR in Biomedicine, 2012, 25, 661-673.	2.8	55
22	Diagnosis of brain abscess by magnetic resonance spectroscopy. Journal of Neurosurgery, 1997, 86, 708-713.	1.6	50
23	Dual <i>T</i> ₁ / <i>T</i> ₂ Nanoscale Coordination Polymers as Novel Contrast Agents for MRI: A Preclinical Study for Brain Tumor. ACS Applied Materials & Interfaces, 2018, 10, 38819-38832.	8.0	50
24	Genetic programming for classification and feature selection: analysis of1H nuclear magnetic resonance spectra from human brain tumour biopsies. , 1998, 11, 217-224.		49
25	The effect of combining two echo times in automatic brain tumor classification by MRS. NMR in Biomedicine, 2008, 21, 1112-1125.	2.8	44
26	MRS quality assessment in a multicentre study on MRS-based classification of brain tumours. NMR in Biomedicine, 2008, 21, 148-158.	2.8	43
27	In vivo proton magnetic resonance spectroscopy of intraventricular tumours of the brain. European Radiology, 2009, 19, 2049-2059.	4.5	43
28	The INTERPRET Decision-Support System version 3.0 for evaluation of Magnetic Resonance Spectroscopy data from human brain tumours and other abnormal brain masses. BMC Bioinformatics, 2010, 11, 581.	2.6	43
29	The Reaction of Bovine Pancreatic Ribonuclease A with 6-Chloropurineriboside 5'-Monophosphate. Evidence on the Existence of a Phosphate-Binding Sub-site. FEBS Journal, 1980, 105, 571-579.	0.2	42
30	1H MRS markers of tumour growth in intrasplenic tumours and liver metastasis induced by injection of HT-29 cells in nude mice spleen. , 1998, 11, 93-106.		41
31	Application of high-field 1H-NMR spectroscopy for the study of perifused amphibian and excised mammalian muscles. Biochimica Et Biophysica Acta - Molecular Cell Research, 1986, 886, 411-424.	4.1	40
32	Automated quality control protocol for MR spectra of brain tumors. Magnetic Resonance in Medicine, 2008, 59, 1274-1281.	3.0	39
33	Perturbation of mouse glioma MRS pattern by induced acute hyperglycemia. NMR in Biomedicine, 2008, 21, 251-264.	2.8	39
34	Convex Non-Negative Matrix Factorization for Brain Tumor Delimitation from MRSI Data. PLoS ONE, 2012, 7, e47824.	2.5	39
35	Feature and model selection with discriminatory visualization for diagnostic classification of brain tumors. Neurocomputing, 2010, 73, 622-632.	5.9	38
36	Proton MR Spectroscopy Provides Relevant Prognostic Information in High-Grade Astrocytomas. American Journal of Neuroradiology, 2011, 32, 74-80.	2.4	33

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37	DCE@urLAB: a dynamic contrast-enhanced MRI pharmacokinetic analysis tool for preclinical data. BMC Bioinformatics, 2013, 14, 316.	2.6	33
38	SpectraClassifier 1.0: a user friendly, automated MRS-based classifier-development system. BMC Bioinformatics, 2010, 11, 106.	2.6	31
39	1 H-MRSI pattern perturbation in a mouse glioma: the effects of acute hyperglycemia and moderate hypothermia. NMR in Biomedicine, 2010, 23, 23-33.	2.8	31
40	1H-NMR studies on the binding subsites of bovine pancreatic ribonuclease A. Biochimica Et Biophysica Acta - Biomembranes, 1981, 660, 117-127.	2.6	30
41	Chemical and computer graphics studies on the topography of the ribonuclease A active site cleft. A model of the enzymepentanucleotide substrate complex. Protein Engineering, Design and Selection, 1989, 2, 417-429.	2.1	30
42	Targeting Protein Kinase CK2: Evaluating CX-4945 Potential for GL261 Glioblastoma Therapy in Immunocompetent Mice. Pharmaceuticals, 2017, 10, 24.	3.8	30
43	Bagging Linear Sparse Bayesian Learning Models for Variable Selection in Cancer Diagnosis. IEEE Transactions on Information Technology in Biomedicine, 2007, 11, 338-347.	3.2	28
44	Non-negative matrix factorisation methods for the spectral decomposition of MRS data from human brain tumours. BMC Bioinformatics, 2012, 13, 38.	2.6	28
45	Robust discrimination of glioblastomas from metastatic brain tumors on the basis of singleâ€voxel ¹ H MRS. NMR in Biomedicine, 2012, 25, 819-828.	2.8	27
46	Evidence on the existence of a purine ligand induced conformational change in the active site of bovine pancreatic ribonuclease A studied by proton nuclear magnetic resonance spectroscopy. Biochemistry, 1982, 21, 4290-4297.	2.5	26
47	In vivo quantification of response to treatment in patients with multiple myeloma by 1H magnetic resonance spectroscopy of bone marrow. Magnetic Resonance Materials in Physics, Biology, and Medicine, 2007, 20, 93-101.	2.0	25
48	A Study of Imidazole-Based Nuclear Magnetic Resonance Probes of Cellular pH. Analytical Biochemistry, 1998, 261, 64-72.	2.4	24
49	In vitro characterization of an Fe8 cluster as potential MRI contrast agent. NMR in Biomedicine, 2005, 18, 300-307.	2.8	24
50	Outlier exploration and diagnostic classification of a multi-centre 1H-MRS brain tumour database. Neurocomputing, 2009, 72, 3085-3097.	5.9	24
51	Metronomic treatment in immunocompetent preclinical GL261 glioblastoma: effects of cyclophosphamide and temozolomide. NMR in Biomedicine, 2017, 30, e3748.	2.8	23
52	Mobile lipid production after confluence and pH stress in perfused C6 cells. NMR in Biomedicine, 2001, 14, 33-40.	2.8	22
53	Efficient γ-amino-proline-derived cell penetrating peptide–superparamagnetic iron oxide nanoparticle conjugates via aniline-catalyzed oxime chemistry as bimodal imaging nanoagents. Chemical Communications, 2012, 48, 5322.	4.1	21
54	Molecular imaging coupled to pattern recognition distinguishes response to temozolomide in preclinical glioblastoma. NMR in Biomedicine, 2014, 27, 1333-1345.	2.8	21

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55	Assignment of the 2.03 ppm resonance in in vivo 1H MRS of human brain tumour cystic fluid: contribution of macromolecules. Magnetic Resonance Materials in Physics, Biology, and Medicine, 2004, 17, 36-46.	2.0	20
56	Preliminary characterization of an experimental breast cancer cells brain metastasis mouse model by MRI/MRS. Magnetic Resonance Materials in Physics, Biology, and Medicine, 2008, 21, 237-249.	2.0	19
57	Classification of brain tumours from MR spectra: the INTERPRET collaboration and its outcomes. NMR in Biomedicine, 2015, 28, 1772-1787.	2.8	19
58	MRSI-based molecular imaging of therapy response to temozolomide in preclinical glioblastoma using source analysis. NMR in Biomedicine, 2016, 29, 732-743.	2.8	19
59	Metabolomics of Therapy Response in Preclinical Glioblastoma: A Multi-Slice MRSI-Based Volumetric Analysis for Noninvasive Assessment of Temozolomide Treatment. Metabolites, 2017, 7, 20.	2.9	19
60	Measurement by nuclear magnetic resonance diffusion of the dimensions of the mobile lipid compartment in C6 cells. Cancer Research, 2002, 62, 5672-7.	0.9	19
61	Compatibility between 3TÂ1H SV-MRS data and automatic brain tumour diagnosis support systems based on databases of 1.5T 1H SV-MRS spectra. Magnetic Resonance Materials in Physics, Biology, and Medicine, 2011, 24, 35-42.	2.0	18
62	A Novel Semi-Supervised Methodology for Extracting Tumor Type-Specific MRS Sources in Human Brain Data. PLoS ONE, 2013, 8, e83773.	2.5	18
63	Ex vivo assessment of polyol coated-iron oxide nanoparticles for MRI diagnosis applications: toxicological and MRI contrast enhancement effects. Journal of Nanoparticle Research, 2014, 16, 1.	1.9	18
64	Quality of clinical brain tumor MR spectra judged by humans and machine learning tools. Magnetic Resonance in Medicine, 2018, 79, 2500-2510.	3.0	18
65	Development and characterization of an ergometer to study the bioenergetics of the human quadriceps muscle by31P NMR spectroscopy inside a standard MR scanner. Magnetic Resonance in Medicine, 1993, 29, 575-581.	3.0	17
66	Automated Brain Tumor Biopsy Prediction Using Single-labeling cDNA Microarrays-based Gene Expression Profiling. Diagnostic Molecular Pathology, 2009, 18, 206-218.	2.1	17
67	Strategies for annotation and curation of translational databases: the eTUMOUR project. Database: the Journal of Biological Databases and Curation, 2012, 2012, bas035-bas035.	3.0	17
68	Improving the classification of brain tumors in mice with perturbation enhanced (PE)-MRSI. Integrative Biology (United Kingdom), 2012, 4, 183-191.	1.3	17
69	Assessment of a 1H high-resolution magic angle spinning NMR spectroscopy procedure for free sugars quantification in intact plant tissue. Planta, 2013, 238, 397-413.	3.2	17
70	<i>In Vivo</i> and <i>Ex Vivo</i> Magnetic Resonance Spectroscopy of the Infarct and the Subventricular Zone in Experimental Stroke. Journal of Cerebral Blood Flow and Metabolism, 2015, 35, 828-834.	4.3	17
71	Cancer metabolism in a snapshot: MRS(I). NMR in Biomedicine, 2019, 32, e4054.	2.8	17
72	On the Design of a Web-Based Decision Support System for Brain Tumour Diagnosis Using Distributed		16

Agents. , 2006, , .

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73	1H-MRS is useful to reinforce the suspicion of primary central nervous system lymphoma prior to surgery. European Radiology, 2014, 24, 2895-2905.	4.5	16
74	A new ex vivo method to evaluate the performance of candidate MRI contrast agents: a proof-of-concept study. Journal of Nanobiotechnology, 2014, 12, 12.	9.1	16
75	Robust methodology for the discrimination of brain tumours from in vivo magnetic resonance spectra. IET Science, Measurement and Technology, 2000, 147, 309-314.	0.7	15
76	Analysis of the changes in the1H NMR spectral pattern of perchloric acid extracts of C6 cells with growth. NMR in Biomedicine, 2006, 19, 223-230.	2.8	15
77	An iron-based T 1 contrast agent made of iron-phosphate complexes: In vitro and in vivo studies. Magnetic Resonance Materials in Physics, Biology, and Medicine, 2007, 20, 27-37.	2.0	15
78	Antiâ€ŧumour immune response in GL261 glioblastoma generated by Temozolomide Immuneâ€Enhancing Metronomic Schedule monitored with MRSIâ€based nosological images. NMR in Biomedicine, 2020, 33, e4229.	2.8	15
79	Quantification and classification of high-resolution magic angle spinning data for brain tumor diagnosis. Annual International Conference of the IEEE Engineering in Medicine and Biology Society, 2007, 2007, 5407-10.	0.5	14
80	Incremental Gaussian Discriminant Analysis based on Graybill and Deal weighted combination of estimators for brain tumour diagnosis. Journal of Biomedical Informatics, 2011, 44, 677-687.	4.3	14
81	Anti-PD-1 Immunotherapy in Preclinical GL261 Glioblastoma: Influence of Therapeutic Parameters and Non-Invasive Response Biomarker Assessment with MRSI-Based Approaches. International Journal of Molecular Sciences, 2020, 21, 8775.	4.1	14
82	The separation of phosphocreatine from creatine, and pH determination in frog muscle by natural abundance13C-NMR. Biochimica Et Biophysica Acta - Molecular Cell Research, 1985, 844, 91-93.	4.1	13
83	Magnetic resonance spectroscopy in posterior fossa tumours: the tumour spectroscopic signature may improve discrimination in adults among haemangioblastoma, ependymal tumours, medulloblastoma, and metastasis. European Radiology, 2019, 29, 2792-2801.	4.5	13
84	N-acetylaspartate as an intrinsic thermometer for 1H NMR of brain slices. Journal of Magnetic Resonance, 1985, 63, 376-379.	0.5	12
85	Development of a Predictor for Human Brain Tumors Based on Gene Expression Values Obtained from Two Types of Microarray Technologies. OMICS A Journal of Integrative Biology, 2010, 14, 157-164.	2.0	12
86	Two-dimensional spectra of intact tissue: Homonuclear Hartmann-Hahn spectroscopy provides increased sensitivity and information content as compared to COSY. Magnetic Resonance in Medicine, 1990, 15, 142-151.	3.0	11
87	1H NMR of intact tissues at 11.1 T. Journal of Magnetic Resonance, 1984, 57, 519-525.	0.5	10
88	Multicentre evaluation of the INTERPRET decision support system 2.0 for brain tumour classification. NMR in Biomedicine, 2014, 27, 1009-1018.	2.8	10
89	Short-term temperature effect on the HRMAS spectra of human brain tumor biopsies and their pattern recognition analysis. Magnetic Resonance Materials in Physics, Biology, and Medicine, 2010, 23, 203-215.	2.0	9
90	Minimization of spectral pattern changes during HRMAS experiments at 37 degrees celsius by prior focused microwave irradiation. Magnetic Resonance Materials in Physics, Biology, and Medicine, 2012, 25, 401-410.	2.0	9

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91	From raw data to data-analysis for magnetic resonance spectroscopy – the missing link: jMRUI2XML. BMC Bioinformatics, 2015, 16, 378.	2.6	9
92	Characterization of the canine rostral ventricularâ€subventricular zone: Morphological, immunohistochemical, ultrastructural, and neurosphere assay studies. Journal of Comparative Neurology, 2018, 526, 721-741.	1.6	9
93	13C-labelling studies indicate compartmentalized synthesis of triacylglycerols in C6 rat glioma cells. Biochimica Et Biophysica Acta - Molecular and Cell Biology of Lipids, 2010, 1801, 693-701.	2.4	8
94	Development of robust discriminant equations for assessing subtypes of glioblastoma biopsies. British Journal of Cancer, 2012, 106, 1816-1825.	6.4	8
95	Influence of the spinning rate in the HR-MAS pattern of mobile lipids in C6 glioma cells and in artificial oil bodies. Magnetic Resonance Materials in Physics, Biology, and Medicine, 2012, 25, 487-496.	2.0	8
96	Dimethyl sulfoxide (DMSO) as a potential contrast agent for brain tumors. NMR in Biomedicine, 2013, 26, 173-184.	2.8	8
97	A Simple Approach to the Design of a Shielded Gradient Probe for High-Resolutionin VivoSpectroscopy. Journal of Magnetic Resonance Series B, 1995, 109, 146-152.	1.6	7
98	Unraveling response to temozolomide in preclinical GL261 glioblastoma with MRI/MRSI using radiomics and signal source extraction. Scientific Reports, 2020, 10, 19699.	3.3	7
99	Successful Partnerships: Exploring the Potential of Immunogenic Signals Triggered by TMZ, CX-4945, and Combined Treatment in GL261 Glioblastoma Cells. International Journal of Molecular Sciences, 2021, 22, 3453.	4.1	7
100	Immune System-Related Changes in Preclinical GL261 Glioblastoma under TMZ Treatment: Explaining MRSI-Based Nosological Imaging Findings with RT-PCR Analyses. Cancers, 2021, 13, 2663.	3.7	7
101	Improving Ribosomal RNA Integrity in Surgically Resected Human Brain Tumor Biopsies. Biopreservation and Biobanking, 2016, 14, 156-164.	1.0	6
102	Extraction of artefactual MRS patterns from a large database using nonâ€negative matrix factorization. NMR in Biomedicine, 2022, 35, e4193.	2.8	6
103	Up-Regulation of the Alpha Prime Subunit of Protein Kinase CK2 as a Marker of Fast Proliferation in GL261 Cultured Cells. Pathology and Oncology Research, 2019, 25, 1659-1663.	1.9	6
104	Development of a transplantable glioma tumour model from genetically engineered mice: MRI/MRS/MRSI characterisation. Journal of Neuro-Oncology, 2016, 129, 67-76.	2.9	5
105	Protein Kinase CK2 Content in GL261 Mouse Glioblastoma. Pathology and Oncology Research, 2016, 22, 633-637.	1.9	5
106	Brain metabolic pattern analysis using a magnetic resonance spectra classification software in experimental stroke. BMC Neuroscience, 2017, 18, 13.	1.9	5
107	Rule-Based Assistance to Brain Tumour Diagnosis Using LR-FIR. Lecture Notes in Computer Science, 2008, , 173-180.	1.3	5
108	Exploratory Characterization of Outliers in a Multi-centre 1H-MRS Brain Tumour Dataset. Lecture Notes in Computer Science, 2008, , 189-196.	1.3	5

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109	Spectral decomposition methods for the analysis of MRS information from human brain tumors. , 2011, , .		4
110	Automated Quality Control for Proton Magnetic Resonance Spectroscopy Data Using Convex Non-negative Matrix Factorization. Lecture Notes in Computer Science, 2016, , 719-727.	1.3	4
111	Classification, Dimensionality Reduction, and Maximally Discriminatory Visualization of a Multicentre 1H-MRS Database of Brain Tumors. , 2008, , .		3
112	In Vivo Magnetic Resonance Spectroscopic Imaging and Ex Vivo Quantitative Neuropathology by High Resolution Magic Angle Spinning Proton Magnetic Resonance Spectroscopy. Neuromethods, 2012, , 329-365.	0.3	3
113	Genomics and Metabolomics Research for Brain Tumour Diagnosis Based on Machine Learning. Lecture Notes in Computer Science, 2007, , 1012-1019.	1.3	3
114	EFECTO DE LA SUPLEMENTACIÓN ORAL CON MONOHIDRATO DE CREATINA EN EL METABOLISMO ENERGÉRTICO MUSCULAR Y EN LA COMPOSICIÓN CORPORAL DE SUJETOS QUE PRACTICAN ACTIVIDAD FÃ S ICA. Revista Chilena De Nutricion, 2003, 30, .	0.3	3
115	On the Implementation of HealthAgents: Agent-Based Brain Tumour Diagnosis. , 2007, , 5-24.		3
116	Preparative purification and group separation of mono- and dinucleotides by combining charge-transfer and affinity chromatography. Journal of Chromatography A, 1982, 237, 500-505.	3.7	2
117	A perifusion loop-gap resonator NMR probe for aerobic cell suspensions. Magnetic Resonance in Medicine, 1993, 29, 563-566.	3.0	2
118	Semi-supervised source extraction methodology for the nosological imaging of glioblastoma response to therapy. , 2014, , .		2
119	r1andr2Relaxivities of Dendrons Based on a OEG-DTPA Architecture: Effect of Gd3+Placement and Dendron Functionalization. Journal of Nanotechnology, 2015, 2015, 1-8.	3.4	2
120	Robustness of Equations that Define Molecular Subtypes of Clioblastoma Tumors Based on Five Transcripts Measured by RT-PCR. OMICS A Journal of Integrative Biology, 2015, 19, 41-51.	2.0	2
121	Establishing Imaging Biomarkers of Host Immune System Efficacy during Glioblastoma Therapy Response: Challenges, Obstacles and Future Perspectives. Metabolites, 2022, 12, 243.	2.9	2
122	A Versatile Perifusion System for the NMR Spectroscopy of Bovine Retina. Assignment of Resonances and Effect of Ischemia. Experimental Eye Research, 1993, 57, 669-678.	2.6	1
123	MRS in clinical practice. Application to brain tumour MRS. , 2008, , .		1
124	Automatic relevance source determination in human brain tumors using Bayesian NMF. , 2014, , .		1
125	Diagnosis and Staging of Brain Tumours: Magnetic Resonance Single Voxel Spectra. , 2011, , 227-243.		1
126	Improving the classification of brain tumors in mice with perturbation enhanced (PE)-MRSI. BMC Proceedings, 2010, 4, .	1.6	0

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127	Brain Tumor Pathological Area Delimitation through Non-negative Matrix Factorization. , 2011, , .		0
128	Usefulness of Proton Magnetic Resonance Spectroscopy in the Clinical Management of Brain Tumors. , 2014, , 141-161.		0
129	Effect of acute hyperglycemia on moderately hypothermic GL261 mouse glioma monitored by T1-weighted DCE MRI. Magnetic Resonance Materials in Physics, Biology, and Medicine, 2015, 28, 119-126.	2.0	0