Nigel P Davies

List of Publications by Year
in descending order

58 papers	1,502 citations	304743 22 h-index	330143 37 g-index
58 all docs	58 docs citations	58 times ranked	2440 citing authors

#	Article	IF	Citations
1	Multiâ€centre reproducibility of diffusion MRI parameters for clinical sequences in the brain. NMR in Biomedicine, 2015, 28, 468-485.	2.8	178
2	Identification and characterisation of childhood cerebellar tumours by in vivo proton MRS. NMR in Biomedicine, 2008, 21, 908-918.	2.8	106
3	Utility and cost evaluation of multiparametric magnetic resonance imaging for the assessment of nonâ€alcoholic fatty liver disease. Alimentary Pharmacology and Therapeutics, 2018, 47, 631-644.	3.7	77
4	Selective arterial spin labeling (SASL): Perfusion territory mapping of selected feeding arteries tagged using twoâ€dimensional radiofrequency pulses. Magnetic Resonance in Medicine, 2003, 49, 1133-1142.	3.0	74
5	Accurate classification of childhood brain tumours by in vivo 1H MRS â€“ A multi-centre study. European Journal of Cancer, 2013, 49, 658-667.	2.8	70
6	Non-invasive detection of glycine as a biomarker of malignancy in childhood brain tumours using in-vivo ¹ H MRS at 1.5 Tesla confirmed by ex-vivo high-resolution magic-angle spinning NMR. NMR in Biomedicine, 2010, 23, 80-87.	2.8	63
7	Multiparametric magnetic resonance imaging for quantitation of liver disease: a two-centre cross-sectional observational study. Scientific Reports, 2018, 8, 9189.	3.3	56
8	High resolution magic angle spinning 1H NMR of childhood brain and nervous system tumours. Molecular Cancer, 2009, 8, 6.	19.2	55
9	Dual-5Î±-Reductase Inhibition Promotes Hepatic Lipid Accumulation in Man. Journal of Clinical Endocrinology and Metabolism, 2016, 101, 103-113.	3.6	50
10	A quantitative comparison of metabolite signals as detected by in vivo MRS with ex vivo¹H HRâ€MAS for childhood brain tumours. NMR in Biomedicine, 2009, 22, 213-219.	2.8	48
11	Texture analysis ofT₁- andT₂-weighted MR images and use of probabilistic neural network to discriminate posterior fossa tumours in children. NMR in Biomedicine, 2014, 27, 632-639.	2.8	48
12	Multiparametric MRI: practical approach and pictorial review of a useful tool in the evaluation of brain tumours and tumour-like lesions. Insights Into Imaging, 2020, 11, 84.	3.4	42
13	Magnetic resonance spectroscopy in the assessment of pilocytic astrocytomas. European Journal of Cancer, 2008, 44, 2640-2647.	2.8	40
14	The use of short-echo-time 1H MRS for childhood cerebellar tumours prior to histopathological diagnosis. Pediatric Radiology, 2007, 37, 1101-1109.	2.0	36
15	Magnetic resonance spectroscopy suggests key differences in the metastatic behaviour of medulloblastoma. European Journal of Cancer, 2007, 43, 1037-1044.	2.8	35
16	MR spectroscopy-based brain metabolite profiling in propionic acidaemia: metabolic changes in the basal ganglia during acute decompensation and effect of liver transplantation. Orphanet Journal of Rare Diseases, 2011, 6, 19.	2.7	34
17	Multiclass imbalance learning: Improving classification of pediatric brain tumors from magnetic resonance spectroscopy. Magnetic Resonance in Medicine, 2017, 77, 2114-2124.	3.0	33
18	Short echo time 1 H magnetic resonance spectroscopy of childhood brain tumours. Child's Nervous System, 2007, 23, 163-169.	1.1	30

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19	Clinical protocols for 31P MRS of the brain and their use in evaluating optic pathway gliomas in children. European Journal of Radiology, 2014, 83, e106-e112.	2.6	30
20	Machine learning-based radiomic evaluation of treatment response prediction in glioblastoma. Clinical Radiology, 2021, 76, 628.e17-628.e27.	1.1	30
21	Application of pattern recognition techniques for classification of pediatric brain tumors by in vivo 3T ¹Hâ€MR spectroscopyâ€"A multiâ€center study. Magnetic Resonance in Medicine, 2018, 79, 2359-2366.	3.0	29
22	1H magnetic resonance spectroscopy in the diagnosis of paediatric low grade brain tumours. European Journal of Radiology, 2013, 82, e295-e301.	2.6	26
23	Classification of paediatric brain tumours by diffusion weighted imaging and machine learning. Scientific Reports, 2021, 11, 2987.	3.3	25
24	Tissue metabolite profiles for the characterisation of paediatric cerebellar tumours. Scientific Reports, 2018, 8, 11992.	3.3	24
25	The value of magnetic resonance spectroscopy in tumour imaging. Archives of Disease in Childhood, 2008, 93, 725-727.	1.9	21
26	Diagnosing relapse in children's brain tumors using metabolite profiles. Neuro-Oncology, 2014, 16, 156-164.	1.2	20
27	Short echo time single voxel 1H magnetic resonance spectroscopy in the diagnosis and characterisation of pineal tumours in children. Pediatric Blood and Cancer, 2011, 57, 972-977.	1.5	17
28	Calibration of gradient propagation delays for accurate two-dimensional radiofrequency pulses. Magnetic Resonance in Medicine, 2005, 53, 231-236.	3.0	16
29	A comparative study of feature extraction and blind source separation of independent component analysis (ICA) on childhood brain tumour ¹H magnetic resonance spectra. NMR in Biomedicine, 2009, 22, 809-818.	2.8	16
30	MRS water resonance frequency in childhood brain tumours: a novel potential biomarker of temperature and tumour environment. NMR in Biomedicine, 2014, 27, 1222-1229.	2.8	16
31	Hepatitis C virus infection is associated with hepatic and adipose tissue insulin resistance that improves after viral cure. Clinical Endocrinology, 2019, 90, 440-448.	2.4	16
32	A comparison between simulated and experimental basis sets for assessing shortâ€TE in vivo¹H MRS data at 1.5 T. NMR in Biomedicine, 2010, 23, 1117-1126.	2.8	14
33	Quantitative in vivo brain magnetic resonance spectroscopic monitoring of neurological involvement in mucopolysaccharidosis type II (Hunter Syndrome). Journal of Inherited Metabolic Disease, 2010, 33, 395-399.	3.6	14
34	Classification of singleâ€voxel ¹H spectra of childhood cerebellar tumors using lcmodel and whole tissue representations. Magnetic Resonance in Medicine, 2013, 70, 1-6.	3.0	14
35	Evaluation of Response to Stereotactic Radiosurgery in Brain Metastases Using Multiparametric Magnetic Resonance Imaging and a Review of the Literature. Clinical Oncology, 2019, 31, 41-49.	1.4	13
36	Magnetic Resonance Spectroscopy in the Diagnostic Evaluation of Brainstem Lesions in Alexander Disease. Journal of Child Neurology, 2011, 26, 356-360.	1.4	10

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37	MRS thermometry calibration at 3â€‰T: effects of protein, ionic concentration and magnetic field strength. NMR in Biomedicine, 2015, 28, 792-800.	2.8	10
38	Diagnostic accuracy and added value of qualitative radiological review of 1H-magnetic resonance spectroscopy in evaluation of childhood brain tumors. Neuro-Oncology Practice, 2019, 6, 428-437.	1.6	8
39	Optimum setting of binomial pulses for magnetization transfer contrast. Journal of Magnetic Resonance Imaging, 2000, 11, 539-548.	3.4	7
40	Prospective multicentre evaluation and refinement of an analysis tool for magnetic resonance spectroscopy of childhood cerebellar tumours. Pediatric Radiology, 2018, 48, 1630-1641.	2.0	7
41	Metabolite selection for machine learning in childhood brain tumour classification. NMR in Biomedicine, 2022, 35, e4673.	2.8	7
42	A hybrid method of application of independent component analysis to inâ€‰vivo¹H MR spectra of childhood brain tumours. NMR in Biomedicine, 2012, 25, 594-606.	2.8	6
43	Glycine: a non-invasive imaging biomarker to aid magnetic resonance spectroscopy in the prediction of survival in paediatric brain tumours. Oncotarget, 2018, 9, 18858-18868.	1.8	6
44	Metabolite Levels in Paediatric Brain Tumours Correlate with Histological Features. Pathobiology, 2018, 85, 157-168.	3.8	5
45	Ex vivo metabolite profiling of paediatric central nervous system tumours reveals prognostic markers. Scientific Reports, 2019, 9, 10473.	3.3	5
46	Variation of T₂ relaxation times in pediatric brain tumors and their effect on metabolite quantification. Journal of Magnetic Resonance Imaging, 2019, 49, 195-203.	3.4	4
47	The development of a graphical user interface, functional elements and classifiers for the non-invasive characterization of childhood brain tumours using magnetic resonance spectroscopy. Knowledge Engineering Review, 2011, 26, 353-363.	2.6	3
48	Raman spectroscopy: a novel tool for intraoperative guidance in surgical neuro-oncology. Neuro-Oncology, 2018, 20, i16-i16.	1.2	3
49	Added value of magnetic resonance spectroscopy for diagnosing childhood cerebellar tumours. NMR in Biomedicine, 2022, 35, e4630.	2.8	3
50	Radiomic evaluation of treatment response in patients with glioblastoma: a pilot study. Neuro-Oncology, 2018, 20, v358-v358.	1.2	1
51	Artificial intelligence for early prediction of treatment response in glioblastoma. Neuro-Oncology, 2021, 23, iv1-iv1.	1.2	1
52	4101 ORAL Multicentre Prospective Classification of Childhood Brain Tumours Using Magnetic Resonance Spectroscopy. European Journal of Cancer, 2011, 47, S284.	2.8	0
53	TB-21METABOLISM AS A PREDICTOR OF SURVIVAL IN CHILDREN'S BRAIN TUMOURS. Neuro-Oncology, 2016, 18, iii172.3-iii172.	1.2	0
54	PWE-038â€…Validation of Multiparametric MRI in The Assessment and Staging of Non-Alcoholic Fatty Liver Disease: Abstract PWE-038 Table 1. Gut, 2016, 65, A157.2-A158.	12.1	0

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55	MB-85NON-INVASIVE TEMPERATURE MEASUREMENTS BY MRI AS A PREDICTOR OF THE SURVIVAL OF MEDULLOBLASTOMA PATIENTS. Neuro-Oncology, 2016, 18, iii116.3-iii116.	1.2	0
56	TB-26TISSUE METABOLITE PROFILES IN THE CHARACTERISATION AND DIAGNOSIS OF CHILDHOOD POSTERIOR FOSSA TUMOURS. Neuro-Oncology, 2016, 18, iii173.2-iii173.	1.2	0
57	Evaluation of response to stereotactic radiosurgery in brain metastases using multiparametric MRI. Neuro-Oncology, 2018, 20, v356-v356.	1.2	0
58	Localisation, Registration and Visualisation of MRS Volumes of Interest on MR Images. IFMBE Proceedings, 2010, , 256-259.	0.3	0