Gareth Ball

List of Publications by Year
in descending order

63	3,871	27	58
papers	citations	h-index	g-index
		201658	138468

81	81	81	4554
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Rich-club organization of the newborn human brain. Proceedings of the National Academy of Sciences of the United States of America, 2014, 111, 7456-7461.	7.1	300
2	Development of cortical microstructure in the preterm human brain. Proceedings of the National Academy of Sciences of the United States of America, 2013, 110, 9541-9546.	7.1	293
3	The Effect of Preterm Birth on Thalamic and Cortical Development. Cerebral Cortex, 2012, 22, 1016-1024.	2.9	262
4	Construction of a consistent high-definition spatio-temporal atlas of the developing brain using adaptive kernel regression. NeuroImage, 2012, 59, 2255-2265.	4.2	259
5	The influence of preterm birth on the developing thalamocortical connectome. Cortex, 2013, 49, 1711-1721.	2.4	202
6	Thalamocortical Connectivity Predicts Cognition in Children Born Preterm. Cerebral Cortex, 2015, 25, 4310-4318.	2.9	201
7	An optimised tract-based spatial statistics protocol for neonates: Applications to prematurity and chronic lung disease. NeuroImage, 2010, 53, 94-102.	4.2	154
8	Neonatal Tract-Based Spatial Statistics Findings and Outcome in Preterm Infants. American Journal of Neuroradiology, 2012, 33, 188-194.	2.4	148
9	Specialization and integration of functional thalamocortical connectivity in the human infant. Proceedings of the National Academy of Sciences of the United States of America, 2015, 112, 6485-6490.	7.1	130
10	A major continuous allergenic epitope of bovine beta-lactoglobulin recognized by human IgE binding. Clinical and Experimental Allergy, 1994, 24, 758-764.	2.9	119
11	Regional changes in thalamic shape and volume with increasing age. NeuroImage, 2012, 63, 1134-1142.	4.2	100
12	Decreased microglial Wnt/Î²-catenin signalling drives microglial pro-inflammatory activation in the developing brain. Brain, 2019, 142, 3806-3833.	7.6	97
13	Machine-learning to characterise neonatal functional connectivity in the preterm brain. NeuroImage, 2016, 124, 267-275.	4.2	92
14	Genetic influences on hub connectivity of the human connectome. Nature Communications, 2021, 12, 4237.	12.8	92
15	Whole-Brain Mapping of Structural Connectivity in Infants Reveals Altered Connection Strength Associated with Growth and Preterm Birth. Cerebral Cortex, 2014, 24, 2324-2333.	2.9	88
16	Exploring the multiple-hit hypothesis of preterm white matter damage using diffusion MRI. NeuroImage: Clinical, 2018, 17, 596-606.	2.7	87
17	Diffusion Tensor Imaging in Preterm Infants With Punctate White Matter Lesions. Pediatric Research, 2011, 69, 561-566.	2.3	80
18	Integrative genomics of microglia implicates DLG4 (PSD95) in the white matter development of preterm infants. Nature Communications, 2017, 8, 428.	12.8	74

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19	Reinforcement of the Brain's Rich-Club Architecture Following Early Neurodevelopmental Disruption Caused by Very Preterm Birth. Cerebral Cortex, 2016, 26, 1322-1335.	2.9	69
20	Multimodal image analysis of clinical influences on preterm brain development. Annals of Neurology, 2017, 82, 233-246.	5.3	61
21	The exploration of rotenone as a toxin for inducing Parkinson's disease in rats, for application in BBB transport and PKâ€"PD experiments. Journal of Pharmacological and Toxicological Methods, 2008, 57, 114-130.	0.7	59
22	Diffusion magnetic resonance imaging in preterm brain injury. Neuroradiology, 2013, 55, 65-95.	2.2	56
23	Age, sex, and puberty related development of the corpus callosum: a multi-technique diffusion MRI study. Brain Structure and Function, 2018, 223, 2753-2765.	2.3	50
24	Voxel-wise comparisons of cellular microstructure and diffusion-MRI in mouse hippocampus using 3D Bridging of Optically-clear histology with Neuroimaging Data (3D-BOND). Scientific Reports, 2018, 8, 4011.	3.3	47
25	Tractography of the corticospinal tracts in infants with focal perinatal injury: comparison with normal controls and to motor development. Neuroradiology, 2012, 54, 507-516.	2.2	43
26	Common Genetic Variants and Risk of Brain Injury After Preterm Birth. Pediatrics, 2014, 133, e1655-e1663.	2.1	43
27	Cortical morphology at birth reflects spatiotemporal patterns of gene expression in the fetal human brain. PLoS Biology, 2020, 18, e3000976.	5.6	38
28	Cortical remodelling in childhood is associated with genes enriched for neurodevelopmental disorders. NeuroImage, 2020, 215, 116803.	4.2	37
29	Executive Functions and Prefrontal Cortex: A Matter of Persistence?. Frontiers in Systems Neuroscience, 2011, 5, 3.	2.5	36
30	Multimodal Structural Neuroimaging Markers of Brain Development and ADHD Symptoms. American Journal of Psychiatry, 2019, 176, 57-66.	7.2	30
31	Individual variation underlying brain age estimates in typical development. NeuroImage, 2021, 235, 118036.	4.2	30
32	Characterising brain network topologies: A dynamic analysis approach using heat kernels. NeuroImage, 2016, 141, 490-501.	4.2	29
33	Machine learning shows association between genetic variability in <i>PPARG</i> and cerebral connectivity in preterm infants. Proceedings of the National Academy of Sciences of the United States of America, 2017, 114, 13744-13749.	7.1	29
34	New imaging approaches to evaluate newborn brain injury and their role in predicting developmental disorders. Current Opinion in Neurology, 2014, 27, 168-175.	3.6	27
35	Charting shared developmental trajectories of cortical thickness and structural connectivity in childhood and adolescence. Human Brain Mapping, 2019, 40, 4630-4644.	3.6	27
36	Testing the Sensitivity of Tract-Based Spatial Statistics to Simulated Treatment Effects in Preterm Neonates. PLoS ONE, 2013, 8, e67706.	2.5	27

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37	Dymeclin deficiency causes postnatal microcephaly, hypomyelination and reticulum-to-Golgi trafficking defects in mice and humans. Human Molecular Genetics, 2015, 24, 2771-2783.	2.9	25
38	Possible relationship between common genetic variation and white matter development in a pilot study of preterm infants. Brain and Behavior, 2016, 6, e00434.	2.2	25
39	Associations Between Neonatal Brain Structure, the Home Environment, and Childhood Outcomes Following Very Preterm Birth. Biological Psychiatry Global Open Science, 2021, 1, 146-155.	2.2	25
40	Modelling neuroanatomical variation during childhood and adolescence with neighbourhood-preserving embedding. Scientific Reports, 2017, 7, 17796.	3.3	24
41	Development of the Corticospinal and Callosal Tracts from Extremely Premature Birth up to 2 Years of Age. PLoS ONE, 2015, 10, e0125681.	2.5	22
42	The development of structural covariance networks during the transition from childhood to adolescence. Scientific Reports, 2021, 11, 9451.	3.3	22
43	Altered white matter and cortical structure in neonates with antenatally diagnosed isolated ventriculomegaly. NeuroImage: Clinical, 2016, 11, 139-148.	2.7	18
44	A neural window on the emergence of cognition. Annals of the New York Academy of Sciences, 2016, 1369, 7-23.	3.8	15
45	Neonatal amygdala resting-state functional connectivity and socio-emotional development in very preterm children. Brain Communications, 2022, 4, fcac009.	3.3	14
46	Quantifying individual differences in brain morphometry underlying symptom severity in Autism Spectrum Disorders. Scientific Reports, 2019, 9, 9898.	3.3	13
47	Polygenic risk for neuropsychiatric disease and vulnerability to abnormal deep grey matter development. Scientific Reports, 2019, 9, 1976.	3.3	13
48	Early and late development of hub connectivity in the human brain. Current Opinion in Psychology, 2022, 44, 321-329.	4.9	12
49	Fractional anisotropy in children with dystonia or spasticity correlates with the selection for DBS or ITB movement disorder surgery. Neuroradiology, 2016, 58, 401-408.	2.2	11
50	Network component analysis reveals developmental trajectories of structural connectivity and specific alterations in autism spectrum disorder. Human Brain Mapping, 2017, 38, 4169-4184.	3.6	11
51	White matter extension of the Melbourne Children's Regional Infant Brain atlas: Mâ€CRIBâ€WM. Human Brain Mapping, 2020, 41, 2317-2333.	3.6	11
52	Diffusion tensor imaging metrics in neonatesâ€"a comparison of manual region-of-interest analysis vs. tract-based spatial statistics. Pediatric Radiology, 2013, 43, 69-79.	2.0	10
53	Individual Differences in Intrinsic Brain Networks Predict Symptom Severity in Autism Spectrum Disorders. Cerebral Cortex, 2021, 31, 681-693.	2.9	10
54	Individual variation in longitudinal postnatal development of the primate brain. Brain Structure and Function, 2019, 224, 1185-1201.	2.3	8

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55	Investigating brain structural maturation in children and adolescents born very preterm using the brain age framework. NeuroImage, 2022, 247, 118828.	4.2	8
56	White matter tracts related to memory and emotion in very preterm children. Pediatric Research, 2021, 89, 1452-1460.	2.3	7
57	Callosal thickness profiles for prognosticating conversion from mild cognitive impairment to Alzheimerâ€™s disease: A classification approach. Brain and Behavior, 2018, 8, e01142.	2.2	2
58	Normalisation of Neonatal Brain Network Measures Using Stochastic Approaches. Lecture Notes in Computer Science, 2013, 16, 574-581.	1.3	2
59	Diffusion Imaging in the Developing Brain. , 2014, , 283-300.		1
60	197 Serial Diffusion Tensor Imaging Demonstrates: White Matter Microstructure in the Preterm Period is not Related to Gestation at Birth. Archives of Disease in Childhood, 2012, 97, A57-A57.	1.9	0
61	O-055â€…Fractional Anisotropy In White Matter And Mean Diffusivity In Grey Matter Correlate To Neurodevelopmental Performance Following Hypoxic-ischaemic Encephalopathy. Archives of Disease in Childhood, 2014, 99, A42.3-A43.	1.9	0
62	Connectomics. , 0, , 770-774.		0
63	Integration of Network-Based Biological Knowledge With White Matter Features in Preterm Infants Using the Graph-Guided Group Lasso. , 2018, , 45-59.		0