Sean C L Deoni

List of Publications by Year
in descending order

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87 papers	7,713 citations	61984 43 h-index	54911 84 g-index

90 all docs	90 docs citations	90 times ranked	8993 citing authors

#	Article	IF	Citations
1	Rapid combinedT1 andT2 mapping using gradient recalled acquisition in the steady state. Magnetic Resonance in Medicine, 2003, 49, 515-526.	3.0	642
2	Mapping Infant Brain Myelination with Magnetic Resonance Imaging. Journal of Neuroscience, 2011, 31, 784-791.	3.6	416
3	Gleaning multicomponent T₁ and T₂ information from steadyâ€state imaging data. Magnetic Resonance in Medicine, 2008, 60, 1372-1387.	3.0	413
4	High-resolutionT1 andT2 mapping of the brain in a clinically acceptable time with DESPOT1 and DESPOT2. Magnetic Resonance in Medicine, 2005, 53, 237-241.	3.0	407
5	The development of brain white matter microstructure. NeuroImage, 2018, 182, 207-218.	4.2	363
6	Investigating white matter development in infancy and early childhood using myelin water faction and relaxation time mapping. NeuroImage, 2012, 63, 1038-1053.	4.2	322
7	Biological sex affects the neurobiology of autism. Brain, 2013, 136, 2799-2815.	7.6	239
8	Early Specialization for Voice and Emotion Processing in the Infant Brain. Current Biology, 2011, 21, 1220-1224.	3.9	233
9	Brain Differences in Infants at Differential Genetic Risk for Late-Onset Alzheimer Disease. JAMA Neurology, 2014, 71, 11.	9.0	221
10	Breastfeeding and early white matter development: A cross-sectional study. NeuroImage, 2013, 82, 77-86.	4.2	219
11	Highâ€resolution T1 mapping of the brain at 3T with driven equilibrium single pulse observation of T1 with highâ€speed incorporation of RF field inhomogeneities (DESPOT1â€HIFI). Journal of Magnetic Resonance Imaging, 2007, 26, 1106-1111.	3.4	196
12	Quantitative Relaxometry of the Brain. Topics in Magnetic Resonance Imaging, 2010, 21, 101-113.	1.2	186
13	Cortical maturation and myelination in healthy toddlers and young children. NeuroImage, 2015, 115, 147-161.	4.2	178
14	High resolution diffusion-weighted imaging in fixed human brain using diffusion-weighted steady state free precession. NeuroImage, 2009, 46, 775-785.	4.2	166
15	MRI characteristics of the substantia nigra in Parkinson's disease: A combined quantitative T1 and DTI study. NeuroImage, 2009, 47, 435-441.	4.2	163
16	White matter development and early cognition in babies and toddlers. Human Brain Mapping, 2014, 35, 4475-4487.	3.6	158
17	Characterizing longitudinal white matter development during early childhood. Brain Structure and Function, 2015, 220, 1921-1933.	2.3	149
18	Modeling healthy male white matter and myelin development: 3 through 60months of age. NeuroImage, 2014, 84, 742-752.	4.2	136

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19	Early nutrition influences developmental myelination and cognition in infants and young children. NeuroImage, 2018, 178, 649-659.	4.2	136
20	Hypomyelinating leukodystrophies: Translational research progress and prospects. Annals of Neurology, 2014, 76, 5-19.	5.3	132
21	Quantifying cortical development in typically developing toddlers and young children, 1â€“6 years of age. NeuroImage, 2017, 153, 246-261.	4.2	123
22	One component? Two components? Three? The effect of including a nonexchanging â€œfreeâ€•water component in multicomponent driven equilibrium single pulse observation of T₁ and T₂. Magnetic Resonance in Medicine, 2013, 70, 147-154.	3.0	122
23	White matter maturation profiles through early childhood predict general cognitive ability. Brain Structure and Function, 2016, 221, 1189-1203.	2.3	119
24	Pediatric neuroimaging using magnetic resonance imaging during non-sedated sleep. Pediatric Radiology, 2014, 44, 64-72.	2.0	117
25	Standardized structural magnetic resonance imaging in multicentre studies using quantitative T 1 and T 2 imaging at 1.5ÂT. NeuroImage, 2008, 40, 662-671.	4.2	110
26	Myelin water imaging reflects clinical variability in multiple sclerosis. NeuroImage, 2012, 60, 263-270.	4.2	110
27	Mapping an index of the myelin g-ratio in infants using magnetic resonance imaging. NeuroImage, 2016, 132, 225-237.	4.2	110
28	Correction of main and transmit magnetic field (B₀ and B₁) inhomogeneity effects in multicomponentâ€driven equilibrium singleâ€pulse observation of T₁ and T₂. Magnetic Resonance in Medicine, 2011, 65, 1021-1035.	3.0	98
29	Transverse relaxation time (T₂) mapping in the brain with offâ€resonance correction using phaseâ€cycled steadyâ€state free precession imaging. Journal of Magnetic Resonance Imaging, 2009, 30, 411-417.	3.4	83
30	Interactions between White Matter Asymmetry and Language during Neurodevelopment. Journal of Neuroscience, 2013, 33, 16170-16177.	3.6	77
31	Sphingomyelin in Brain and Cognitive Development: Preliminary Data. ENeuro, 2019, 6, ENEURO.0421-18.2019.	1.9	69
32	Effects of Delayed Cord Clamping on 4-Month Ferritin Levels, Brain Myelin Content, and Neurodevelopment: A Randomized Controlled Trial. Journal of Pediatrics, 2018, 203, 266-272.e2.	1.8	66
33	Advances in myelin imaging with potential clinical application to pediatric imaging. Neurosurgical Focus, 2013, 34, E9.	2.3	65
34	Visualization of thalamic nuclei on high resolution, multi-averaged T1 and T2 maps acquired at 1.5 T. Human Brain Mapping, 2005, 25, 353-359.	3.6	64
35	Myelination Is Associated with Processing Speed in Early Childhood: Preliminary Insights. PLoS ONE, 2015, 10, e0139897.	2.5	63
36	Unsupervised data-driven stratification of mentalizing heterogeneity in autism. Scientific Reports, 2016, 6, 35333.	3.3	60

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37	Synthetic T1-weighted brain image generation with incorporated coil intensity correction using DESPOT1. Magnetic Resonance Imaging, 2006, 24, 1241-1248.	1.8	57
38	A comparison of inhomogeneous magnetization transfer, myelin volume fraction, and diffusion tensor imaging measures in healthy children. NeuroImage, 2018, 182, 343-350.	4.2	57
39	Estimating the age of healthy infants from quantitative myelin water fraction maps. Human Brain Mapping, 2015, 36, 1233-1244.	3.6	56
40	Examining the relationships between cortical maturation and white matter myelination throughout early childhood. NeuroImage, 2016, 125, 413-421.	4.2	55
41	Traveling Slow Oscillations During Sleep: A Marker of Brain Connectivity in Childhood. Sleep, 2017, 40, .	1.1	54
42	Investigating the stability of mcDESPOT myelin water fraction values derived using a stochastic region contraction approach. Magnetic Resonance in Medicine, 2015, 73, 161-169.	3.0	52
43	Segmentation of thalamic nuclei using a modified k-means clustering algorithm and high-resolution quantitative magnetic resonance imaging at 1.5 T. NeuroImage, 2007, 34, 117-126.	4.2	51
44	Brain and cord myelin water imaging: a progressive multiple sclerosis biomarker. NeuroImage: Clinical, 2015, 9, 574-580.	2.7	44
45	Increased Sleep Depth in Developing Neural Networks: New Insights from Sleep Restriction in Children. Frontiers in Human Neuroscience, 2016, 10, 456.	2.0	43
46	RapidT2 estimation with phase-cycled variable nutation steady-state free precession. Magnetic Resonance in Medicine, 2004, 52, 435-439.	3.0	42
47	Visualization of the deep cerebellar nuclei using quantitative T1 and Ï•magnetic resonance imaging at 3ÂTesla. NeuroImage, 2007, 37, 1260-1266.	4.2	38
48	Investigating exchange and multicomponent relaxation in fullyâ€balanced steadyâ€state free precession imaging. Journal of Magnetic Resonance Imaging, 2008, 27, 1421-1429.	3.4	36
49	On the brain structure heterogeneity of autism: Parsing out acquisition site effects with significanceâ€weighted principal component analysis. Human Brain Mapping, 2017, 38, 1208-1223.	3.6	35
50	Functional connectivity correlates of infant and early childhood cognitive development. Brain Structure and Function, 2020, 225, 669-681.	2.3	35
51	Magnetic Resonance Relaxation and Quantitative Measurement in the Brain. Methods in Molecular Biology, 2011, 711, 65-108.	0.9	33
52	Accessible pediatric neuroimaging using a low field strength MRI scanner. NeuroImage, 2021, 238, 118273.	4.2	32
53	Longitudinal associations between white matter maturation and cognitive development across early childhood. Human Brain Mapping, 2019, 40, 4130-4145.	3.6	30
54	Emerging ethical issues raised by highly portable MRI research in remote and resource-limited international settings. NeuroImage, 2021, 238, 118210.	4.2	28

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55	Cesarean Delivery Impacts Infant Brain Development. American Journal of Neuroradiology, 2019, 40, 169-177.	2.4	26
56	Development of a mobile low-field MRI scanner. Scientific Reports, 2022, 12, 5690.	3.3	25
57	Inflammation, Cognition, and White Matter in Older Adults: An Examination by Race. Frontiers in Aging Neuroscience, 2020, 12, 553998.	3.4	23
58	Youth Well-being During the COVID-19 Pandemic. Pediatrics, 2022, 149, .	2.1	23
59	Investigating the effect of exchange and multicomponentT1 relaxation on the short repetition time spoiled steady-state signal and the DESPOT1T1 quantification method. Journal of Magnetic Resonance Imaging, 2007, 25, 570-578.	3.4	22
60	Lowering the Floor on Trail Making Test Part B: Psychometric Evidence for a New Scoring Metric. Archives of Clinical Neuropsychology, 2015, 30, 643-656.	0.5	21
61	The Effects of Delayed Cord Clamping on 12-Month Brain Myelin Content and Neurodevelopment: A Randomized Controlled Trial. American Journal of Perinatology, 2022, 39, 037-044.	1.4	19
62	Family SES Is Associated with the Gut Microbiome in Infants and Children. Microorganisms, 2021, 9, 1608.	3.6	19
63	A simple sleep EEG marker in childhood predicts brain myelin 3.5 years later. NeuroImage, 2019, 199, 342-350.	4.2	18
64	Simultaneous highâ€resolution T₂â€weighted imaging and quantitative <scp>T</scp>₂ mapping at low magnetic field strengths using a multiple TE and multiâ€orientation acquisition approach. Magnetic Resonance in Medicine, 2022, 88, 1273-1281.	3.0	16
65	A Nutrient Formulation Affects Developmental Myelination in Term Infants: A Randomized Clinical Trial. Frontiers in Nutrition, 2022, 9, 823893.	3.7	15
66	Pilot investigation of a novel white matter imaging technique in Veterans with and without history of mild traumatic brain injury. Brain Injury, 2018, 32, 1255-1264.	1.2	14
67	Prospective study of myelin water fraction changes after mild traumatic brain injury in collegiate contact sports. Journal of Neurosurgery, 2019, 130, 1321-1329.	1.6	14
68	Longitudinal white matter and cognitive development in pediatric carriers of the apolipoprotein Îµ4 allele. NeuroImage, 2020, 222, 117243.	4.2	14
69	Is fetal MRI ready for neuroimaging prime time? An examination of progress and remaining areas for development. Developmental Cognitive Neuroscience, 2021, 51, 100999.	4.0	14
70	Remote and at-home data collection: Considerations for the NIH HEALthy Brain and Cognitive Development (HBCD) study. Developmental Cognitive Neuroscience, 2022, 54, 101059.	4.0	14
71	Age-dynamic networks and functional correlation for early white matter myelination. Brain Structure and Function, 2019, 224, 535-551.	2.3	13
72	Analysis of Early-Life Growth and Age at Pubertal Onset in US Children. JAMA Network Open, 2022, 5, e2146873.	5.9	13

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73	Multi-component relaxation in clinically isolated syndrome: Lesion myelination may predict multiple sclerosis conversion. NeuroImage: Clinical, 2018, 20, 61-70.	2.7	11
74	FrÃ©chet estimation of time-varying covariance matrices from sparse data, with application to the regional co-evolution of myelination in the developing brain. Annals of Applied Statistics, 2019, 13, .	1.1	9
75	Connecting inside out: Development of the social brain in infants and toddlers with a focus on myelination as a marker of brain maturation. Child Development, 2022, 93, 359-371.	3.0	9
76	Myelin water fraction changes in febrile seizures. Clinical Neurology and Neurosurgery, 2018, 175, 61-67.	1.4	7
77	Machine Learning Classification Identifies Cerebellar Contributions to Early and Moderate Cognitive Decline in Alzheimerâ€™s Disease. Frontiers in Aging Neuroscience, 2020, 12, 524024.	3.4	7
78	Modeling sparse longitudinal data in early neurodevelopment. NeuroImage, 2021, 237, 118079.	4.2	6
79	Nutritional influences on early white matter development: Response to Anderson and Burggren. NeuroImage, 2014, 100, 703-705.	4.2	5
80	Influences of Chronic Physical and Mental Health Conditions on Child and Adolescent Positive Health. Academic Pediatrics, 2022, 22, 1024-1032.	2.0	5
81	Putamen development in children 12 to 21 months old. Proceedings of SPIE, 2017, 10160, .	0.8	4
82	Altered myelination in youth born with congenital heart disease. Human Brain Mapping, 2022, 43, 3545-3558.	3.6	4
83	Decreased myelin content of the fornix predicts poorer memory performance beyond vascular risk, hippocampal volume, and fractional anisotropy in nondemented older adults. Brain Imaging and Behavior, 2021, 15, 2563-2571.	2.1	3
84	Impact of the COVID-19 Pandemic Environment on Early Child Brain and Cognitive Development. Biological Psychiatry, 2022, 91, S26.	1.3	3
85	Developmental changes of the central sulcus morphology in young children. Brain Structure and Function, 2021, 226, 1841-1853.	2.3	2
86	Cranial thickness changes in early childhood. , 2017, 10572, .		1
87	Paradoxical centrally increased diffusivity in perinatal arterial ischemic stroke. Pediatric Radiology, 2016, 46, 82-86.	2.0	0