Sean C L Deoni

List of Publications by Year
in descending order

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	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
2	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
3	Influences of Chronic Physical and Mental Health Conditions on Child and Adolescent Positive Health. Academic Pediatrics, 2022, 22, 1024-1032.	2.0	5
4	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
5	A Nutrient Formulation Affects Developmental Myelination in Term Infants: A Randomized Clinical Trial. Frontiers in Nutrition, 2022, 9, 823893.	3.7	15
6	Analysis of Early-Life Growth and Age at Pubertal Onset in US Children. JAMA Network Open, 2022, 5, e2146873.	5.9	13
7	Youth Well-being During the COVID-19 Pandemic. Pediatrics, 2022, 149, .	2.1	23
8	Development of a mobile low-field MRI scanner. Scientific Reports, 2022, 12, 5690.	3.3	25
9	Altered myelination in youth born with congenital heart disease. Human Brain Mapping, 2022, 43, 3545-3558.	3.6	4
10	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
11	Impact of the COVID-19 Pandemic Environment on Early Child Brain and Cognitive Development. Biological Psychiatry, 2022, 91, S26.	1.3	3
12	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
13	Developmental changes of the central sulcus morphology in young children. Brain Structure and Function, 2021, 226, 1841-1853.	2.3	2
14	Family SES Is Associated with the Gut Microbiome in Infants and Children. Microorganisms, 2021, 9, 1608.	3.6	19
15	Modeling sparse longitudinal data in early neurodevelopment. NeuroImage, 2021, 237, 118079.	4.2	6
16	Emerging ethical issues raised by highly portable MRI research in remote and resource-limited international settings. NeuroImage, 2021, 238, 118210.	4.2	28
17	Accessible pediatric neuroimaging using a low field strength MRI scanner. NeuroImage, 2021, 238, 118273.	4.2	32
18	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

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19	Longitudinal white matter and cognitive development in pediatric carriers of the apolipoprotein Îµ4 allele. NeuroImage, 2020, 222, 117243.	4.2	14
20	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
21	Inflammation, Cognition, and White Matter in Older Adults: An Examination by Race. Frontiers in Aging Neuroscience, 2020, 12, 553998.	3.4	23
22	Functional connectivity correlates of infant and early childhood cognitive development. Brain Structure and Function, 2020, 225, 669-681.	2.3	35
23	Sphingomyelin in Brain and Cognitive Development: Preliminary Data. ENeuro, 2019, 6, ENEURO.0421-18.2019.	1.9	69
24	A simple sleep EEG marker in childhood predicts brain myelin 3.5 years later. NeuroImage, 2019, 199, 342-350.	4.2	18
25	Longitudinal associations between white matter maturation and cognitive development across early childhood. Human Brain Mapping, 2019, 40, 4130-4145.	3.6	30
26	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
27	Cesarean Delivery Impacts Infant Brain Development. American Journal of Neuroradiology, 2019, 40, 169-177.	2.4	26
28	Age-dynamic networks and functional correlation for early white matter myelination. Brain Structure and Function, 2019, 224, 535-551.	2.3	13
29	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
30	Early nutrition influences developmental myelination and cognition in infants and young children. NeuroImage, 2018, 178, 649-659.	4.2	136
31	The development of brain white matter microstructure. NeuroImage, 2018, 182, 207-218.	4.2	363
32	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
33	Myelin water fraction changes in febrile seizures. Clinical Neurology and Neurosurgery, 2018, 175, 61-67.	1.4	7
34	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
35	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
36	Multi-component relaxation in clinically isolated syndrome: Lesion myelination may predict multiple sclerosis conversion. NeuroImage: Clinical, 2018, 20, 61-70.	2.7	11

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37	Putamen development in children 12 to 21 months old. Proceedings of SPIE, 2017, 10160, .	0.8	4
38	Quantifying cortical development in typically developing toddlers and young children, 1â€"6 years of age. NeuroImage, 2017, 153, 246-261.	4.2	123
39	Traveling Slow Oscillations During Sleep: A Marker of Brain Connectivity in Childhood. Sleep, 2017, 40, .	1.1	54
40	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
41	Cranial thickness changes in early childhood. , 2017, 10572, .		1
42	Increased Sleep Depth in Developing Neural Networks: New Insights from Sleep Restriction in Children. Frontiers in Human Neuroscience, 2016, 10, 456.	2.0	43
43	Mapping an index of the myelin g-ratio in infants using magnetic resonance imaging. NeuroImage, 2016, 132, 225-237.	4.2	110
44	Examining the relationships between cortical maturation and white matter myelination throughout early childhood. NeuroImage, 2016, 125, 413-421.	4.2	55
45	Unsupervised data-driven stratification of mentalizing heterogeneity in autism. Scientific Reports, 2016, 6, 35333.	3.3	60
46	Paradoxical centrally increased diffusivity in perinatal arterial ischemic stroke. Pediatric Radiology, 2016, 46, 82-86.	2.0	0
47	White matter maturation profiles through early childhood predict general cognitive ability. Brain Structure and Function, 2016, 221, 1189-1203.	2.3	119
48	Estimating the age of healthy infants from quantitative myelin water fraction maps. Human Brain Mapping, 2015, 36, 1233-1244.	3.6	56
49	Brain and cord myelin water imaging: a progressive multiple sclerosis biomarker. NeuroImage: Clinical, 2015, 9, 574-580.	2.7	44
50	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
51	Myelination Is Associated with Processing Speed in Early Childhood: Preliminary Insights. PLoS ONE, 2015, 10, e0139897.	2.5	63
52	Cortical maturation and myelination in healthy toddlers and young children. NeuroImage, 2015, 115, 147-161.	4.2	178
53	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
54	Characterizing longitudinal white matter development during early childhood. Brain Structure and Function, 2015, 220, 1921-1933.	2.3	149

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55	Nutritional influences on early white matter development: Response to Anderson and Burggren. NeuroImage, 2014, 100, 703-705.	4.2	5
56	White matter development and early cognition in babies and toddlers. Human Brain Mapping, 2014, 35, 4475-4487.	3.6	158
57	Hypomyelinating leukodystrophies: Translational research progress and prospects. Annals of Neurology, 2014, 76, 5-19.	5.3	132
58	Modeling healthy male white matter and myelin development: 3 through 60months of age. NeuroImage, 2014, 84, 742-752.	4.2	136
59	Pediatric neuroimaging using magnetic resonance imaging during non-sedated sleep. Pediatric Radiology, 2014, 44, 64-72.	2.0	117
60	Brain Differences in Infants at Differential Genetic Risk for Late-Onset Alzheimer Disease. JAMA Neurology, 2014, 71, 11.	9.0	221
61	Interactions between White Matter Asymmetry and Language during Neurodevelopment. Journal of Neuroscience, 2013, 33, 16170-16177.	3.6	77
62	Breastfeeding and early white matter development: A cross-sectional study. NeuroImage, 2013, 82, 77-86.	4.2	219
63	One component? Two components? Three? The effect of including a nonexchanging â€œfreeâ€•water component in multicomponent driven equilibrium single pulse observation of <i>T</i>₁ and <i>T</i>₂. Magnetic Resonance in Medicine, 2013, 70, 147-154.	3.0	122
64	Advances in myelin imaging with potential clinical application to pediatric imaging. Neurosurgical Focus, 2013, 34, E9.	2.3	65
65	Biological sex affects the neurobiology of autism. Brain, 2013, 136, 2799-2815.	7.6	239
66	Myelin water imaging reflects clinical variability in multiple sclerosis. NeuroImage, 2012, 60, 263-270.	4.2	110
67	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
68	Mapping Infant Brain Myelination with Magnetic Resonance Imaging. Journal of Neuroscience, 2011, 31, 784-791.	3.6	416
69	Early Specialization for Voice and Emotion Processing in the Infant Brain. Current Biology, 2011, 21, 1220-1224.	3.9	233
70	Correction of main and transmit magnetic field (<i>B</i>₀ and <i>B</i>₁) inhomogeneity effects in multicomponentâ€driven equilibrium singleâ€pulse observation of <i>T</i>₁ and <i>T</i>₂. Magnetic Resonance in Medicine, 2011, 65, 1021-1035.	3.0	98
71	Magnetic Resonance Relaxation and Quantitative Measurement in the Brain. Methods in Molecular Biology, 2011, 711, 65-108.	0.9	33
72	Quantitative Relaxometry of the Brain. Topics in Magnetic Resonance Imaging, 2010, 21, 101-113.	1.2	186

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73	Transverse relaxation time (<i>T</i>₂) 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
74	High resolution diffusion-weighted imaging in fixed human brain using diffusion-weighted steady state free precession. NeuroImage, 2009, 46, 775-785.	4.2	166
75	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
76	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
77	Gleaning multicomponent <i>T</i>₁ and <i>T</i>₂ information from steadyâ€state imaging data. Magnetic Resonance in Medicine, 2008, 60, 1372-1387.	3.0	413
78	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
79	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
80	Visualization of the deep cerebellar nuclei using quantitative T1 and Ï•magnetic resonance imaging at 3ÂTesla. NeuroImage, 2007, 37, 1260-1266.	4.2	38
81	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
82	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
83	Synthetic T1-weighted brain image generation with incorporated coil intensity correction using DESPOT1. Magnetic Resonance Imaging, 2006, 24, 1241-1248.	1.8	57
84	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
85	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
86	RapidT2 estimation with phase-cycled variable nutation steady-state free precession. Magnetic Resonance in Medicine, 2004, 52, 435-439.	3.0	42
87	Rapid combinedT1 andT2 mapping using gradient recalled acquisition in the steady state. Magnetic Resonance in Medicine, 2003, 49, 515-526.	3.0	642