Daniel H Reich

List of Publications by Year
in descending order

95 papers	5,795 citations	126907 33 h-index	82547 72 g-index
104 all docs	104 docs citations	104 times ranked	7562 citing authors

#	Article	IF	Citations
1	Magnetic microposts as an approach to apply forces to living cells. Proceedings of the National Academy of Sciences of the United States of America, 2007, 104, 14553-14558.	7.1	314
2	Assessment of lesions on magnetic resonance imaging in multiple sclerosis: practical guidelines. Brain, 2019, 142, 1858-1875.	7.6	303
3	2021 MAGNIMSâ€“CMSCâ€“NAIMS consensus recommendations on the use of MRI in patients with multiple sclerosis. Lancet Neurology, The, 2021, 20, 653-670.	10.2	302
4	Statistical normalization techniques for magnetic resonance imaging. NeuroImage: Clinical, 2014, 6, 9-19.	2.7	300
5	Association of Chronic Active Multiple Sclerosis Lesions With Disability In Vivo. JAMA Neurology, 2019, 76, 1474.	9.0	288
6	Magnetic Alignment of Fluorescent Nanowires. Nano Letters, 2001, 1, 155-158.	9.1	279
7	The central vein sign and its clinical evaluation for the diagnosis of multiple sclerosis: a consensus statement from the North American Imaging in Multiple Sclerosis Cooperative. Nature Reviews Neurology, 2016, 12, 714-722.	10.1	274
8	Pembrolizumab Treatment for Progressive Multifocal Leukoencephalopathy. New England Journal of Medicine, 2019, 380, 1597-1605.	27.0	260
9	Direct Observation of Field-Induced Incommensurate Fluctuations in a One-DimensionalS=1/2Antiferromagnet. Physical Review Letters, 1997, 79, 1750-1753.	7.8	253
10	Gadolinium-based MRI characterization of leptomeningeal inflammation in multiple sclerosis. Neurology, 2015, 85, 18-28.	1.1	247
11	Persistent 7-tesla phase rim predicts poor outcome in new multiple sclerosis patient lesions. Journal of Clinical Investigation, 2016, 126, 2597-2609.	8.2	212
12	Autosomal recessive phosphoglucomutase 3 (PGM3) mutations link glycosylation defects to atopy, immune deficiency, autoimmunity, and neurocognitive impairment. Journal of Allergy and Clinical Immunology, 2014, 133, 1400-1409.e5.	2.9	193
13	Central vein sign differentiates Multiple Sclerosis from central nervous system inflammatory vasculopathies. Annals of Neurology, 2018, 83, 283-294.	5.3	160
14	Mechanical Coupling Between Myofibroblasts and Cardiomyocytes Slows Electric Conduction in Fibrotic Cell Monolayers. Circulation, 2011, 123, 2083-2093.	1.6	142
15	Optimization of Yield in Magnetic Cell Separations Using Nickel Nanowires of Different Lengths. Biotechnology Progress, 2008, 21, 509-515.	2.6	114
16	FLAIR*: A Combined MR Contrast Technique for Visualizing White Matter Lesions and Parenchymal Veins. Radiology, 2012, 265, 926-932.	7.3	106
17	Decoupling Cell and Matrix Mechanics in Engineered Microtissues Using Magnetically Actuated Microcantilevers. Advanced Materials, 2013, 25, 1699-1705.	21.0	89
18	Paramagnetic Rim Lesions are Specific to Multiple Sclerosis: An International Multicenter 3T MRI Study. Annals of Neurology, 2020, 88, 1034-1042.	5.3	89

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19	Leptomeningeal gadolinium enhancement across the spectrum of chronic neuroinflammatory diseases. Neurology, 2017, 88, 1439-1444.	1.1	85
20	Triplet Waves in a Quantum Spin Liquid. Physical Review Letters, 2000, 84, 4465-4468.	7.8	82
21	Enhancement of human iPSC-derived cardiomyocyte maturation by chemical conditioning in a 3D environment. Journal of Molecular and Cellular Cardiology, 2020, 138, 1-11.	1.9	80
22	Frustration-induced two-dimensional quantum disordered phase in piperazinium hexachlorodicuprate. Physical Review B, 2001, 64, .	3.2	68
23	Correlation between microstructure and magnetotransport in organic semiconductor spin-valve structures. Physical Review B, 2009, 79, .	3.2	63
24	Magnetic microposts for mechanical stimulation of biological cells: Fabrication, characterization, and analysis. Review of Scientific Instruments, 2008, 79, 044302.	1.3	61
25	Correlations and Disorder in Arrays of Magnetically Coupled Superconducting Rings. Physical Review Letters, 1996, 76, 815-818.	7.8	58
26	Coinfection of Human Herpesviruses 6A (HHV-6A) and HHV-6B as Demonstrated by Novel Digital Droplet PCR Assay. PLoS ONE, 2014, 9, e92328.	2.5	56
27	Chronic White Matter Inflammation and Serum Neurofilament Levels in Multiple Sclerosis. Neurology, 2021, 97, e543-e553.	1.1	54
28	Force-driven evolution of mesoscale structure in engineered 3D microtissues and the modulation of tissue stiffening. Biomaterials, 2014, 35, 5056-5064.	11.4	52
29	Relationships between quantitative spinal cord MRI and retinal layers in multiple sclerosis. Neurology, 2015, 84, 720-728.	1.1	52
30	Diagnostic performance of central vein sign for multiple sclerosis with a simplified three-lesion algorithm. Multiple Sclerosis Journal, 2018, 24, 750-757.	3.0	50
31	Assessment of Early Evidence of Multiple Sclerosis in a Prospective Study of Asymptomatic High-Risk Family Members. JAMA Neurology, 2017, 74, 293.	9.0	46
32	The â€œcentral vein signâ€•in patients with diagnostic â€œred flagsâ€•for multiple sclerosis: A prospective multicenter 3T study. Multiple Sclerosis Journal, 2020, 26, 421-432.	3.0	44
33	Cu2(1,4-diazacycloheptane)2Cl4: A quasi-one-dimensional S=1/2 spin liquid system. Journal of Applied Physics, 1996, 79, 5392.	2.5	37
34	Matrix viscoplasticity and its shielding by active mechanics in microtissue models: experiments and mathematical modeling. Scientific Reports, 2016, 6, 33919.	3.3	36
35	DopantâEDependent Increase in Seebeck Coefficient and Electrical Conductivity in Blended Polymers with Offset Carrier Energies. Advanced Electronic Materials, 2019, 5, 1800618.	5.1	34
36	Longitudinal high-dimensional principal components analysis with application to diffusion tensor imaging of multiple sclerosis. Annals of Applied Statistics, 2014, 8, 2175-2202.	1.1	33

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37	MRI evaluation of thalamic volume differentiates MS from common mimics. Neurology: Neuroimmunology and NeuroInflammation, 2017, 4, e387.	6.0	33
38	Probing cellular traction forces with magnetic nanowires and microfabricated force sensor arrays. Nanotechnology, 2012, 23, 075101.	2.6	31
39	CVSnet: A machine learning approach for automated central vein sign assessment in multiple sclerosis. NMR in Biomedicine, 2020, 33, e4283.	2.8	31
40	Diagnosis of Progressive Multiple Sclerosis From the Imaging Perspective. JAMA Neurology, 2021, 78, 351.	9.0	30
41	A microfabricated magnetic actuation device for mechanical conditioning of arrays of 3D microtissues. Lab on A Chip, 2015, 15, 2496-2503.	6.0	29
42	Direct MRI detection of impending plaque development in multiple sclerosis. Neurology: Neuroimmunology and NeuroInflammation, 2015, 2, e145.	6.0	28
43	A 7T spine array based on electric dipole transmitters. Magnetic Resonance in Medicine, 2015, 74, 1189-1197.	3.0	27
44	Clinical 3-tesla FLAIR* MRI improves diagnostic accuracy in multiple sclerosis. Multiple Sclerosis Journal, 2016, 22, 1578-1586.	3.0	27
45	Effects of carrier mobility and morphology in organic semiconductor spin valves. Journal of Applied Physics, 2009, 105, .	2.5	26
46	COVID-19: Post-vaccine Smell and Taste Disorders: Report of 6 Cases. Ear, Nose and Throat Journal, 2024, 103, NP104-NP107.	0.8	26
47	Proximity and coupling effects in superconductor/ferromagnet multilayers (invited). Journal of Applied Physics, 1997, 81, 5358-5363.	2.5	25
48	Brownian dynamics of colloidal probes during protein-layer formation at an oilâ€“water interface. Soft Matter, 2011, 7, 7635.	2.7	25
49	X-ray and neutron reflectivity and electronic properties of PCBM-poly(bromo)styrene blends and bilayers with poly(3-hexylthiophene). Journal of Materials Chemistry, 2012, 22, 4364-4370.	6.7	24
50	Detection of demyelination in multiple sclerosis by analysis of <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" altimg="si1.gif" overflow="scroll"><mml:msubsup><mml:mrow><mml:mi>T</mml:mi></mml:mrow><mml:mrow><mml:mn>2</mml:mn></mml:mrow><mml:mrow mathvariant="normal">*</mml:mrow></mml:msubsup></mml:math> relaxation at 7 T. NeuroImage: Clinical, 2015, 7, 709-714.	2.7	24
51	Effects of Geometry on the Mechanics and Alignment of Three-Dimensional Engineered Microtissues. ACS Biomaterials Science and Engineering, 2019, 5, 3843-3855.	5.2	23
52	Driven topological transitions in active nematic films. Soft Matter, 2020, 16, 9331-9338.	2.7	22
53	Paramagnetic Rim Lesions in Multiple Sclerosis: Comparison of Visualization at 1.5-T and 3-T MRI. American Journal of Roentgenology, 2022, 219, 120-131.	2.2	22
54	RimNet: A deep 3D multimodal MRI architecture for paramagnetic rim lesion assessment in multiple sclerosis. NeuroImage: Clinical, 2020, 28, 102412.	2.7	21

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55	Sample-size calculations for short-term proof-of-concept studies of tissue protection and repair in multiple sclerosis lesions via conventional clinical imaging. Multiple Sclerosis Journal, 2015, 21, 1693-1704.	3.0	20
56	The â€œcentral vein signâ€•in inflammatory demyelination: The role of fibrillar collagen type I. Annals of Neurology, 2019, 85, 934-942.	5.3	20
57	Association of White Matter Hyperintensities With HIV Status and Vascular Risk Factors. Neurology, 2021, 96, e1823-e1834.	1.1	20
58	Health Effects of Lesion Localization in Multiple Sclerosis: Spatial Registration and Confounding Adjustment. PLoS ONE, 2014, 9, e107263.	2.5	19
59	New Prospects for Ultra-High-Field Magnetic Resonance Imaging in Multiple Sclerosis. Investigative Radiology, 2021, 56, 773-784.	6.2	19
60	Synthesis, Fabrication, and Heterostructure of Charged, Substituted Polystyrene Multilayer Dielectrics and Their Effects in Pentacene Transistors. Macromolecules, 2016, 49, 3478-3489.	4.8	17
61	Central Vein Sign Profile of Newly Developing Lesions in Multiple Sclerosis. Neurology: Neuroimmunology and NeuroInflammation, 2022, 9, .	6.0	17
62	Example based lesion segmentation. Proceedings of SPIE, 2014, 9034, .	0.8	16
63	Statistical estimation of T1 relaxation times using conventional magnetic resonance imaging. NeuroImage, 2016, 133, 176-188.	4.2	16
64	The central vein sign in multiple sclerosis patients with vascular comorbidities. Multiple Sclerosis Journal, 2021, 27, 1057-1065.	3.0	16
65	Optogenetic current in myofibroblasts acutely alters electrophysiology and conduction of co-cultured cardiomyocytes. Scientific Reports, 2021, 11, 4430.	3.3	16
66	7T MRI Visualization of Cortical Lesions in Adolescents and Young Adults with Pediatricâ€Onset Multiple Sclerosis. Journal of Neuroimaging, 2017, 27, 447-452.	2.0	15
67	Dissecting fat-tailed fluctuations in the cytoskeleton with active micropost arrays. Proceedings of the National Academy of Sciences of the United States of America, 2019, 116, 13839-13846.	7.1	15
68	Magnetic approaches to study collective three-dimensional cell mechanics in long-term cultures (invited). Journal of Applied Physics, 2014, 115, 172616.	2.5	14
69	Paramagnetic rim lesions are associated with pathogenic CSF profiles and worse clinical status in multiple sclerosis: A retrospective cross-sectional study. Multiple Sclerosis Journal, 2022, 28, 2046-2056.	3.0	13
70	Magnetic Resonance Imaging and Histopathological Visualization of Human Dural Lymphatic Vessels. Bio-protocol, 2018, 8, .	0.4	12
71	Clonidine administration during intraoperative monitoring for pediatric scoliosis surgery: Effects on central and peripheral motor responses. Neurophysiologie Clinique, 2018, 48, 93-102.	2.2	11
72	Highly Contrasting Static Charging and Bias Stress Effects in Pentacene Transistors with Polystyrene Heterostructures Incorporating Oxidizable N,Nâ€²-Bis(4-methoxyphenyl)aniline Side Chains as Gate Dielectrics. Macromolecules, 2018, 51, 6011-6020.	4.8	11

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73	Force-dependent trans-endocytosis by breast cancer cells depletes costimulatory receptor CD80 and attenuates T cell activation. Biosensors and Bioelectronics, 2020, 165, 112389.	10.1	11
74	Can leptomeningeal enhancement be linked to multiple sclerosis?. Neurology, 2015, 84, 762-763.	1.1	8
75	Induced pluripotent stem cell-derived vascular smooth muscle cells. Vascular Biology (Bristol,) Tj ETQq1 1 0.784314 rgBT /Overlock 10	3.2	8
76	Recurrent natalizumab-related aseptic meningitis in a patient with multiple sclerosis. Multiple Sclerosis Journal, 2017, 23, 1424-1427.	3.0	7
77	Effects of trifluoromethyl substituents on interfacial and bulk polarization of polystyrene gate dielectrics. Applied Physics Letters, 2019, 114, .	3.3	6
78	Charge Trapping in Polymer Electrets with Highly Dilute Blended Arylamine Donors. ACS Applied Electronic Materials, 2021, 3, 1656-1662.	4.3	5
79	Extracellular Matrix Alignment Directs Provisional Matrix Assembly and Three Dimensional Fibrous Tissue Closure. Tissue Engineering - Part A, 2021, , .	3.1	5
80	Statistical image analysis of longitudinal RAVENS images. Frontiers in Neuroscience, 2015, 9, 368.	2.8	4
81	Imaging of meningeal inflammation should become part of the routine MRI protocol â€“ Yes. Multiple Sclerosis Journal, 2019, 25, 330-331.	3.0	4
82	Progressive multifocal leukoencephalopathy lesion and brain parenchymal segmentation from MRI using serial deep convolutional neural networks. NeuroImage: Clinical, 2020, 28, 102499.	2.7	4
83	Fabrication and Mechanical Properties Measurements of 3D Microtissues for the Study of Cellâ€“Matrix Interactions. Methods in Molecular Biology, 2018, 1722, 303-328.	0.9	3
84	Maximized Hole Trapping in a Polystyrene Transistor Dielectric from a Highly Branched Iminobis(aminoarene) Side Chain. ACS Applied Materials & Interfaces, 2021, 13, 34584-34596.	8.0	3
85	Pervasive cytoquakes in the actomyosin cortex across cell types and substrate stiffness. Integrative Biology (United Kingdom), 2021, 13, 246-257.	1.3	3
86	Outlier detection in multimodal <scp>MRI</scp> identifies rare individual phenotypes among more than 15,000 brains. Human Brain Mapping, 2022, 43, 1766-1782.	3.6	3
87	Does sensitivity to arousal improve the prognostic value of somatosensory evoked potentials in newborn infants?. Developmental Medicine and Child Neurology, 2017, 59, 890-890.	2.1	2
88	Visualization of cortical MS lesions with MRI need not be further improved â€“ Commentary. Multiple Sclerosis Journal, 2017, 23, 19-20.	3.0	2
89	Measuring Cytoskeletal Mechanical Fluctuations and Rheology with Active Micropost Arrays. Current Protocols, 2022, 2, .	2.9	2
90	Intensity standardization of longitudinal images using 4D clustering. , 2013, , .		1

#	Article	IF	Citations
91	Making a difference, an integrated PACS workflow for evaluating longitudinal changes across serial imaging. , 2021, , .		1
92	The need for specific paediatric tools for stroke recognition. Developmental Medicine and Child Neurology, 2018, 60, 1069-1069.	2.1	0
93	Is selective dorsal rhizotomy a wellâ€founded treatment for spasticity?. Developmental Medicine and Child Neurology, 2020, 62, 656-656.	2.1	0
94	Case 10: it's "the vision thing". MedGenMed: Medscape General Medicine, 2005, 7, 58.	0.2	0
95	Occipital Epilepsy With Subcortical Atrophy in Celiac Disease. Neurology: Clinical Practice, 2021, 11, e744-e746.	1.6	0