Niall Holmes

List of Publications by Year in descending order

32 papers	2,543 citations	304743 22 h-index	414414 32 g-index
45 all docs	45 docs citations	45 times ranked	1264 citing authors

#	Article	IF	Citations
1	Moving magnetoencephalography towards real-world applications with a wearable system. Nature, 2018, 555, 657-661.	27.8	795
2	Optically pumped magnetometers: From quantum origins to multi-channel magnetoencephalography. NeuroImage, 2019, 199, 598-608.	4.2	186
3	Multi-channel whole-head OPM-MEG: Helmet design and a comparison with a conventional system. NeuroImage, 2020, 219, 116995.	4.2	164
4	A bi-planar coil system for nulling background magnetic fields in scalp mounted magnetoencephalography. NeuroImage, 2018, 181, 760-774.	4.2	143
5	A tool for functional brain imaging with lifespan compliance. Nature Communications, 2019, 10, 4785.	12.8	96
6	Magnetoencephalography with optically pumped magnetometers (OPM-MEG): the next generation of functional neuroimaging. Trends in Neurosciences, 2022, 45, 621-634.	8.6	91
7	Towards OPM-MEG in a virtual reality environment. NeuroImage, 2019, 199, 408-417.	4.2	87
8	Wearable neuroimaging: Combining and contrasting magnetoencephalography and electroencephalography. NeuroImage, 2019, 201, 116099.	4.2	82
9	Triaxial detection of the neuromagnetic field using optically-pumped magnetometry: feasibility and application in children. NeuroImage, 2022, 252, 119027.	4.2	76
10	Theoretical advantages of a triaxial optically pumped magnetometer magnetoencephalography system. NeuroImage, 2021, 236, 118025.	4.2	73
11	Balanced, bi-planar magnetic field and field gradient coils for field compensation in wearable magnetoencephalography. Scientific Reports, 2019, 9, 14196.	3.3	72
12	Measuring functional connectivity with wearable MEG. NeuroImage, 2021, 230, 117815.	4.2	72
13	Cognitive neuroscience using wearable magnetometer arrays: Non-invasive assessment of language function. NeuroImage, 2018, 181, 513-520.	4.2	56
14	Mouth magnetoencephalography: A unique perspective on the human hippocampus. NeuroImage, 2021, 225, 117443.	4.2	56
15	Precision magnetic field modelling and control for wearable magnetoencephalography. NeuroImage, 2021, 241, 118401.	4.2	54
16	On-Scalp Optically Pumped Magnetometers versus Cryogenic Magnetoencephalography for Diagnostic Evaluation of Epilepsy in School-aged Children. Radiology, 2022, 304, 429-434.	7.3	54
17	Imaging the human hippocampus with optically-pumped magnetoencephalography. NeuroImage, 2019, 203, 116192.	4.2	52
18	Optically pumped magnetoencephalography in epilepsy. Annals of Clinical and Translational Neurology, 2020, 7, 397-401.	3.7	43

#	Article	IF	Citations
19	Modelling optically pumped magnetometer interference in MEG as a spatially homogeneous magnetic field. NeuroImage, 2021, 244, 118484.	4.2	36
20	Using OPM-MEG in contrasting magnetic environments. NeuroImage, 2022, 253, 119084.	4.2	33
21	Using optically pumped magnetometers to measure magnetoencephalographic signals in the human cerebellum. Journal of Physiology, 2019, 597, 4309-4324.	2.9	31
22	Magnetic Field Mapping and Correction for Moving OP-MEG. IEEE Transactions on Biomedical Engineering, 2022, 69, 528-536.	4.2	26
23	Optimal Inverse Design of Magnetic Field Profiles in a Magnetically Shielded Cylinder. Physical Review Applied, 2020, 14, .	3.8	24
24	Pragmatic spatial sampling for wearable MEG arrays. Scientific Reports, 2020, 10, 21609.	3.3	23
25	Measuring the cortical tracking of speech with optically-pumped magnetometers. NeuroImage, 2021, 233, 117969.	4.2	22
26	Dataâ€driven model optimization for optically pumped magnetometer sensor arrays. Human Brain Mapping, 2019, 40, 4357-4369.	3.6	16
27	Practical real-time MEG-based neural interfacing with optically pumped magnetometers. BMC Biology, 2021, 19, 158.	3.8	14
28	Planar Coil Optimization in a Magnetically Shielded Cylinder. Physical Review Applied, 2021, 15, .	3.8	13
29	Magnetic field design in a cylindrical high-permeability shield: The combination of simple building blocks and a genetic algorithm. Journal of Applied Physics, 2022, 131, .	2.5	13
30	Bespoke magnetic field design for a magnetically shielded cold atom interferometer. Scientific Reports, 2022, 12, .	3.3	8
31	Updating Dynamic Noise Models With Moving Magnetoencephalographic (MEG) Systems. IEEE Access, 2019, 7, 10093-10102.	4.2	5
32	Optimised hybrid shielding and magnetic field control for emerging quantum technologies. , 2021, , .		2