Louis Lemieux

List of Publications by Year
in descending order

62 papers	4,164 citations	126907 33 h-index	118850 62 g-index
66 all docs	66 docs citations	66 times ranked	4004 citing authors

#	Article	IF	Citations
1	Recording of EEG during fMRI experiments: Patient safety. Magnetic Resonance in Medicine, 1997, 38, 943-952.	3.0	284
2	Temporal lobe interictal epileptic discharges affect cerebral activity in â€œdefault modeâ€•brain regions. Human Brain Mapping, 2007, 28, 1023-1032.	3.6	281
3	Hemodynamic correlates of epileptiform discharges: An EEG-fMRI study of 63 patients with focal epilepsy. Brain Research, 2006, 1088, 148-166.	2.2	255
4	EEGâ€“fMRI of idiopathic and secondarily generalized epilepsies. NeuroImage, 2006, 31, 1700-1710.	4.2	254
5	Modelling large motion events in fMRI studies of patients with epilepsy. Magnetic Resonance Imaging, 2007, 25, 894-901.	1.8	222
6	A patient-to-computed-tomography image registration method based on digitally reconstructed radiographs. Medical Physics, 1994, 21, 1749-1760.	3.0	194
7	Fast, accurate, and reproducible automatic segmentation of the brain in T1-weighted volume MRI data. Magnetic Resonance in Medicine, 1999, 42, 127-135.	3.0	178
8	Causal Hierarchy within the Thalamo-Cortical Network in Spike and Wave Discharges. PLoS ONE, 2009, 4, e6475.	2.5	141
9	Electrophysiological correlates of the BOLD signal for EEG-informed fMRI. Human Brain Mapping, 2015, 36, 391-414.	3.6	137
10	Simultaneous intracranial EEG and fMRI of interictal epileptic discharges in humans. NeuroImage, 2011, 54, 182-190.	4.2	124
11	EEG correlated functional MRI and postoperative outcome in focal epilepsy. Journal of Neurology, Neurosurgery and Psychiatry, 2010, 81, 922-927.	1.9	122
12	Epileptic networks in focal cortical dysplasia revealed using electroencephalographyâ€“functional magnetic resonance imaging. Annals of Neurology, 2011, 70, 822-837.	5.3	116
13	Functional MRI with active, fully implanted, deep brain stimulation systems: Safety and experimental confounds. NeuroImage, 2007, 37, 508-517.	4.2	103
14	Noncanonical spike-related BOLD responses in focal epilepsy. Human Brain Mapping, 2007, 29, 329-345.	3.6	91
15	Feasibility of simultaneous intracranial EEG-fMRI in humans: A safety study. NeuroImage, 2010, 49, 379-390.	4.2	85
16	The combination of EEG Source Imaging and EEGâ€correlated functional MRI to map epileptic networks. Epilepsia, 2010, 51, 491-505.	5.1	75
17	Imaging haemodynamic changes related to seizures: Comparison of EEG-based general linear model, independent component analysis of fMRI and intracranial EEG. NeuroImage, 2010, 53, 196-205.	4.2	75
18	Safety of localizing epilepsy monitoring intracranial electroencephalograph electrodes using MRI: Radiofrequencyâ€induced heating. Journal of Magnetic Resonance Imaging, 2008, 28, 1233-1244.	3.4	74

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19	Automatic segmentation of the brain and intracranial cerebrospinal fluid inT1-weighted volume MRI scans of the head, and its application to serial cerebral and intracranial volumetry. Magnetic Resonance in Medicine, 2003, 49, 872-884.	3.0	71
20	EEG-fMRI in the presurgical evaluation of temporal lobe epilepsy. Journal of Neurology, Neurosurgery and Psychiatry, 2016, 87, 642-649.	1.9	69
21	Dysfunctional Brain Networking among Autonomic Regulatory Structures in Temporal Lobe Epilepsy Patients at High Risk of Sudden Unexpected Death in Epilepsy. Frontiers in Neurology, 2017, 8, 544.	2.4	69
22	Simultaneous intracranial EEGâ€“fMRI in humans: Protocol considerations and data quality. NeuroImage, 2012, 63, 301-309.	4.2	62
23	Combined EEG-fMRI and tractography to visualise propagation of epileptic activity. Journal of Neurology, Neurosurgery and Psychiatry, 2008, 79, 594-597.	1.9	61
24	Mapping preictal and ictal haemodynamic networks using video-electroencephalography and functional imaging. Brain, 2012, 135, 3645-3663.	7.6	61
25	Hippocampal and cerebellar volumetry in serially acquired MRI volume scans. Magnetic Resonance Imaging, 2000, 18, 1027-1033.	1.8	59
26	Voxel-based localization in frame-based and frameless stereotaxy and its accuracy. Medical Physics, 1994, 21, 1301-1310.	3.0	54
27	Altered fMRI Connectivity Dynamics in Temporal Lobe Epilepsy Might Explain Seizure Semiology. Frontiers in Neurology, 2014, 5, 175.	2.4	51
28	Networks involved in seizure initiation. Neurology, 2012, 79, 249-253.	1.1	48
29	Combined electroencephalographyâ€“functional magnetic resonance imaging and electrical source imaging improves localization of pediatric focal epilepsy. Annals of Neurology, 2017, 82, 278-287.	5.3	45
30	Tracking slow modulations in synaptic gain using dynamic causal modelling: Validation in epilepsy. NeuroImage, 2015, 107, 117-126.	4.2	43
31	Neuroimaging of Sudden Unexpected Death in Epilepsy (SUDEP): Insights From Structural and Resting-State Functional MRI Studies. Frontiers in Neurology, 2019, 10, 185.	2.4	43
32	Phaseâ€“amplitude coupling and the BOLD signal: A simultaneous intracranial EEG (icEEG) - fMRI study in humans performing a finger-tapping task. NeuroImage, 2017, 146, 438-451.	4.2	40
33	Mapping effective connectivity in the human brain with concurrent intracranial electrical stimulation and BOLD-fMRI. Journal of Neuroscience Methods, 2017, 277, 101-112.	2.5	39
34	Fractal and Multifractal Properties of Electrographic Recordings of Human Brain Activity: Toward Its Use as a Signal Feature for Machine Learning in Clinical Applications. Frontiers in Physiology, 2018, 9, 1767.	2.8	38
35	Electroencephalography-correlated functional MR imaging studies of epileptic activity. Neuroimaging Clinics of North America, 2004, 14, 487-506.	1.0	36
36	Towards motion insensitive EEG-fMRI: Correcting motion-induced voltages and gradient artefact instability in EEG using an fMRI prospective motion correction (PMC) system. NeuroImage, 2016, 138, 13-27.	4.2	35

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37	Methods and utility of EEG-fMRI in epilepsy. Quantitative Imaging in Medicine and Surgery, 2015, 5, 300-12.	2.0	33
38	Simultaneous Intracranial EEG-fMRI Shows Inter-Modality Correlation in Time-Resolved Connectivity Within Normal Areas but Not Within Epileptic Regions. Brain Topography, 2017, 30, 639-655.	1.8	32
39	Optimising EEG-fMRI for Localisation of Focal Epilepsy in Children. PLoS ONE, 2016, 11, e0149048.	2.5	32
40	Measurement of small inter-scan fluctuations in voxel dimensions in magnetic resonance images using registration. Medical Physics, 1998, 25, 1049-1054.	3.0	29
41	Classification of EEG abnormalities in partial epilepsy with simultaneous EEGâ€“fMRI recordings. NeuroImage, 2014, 99, 461-476.	4.2	29
42	Effect of fiducial marker localization on stereotactic target coordinate calculation in CT slices and radiographs. Physics in Medicine and Biology, 1994, 39, 1915-1928.	3.0	27
43	Do reflex seizures and spontaneous seizures form a continuum? â€“ Triggering factors and possible common mechanisms. Seizure: the Journal of the British Epilepsy Association, 2015, 25, 72-79.	2.0	26
44	Periâ€ictal hypoxia is related to extent of regional brain volume loss accompanying generalized tonicâ€clonic seizures. Epilepsia, 2020, 61, 1570-1580.	5.1	25
45	Causality within the Epileptic Network: An EEG-fMRI Study Validated by Intracranial EEG. Frontiers in Neurology, 2013, 4, 185.	2.4	24
46	ICN_Atlas: Automated description and quantification of functional MRI activation patterns in the framework of intrinsic connectivity networks. NeuroImage, 2017, 163, 319-341.	4.2	22
47	Mapping human preictal and ictal haemodynamic networks using simultaneous intracranial EEG-fMRI. NeuroImage: Clinical, 2016, 11, 486-493.	2.7	20
48	A study of the electro-haemodynamic coupling using simultaneously acquired intracranial EEG and fMRI data in humans. NeuroImage, 2016, 142, 371-380.	4.2	20
49	The impact of mapping interictal discharges using EEG-fMRI on the epilepsy presurgical clinical decision making process: A prospective study. Seizure: the Journal of the British Epilepsy Association, 2018, 61, 30-37.	2.0	16
50	Safety of Simultaneous Scalp or Intracranial EEG during MRI: A Review. Frontiers in Physics, 2017, 5, .	2.1	13
51	EEG-Correlated Functional MRI: Recent Methodologic Progress and Current Issues. Epilepsia, 2002, 43, 64-68.	5.1	12
52	A hemodynamic network involving the insula, the cingulate, and the basal forebrain correlates with EEG synchronization phases of sleep instability. Sleep, 2019, 42, .	1.1	11
53	Source analyses of axial and vestibular evoked potentials associated with brainstem-spinal reflexes show cerebellar and cortical contributions. Neuroscience Letters, 2021, 757, 135960.	2.1	11
54	A novel scheme for the validation of an automated classification method for epileptic spikes by comparison with multiple observers. Clinical Neurophysiology, 2017, 128, 1246-1254.	1.5	10

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55	BOLD mapping of human epileptic spikes recorded during simultaneous intracranial EEG-fMRI: The impact of automated spike classification. NeuroImage, 2019, 184, 981-992.	4.2	10
56	fMRI-Based Effective Connectivity in Surgical Remediable Epilepsies: A Pilot Study. Brain Topography, 2021, 34, 632-650.	1.8	6
57	Temperature Measurements in the Vicinity of Human Intracranial EEG Electrodes Exposed to Body-Coil RF for MRI at 1.5T. Frontiers in Neuroscience, 2020, 14, 429.	2.8	5
58	Altered Relationship Between Heart Rate Variability and fMRI-Based Functional Connectivity in People With Epilepsy. Frontiers in Neurology, 2021, 12, 671890.	2.4	5
59	Structural Image Analysis in Epilepsy. Epilepsia, 2002, 43, 19-24.	5.1	4
60	Safety of intracranial electroencephalography during functional magnetic resonance imaging in humans at 1.5 tesla using a head transmit RF coil: Histopathological and heat-shock immunohistochemistry observations. NeuroImage, 2022, 254, 119129.	4.2	3
61	Human epileptic seizures mapped using functional MRI and EEG recorded simultaneously. , 2014, , .		0
62	Evaluating the Safety of Simultaneous Intracranial Electroencephalography and Functional Magnetic Resonance Imaging Acquisition Using a 3 Tesla Magnetic Resonance Imaging Scanner. Frontiers in Neuroscience, 0, 16, .	2.8	0