Fabrice Wallois,, Hdr

List of Publications by Year
in descending order

83 papers	2,293 citations	236925 25 h-index	243625 44 g-index
84 all docs	84 docs citations	84 times ranked	2476 citing authors

#	Article	IF	Citations
1	Differences in behavioral and cortical indices in pianists and non-musicians during a non-musical motor planning task: An event-related potential study. Neuroscience Letters, 2022, 769, 136321.	2.1	0
2	Evolution of cross-frequency coupling between endogenous oscillations over the temporal cortex in very premature neonates. Cerebral Cortex, 2022, 33, 278-289.	2.9	1
3	Performance Analysis of Optically Pumped 4He Magnetometers vs. Conventional SQUIDs: From Adult to Infant Head Models. Sensors, 2022, 22, 3093.	3.8	10
4	Back to basics: the neuronal substrates and mechanisms that underlie the electroencephalogram in premature neonates. Neurophysiologie Clinique, 2021, 51, 5-33.	2.2	37
5	Cortical hemodynamic mapping of subthalamic nucleus deep brain stimulation in Parkinsonian patients, using high-density functional near-infrared spectroscopy. PLoS ONE, 2021, 16, e0245188.	2.5	2
6	What Triggers the Interictal Epileptic Spike? A Multimodal Multiscale Analysis of the Dynamic of Synaptic and Non-synaptic Neuronal and Vascular Compartments Using Electrical and Optical Measurements. Frontiers in Neurology, 2021, 12, 596926.	2.4	4
7	Dynamics of cortical oxygenation during immediate adaptation to extrauterine life. Scientific Reports, 2021, 11, 22041.	3.3	0
8	Neurovascular coupling in the developing neonatal brain at rest. Human Brain Mapping, 2020, 41, 503-519.	3.6	19
9	Exploring the Eventâ€Related Potentials' Time Course of Associative Recognition in Autism. Autism Research, 2020, 13, 1998-2016.	3.8	6
10	Functional and structural correlates of the preterm infantâ€™s brain: relating developmental changes of auditory evoked responses to structural maturation. Brain Structure and Function, 2020, 225, 2165-2176.	2.3	6
11	The intimate relationship between coalescent generators in very premature human newborn brains: Quantifying the coupling of nested endogenous oscillations. Human Brain Mapping, 2020, 41, 4691-4703.	3.6	12
12	Temporal and Spatial Dynamics of Different Interictal Epileptic Discharges: A Time-Frequency EEG Approach in Pediatric Focal Refractory Epilepsy. Frontiers in Neurology, 2020, 11, 941.	2.4	5
13	Impact of prematurity on neurodevelopment. Handbook of Clinical Neurology / Edited By P J Vinken and G W Bruyn, 2020, 173, 341-375.	1.8	14
14	Effect of structural complexities in head modeling on the accuracy of EEG source localization in neonates. Journal of Neural Engineering, 2020, 17, 056004.	3.5	10
15	Neurodevelopment and asymmetry of auditory-related responses to repetitive syllabic stimuli in preterm neonates based on frequency-domain analysis. Scientific Reports, 2019, 9, 10654.	3.3	9
16	Functional and Structural Network Disorganizations in Typical Epilepsy With Centro-Temporal Spikes and Impact on Cognitive Neurodevelopment. Frontiers in Neurology, 2019, 10, 809.	2.4	16
17	Preterm Modulation of Connectivity by Endogenous Generators: The Theta Temporal Activities in Coalescence with Slow Waves. Brain Topography, 2019, 32, 762-772.	1.8	7
18	Assessment of cerebrovascular development and intraventricular hemorrhages in preterm infants with optical measures of the brain arterial pulse wave. Journal of Cerebral Blood Flow and Metabolism, 2019, 39, 466-480.	4.3	8

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19	Neonatal brain resting-state functional connectivity imaging modalities. Photoacoustics, 2018, 10, 1-19.	7.8	56
20	Consequence of intraventricular hemorrhage on neurovascular coupling evoked by speech syllables in preterm neonates. Developmental Cognitive Neuroscience, 2018, 30, 60-69.	4.0	18
21	Identifying neural drivers of benign childhood epilepsy with centrotemporal spikes. NeuroImage: Clinical, 2018, 17, 739-750.	2.7	15
22	A survey on stimuli for visual cortical function assessment in infants. Brain and Development, 2018, 40, 2-15.	1.1	2
23	Functional Maps at the Onset of Auditory Inputs in Very Early Preterm Human Neonates. Cerebral Cortex, 2017, 27, bhw103.	2.9	41
24	Shedding light on interictal epileptic spikes: An in vivo study using fast optical signal and electrocorticography. Epilepsia, 2017, 58, 608-616.	5.1	14
25	Plasticity of neonatal neuronal networks in very premature infants: Source localization of temporal theta activity, the first endogenous neural biomarker, in temporoparietal areas. Human Brain Mapping, 2017, 38, 2345-2358.	3.6	17
26	Relationship between relative cerebral blood flow, relative cerebral blood volume, and relative cerebral metabolic rate of oxygen in the preterm neonatal brain. Neurophotonics, 2017, 4, 021104.	3.3	10
27	Hemodynamic Changes Associated with Interictal Spikes Induced by Acute Models of Focal Epilepsy in Rats: A Simultaneous Electrocorticography and Near-Infrared Spectroscopy Study. Brain Topography, 2017, 30, 390-407.	1.8	14
28	Effect of confounding variables on hemodynamic response function estimation using averaging and deconvolution analysis: An event-related NIRS study. NeuroImage, 2017, 155, 25-49.	4.2	26
29	Non-invasive, multimodal analysis of cortical activity, blood volume and neurovascular coupling in infantile spasms using EEG-fNIRS monitoring. NeuroImage: Clinical, 2017, 15, 359-366.	2.7	13
30	Cortical light scattering during interictal epileptic spikes in frontal lobe epilepsy in children: A fast optical signal and electroencephalographic study. Epilepsia, 2017, 58, 2064-2072.	5.1	9
31	Local and Distant Dysregulation of Synchronization Around Interictal Spikes in BECTS. Frontiers in Neuroscience, 2017, 11, 59.	2.8	10
32	Electrophysiological and hemodynamic mismatch responses in rats listening to human speech syllables. PLoS ONE, 2017, 12, e0173801.	2.5	9
33	A Neonatal Bimodal MR-CT Head Template. PLoS ONE, 2017, 12, e0166112.	2.5	7
34	EEG Resting State Functional Connectivity Analysis in Children with Benign Epilepsy with Centrotemporal Spikes. Frontiers in Neuroscience, 2016, 10, 143.	2.8	51
35	Effects of uncertainty in head tissue conductivity and complexity on EEG forward modeling in neonates. Human Brain Mapping, 2016, 37, 3604-3622.	3.6	35
36	Distinct hemispheric specializations for native and non-native languages in one-day-old newborns identified by fNIRS. Neuropsychologia, 2016, 84, 63-69.	1.6	56

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37	Skull Segmentation and Reconstruction From Newborn CT Images Using Coupled Level Sets. IEEE Journal of Biomedical and Health Informatics, 2016, 20, 563-573.	6.3	18
38	EEG resting state analysis of cortical sources in patients with benign epilepsy with centrotemporal spikes. NeuroImage: Clinical, 2015, 9, 275-282.	2.7	35
39	Evaluation of anterior fontanel size and area in the newborn using CT images. Journal of Intelligent and Fuzzy Systems, 2015, 29, 443-450.	1.4	3
40	Functional Brain Dysfunction in Patients with Benign Childhood Epilepsy as Revealed by Graph Theory. PLoS ONE, 2015, 10, e0139228.	2.5	35
41	Neonatal Atlas Templates for the Study of Brain Development Using Magnetic Resonance Images. Current Medical Imaging, 2015, 11, 38-48.	0.8	2
42	High-density EEG and source analysis: Principles, recent progress and applications in children. Journal of Pediatric Epilepsy, 2015, 02, 003-018.	0.2	0
43	Noninvasive Technique for the Diagnosis of Patent Ductus Arteriosus in Premature Infants by Analyzing Pulse Wave Phases on Photoplethysmography Signals Measured in the Right Hand and the Left Foot. PLoS ONE, 2014, 9, e98763.	2.5	8
44	Automatic segmentation of newbornsâ€™ skull and fontanel from CT data using model-based variational level set. Signal, Image and Video Processing, 2014, 8, 377-387.	2.7	13
45	Quantitative effect of the neonatal fontanel on synthetic near infrared spectroscopy measurements. Human Brain Mapping, 2013, 34, 878-889.	3.6	16
46	Patent ductus arteriosus in preterm infants is associated with cardiac autonomic alteration and predominant parasympathetic stimulation. Early Human Development, 2013, 89, 631-634.	1.8	10
47	Syllabic discrimination in premature human infants prior to complete formation of cortical layers. Proceedings of the National Academy of Sciences of the United States of America, 2013, 110, 4846-4851.	7.1	298
48	A Tool to Investigate Symmetry Properties of Newborns Brain: The Newbornsâ€™ Symmetric Brain Atlas. ISRN Neuroscience, 2013, 2013, 1-6.	1.5	1
49	Usefulness of simultaneous EEGâ€"NIRS recording in language studies. Brain and Language, 2012, 121, 110-123.	1.6	99
50	Realistic Head Model Design and 3D Brain Imaging of NIRS Signals Using Audio Stimuli on Preterm Neonates for Intra-Ventricular Hemorrhage Diagnosis. Lecture Notes in Computer Science, 2012, 15, 172-179.	1.3	2
51	Quantitative investigation of the effect of the extra-cerebral vasculature in diffuse optical imaging: a simulation study. Biomedical Optics Express, 2011, 2, 680.	2.9	27
52	Experimental investigation of NIRS spatial sensitivity. Biomedical Optics Express, 2011, 2, 1478.	2.9	45
53	Dynamic changes in quantitative electroencephalogram during continuous performance test in children with attention-deficit/hyperactivity disorder. International Journal of Psychophysiology, 2011, 81, 230-236.	1.0	56
54	Design and construction of a brain phantom to simulate neonatal MR images. Computerized Medical Imaging and Graphics, 2011, 35, 237-250.	5.8	3

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55	Mother and Stranger: An Electrophysiological Study of Voice Processing in Newborns. Cerebral Cortex, 2011, 21, 1705-1711.	2.9	98
56	NIRSâ€measured oxyâ€and deoxyhemoglobin changes associated with EEG spikeâ€andâ€wave discharges in a genetic model of absence epilepsy: The GAERS. Epilepsia, 2010, 51, 1374-1384.	5.1	27
57	EEG-NIRS in epilepsy in children and neonates. Neurophysiologie Clinique, 2010, 40, 281-292.	2.2	67
58	Vagus nerve stimulation induces changes in respiratory sinus arrhythmia of epileptic children during sleep. Epilepsia, 2009, 50, 2473-2480.	5.1	30
59	Haemodynamic changes during seizure-like activity in a neonate: A simultaneous AC EEG-SPIR and high-resolution DC EEG recording. Neurophysiologie Clinique, 2009, 39, 217-227.	2.2	25
60	Detection of EEG transients in neonates and older children using a system based on dynamic time-warping template matching and spatial dipole clustering. NeuroImage, 2009, 48, 50-62.	4.2	29
61	High-resolution electroencephalography and source localization in neonates. Human Brain Mapping, 2008, 29, 167-176.	3.6	77
62	NIRSâ€measured oxyâ€and deoxyhemoglobin changes associated with EEG spikeâ€andâ€wave discharges in children. Epilepsia, 2008, 49, 1871-1880.	5.1	95
63	Does spatiotemporal synchronization of EEG change prior to absence seizures?. Brain Research, 2008, 1188, 207-221.	2.2	65
64	Animal model of the short-term cardiorespiratory effects of intermittent vagus nerve stimulation. Autonomic Neuroscience: Basic and Clinical, 2008, 143, 20-26.	2.8	17
65	Inverse coupling between respiratory and cardiac oscillators in a life-threatening event in a neonate. Autonomic Neuroscience: Basic and Clinical, 2008, 143, 79-82.	2.8	8
66	A multistage knowledge-based system for EEG seizure detection in newborn infants. Clinical Neurophysiology, 2007, 118, 2781-2797.	1.5	114
67	A neonatal atlas template for spatial normalization of whole-brain magnetic resonance images of newborns: Preliminary results. NeuroImage, 2007, 37, 463-473.	4.2	86
68	Vagus Nerve Stimulation Therapy Induces Changes in Heart Rate of Children during Sleep. Epilepsia, 2007, 48, 923-930.	5.1	20
69	Cardiorespiratory effects induced by vagus nerve stimulation in epileptic children. Medical and Biological Engineering and Computing, 2006, 44, 338-347.	2.8	16
70	Vagus Nerve Stimulation Induces Concomitant Respiratory Alterations and a Decrease in SaO2 in Children. Epilepsia, 2005, 46, 1802-1809.	5.1	29
71	Connections between retrotrapezoid nucleus and nucleus tractus solitarii in cat. Neuroscience Letters, 2000, 280, 111-114.	2.1	20
72	Effect of hypoxia on the activity of respiratory and non-respiratory modulated retrotrapezoid neurons of the cat. Autonomic Neuroscience: Basic and Clinical, 2000, 86, 70-77.	2.8	17

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73	Changes in Fos-like immunoreactivity evoked by maturation of the sneeze reflex triggered by nasal air puff stimulation in kittens. Brain Research, 1997, 757, 102-110.	2.2	8
74	An improved mechanical air puff stimulator that allows activation of a variety of endoepithelial receptors and is suitable for the study of reflexes in animals and humans. Journal of Neuroscience Methods, 1997, 77, 119-127.	2.5	3
75	C-Fos-like immunoreactivity in the cat brainstem evoked by sneeze-inducing air puff stimulation of the nasal mucosa. Brain Research, 1995, 687, 143-154.	2.2	37
76	Activities of vagal receptors in the different phases of sneeze in cats. Respiration Physiology, 1995, 101, 239-255.	2.7	9
77	Influence of vagal afferents in the sneeze reflex in cats. Neuroscience Letters, 1994, 177, 79-82.	2.1	14
78	Nasal air puff stimulations and laryngeal, thoracic and abdominal muscle activities. Respiration Physiology, 1994, 97, 47-62.	2.7	13
79	Postnatal development of the anterior ethmoidal nerve in cats: Unmyelinated and myelinated nerve fiber analysis. Neuroscience Letters, 1993, 160, 221-224.	2.1	15
80	Oral stimulations induce apnoea in newborn kittens. NeuroReport, 1993, 4, 903-906.	1.2	16
81	A comparative HRP study of the neuronal supply to the inferior and superior nasal meatus in the cat. Neuroscience Letters, 1992, 139, 234-238.	2.1	10
82	Trigeminal afferences implied in the triggering or inhibition of sneezing in cats. Neuroscience Letters, 1991, 122, 145-147.	2.1	23
83	Trigeminal nasal receptors related to respiration and to various stimuli in cats. Respiration Physiology, 1991, 85, 111-125.	2.7	65