Olivier Baledent

List of Publications by Year
in descending order

74 papers	1,934 citations	331670 21 h-index	276875 41 g-index
77 all docs	77 docs citations	77 times ranked	1694 citing authors

#	Article	IF	Citations
1	Aging Effects on Cerebral Blood and Cerebrospinal Fluid Flows. Journal of Cerebral Blood Flow and Metabolism, 2007, 27, 1563-1572.	4.3	248
2	Cerebrospinal Fluid Dynamics and Relation with Blood Flow. Investigative Radiology, 2001, 36, 368-377.	6.2	201
3	Relationship Between Cerebrospinal Fluid and Blood Dynamics in Healthy Volunteers and Patients with Communicating Hydrocephalus. Investigative Radiology, 2004, 39, 45-55.	6.2	158
4	A Phase-Contrast MRI Study of Physiologic Cerebral Venous Flow. Journal of Cerebral Blood Flow and Metabolism, 2009, 29, 1208-1215.	4.3	119
5	Origin of subarachnoid cerebrospinal fluid pulsations: a phase-contrast MR analysis. Magnetic Resonance Imaging, 2000, 18, 387-395.	1.8	105
6	Brain hydrodynamics study by phase-contrast magnetic resonance imaging and transcranial color doppler. Journal of Magnetic Resonance Imaging, 2006, 24, 995-1004.	3.4	70
7	Hepatic vascular flow measurements by phase contrast MRI and doppler echography: A comparative and reproducibility study. Journal of Magnetic Resonance Imaging, 2010, 31, 579-588.	3.4	62
8	Cerebrospinal fluid and blood flow in mild cognitive impairment and Alzheimer's disease: a differential diagnosis from idiopathic normal pressure hydrocephalus. Fluids and Barriers of the CNS, 2011, 8, 12.	5.0	60
9	A New Lumped-Parameter Model of Cerebrospinal Hydrodynamics During the Cardiac Cycle in Healthy Volunteers. IEEE Transactions on Biomedical Engineering, 2007, 54, 483-491.	4.2	52
10	A coupled hydrodynamic model of the cardiovascular and cerebrospinal fluid system. American Journal of Physiology - Heart and Circulatory Physiology, 2012, 302, H1492-H1509.	3.2	52
11	Concomitant Analysis of Arterial, Venous, and CSF Flows using Phase-Contrast MRI: A Quantitative Comparison Between MS Patients and Healthy Controls. Journal of Cerebral Blood Flow and Metabolism, 2013, 33, 1314-1321.	4.3	51
12	Extracranial versus intracranial hydro-hemodynamics during aging: a PC-MRI pilot cross-sectional study. Fluids and Barriers of the CNS, 2020, 17, 1.	5.0	48
13	Decreased Cerebrospinal Fluid Flow Is Associated With Cognitive Deficit in Elderly Patients. Frontiers in Aging Neuroscience, 2019, 11, 87.	3.4	46
14	Cerebrospinal Fluid Flow Waveforms. Investigative Radiology, 2001, 36, 146-154.	6.2	41
15	A 3D subject-specific model of the spinal subarachnoid space with anatomically realistic ventral and dorsal spinal cord nerve rootlets. Fluids and Barriers of the CNS, 2017, 14, 36.	5.0	36
16	Intracranial Fluid Dynamics in Normal and Hydrocephalic States. Journal of Computer Assisted Tomography, 2004, 28, 247-254.	0.9	34
17	Dynamic measurements of total hepatic blood flow with Phase Contrast MRI. European Journal of Radiology, 2010, 73, 119-124.	2.6	33
18	Heart rate and respiration influence on macroscopic blood and CSF flows. Acta Radiologica, 2017, 58, 977-982.	1.1	28

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19	Anthropomorphic Model of Intrathecal Cerebrospinal Fluid Dynamics Within the Spinal Subarachnoid Space: Spinal Cord Nerve Roots Increase Steady-Streaming. Journal of Biomechanical Engineering, 2018, 140, .	1.3	28
20	Compliance of the cerebrospinal space: comparison of three methods. Acta Neurochirurgica, 2021, 163, 1979-1989.	1.7	27
21	Measurement of choroid plexus perfusion using dynamic susceptibility MR imaging: capillary permeability and age-related changes. Neuroradiology, 2013, 55, 1447-1454.	2.2	25
22	Enhanced in vitro model of the CSF dynamics. Fluids and Barriers of the CNS, 2019, 16, 11.	5.0	23
23	Correlation Between Tap Test and CSF Aqueductal Stroke Volume in Idiopathic Normal Pressure Hydrocephalus. Acta Neurochirurgica Supplementum, 2012, 113, 43-46.	1.0	20
24	Interactions between Flow Oscillations and Biochemical Parameters in the Cerebrospinal Fluid. Frontiers in Aging Neuroscience, 2016, 8, 154.	3.4	20
25	Estimation of the Lateral Ventricles Volumes from a 2D Image and Its Relationship with Cerebrospinal Fluid Flow. BioMed Research International, 2013, 2013, 1-9.	1.9	18
26	Relationship between cerebrospinal fluid flow, ventricles morphology, and DTI properties in internal capsules: differences between Alzheimer's disease and normal-pressure hydrocephalus. Acta Radiologica, 2014, 55, 992-999.	1.1	18
27	Insights Into Cerebrospinal Fluid and Cerebral Blood Flows in Infants and Young Children. Journal of Child Neurology, 2014, 29, 1608-1615.	1.4	18
28	Does Phase-Contrast Imaging through the Cerebral Aqueduct Predict the Outcome of Lumbar CSF Drainage or Shunt Surgery in Patients with Suspected Adult Hydrocephalus?. American Journal of Neuroradiology, 2018, 39, 2224-2230.	2.4	16
29	A Phaseâ€Contrast MRI Study of Acute and Chronic Hydrodynamic Alterations after Hydrocephalus Induced by Subarachnoid Hemorrhage. Journal of Neuroimaging, 2012, 22, 343-350.	2.0	15
30	Use of dynamic 18F-fluorodeoxyglucose positron emission tomography to investigate choroid plexus function in Alzheimer's disease. Experimental Gerontology, 2016, 77, 62-68.	2.8	15
31	Use of Phase-Contrast MRA to Assess Intracranial Venous Sinus Resistance to Drainage in Healthy Individuals. American Journal of Neuroradiology, 2017, 38, 281-287.	2.4	14
32	Cerebrospinal Fluid and Cerebral Blood Flows in Idiopathic Intracranial Hypertension. Acta Neurochirurgica Supplementum, 2018, 126, 237-241.	1.0	13
33	Imaging of the cerebrospinal fluid circulation. , 2014, , 121-138.		12
34	Cerebral Blood and CSF Flow Patterns in Patients Diagnosed for Cerebral Venous Thrombosis - An Observational Study. Journal of Clinical Imaging Science, 2012, 2, 41.	1.1	11
35	Ventriculomegaly in the Elderly: Who Needs a Shunt? A MRI Study on 90 Patients. Acta Neurochirurgica Supplementum, 2018, 126, 221-228.	1.0	11
36	Ocular blood flow and cerebrospinal fluid pressure in glaucoma. Acta Radiologica Open, 2016, 5, 205846011562427.	0.6	10

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37	3T non-injected phase-contrast MRI sequences for the mapping of the external carotid branches: InÂvivo radio-anatomical pilot study for feasibility analysis. Journal of Cranio-Maxillo-Facial Surgery, 2018, 46, 98-106.	1.7	10
38	Total cerebrovascular blood flow and whole brain perfusion in children sedated using propofol with or without ketamine at induction: An investigation with 2Dâ€Cine PC and ASL. Journal of Magnetic Resonance Imaging, 2019, 50, 1433-1440.	3.4	10
39	Simple Patient-Based Transmantle Pressure and Shear Estimate From Cine Phase-Contrast MRI in Cerebral Aqueduct. IEEE Transactions on Biomedical Engineering, 2012, 59, 2874-2883.	4.2	9
40	Effect of surgery on periventricular white matter in normal pressure hydrocephalus patients: comparison of two methods of DTI analysis. Acta Radiologica, 2014, 55, 614-621.	1.1	9
41	A phase-contrast MRI study of physiologic cerebral venous flow. Journal of Cerebral Blood Flow and Metabolism, 0, , .	4.3	9
42	Dynamics of hydrocephalus: a physical approach. Journal of Biological Physics, 2012, 38, 251-266.	1.5	8
43	Influence of principal component analysis acceleration factor on velocity measurement in 2D and 4D PC-MRI. Magnetic Resonance Materials in Physics, Biology, and Medicine, 2018, 31, 469-481.	2.0	8
44	Aqueductal Cerebrospinal Fluid Stroke Volume Flow in a Rodent Model of Chronic Communicating Hydrocephalus: Establishing a Homogeneous Study Population for Cerebrospinal Fluid Dynamics Exploration. World Neurosurgery, 2019, 128, e1118-e1125.	1.3	8
45	Phase-shift between arterial flow and ICP pulse during infusion test. Acta Neurochirurgica, 2015, 157, 633-638.	1.7	7
46	Early assessment of lateralization and sex influences on the microstructure of the white matter corticospinal tract in healthy term neonates. Journal of Neuroscience Research, 2019, 97, 480-491.	2.9	7
47	â€œBucketâ€•cerebrospinal fluid bulk flowâ€”is it a fact or a fiction?. Acta Neurochirurgica, 2019, 161, 257-258.	1.7	7
48	Physical Phantom of Craniospinal Hydrodynamics. Acta Neurochirurgica Supplementum, 2012, 113, 65-69.	1.0	7
49	Cerebrovascular time constant in patients suffering from hydrocephalus. Neurological Research, 2014, 36, 255-261.	1.3	6
50	Correlation of CSF flow using phase-contrast MRI with ventriculomegaly and CSF opening pressure in mucopolysaccharidoses. Fluids and Barriers of the CNS, 2017, 14, 23.	5.0	6
51	Relationship between pineal cyst size and aqueductal CSF flow measured by phase contrast MRI. Journal of Neurosurgical Sciences, 2021, 65, 63-68.	0.6	6
52	Sleep Apnea Syndrome in an Elderly Population Admitted to a Geriatric Unit: Prevalence and Effect on Cognitive Function. Frontiers in Aging Neuroscience, 2019, 11, 361.	3.4	6
53	Brain pulsations enlightened. Acta Neurochirurgica, 2018, 160, 225-227.	1.7	5
54	Dynamics of Cerebrospinal Fluid: From Theoretical Models to Clinical Applications. Biological and Medical Physics Series, 2019, , 181-214.	0.4	5

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55	Use of real-time phase-contrast MRI to quantify the effect of spontaneous breathing on the cerebral arteries. NeuroImage, 2022, 258, 119361.	4.2	5
56	The kinetics of ¹⁸fâ€fluorodeoxyglucose uptake in the choroid plexus. International Journal of Imaging Systems and Technology, 2011, 21, 107-114.	4.1	4
57	Quantitative analysis of cerebrospinal fluid flow in complex regions by using phase contrast magnetic resonance imaging. International Journal of Imaging Systems and Technology, 2011, 21, 290-297.	4.1	4
58	Normalâ€Pressure Hydrocephalus, Sleep Apnea Syndrome, and Quality of Life in an Octagenarian. Journal of the American Geriatrics Society, 2016, 64, 1922-1923.	2.6	4
59	Quantitative assessment of the flow distribution in the branches of the external carotid by non-injected flow MRI. Dentomaxillofacial Radiology, 2018, 47, 20180153.	2.7	4
60	An innovative approach to investigate the dynamics of the cerebrospinal fluid in the prepontine cistern: A feasibility study using spatial saturation-prepared cine PC-MRI. European Journal of Radiology Open, 2014, 1, 14-21.	1.6	3
61	Quantification of blood flow in the superior ophthalmic vein using phase contrast magnetic resonance imaging. Experimental Eye Research, 2018, 176, 40-45.	2.6	3
62	Mathematical Modelling of CSF Pulsatile Flow in Aqueduct Cerebri. Acta Neurochirurgica Supplementum, 2018, 126, 233-236.	1.0	3
63	Numerical Cerebrospinal System Modeling in Fluid-Structure Interaction. Acta Neurochirurgica Supplementum, 2018, 126, 255-259.	1.0	2
64	A New Noninvasive Method for Determining the Local (True) Wave Speed: Application to Internal Carotid Artery. Biophysical Reviews and Letters, 2018, 13, 61-73.	0.8	2
65	A Semi-automatic Software for Processing Real-Time Phase-Contrast MRI Data. Lecture Notes in Computational Vision and Biomechanics, 2019, , 22-28.	0.5	2
66	Erratum to â€œEstimation of the Lateral Ventricles Volumes from a 2D Image and Its Relationship with Cerebrospinal Fluid Flowâ€• BioMed Research International, 2014, 2014, 1-1.	1.9	1
67	Ventricular Volume Dynamics During the Development of Adult Chronic Communicating Hydrocephalus in a Rodent Model. World Neurosurgery, 2018, 120, e1120-e1127.	1.3	1
68	Dynamics of Cerebrospinal Fluid: From Theoretical Models to Clinical Applications. Biological and Medical Physics Series, 2011, , 137-167.	0.4	1
69	A novel non-invasive method for estimating the local wave speed at a single site in the internal carotid artery. Biomedizinische Technik, 2020, 65, 557-566.	0.8	1
70	Ophthalmic Artery and Superior Ophthalmic Vein Blood Flow Dynamics in Glaucoma Investigated by Phase Contrast Magnetic Resonance Imaging. Journal of Glaucoma, 2021, 30, 65-70.	1.6	1
71	Estimation of tansfer function in carotid artery. , 2018, , .		0
72	Diffusion and Flow MR Imaging to Investigate Hydrocephalus Patients Before and After Endoscopic Third Ventriculostomy. Acta Neurochirurgica Supplementum, 2021, 131, 303-306.	1.0	0

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73	A NOVEL METHOD FOR DETERMINING THE ARRIVAL TIME OF REFLECTED WAVE AT SINGLE SITE: VALIDATION USING PHASE CONTRAST MAGNETIC RESONANCE DATA. Journal of Mechanics in Medicine and Biology, 0, , .	0.7	0
74	COMPARISON BETWEEN TWO NONINVASIVE METHODS USED TO ESTIMATE BIOMECHANICAL PROPERTIES OF THE INTERNAL CAROTID ARTERY. Journal of Mechanics in Medicine and Biology, 0, , .	0.7	0