

# Peter Smielewski

## List of Publications by Year in Descending Order

**Source:** <https://exaly.com/author-pdf/46197/peter-smielewski-publications-by-year.pdf>

**Version:** 2024-04-25

This document has been generated based on the publications and citations recorded by exaly.com. For the latest version of this publication list, visit the link given above.

The third column is the impact factor (IF) of the journal, and the fourth column is the number of citations of the article.

291  
papers

12,487  
citations

58  
h-index

104  
g-index

301  
ext. papers

15,167  
ext. citations

4.1  
avg, IF

6.11  
L-index

#	Paper	IF	Citations
291	Technical considerations on the use of Granger causality in neuromonitoring <i>Brain Multiphysics</i> , <b>2022</b> , 3, 100044	4.2	
290	Effect of frailty on 6-month outcome after traumatic brain injury: a multicentre cohort study with external validation.. <i>Lancet Neurology</i> , <b>2022</b> , 21, 153-162	24.1	2
289	Feasibility of non-invasive neuromonitoring in general intensive care patients using a multi-parameter transcranial Doppler approach.. <i>Journal of Clinical Monitoring and Computing</i> , <b>2022</b> , 1	2	0
288	Serum metabolome associated with severity of acute traumatic brain injury.. <i>Nature Communications</i> , <b>2022</b> , 13, 2545	17.4	2
287	Evaluation of the relationship between slow-waves of intracranial pressure, mean arterial pressure and brain tissue oxygen in TBI: a CENTER-TBI exploratory analysis. <i>Journal of Clinical Monitoring and Computing</i> , <b>2021</b> , 35, 711-722	2	4
286	Relationship Between Baroreflex and Cerebral Autoregulation in Patients With Cerebral Vasospasm After Aneurysmal Subarachnoid Hemorrhage.. <i>Frontiers in Neurology</i> , <b>2021</b> , 12, 740338	4.1	
285	Modeling Brain-Heart Crosstalk Information in Patients with Traumatic Brain Injury. <i>Neurocritical Care</i> , <b>2021</b> , 1	3.3	1
284	Causal relationship between slow waves of arterial, intracranial pressures and blood velocity in brain. <i>Computers in Biology and Medicine</i> , <b>2021</b> , 139, 104970	7	1
283	Determining Thresholds for Three Indices of Autoregulation to Identify the Lower Limit of Autoregulation During Cardiac Surgery. <i>Critical Care Medicine</i> , <b>2021</b> , 49, 650-660	1.4	5
282	Association between Physiological Signal Complexity and Outcomes in Moderate and Severe Traumatic Brain Injury: A CENTER-TBI Exploratory Analysis of Multi-Scale Entropy. <i>Journal of Neurotrauma</i> , <b>2021</b> , 38, 272-282	5.4	7
281	Association of transcranial Doppler blood flow velocity slow waves with delayed cerebral ischemia in patients suffering from subarachnoid hemorrhage: a retrospective study. <i>Intensive Care Medicine Experimental</i> , <b>2021</b> , 9, 11	3.7	2
280	Impact of Arterial Carbon Dioxide and Oxygen Content on Cerebral Autoregulation Monitoring Among Children Supported by ECMO. <i>Neurocritical Care</i> , <b>2021</b> , 35, 480-490	3.3	2
279	CSF Dynamics for Shunt Prognostication and Revision in Normal Pressure Hydrocephalus. <i>Journal of Clinical Medicine</i> , <b>2021</b> , 10,	5.1	2
278	Compliance of the cerebrospinal space: comparison of three methods. <i>Acta Neurochirurgica</i> , <b>2021</b> , 163, 1979-1989	3	6
277	Cerebral autoregulation in the operating room and intensive care unit after cardiac surgery. <i>British Journal of Anaesthesia</i> , <b>2021</b> , 126, 967-974	5.4	6
276	Brain Temperature Influences Intracranial Pressure and Cerebral Perfusion Pressure After Traumatic Brain Injury: A CENTER-TBI Study. <i>Neurocritical Care</i> , <b>2021</b> , 1	3.3	1
275	Management of arterial partial pressure of carbon dioxide in the first week after traumatic brain injury: results from the CENTER-TBI study. <i>Intensive Care Medicine</i> , <b>2021</b> , 47, 961-973	14.5	2

274	Visualising the pressure-time burden of elevated intracranial pressure after severe traumatic brain injury: a retrospective confirmatory study. <i>British Journal of Anaesthesia</i> , <b>2021</b> , 126, e15-e17	5.4	5
273	Continuous Monitoring of Cerebral Autoregulation in Children Supported by Extracorporeal Membrane Oxygenation: A Pilot Study. <i>Neurocritical Care</i> , <b>2021</b> , 34, 935-945	3.3	6
272	Autonomic Nervous System Activity during Refractory Rise in Intracranial Pressure. <i>Journal of Neurotrauma</i> , <b>2021</b> , 38, 1662-1669	5.4	0
271	The Effect of Temperature Increases on Brain Tissue Oxygen Tension in Patients with Traumatic Brain Injury: A Collaborative European NeuroTrauma Effectiveness Research in Traumatic Brain Injury Substudy. <i>Therapeutic Hypothermia and Temperature Management</i> , <b>2021</b> , 11, 122-131	1.3	2
270	Systemic Markers of Injury and Injury Response Are Not Associated with Impaired Cerebrovascular Reactivity in Adult Traumatic Brain Injury: A Collaborative European Neurotrauma Effectiveness Research in Traumatic Brain Injury (CENTER-TBI) Study. <i>Journal of Neurotrauma</i> , <b>2021</b> , 38, 870-878	5.4	3
269	Patient-specific ICP Epidemiologic Thresholds in Adult Traumatic Brain Injury: A CENTER-TBI Validation Study. <i>Journal of Neurosurgical Anesthesiology</i> , <b>2021</b> , 33, 28-38	3	25
268	Errors and Consequences of Inaccurate Estimation of Mean Blood Flow Velocity in Cerebral Arteries. <i>Acta Neurochirurgica Supplementum</i> , <b>2021</b> , 131, 23-25	1.7	
267	Patient@ Clinical Presentation and CPPopt Availability: Any Association?. <i>Acta Neurochirurgica Supplementum</i> , <b>2021</b> , 131, 167-172	1.7	0
266	Comparison of Two Intracranial Pressure Calculation Methods and Their Effects on the Mean Intracranial Pressure and Intracranial Pressure Dose. <i>Acta Neurochirurgica Supplementum</i> , <b>2021</b> , 131, 31-33	1.7	0
265	Optimal Cerebral Perfusion Pressure Assessed with a Multi-Window Weighted Approach Adapted for Prospective Use: A Validation Study. <i>Acta Neurochirurgica Supplementum</i> , <b>2021</b> , 131, 181-185	1.7	1
264	Cerebrovascular Consequences of Elevated Intracranial Pressure After Traumatic Brain Injury. <i>Acta Neurochirurgica Supplementum</i> , <b>2021</b> , 131, 43-48	1.7	1
263	Automatic Pulse Classification for Artefact Removal Using SAX Strings, a CENTER-TBI Study. <i>Acta Neurochirurgica Supplementum</i> , <b>2021</b> , 131, 231-234	1.7	
262	Lower Limit of Reactivity Assessed with PRx in an Experimental Setting. <i>Acta Neurochirurgica Supplementum</i> , <b>2021</b> , 131, 275-278	1.7	2
261	DeepClean: Self-Supervised Artefact Rejection for Intensive Care Waveform Data Using Deep Generative Learning. <i>Acta Neurochirurgica Supplementum</i> , <b>2021</b> , 131, 235-241	1.7	1
260	An Update on the COGiTATE Phase II Study: Feasibility and Safety of Targeting an Optimal Cerebral Perfusion Pressure as a Patient-Tailored Therapy in Severe Traumatic Brain Injury. <i>Acta Neurochirurgica Supplementum</i> , <b>2021</b> , 131, 143-147	1.7	3
259	Spectral Cerebral Blood Volume Accounting for Noninvasive Estimation of Changes in Cerebral Perfusion Pressure in Patients with Traumatic Brain Injury. <i>Acta Neurochirurgica Supplementum</i> , <b>2021</b> , 131, 193-199	1.7	1
258	Visualization of Intracranial Pressure Insults After Severe Traumatic Brain Injury: Influence of Individualized Limits of Reactivity. <i>Acta Neurochirurgica Supplementum</i> , <b>2021</b> , 131, 7-10	1.7	0
257	Methodological Consideration on Monitoring Refractory Intracranial Hypertension and Autonomic Nervous System Activity. <i>Acta Neurochirurgica Supplementum</i> , <b>2021</b> , 131, 211-215	1.7	0

256	Delay of cerebral autoregulation in traumatic brain injury patients. <i>Clinical Neurology and Neurosurgery</i> , <b>2021</b> , 202, 106478	2	1
255	Targeting Autoregulation-Guided Cerebral Perfusion Pressure after Traumatic Brain Injury (COGITATE): A Feasibility Randomized Controlled Clinical Trial. <i>Journal of Neurotrauma</i> , <b>2021</b> , 38, 2790-2800	5.4	6
254	Midline shift in patients with closed traumatic brain injury may be driven by cerebral perfusion pressure not intracranial pressure. <i>Journal of Neurosurgical Sciences</i> , <b>2021</b> , 65, 383-390	1.3	0
253	External Hydrocephalus After Traumatic Brain Injury: Retrospective Study of 102 Patients. <i>Acta Neurochirurgica Supplementum</i> , <b>2021</b> , 131, 35-38	1.7	0
252	Usability of Noninvasive Counterparts of Traditional Autoregulation Indices in Traumatic Brain Injury. <i>Acta Neurochirurgica Supplementum</i> , <b>2021</b> , 131, 163-166	1.7	
251	Analysis of Cardio-Cerebral Crosstalk Events in an Adult Cohort from the CENTER-TBI Study. <i>Acta Neurochirurgica Supplementum</i> , <b>2021</b> , 131, 39-42	1.7	1
250	Python-Embedded Plugin Implementation in ICM+: Novel Tools for Neuromonitoring Time Series Analysis with Examples Using CENTER-TBI Datasets. <i>Acta Neurochirurgica Supplementum</i> , <b>2021</b> , 131, 255-260	1.7	
249	Optimal Cerebral Perfusion Pressure Based on Intracranial Pressure-Derived Indices of Cerebrovascular Reactivity: Which One Is Better for Outcome Prediction in Moderate/Severe Traumatic Brain Injury?. <i>Acta Neurochirurgica Supplementum</i> , <b>2021</b> , 131, 173-179	1.7	0
248	Can We Cluster ICU Treatment Strategies for Traumatic Brain Injury by Hospital Treatment Preferences?. <i>Neurocritical Care</i> , <b>2021</b> , 1	3.3	0
247	Characterising the dynamics of cerebral metabolic dysfunction following traumatic brain injury: A microdialysis study in 619 patients.. <i>PLoS ONE</i> , <b>2021</b> , 16, e0260291	3.7	1
246	Transcranial Doppler-derived indices of cerebrovascular haemodynamics are independent of depth and angle of insonation. <i>Journal of Clinical Neuroscience</i> , <b>2020</b> , 82, 115-121	2.2	1
245	Intracranial Pressure Monitoring in Head Injury <b>2020</b> , 110-131		1
244	Low-resolution pressure reactivity index and its derived optimal cerebral perfusion pressure in adult traumatic brain injury: a CENTER-TBI study. <i>Critical Care</i> , <b>2020</b> , 24, 266	10.8	6
243	Assessment of cerebral autoregulation indices - a modelling perspective. <i>Scientific Reports</i> , <b>2020</b> , 10, 9600	4.9	9
242	Treatment targets based on autoregulation parameters in neurocritical care patients. <i>Current Opinion in Critical Care</i> , <b>2020</b> , 26, 109-114	3.5	8
241	Diffuse Intracranial Injury Patterns Are Associated with Impaired Cerebrovascular Reactivity in Adult Traumatic Brain Injury: A CENTER-TBI Validation Study. <i>Journal of Neurotrauma</i> , <b>2020</b> , 37, 1597-1608	5.4	8
240	Predictive and Discriminative Power of Pressure Reactivity Indices in Traumatic Brain Injury. <i>Neurosurgery</i> , <b>2020</b> , 87, 655-663	3.2	3
239	Cardiovascular and cerebrovascular responses to cardio-respiratory events in preterm infants during the transitional period. <i>Journal of Physiology</i> , <b>2020</b> , 598, 4107-4119	3.9	2

238	Continuous cerebrovascular reactivity monitoring in moderate/severe traumatic brain injury: a narrative review of advances in neurocritical care. <i>British Journal of Anaesthesia</i> , <b>2020</b> ,	5.4	26
237	Statistical Cerebrovascular Reactivity Signal Properties after Secondary Decompressive Craniectomy in Traumatic Brain Injury: A CENTER-TBI Pilot Analysis. <i>Journal of Neurotrauma</i> , <b>2020</b> , 37, 1306-1314	5.4	11
236	Relationship between Measures of Cerebrovascular Reactivity and Intracranial Lesion Progression in Acute Traumatic Brain Injury Patients: A CENTER-TBI Study. <i>Journal of Neurotrauma</i> , <b>2020</b> , 37, 1556-1565	5.4	11
235	Comparison of wavelet and correlation indices of cerebral autoregulation in a pediatric swine model of cardiac arrest. <i>Scientific Reports</i> , <b>2020</b> , 10, 5926	4.9	4
234	Brain Tissue Oxygen and Cerebrovascular Reactivity in Traumatic Brain Injury: A Collaborative European NeuroTrauma Effectiveness Research in Traumatic Brain Injury Exploratory Analysis of Insult Burden. <i>Journal of Neurotrauma</i> , <b>2020</b> , 37, 1854-1863	5.4	17
233	Impact of duration and magnitude of raised intracranial pressure on outcome after severe traumatic brain injury: A CENTER-TBI high-resolution group study. <i>PLoS ONE</i> , <b>2020</b> , 15, e0243427	3.7	14
232	Cardiorespiratory Events in Infants Born Preterm during the Transitional Period. <i>Journal of Pediatrics</i> , <b>2020</b> , 221, 32-38.e2	3.6	
231	Robotic Semi-Automated Transcranial Doppler Assessment of Cerebrovascular Autoregulation in Post-Concussion Syndrome: Methodological Considerations. <i>Neurotrauma Reports</i> , <b>2020</b> , 1, 218-231	1.6	5
230	Influence of mild-moderate hypocapnia on intracranial pressure slow waves activity in TBI. <i>Acta Neurochirurgica</i> , <b>2020</b> , 162, 345-356	3	3
229	Relationship Between Measures of Cerebrovascular Reactivity and Intracranial Lesion Progression in Acute TBI Patients: an Exploratory Analysis. <i>Neurocritical Care</i> , <b>2020</b> , 32, 373-382	3.3	15
228	Signal Information Prediction of Mortality Identifies Unique Patient Subsets after Severe Traumatic Brain Injury: A Decision-Tree Analysis Approach. <i>Journal of Neurotrauma</i> , <b>2020</b> , 37, 1011-1019	5.4	8
227	Association between Cerebrovascular Reactivity Monitoring and Mortality Is Preserved When Adjusting for Baseline Admission Characteristics in Adult Traumatic Brain Injury: A CENTER-TBI Study. <i>Journal of Neurotrauma</i> , <b>2020</b> , 37, 1233-1241	5.4	25
226	Validation of non-invasive cerebrovascular pressure reactivity and pulse amplitude reactivity indices in traumatic brain injury. <i>Acta Neurochirurgica</i> , <b>2020</b> , 162, 337-344	3	1
225	Near-Infrared Spectroscopy to Assess Cerebral Autoregulation and Optimal Mean Arterial Pressure in Patients With Hypoxic-Ischemic Brain Injury: A Prospective Multicenter Feasibility Study <b>2020</b> , 2, e0217		4
224	Heart rate entropy is associated with mortality after intracerebral hemorrhage. <i>Journal of the Neurological Sciences</i> , <b>2020</b> , 418, 117033	3.2	3
223	Descriptive analysis of low versus elevated intracranial pressure on cerebral physiology in adult traumatic brain injury: a CENTER-TBI exploratory study. <i>Acta Neurochirurgica</i> , <b>2020</b> , 162, 2695-2706	3	3
222	Observations on the Cerebral Effects of Refractory Intracranial Hypertension After Severe Traumatic Brain Injury. <i>Neurocritical Care</i> , <b>2020</b> , 32, 437-447	3.3	10
221	Hypocapnia after traumatic brain injury: how does it affect the time constant of the cerebral circulation?. <i>Journal of Clinical Monitoring and Computing</i> , <b>2020</b> , 34, 461-468	2	4

220	Burden of hypoxia and intraventricular haemorrhage in extremely preterm infants. <i>Archives of Disease in Childhood: Fetal and Neonatal Edition</i> , <b>2020</b> , 105, 242-247	4-7	6
219	Impact of duration and magnitude of raised intracranial pressure on outcome after severe traumatic brain injury: A CENTER-TBI high-resolution group study <b>2020</b> , 15, e0243427		
218	Impact of duration and magnitude of raised intracranial pressure on outcome after severe traumatic brain injury: A CENTER-TBI high-resolution group study <b>2020</b> , 15, e0243427		
217	Impact of duration and magnitude of raised intracranial pressure on outcome after severe traumatic brain injury: A CENTER-TBI high-resolution group study <b>2020</b> , 15, e0243427		
216	Impact of duration and magnitude of raised intracranial pressure on outcome after severe traumatic brain injury: A CENTER-TBI high-resolution group study <b>2020</b> , 15, e0243427		
215	Case-mix, care pathways, and outcomes in patients with traumatic brain injury in CENTER-TBI: a European prospective, multicentre, longitudinal, cohort study. <i>Lancet Neurology, The</i> , <b>2019</b> , 18, 923-934	24.1	139
214	A comparison of non-invasive versus invasive measures of intracranial pressure in hypoxic ischaemic brain injury after cardiac arrest. <i>Resuscitation</i> , <b>2019</b> , 137, 221-228	4	29
213	Cerebrovascular reactivity is not associated with therapeutic intensity in adult traumatic brain injury: a CENTER-TBI analysis. <i>Acta Neurochirurgica</i> , <b>2019</b> , 161, 1955-1964	3	28
212	Compensatory-reserve-weighted intracranial pressure versus intracranial pressure for outcome association in adult traumatic brain injury: a CENTER-TBI validation study. <i>Acta Neurochirurgica</i> , <b>2019</b> , 161, 1275-1284	3	11
211	Changes in hemodynamics, cerebral oxygenation and cerebrovascular reactivity during the early transitional circulation in preterm infants. <i>Pediatric Research</i> , <b>2019</b> , 86, 247-253	3-2	7
210	Thresholds for identifying pathological intracranial pressure in paediatric traumatic brain injury. <i>Scientific Reports</i> , <b>2019</b> , 9, 3537	4-9	4
209	Univariate comparison of performance of different cerebrovascular reactivity indices for outcome association in adult TBI: a CENTER-TBI study. <i>Acta Neurochirurgica</i> , <b>2019</b> , 161, 1217-1227	3	37
208	Reply to: Optic nerve sheath diameter measurement in hypoxic ischaemic brain injury after cardiac arrest. <i>Resuscitation</i> , <b>2019</b> , 138, 308-309	4	1
207	Non-Invasive Pressure Reactivity Index Using Doppler Systolic Flow Parameters: A Pilot Analysis. <i>Journal of Neurotrauma</i> , <b>2019</b> , 36, 713-720	5-4	17
206	Can interhemispheric desynchronization of cerebral blood flow anticipate upcoming vasospasm in aneurysmal subarachnoid haemorrhage patients?. <i>Journal of Neuroscience Methods</i> , <b>2019</b> , 325, 108358	3	1
205	Artifact removal from neurophysiological signals: impact on intracranial and arterial pressure monitoring in traumatic brain injury. <i>Journal of Neurosurgery</i> , <b>2019</b> , 132, 1952-1960	3-2	7
204	Feasibility of individualised severe traumatic brain injury management using an automated assessment of optimal cerebral perfusion pressure: the COGiTATE phase II study protocol. <i>BMJ Open</i> , <b>2019</b> , 9, e030727	3	54
203	Estimation of pulsatile cerebral arterial blood volume based on transcranial doppler signals. <i>Medical Engineering and Physics</i> , <b>2019</b> , 74, 23-32	2-4	5

202	Feasibility of Hidden Markov Models for the Description of Time-Varying Physiologic State After Severe Traumatic Brain Injury. <i>Critical Care Medicine</i> , <b>2019</b> , 47, e880-e885	1.4	5
201	The Burden of Brain Hypoxia and Optimal Mean Arterial Pressure in Patients With Hypoxic Ischemic Brain Injury After Cardiac Arrest. <i>Critical Care Medicine</i> , <b>2019</b> , 47, 960-969	1.4	48
200	Continuous monitoring of cerebrovascular reactivity through pulse transit time and intracranial pressure. <i>Physiological Measurement</i> , <b>2019</b> , 40, 01LT01	2.9	0
199	Twenty-Five Years of Intracranial Pressure Monitoring After Severe Traumatic Brain Injury: A Retrospective, Single-Center Analysis. <i>Neurosurgery</i> , <b>2019</b> , 85, E75-E82	3.2	53
198	Changes in cardiac autonomic activity during intracranial pressure plateau waves in patients with traumatic brain injury. <i>Clinical Autonomic Research</i> , <b>2019</b> , 29, 123-126	4.3	5
197	Cerebrovascular assessment of patients undergoing shoulder surgery in beach chair position using a multiparameter transcranial Doppler approach. <i>Journal of Clinical Monitoring and Computing</i> , <b>2019</b> , 33, 615-625	2	9
196	Comparison of Performance of Different Optimal Cerebral Perfusion Pressure Parameters for Outcome Prediction in Adult Traumatic Brain Injury: A Collaborative European NeuroTrauma Effectiveness Research in Traumatic Brain Injury (CENTER-TBI) Study. <i>Journal of Neurotrauma</i> , <b>2019</b> , 36, 1505-1517	5.4	31
195	Genetic drivers of cerebral blood flow dysfunction in TBI: a speculative synthesis. <i>Nature Reviews Neurology</i> , <b>2019</b> , 15, 25-39	15	21
194	Optic nerve sheath diameter ultrasonography at admission as a predictor of intracranial hypertension in traumatic brain injured patients: a prospective observational study. <i>Journal of Neurosurgery</i> , <b>2019</b> , 132, 1279-1285	3.2	13
193	Critical Closing Pressure During a Controlled Increase in Intracranial Pressure. <i>Acta Neurochirurgica Supplementum</i> , <b>2018</b> , 126, 133-137	1.7	4
192	Computed Tomography Indicators of Deranged Intracranial Physiology in Paediatric Traumatic Brain Injury. <i>Acta Neurochirurgica Supplementum</i> , <b>2018</b> , 126, 29-34	1.7	3
191	The authors reply. <i>Critical Care Medicine</i> , <b>2018</b> , 46, e176	1.4	
190	Visualisation of the Optimal Cerebral Perfusion Landscape in Severe Traumatic Brain Injury Patients. <i>Acta Neurochirurgica Supplementum</i> , <b>2018</b> , 126, 55-58	1.7	3
189	Non-invasive Intracranial Pressure Assessment in Brain Injured Patients Using Ultrasound-Based Methods. <i>Acta Neurochirurgica Supplementum</i> , <b>2018</b> , 126, 69-73	1.7	20
188	Pre-hospital Predictors of Impaired ICP Trends in Continuous Monitoring of Paediatric Traumatic Brain Injury Patients. <i>Acta Neurochirurgica Supplementum</i> , <b>2018</b> , 126, 7-10	1.7	2
187	Effect of Mild Hypocapnia on Critical Closing Pressure and Other Mechanoelastic Parameters of the Cerebrospinal System. <i>Acta Neurochirurgica Supplementum</i> , <b>2018</b> , 126, 139-142	1.7	5
186	Increased ICP and Its Cerebral Haemodynamic Sequelae. <i>Acta Neurochirurgica Supplementum</i> , <b>2018</b> , 126, 47-50	1.7	4
185	Wavelet pressure reactivity index: a validation study. <i>Journal of Physiology</i> , <b>2018</b> , 596, 2797-2809	3.9	13

184	Estimating Pressure Reactivity Using Noninvasive Doppler-Based Systolic Flow Index. <i>Journal of Neurotrauma</i> , <b>2018</b> , 35, 1559-1568	5.4	17
183	Intracranial and Extracranial Injury Burden as Drivers of Impaired Cerebrovascular Reactivity in Traumatic Brain Injury. <i>Journal of Neurotrauma</i> , <b>2018</b> , 35, 1569-1577	5.4	21
182	Optimal Cerebral Perfusion Pressure in Centers With Different Treatment Protocols. <i>Critical Care Medicine</i> , <b>2018</b> , 46, e235-e241	1.4	13
181	Medical Device Connectivity Challenges Outline the Technical Requirements and Standards For Promoting Big Data Research and Personalized Medicine in Neurocritical Care. <i>Military Medicine</i> , <b>2018</b> , 183, 99-104	1.3	7
180	Transcranial Doppler Systolic Flow Index and ICP-Derived Cerebrovascular Reactivity Indices in Traumatic Brain Injury. <i>Journal of Neurotrauma</i> , <b>2018</b> , 35, 314-322	5.4	27
179	Multimodality neuromonitoring in severe pediatric traumatic brain injury. <i>Pediatric Research</i> , <b>2018</b> , 83, 41-49	3.2	12
178	Further Controversies About Brain Tissue Oxygenation Pressure-Reactivity After Traumatic Brain Injury. <i>Neurocritical Care</i> , <b>2018</b> , 28, 162-168	3.3	6
177	Radiological Correlates of Raised Intracranial Pressure in Children: A Review. <i>Frontiers in Pediatrics</i> , <b>2018</b> , 6, 32	3.4	4
176	Validation of Pressure Reactivity and Pulse Amplitude Indices against the Lower Limit of Autoregulation, Part I: Experimental Intracranial Hypertension. <i>Journal of Neurotrauma</i> , <b>2018</b> , 35, 2803-2811	5.4	35
175	Critical thresholds for intracranial pressure vary over time in non-craniectomised traumatic brain injury patients. <i>Acta Neurochirurgica</i> , <b>2018</b> , 160, 1315-1324	3	13
174	Baroreflex Impairment After Subarachnoid Hemorrhage Is Associated With Unfavorable Outcome. <i>Stroke</i> , <b>2018</b> , 49, 1632-1638	6.7	8
173	Validation of Intracranial Pressure-Derived Cerebrovascular Reactivity Indices against the Lower Limit of Autoregulation, Part II: Experimental Model of Arterial Hypotension. <i>Journal of Neurotrauma</i> , <b>2018</b> , 35, 2812-2819	5.4	31
172	Novel index for predicting mortality during the first 24 hours after traumatic brain injury. <i>Journal of Neurosurgery</i> , <b>2018</b> , 131, 1887-1895	3.2	11
171	HDF5-Based Data Format for Archiving Complex Neuro-monitoring Data in Traumatic Brain Injury Patients. <i>Acta Neurochirurgica Supplementum</i> , <b>2018</b> , 126, 121-125	1.7	7
170	Simultaneous Transients of Intracranial Pressure and Heart Rate in Traumatic Brain Injury: Methods of Analysis. <i>Acta Neurochirurgica Supplementum</i> , <b>2018</b> , 126, 147-151	1.7	4
169	Deriving the PRx and CPPopt from 0.2-Hz Data: Establishing Generalizability to Bedmaster Users. <i>Acta Neurochirurgica Supplementum</i> , <b>2018</b> , 126, 179-182	1.7	5
168	Do ICP-Derived Parameters Differ in Vegetative State from Other Outcome Groups After Traumatic Brain Injury?. <i>Acta Neurochirurgica Supplementum</i> , <b>2018</b> , 126, 17-20	1.7	1
167	Mathematical Modelling of CSF Pulsatile Flow in Aqueduct Cerebri. <i>Acta Neurochirurgica Supplementum</i> , <b>2018</b> , 126, 233-236	1.7	3



166	Critical Thresholds of Intracranial Pressure-Derived Continuous Cerebrovascular Reactivity Indices for Outcome Prediction in Noncraniectomized Patients with Traumatic Brain Injury. <i>Journal of Neurotrauma</i> , <b>2018</b> , 35, 1107-1115	5.4	53
165	A Description of a New Continuous Physiological Index in Traumatic Brain Injury Using the Correlation between Pulse Amplitude of Intracranial Pressure and Cerebral Perfusion Pressure. <i>Journal of Neurotrauma</i> , <b>2018</b> , 35, 963-974	5.4	31
164	Optimal cerebral perfusion pressure via transcranial Doppler in TBI: application of robotic technology. <i>Acta Neurochirurgica</i> , <b>2018</b> , 160, 2149-2157	3	15
163	Impaired cerebral compensatory reserve is associated with admission imaging characteristics of diffuse insult in traumatic brain injury. <i>Acta Neurochirurgica</i> , <b>2018</b> , 160, 2277-2287	3	14
162	Optimal Mean Arterial Blood Pressure in Extremely Preterm Infants within the First 24 Hours of Life. <i>Journal of Pediatrics</i> , <b>2018</b> , 203, 242-248	3.6	10
161	Baroreflex sensitivity and heart rate variability are predictors of mortality in patients with aneurysmal subarachnoid haemorrhage. <i>Journal of the Neurological Sciences</i> , <b>2018</b> , 394, 112-119	3.2	8
160	Survey in expert clinicians on the validity of automated calculation of optimal cerebral perfusion pressure. <i>Minerva Anestesiologica</i> , <b>2018</b> , 84, 40-48	1.9	3
159	Heart rate variability is associated with outcome in spontaneous intracerebral hemorrhage. <i>Journal of Critical Care</i> , <b>2018</b> , 48, 85-89	4	9
158	Cerebral haemodynamics during experimental intracranial hypertension. <i>Journal of Cerebral Blood Flow and Metabolism</i> , <b>2017</b> , 37, 694-705	7.3	20
157	Monitoring of Optimal Cerebral Perfusion Pressure in Traumatic Brain Injured Patients Using a Multi-Window Weighting Algorithm. <i>Journal of Neurotrauma</i> , <b>2017</b> , 34, 3081-3088	5.4	27
156	Severe traumatic brain injury: targeted management in the intensive care unit. <i>Lancet Neurology</i> , <b>2017</b> , 16, 452-464	24.1	165
155	Complexity of brain signals is associated with outcome in preterm infants. <i>Journal of Cerebral Blood Flow and Metabolism</i> , <b>2017</b> , 37, 3368-3379	7.3	10
154	Continuous Autoregulatory Indices Derived from Multi-Modal Monitoring: Each One Is Not Like the Other. <i>Journal of Neurotrauma</i> , <b>2017</b> , 34, 3070-3080	5.4	44
153	Impaired cerebral autoregulation: measurement and application to stroke. <i>Journal of Neurology, Neurosurgery and Psychiatry</i> , <b>2017</b> , 88, 520-531	5.5	69
152	Relationship Between Brain Pulsatility and Cerebral Perfusion Pressure: Replicated Validation Using Different Drivers of CPP Change. <i>Neurocritical Care</i> , <b>2017</b> , 27, 392-400	3.3	13
151	Continuous Monitoring and Visualization of Optimum Spinal Cord Perfusion Pressure in Patients with Acute Cord Injury. <i>Journal of Neurotrauma</i> , <b>2017</b> , 34, 2941-2949	5.4	28
150	Early Asymmetric Cardio-Cerebral Causality and Outcome after Severe Traumatic Brain Injury. <i>Journal of Neurotrauma</i> , <b>2017</b> , 34, 2743-2752	5.4	26
149	Predictors of Outcome With Cerebral Autoregulation Monitoring: A Systematic Review and Meta-Analysis. <i>Critical Care Medicine</i> , <b>2017</b> , 45, 695-704	1.4	61

148	Transcranial Doppler Monitoring of Intracranial Pressure Plateau Waves. <i>Neurocritical Care</i> , <b>2017</b> , 26, 330-338	3.3	24
147	Cerebral autoregulation monitoring in acute traumatic brain injury: what's the evidence?. <i>Minerva Anestesiologica</i> , <b>2017</b> , 83, 844-857	1.9	12
146	Applying time-frequency analysis to assess cerebral autoregulation during hypercapnia. <i>PLoS ONE</i> , <b>2017</b> , 12, e0181851	3.7	10
145	Cerebrovascular pressure reactivity monitoring using wavelet analysis in traumatic brain injury patients: A retrospective study. <i>PLoS Medicine</i> , <b>2017</b> , 14, e1002348	11.6	32
144	Temporal profile of intracranial pressure and cerebrovascular reactivity in severe traumatic brain injury and association with fatal outcome: An observational study. <i>PLoS Medicine</i> , <b>2017</b> , 14, e1002353	11.6	44
143	Individualizing Thresholds of Cerebral Perfusion Pressure Using Estimated Limits of Autoregulation. <i>Critical Care Medicine</i> , <b>2017</b> , 45, 1464-1471	1.4	72
142	Pressure Autoregulation Measurement Techniques in Adult Traumatic Brain Injury, Part II: A Scoping Review of Continuous Methods. <i>Journal of Neurotrauma</i> , <b>2017</b> , 34, 3224-3237	5.4	44
141	Traumatic brain injury: integrated approaches to improve prevention, clinical care, and research. <i>Lancet Neurology</i> , <b>2017</b> , 16, 987-1048	24.1	851
140	Pressure Autoregulation Measurement Techniques in Adult Traumatic Brain Injury, Part I: A Scoping Review of Intermittent/Semi-Intermittent Methods. <i>Journal of Neurotrauma</i> , <b>2017</b> , 34, 3207-3223	5.4	26
139	An Association Between ICP-Derived Data and Outcome in TBI Patients: The Role of Sample Size. <i>Neurocritical Care</i> , <b>2017</b> , 27, 103-107	3.3	13
138	Glycemia Is Related to Impaired Cerebrovascular Autoregulation after Severe Pediatric Traumatic Brain Injury: A Retrospective Observational Study. <i>Frontiers in Pediatrics</i> , <b>2017</b> , 5, 205	3.4	2
137	Prospective Study on Noninvasive Assessment of Intracranial Pressure in Traumatic Brain-Injured Patients: Comparison of Four Methods. <i>Journal of Neurotrauma</i> , <b>2016</b> , 33, 792-802	5.4	53
136	Using the relationship between brain tissue regional saturation of oxygen and mean arterial pressure to determine the optimal mean arterial pressure in patients following cardiac arrest: A pilot proof-of-concept study. <i>Resuscitation</i> , <b>2016</b> , 106, 120-5	4	41
135	Noninvasive Assessment of ICP: Evaluation of New TBI Data. <i>Acta Neurochirurgica Supplementum</i> , <b>2016</b> , 122, 69-73	1.7	9
134	Brain Oxygen Relationship to Cerebral Perfusion Pressure Depends on Tip Location and Time Window: Can Brain O <sub>2</sub> Be an Adjunctive Modality for Determining Optimal CPP?. <i>Acta Neurochirurgica Supplementum</i> , <b>2016</b> , 122, 133-5	1.7	3
133	Plateau Waves of Intracranial Pressure and Partial Pressure of Cerebral Oxygen. <i>Acta Neurochirurgica Supplementum</i> , <b>2016</b> , 122, 177-9	1.7	0
132	Cerebrovascular Signal Complexity Six Hours after Intensive Care Unit Admission Correlates with Outcome after Severe Traumatic Brain Injury. <i>Journal of Neurotrauma</i> , <b>2016</b> , 33, 2011-2018	5.4	27
131	Ventricular Volume Load Reveals the Mechanoelastic Impact of Communicating Hydrocephalus on Dynamic Cerebral Autoregulation. <i>PLoS ONE</i> , <b>2016</b> , 11, e0158506	3.7	7

130	The Diastolic Closing Margin Is Associated with Intraventricular Hemorrhage in Premature Infants. <i>Acta Neurochirurgica Supplementum</i> , <b>2016</b> , 122, 147-50	1.7	3
129	The Ontogeny of Cerebrovascular Pressure Autoregulation in Premature Infants. <i>Acta Neurochirurgica Supplementum</i> , <b>2016</b> , 122, 151-5	1.7	10
128	Change in Pulsatile Cerebral Arterial Pressure and Flow Waves as a Therapeutic Strategy?. <i>Acta Neurochirurgica Supplementum</i> , <b>2016</b> , 122, 167-70	1.7	3
127	Monitoring Cerebral Autoregulation After Subarachnoid Hemorrhage. <i>Acta Neurochirurgica Supplementum</i> , <b>2016</b> , 122, 199-203	1.7	11
126	Correlation Between Cerebral Autoregulation and Carbon Dioxide Reactivity in Patients with Traumatic Brain Injury. <i>Acta Neurochirurgica Supplementum</i> , <b>2016</b> , 122, 205-9	1.7	9
125	Derangement of Cerebral Blood Flow Autoregulation During Intracranial Pressure Plateau Waves as Detected by Time and Frequency-Based Methods. <i>Acta Neurochirurgica Supplementum</i> , <b>2016</b> , 122, 233-8	1.7	5
124	The Ontogeny of Cerebrovascular Critical Closing Pressure. <i>Acta Neurochirurgica Supplementum</i> , <b>2016</b> , 122, 249-53	1.7	1
123	The Correlation Between Intracranial Pressure and Cerebral Blood Flow Velocity During ICP Plateau Waves. <i>Acta Neurochirurgica Supplementum</i> , <b>2016</b> , 122, 81-3	1.7	0
122	Continuous Multimodality Monitoring in Children after Traumatic Brain Injury-Preliminary Experience. <i>PLoS ONE</i> , <b>2016</b> , 11, e0148817	3.7	35
121	Autonomic Impairment in Severe Traumatic Brain Injury: A Multimodal Neuromonitoring Study. <i>Critical Care Medicine</i> , <b>2016</b> , 44, 1173-81	1.4	44
120	Continuous Monitoring of the Complexity of Intracranial Pressure After Head Injury. <i>Acta Neurochirurgica Supplementum</i> , <b>2016</b> , 122, 33-5	1.7	3
119	Outcome, Pressure Reactivity and Optimal Cerebral Perfusion Pressure Calculation in Traumatic Brain Injury: A Comparison of Two Variants. <i>Acta Neurochirurgica Supplementum</i> , <b>2016</b> , 122, 221-3	1.7	8
118	Enhanced Visualization of Optimal Cerebral Perfusion Pressure Over Time to Support Clinical Decision Making. <i>Critical Care Medicine</i> , <b>2016</b> , 44, e996-9	1.4	23
117	Elevated Diastolic Closing Margin Is Associated with Intraventricular Hemorrhage in Premature Infants. <i>Journal of Pediatrics</i> , <b>2016</b> , 174, 52-6	3.6	15
116	Validation of a New Noninvasive Intracranial Pressure Monitoring Method by Direct Comparison with an Invasive Technique. <i>Acta Neurochirurgica Supplementum</i> , <b>2016</b> , 122, 93-6	1.7	16
115	Validation of a New Minimally Invasive Intracranial Pressure Monitoring Method by Direct Comparison with an Invasive Technique. <i>Acta Neurochirurgica Supplementum</i> , <b>2016</b> , 122, 97-100	1.7	11
114	Patient-Specific Thresholds and Doses of Intracranial Hypertension in Severe Traumatic Brain Injury. <i>Acta Neurochirurgica Supplementum</i> , <b>2016</b> , 122, 117-20	1.7	9
113	Plateau Waves of Intracranial Pressure and Multimodal Brain Monitoring. <i>Acta Neurochirurgica Supplementum</i> , <b>2016</b> , 122, 143-6	1.7	8

112	Cerebral Critical Closing Pressure During Infusion Tests. <i>Acta Neurochirurgica Supplementum</i> , <b>2016</b> , 122, 215-20	1.7	4
111	Measurement of Intraspinal Pressure After Spinal Cord Injury: Technical Note from the Injured Spinal Cord Pressure Evaluation Study. <i>Acta Neurochirurgica Supplementum</i> , <b>2016</b> , 122, 323-8	1.7	18
110	Regulation of the cerebral circulation: bedside assessment and clinical implications. <i>Critical Care</i> , <b>2016</b> , 20, 129	10.8	114
109	Cerebral vasospasm affects arterial critical closing pressure. <i>Journal of Cerebral Blood Flow and Metabolism</i> , <b>2015</b> , 35, 285-91	7.3	12
108	Kidney-brain link in traumatic brain injury patients? A preliminary report. <i>Neurocritical Care</i> , <b>2015</b> , 22, 192-201	3.3	27
107	Comparison of frequency and time domain methods of assessment of cerebral autoregulation in traumatic brain injury. <i>Journal of Cerebral Blood Flow and Metabolism</i> , <b>2015</b> , 35, 248-56	7.3	56
106	The Effect of Red Blood Cell Transfusion on Cerebral Autoregulation in Patients with Severe Traumatic Brain Injury. <i>Neurocritical Care</i> , <b>2015</b> , 23, 210-6	3.3	31
105	Bilateral failure of cerebral autoregulation is related to unfavorable outcome after subarachnoid hemorrhage. <i>Neurocritical Care</i> , <b>2015</b> , 22, 65-73	3.3	32
104	Observation of Autoregulation Indices During Ventricular CSF Drainage After Aneurysmal Subarachnoid Hemorrhage: A Pilot Study. <i>Neurocritical Care</i> , <b>2015</b> , 23, 347-54	3.3	15
103	Short pressure reactivity index versus long pressure reactivity index in the management of traumatic brain injury. <i>Journal of Neurosurgery</i> , <b>2015</b> , 122, 588-94	3.2	19
102	A noninvasive estimation of cerebral perfusion pressure using critical closing pressure. <i>Journal of Neurosurgery</i> , <b>2015</b> , 123, 638-48	3.2	37
101	Consensus statement from the 2014 International Microdialysis Forum. <i>Intensive Care Medicine</i> , <b>2015</b> , 41, 1517-28	14.5	197
100	Ontogeny of cerebrovascular critical closing pressure. <i>Pediatric Research</i> , <b>2015</b> , 78, 71-5	3.2	11
99	Intraspinal pressure and spinal cord perfusion pressure after spinal cord injury: an observational study. <i>Journal of Neurosurgery: Spine</i> , <b>2015</b> , 23, 763-71	2.8	43
98	Doppler Non-invasive Monitoring of ICP in an Animal Model of Acute Intracranial Hypertension. <i>Neurocritical Care</i> , <b>2015</b> , 23, 419-26	3.3	31
97	Increased blood glucose is related to disturbed cerebrovascular pressure reactivity after traumatic brain injury. <i>Neurocritical Care</i> , <b>2015</b> , 22, 20-5	3.3	20
96	Principles of cerebral hemodynamics when intracranial pressure is raised: lessons from the peripheral circulation. <i>Journal of Hypertension</i> , <b>2015</b> , 33, 1233-41	1.9	15
95	Clinical and Physiological Events That Contribute to the Success Rate of Finding "Optimal" Cerebral Perfusion Pressure in Severe Brain Trauma Patients. <i>Critical Care Medicine</i> , <b>2015</b> , 43, 1952-63	1.4	26

94	Complexity of cerebral blood flow velocity and arterial blood pressure in subarachnoid hemorrhage using time-frequency analysis. <i>Annual International Conference of the IEEE Engineering in Medicine and Biology Society IEEE Engineering in Medicine and Biology Society Annual International Conference, 2015, 2015, 7700-3</i>	0.9	4
93	Cerebral critical closing pressure in hydrocephalus patients undertaking infusion tests. <i>Neurological Research, 2015, 37, 674-82</i>	2.7	12
92	Monitoring of Cerebrovascular Reactivity for Determination of Optimal Blood Pressure in Preterm Infants. <i>Journal of Pediatrics, 2015, 167, 86-91</i>	3.6	37
91	Changes in Cerebral Partial Oxygen Pressure and Cerebrovascular Reactivity During Intracranial Pressure Plateau Waves. <i>Neurocritical Care, 2015, 23, 85-91</i>	3.3	12
90	Optimal Cerebral Perfusion Pressure Management at Bedside: A Single-Center Pilot Study. <i>Neurocritical Care, 2015, 23, 92-102</i>	3.3	75
89	Cessation of diastolic cerebral blood flow velocity: the role of critical closing pressure. <i>Neurocritical Care, 2014, 20, 40-8</i>	3.3	34
88	Model-based indices describing cerebrovascular dynamics. <i>Neurocritical Care, 2014, 20, 142-57</i>	3.3	29
87	Optic nerve sheath diameter on computed tomography is correlated with simultaneously measured intracranial pressure in patients with severe traumatic brain injury. <i>Intensive Care Medicine, 2014, 40, 1267-74</i>	14.5	107
86	Patient-specific thresholds of intracranial pressure in severe traumatic brain injury. <i>Journal of Neurosurgery, 2014, 120, 893-900</i>	3.2	87
85	Pressures, flow, and brain oxygenation during plateau waves of intracranial pressure. <i>Neurocritical Care, 2014, 21, 124-32</i>	3.3	18
84	Relationship of vascular wall tension and autoregulation following traumatic brain injury. <i>Neurocritical Care, 2014, 21, 266-74</i>	3.3	17
83	A continuous correlation between intracranial pressure and cerebral blood flow velocity reflects cerebral autoregulation impairment during intracranial pressure plateau waves. <i>Neurocritical Care, 2014, 21, 514-25</i>	3.3	14
82	Continuous time-domain monitoring of cerebral autoregulation in neurocritical care. <i>Medical Engineering and Physics, 2014, 36, 638-45</i>	2.4	48
81	Post-traumatic multimodal brain monitoring: response to hypertonic saline. <i>Journal of Neurotrauma, 2014, 31, 1872-80</i>	5.4	30
80	Monitoring of spinal cord perfusion pressure in acute spinal cord injury: initial findings of the injured spinal cord pressure evaluation study*. <i>Critical Care Medicine, 2014, 42, 646-55</i>	1.4	99
79	Between-centre variability in transfer function analysis, a widely used method for linear quantification of the dynamic pressure-flow relation: the CARNet study. <i>Medical Engineering and Physics, 2014, 36, 620-7</i>	2.4	42
78	Cerebral autoregulation after subarachnoid hemorrhage: comparison of three methods. <i>Journal of Cerebral Blood Flow and Metabolism, 2013, 33, 449-56</i>	7.3	67
77	Critical closing pressure during intracranial pressure plateau waves. <i>Neurocritical Care, 2013, 18, 341-8</i>	3.3	30

76	Clinical relevance of cerebral autoregulation following subarachnoid haemorrhage. <i>Nature Reviews Neurology</i> , <b>2013</b> , 9, 152-63	15	131
75	Reduced complexity of intracranial pressure observed in short time series of intracranial hypertension following traumatic brain injury in adults. <i>Journal of Clinical Monitoring and Computing</i> , <b>2013</b> , 27, 395-403	2	11
74	Critical closing pressure determined with a model of cerebrovascular impedance. <i>Journal of Cerebral Blood Flow and Metabolism</i> , <b>2013</b> , 33, 235-43	7.3	61
73	In reply. Transcranial Doppler derived pulsatility index in the assessment of intracranial pressure: the trend is your friend. <i>Neurosurgery</i> , <b>2013</b> , 72, E320	3.2	1
72	The frequency response of cerebral autoregulation. <i>Journal of Applied Physiology</i> , <b>2013</b> , 115, 52-6	3.7	40
71	Positive end-expiratory pressure oscillation facilitates brain vascular reactivity monitoring. <i>Journal of Applied Physiology</i> , <b>2012</b> , 113, 1362-8	3.7	28
70	Renovascular reactivity measured by near-infrared spectroscopy. <i>Journal of Applied Physiology</i> , <b>2012</b> , 113, 307-14	3.7	54
69	Time constant of the cerebral arterial bed in normal subjects. <i>Ultrasound in Medicine and Biology</i> , <b>2012</b> , 38, 1129-37	3.5	24
68	ICM+: a versatile software for assessment of CSF dynamics. <i>Acta Neurochirurgica Supplementum</i> , <b>2012</b> , 114, 75-9	1.7	19
67	Monitoring cerebral autoregulation after head injury. Which component of transcranial Doppler flow velocity is optimal?. <i>Neurocritical Care</i> , <b>2012</b> , 17, 211-8	3.3	71
66	Complexity of intracranial pressure correlates with outcome after traumatic brain injury. <i>Brain</i> , <b>2012</b> , 135, 2399-408	11.2	59
65	Vasospasm shortens cerebral arterial time constant. <i>Neurocritical Care</i> , <b>2012</b> , 16, 213-8	3.3	30
64	Transcranial Doppler pulsatility index: what it is and what it isn't. <i>Neurocritical Care</i> , <b>2012</b> , 17, 58-66	3.3	169
63	Continuous monitoring of cerebrovascular reactivity using pulse waveform of intracranial pressure. <i>Neurocritical Care</i> , <b>2012</b> , 17, 67-76	3.3	68
62	Critical Thresholds for Cerebrovascular Reactivity: Facts, No Fiction!. <i>Neurocritical Care</i> , <b>2012</b> , 17, 152-153	3.3	3
61	The relationship between cerebral blood flow autoregulation and cerebrovascular pressure reactivity after traumatic brain injury. <i>Neurosurgery</i> , <b>2012</b> , 71, 652-60; discussion 660-1	3.2	86
60	Impairment of cerebral autoregulation predicts delayed cerebral ischemia after subarachnoid hemorrhage: a prospective observational study. <i>Stroke</i> , <b>2012</b> , 43, 3230-7	6.7	174
59	Noninvasive autoregulation monitoring in a swine model of pediatric cardiac arrest. <i>Anesthesia and Analgesia</i> , <b>2012</b> , 114, 825-36	3.9	43

58	Continuous determination of optimal cerebral perfusion pressure in traumatic brain injury. <i>Critical Care Medicine</i> , <b>2012</b> , 40, 2456-63	1.4	348
57	Static autoregulation is intact early after severe unilateral brain injury in a neonatal Swine model. <i>Neurosurgery</i> , <b>2012</b> , 71, 138-45	3.2	11
56	Reliability of the blood flow velocity pulsatility index for assessment of intracranial and cerebral perfusion pressures in head-injured patients. <i>Neurosurgery</i> , <b>2012</b> , 71, 853-61	3.2	106
55	Non-invasively estimated ICP pulse amplitude strongly correlates with outcome after TBI. <i>Acta Neurochirurgica Supplementum</i> , <b>2012</b> , 114, 121-5	1.7	23
54	Monitoring of the association between cerebral blood flow velocity and intracranial pressure. <i>Acta Neurochirurgica Supplementum</i> , <b>2012</b> , 114, 147-51	1.7	16
53	Time constant of the cerebral arterial bed. <i>Acta Neurochirurgica Supplementum</i> , <b>2012</b> , 114, 17-21	1.7	24
52	Cerebral extracellular chemistry and outcome following traumatic brain injury: a microdialysis study of 223 patients. <i>Brain</i> , <b>2011</b> , 134, 484-94	11.2	278
51	Cerebral blood flow and cerebrovascular autoregulation in a swine model of pediatric cardiac arrest and hypothermia. <i>Critical Care Medicine</i> , <b>2011</b> , 39, 2337-45	1.4	77
50	Effect of hyper- and hypocapnia on cerebral arterial compliance in normal subjects. <i>Journal of Neuroimaging</i> , <b>2011</b> , 21, 121-5	2.8	29
49	Critical thresholds for transcranial Doppler indices of cerebral autoregulation in traumatic brain injury. <i>Neurocritical Care</i> , <b>2011</b> , 14, 188-93	3.3	100
48	Changes in cerebral compartmental compliances during mild hypocapnia in patients with traumatic brain injury. <i>Journal of Neurotrauma</i> , <b>2011</b> , 28, 889-96	5.4	11
47	The limitations of near-infrared spectroscopy to assess cerebrovascular reactivity: the role of slow frequency oscillations. <i>Anesthesia and Analgesia</i> , <b>2011</b> , 113, 849-57	3.9	47
46	What shapes pulse amplitude of intracranial pressure?. <i>Journal of Neurotrauma</i> , <b>2010</b> , 27, 317-24	5.4	65
45	Noninvasive monitoring of cerebrovascular reactivity with near infrared spectroscopy in head-injured patients. <i>Journal of Neurotrauma</i> , <b>2010</b> , 27, 1951-8	5.4	111
44	A comparison study of cerebral autoregulation assessed with transcranial Doppler and cortical laser Doppler flowmetry. <i>Neurological Research</i> , <b>2010</b> , 32, 425-8	2.7	22
43	Continuous assessment of cerebral autoregulation with near-infrared spectroscopy in adults after subarachnoid hemorrhage. <i>Stroke</i> , <b>2010</b> , 41, 1963-8	6.7	643
42	Cerebrospinal compensation of pulsating cerebral blood volume in hydrocephalus. <i>Neurological Research</i> , <b>2010</b> , 32, 587-92	2.7	4
41	Real-time continuous monitoring of cerebral blood flow autoregulation using near-infrared spectroscopy in patients undergoing cardiopulmonary bypass. <i>Stroke</i> , <b>2010</b> , 41, 1951-6	6.7	259

40	Transient changes in brain tissue oxygen in response to modifications of cerebral perfusion pressure: an observational study. <i>Anesthesia and Analgesia</i> , <b>2010</b> , 110, 165-73	3.9	16
39	Impaired autoregulation of cerebral blood flow during rewarming from hypothermic cardiopulmonary bypass and its potential association with stroke. <i>Anesthesia and Analgesia</i> , <b>2010</b> , 110, 321-8	3.9	109
38	Noninvasive autoregulation monitoring with and without intracranial pressure in the naive piglet brain. <i>Anesthesia and Analgesia</i> , <b>2010</b> , 111, 191-5	3.9	32
37	"Optimal cerebral perfusion pressure" in poor grade patients after subarachnoid hemorrhage. <i>Neurocritical Care</i> , <b>2010</b> , 13, 17-23	3.3	59
36	Continuous monitoring of cerebrovascular pressure reactivity after traumatic brain injury in children. <i>Pediatrics</i> , <b>2009</b> , 124, e1205-12	7.4	95
35	Cerebrovascular reactivity measured by near-infrared spectroscopy. <i>Stroke</i> , <b>2009</b> , 40, 1820-6	6.7	177
34	The monitoring of relative changes in compartmental compliances of brain. <i>Physiological Measurement</i> , <b>2009</b> , 30, 647-59	2.9	44
33	Near-infrared spectroscopy can monitor dynamic cerebral autoregulation in adults. <i>Neurocritical Care</i> , <b>2009</b> , 10, 122-8	3.3	144
32	Reactivity of brain tissue oxygen to change in cerebral perfusion pressure in head injured patients. <i>Neurocritical Care</i> , <b>2009</b> , 10, 274-9	3.3	29
31	Critical closing pressure: comparison of three methods. <i>Journal of Cerebral Blood Flow and Metabolism</i> , <b>2009</b> , 29, 987-93	7.3	18
30	Use of drains versus no drains after burr-hole evacuation of chronic subdural haematoma: a randomised controlled trial. <i>Lancet, The</i> , <b>2009</b> , 374, 1067-73	4.0	424
29	The lower limit of cerebral blood flow autoregulation is increased with elevated intracranial pressure. <i>Anesthesia and Analgesia</i> , <b>2009</b> , 108, 1278-83	3.9	64
28	Index of cerebrospinal compensatory reserve in hydrocephalus. <i>Neurosurgery</i> , <b>2009</b> , 64, 494-501; discussion 501-2	3.2	61
27	Magnetic field interactions in adjustable hydrocephalus shunts. <i>Journal of Neurosurgery: Pediatrics</i> , <b>2008</b> , 2, 222-8	2.1	56
26	Cerebral perfusion in sepsis-associated delirium. <i>Critical Care</i> , <b>2008</b> , 12, R63	10.8	161
25	Continuous monitoring of cerebrovascular pressure reactivity in patients with head injury. <i>Neurosurgical Focus</i> , <b>2008</b> , 25, E2	4.2	138
24	Effect of decompressive craniectomy on intracranial pressure and cerebrospinal compensation following traumatic brain injury. <i>Journal of Neurosurgery</i> , <b>2008</b> , 108, 66-73	3.2	152
23	Effect of hyperoxia on regional oxygenation and metabolism after severe traumatic brain injury: preliminary findings. <i>Critical Care Medicine</i> , <b>2008</b> , 36, 273-81	1.4	176



22	Assessment of cerebrospinal fluid outflow resistance. <i>Medical and Biological Engineering and Computing</i> , <b>2007</b> , 45, 719-35	3.1	93
21	A synopsis of brain pressures: which? when? are they all useful?. <i>Neurological Research</i> , <b>2007</b> , 29, 672-9	2.7	18
20	Intracranial pressure: more than a number. <i>Neurosurgical Focus</i> , <b>2007</b> , 22, E10	4.2	78
19	Hyperventilation following head injury: effect on ischemic burden and cerebral oxidative metabolism. <i>Critical Care Medicine</i> , <b>2007</b> , 35, 568-78	1.4	244
18	Predictive value of initial computerized tomography scan, intracranial pressure, and state of autoregulation in patients with traumatic brain injury. <i>Journal of Neurosurgery</i> , <b>2006</b> , 104, 731-7	3.2	114
17	Intersubject variability and reproducibility of 15O PET studies. <i>Journal of Cerebral Blood Flow and Metabolism</i> , <b>2006</b> , 26, 48-57	7.3	77
16	Effect of cerebral perfusion pressure augmentation on regional oxygenation and metabolism after head injury. <i>Critical Care Medicine</i> , <b>2005</b> , 33, 189-95; discussion 255-7	1.4	161
15	Defining ischemic burden after traumatic brain injury using 15O PET imaging of cerebral physiology. <i>Journal of Cerebral Blood Flow and Metabolism</i> , <b>2004</b> , 24, 191-201	7.3	151
14	Sustained moderate reductions in arterial CO2 after brain trauma time-course of cerebral blood flow velocity and intracranial pressure. <i>Intensive Care Medicine</i> , <b>2004</b> , 30, 2180-7	14.5	42
13	Diffusion limited oxygen delivery following head injury. <i>Critical Care Medicine</i> , <b>2004</b> , 32, 1384-90	1.4	328
12	Assessment of cerebrovascular autoregulation in head-injured patients: a validation study. <i>Stroke</i> , <b>2003</b> , 34, 2404-9	6.7	154
11	Limbic hypometabolism in Alzheimer® disease and mild cognitive impairment. <i>Annals of Neurology</i> , <b>2003</b> , 54, 343-51	9.4	331
10	Responses of posttraumatic pericontusional cerebral blood flow and blood volume to an increase in cerebral perfusion pressure. <i>Journal of Cerebral Blood Flow and Metabolism</i> , <b>2003</b> , 23, 1371-7	7.3	61
9	Integrated image analysis solutions for PET datasets in damaged brain. <i>Journal of Clinical Monitoring and Computing</i> , <b>2002</b> , 17, 427-40	2	20
8	Effect of hyperventilation on cerebral blood flow in traumatic head injury: clinical relevance and monitoring correlates. <i>Critical Care Medicine</i> , <b>2002</b> , 30, 1950-9	1.4	263
7	Predicting delayed ischemic deficits after aneurysmal subarachnoid hemorrhage using a transient hyperemic response test of cerebral autoregulation. <i>Neurosurgery</i> , <b>2000</b> , 47, 819-25; discussions 825-6	3.2	103
6	A computing system for the clinical and experimental investigation of cerebrovascular reactivity. <i>Journal of Clinical Monitoring and Computing</i> , <b>1997</b> , 14, 185-98		10
5	Clinical evaluation of near-infrared spectroscopy for testing cerebrovascular reactivity in patients with carotid artery disease. <i>Stroke</i> , <b>1997</b> , 28, 331-8	6.7	71

- 4 Internal and external carotid contributions to near-infrared spectroscopy during carotid endarterectomy. *Stroke*, **1997**, 28, 906-11 6.7 49
- 3 . *Journal of Clinical Monitoring and Computing*, **1997**, 14, 185-198 18
- 2 Assessment of cerebral autoregulation using carotid artery compression. *Stroke*, **1996**, 27, 2197-203 6.7 104
- 1 Can cerebrovascular reactivity be measured with near-infrared spectroscopy?. *Stroke*, **1995**, 26, 2285-92 6.7 91