Andriy Temko

List of Publications by Year
in descending order

85 papers	3,010 citations	236925 25 h-index	254184 43 g-index
85 all docs	85 docs citations	85 times ranked	3261 citing authors

#	Article	IF	Citations
1	A method for AI assisted human interpretation of neonatal EEG. Scientific Reports, 2022, 12, .	3.3	6
2	Gaussian mixture models for site-specific wind turbine power curves. Proceedings of the Institution of Mechanical Engineers, Part A: Journal of Power and Energy, 2021, 235, 494-505.	1.4	3
3	Deep Learning for EEG Seizure Detection in Preterm Infants. International Journal of Neural Systems, 2021, 31, 2150008.	5.2	29
4	A Framework for AI-Assisted Detection of Patent Ductus Arteriosus from Neonatal Phonocardiogram. Healthcare (Switzerland), 2021, 9, 169.	2.0	14
5	An EEG analysis framework through AI and sonification on low power IoT edge devices. , 2021, 2021, 277-280.		4
6	Towards Deeper Neural Networks for Neonatal Seizure Detection. , 2021, 2021, 920-923.		4
7	Neonatal seizure detection from raw multi-channel EEG using a fully convolutional architecture. Neural Networks, 2020, 123, 12-25.	5.9	85
8	Ensembling crowdsourced seizure prediction algorithms using longâ€term human intracranial EEG. Epilepsia, 2020, 61, e7-e12.	5.1	15
9	Colonic microbiota is associated with inflammation and host epigenomic alterations in inflammatory bowel disease. Nature Communications, 2020, 11, 1512.	12.8	167
10	Gut microbiome, big data and machine learning to promote precision medicine for cancer. Nature Reviews Gastroenterology and Hepatology, 2020, 17, 635-648.	17.8	172
11	Analysis of a Low-Cost EEG Monitoring System and Dry Electrodes toward Clinical Use in the Neonatal ICU. Sensors, 2019, 19, 2637.	3.8	32
12	Prediction of short-term health outcomes in preterm neonates from heart-rate variability and blood pressure using boosted decision trees. Computer Methods and Programs in Biomedicine, 2019, 180, 104996.	4.7	9
13	On sound-based interpretation of neonatal EEG. , 2018, , .		3
14	Investigating the Impact of CNN Depth on Neonatal Seizure Detection Performance. , 2018, 2018, 5862-5865.		13
15	System Level Framework for Assessing the Accuracy of Neonatal EEG Acquisition. , 2018, 2018, 4339-4342.		1
16	Heart Rate Variability during Periods of Low Blood Pressure as a Predictor of Short-Term Outcome in Preterms. , 2018, 2018, 5614-5517.		3
17	Neonatal EEG Interpretation and Decision Support Framework for Mobile Platforms. , 2018, 2018, 4881-4884.		9
18	Coupling between mean blood pressure and EEG in preterm neonates is associated with reduced illness severity scores. PLoS ONE, 2018, 13, e0199587.	2.5	6

#	Article	IF	Citations
19	Epilepsyecosystem.org: crowd-sourcing reproducible seizure prediction with long-term human intracranial EEG. Brain, 2018, 141, 2619-2630.	7.6	105
20	Exploring temporal information in neonatal seizures using a dynamic time warping based SVM kernel. Computers in Biology and Medicine, 2017, 82, 100-110.	7.0	23
21	Accurate Heart Rate Monitoring During Physical Exercises Using PPG. IEEE Transactions on Biomedical Engineering, 2017, 64, 2016-2024.	4.2	182
22	Comparison of electrode technologies for dry and portable EEG acquisition. , 2017, , .		11
23	PPG-based heart rate estimation using Wiener filter, phase vocoder and Viterbi decoding. , 2017, , .		7
24	Lost in translation? The potential psychobiotic Lactobacillus rhamnosus (JB-1) fails to modulate stress or cognitive performance in healthy male subjects. Brain, Behavior, and Immunity, 2017, 61, 50-59.	4.1	254
25	Neonatal seizure detection using convolutional neural networks. , 2017, , .		26
26	Portable neonatal EEG monitoring and sonification on an Android device. , 2017, 2017, 2018-2021.		9
27	V2Hz: Music composition from wind turbine energy using a finite-state machine. , 2017, , .		1
28	Toward a Personalized Real-Time Diagnosis in Neonatal Seizure Detection. IEEE Journal of Translational Engineering in Health and Medicine, 2017, 5, 1-14.	3.7	14
29	Modelling interactions between blood pressure and brain activity in preterm neonates. , 2017, 2017, 3969-3972.		2
30	In-depth performance analysis of an EEG based neonatal seizure detection algorithm. Clinical Neurophysiology, 2016, 127, 2246-2256.	1.5	19
31	Bifidobacterium longum 1714 as a translational psychobiotic: modulation of stress, electrophysiology and neurocognition in healthy volunteers. Translational Psychiatry, 2016, 6, e939-e939.	4.8	350
32	Validation of an automated seizure detection algorithm for term neonates. Clinical Neurophysiology, 2016, 127, 156-168.	1.5	55
33	Grading hypoxicâ€"ischemic encephalopathy severity in neonatal EEG using GMM supervectors and the support vector machine. Clinical Neurophysiology, 2016, 127, 297-309.	1.5	39
34	Detecting Neonatal Seizures With Computer Algorithms. Journal of Clinical Neurophysiology, 2016, 33, 394-402.	1.7	26
35	Classification of hypoxic-ischemic encephalopathy using long term heart rate variability based features. , 2015, 2015, 2355-8.		2
36	Automatic detection of artifact in neonatal ECG. , 2015, , .		0

#	Article	IF	Citations
37	Detection of seizures in intracranial EEG: UPenn and Mayo Clinic's Seizure Detection Challenge. , 2015, 2015, 6582-5.		16
38	Assessment of quality of ECG for accurate estimation of Heart Rate Variability in newborns. , 2015, 2015, 5863-6.		3
39	Clinical implementation of a neonatal seizure detection algorithm. Decision Support Systems, 2015, 70, 86-96.	5.9	42
40	Multimodal predictor of neurodevelopmental outcome in newborns with hypoxic-ischaemic encephalopathy. Computers in Biology and Medicine, 2015, 63, 169-177.	7.0	26
41	Estimation of heart rate from photoplethysmography during physical exercise using Wiener filtering and the phase vocoder. , 2015, 2015, 1500-3.		36
42	EEG ‘diarization’ for the description of neonatal brain injuries. , 2014, , .		1
43	Modulation frequency analysis of seizures in neonatal EEG. , 2014, , .		0
44	Assessing instantaneous energy in the EEG: A non-negative, frequency-weighted energy operator. , 2014, 2014, 3288-91.		36
45	Neonatal EEG audification for seizure detection. , 2014, 2014, 4451-4.		8
46	Grading brain injury in neonatal EEG using SVM and supervector kernel. , 2014, , .		3
47	Automated Detection of Perturbed Cardiac Physiology During Oral Food Allergen Challenge in Children. IEEE Journal of Biomedical and Health Informatics, 2014, 18, 1051-1057.	6.3	12
48	ROBUST NEONATAL EEG SEIZURE DETECTION THROUGH ADAPTIVE BACKGROUND MODELING. International Journal of Neural Systems, 2013, 23, 1350018.	5.2	57
49	An Automated System for Grading EEG Abnormality in Term Neonates with Hypoxic-Ischaemic Encephalopathy. Annals of Biomedical Engineering, 2013, 41, 775-785.	2.5	53
50	Real-time allergy detection. , 2013, , .		0
51	Discriminative and Generative Classification Techniques Applied to Automated Neonatal Seizure Detection. IEEE Journal of Biomedical and Health Informatics, 2013, 17, 297-304.	6.3	30
52	Inclusion of temporal priors for automated neonatal EEG classification. Journal of Neural Engineering, 2012, 9, 046002.	3.5	17
53	Dynamic time warping based neonatal seizure detection system. , 2012, 2012, 4919-22.		3
54	Temporal evolution of seizure burden for automated neonatal EEG classification. , 2012, 2012, 4915-8.		0

#	Article	IF	Citations
55	223 Clinical Utility of an Automated Neonatal Seizure Detection Algorithm. Archives of Disease in Childhood, 2012, 97, A64-A64.	1.9	0
56	Adaptive modelling of background EEG for robust detection of neonatal seizures. , 2012, , .		0
57	Instantaneous Measure of EEG Channel Importance for Improved Patient-Adaptive Neonatal Seizure Detection. IEEE Transactions on Biomedical Engineering, 2012, 59, 717-727.	4.2	34
58	EEG-based neonatal seizure detection with Support Vector Machines. Clinical Neurophysiology, 2011, 122, 464-473.	1.5	270
59	Performance assessment for EEG-based neonatal seizure detectors. Clinical Neurophysiology, 2011, 122, 474-482.	1.5	101
60	A Data-Driven Energy Based Estimator of EEG Channel Importance for Improved Patient-Adaptive Neonatal Seizure Detector. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2011, 44, 13770-13775.	0.4	0
61	Clinical Validation of a Neonatal Seizure Detection Algorithm. Pediatric Research, 2011, 70, 135-135.	2.3	2
62	EEG Signal Description with Spectral-Envelope-Based Speech Recognition Features for Detection of Neonatal Seizures. IEEE Transactions on Information Technology in Biomedicine, 2011, 15, 839-847.	3.2	44
63	Parallel artefact rejection for epileptiform activity detection in routine EEG. , 2011, 2011, 7953-6.		4
64	Online EEG channel weighting for detection of seizures in the neonate. , 2011, 2011, 1447-50.		4
65	Advances in Automated Neonatal Seizure Detection. Studies in Computational Intelligence, 2011, , 93-113.	0.9	5
66	Heart rate based automatic seizure detection in the newborn. Medical Engineering and Physics, 2010, 32, 829-839.	1.7	42
67	Gaussian mixture models for classification of neonatal seizures using EEG. Physiological Measurement, 2010, 31, 1047-1064.	2.1	54
68	Speech recognition features for EEG signal description in detection of neonatal seizures. , 2010, 2010, 3281-4.		16
69	Predicting the neurodevelopmental outcome in newborns with hypoxic-ischaemic injury. , 2010, 2010, 1370-3.		4
70	SVM detection of epileptiform activity in routine EEG. , 2010, 2010, 6369-72.		2
71	Age-independent seizure detection. , 2009, 2009, 6612-5.		20
72	On the effect of reduced sampling rate and bitwidth on seizure detection. , 2009, , .		1

#	Article	IF	Citations
73	An SVM-based system and its performance for detection of seizures in neonates. , 2009, 2009, 2643-6.		30
74	A comparison of generative and discriminative approaches in automated neonatal seizure detection. , 2009, , .		2
75	Acoustic event detection in meeting-room environments. Pattern Recognition Letters, 2009, 30, 1281-1288.	4.2	71
76	EEG in the healthy term newborn within 12 hours of birth. Clinical Neurophysiology, 2009, 120, 1046-1053.	1.5	52
77	A Gaussian mixture model based statistical classification system for neonatal seizure detection. , 2009, , .		12
78	Fuzzy integral based information fusion for classification of highly confusable non-speech sounds. Pattern Recognition, 2008, 41, 1814-1823.	8.1	43
79	Enhanced SVM Training for Robust Speech Activity Detection. , 2007, , .		16
80	Speaker Diarization for Conference Room: The UPC RT07s Evaluation System. Lecture Notes in Computer Science, 2007, , 543-553.	1.3	11
81	Classification of acoustic events using SVM-based clustering schemes. Pattern Recognition, 2006, 39, 682-694.	8.1	85
82	Improving the Performance of Acoustic Event Classification by Selecting and Combining Information Sources Using the Fuzzy Integral. Lecture Notes in Computer Science, 2006, , 357-368.	1.3	2
83	Robust Speech Activity Detection in Interactive Smart-Room Environments. Lecture Notes in Computer Science, 2006, , 236-247.	1.3	2
84	Classification of Meeting-Room Acoustic Events with Support Vector Machines and Variable-Feature-Set Clustering. , 0, , .		20
85	Comparison of Sequence Discriminant Support Vector Machines for Acoustic Event Classification. , 0, , .		18