

# Kaspar Anton Schindler

## List of Publications by Year in descending order

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Version: 2024-02-01

126  
papers

4,581  
citations

159358

30  
h-index

123241

61  
g-index

135  
all docs

135  
docs citations

135  
times ranked

4291  
citing authors

#	ARTICLE	IF	CITATIONS
1	Continuous Versus Routine Standardized Electroencephalogram for Outcome Prediction in Critically Ill Adults: Analysis From a Randomized Trial. <i>Critical Care Medicine</i> , 2022, 50, 329-334.	0.4	6
2	Stationary EEG pattern relates to large-scale resting state networks – An EEG-fMRI study connecting brain networks across time-scales. <i>NeuroImage</i> , 2022, 246, 118763.	2.1	5
3	An Instrumented Apartment to Monitor Human Behavior: A Pilot Case Study in the NeuroTec Loft. <i>Sensors</i> , 2022, 22, 1657.	2.1	3
4	On the relationships between epilepsy, sleep, and Alzheimer’s disease: A narrative review. <i>Epilepsy and Behavior</i> , 2022, 129, 108609.	0.9	8
5	EEG recording latency in critically ill patients: Impact on outcome. An analysis of a randomized controlled trial (CERTA). <i>Clinical Neurophysiology</i> , 2022, 139, 23-27.	0.7	4
6	Continuous versus routine EEG in patients after cardiac arrest. <i>Resuscitation</i> , 2022, 176, 68-73.	1.3	10
7	Informed consent in critically ill adults participating to a randomized trial. <i>Brain and Behavior</i> , 2021, 11, e01965.	1.0	2
8	An Ensemble of Hyperdimensional Classifiers: Hardware-Friendly Short-Latency Seizure Detection With Automatic iEEG Electrode Selection. <i>IEEE Journal of Biomedical and Health Informatics</i> , 2021, 25, 935-946.	3.9	27
9	Under-sampling in epilepsy: Limitations of conventional EEG. <i>Clinical Neurophysiology Practice</i> , 2021, 6, 41-49.	0.6	22
10	Assessment of a Study of Continuous vs Repeat-Spot Electroencephalography in Patients With Critical Illness – Reply. <i>JAMA Neurology</i> , 2021, 78, 369.	4.5	1
11	Continuous versus routine EEG in critically ill adults: reimbursement analysis of a randomised trial. <i>Swiss Medical Weekly</i> , 2021, 151, w20477.	0.8	2
12	Electroencephalography of mechanically ventilated patients at high risk of delirium. <i>Acta Neurologica Scandinavica</i> , 2021, 144, 296-302.	1.0	2
13	EEG spindles integrity in critical care adults. Analysis of a randomized trial. <i>Acta Neurologica Scandinavica</i> , 2021, 144, 655-662.	1.0	7
14	A Primer on Hyperdimensional Computing for iEEG Seizure Detection. <i>Frontiers in Neurology</i> , 2021, 12, 701791.	1.1	5
15	NeuroTec Sitem-Insel Bern: Closing the Last Mile in Neurology. <i>Clinical and Translational Neuroscience</i> , 2021, 5, 13.	0.4	10
16	Low-Latency Detection of Epileptic Seizures from iEEG with Temporal Convolutional Networks on a Low-Power Parallel MCU. , 2021, , .		3
17	More Than Spikes: On the Added Value of Non-linear Intracranial EEG Analysis for Surgery Planning in Temporal Lobe Epilepsy. <i>Frontiers in Neurology</i> , 2021, 12, 741450.	1.1	1
18	Hyperdimensional Computing With Local Binary Patterns: One-Shot Learning of Seizure Onset and Identification of Ictogenic Brain Regions Using Short-Time iEEG Recordings. <i>IEEE Transactions on Biomedical Engineering</i> , 2020, 67, 601-613.	2.5	45

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19	Linear and nonlinear interrelations show fundamentally distinct network structure in preictal intracranial EEG of epilepsy patients. <i>Human Brain Mapping</i> , 2020, 41, 467-483.	1.9	15
20	A role for spindles in the onset of rapid eye movement sleep. <i>Nature Communications</i> , 2020, 11, 5247.	5.8	45
21	Diagnosis of epilepsy after first seizure. Introducing the SWISS FIRST study. <i>Clinical and Translational Neuroscience</i> , 2020, 4, 2514183X2093944.	0.4	4
22	Standardized visual EEG features predict outcome in patients with acute consciousness impairment of various etiologies. <i>Critical Care</i> , 2020, 24, 680.	2.5	11
23	Continuous vs Routine Electroencephalogram in Critically Ill Adults With Altered Consciousness and No Recent Seizure. <i>JAMA Neurology</i> , 2020, 77, 1225.	4.5	81
24	Chance and risk in epilepsy. <i>Current Opinion in Neurology</i> , 2020, 33, 163-172.	1.8	33
25	Topography of MR lesions correlates with standardized EEG pattern in early comatose survivors after cardiac arrest. <i>Resuscitation</i> , 2020, 149, 217-224.	1.3	11
26	Local thalamic atrophy associates with large-scale functional connectivity alterations of fronto-parietal cortices in genetic generalized epilepsies. <i>Clinical and Translational Neuroscience</i> , 2019, 3, 2514183X1985032.	0.4	2
27	Dynamic modulation of theta-gamma coupling during rapid eye movement sleep. <i>Sleep</i> , 2019, 42, .	0.6	39
28	Quantification and Selection of Ictogenic Zones in Epilepsy Surgery. <i>Frontiers in Neurology</i> , 2019, 10, 1045.	1.1	29
29	Assessing Epileptogenicity Using Phase-Locked High Frequency Oscillations: A Systematic Comparison of Methods. <i>Frontiers in Neurology</i> , 2019, 10, 1132.	1.1	13
30	Laelaps: An Energy-Efficient Seizure Detection Algorithm from Long-term Human iEEG Recordings without False Alarms. , 2019, , .		39
31	Stroke causes a transient imbalance of interhemispheric information flow in EEG during non-REM sleep. <i>Clinical Neurophysiology</i> , 2018, 129, 1418-1426.	0.7	11
32	Does Continuous Video-EEG in Patients With Altered Consciousness Improve Patient Outcome? Current Evidence and Randomized Controlled Trial Design. <i>Journal of Clinical Neurophysiology</i> , 2018, 35, 359-364.	0.9	19
33	Rational design of transcranial alternating current stimulation. <i>Clinical and Translational Neuroscience</i> , 2018, 2, 2514183X1879351.	0.4	11
34	One-shot Learning for iEEG Seizure Detection Using End-to-end Binary Operations: Local Binary Patterns with Hyperdimensional Computing. , 2018, , .		55
35	Mean field phase synchronization between chimera states. <i>Chaos</i> , 2018, 28, 091101.	1.0	19
36	Characteristic Fluctuations Around Stable Attractor Dynamics Extracted from Highly Nonstationary Electroencephalographic Recordings. <i>Brain Connectivity</i> , 2018, 8, 457-474.	0.8	11

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37	Evaluating resective surgery targets in epilepsy patients: A comparison of quantitative EEG methods. <i>Journal of Neuroscience Methods</i> , 2018, 305, 54-66.	1.3	12
38	Elevated Ictal Brain Network Ictogenicity Enables Prediction of Optimal Seizure Control. <i>Frontiers in Neurology</i> , 2018, 9, 98.	1.1	30
39	Predictive modeling of EEG time series for evaluating surgery targets in epilepsy patients. <i>Human Brain Mapping</i> , 2017, 38, 2509-2531.	1.9	12
40	EEG synchronization measures are early outcome predictors in comatose patients after cardiac arrest. <i>Clinical Neurophysiology</i> , 2017, 128, 635-642.	0.7	26
41	Suppression of interictal spikes during phasic rapid eye movement sleep: a quantitative stereo-electroencephalography study. <i>Journal of Sleep Research</i> , 2017, 26, 606-613.	1.7	42
42	Computer models to inform epilepsy surgery strategies: prediction of postoperative outcome. <i>Brain</i> , 2017, 140, e30-e30.	3.7	15
43	Demographic, Clinical and Polysomnographic Characteristics of Childhood- and Adult-Onset Sleepwalking in Adults. <i>European Neurology</i> , 2017, 78, 307-311.	0.6	38
44	Personalized structural image analysis in patients with temporal lobe epilepsy. <i>Scientific Reports</i> , 2017, 7, 10883.	1.6	10
45	Correlating Interictal Spikes with Sigma and Delta Dynamics during Non-Rapid-Eye-Movement-Sleep. <i>Frontiers in Neurology</i> , 2017, 8, 288.	1.1	21
46	An optimal strategy for epilepsy surgery: Disruption of the rich-club?. <i>PLoS Computational Biology</i> , 2017, 13, e1005637.	1.5	82
47	Estimation of brain network ictogenicity predicts outcome from epilepsy surgery. <i>Scientific Reports</i> , 2016, 6, 29215.	1.6	134
48	All together now: Analogies between chimera state collapses and epileptic seizures. <i>Scientific Reports</i> , 2016, 6, 23000.	1.6	133
49	Burst firing of single neurons in the human medial temporal lobe changes before epileptic seizures. <i>Clinical Neurophysiology</i> , 2016, 127, 3329-3334.	0.7	14
50	Ictal time-irreversible intracranial EEG signals as markers of the epileptogenic zone. <i>Clinical Neurophysiology</i> , 2016, 127, 3051-3058.	0.7	30
51	Prognostic and diagnostic value of EEG signal coupling measures in coma. <i>Clinical Neurophysiology</i> , 2016, 127, 2942-2952.	0.7	20
52	Focal Epilepsy: MR Imaging of Nonhemodynamic Field Effects by Using a Phase-cycled Stimulus-induced Rotary Saturation Approach with Spin-Lock Preparation. <i>Radiology</i> , 2016, 280, 237-243.	3.6	10
53	Focal and Generalized Patterns of Cerebral Cortical Veins Due to Non-Convulsive Status Epilepticus or Prolonged Seizure Episode after Convulsive Status Epilepticus – A MRI Study Using Susceptibility Weighted Imaging. <i>PLoS ONE</i> , 2016, 11, e0160495.	1.1	15
54	Prolonged Postictal Asystole in a Child with Focal Epilepsy and Cerebellar Atrophy. <i>Neuropediatrics</i> , 2016, 47, .	0.3	0

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55	Random Sampling with Interspike-Intervals of the Exponential Integrate and Fire Neuron: A Computational Interpretation of UP-States. <i>PLoS ONE</i> , 2015, 10, e0132906.	1.1	1
56	Resected Brain Tissue, Seizure Onset Zone and Quantitative EEG Measures: Towards Prediction of Post-Surgical Seizure Control. <i>PLoS ONE</i> , 2015, 10, e0141023.	1.1	43
57	Neurology and psychiatry: waking up to opportunities of sleep. : State of the art and clinical/research priorities for the next decade. <i>European Journal of Neurology</i> , 2015, 22, 1337-1354.	1.7	46
58	A Fully Integrated IC With 0.85- $\frac{1}{4}$ W/Channel Consumption for Epileptic iEEG Detection. <i>IEEE Transactions on Circuits and Systems II: Express Briefs</i> , 2015, 62, 114-118.	2.2	24
59	Chowâ€“Liu trees are sufficient predictive models for reproducing key features of functional networks of periictal EEG time-series. <i>NeuroImage</i> , 2015, 118, 520-537.	2.1	7
60	Induction of Fear by Intraoperative Stimulation During Awake Craniotomy: Case Presentation and Systematic Review of the Literature. <i>World Neurosurgery</i> , 2015, 84, 470-474.	0.7	7
61	Detecting Functional Hubs of Ictogenic Networks. <i>Brain Topography</i> , 2015, 28, 305-317.	0.8	49
62	Localization of Epileptogenic Zone on Pre-surgical Intracranial EEG Recordings: Toward a Validation of Quantitative Signal Analysis Approaches. <i>Brain Topography</i> , 2015, 28, 832-837.	0.8	58
63	In-vivo validation of a compact inductively-powered neural recording interface. , 2014, , .		0
64	Focal hemodynamic patterns of status epilepticus detected by susceptibility weighted imaging (SWI). <i>European Radiology</i> , 2014, 24, 2980-2988.	2.3	28
65	Epileptic seizures as condensed sleep: an analysis of network dynamics from electroencephalogram signals. <i>Journal of Sleep Research</i> , 2014, 23, 270-275.	1.7	8
66	Improved Localization of Implanted Subdural Electrode Contacts on Magnetic Resonance Imaging With an Elastic Image Fusion Algorithm in an Invasive Electroencephalography Recording. <i>Operative Neurosurgery</i> , 2014, 10, 506-513.	0.4	6
67	Seizure Termination. <i>International Review of Neurobiology</i> , 2014, 114, 187-207.	0.9	24
68	Neuroimaging of Epilepsy: Lesions, Networks, Oscillations. <i>Clinical Neuroradiology</i> , 2014, 24, 5-15.	1.0	20
69	Standing Waves as an Explanation for Generic Stationary Correlation Patterns in Noninvasive EEG of Focal Onset Seizures. <i>Brain Connectivity</i> , 2014, 4, 131-144.	0.8	14
70	PureEEG: Automatic EEG artifact removal for epilepsy monitoring. <i>Neurophysiologie Clinique</i> , 2014, 44, 479-490.	1.0	29
71	Detecting determinism with improved sensitivity in time series: Rank-based nonlinear predictability score. <i>Physical Review E</i> , 2014, 90, 032913.	0.8	13
72	Widespread grey matter changes and hemodynamic correlates to interictal epileptiform discharges in pharmaco-resistant mesial temporal epilepsy. <i>Journal of Neurology</i> , 2013, 260, 1601-1610.	1.8	15

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73	Ordinal patterns in epileptic brains: Analysis of intracranial EEG and simultaneous EEG-fMRI. <i>European Physical Journal: Special Topics</i> , 2013, 222, 569-585.	1.2	18
74	Genuine cross-correlations: Which surrogate based measure reproduces analytical results best?. <i>Neural Networks</i> , 2013, 46, 154-164.	3.3	9
75	Synchronization and desynchronization in epilepsy: controversies and hypotheses. <i>Journal of Physiology</i> , 2013, 591, 787-797.	1.3	450
76	Common mechanisms of auditory hallucinationsâ€“perfusion studies in epilepsy. <i>Psychiatry Research - Neuroimaging</i> , 2013, 211, 268-270.	0.9	16
77	A Systems-Level Approach to Human Epileptic Seizures. <i>Neuroinformatics</i> , 2013, 11, 159-173.	1.5	32
78	DYNAMICS OF LINEAR AND NONLINEAR INTERRELATION NETWORKS IN PERI-ICTAL INTRACRANIAL EEG: SEIZURE ONSET AND TERMINATION. , 2013, , .		0
79	Localizing Seizure-Onset Zones in Presurgical Evaluation of Drug-Resistant Epilepsy by Electroencephalography/fMRI: Effectiveness of Alternative Thresholding Strategies. <i>American Journal of Neuroradiology</i> , 2012, 33, 1818-1824.	1.2	14
80	Adverse Effect of Early Epileptic Seizures in Patients Receiving Endovascular Therapy for Acute Stroke. <i>Stroke</i> , 2012, 43, 1584-1590.	1.0	48
81	On seeing the trees and the forest: Singleâ€“signal and multisignal analysis of periictal intracranial EEG. <i>Epilepsia</i> , 2012, 53, 1658-1668.	2.6	25
82	Nonrandomness, nonlinear dependence, and nonstationarity of electroencephalographic recordings from epilepsy patients. <i>Physical Review E</i> , 2012, 86, 046206.	0.8	297
83	Self-organised transients in a neural mass model of epileptogenic tissue dynamics. <i>NeuroImage</i> , 2012, 59, 2644-2660.	2.1	74
84	Intermittent spikeâ€“wave dynamics in a heterogeneous, spatially extended neural mass model. <i>NeuroImage</i> , 2011, 55, 920-932.	2.1	97
85	Uniform approach to linear and nonlinear interrelation patterns in multivariate time series. <i>Physical Review E</i> , 2011, 83, 066215.	0.8	27
86	EEG correlation and power during maintenance of wakefulness test after sleep-deprivation. <i>Clinical Neurophysiology</i> , 2011, 122, 2025-2031.	0.7	10
87	Forbidden ordinal patterns of periictal intracranial EEG indicate deterministic dynamics in human epileptic seizures. <i>Epilepsia</i> , 2011, 52, 1771-1780.	2.6	47
88	Evolution of Genuine Cross-Correlation Strength of Focal Onset Seizures. <i>Journal of Clinical Neurophysiology</i> , 2011, 28, 450-462.	0.9	19
89	Analyzing spatio-temporal patterns of genuine cross-correlations. <i>Journal of Neuroscience Methods</i> , 2010, 191, 94-100.	1.3	38
90	Peri-ictal correlation dynamics of high-frequency (80â€“200Hz) intracranial EEG. <i>Epilepsy Research</i> , 2010, 89, 72-81.	0.8	28

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91	Assessing periodicity of periodic leg movements during sleep. <i>Frontiers in Neuroscience</i> , 2010, 4, .	1.4	3
92	Improvement of non-paraneoplastic voltage-gated potassium channel antibody-associated limbic encephalitis without immunosuppressive therapy. <i>Epilepsy and Behavior</i> , 2010, 17, 555-557.	0.9	24
93	Wavelet-denoising of electroencephalogram and the absolute slope method: A new tool to improve electroencephalographic localization and lateralization. <i>Clinical Neurophysiology</i> , 2009, 120, 1273-1281.	0.7	21
94	A novel synchronization measure for epileptic seizure detection based on Fourier series expansions. <i>IFMBE Proceedings</i> , 2009, , 171-175.	0.2	3
95	Theta burst transcranial magnetic stimulation is associated with increased EEG synchronization in the stimulated relative to unstimulated cerebral hemisphere. <i>Neuroscience Letters</i> , 2008, 436, 31-34.	1.0	27
96	Application of a multivariate seizure detection and prediction method to non-invasive and intracranial long-term EEG recordings. <i>Clinical Neurophysiology</i> , 2008, 119, 197-211.	0.7	77
97	Estimating the strength of genuine and random correlations in non-stationary multivariate time series. <i>Europhysics Letters</i> , 2008, 84, 10009.	0.7	26
98	Evolving functional network properties and synchronizability during human epileptic seizures. <i>Chaos</i> , 2008, 18, 033119.	1.0	251
99	Data-driven estimates of the number of clusters in multivariate time series. <i>Physical Review E</i> , 2008, 78, 066703.	0.8	9
100	Mesial Frontal Epilepsy and Ictal Body Turning Along the Horizontal Body Axis. <i>Archives of Neurology</i> , 2008, 65, 71-7.	4.9	55
101	How generalised are secondarily "generalised" tonic clonic seizures?. <i>Journal of Neurology, Neurosurgery and Psychiatry</i> , 2007, 78, 993-996.	0.9	49
102	Increasing synchronization may promote seizure termination: Evidence from status epilepticus. <i>Clinical Neurophysiology</i> , 2007, 118, 1955-1968.	0.7	144
103	Automatic Reduction of Artifacts in EEG-Signals. , 2007, , .		9
104	Changes of EEG synchronization during low-frequency electric stimulation of the seizure onset zone. <i>Epilepsy Research</i> , 2007, 77, 108-119.	0.8	29
105	Asystole induced by electrical stimulation of the left cingulate gyrus. <i>Epileptic Disorders</i> , 2007, 9, 77-81.	0.7	42
106	EEG in Creutzfeldt-Jakob disease. <i>Clinical Neurophysiology</i> , 2006, 117, 935-951.	0.7	234
107	Reply to "Nonconvulsive status epilepticus in Creutzfeldt-Jakob disease". <i>Clinical Neurophysiology</i> , 2006, 117, 1881.	0.7	1
108	Ictal vomiting in a left hemisphere language-dominant patient with left-sided temporal lobe epilepsy. <i>Epilepsy and Behavior</i> , 2006, 8, 323-327.	0.9	19

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109	Detection of regional blood perfusion changes in epileptic seizures with dynamic brain perfusion CT—A pilot study. <i>Epilepsy Research</i> , 2006, 72, 102-110.	0.8	45
110	Transient MR changes and symptomatic epilepsy following gamma knife treatment of a residual GH-secreting pituitary adenoma in the cavernous sinus. <i>Acta Neurochirurgica</i> , 2006, 148, 903-908.	0.9	11
111	Fast oscillations trigger bursts of action potentials in neocortical neurons in vitro: A quasi-white-noise analysis study. <i>Brain Research</i> , 2006, 1110, 201-210.	1.1	8
112	Brain areas involved in medial temporal lobe seizures: A principal component analysis of ictal SPECT data. <i>Human Brain Mapping</i> , 2006, 27, 520-534.	1.9	21
113	Assessing seizure dynamics by analysing the correlation structure of multichannel intracranial EEG. <i>Brain</i> , 2006, 130, 65-77.	3.7	292
114	Comparison of voxel-based 3-D MRI analysis and subtraction ictal SPECT coregistered to MRI in focal epilepsy. <i>Epilepsy Research</i> , 2005, 65, 125-133.	0.8	18
115	Adult Onset Metachromatic Leukodystrophy Without Electroclinical Peripheral Nervous System Involvement. <i>Archives of Neurology</i> , 2005, 62, 309.	4.9	29
116	EEG analysis with simulated neuronal cell models helps to detect pre-seizure changes. <i>Clinical Neurophysiology</i> , 2002, 113, 604-614.	0.7	52
117	Diffusion and perfusion MRI for the localisation of epileptogenic foci in drug-resistant epilepsy. <i>Neuroradiology</i> , 2002, 44, 475-480.	1.1	25
118	Using simulated neuronal cell models for detection of epileptic seizures in foramen ovale and scalp EEG. <i>Clinical Neurophysiology</i> , 2001, 112, 1006-1017.	0.7	31
119	Hyperperfusion of anterior cingulate gyrus in a case of paroxysmal nocturnal dystonia. <i>Neurology</i> , 2001, 57, 917-920.	1.5	44
120	Noise-driven neocortical interaction: a simple generation mechanism for complex neuron spiking. <i>Acta Biotheoretica</i> , 2000, 48, 149-171.	0.7	6
121	Neocortical networks of pyramidal neurons: from local locking and chaos to macroscopic chaos and synchronization. <i>Nonlinearity</i> , 2000, 13, 1515-1529.	0.6	24
122	When pyramidal neurons lock, when they respond chaotically, and when they like to synchronize. <i>Neuroscience Research</i> , 2000, 36, 81-91.	1.0	24
123	Complex Response to Periodic Inhibition in Simple and Detailed Neuronal Models. <i>Neural Computation</i> , 1999, 11, 67-74.	1.3	9
124	Chaotic Spike Patterns Evoked by Periodic Inhibition of Rat Cortical Neurons. <i>Zeitschrift Fur Naturforschung - Section A Journal of Physical Sciences</i> , 1997, 52, 509-512.	0.7	10
125	A Multivariate Approach to Correlation Analysis Based on Random Matrix Theory. , 0, , 209-226.		7
126	Bivariate and Multivariate Time Series Analysis Techniques and their Potential Impact for Seizure Prediction. , 0, , 189-208.		2