Seunghwan Kim

List of Publications by Year
in descending order

80 papers	2,500 citations	236833 25 h-index	206029 48 g-index
81 all docs	81 docs citations	81 times ranked	2329 citing authors

#	Article	IF	Citations
1	Coherence resonance in a Hodgkin-Huxley neuron. Physical Review E, 1998, 57, 3292-3297.	0.8	219
2	The directionality and functional organization of frontoparietal connectivity during consciousness and anesthesia in humans. Consciousness and Cognition, 2009, 18, 1069-1078.	0.8	204
3	Multistability in Coupled Oscillator Systems with Time Delay. Physical Review Letters, 1997, 79, 2911-2914.	2.9	196
4	Reconfiguration of Network Hub Structure after Propofol-induced Unconsciousness. Anesthesiology, 2013, 119, 1347-1359.	1.3	127
5	Propofol induction reduces the capacity for neural information integration: Implications for the mechanism of consciousness and general anesthesia. Consciousness and Cognition, 2009, 18, 56-64.	0.8	124
6	Market efficiency in foreign exchange markets. Physica A: Statistical Mechanics and Its Applications, 2007, 382, 209-212.	1.2	108
7	Parameter dependence of stochastic resonance in the stochastic Hodgkin-Huxley neuron. Physical Review E, 1999, 60, 826-830.	0.8	89
8	Self-organized criticality and scale-free properties in emergent functional neural networks. Physical Review E, 2006, 74, 045101.	0.8	89
9	Brain Networks Maintain a Scale-free Organization across Consciousness, Anesthesia, and Recovery. Anesthesiology, 2010, 113, 1081-1091.	1.3	86
10	Classification of epilepsy types through global network analysis of scalp electroencephalograms. Physical Review E, 2006, 73, 041920.	0.8	74
11	Long-term memory and volatility clustering in high-frequency price changes. Physica A: Statistical Mechanics and Its Applications, 2008, 387, 1247-1254.	1.2	69
12	Postoperative alteration of cerebral glucose metabolism in mesial temporal lobe epilepsy. Brain, 2005, 128, 1802-1810.	3.7	66
13	Topological properties of stock networks based on minimal spanning tree and random matrix theory in financial time series. Physica A: Statistical Mechanics and Its Applications, 2009, 388, 900-906.	1.2	65
14	Chaotic dynamics in systems with square symmetry. Physics Letters, Section A: General, Atomic and Solid State Physics, 1989, 140, 416-420.	0.9	51
15	Understanding volatility correlation behavior with a magnitude cross-correlation function. Physical Review E, 2006, 73, 066128.	0.8	49
16	Diversity of functional connectivity patterns is reduced in propofol€induced unconsciousness. Human Brain Mapping, 2017, 38, 4980-4995.	1.9	48
17	Perfusion abnormality of the caudate nucleus in patients with paroxysmal kinesigenic choreoathetosis. European Journal of Nuclear Medicine and Molecular Imaging, 2005, 32, 1205-1209.	3.3	47
18	Functional Brain Network Mechanism of Hypersensitivity in Chronic Pain. Scientific Reports, 2018, 8, 243.	1.6	44

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19	Relationship of Topology, Multiscale Phase Synchronization, and State Transitions in Human Brain Networks. Frontiers in Computational Neuroscience, 2017, 11, 55.	1.2	39
20	Suppressed neural complexity during ketamine- and propofol-induced unconsciousness. Neuroscience Letters, 2017, 653, 320-325.	1.0	37
21	Bifurcation analysis of mode-locking structure in a Hodgkin-Huxley neuron under sinusoidal current. Physical Review E, 2006, 73, 041924.	0.8	33
22	Regional Cerebral Hyperperfusion with Ictal Dystonic Posturing: Ictal-Interictal SPECT Subtraction. Epilepsia, 2004, 45, 686-689.	2.6	32
23	Rhythmic control of mRNA stability modulates circadian amplitude of mouse $Period3$ mRNA. Journal of Neurochemistry, 2015, 132, 642-656.	2.1	32
24	Fano resonances in translationally invariant nonlinear chains. Physical Review B, 2001, 63, .	1.1	31
25	Altered branching patterns of Purkinje cells in mouse model for cortical development disorder. Scientific Reports, 2011, 1, 122.	1.6	28
26	Deterministic factors of stock networks based on cross-correlation in financial market. Physica A: Statistical Mechanics and Its Applications, 2007, 383, 139-146.	1.2	27
27	Effects of time-delayed interactions on dynamic patterns in a coupled phase oscillator system. Physical Review E, 1999, 60, 4962-4965.	0.8	26
28	Protease-activated Receptor-2 Increases Exocytosis via Multiple Signal Transduction Pathways in Pancreatic Duct Epithelial Cells. Journal of Biological Chemistry, 2008, 283, 18711-18720.	1.6	26
29	Analysis of the separatrix map in Hamiltonian systems. Physica D: Nonlinear Phenomena, 1996, 89, 315-328.	1.3	25
30	Topological Properties of a Minimal Spanning Tree in the Korean and the American Stock Markets. Journal of the Korean Physical Society, 2007, 51, 1432.	0.3	24
31	Multifractal analysis of the Korean agricultural market. Physica A: Statistical Mechanics and Its Applications, 2011, 390, 4286-4292.	1.2	23
32	Changes in the thalamocortical connectivity during anesthesia-induced transitions in consciousness. NeuroReport, 2012, 23, 294-298.	0.6	23
33	Understanding Visual Map Formation through Vortex Dynamics of Spin Hamiltonian Models. Physical Review Letters, 2004, 92, 018101.	2.9	19
34	The effect of a market factor on information flow between stocks using the minimal spanning tree. Physica A: Statistical Mechanics and Its Applications, 2010, 389, 1643-1652.	1.2	18
35	Separatrix-map analysis of chaotic transport in planar periodic vortical flows. Physical Review E, 1994, 49, 2900-2911.	0.8	17
36	Internal Ribosomal Entry Site-Mediated Translation Is Important for Rhythmic PERIOD1 Expression. PLoS ONE, 2012, 7, e37936.	1.1	16

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37	The structure of eigenmodes and phonon scattering by discrete breathers in the discrete nonlinear Schrödinger chain. Physica D: Nonlinear Phenomena, 2000, 141, 91-103.	1.3	14
38	Characterization of Phase Transition in the Thalamocortical System during Anesthesia-Induced Loss of Consciousness. PLoS ONE, 2012, 7, e50580.	1.1	14
39	Quantifying Morphological Parameters of the Terminal Branching Units in a Mouse Lung by Phase Contrast Synchrotron Radiation Computed Tomography. PLoS ONE, 2013, 8, e63552.	1.1	13
40	An analysis of the financial crisis in the KOSPI market using Hurst exponents. Physica A: Statistical Mechanics and Its Applications, 2014, 410, 327-334.	1.2	13
41	Statistical Investigation of Connected Structures of Stock Networks in a Financial Time Series. Journal of the Korean Physical Society, 2008, 53, 3837-3841.	0.3	13
42	Fourier analysis of multi-frequency dynamical systems. Physica D: Nonlinear Phenomena, 1988, 31, 117-126.	1.3	12
43	Universal scaling in circle maps. Physica D: Nonlinear Phenomena, 1989, 39, 365-392.	1.3	12
44	Effects of time dependency and efficiency on information flow in financial markets. Physica A: Statistical Mechanics and Its Applications, 2008, 387, 5219-5224.	1.2	12
45	The forced walking test: A novel test for pinpointing the anesthetic-induced transition in consciousness in mouse. Journal of Neuroscience Methods, 2010, 188, 14-23.	1.3	12
46	Internal localized eigenmodes on spin discrete breathers in antiferromagnetic chains with on-site easy-axis anisotropy. Physical Review B, 2002, 66, .	1.1	11
47	Effect of changing data size on eigenvalues in the Korean and Japanese stock markets. Physica A: Statistical Mechanics and Its Applications, 2009, 388, 4780-4786.	1.2	11
48	Phase dynamics in the biological neural networks. Physica A: Statistical Mechanics and Its Applications, 2000, 288, 380-396.	1.2	10
49	Simple Partial Status Epilepticus Localized by Single‐Photon Emission Computed Tomography Subtraction in Chronic Cerebral Paragonimiasis. Journal of Neuroimaging, 2004, 14, 365-368.	1.0	10
50	Different Ocular Dominance Map Formation Influenced by Orientation Preference Columns in Visual Cortices. Physical Review Letters, 2005, 94, 068701.	2.9	10
51	Subgraph "Backbone" Analysis of Dynamic Brain Networks during Consciousness and Anesthesia. PLoS ONE, 2013, 8, e70899.	1.1	10
52	Bona fide stochastic resonance and multimodality in the stochastic Hodgkin-Huxley neuron. Physical Review E, 2005, 72, 061906.	0.8	9
53	Effects of modularity in financial markets on an agent-based model. Journal of the Korean Physical Society, 2012, 60, 599-603.	0.3	8
54	PHONON SCATTERING BY BREATHERS IN THE DISCRETE NONLINEAR SCHRÃ—DINGER CHAIN. International Journal of Modern Physics B, 2000, 14, 1903-1914.	1.0	7

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55	Understanding Financial Market States Using an Artificial Double Auction Market. PLoS ONE, 2016, 11, e0152608.	1.1	7
56	Multifractal Analysis of Korean Stock Market. Journal of the Korean Physical Society, 2010, 56, 982-985.	0.3	7
57	Instability of planar vortices in the two-dimensional easy-plane Heisenberg model with distance-dependent interactions. Physical Review B, 2004, 70, .	1.1	6
58	Event and time-scale characteristics of heart-rate dynamics. Physical Review E, 2005, 71, 061917.	0.8	6
59	Dendritic planarity of Purkinje cells is independent of Reelin signaling. Brain Structure and Function, 2015, 220, 2263-2273.	1.2	6
60	Various synchronous states due to coupling strength inhomogeneity and coupling functions in systems of coupled identical oscillators. Chaos, 2019, 29, 011106.	1.0	6
61	Nonlinear properties of the Korea fund market. Journal of the Korean Physical Society, 2015, 67, 2039-2044.	0.3	5
62	Spatiotemporal dynamics of domain-wall solitons in the fully frustrated Josephson-junction ladder arrays. Physical Review B, 1996, 53, R502-R505.	1.1	4
63	The Effect of the Frequency Inhomogeneity on the Synchronous States in Systems of Coupled Oscillators. Journal of the Korean Physical Society, 2019, 74, 215-218.	0.3	3
64	Simple Partial Status Epilepticus Localized by Single-Photon Emission Computed Tomography Subtraction in Chronic Cerebral Paragonimiasis. , 2004, 14, 365-368.		3
65	Propofol Induction Reduces the Capacity for Neural Information Integration: Implications for the Mechanism of Consciousness and General Anesthesia. Nature Precedings, 2008, , .	0.1	2
66	Estimating transition point of anesthetic-induced loss of consciousness in mice by detecting motion in response to forced movement. , 2009, 2009, 4974-7.		2
67	Core-periphery disparity in fractal behavior of complex networks. Physical Review E, 2011, 84, 037103.	0.8	2
68	Entropy analysis in foreign exchange markets and economic crisis. Journal of the Korean Physical Society, 2012, 61, 638-646.	0.3	2
69	Network Model With Reduced Metabolic Rate Predicts Spatial Synchrony of Neuronal Activity. Frontiers in Computational Neuroscience, 2021, 15, 738362.	1.2	2
70	Exact inversion and scaling of the conductance matrices of Josephson junction multi-ladder arrays. Physics Letters, Section A: General, Atomic and Solid State Physics, 1995, 203, 407-411.	0.9	1
71	Phase synchronization and crisis in coupled periodically driven chaotic oscillators. Physics Letters, Section A: General, Atomic and Solid State Physics, 2004, 327, 167-173.	0.9	1
72	A new dynamic property of human consciousness. Nature Precedings, 2007, , .	0.1	1

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73	The Effect of Heterogeneous Interactions Among Traders in an Artificial Stock Market. SSRN Electronic Journal, 2015, , .	0.4	1
74	A robust complexity measure for noisy EEG time series under dynamic transitions during anesthesia. Journal of the Korean Physical Society, 2022, 80, 68-73.	0.3	1
75	Spatio-temporal dynamics in a locally coupled Ginzburg-Landau oscillator chain with time delay. AIP Conference Proceedings, 2000, , .	0.3	0
76	Noise-induced organized slow fluctuations in networks of neural areas with interarea feed-forward excitation and inhibition. Physical Review E, 2014, 89, 062710.	0.8	0
77	A Novel Visualization Method for Sleep Spindles Based on Source Localization of High Density EEG. Experimental Neurobiology, 2017, 26, 362-368.	0.7	0
78	THE MODELING AND FUNCTIONAL CONNECTIVITY OF THE BRAIN. , 2008, , .		0
79	Spam Source Clustering by Constructing Spammer Network with Correlation Measure. Lecture Notes of the Institute for Computer Sciences, Social-Informatics and Telecommunications Engineering, 2009, , 889-893.	0.2	0
80	Grouping Properties of Industry Sectors in Financial Markets. SSRN Electronic Journal, 0, , .	0.4	0