# Changsong Zhou

List of Publications by Year
in descending order

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|---|---|
| 111 papers | 9,248 citations |
| 101384 36 h-index | 39575 94 g-index |
| 115 all docs | 115 docs citations |
| 115 times ranked | 5705 citing authors |

| # | Article | IF | Citations |
|---|---------|----|-----------| 
| 1 | Less is more: wiring-economical modular networks support self-sustained firing-economical neural avalanches for efficient processing. National Science Review, 2022, 9, nwab102. | 4.6 | 9 |
| 2 | Criticality enhances the multilevel reliability of stimulus responses in cortical neural networks. PLoS Computational Biology, 2022, 18, e1009848. | 1.5 | 9 |
| 3 | Multimodal Evidence of Atypical Processing of Eye Gaze and Facial Emotion in Children With Autistic Traits. Frontiers in Human Neuroscience, 2022, 16, 733852. | 1.0 | 3 |
| 4 | Rational designing of oscillatory rhythmicity for memory rescue in plasticity-impaired learning networks. Cell Reports, 2022, 39, 110678. | 2.9 | 2 |
| 5 | Acute stress promotes brain network integration and reduces state transition variability. Proceedings of the National Academy of Sciences of the United States of America, 2022, 119, . | 3.3 | 7 |
| 6 | Lifespan associations of resting-state brain functional networks with ADHD symptoms. IScience, 2022, 25, 104673. | 1.9 | 5 |
| 7 | What do neuroanatomical networks reveal about the ontology of human cognitive abilities?. IScience, 2022, 25, 104706. | 1.9 | 1 |
| 8 | Delayed Feedback-Based Suppression of Pathological Oscillations in a Neural Mass Model. IEEE Transactions on Cybernetics, 2021, 51, 5046-5056. | 6.2 | 13 |
| 9 | Spatial multi-scaled chimera states of cerebral cortex network and its inherent structure-dynamics relationship in human brain. National Science Review, 2021, 8, nwaa125. | 4.6 | 21 |
| 10 | Adaptive Reconfiguration of Intrinsic Community Structure in Children with 5-Year Abacus Training. Cerebral Cortex, 2021, 31, 3122-3135. | 1.6 | 8 |
| 11 | Cortex-Wide Dynamics of Intrinsic Electrical Activities: Propagating Waves and Their Interactions. Journal of Neuroscience, 2021, 41, 3665-3678. | 1.7 | 33 |
| 12 | Nature and nurture shape structural connectivity in the face processing brain network. NeuroImage, 2021, 229, 117736. | 2.1 | 7 |
| 13 | Segregation, integration, and balance of large-scale resting brain networks configure different cognitive abilities. Proceedings of the National Academy of Sciences of the United States of America, 2021, 118, . | 3.3 | 88 |
| 14 | Closing the loop of DBS using the beta oscillations in cortex. Cognitive Neurodynamics, 2021, 15, 1157-1167. | 2.3 | 7 |
| 15 | Dynamic Configuration of Coactive Micropatterns in the Default Mode Network During Wakefulness and Sleep. Brain Connectivity, 2021, 11, 471-482. | 0.8 | 4 |
| 16 | Gamma Oscillations Facilitate Effective Learning in Excitatory-Inhibitory Balanced Neural Circuits. Neural Plasticity, 2021, 2021, 1-18. | 1.0 | 12 |
| 17 | Association of aerobic glycolysis with the structural connectome reveals a benefit–risk balancing mechanism in the human brain. Proceedings of the National Academy of Sciences of the United States of America, 2021, 118, e2013232118. | 3.3 | 5 |
| 18 | Synaptic changes modulate spontaneous transitions between tonic and bursting neural activities in coupled Hindmarsh-Rose neurons. Physical Review E, 2021, 104, 054407. | 0.8 | 8 |

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| 19 | Exploring Neural Signal Complexity as a Potential Link between Creative Thinking, Intelligence, and Cognitive Control. Journal of Intelligence, 2021, 9, 59. | 1.3 | 5 |
| 20 | Finding type and location of the source of cardiac arrhythmias from the averaged flow velocity field using the determinant-trace method. Physical Review E, 2021, 104, 064401. | 0.8 | 3 |
| 21 | Patterns of individual differences in fiber tract integrity of the face processing brain network support neurofunctional models. NeuroImage, 2020, 204, 116229. | 2.1 | 11 |
| 22 | The role of coupling connections in a model of the cortico-basal ganglia-thalamocortical neural loop for the generation of beta oscillations. Neural Networks, 2020, 123, 381-392. | 3.3 | 16 |
| 23 | What Does Temporal Brain Signal Complexity Reveal About Verbal Creativity?. Frontiers in Behavioral Neuroscience, 2020, 14, 146. | 1.0 | 6 |
| 24 | Hopf Bifurcation in Mean Field Explains Critical Avalanches in Excitation-Inhibition Balanced Neuronal Networks: A Mechanism for Multiscale Variability. Frontiers in Systems Neuroscience, 2020, 14, 580011. | 1.2 | 23 |
| 25 | Sex differences in behavioral and brain responses to incongruity in emotional speech controlling for autistic traits. Biological Psychology, 2020, 157, 107973. | 1.1 | 2 |
| 26 | Characterizing the brain's dynamical response from scalp-level neural electrical signals: a review of methodology development. Cognitive Neurodynamics, 2020, 14, 731-742. | 2.3 | 13 |
| 27 | A Large-Scale High-Density Weighted Structural Connectome of the Macaque Brain Acquired by Predicting Missing Links. Cerebral Cortex, 2020, 30, 4771-4789. | 1.6 | 7 |
| 28 | Understanding the computation of time using neural network models. Proceedings of the National Academy of Sciences of the United States of America, 2020, 117, 10530-10540. | 3.3 | 42 |
| 29 | Predicting reading ability from brain anatomy and function: From areas to connections. NeuroImage, 2020, 218, 116966. | 2.1 | 18 |
| 30 | Individual Cortical Entropy Profile: Test–Retest Reliability, Predictive Power for Cognitive Ability, and Neuroanatomical Foundation. Cerebral Cortex Communications, 2020, 1, tgaa015. | 0.7 | 15 |
| 31 | Hierarchical Connectome Modes and Critical State Jointly Maximize Human Brain Functional Diversity. Physical Review Letters, 2019, 123, 038301. | 2.9 | 73 |
| 32 | The reliability and psychometric structure of Multi-Scale Entropy measured from EEG signals at rest and during face and object recognition tasks. Journal of Neuroscience Methods, 2019, 326, 108343. | 1.3 | 18 |
| 33 | Cognitive Performance in Young APOE Îµ4 Carriers: A Latent Variable Approach for Assessing the Genotype–Phenotype Relationship. Behavior Genetics, 2019, 49, 455-468. | 1.4 | 6 |
| 34 | Assessing spatiotemporal variability of brain spontaneous activity by multiscale entropy and functional connectivity. NeuroImage, 2019, 198, 198-220. | 2.1 | 34 |
| 35 | Repetition Priming Effects for Famous Faces through Dynamic Causal Modelling of Latency–Corrected Event–Related Brain Potentials. European Journal of Neuroscience, 2018, 49, 1330-1347. | 1.2 | 6 |
| 36 | Mathematical Modeling for Description of Oscillation Suppression Induced by Deep Brain Stimulation. IEEE Transactions on Neural Systems and Rehabilitation Engineering, 2018, 26, 1649-1658. | 2.7 | 8 |

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| 37 | Exploiting the intra-subject latency variability from single-trial event-related potentials in the P3 time range: A review and comparative evaluation of methods. Neuroscience and Biobehavioral Reviews, 2017, 75, 1-21. | 2.9 | 106 |
| 38 | Structural encoding processes contribute to individual differences in face and object cognition: Inferences from psychometric test performance and event-related brain potentials. Cortex, 2017, 95, 192-210. | 1.1 | 18 |
| 39 | COMT genotype is differentially associated with single trial variability of ERPs as a function of memory type. Biological Psychology, 2017, 127, 209-219. | 1.1 | 5 |
| 40 | Co-emergence of multi-scale cortical activities of irregular firing, oscillations and avalanches achieves cost-efficient information capacity. PLoS Computational Biology, 2017, 13, e1005384. | 1.5 | 30 |
| 41 | Features of spatial and functional segregation and integration of the primate connectome revealed by trade-off between wiring cost and efficiency. PLoS Computational Biology, 2017, 13, e1005776. | 1.5 | 39 |
| 42 | Spike Pattern Structure Influences Synaptic Efficacy Variability under STDP and Synaptic Homeostasis. I: Spike Generating Models on Converging Motifs. Frontiers in Computational Neuroscience, 2016, 10, 14. | 1.2 | 6 |
| 43 | Spike Pattern Structure Influences Synaptic Efficacy Variability under STDP and Synaptic Homeostasis. II: Spike Shuffling Methods on LIF Networks. Frontiers in Computational Neuroscience, 2016, 10, 83. | 1.2 | 2 |
| 44 | Unfolding large-scale online collaborative human dynamics. Proceedings of the National Academy of Sciences of the United States of America, 2016, 113, 14627-14632. | 3.3 | 32 |
| 45 | Functional complexity emerging from anatomical constraints in the brain: the significance of network modularity and rich-clubs. Scientific Reports, 2016, 6, 38424. | 1.6 | 87 |
| 46 | Reconstructing ERP amplitude effects after compensating for trial-to-trial latency jitter: A solution based on a novel application of residue iteration decomposition. International Journal of Psychophysiology, 2016, 109, 9-20. | 0.5 | 45 |
| 47 | Articulation Artifacts During Overt Language Production in Event-Related Brain Potentials: Description and Correction. Brain Topography, 2016, 29, 791-813. | 0.8 | 25 |
| 48 | Fast response and high sensitivity to microsaccades in a cascading-adaptation neural network with short-term synaptic depression. Physical Review E, 2016, 93, 042302. | 0.8 | 4 |
| 49 | Model predictions of features in microsaccade-related neural responses in a feedforward network with short-term synaptic depression. Scientific Reports, 2016, 6, 20888. | 1.6 | 2 |
| 50 | Restoring Latency-Variable ERP Components from Single Trials: A New Approach to ERP Analysis with Residue Iteration Decomposition (RIDE). Advances in Cognitive Neurodynamics, 2016, , 519-525. | 0.1 | 0 |
| 51 | Stochastic Oscillation in Self-Organized Critical States of Small Systems: Sensitive Resting State in Neural Systems. Physical Review Letters, 2016, 116, 018101. | 2.9 | 29 |
| 52 | Neuroanatomic localization of priming effects for famous faces with latency-corrected event-related potentials. Brain Research, 2016, 1632, 58-72. | 1.1 | 6 |
| 53 | Dissociating the Influence of Affective Word Content and Cognitive Processing Demands on the Late Positive Potential. Brain Topography, 2016, 29, 82-93. | 0.8 | 10 |
| 54 | Understanding Structural-Functional Relationships in the Human Brain. Neuroscientist, 2015, 21, 290-305. | 2.6 | 173 |

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| 55 | A toolbox for residue iteration decomposition (RIDE)â€"A method for the decomposition, reconstruction, and single trial analysis of event related potentials. Journal of Neuroscience Methods, 2015, 250, 7-21. | 1.3 | 133 |
| 56 | Re-Examination of Chinese Semantic Processing and Syntactic Processing: Evidence from Conventional ERPs and Reconstructed ERPs by Residue Iteration Decomposition (RIDE). PLoS ONE, 2015, 10, e0117324. | 1.1 | 15 |
| 57 | Updating and validating a new framework for restoring and analyzing latencyâ€variable ERP components from single trials with residue iteration decomposition (RIDE). Psychophysiology, 2015, 52, 839-856. | 1.2 | 95 |
| 58 | Testing the stimulus-to-response bridging function of the oddball-P3 by delayed response signals and residue iteration decomposition (RIDE). NeuroImage, 2014, 100, 271-280. | 2.1 | 130 |
| 59 | Overcoming limitations of the <scp>ERP</scp> method with <scp>R</scp>esidue <scp>I</scp>teration <scp>D</scp>ecomposition (<scp>RIDE</scp>): A demonstration in go/noâ€go experiments. Psychophysiology, 2013, 50, 253-265. | 1.2 | 74 |
| 60 | Separating stimulusâ€driven and responseâ€related <scp>LRP</scp> components with Residue Iteration Decomposition (<scp>RIDE</scp>). Psychophysiology, 2013, 50, 70-73. | 1.2 | 28 |
| 61 | Trade-off between Multiple Constraints Enables Simultaneous Formation of Modules and Hubs in Neural Systems. PLoS Computational Biology, 2013, 9, e1002937. | 1.5 | 91 |
| 62 | A model of microsaccade-related neural responses induced by short-term depression in thalamocortical synapses. Frontiers in Computational Neuroscience, 2013, 7, 47. | 1.2 | 5 |
| 63 | Network Evolution Induced by Asynchronous Stimuli through Spike-Timing-Dependent Plasticity. PLoS ONE, 2013, 8, e84644. | 1.1 | 8 |
| 64 | Hierarchical modular structure enhances the robustness of self-organized criticality in neural networks. New Journal of Physics, 2012, 14, 023005. | 1.2 | 58 |
| 65 | Relative clock verifies endogenous bursts of human dynamics. Europhysics Letters, 2012, 97, 18006. | 0.7 | 33 |
| 66 | Multiple synchronization attractors of serially connected spin-torque nanooscillators. Physical Review B, 2012, 86, . | 1.1 | 18 |
| 67 | Interplay between structure and dynamics in adaptive complex networks: Emergence and amplification of modularity by adaptive dynamics. Physical Review E, 2011, 84, 016116. | 0.8 | 33 |
| 68 | Characterizing the complexity of brain and mind networks. Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences, 2011, 369, 3730-3747. | 1.6 | 13 |
| 69 | Exploring Brain Function from Anatomical Connectivity. Frontiers in Neuroscience, 2011, 5, 83. | 1.4 | 92 |
| 70 | Organization of Anti-Phase Synchronization Pattern in Neural Networks: What are the Key Factors?. Frontiers in Systems Neuroscience, 2011, 5, 100. | 1.2 | 31 |
| 71 | Sustained activity in hierarchical modular neural networks: self-organized criticality and oscillations. Frontiers in Computational Neuroscience, 2011, 5, 30. | 1.2 | 82 |
| 72 | Residue iteration decomposition (RIDE): A new method to separate ERP components on the basis of latency variability in single trials. Psychophysiology, 2011, 48, 1631-1647. | 1.2 | 166 |

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| 73 | Competition between intra-community and inter-community synchronization and relevance in brain cortical networks. Physical Review E, 2011, 84, 016109. | 0.8 | 22 |
| 74 | Fractional locking of spin-torque oscillator by injected ac current. Physical Review B, 2011, 83, . | 1.1 | 19 |
| 75 | Coupled perturbed heteroclinic cycles: Synchronization and dynamical behaviors of spin-torque oscillators. Physical Review B, 2011, 84, . | 1.1 | 21 |
| 76 | Evidence for a bimodal distribution in human communication. Proceedings of the National Academy of Sciences of the United States of America, 2010, 107, 18803-18808. | 3.3 | 219 |
| 77 | Human comment dynamics in on-line social systems. Physica A: Statistical Mechanics and Its Applications, 2010, 389, 5832-5837. | 1.2 | 23 |
| 78 | Cortical hubs form a module for multisensory integration on top of the hierarchy of cortical networks. Frontiers in Neuroinformatics, 2010, 4, 1. | 1.3 | 272 |
| 79 | Rate-synchrony relationship between input and output of spike trains in neuronal networks. Physical Review E, 2010, 81, 011917. | 0.8 | 1 |
| 80 | Mapping from structure to dynamics: A unified view of dynamical processes on networks. Physical Review E, 2010, 82, 026116. | 0.8 | 28 |
| 81 | Complexity versus modularity and heterogeneity in oscillatory networks: Combining segregation and integration in neural systems. Physical Review E, 2010, 82, 046225. | 0.8 | 35 |
| 82 | Better synchronizability in generalized adaptive networks. Physical Review E, 2010, 81, 026201. | 0.8 | 28 |
| 83 | Global attractors and the difficulty of synchronizing serial spin-torque oscillators. Physical Review B, 2010, 82, . | 1.1 | 34 |
| 84 | Enhanced synchronizability in scale-free networks. Chaos, 2009, 19, 013105. | 1.0 | 16 |
| 85 | Graph analysis of cortical networks reveals complex anatomical communication substrate. Chaos, 2009, 19, 015117. | 1.0 | 79 |
| 86 | Information encoding in an oscillatory network. Physical Review E, 2009, 79, 061910. | 0.8 | 9 |
| 87 | Complex brain networks: From topological communities to clustered dynamics. Pramana - Journal of Physics, 2008, 70, 1087-1097. | 0.9 | 8 |
| 88 | Synchronization in complex networks. Physics Reports, 2008, 469, 93-153. | 10.3 | 2,928 |
| 89 | Synchronization in small-world networks. Chaos, 2008, 18, 037111. | 1.0 | 41 |
| 90 | Reciprocity of networks with degree correlations and arbitrary degree sequences. Physical Review E, 2008, 77, 016106. | 0.8 | 39 |

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| 91 | Structure–function relationship in complex brain networks expressed by hierarchical synchronization. New Journal of Physics, 2007, 9, 178-178. | 1.2 | 145 |
| 92 | Structural and functional clusters of complex brain networks. Physica D: Nonlinear Phenomena, 2006, 224, 202-212. | 1.3 | 116 |
| 93 | Universality in the Synchronization of Weighted Random Networks. Physical Review Letters, 2006, 96, 034101. | 2.9 | 301 |
| 94 | Hierarchical synchronization in complex networks with heterogeneous degrees. Chaos, 2006, 16, 015104. | 1.0 | 113 |
| 95 | Dynamical Weights and Enhanced Synchronization in Adaptive Complex Networks. Physical Review Letters, 2006, 96, 164102. | 2.9 | 346 |
| 96 | Hierarchical Organization Unveiled by Functional Connectivity in Complex Brain Networks. Physical Review Letters, 2006, 97, 238103. | 2.9 | 426 |
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| 98 | Network synchronization, diffusion, and the paradox of heterogeneity. Physical Review E, 2005, 71, 016116. | 0.8 | 455 |
| 99 | Resonant patterns in noisy active media. Physical Review E, 2004, 69, 056210. | 0.8 | 3 |
| 100 | Three Types of Transitions to Phase Synchronization in Coupled Chaotic Oscillators. Physical Review Letters, 2003, 91, 024101. | 2.9 | 146 |
| 101 | Noise-induced synchronization and coherence resonance of a Hodgkin–Huxley model of thermally sensitive neurons. Chaos, 2003, 13, 401-409. | 1.0 | 157 |
| 102 | Frequency and phase locking of noise-sustained oscillations in coupled excitable systems: Array-enhanced resonances. Physical Review E, 2003, 67, 030101. | 0.8 | 63 |
| 103 | Noise-Sustained Coherent Oscillation of Excitable Media in a Chaotic Flow. Physical Review Letters, 2003, 91, 150601. | 2.9 | 18 |
| 104 | Noise, Synchronization and Coherence in Chaotic Oscillators. International Journal of Modern Physics B, 2003, 17, 4023-4044. | 1.0 | 3 |
| 105 | Noise-Induced Phase Synchronization and Synchronization Transitions in Chaotic Oscillators. Physical Review Letters, 2002, 88, 230602. | 2.9 | 216 |
| 106 | Spatiotemporal coherence resonance of phase synchronization in weakly coupled chaotic oscillators. Physical Review E, 2002, 65, 040101. | 0.8 | 40 |
| 107 | Noise-Enhanced Phase Synchronization of Chaotic Oscillators. Physical Review Letters, 2002, 89, 014101. | 2.9 | 117 |
| 108 | Array-Enhanced Coherence Resonance: Nontrivial Effects of Heterogeneity and Spatial Independence of Noise. Physical Review Letters, 2001, 87, 098101. | 2.9 | 274 |

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| 109 | Synchronization regimes in coupled noisy excitable systems. Physical Review E, 2001, 63, 026201. | 0.8 | 14 |
| 110 | Phase synchronization in coupled nonidentical excitable systems and array-enhanced coherence resonance. Physical Review E, 2000, 61, R1001-R1004. | 0.8 | 161 |
| 111 | Symmetry-breaking on-off intermittency under modulation: Robustness of supersensitivity, resonance, and information gain. Physical Review E, 2000, 62, 1983-1987. | 0.8 | 8 |