List of Publications by Year in descending order

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| #  | Article   | IF   | CITATIONS |
|----|---|------|-----------|
| 1  | Selective crystal growth of indium selenide compounds from saturated solutions grown in a selenium vapor. Results in Materials, 2022, 13, 100253.                                       | 1.8  | 5         |
| 2  | Cell-to-cell variability in inducible Caspase9-mediated cell death. Cell Death and Disease, 2022, 13, 34.   | 6.3  | 5         |
| 3  | Computable early Caenorhabditis elegans embryo with a phase field model. PLoS Computational Biology, 2022, 18, e1009755.  | 3.2  | 10        |
| 4  | Optical and Electrical Properties of InxGa1â^'xSe Mixed Crystal Grown from Indium Flux by Traveling<br>Heater Method. Journal of Electronic Materials, 2021, 50, 2649-2655.             | 2.2  | 0         |
| 5  | Quantitative investigation reveals distinct phases in Drosophila sleep. Communications Biology, 2021, 4, 364.   | 4.4  | 6         |
| 6  | Finding gene network topologies for given biological function with recurrent neural network.<br>Nature Communications, 2021, 12, 3125.  | 12.8 | 19        |
| 7  | Volume segregation programming in a nematode's early embryogenesis. Physical Review E, 2021, 104, 054409.   | 2.1  | 4         |
| 8  | Why and how the nematode's early embryogenesis can be precise and robust: a mechanical perspective.<br>Physical Biology, 2020, 17, 026001.  | 1.8  | 9         |
| 9  | Enhancement of spin-charge current interconversion by oxidation of rhenium. Journal of Magnetism and Magnetic Materials, 2020, 516, 167298.   | 2.3  | 5         |
| 10 | Protocol for Titrating Gene Expression Levels in Budding Yeast. STAR Protocols, 2020, 1, 100082.  | 1.2  | 1         |
| 11 | Establishment of a morphological atlas of the Caenorhabditis elegans embryo using deep-learning-based 4D segmentation. Nature Communications, 2020, 11, 6254.                           | 12.8 | 45        |
| 12 | Circulating re-entrant waves promote maturation of hiPSC-derived cardiomyocytes in self-organized tissue ring. Communications Biology, 2020, 3, 122.                                    | 4.4  | 32        |
| 13 | In <sub>x</sub> Ga <sub>1â^'x</sub> Se mixed crystals grown from an In flux by the traveling heater method for THz wave generation. Journal of Physics Communications, 2020, 4, 065007. | 1.2  | 3         |
| 14 | Analysis of Circulating Waves in Tissue Rings derived from Human Induced Pluripotent Stem Cells.<br>Scientific Reports, 2020, 10, 2984.   | 3.3  | 4         |
| 15 | Terahertz wave generation via difference frequency generation using 2D InxGa1-xSe crystal grown from indium flux. Optics Express, 2020, 28, 472.  | 3.4  | 8         |
| 16 | Computational study on ratio-sensing in yeast galactose utilization pathway. PLoS Computational<br>Biology, 2020, 16, e1007960.   | 3.2  | 5         |
| 17 | Phase-matching condition for THz wave generation via difference frequency generation using InxGa1-xSe mixed crystals. Optics Express, 2020, 28, 20888.                                  | 3.4  | 2         |
| 18 | Cell Cycle Inhibitor Whi5 Records Environmental Information to Coordinate Growth and Division in Yeast. Cell Reports, 2019, 29, 987-994.e5.   | 6.4  | 38        |

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|----|--|------|-----------|
| 19 | Network Topologies That Can Achieve Dual Function of Adaptation and Noise Attenuation. Cell Systems, 2019, 9, 271-285.e7.  | 6.2  | 56        |
| 20 | Optimal compressed sensing strategies for an array of nonlinear olfactory receptor neurons with<br>and without spontaneous activity. Proceedings of the National Academy of Sciences of the United<br>States of America, 2019, 116, 20286-20295. | 7.1  | 14        |
| 21 | Growth strategy of microbes on mixed carbon sources. Nature Communications, 2019, 10, 1279.  | 12.8 | 105       |
| 22 | Visualization of Genomic Loci in Living Cells with BiFCâ€TALE. Current Protocols in Cell Biology, 2019, 82, e78.   | 2.3  | 2         |
| 23 | Bi-functional biochemical networks. Physical Biology, 2019, 16, 016001.  | 1.8  | 7         |
| 24 | Quantitative evaluation of fiber structure by using coherent terahertz wave. Composites Part B:<br>Engineering, 2019, 159, 1-3.  | 12.0 | 3         |
| 25 | Network Motifs Capable of Decoding Transcription Factor Dynamics. Scientific Reports, 2018, 8, 3594.   | 3.3  | 26        |
| 26 | Early-warning signals of critical transition: Effect of extrinsic noise. Physical Review E, 2018, 97, 032406.  | 2.1  | 10        |
| 27 | Characteristics of 2D Ge-doped GaSe grown by low temperature liquid phase deposition under a controlled Se vapor pressure. Journal of Nanosciences Current Research, 2018, 03, .   | 1.2  | 5         |
| 28 | Low temperature liquid phase growth of crystalline InSe grown by the temperature difference method under controlled vapor pressure. Journal of Crystal Growth, 2018, 495, 54-58.   | 1.5  | 4         |
| 29 | Direct determination of the interlayer van der Waals bonding force in 2D indium selenide semiconductor crystal. Journal of Applied Physics, 2018, 123, .   | 2.5  | 5         |
| 30 | Low Cell-Matrix Adhesion Reveals Two Subtypes of Human Pluripotent Stem Cells. Stem Cell Reports,<br>2018, 11, 142-156.  | 4.8  | 37        |
| 31 | A systematic study of the determinants of protein abundance memory in cell lineage. Science Bulletin, 2018, 63, 1051-1058.   | 9.0  | 1         |
| 32 | Nanog induced intermediate state in regulating stem cell differentiation and reprogramming. BMC Systems Biology, 2018, 12, 22.   | 3.0  | 31        |
| 33 | Single-Cell RNA-Seq Reveals Dynamic Early Embryonic-like Programs during Chemical Reprogramming.<br>Cell Stem Cell, 2018, 23, 31-45.e7.  | 11.1 | 122       |
| 34 | Live visualization of genomic loci with BiFC-TALE. Scientific Reports, 2017, 7, 40192.   | 3.3  | 12        |
| 35 | Adaptation with transcriptional regulation. Scientific Reports, 2017, 7, 42648.  | 3.3  | 25        |
| 36 | Design of Tunable Oscillatory Dynamics in a Synthetic NF-κB Signaling Circuit. Cell Systems, 2017, 5,<br>460-470.e5.   | 6.2  | 39        |

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|----|---|------|-----------|
| 37 | Odor-evoked inhibition of olfactory sensory neurons drives olfactory perception in Drosophila.<br>Nature Communications, 2017, 8, 1357.   | 12.8 | 53        |
| 38 | Adaptation through proportion. Physical Biology, 2016, 13, 046007.  | 1.8  | 4         |
| 39 | Reliable cell cycle commitment in budding yeast is ensured by signal integration. ELife, 2015, 4, .   | 6.0  | 67        |
| 40 | The Center for Quantitative Biology at Peking University. Quantitative Biology, 2015, 3, 1-3.   | 0.5  | 0         |
| 41 | <i>Arabidopsis</i> DET1 degrades HFR1 but stabilizes PIF1 to precisely regulate seed germination.<br>Proceedings of the National Academy of Sciences of the United States of America, 2015, 112, 3817-3822. | 7.1  | 69        |
| 42 | An Atlas of Network Topologies Reveals Design Principles for Caenorhabditis elegans Vulval<br>Precursor Cell Fate Patterning. PLoS ONE, 2015, 10, e0131397.   | 2.5  | 2         |
| 43 | Community detection for networks with unipartite and bipartite structure. New Journal of Physics, 2014, 16, 093001.   | 2.9  | 9         |
| 44 | Multiple mechanisms determine the order of APC/C substrate degradation in mitosis. Journal of Cell<br>Biology, 2014, 207, 23-39.  | 5.2  | 68        |
| 45 | Costs and Benefits of Mutational Robustness in RNA Viruses. Cell Reports, 2014, 8, 1026-1036.   | 6.4  | 49        |
| 46 | Synergistic and Antagonistic Drug Combinations Depend on Network Topology. PLoS ONE, 2014, 9, e93960.   | 2.5  | 99        |
| 47 | QB: A new inter- and multi-disciplinary forum for modeling, engineering and understanding life.<br>Quantitative Biology, 2013, 1, 1-2.  | 0.5  | 7         |
| 48 | Bridging cross-cultural gaps in scientific exchange through innovative team challenge workshops.<br>Quantitative Biology, 2013, 1, 3-8.   | 0.5  | 0         |
| 49 | Generic properties of random gene regulatory networks. Quantitative Biology, 2013, 1, 253-260.  | 0.5  | 15        |
| 50 | Design Principles of Regulatory Networks: Searching for the Molecular Algorithms of the Cell.<br>Molecular Cell, 2013, 49, 202-212.   | 9.7  | 139       |
| 51 | Induction of Pluripotency in Mouse Somatic Cells with Lineage Specifiers. Cell, 2013, 153, 963-975.   | 28.9 | 272       |
| 52 | Design Principles of the Yeast G1/S Switch. PLoS Biology, 2013, 11, e1001673.   | 5.6  | 51        |
| 53 | A light-inducible organelle-targeting system for dynamically activating and inactivating signaling in budding yeast. Molecular Biology of the Cell, 2013, 24, 2419-2430.                                    | 2.1  | 90        |
| 54 | Designing the Scientific Cradle for Quantitative Biologists. ACS Synthetic Biology, 2012, 1, 254-255.   | 3.8  | 3         |

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|----|--|------|-----------|
| 55 | Cell cycle synchronization by nutrient modulation. Integrative Biology (United Kingdom), 2012, 4, 328.   | 1.3  | 21        |
| 56 | Hierarchical Modularity and the Evolution of Genetic Interactomes across Species. Molecular Cell, 2012, 46, 691-704.   | 9.7  | 185       |
| 57 | Designing Synthetic Regulatory Networks Capable of Self-Organizing Cell Polarization. Cell, 2012, 151, 320-332.  | 28.9 | 163       |
| 58 | Flux Balance Analysis of Ammonia Assimilation Network in E. coli Predicts Preferred Regulation Point.<br>PLoS ONE, 2011, 6, e16362.  | 2.5  | 9         |
| 59 | Decision making of the p53 network: Death by integration. Journal of Theoretical Biology, 2011, 271, 205-211.  | 1.7  | 38        |
| 60 | Modular analysis of the probabilistic genetic interaction network. Bioinformatics, 2011, 27, 853-859.  | 4.1  | 10        |
| 61 | De Novo Design of a βαβâ€Motif. Angewandte Chemie - International Edition, 2009, 48, 3301-3303.  | 13.8 | 43        |
| 62 | Defining Network Topologies that Can Achieve Biochemical Adaptation. Cell, 2009, 138, 760-773.   | 28.9 | 1,354     |
| 63 | A more robust Boolean model describing inhibitor binding. Frontiers of Electrical and Electronic Engineering in China: Selected Publications From Chinese Universities, 2008, 3, 371-375.                          | 0.6  | 0         |
| 64 | Finding multiple target optimal intervention in diseaseâ€related molecular network. Molecular Systems<br>Biology, 2008, 4, 228.  | 7.2  | 165       |
| 65 | Robust, Tunable Biological Oscillations from Interlinked Positive and Negative Feedback Loops.<br>Science, 2008, 321, 126-129.   | 12.6 | 602       |
| 66 | Rationalizing translation attenuation in the network architecture of the unfolded protein response.<br>Proceedings of the National Academy of Sciences of the United States of America, 2008, 105,<br>20280-20285. | 7.1  | 51        |
| 67 | SCUMBLE: a method for systematic and accurate detection of codon usage bias by maximum likelihood estimation. Nucleic Acids Research, 2008, 36, 3819-3827.   | 14.5 | 13        |
| 68 | Dynamic Simulations on the Arachidonic Acid Metabolic Network. PLoS Computational Biology, 2007,<br>3, e55.  | 3.2  | 90        |
| 69 | Hydrophobic interaction and hydrogen-bond network for a methane pair in liquid water. Proceedings of the National Academy of Sciences of the United States of America, 2007, 104, 2626-2630.                       | 7.1  | 78        |
| 70 | Function constrains network architecture and dynamics: A case study on the yeast cell cycle Boolean network. Physical Review E, 2007, 75, 051907.  | 2.1  | 81        |
| 71 | Dynamic Properties of Cell-Cycle and Life-Cycle Networks in Budding Yeast. , 2007, , 217-227.  |      | 0         |
| 72 | Dynamic Studies of Scaffold-Dependent Mating Pathway in Yeast. Biophysical Journal, 2006, 91,<br>3986-4001.  | 0.5  | 28        |

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|----|---|------|-----------|
| 73 | Robustness and modular design of the Drosophila segment polarity network. Molecular Systems<br>Biology, 2006, 2, 70.  | 7.2  | 114       |
| 74 | Stochastic model of yeast cell-cycle network. Physica D: Nonlinear Phenomena, 2006, 219, 35-39.   | 2.8  | 67        |
| 75 | Gibbs sampling and helix-cap motifs. Nucleic Acids Research, 2005, 33, 5343-5353.   | 14.5 | 10        |
| 76 | Specificity of Trypsin and Chymotrypsin: Loop-Motion-Controlled Dynamic Correlation as a Determinant. Biophysical Journal, 2005, 89, 1183-1193.                             | 0.5  | 104       |
| 77 | Simulation and Analysis ofin vitroDNA Evolution. Physical Review Letters, 2004, 92, 038101.   | 7.8  | 12        |
| 78 | Correlation between sequence hydrophobicity and surface-exposure pattern of database proteins.<br>Protein Science, 2004, 13, 752-762.                                       | 7.6  | 90        |
| 79 | Flexibility of β-sheets: Principal component analysis of database protein structures. Proteins:<br>Structure, Function and Bioinformatics, 2004, 55, 91-98.                 | 2.6  | 43        |
| 80 | Designability and thermal stability of protein structures. Polymer, 2004, 45, 699-705.  | 3.8  | 35        |
| 81 | The yeast cell-cycle network is robustly designed. Proceedings of the National Academy of Sciences of the United States of America, 2004, 101, 4781-4786.                   | 7.1  | 953       |
| 82 | Flexibility of α-Helices: Results of a Statistical Analysis of Database Protein Structures. Journal of<br>Molecular Biology, 2003, 327, 229-237.                            | 4.2  | 62        |
| 83 | Structure space of model proteins: A principal component analysis. Journal of Chemical Physics, 2003, 118, 4277-4284.   | 3.0  | 8         |
| 84 | Origin of scaling behavior of protein packing density: A sequential Monte Carlo study of compact<br>long chain polymers. Journal of Chemical Physics, 2003, 118, 6102-6109. | 3.0  | 56        |
| 85 | Statistical mechanics of RNA folding: Importance of alphabet size. Physical Review E, 2003, 68, 041904.   | 2.1  | 11        |
| 86 | Designability of Â-helical proteins. Proceedings of the National Academy of Sciences of the United<br>States of America, 2002, 99, 11163-11168.                             | 7.1  | 28        |
| 87 | Fast tree search for enumeration of a lattice model of protein folding. Journal of Chemical Physics, 2002, 116, 352.  | 3.0  | 29        |
| 88 | Identifying proteins of high designability via surface-exposure patterns. Proteins: Structure, Function and Bioinformatics, 2002, 47, 295-304.                              | 2.6  | 14        |
| 89 | Emergence of highly designable protein-backbone conformations in an off-lattice model. Proteins:<br>Structure, Function and Bioinformatics, 2002, 47, 506-512.              | 2.6  | 42        |
| 90 | Designability of protein structures: A lattice-model study using the Miyazawa-Jernigan matrix.<br>Proteins: Structure, Function and Bioinformatics, 2002, 49, 403-412.      | 2.6  | 60        |

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|-----|---|-----|-----------|
| 91  | The designability of protein structures. Journal of Molecular Graphics and Modelling, 2001, 19, 157-167.  | 2.4 | 56        |
| 92  | Exact solution of a stochastic directed sandpile model. Physical Review E, 2001, 63, 026111.  | 2.1 | 28        |
| 93  | Simple models of the protein folding problem. Physica A: Statistical Mechanics and Its Applications, 2000, 288, 31-48.                              | 2.6 | 35        |
| 94  | Symmetry and designability for lattice protein models. Journal of Chemical Physics, 2000, 113, 8329-8336.   | 3.0 | 37        |
| 95  | 1/fNoise in Bak-Tang-Wiesenfeld Models on Narrow Stripes. Physical Review Letters, 1999, 83, 2449-2452.   | 7.8 | 34        |
| 96  | Incommensurability in the frustrated two-dimensionalXYmodel. Physical Review B, 1999, 60, 3163-3168.  | 3.2 | 26        |
| 97  | Low-energy excitations and phase transitions in the frustrated two-dimensionalXYmodel. Physical Review B, 1998, 58, 6591-6607.                      | 3.2 | 9         |
| 98  | Nature of Driving Force for Protein Folding: A Result From Analyzing the Statistical Potential.<br>Physical Review Letters, 1997, 79, 765-768.      | 7.8 | 195       |
| 99  | Domain Walls and Phase Transitions in the Frustrated Two-DimensionalXYModel. Physical Review Letters, 1997, 79, 451-454.                            | 7.8 | 17        |
| 100 | Nature of Phase Transitions of Superconducting Wire Networks in a Magnetic Field. Physical Review<br>Letters, 1996, 76, 2989-2992.                  | 7.8 | 62        |
| 101 | Peak effect in superconductors: melting of Larkin domains. Europhysics Letters, 1996, 35, 597-602.  | 2.0 | 42        |
| 102 | Correction of partial-volume effects in phase-contrast flow measurements. Journal of Magnetic<br>Resonance Imaging, 1995, 5, 175-180.               | 3.4 | 50        |
| 103 | Tang, Feng, and Golubovic Reply:. Physical Review Letters, 1995, 74, 3500-3500.   | 7.8 | 1         |
| 104 | Phases of Josephson Junction Ladders. Physical Review Letters, 1995, 75, 3930-3933.   | 7.8 | 44        |
| 105 | Dynamics of a driven single flux line in superconductors. Physical Review B, 1995, 51, 8457-8461.   | 3.2 | 1         |
| 106 | Self-Organized Criticality in Nonconserved Systems. Physical Review Letters, 1995, 74, 742-745.   | 7.8 | 112       |
| 107 | Dynamics and noise spectra of a driven single flux line in superconductors. Physical Review Letters, 1994, 72, 1264-1267.                           | 7.8 | 23        |
| 108 | Accuracy of phase-contrast flow measurements in the presence of partial-volume effects. Journal of<br>Magnetic Resonance Imaging, 1993, 3, 377-385. | 3.4 | 276       |

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|-----|---|------|-----------|
| 109 | SOC and the Bean critical state. Physica A: Statistical Mechanics and Its Applications, 1993, 194, 315-320.                                   | 2.6  | 47        |
| 110 | Patterns and scaling properties in a ballistic deposition model. Physical Review Letters, 1993, 71, 2769-2772.                                | 7.8  | 18        |
| 111 | A forest-fire model and some thoughts on turbulence. Physics Letters, Section A: General, Atomic and Solid State Physics, 1990, 147, 297-300. | 2.1  | 388       |
| 112 | Droplet model for autocorrelation functions in an Ising ferromagnet. Physical Review A, 1989, 40, 995-1003.                                   | 2.5  | 27        |
| 113 | Comment on "Relaxation at the Angle of Repose". Physical Review Letters, 1989, 62, 110-110.   | 7.8  | 6         |
| 114 | A physicist's sandbox. Journal of Statistical Physics, 1989, 54, 1441-1458.   | 1.2  | 52        |
| 115 | Mean field theory of self-organized critical phenomena. Journal of Statistical Physics, 1988, 51, 797-802.                                    | 1.2  | 151       |
| 116 | Critical Exponents and Scaling Relations for Self-Organized Critical Phenomena. Physical Review<br>Letters, 1988, 60, 2347-2350.              | 7.8  | 360       |
| 117 | Self-organized criticality. Physical Review A, 1988, 38, 364-374.   | 2.5  | 3,730     |
| 118 | Phase organization. Physical Review Letters, 1987, 58, 1161-1164.   | 7.8  | 98        |
| 119 | Critical wave functions and a Cantor-set spectrum of a one-dimensional quasicrystal model. Physical Review B, 1987, 35, 1020-1033.            | 3.2  | 662       |
| 120 | Self-organized criticality: An explanation of the 1/ <i>f</i> noise. Physical Review Letters, 1987, 59, 381-384.                              | 7.8  | 6,415     |
| 121 | Viscous flows in two dimensions. Reviews of Modern Physics, 1986, 58, 977-999.  | 45.6 | 674       |
| 122 | Clobal scaling properties of the spectrum for a quasiperiodic schrödinger equation. Physical Review<br>B, 1986, 34, 2041-2044.                | 3.2  | 165       |
| 123 | Diffusion-limited aggregation and the Saffman-Taylor problem. Physical Review A, 1985, 31, 1977-1979.   | 2.5  | 181       |
| 124 | Localization Problem in One Dimension: Mapping and Escape. Physical Review Letters, 1983, 50, 1870-1872.                                      | 7.8  | 1,018     |