# MÃ¡ria Ercsey-Ravasz

## List of Publications by Year
## in descending order

| | | | |
|---|---|---|---|
| **46**<br>papers | **3,337**<br>citations | 331259<br>**21**<br>h-index | 301761<br>**39**<br>g-index |
| **47**<br>all docs | **47**<br>docs citations | **47**<br>times ranked | **3651**<br>citing authors |

| # | Article | IF | Citations |
|---|---------|----|-----------|
| 1 | A Weighted and Directed Interareal Connectivity Matrix for Macaque Cerebral Cortex. Cerebral Cortex, 2014, 24, 17-36. | 1.6 | 711 |
| 2 | Cortical High-Density Counterstream Architectures. Science, 2013, 342, 1238406. | 6.0 | 468 |
| 3 | A Predictive Network Model of Cerebral Cortical Connectivity Based on a Distance Rule. Neuron, 2013, 80, 184-197. | 3.8 | 372 |
| 4 | Weight Consistency Specifies Regularities of Macaque Cortical Networks. Cerebral Cortex, 2011, 21, 1254-1272. | 1.6 | 316 |
| 5 | The role of long-range connections on the specificity of the macaque interareal cortical network. Proceedings of the National Academy of Sciences of the United States of America, 2013, 110, 5187-5192. | 3.3 | 172 |
| 6 | The Mouse Cortical Connectome, Characterized by an Ultra-Dense Cortical Graph, Maintains Specificity by Distinct Connectivity Profiles. Neuron, 2018, 97, 698-715.e10. | 3.8 | 169 |
| 7 | Spatial Embedding and Wiring Cost Constrain the Functional Layout of the Cortical Network of Rodents and Primates. PLoS Biology, 2016, 14, e1002512. | 2.6 | 158 |
| 8 | Complexity of the International Agro-Food Trade Network and Its Impact on Food Safety. PLoS ONE, 2012, 7, e37810. | 1.1 | 125 |
| 9 | Predicting commuter flows in spatial networks using a radiation model based on temporal ranges. Nature Communications, 2014, 5, 5347. | 5.8 | 118 |
| 10 | Optimization hardness as transient chaos in an analog approach to constraint satisfaction. Nature Physics, 2011, 7, 966-970. | 6.5 | 82 |
| 11 | Spiral Cracks in Drying Precipitates. Physical Review Letters, 2002, 88, 095502. | 2.9 | 78 |
| 12 | Modeling Conformational Ensembles of Slow Functional Motions in Pin1-WW. PLoS Computational Biology, 2010, 6, e1001015. | 1.5 | 76 |
| 13 | Spiral cracks without twisting. Nature, 2001, 410, 166-166. | 13.7 | 49 |
| 14 | Centrality Scaling in Large Networks. Physical Review Letters, 2010, 105, 038701. | 2.9 | 48 |
| 15 | The Chaos Within Sudoku. Scientific Reports, 2012, 2, 725. | 1.6 | 41 |
| 16 | Range-limited centrality measures in complex networks. Physical Review E, 2012, 85, 066103. | 0.8 | 38 |
| 17 | A multiscale cerebral neurochemical connectome of the rat brain. PLoS Biology, 2017, 15, e2002612. | 2.6 | 34 |
| 18 | Principles of dynamical modularity in biological regulatory networks. Scientific Reports, 2016, 6, 21957. | 1.6 | 33 |

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|---|---------|----|-----------|
| 19 | A continuous-time MaxSAT solver with high analog performance. Nature Communications, 2018, 9, 4864. | 5.8 | 25 |
| 20 | Efficient Analog Circuits for Boolean Satisfiability. IEEE Transactions on Very Large Scale Integration (VLSI) Systems, 2018, 26, 155-167. | 2.1 | 23 |
| 21 | Community detection by graph Voronoi diagrams. New Journal of Physics, 2014, 16, 063007. | 1.2 | 22 |
| 22 | Three-state Potts model in combination with the rock-scissors-paper game. Physical Review E, 2005, 71, 027102. | 0.8 | 21 |
| 23 | Asymmetric Continuous-Time Neural Networks without Local Traps for Solving Constraint Satisfaction Problems. PLoS ONE, 2013, 8, e73400. | 1.1 | 18 |
| 24 | Spreading of families in cyclic predator-prey models. Physical Review E, 2004, 70, 012901. | 0.8 | 13 |
| 25 | The Brain in Space. Research and Perspectives in Neurosciences, 2016, , 45-74. | 0.4 | 13 |
| 26 | Phase transition in an optimal clusterization model. Physica A: Statistical Mechanics and Its Applications, 2006, 362, 357-368. | 1.2 | 11 |
| 27 | Stochastic simulations on the cellular wave computers. European Physical Journal B, 2006, 51, 407-411. | 0.6 | 10 |
| 28 | Alcohol and sweet reward are encoded by distinct meta-ensembles. Neuropharmacology, 2021, 195, 108496. | 2.0 | 10 |
| 29 | PERSPECTIVES FOR MONTE CARLO SIMULATIONS ON THE CNN UNIVERSAL MACHINE. International Journal of Modern Physics C, 2006, 17, 909-922. | 0.8 | 8 |
| 30 | Robust optimization with transiently chaotic dynamical systems. Europhysics Letters, 2014, 106, 40002. | 0.7 | 8 |
| 31 | Order-to-chaos transition in the hardness of random Boolean satisfiability problems. Physical Review E, 2016, 93, 052211. | 0.8 | 8 |
| 32 | Statistical physics on cellular neural network computers. Physica D: Nonlinear Phenomena, 2008, 237, 1226-1234. | 1.3 | 7 |
| 33 | Collective behavior of electronic fireflies. European Physical Journal B, 2008, 65, 271-277. | 0.6 | 6 |
| 34 | Correlation clustering on networks. Journal of Physics A: Mathematical and Theoretical, 2009, 42, 345003. | 0.7 | 6 |
| 35 | Continuous-time neural networks without local traps for solving Boolean satisfiability. , 2012, , . | | 6 |
| 36 | Mitigating ageing bias in article level metrics using citation network analysis. Journal of Informetrics, 2021, 15, 101105. | 1.4 | 6 |

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|---|---------|----|-----------|
| 37 | Cellular Neural Networks for NP-Hard Optimization. Eurasip Journal on Advances in Signal Processing, 2009, 2009, . | 1.0 | 5 |
| 38 | Cell Surface Protein mRNAs Show Differential Transcription in Pyramidal and Fast-Spiking Cells as Revealed by Single-Cell Sequencing. Cerebral Cortex, 2021, 31, 731-745. | 1.6 | 5 |
| 39 | Cellular neural networks for NP-hard optimization. , 2008, , . | | 4 |
| 40 | A Novel Measure Inspired by Lyapunov Exponents for the Characterization of Dynamics in State-Transition Networks. Entropy, 2021, 23, 103. | 1.1 | 4 |
| 41 | Random Number Generator and Monte Carlo type Simulations on the CNN-UM. , 2006, , . | | 3 |
| 42 | Stochastic optimization of spin-glasses on cellular neural/nonlinear network based processors. Physica A: Statistical Mechanics and Its Applications, 2009, 388, 1024-1030. | 1.2 | 2 |
| 43 | Analog dynamics for solving max-SAT problems. , 2014, , . | | 1 |
| 44 | Stochastic graph Voronoi tessellation reveals community structure. Physical Review E, 2017, 95, 022306. | 0.8 | 1 |
| 45 | Cellular Wave Computing in Nanoscale via Million Processor Chips. , 2010, , 5-25. | | 1 |
| 46 | A CNN SAT-solver robust to noise. , 2014, , . | | 0 |