# Bhaskar DasGupta

List of Publications by Year
in descending order

| 59 papers | 900 citations | 516561<br>16 h-index | 501076<br>28 g-index |
|---|---|---|---|
| 70 all docs | 70 docs citations | 70 times ranked | 651 citing authors |

| # | Article | IF | Citations |
|---|---------|----|-----------|
| 1 | Reconstructing sibling relationships in wild populations. Bioinformatics, 2007, 23, i49-i56. | 1.8 | 78 |
| 2 | Algorithmic and complexity results for decompositions of biological networks into monotone subsystems. BioSystems, 2007, 90, 161-178. | 0.9 | 71 |
| 3 | Multi-phase Algorithms for Throughput Maximization for Real-Time Scheduling. Journal of Combinatorial Optimization, 2000, 4, 307-323. | 0.8 | 52 |
| 4 | A Novel Method for Signal Transduction Network Inference from Indirect Experimental Evidence. Journal of Computational Biology, 2007, 14, 927-949. | 0.8 | 52 |
| 5 | Topological implications of negative curvature for biological and social networks. Physical Review E, 2014, 89, 032811. | 0.8 | 45 |
| 6 | Efficient Approximation Algorithms for Tiling and Packing Problems with Rectangles. Journal of Algorithms, 2001, 41, 443-470. | 0.9 | 42 |
| 7 | A direct variational method for planning monotonically optimal paths for redundant manipulators in constrained workspaces. Robotics and Autonomous Systems, 2013, 61, 209-220. | 3.0 | 40 |
| 8 | NET-SYNTHESIS: a software for synthesis, inference and simplification of signal transduction networks. Bioinformatics, 2008, 24, 293-295. | 1.8 | 39 |
| 9 | A variational approach to path planning for hyper-redundant manipulators. Robotics and Autonomous Systems, 2009, 57, 194-201. | 3.0 | 37 |
| 10 | Tight approximability results for test set problems in bioinformatics. Journal of Computer and System Sciences, 2005, 71, 145-162. | 0.9 | 35 |
| 11 | Randomized approximation algorithms for set multicover problems with applications to reverse engineering of protein and gene networks. Discrete Applied Mathematics, 2007, 155, 733-749. | 0.5 | 35 |
| 12 | On the complexity of NewmanÊ¼s community finding approach for biological and social networks. Journal of Computer and System Sciences, 2013, 79, 50-67. | 0.9 | 29 |
| 13 | Computationally efficient measure of topological redundancy of biological and social networks. Physical Review E, 2011, 84, 036117. | 0.8 | 26 |
| 14 | Inferring (Biological) Signal Transduction Networks viaÂTransitive Reductions of Directed Graphs. Algorithmica, 2008, 51, 129-159. | 1.0 | 20 |
| 15 | Exact Size of Binary Space Partitionings and Improved Rectangle Tiling Algorithms. SIAM Journal on Discrete Mathematics, 2002, 15, 252-267. | 0.4 | 19 |
| 16 | The Rectangle Enclosure and Point-Dominance Problems Revisited. International Journal of Computational Geometry and Applications, 1997, 07, 437-455. | 0.3 | 17 |
| 17 | Highly scalable algorithms for robust string barcoding. International Journal of Bioinformatics Research and Applications, 2005, 1, 145. | 0.1 | 16 |
| 18 | Analog versus Discrete Neural Networks. Neural Computation, 1996, 8, 805-818. | 1.3 | 14 |

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|---|---------|-----|-----------|
| 19 | Algorithmic and Complexity Results for Decompositions of Biological Networks into Monotone Subsystems. Lecture Notes in Computer Science, 2006, , 253-264. | 1.0 | 13 |
| 20 | Capacitated clustering problem in computational biology: Combinatorial and statistical approach for sibling reconstruction. Computers and Operations Research, 2012, 39, 609-619. | 2.4 | 13 |
| 21 | COMBINATORIAL RECONSTRUCTION OF HALF-SIBLING GROUPS FROM MICROSATELLITE DATA. Journal of Bioinformatics and Computational Biology, 2010, 08, 337-356. | 0.3 | 12 |
| 22 | On analyzing and evaluating privacy measures for social networks under active attack. Information Sciences, 2019, 473, 87-100. | 4.0 | 12 |
| 23 | Fast Optimal Genome Tiling with Applications to Microarray Design and Homology Search. Journal of Computational Biology, 2004, 11, 766-785. | 0.8 | 11 |
| 24 | Stochastic Budget Optimization in Internet Advertising. Algorithmica, 2013, 65, 634-661. | 1.0 | 10 |
| 25 | Algorithmic Perspectives of Network Transitive Reduction Problems and their Applications to Synthesis and Analysis of Biological Networks. Biology, 2014, 3, 1-21. | 1.3 | 10 |
| 26 | Effect of Gromov-Hyperbolicity Parameter on Cuts and Expansions in Graphs and Some Algorithmic Implications. Algorithmica, 2018, 80, 772-800. | 1.0 | 10 |
| 27 | ERROR TOLERANT SIBSHIP RECONSTRUCTION IN WILD POPULATIONS. , 2008, , . | | 9 |
| 28 | Approximating Transitive Reductions for Directed Networks. Lecture Notes in Computer Science, 2009, , 74-85. | 1.0 | 8 |
| 29 | Approximation algorithms for MAX–MIN tiling. Journal of Algorithms, 2003, 47, 122-134. | 0.9 | 7 |
| 30 | Algorithmic Issues in Reverse Engineering of Protein and Gene Networks via the Modular Response Analysis Method. Annals of the New York Academy of Sciences, 2007, 1115, 132-141. | 1.8 | 7 |
| 31 | The inverse protein folding problem on 2D and 3D lattices. Discrete Applied Mathematics, 2007, 155, 719-732. | 0.5 | 7 |
| 32 | New Optimization Model and Algorithm for Sibling Reconstruction from Genetic Markers. INFORMS Journal on Computing, 2010, 22, 180-194. | 1.0 | 7 |
| 33 | Spatio-Temporal Matching for Urban Transportation Applications. ACM Transactions on Spatial Algorithms and Systems, 2017, 3, 1-39. | 1.1 | 7 |
| 34 | Detecting network anomalies using Forman–Ricci curvature and a case study for human brain networks. Scientific Reports, 2021, 11, 8121. | 1.6 | 7 |
| 35 | Inapproximability results for the lateral gene transfer problem. Journal of Combinatorial Optimization, 2006, 11, 387-405. | 0.8 | 6 |
| 36 | On approximating four covering and packing problems. Journal of Computer and System Sciences, 2009, 75, 287-302. | 0.9 | 6 |

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| 37 | On optimal approximability results for computing the strong metric dimension. Discrete Applied Mathematics, 2017, 221, 18-24. | 0.5 | 6 |
| 38 | Approximating the online set multicover problems via randomized winnowing. Theoretical Computer Science, 2008, 393, 54-71. | 0.5 | 5 |
| 39 | Some Perspectives on Network Modeling in Therapeutic Target Prediction. Biomedical Engineering and Computational Biology, 2013, 5, BECB.S10793. | 0.8 | 5 |
| 40 | Column-Generation Framework of Nonlinear Similarity Model for Reconstructing Sibling Groups. INFORMS Journal on Computing, 2015, 27, 35-47. | 1.0 | 5 |
| 41 | Inference of Signal Transduction Networks from Double Causal Evidence. Methods in Molecular Biology, 2010, 673, 239-251. | 0.4 | 5 |
| 42 | On the Computational Complexity of Measuring Global Stability of Banking Networks. Algorithmica, 2014, 70, 595-647. | 1.0 | 4 |
| 43 | On the computational complexities of three problems related to a privacy measure for large networks under active attack. Theoretical Computer Science, 2019, 775, 53-67. | 0.5 | 4 |
| 44 | A survey of some tensor analysis techniques for biological systems. Quantitative Biology, 2019, 7, 266-277. | 0.3 | 4 |
| 45 | Why Did the Shape of Your Network Change? (On Detecting Network Anomalies via Non-local) Tj ETQq1 1 0.784314 rgBT /Overlock 10 | 1.0 | 4 |
| 46 | On communication protocols that compute almost privately. Theoretical Computer Science, 2012, 457, 45-58. | 0.5 | 3 |
| 47 | On a connection between small set expansions and modularity clustering. Information Processing Letters, 2014, 114, 349-352. | 0.4 | 3 |
| 48 | On theoretical and empirical algorithmic analysis of the efficiency gap measure in partisan gerrymandering. Journal of Combinatorial Optimization, 2020, 40, 512-546. | 0.8 | 3 |
| 49 | AN IMPLICIT COVER PROBLEM IN WILD POPULATION STUDY. Discrete Mathematics, Algorithms and Applications, 2010, 02, 21-31. | 0.4 | 2 |
| 50 | PRIMER SELECTION METHODS FOR DETECTION OF GENOMIC INVERSIONS AND DELETIONS VIA PAMP. , 2007, , . | | 2 |
| 51 | An integrated optimization framework for inferring two generation kinships and parental genotypes from microsatellite samples. , 2012, , . | | 1 |
| 52 | A Review of and Some Results for Ollivierâ€"Ricci Network Curvature. Mathematics, 2020, 8, 1416. | 1.1 | 1 |
| 53 | Optimal polygon placement by translation1. International Journal of Computer Mathematics, 1994, 52, 139-148. | 1.0 | 0 |
| 54 | Efficient Combinatorial Algorithms for DNA Sequence Processing. , 2007, , 223-239. | | 0 |

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| 55 | Topological implications of negative curvature for biological networks. , 2018, , . | | 0 |
| 56 | A Review of Several Privacy Violation Measures for Large Networks under Active Attacks. , 2020, , . | | 0 |
| 57 | Models and Algorithmic Tools for Computational Processes in Cellular Biology: Recent Developments and Future Directions. Lecture Notes in Computer Science, 2012, , 84-86. | 1.0 | 0 |
| 58 | Computational Complexities of Optimization Problems Related to Model-Based Clustering of Networks. , 2014, , 97-113. | | 0 |
| 59 | Steiner Problem in Multistage Computer Networks. Network Optimization Problems: Algorithms, Applications and Complexity, 1993, , 387-401. | 0.1 | 0 |