

Heping Zhang

List of Publications by Year in descending order

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155
papers

1,886
citations

331538

21
h-index

377752

34
g-index

155
all docs

155
docs citations

155
times ranked

493
citing authors

| # | ARTICLE | IF | CITATIONS |
|----|---|-----|-----------|
| 1 | Relations between global forcing number and maximum anti-forcing number of a graph. Discrete Applied Mathematics, 2022, 311, 85-96. | 0.5 | 2 |
| 2 | Complete forcing numbers of hexagonal systems II. Journal of Mathematical Chemistry, 2022, 60, 666-680. | 0.7 | 1 |
| 3 | Continuous forcing spectrum of regular hexagonal polyhexes. Applied Mathematics and Computation, 2022, 425, 127058. | 1.4 | 1 |
| 4 | The anti-forcing spectra of $\langle \text{mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" altimg="si53.svg"} \rangle \langle \text{mml:mrow} \rangle \langle \text{mml:mo} \rangle \langle \text{mml:mn} \rangle 4 \langle \text{mml:mn} \rangle \langle \text{mml:mo} \rangle, \langle \text{mml:mo} \rangle \langle \text{mml:mn} \rangle 6 \langle \text{mml:mn} \rangle \langle \text{mml:mo} \rangle$. Applied Mathematics and Computation, 2022, 425, 127090. | 1.4 | 1 |
| 5 | Some novel minimax results for perfect matchings of hexagonal systems. Discrete Applied Mathematics, 2022, 320, 435-445. | 0.5 | 0 |
| 6 | Nice pairs of disjoint pentagons in fullerene graphs. Journal of Mathematical Chemistry, 2021, 59, 1316-1331. | 0.7 | 0 |
| 7 | Characterizing the fullerene graphs with the minimum forcing number 3. Discrete Applied Mathematics, 2021, 294, 181-204. | 0.5 | 4 |
| 8 | Complete forcing numbers of hexagonal systems. Journal of Mathematical Chemistry, 2021, 59, 1767-1784. | 0.7 | 2 |
| 9 | The Cyclic Edge Connectivity and Anti-Kekulé Number of the (5,6,7)-Fullerene. Polycyclic Aromatic Compounds, 2020, 40, 144-149. | 1.4 | 1 |
| 10 | Matching preclusion for direct product of regular graphs. Discrete Applied Mathematics, 2020, 277, 221-230. | 0.5 | 6 |
| 11 | Approximation algorithms for capacitated partial inverse maximum spanning tree problem. Journal of Global Optimization, 2020, 77, 319-340. | 1.1 | 6 |
| 12 | On the anti-Kekulé number of (4,5,6)-fullerenes. Discrete Applied Mathematics, 2020, 283, 577-589. | 0.5 | 3 |
| 13 | Fractional matching preclusion number of graphs and the perfect matching polytope. Journal of Combinatorial Optimization, 2020, 39, 915-932. | 0.8 | 0 |
| 14 | Conditional Matching Preclusion for Folded Hypercubes. Journal of Interconnection Networks, 2019, 19, 1940011. | 0.6 | 2 |
| 15 | The (n, k) -Extendable Graphs in Surfaces. Graphs and Combinatorics, 2019, 35, 941-957. | 0.2 | 0 |
| 16 | Forcing and anti-forcing polynomials of perfect matchings for some rectangle grids. Journal of Mathematical Chemistry, 2019, 57, 202-225. | 0.7 | 9 |
| 17 | Counting Clar structures of (4, 6)-fullerenes. Applied Mathematics and Computation, 2019, 346, 559-574. | 1.4 | 2 |
| 18 | Hamiltonian laceability in hypercubes with faulty edges. Discrete Applied Mathematics, 2018, 236, 438-445. | 0.5 | 5 |

| # | ARTICLE | IF | CITATIONS |
|----|---|-----|-----------|
| 19 | Upper bounds on the bondage number of the strong product of a graph and a tree. International Journal of Computer Mathematics, 2018, 95, 511-527. | 1.0 | 4 |
| 20 | Hexagonal systems with the one-to-one correspondence between geometric and algebraic Kekulé structures. Discrete Applied Mathematics, 2018, 238, 144-157. | 0.5 | 2 |
| 21 | Construction for trees with unique minimum dominating sets. International Journal of Computer Mathematics: Computer Systems Theory, 2018, 3, 204-213. | 0.7 | 4 |
| 22 | Matching preclusion for n -grid graphs. Discrete Applied Mathematics, 2018, 243, 194-206. | 0.5 | 1 |
| 23 | On bicriticality of (3,6)-fullerene graphs. Journal of Mathematical Chemistry, 2018, 56, 2785-2793. | 0.7 | 4 |
| 24 | Anti-forcing polynomials for benzenoid systems with forcing edges. Discrete Applied Mathematics, 2018, 250, 342-356. | 0.5 | 10 |
| 25 | The isolated-pentagon rule and nice substructures in fullerenes. Ars Mathematica Contemporanea, 2018, 15, 487-497. | 0.3 | 11 |
| 26 | Sharp upper bounds on the Clar number of fullerene graphs. Discussiones Mathematicae - Graph Theory, 2018, 38, 155. | 0.2 | 0 |
| 27 | Anti-forcing spectra of perfect matchings of graphs. Journal of Combinatorial Optimization, 2017, 33, 660-680. | 0.8 | 16 |
| 28 | Extremal anti-forcing numbers of perfect matchings of graphs. Discrete Applied Mathematics, 2017, 224, 69-79. | 0.5 | 9 |
| 29 | Anti-forcing spectrum of any cata-condensed hexagonal system is continuous. Frontiers of Mathematics in China, 2017, 12, 325-337. | 0.4 | 11 |
| 30 | Matching preclusion and conditional edge-fault Hamiltonicity of binary de Bruijn graphs. Discrete Applied Mathematics, 2017, 233, 104-117. | 0.5 | 12 |
| 31 | Single coronoid systems with an anti-forcing edge. Discrete Applied Mathematics, 2017, 233, 94-103. | 0.5 | 0 |
| 32 | On the maximum forcing and anti-forcing numbers of 4×6 grid graphs. Discrete Applied Mathematics, 2017, 233, 187-194. | 0.5 | 11 |
| 33 | A negative answer to a problem on generalized Fibonacci cubes. Discrete Mathematics, 2017, 340, 81-86. | 0.4 | 6 |
| 34 | Per-spectral characterizations of some bipartite graphs. Discussiones Mathematicae - Graph Theory, 2017, 37, 935. | 0.2 | 4 |
| 35 | Extremal hexagonal chains with respect to the coefficients sum of the permanental polynomial. Applied Mathematics and Computation, 2016, 291, 30-38. | 1.4 | 18 |
| 36 | Matching preclusion for vertex-transitive networks. Discrete Applied Mathematics, 2016, 207, 90-98. | 0.5 | 22 |

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|----|---|-----|-----------|
| 37 | Forcing polynomials of benzenoid parallelogram and its related benzenoids. Applied Mathematics and Computation, 2016, 284, 209-218. | 1.4 | 9 |
| 38 | Factor-Criticality of Vertex-Transitive Graphs. Journal of Graph Theory, 2016, 81, 262-271. | 0.5 | 1 |
| 39 | Maximally matched and super matched regular graphs. International Journal of Computer Mathematics: Computer Systems Theory, 2016, 1, 74-84. | 0.7 | 8 |
| 40 | Small Matchings Extend to Hamiltonian Cycles in Hypercubes. Graphs and Combinatorics, 2016, 32, 363-376. | 0.2 | 4 |
| 41 | A minimax result for perfect matchings of a polyomino graph. Discrete Applied Mathematics, 2016, 206, 165-171. | 0.5 | 5 |
| 42 | Fullerenes with the maximum Clar number. Discrete Applied Mathematics, 2016, 202, 58-69. | 0.5 | 3 |
| 43 | The bondage number of the strong product of a complete graph with a path and a special starlike tree. Discrete Mathematics, Algorithms and Applications, 2016, 08, 1650006. | 0.4 | 4 |
| 44 | Proofs of two conjectures on generalized Fibonacci cubes. European Journal of Combinatorics, 2016, 51, 419-432. | 0.5 | 18 |
| 45 | The maximum forcing number of cylindrical grid, toroidal 4×8 lattice and Klein bottle 4×8 lattice. Journal of Mathematical Chemistry, 2016, 54, 18-32. | 0.7 | 8 |
| 46 | Per-spectral and adjacency spectral characterizations of a complete graph removing six edges. Discrete Applied Mathematics, 2016, 203, 158-170. | 0.5 | 12 |
| 47 | Anti-forcing numbers of perfect matchings of graphs. Discrete Applied Mathematics, 2016, 202, 95-105. | 0.5 | 25 |
| 48 | The restricted edge-connectivity and restricted connectivity of augmented k -ary n -cubes. International Journal of Computer Mathematics, 2016, 93, 1281-1298. | 1.0 | 17 |
| 49 | Complete forcing numbers of primitive coronoids. Journal of Combinatorial Optimization, 2016, 32, 318-330. | 0.8 | 5 |
| 50 | A maximum resonant set of polyomino graphs. Discussiones Mathematicae - Graph Theory, 2016, 36, 323. | 0.2 | 6 |
| 51 | Matchings extend to Hamiltonian cycles in k -ary n -cubes. Information Sciences, 2015, 305, 1-13. | 4.0 | 9 |
| 52 | Per-spectral characterizations of graphs with extremal per-nullity. Linear Algebra and Its Applications, 2015, 484, 13-26. | 0.4 | 11 |
| 53 | 2-resonant fullerenes. European Journal of Combinatorics, 2015, 49, 13-24. | 0.5 | 4 |
| 54 | On the Permanental Polynomials of Matrices. Bulletin of the Malaysian Mathematical Sciences Society, 2015, 38, 1361-1374. | 0.4 | 3 |

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|-----|---|-----|-----------|
| 109 | Relations between Clar structures, Clar covers, and the sextet-rotation tree of a hexagonal system. <i>Discrete Applied Mathematics</i> , 2008, 156, 1809-1821. | 0.5 | 6 |
| 110 | None of the coronoid systems can be isometrically embedded into a hypercube. <i>Discrete Applied Mathematics</i> , 2008, 156, 2817-2822. | 0.5 | 8 |
| 111 | A complete characterization for k-resonant Klein-bottle polyhexes. <i>Journal of Mathematical Chemistry</i> , 2008, 43, 45-59. | 0.7 | 18 |
| 112 | A note on the cyclical edge-connectivity of fullerene graphs. <i>Journal of Mathematical Chemistry</i> , 2008, 43, 134-140. | 0.7 | 23 |
| 113 | The forcing number of toroidal polyhexes. <i>Journal of Mathematical Chemistry</i> , 2008, 43, 457-475. | 0.7 | 14 |
| 114 | Generalized Hosoya polynomials of hexagonal chains. <i>Journal of Mathematical Chemistry</i> , 2008, 43, 852-863. | 0.7 | 10 |
| 115 | k-resonant toroidal polyhexes. <i>Journal of Mathematical Chemistry</i> , 2008, 44, 270-285. | 0.7 | 9 |
| 116 | Kirchhoff index of linear hexagonal chains. <i>International Journal of Quantum Chemistry</i> , 2008, 108, 503-512. | 1.0 | 85 |
| 117 | The Laplacian spectral radius of some bipartite graphs. <i>Linear Algebra and Its Applications</i> , 2008, 428, 1610-1619. | 0.4 | 15 |
| 118 | The Hosoya polynomial decomposition for hexagonal chains. <i>Mathematical and Computer Modelling</i> , 2008, 48, 601-609. | 2.0 | 5 |
| 119 | Hosoya polynomials under gated amalgamations. <i>Discrete Applied Mathematics</i> , 2008, 156, 2407-2419. | 0.5 | 4 |
| 120 | The Hosoya polynomial decomposition for catacondensed benzenoid graphs. <i>Discrete Applied Mathematics</i> , 2008, 156, 2930-2938. | 0.5 | 6 |
| 121 | Path-comprehensive and vertex-pancyclic properties of super line graph $\langle \text{mml:math altimg="si2.gif" display="inline" overflow="scroll" xmlns:xocs="http://www.elsevier.com/xml/xocs/dtd" xmlns:xs="http://www.w3.org/2001/XMLSchema" xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance" xmlns="http://www.elsevier.com/xml/ja/dtd" xmlns:ia="http://www.elsevier.com/xml/ja/dtd" xmlns:mml="http://www.w3.org/1998/Math/MathML" xmlns:tb="http://www.elsevier.com/xml/common/table/dtd" xmlns:sb="http://www.elsevier.com/xml/c$ | 0.4 | 3 |
| 122 | Energy conservation in wireless sensor networks and connectivity of graphs. <i>Theoretical Computer Science</i> , 2008, 393, 81-89. | 0.5 | 11 |
| 123 | Resonance Graphs and a Binary Coding for the 1-Factors of Benzenoid Systems. <i>SIAM Journal on Discrete Mathematics</i> , 2008, 22, 971-984. | 0.4 | 25 |
| 124 | Some rules on resistance distance with applications. <i>Journal of Physics A: Mathematical and Theoretical</i> , 2008, 41, 445203. | 0.7 | 28 |
| 125 | Sufficient conditions for graphs to be $\hat{\beta}$ -optimal and super- $\hat{\beta}$. <i>Networks</i> , 2007, 49, 234-242. | 1.6 | 17 |
| 126 | Resistance distance and Kirchhoff index in circulant graphs. <i>International Journal of Quantum Chemistry</i> , 2007, 107, 330-339. | 1.0 | 98 |

| # | ARTICLE | IF | CITATIONS |
|-----|---|-----|-----------|
| 127 | Hosoya polynomials of armchair open-ended nanotubes. <i>International Journal of Quantum Chemistry</i> , 2007, 107, 586-596. | 1.0 | 15 |
| 128 | An Upper Bound for the Clar Number of Fullerene Graphs. <i>Journal of Mathematical Chemistry</i> , 2007, 41, 123-133. | 0.7 | 24 |
| 129 | Characterizations for Some Types of DNA Graphs. <i>Journal of Mathematical Chemistry</i> , 2007, 42, 65-79. | 0.7 | 8 |
| 130 | A characterization of the interval distance monotone graphs. <i>Discrete Mathematics</i> , 2007, 307, 2622-2627. | 0.4 | 1 |
| 131 | A min-max result on outerplane bipartite graphs. <i>Applied Mathematics Letters</i> , 2007, 20, 199-205. | 1.5 | 5 |
| 132 | Construction for bicritical graphs and k-extendable bipartite graphs. <i>Discrete Mathematics</i> , 2006, 306, 1415-1423. | 0.4 | 14 |
| 133 | k-resonance in Toroidal Polyhexes*. <i>Journal of Mathematical Chemistry</i> , 2005, 38, 451-466. | 0.7 | 20 |
| 134 | A comparison between 1-factor count and resonant pattern count in plane non-bipartite graphs. <i>Journal of Mathematical Chemistry</i> , 2005, 38, 315-324. | 0.7 | 4 |
| 135 | Regular Coronoids and Ear Decompositions of Plane Elementary Bipartite Graphs. , 2005, , 259-271. | | 1 |
| 136 | Z-transformation graphs of maximum matchings of plane bipartite graphs. <i>Discrete Applied Mathematics</i> , 2004, 134, 339-350. | 0.5 | 5 |
| 137 | Z-transformation graphs of perfect matchings of plane bipartite graphs. <i>Discrete Mathematics</i> , 2004, 276, 393-404. | 0.4 | 21 |
| 138 | The Z-Transformation graph for an outerplane bipartite graph has a Hamilton path. <i>Applied Mathematics Letters</i> , 2004, 17, 897-901. | 1.5 | 4 |
| 139 | A Distributive Lattice on the Set of Perfect Matchings of a Plane Bipartite Graph. <i>Order</i> , 2003, 20, 13-29. | 0.3 | 30 |
| 140 | Clar and sextet polynomials of buckminsterfullerene. <i>Computational and Theoretical Chemistry</i> , 2003, 622, 239-248. | 1.5 | 13 |
| 141 | Cell rotation graphs of strongly connected orientations of plane graphs with an application. <i>Discrete Applied Mathematics</i> , 2003, 130, 469-485. | 0.5 | 3 |
| 142 | Normal Components, Kekulé Patterns, and Clar Patterns in Plane Bipartite Graphs. <i>Journal of Mathematical Chemistry</i> , 2002, 31, 405-420. | 0.7 | 19 |
| 143 | New Lower Bound on the Number of Perfect Matchings in Fullerene Graphs. <i>Journal of Mathematical Chemistry</i> , 2001, 30, 343-347. | 0.7 | 35 |
| 144 | Total Z-transformation graphs of perfect matching of plane bipartite graphs. <i>Electronic Notes in Discrete Mathematics</i> , 2000, 5, 317-320. | 0.4 | 1 |

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|-----|--|-----|-----------|
| 145 | Plane elementary bipartite graphs. <i>Discrete Applied Mathematics</i> , 2000, 105, 291-311. | 0.5 | 84 |
| 146 | The Clar covering polynomial of hexagonal systems III. <i>Discrete Mathematics</i> , 2000, 212, 261-269. | 0.4 | 23 |
| 147 | Perfect Matchings of Polyomino Graphs. <i>Graphs and Combinatorics</i> , 1997, 13, 295-304. | 0.2 | 21 |
| 148 | The rotation graphs of perfect matchings of plane bipartite graphs. <i>Discrete Applied Mathematics</i> , 1997, 73, 5-12. | 0.5 | 25 |
| 149 | The Clar covering polynomial of hexagonal systems with an application to chromatic polynomials. <i>Discrete Mathematics</i> , 1997, 172, 163-173. | 0.4 | 21 |
| 150 | A solution to Gutman's problem on the characteristic polynomial of a bipartite graph. <i>Discrete Mathematics</i> , 1996, 154, 297-300. | 0.4 | 0 |
| 151 | The connectivity of Z-transformation graphs of perfect matchings of polyominoes. <i>Discrete Mathematics</i> , 1996, 158, 257-272. | 0.4 | 15 |
| 152 | The Clar covering polynomial of hexagonal systems I. <i>Discrete Applied Mathematics</i> , 1996, 69, 147-167. | 0.5 | 82 |
| 153 | A new enumeration method for Kekulé structures of hexagonal systems with forcing edges. <i>Computational and Theoretical Chemistry</i> , 1995, 331, 255-260. | 1.5 | 9 |
| 154 | Hexagonal systems with fixed bonds. <i>Discrete Applied Mathematics</i> , 1993, 47, 285-296. | 0.5 | 6 |
| 155 | The Star-Structure Connectivity and Star-Substructure Connectivity of Hypercubes and Folded Hypercubes. <i>Computer Journal</i> , 0, , . | 1.5 | 1 |