

# Gabriele Eichfelder

## List of Publications by Year in descending order

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Version: 2024-02-01

57  
papers

1,324  
citations

471509

17  
h-index

361022

35  
g-index

64  
all docs

64  
docs citations

64  
times ranked

840  
citing authors

| #  | ARTICLE  | IF  | CITATIONS |
|----|--|-----|-----------|
| 1  | Limit sets in global multiobjective optimization. <i>Optimization</i> , 2024, 73, 1-27.  | 1.7 | 1         |
| 2  | Optimality conditions for set optimization using a directional derivative based on generalized Steiner sets. <i>Optimization</i> , 2022, 71, 2273-2314.              | 1.7 | 3         |
| 3  | A note on completely positive relaxations of quadratic problems in a multiobjective framework. <i>Journal of Global Optimization</i> , 2022, 82, 615-626.            | 1.8 | 2         |
| 4  | An approximation algorithm for multi-objective optimization problems using a box-coverage. <i>Journal of Global Optimization</i> , 2022, 83, 329-357.                | 1.8 | 5         |
| 5  | On the exactness of the $\hat{\mu}$ -constraint method for biobjective nonlinear integer programming. <i>Operations Research Letters</i> , 2022, 50, 356-361.        | 0.7 | 5         |
| 6  | A Vectorization Scheme for Nonconvex Set Optimization Problems. <i>SIAM Journal on Optimization</i> , 2022, 32, 1184-1209.   | 2.0 | 2         |
| 7  | Coordinate transformation and its uncertainty under consideration of a non-orthogonal coordinate base. <i>Measurement Science and Technology</i> , 2021, 32, 045001. | 2.6 | 6         |
| 8  | Nonconvex constrained optimization by a filtering branch and bound. <i>Journal of Global Optimization</i> , 2021, 80, 31-61.   | 1.8 | 2         |
| 9  | Proximity measures based on KKT points for constrained multi-objective optimization. <i>Journal of Global Optimization</i> , 2021, 80, 63-86.                        | 1.8 | 5         |
| 10 | Expensive multi-objective optimization of electromagnetic mixing in a liquid metal. <i>Optimization and Engineering</i> , 2021, 22, 1065-1089.                       | 2.4 | 3         |
| 11 | A general branch-and-bound framework for continuous global multiobjective optimization. <i>Journal of Global Optimization</i> , 2021, 80, 195-227.                   | 1.8 | 10        |
| 12 | A decision space algorithm for multiobjective convex quadratic integer optimization. <i>Computers and Operations Research</i> , 2021, 134, 105396.                   | 4.0 | 6         |
| 13 | Twenty years of continuous multiobjective optimization in the twenty-first century. <i>EURO Journal on Computational Optimization</i> , 2021, 9, 100014.             | 2.4 | 8         |
| 14 | An algorithmic approach to multiobjective optimization with decision uncertainty. <i>Journal of Global Optimization</i> , 2020, 77, 3-25.                            | 1.8 | 11        |
| 15 | Solving Multiobjective Mixed Integer Convex Optimization Problems. <i>SIAM Journal on Optimization</i> , 2020, 30, 3122-3145.  | 2.0 | 21        |
| 16 | Methods for Multiobjective Bilevel Optimization. <i>Springer Optimization and Its Applications</i> , 2020, , 423-449.  | 0.9 | 3         |
| 17 | Numerical results for the multiobjective trust region algorithm MHT. <i>Data in Brief</i> , 2019, 25, 104103.  | 1.0 | 6         |
| 18 | A Branch-and-Bound-Based Algorithm for Nonconvex Multiobjective Optimization. <i>SIAM Journal on Optimization</i> , 2019, 29, 794-821.                               | 2.0 | 25        |

| #  | ARTICLE   | IF  | CITATIONS |
|----|---|-----|-----------|
| 19 | An algorithm for computing Fréchet means on the sphere. Optimization Letters, 2019, 13, 1523-1533.  | 1.6 | 2         |
| 20 | Using a B&B algorithm from multiobjective optimization to solve constrained optimization problems. AIP Conference Proceedings, 2019, , .  | 0.4 | 1         |
| 21 | A Trust-Region Algorithm for Heterogeneous Multiobjective Optimization. SIAM Journal on Optimization, 2019, 29, 1017-1047.  | 2.0 | 25        |
| 22 | On Classes of Set Optimization Problems which are Reducible to Vector Optimization Problems and its Impact on Numerical Test Instances. , 2019, , 241-265.  |     | 1         |
| 23 | Maximum electromagnetic drag configurations for a translating conducting cylinder with distant magnetic dipoles. Journal of Engineering Mathematics, 2018, 108, 123-141.                              | 1.2 | 1         |
| 24 | Decision uncertainty in multiobjective optimization. Journal of Global Optimization, 2017, 69, 485-510.   | 1.8 | 27        |
| 25 | Set Approach for Set Optimization with Variable Ordering Structures Part II: Scalarization Approaches. Journal of Optimization Theory and Applications, 2016, 171, 947-963.                           | 1.5 | 13        |
| 26 | Set Approach for Set Optimization with Variable Ordering Structures Part I: Set Relations and Relationship to Vector Approach. Journal of Optimization Theory and Applications, 2016, 171, 931-946.   | 1.5 | 13        |
| 27 | A modification of the $\alpha$ hox {BB} $\hat{\pm}$ BB method for box-constrained optimization and an application to inverse kinematics. EURO Journal on Computational Optimization, 2016, 4, 93-121. | 2.4 | 2         |
| 28 | Copositivity tests based on the linear complementarity problem. Computational Optimization and Applications, 2016, 63, 461-493.   | 1.6 | 6         |
| 29 | Characterization of properly optimal elements with variable ordering structures. Optimization, 2016, 65, 571-588.   | 1.7 | 10        |
| 30 | On the effects of combining objectives in multi-objective optimization. Mathematical Methods of Operations Research, 2015, 82, 1-18.  | 1.0 | 3         |
| 31 | Cone-Valued Maps. Vector Optimization, 2014, , 57-75.   | 0.7 | 0         |
| 32 | Nonlinear Scalarizations. Vector Optimization, 2014, , 89-104.  | 0.7 | 0         |
| 33 | Numerical Procedures in Multiobjective Optimization with Variable Ordering Structures. Journal of Optimization Theory and Applications, 2014, 162, 489-514.   | 1.5 | 30        |
| 34 | Properly optimal elements in vector optimization with variable ordering structures. Journal of Global Optimization, 2014, 60, 689-712.  | 1.8 | 31        |
| 35 | Variable Ordering Structures in Vector Optimization. Vector Optimization, 2014, , .   | 0.7 | 52        |
| 36 | Outlook and Further Application Areas. Vector Optimization, 2014, , 175-180.  | 0.7 | 0         |

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|----|--|-----|-----------|
| 37 | Duality Results. Vector Optimization, 2014, , 139-152.   | 0.7 | 0         |
| 38 | Linear Scalarizations. Vector Optimization, 2014, , 77-88.   | 0.7 | 0         |
| 39 | Optimality Concepts and Their Characterization. Vector Optimization, 2014, , 27-55.  | 0.7 | 0         |
| 40 | Optimality Conditions for Vector Optimization Problems. Vector Optimization, 2014, , 117-138.  | 0.7 | 0         |
| 41 | Variable Ordering Structures. Vector Optimization, 2014, , 1-25.   | 0.7 | 0         |
| 42 | Scalarizations for Variable Orderings Given by Bishop-Phelps Cones. Vector Optimization, 2014, , 105-115.  | 0.7 | 0         |
| 43 | On the set-semidefinite representation of nonconvex quadratic programs over arbitrary feasible sets. Optimization Letters, 2013, 7, 1373-1386.       | 1.6 | 22        |
| 44 | Optimality conditions for vector optimization problems with variable ordering structures. Optimization, 2013, 62, 597-627.                           | 1.7 | 49        |
| 45 | Copositivity detection by difference-of-convex decomposition and $\mathcal{H}$ -subdivision. Mathematical Programming, 2013, 138, 365-400.           | 2.4 | 17        |
| 46 | Variable Ordering Structures in Vector Optimization. Vector Optimization, 2012, , 95-126.  | 0.7 | 30        |
| 47 | Vector Optimization Problems and Their Solution Concepts. Vector Optimization, 2012, , 1-27.   | 0.7 | 17        |
| 48 | Cone-valued maps in optimization. Applicable Analysis, 2012, 91, 1831-1846.  | 1.3 | 18        |
| 49 | Local specific absorption rate control for parallel transmission by virtual observation points. Magnetic Resonance in Medicine, 2011, 66, 1468-1476. | 3.0 | 204       |
| 50 | Optimal Elements in Vector Optimization with a Variable Ordering Structure. Journal of Optimization Theory and Applications, 2011, 151, 217-240.     | 1.5 | 54        |
| 51 | Multiobjective bilevel optimization. Mathematical Programming, 2010, 123, 419-449.   | 2.4 | 128       |
| 52 | Foundations of Set-Semidefinite Optimization. Springer Optimization and Its Applications, 2010, , 259-284.   | 0.9 | 5         |
| 53 | Scalarizations for adaptively solving multi-objective optimization problems. Computational Optimization and Applications, 2009, 44, 249-273.         | 1.6 | 74        |
| 54 | An Adaptive Scalarization Method in Multiobjective Optimization. SIAM Journal on Optimization, 2009, 19, 1694-1718.                                  | 2.0 | 87        |

| #  | ARTICLE   | IF  | CITATIONS |
|----|---|-----|-----------|
| 55 | A Constraint Method in Nonlinear Multi-Objective Optimization. Lecture Notes in Economics and Mathematical Systems, 2009, , 3-12. | 0.3 | 18        |
| 56 | Adaptive Scalarization Methods in Multiobjective Optimization. Vector Optimization, 2008, , .                                     | 0.7 | 234       |
| 57 | Solving set-valued optimization problems using a multiobjective approach. Optimization, 0, , 1-32.                                | 1.7 | 2         |