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Assistant Professor

College: Faculty of Science

Department: Mathematics

Employment Information

Faculty/Department	Position/Rank	Employment Type	Cooperation Type	Grade
(not set)	(not set)	Tenure Track	Full Time	8

Papers in Conferences

1. هاجر علی مراد، حبیب شریف، آموزش ریاضیات بر مبنای ارزشهای کارآفرینی، چهارمین کنفرانس ملی آموزش و کاربرد ریاضیات، کرمانشاه، ۲۰۲۳.
2. هاجر علی مراد، بهینه سازی سیستم های کنترلی دینامیکی با استفاده از الگوریتم ازدحام ذرات، دومین کنفرانس بین المللی دانشجویان علوم پایه ایران، تهران، ۲۰۲۳.
3. هاجر علی مراد، بررسی دلایل افت تحصیلی ریاضی، پیشنهادات و روشهای کاهش افت تحصیلی در زمینه نحوه تدریس، هجدهمین کنفرانس آموزش ریاضی ایران، دامغان، ۲۰۲۲.
4. پنجاه و یکمین، Minimal Zero Norm Solution for Quadratic Programming Problem, هاجر علی مراد, 2021, کنفرانس ریاضی ایران, کاشان.
5. پنجاه و دومین کنفرانس, A simple method for finding private solution of Riccati equation, هاجر علی مراد, 2021, ریاضی ایران, کرمان.
6. H. Alimorad, A simple non-linear programming method for solving least-squares problem, The 50 th annual Iranian mathematics conference, Shiraz, 2019.
7. H. Alimorad, A simple discretize method for finding the optimum shape of a bar cross-section, The 50 th annual Iranian mathematics conference, Shiraz, 2019.
8. A. Fakharzadeh J. and H. Alimorad, A Theoretical Measure Technique for Determining 3-D Symmetric Optimal Shapes with a Given Center of Mass, 8 th International Conference of the Iranian Society of Operations Research, Ferdowsi University of Mashhad, May 21-22, Mashhad, Mashhad, 2015.
9. A. Fakharzadeh J. and H. Alimorad, Determining the Optimal Surface by Using a Theoretical Measure Technique and Artificial Controls (with and without obstacle), The 45th Annual Iranian Mathematics Conference, Semnan, Semnan, 2014.
10. A. Fakharzadeh J. , H. Alimorad , S. Tobaie, A Linear Technique for Designing the Optimal Rotating Shapes, International Conference on Metaheuristic Algorithms and Optimization, Fereydunkenar, Fereydunkenar, 2014.
11. M. B. Ahmadi. ,& H. Alimorad, An Algorithm for Computing the Hosoya Index, Conference and Workshop on Mathematical Chemistry, Persian Gulf University. ,2013.

12. A. Fakharzadeh J. ,& H. Alimorad and Z. Rafiei ,Using Linearization and Penalty Approach to Solve Optimal Shape Design Problem with an Obstacle ,International Conference on Nonlinear Modeling & Optimization, Shomal Unioversity. ,Amol ,2012.
13. H. Alimorad ,& E. Hesameddini and A. Fakharzadeh J. , ,Using Elzaki Transform for Solving the Klein-Gordon Equation ,International Conference on Nonlinear Modeling & Optimization, Shomal Unioversity. ,Amol ,2012.
14. A. Fakharzadeh, J ,& H. Alimorad and A. bieranvand ,Optimal Internal Dissipation of a Damped Wave Equation Using Method Based on Measure ,5th International Conference of Iranian Operations Research Society, Azarbaijan University of Tarbiat Moallem. ,Tabriz ,1391.
15. M. B. Ahmadi ,& H. Alimorad ,A New Fuzzy Approach for Solving multi-objective bi-level programming problem ,5th International Conference of Iranian Operations Research Society, Azarbaijan University of Tarbiat Moallem. ,Tabriz ,1391.
16. M. B. Ahmadi ,& H. Alimorad ,An Algorithm for Computing the Merrifield-Simmons Index. ,Conferencen & Workshop on Mathematical Chemistry Payame Noor University of Yazd ,Yazd ,2012.
17. Hajar Alimorad ,A simple method for finding private solution of Riccati equation ,The 52nd Annual Iranian Mathematics Conference ,کرمان, September, 2021.
18. Hajar Alimorad ,Minimal Zero Norm Solution for Quadratic Programming Problem ,کنفرانس سالانه ریاضی ,کاشان, 2021.

Papers in Journals

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1. Hajar Alimorad, Habib Sharif, شماره، شماره، ریاضی و جامعه، شماره، Hajar Alimorad, Habib Sharif, ۷، شماره صفحات ۷۹-۲۳۰، ۸۴.
 2. Hajar Alimorad, Solution of optimal control problems using shifted chebyshev polynomial, Iranian Journal of Optimization, Vol. 12, pp. 233-239, Autumn 2021.
 3. Hajar Alimorad, Optimization of dynamic control systems using water cycle algorithm, Journal of the Franklin Institute, 2024.
 4. Hajar Alimorad, Alireza Fakharzadeh Jahromi, A new approach for solving the obstacle problems in three-dimensions, Optik - International Journal for Light and Electron Optics, No. 276, pp. 170646, 2023.
 5. Hajar Alimorad, Efficient Solution of Nonlinear Unconstraint Optimization Problems using Quasi-Newton's Method: A Revised Approach, control and optimization in applied mathematics (coam), 2023.
 6. Hajar Alimorad, An iterative method and maximal solution of Coupled algebraic Riccati equations, Journal of Algorithms and Computation, No. 54, pp. 109-123, 2022.
 7. Alireza Fakharzadeh Jahromi, Hajar Alimorad, Sedigheh Tuobaei, A linear technique for designing optimal rotated shapes, Computational and Applied Mathematics, pp. 420-437, 2022.
 8. Hajar Alimorad, Calculating Szeged Index and Revised Szeged Index by Using Adjacency Matrix, Iranian Journal of Analytical Chemistry, 2022.
 9. Hajar Alimorad, A simple and efficient method for solving multi-objective programming problems and multi-objective optimal controls, International Journal of Mathematical Modelling & Computations, 2022.
 10. Hajar Alimorad, Shaker Abdolmohammadi, A new method for solving coupled complex matrix equations, Journal of Linear and Topological Algebra, Vol. 10, No. 2, pp. 93-99, 2021.
 11. H. Alimorad and A. Fakharzadeh Jahromi, Finding the Optimal Place of Sensors for a 3-D Damped Wave Equation by using Measure Approach, Control and Optimization in Applied Mathematics (COAM), 2020.
 12. Hajar Alimorad, A Practical Algorithm for $[r, s, t]$ -Coloring of Graph, Global Analysis and Discrete Mathematics, pp. 67-74, June 2020.
 13. H. Alimorad, A new approach for determining multi-objective optimal control of semilinear parabolic problems, Computational and Applied Mathematics, pp. 1-11, 2019.
 14. H. Alimorad and A. Fakharzadeh J, A review of theoretical measure approaches in optimal shape problem, International journal of numerical analysis and modeling, Vol. 16, pp. 543-574, 2019.

15. H. Alimorad and A. Fakharzadeh J, A Theoretical Measure Technique for Determining 3-D Symmetric Nearly Optimal Shapes with a Given Center of Mass, Computational Mathematics and Mathematical Physics, Vol. 57, No. 7, pp. 1225–1240, 2017.
16. A Fakharzadeh J., H Alimorad and A Beiranvand, A Linearization Technique for Optimal Design of the Damping Set with Internal Dissipation, (Iranian Journal of Numerical Analysis and Optimization (IJNAO), Vol. 6, No. 1, pp. 1-29, 2016.
17. Ahmadi, M. B. and Alimorad, H., An Algorithm for Computing the Merrifield-Simmons Index, Communications in Mathematical and in Computer Chemistry, Vol. 71, pp. 355-359, 2014.
18. H. Alimorad, E. Hesameddini and A. Fakharzadeh J, Using Elzaki Transform to Solving the KLEIN-GORDON Equation, (TWMS) Journal of Pure and Applied Mathematics, Vol. 7, No. 2, pp. 177-184, 2016.
19. Ahmadi, M. B. and Alimorad, H., On the Hosoya index of trees, Journal of optoelectronics and advanced materials, Vol. 13, No. 9, pp. 1122-1125, 2011 11 5.

Books

1. بهینه سازی خطی.