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Biography

Lisans, Yüksek Lisans ve Doktora derecelerini Bursa Uludağ Üniversitesi Mühendislik Fakültesi, Makine Mühendisliği Bölümünde tamamladı. Amerika Birleşik Devletlerinde bulunan Michigan Üniversitesi ve Mississippi State Üniversitelerinde Makine Mühendisliği ve Havacılık Mühendisliği Bölümlerinde doktora sonrası araştırmacı olarak çalıştı.

2023 yılında Türkiye Bilimler Akademisi (TÜBA) Asli üyesi olarak seçilmiştir. 2017 yılında TÜBİTAK Bilim Teşvik Ödülü, 2015 yılında TÜBA-GEBİP(Üstün Başarılı Genç Bilim Adamı) Ödülü ve ODTÜ Prof. Dr. Mustafa Parlar Teşvik Ödülü'ne layık görülmüştür. 2019, 2020, 2021, 2022 ve 2023 yılında Standford üniversitesinden bilim insanlarının yer aldığı bir ekip tarafından hazırlanan ''dünyanın en etkili bilim insanları'' listesinde yer aldı. Bu listeye Türkiye'den giren tüm disiplinlerdeki bilim insanları arasında 16'ıncı sırada yer almıştır.

Üniversite-Sanayi İşbirliğinden sorumlu Rektör Danışmanlığı, Mühendislik Fakültesi Dekan Yardımcılığı, Makine Mühendisliği Bölüm Başkanlığı, Endüstri Mühendisliği Bölüm Başkanlığı, Mimarlık Bölüm Başkanlığı, Matematik Bölüm Başkanlığı, YÖK-ÜAK (Yüksek Öğretim Kurulu-Üniversitelerarası Kurul) üyeliği, TÜBİTAK Yürütme Komitesi üyeliği, Uygulama ve Araştırma Merkezi Müdürlüğü, Fakülte Kurulu Üyeliği, Fakülte Yönetim Kurulu üyeliği, Yüksek Okul Müdürlüğü, Senato Üyeliği gibi farklı idari görevlerde bulundu. 2020-2022 yılları arasında Türk Havacılık ve Uzay Sanayi A.Ş. de (TUSAŞ) Ar-Ge Merkezi Müdürü olarak görev yaptı ve yerli hava araçlarının geliştirilmesine yönelik farklı projelerde görev aldı.

TÜBİTAK-ARDEB, Bilim Sanayi ve Teknoloji Bakanlığı destekli San-Tez projelerinde yürütücü olarak görev yapmıştır. Oyak-Renault Otomobil Fabrikaları Ar-ge Merkezi, Beyçelik Holding Ar-Ge Merkezi, Yeşilova Holding Ar-Ge Merkezi, Coşkunöz Holding Ar-ge Merkezi, Toksan Ar-Ge Merkezi, Valeo Fren Sistemleri A.Ş., Akpres Ar-ge Merkezi, gibi çeşitli yerli ve yabancı ortaklı firmaların çok sayıda TÜBİTAK-TEYDEB destekli 1501 ve 1505 Ar-Ge projelerinde optimum ürün geliştirmeden sorumlu akademik danışman ve proje yürütücüsü olarak görev aldı..

Çeşitli SCI, SCI- Expanded indexlerinde taranan dergilerde Associate editor, Guest editor ve Editorial Board Member olarak görev yaptı.

Education Information

Doctorate, Turkey 2001 - 2006

Research Areas

Numerical Algorithms, Artificial Intelligence, Computer Learning and Pattern Recognition, Neural Networks, Machine Elements, Machine Design, Computer Aided Design and Manufacturing, Non-traditional manufacturing methods, Welding Methods, Plastic Forming Methods, Machining Methods, Finite Element Methods, Mechanical Properties, Composites, Engineering and Technology

Advising Theses

YILDIZ A. R., Taşıt debriyaj diyafram yaylarının yük karakteristiği ve gerilme kısıtları altında sezgisel yöntemler ile optimum tasarımı, Postgraduate, A.KARADUMAN(Student), 2017
YILDIZ A. R., Sac şekillendirme etkisi dikkate alınarak yüksek performanslı taşıt pasif güvenlik sistemlerinin geliştirilmesi, Postgraduate, A.YILDIRIM(Student), 2017
Yıldız A. R., Biyel kolu analizi, optimizasyonu ve yorulma davranışının incelenmesi, Postgraduate, H.Acar(Student), 2017
YILDIZ A. R., Biyel kolu analizi, optimizasyonu ve yorulma davranışının incelenmesi, Postgraduate, H.ACAR(Student), 2016
YILDIZ A. R., Yüksek performanslı taşıt güvenlik sistemlerinin geliştirilmesi, Doctorate, S.KARAGÖZ(Student), 2016
YILDIZ A. R., Yeni nesil otokorkuluk sistemlerinin çarpışma analizleri ve sezgisel optimizasyon yöntemleri kullanılarak geliştirilmesi, Postgraduate, E.KURTULUŞ(Student), 2015
YILDIZ A. R., Taşıtlarda önden çarpışma performansını etkileyen enerji yutucuların optimum tasarımı, Postgraduate, E.DEMİRCİ(Student), 2014

Published journal articles indexed by SCI, SSCI, and AHCI

I. **Enhanced crashworthiness performance of auxetic structures using artificial neural network and geyser inspired algorithm**
YILDIZ B. S., YILDIZ A. R., Yakupoglu C.
MATERIALS TESTING, 2024 (SCI-Expanded)

II. **Multi-objective optimization of truss structures using the enhanced Lichtenberg algorithm**
Panagant N., Mahajan S., Sait S. M., YILDIZ B. S., YILDIZ A. R., Khodadadi N., Mehta P.
MATERIALS TESTING, 2024 (SCI-Expanded)

III. **Comparative study of state-of-the-art metaheuristics for solving constrained mechanical design optimization problems: experimental analyses and performance evaluations**
Mehta P., Abderazek H., Kumar S., Sait S. M., YILDIZ B. S., YILDIZ A. R.
MATERIALS TESTING, 2024 (SCI-Expanded)

IV. **Centroid opposition-based backtracking search algorithm for global optimization and engineering problems**
Debnath S., Debbarma S., Nama S., Saha A. K., Dhar R., YILDIZ A. R., Gandomi A. H.
Advances in Engineering Software, vol.198, 2024 (SCI-Expanded)

V. **Advanced structural design of engineering components utilizing an artificial neural network and GNDO algorithm**
YILDIZ A. R., YILDIZ B. S.
MATERIALS TESTING, 2024 (SCI-Expanded)

VI. **Artificial neural network infused quasi oppositional learning partial reinforcement algorithm for structural design optimization of vehicle suspension components**
Sait S. M., Mehta P., Pholdee N., YILDIZ B. S., YILDIZ A. R.
MATERIALS TESTING, vol.66, no.11, pp.1855-1863, 2024 (SCI-Expanded)

VII. **Optimization of vehicle crashworthiness problems using recent twelve metaheuristic algorithms**
Kumar S., YILDIZ B. S., Mehta P., Sait S. M., Hussien A. G., YILDIZ A. R.

MATERIALS TESTING, no.11, pp.1890-1901, 2024 (SCI-Expanded)

VIII. **Optimization of vehicle conceptual design problems using an enhanced hunger games search algorithm**
Mehta P., Panagant N., Wansasueb K., Sait S. M., YILDIZ A. R., Kumar S., YILDIZ B. S., Hussien A. G.
MATERIALS TESTING, no.11, pp.1864-1889, 2024 (SCI-Expanded)

IX. **A novel chaotic artificial rabbits algorithm for optimization of constrained engineering problems**
Duzgun E., ACAR E., YILDIZ A. R.
MATERIALS TESTING, vol.66, no.9, pp.1449-1462, 2024 (SCI-Expanded)

X. **Optimal design of structural engineering components using artificial neural network-assisted crayfish algorithm**
Sait S. M., Mehta P., YILDIZ A. R., YILDIZ B. S.
MATERIALS TESTING, vol.66, no.9, pp.1439-1448, 2024 (SCI-Expanded)

XI. **Experimental and numerical investigation of crash performances of additively manufactured novel multi-cell crash box made with CF15PET, PLA, and ABS**
Kopar M., YILDIZ A. R.
MATERIALS TESTING, no.9, pp.1510-1518, 2024 (SCI-Expanded)

XII. **A comparison of recent optimization algorithms for build orientation problems in additive manufacturing**
Gunaydin A. C., YILDIZ A. R.
MATERIALS TESTING, 2024 (SCI-Expanded)

XIII. **Metaheuristic-assisted complex H-infinity flight control tuning for the Hawkeye unmanned aerial vehicle: A comparative study**
Kanokmedhakul Y., Bureerat S., Panagant N., Radpukdee T., Pholdee N., YILDIZ A. R.
Expert Systems with Applications, vol.248, 2024 (SCI-Expanded)

XIV. **Optimization of electric vehicle design problems using improved electric eel foraging optimization algorithm**
Mehta P., YILDIZ B. S., Sait S. M., YILDIZ A. R.
MATERIALS TESTING, vol.66, no.8, pp.1230-1240, 2024 (SCI-Expanded)

XV. **Enhancing the structural performance of engineering components using the geometric mean optimizer**
Mehta P., YILDIZ A. R., Sait S. M., YILDIZ B. S.
Materialpruefung/Materials Testing, vol.66, no.7, pp.1063-1073, 2024 (SCI-Expanded)

XVI. **Optimum design of additively manufactured aerospace components with different lattice structures**
Taşçl M., Erdaş M. U., GÖKTUĞ M. R., Yldlz B. S., Yldlz A. R.
MATERIALS TESTING, no.6, pp.876-882, 2024 (SCI-Expanded)

XVII. **Crash performance of a novel bio-inspired energy absorber produced by additive manufacturing using PLA and ABS materials**
Erdaş M. U., YILDIZ B. S., Yildiz A. R.
MATERIALS TESTING, vol.66, no.5, pp.696-704, 2024 (SCI-Expanded)

XVIII. **Modified crayfish optimization algorithm for solving multiple engineering application problems**
Jia H., Zhou X., Zhang J., Abualigah L., YILDIZ A. R., Hussien A. G.
Artificial Intelligence Review, vol.57, no.5, 2024 (SCI-Expanded)

XIX. **A new enhanced mountain gazelle optimizer and artificial neural network for global optimization of mechanical design problems**
Mehta P., Sait S. M., YILDIZ B. S., Erdas M. U., Kopar M., YILDIZ A. R.
MATERIALS TESTING, vol.66, pp.544-552, 2024 (SCI-Expanded)

XX. **Experimental analysis of the effects of different production directions on the mechanical characteristics of ABS, PLA, and PETG materials produced by FDM**
Erdas M. U., YILDIZ B. S., YILDIZ A. R.
MATERIALS TESTING, vol.66, no.2, pp.198-206, 2024 (SCI-Expanded)

XXI. **Experimental Investigation on Mechanical properties of CF15PET and GF30PP materials produced**

with different raster angles
Kopar M., Erdas M. U., YILDIZ A. R.
MATERIALS TESTING, vol.66, no.6, pp.847-855, 2024 (SCI-Expanded)

XXII. **Optimization of truss structures using multi-objective cheetah optimizer**
Kumar S., Tejani G. G., Mehta P., Sait S. M., YILDIZ A. R., Mirjalili S.
Mechanics Based Design of Structures and Machines, 2024 (SCI-Expanded)

XXIII. **GBRUN: A Gradient Search-based Binary Runge Kutta Optimizer for Feature Selection**
Dou Z., Chu S., Zhuang Z., YILDIZ A. R., Pan J.
JOURNAL OF INTERNET TECHNOLOGY, vol.25, no.3, pp.341-353, 2024 (SCI-Expanded)

XXIV. **Starfish optimization algorithm (SFOA): a bio-inspired metaheuristic algorithm for global optimization compared with 100 optimizers**
Zhong C., Li G., Meng Z., Li H., YILDIZ A. R., Mirjalili S.
Neural Computing and Applications, 2024 (SCI-Expanded)

XXV. **Ship Rescue Optimization: A New Metaheuristic Algorithm for Solving Engineering Problems**
Chu S., Wang T. -., Yildiz A. R., Pan J.
JOURNAL OF INTERNET TECHNOLOGY, vol.25, no.1, pp.61-78, 2024 (SCI-Expanded)

XXVI. **Experimental investigation of mechanical properties of PLA, ABS, and PETG 3-d printing materials using fused deposition modeling technique**
Kopar M., YILDIZ A. R.
Materialpruefung/Materials Testing, vol.65, no.12, pp.1795-1804, 2023 (SCI-Expanded)

XXVII. **Optimum design of a composite drone component using slime mold algorithm**
Kopar M., Ylldlz A. R., Ylldlz B. S.
MATERIALS TESTING, vol.65, no.12, pp.1857-1864, 2023 (SCI-Expanded)

XXVIII. **A novel hybrid Fick's law algorithm-quasi oppositional-based learning algorithm for solving constrained mechanical design problems**
Mehta P., YILDIZ B. S., Sait S. M., YILDIZ A. R.
Materialpruefung/Materials Testing, vol.65, no.12, pp.1817-1825, 2023 (SCI-Expanded)

XXIX. **Optimum design of a seat bracket using artificial neural networks and dandelion optimization algorithm**
Erdaş M. U., Kopar M., YILDIZ B. S., YILDIZ A. R.
Materialpruefung/Materials Testing, vol.65, no.12, pp.1767-1775, 2023 (SCI-Expanded)

XXX. **Grid-based many-objective optimiser for aircraft conceptual design with multiple aircraft configurations**
Champasak P., Panagant N., Pholdee N., Bureerat S., Rajendran P., YILDIZ A. R.
ENGINEERING APPLICATIONS OF ARTIFICIAL INTELLIGENCE, vol.126, 2023 (SCI-Expanded)

XXXI. **Performance of scientific law-inspired optimization algorithms for constrained engineering applications**
Raja B. D., Patel, V. K., Yıldız A. R., Kotecha P.
ENGINEERING OPTIMIZATION, vol.55, no.10, pp.1798-1812, 2023 (SCI-Expanded)

XXXII. **A multi-strategy boosted prairie dog optimization algorithm for global optimization of heat exchangers**
GÜRSES D., Mehta P., Sait S. M., Kumar S., YILDIZ A. R.
MATERIALS TESTING, vol.65, no.9, pp.1396-1404, 2023 (SCI-Expanded)

XXXIII. **PINN-FORM: A new physics-informed neural network for reliability analysis with partial differential equation**
Meng Z., Qian Q., Xu M., Yu B., YILDIZ A. R., Mirjalili S.
COMPUTER METHODS IN APPLIED MECHANICS AND ENGINEERING, vol.414, 2023 (SCI-Expanded)

XXXIV. **Application of state-of-the-art multiobjective metaheuristic algorithms in reliability-based design optimization: a comparative study**
Meng Z., YILDIZ B. S., Li G., Zhong C., Mirjalili S., YILDIZ A. R.
Structural and Multidisciplinary Optimization, vol.66, no.8, 2023 (SCI-Expanded)

XXXV. **Cheetah optimization algorithm for optimum design of heat exchangers**
Sait S. M., Mehta P., GÜRSES D., YILDIZ A. R.
MATERIALS TESTING, vol.65, no.8, pp.1230-1236, 2023 (SCI-Expanded)

XXXVI. **Composite disc optimization using hunger games search optimization algorithm**
Kopar M., YILDIZ A. R.
MATERIALS TESTING, vol.65, no.8, pp.1222-1229, 2023 (SCI-Expanded)

XXXVII. **A Comparative Study of State-of-the-art Metaheuristics for Solving Many-objective Optimization Problems of Fixed Wing Unmanned Aerial Vehicle Conceptual Design**
Anosri S., Panagant N., Champasak P., Bureerat S., Thipyopas C., Kumar S., Pholdee N., YILDIZ B. S., YILDIZ A. R.
ARCHIVES OF COMPUTATIONAL METHODS IN ENGINEERING, vol.30, no.6, pp.3657-3671, 2023 (SCI-Expanded)

XXXVIII. **A novel hybrid arithmetic optimization algorithm for solving constrained optimization problems**
YILDIZ B. S., Kumar S., Panagant N., Mehta P., Sait S. M., YILDIZ A. R., Pholdee N., Bureerat S., Mirjalili S.
KNOWLEDGE-BASED SYSTEMS, vol.271, 2023 (SCI-Expanded)

XXXIX. **Simultaneous aerodynamic and structural optimisation of a low-speed horizontal-axis wind turbine blade using metaheuristic algorithms**
Sabangban N., Panagant N., Bureerat S., Wansasueb K., Kuma S., YILDIZ A. R., Pholdee N.
MATERIALS TESTING, vol.65, no.5, pp.699-714, 2023 (SCI-Expanded)

XL. **Experimental and numerical investigation of crashworthiness performance for optimal automobile structures using response surface methodology and oppositional based learning differential evolution algorithm**
Yildirim A., Demirci E., Karagöz S., Özcan S., YILDIZ A. R.
MATERIALS TESTING, vol.65, no.3, pp.346-363, 2023 (SCI-Expanded)

XLI. **Chaotic marine predators algorithm for global optimization of real-world engineering problems**
Kumar S., YILDIZ B. S., Mehta P., Panagant N., Sait S. M., Mirjalili S., YILDIZ A. R.
KNOWLEDGE-BASED SYSTEMS, vol.261, 2023 (SCI-Expanded)

XLII. **A novel generalized normal distribution optimizer with elite oppositional based learning for optimization of mechanical engineering problems**
Mehta P., Sultan Yldlz B. S., Pholdee N., Kumar S., Riza Yildiz A. R., Sait S. M., Bureerat S.
MATERIALS TESTING, vol.65, no.2, pp.210-223, 2023 (SCI-Expanded)

XLIII. **On the comparative performance of recent swarm intelligence based algorithms for optimization of real-life Sterling cycle operated refrigeration/liquefaction system**
Raja B. D., Patel V. K., Savsani V. J., YILDIZ A. R.
ARTIFICIAL INTELLIGENCE REVIEW, vol.56, no.2, pp.1297-1317, 2023 (SCI-Expanded)

XLIV. **Performance of scientific law-inspired optimization algorithms for constrained engineering applications**
Raja B. D., Patel V. K., Yıldız A. R., Kotecha P.
ENGINEERING OPTIMIZATION, vol.55, no.10, pp.1798-1812, 2023 (SCI-Expanded)

XLV. **Airfoil Shape Optimisation Using a Multi-Fidelity Surrogate-Assisted Metaheuristic with a New Multi-Objective Infill Sampling Technique**
Aye C. M., Wansaseub K., Kumar S., Tejani G. G., Bureerat S., YILDIZ A. R., Pholdee N.
CMES-COMPUTER MODELING IN ENGINEERING & SCIENCES, vol.137, pp.2111-2128, 2023 (SCI-Expanded)

XLVI. **A novel hybrid flow direction optimizer-dynamic oppositional based learning algorithm for solving complex constrained mechanical design problems**
YILDIZ B. S., Pholdee N., Mehta P., Sait S. M., Kumar S., Bureerat S., YILDIZ A. R.
MATERIALS TESTING, vol.65, no.1, pp.134-143, 2023 (SCI-Expanded)

XLVII. **An efficient two-stage water cycle algorithm for complex reliability-based design optimization problems**
Meng Z., Li H., Zeng R., Mirjalili S., YILDIZ A. R.
NEURAL COMPUTING & APPLICATIONS, vol.34, no.23, pp.20993-21013, 2022 (SCI-Expanded)

XLVIII. **A novel chaotic Runge Kutta optimization algorithm for solving constrained engineering problems**
YILDIZ B. S., Mehta P., Panagant N., Mirjalili S., YILDIZ A. R.

JOURNAL OF COMPUTATIONAL DESIGN AND ENGINEERING, vol.9, no.6, pp.2452-2465, 2022 (SCI-Expanded)

XLIX. **Mixed reliability-oriented topology optimization for thermo-mechanical structures with multi-source uncertainties**
Meng Z., Guo L., YILDIZ A. R., Wang X.
ENGINEERING WITH COMPUTERS, vol.38, no.6, pp.5489-5505, 2022 (SCI-Expanded)

L. **Efficient decoupling-assisted evolutionary/metaheuristic framework for expensive reliability-based design optimization problems**
Meng Z., YILDIZ A. R., Mirjalili S.
EXPERT SYSTEMS WITH APPLICATIONS, vol.205, 2022 (SCI-Expanded)

LI. **Minimization of release bearing load loss in a clutch system for high-speed rotations using the differential evolution algorithm**
Karaduman A., Lekesiz H., YILDIZ A. R.
MATERIALS TESTING, vol.64, no.11, pp.1627-1635, 2022 (SCI-Expanded)

LII. **Enhanced grasshopper optimization algorithm using elite opposition-based learning for solving real-world engineering problems**
YILDIZ B. S., Pholdee N., Bureerat S., YILDIZ A. R., Sait S. M.
ENGINEERING WITH COMPUTERS, vol.38, no.5, pp.4207-4219, 2022 (SCI-Expanded)

LIII. **Reptile search algorithm and kriging surrogate model for structural design optimization with natural frequency constraints**
YILDIZ B. S., Bureerat S., Panagant N., Mehta P., YILDIZ A. R.
MATERIALS TESTING, vol.64, no.10, pp.1504-1511, 2022 (SCI-Expanded)

LIV. **Aircraft conceptual design using metaheuristic-based reliability optimisation**
Champasak P., Panagant N., Pholdee N., Vio G. A., Bureerat S., YILDIZ B. S., Yildiz A. R.
AEROSPACE SCIENCE AND TECHNOLOGY, vol.129, 2022 (SCI-Expanded)

LV. **A new chaotic Levy flight distribution optimization algorithm for solving constrained engineering problems**
Yıldız B. S., Kumar S., Pholdee N., Bureerat S., Sait S. M., Yıldız A. R.
EXPERT SYSTEMS, vol.39, no.8, 2022 (SCI-Expanded)

LVI. **Artificial gorilla troops algorithm for the optimization of a fine plate heat exchanger**
Gurses D., Mehta P., Patel V., Sait S. M., YILDIZ A. R.
MATERIALS TESTING, vol.64, no.9, pp.1325-1331, 2022 (SCI-Expanded)

LVII. **A Nelder Mead-infused INFO algorithm for optimization of mechanical design problems**
Mehta P., YILDIZ B. S., Kumar S., Pholdee N., Sait S. M., Panagant N., Bureerat S., YILDIZ A. R.
MATERIALS TESTING, vol.64, no.8, pp.1172-1182, 2022 (SCI-Expanded)

LVIII. **African vultures optimization algorithm for optimization of shell and tube heat exchangers**
Gurses D., Mehta P., Sait S. M., YILDIZ A. R.
MATERIALS TESTING, vol.64, no.8, pp.1234-1241, 2022 (SCI-Expanded)

LIX. **A new hybrid artificial hummingbird-simulated annealing algorithm to solve constrained mechanical engineering problems**
YILDIZ B. S., Mehta P., Sait S. M., Panagant N., Kumar S., YILDIZ A. R.
MATERIALS TESTING, vol.64, no.7, pp.1043-1050, 2022 (SCI-Expanded)

LX. **A novel chaotic Henry gas solubility optimization algorithm for solving real-world engineering problems**
YILDIZ B. S., Pholdee N., Panagant N., Bureerat S., YILDIZ A. R., Sait S. M.
ENGINEERING WITH COMPUTERS, vol.38, no.SUPPL 2, pp.871-883, 2022 (SCI-Expanded)

LXI. **Manta ray foraging optimization algorithm and hybrid Taguchi salp swarm-Nelder-Mead algorithm for the structural design of engineering components**
Yıldız A. R., Mehta P.
MATERIALS TESTING, vol.64, no.5, pp.706-713, 2022 (SCI-Expanded)

LXII. **Gradient-based optimizer for economic optimization of engineering problems**
Mehta P., YILDIZ B. S., Sait S. M., YILDIZ A. R.

MATERIALS TESTING, vol.64, no.5, pp.690-696, 2022 (SCI-Expanded)

LXIII. **Hunger games search algorithm for global optimization of engineering design problems**
Mehta P., YILDIZ B. S., Sait S. M., YILDIZ A. R.
MATERIALS TESTING, vol.64, no.4, pp.524-532, 2022 (SCI-Expanded)

LXIV. **Hybridised differential evolution and equilibrium optimiser with learning parameters for mechanical and aircraft wing design**
Wansasueb K., Panmanee S., Panagant N., Pholdee N., Bureerat S., YILDIZ A. R.
KNOWLEDGE-BASED SYSTEMS, vol.239, 2022 (SCI-Expanded)

LXV. **Multi-objective optimization of build orientation considering support structure volume and build time in laser powder bed fusion**
Günaydln A. C., Ylldlz A. R., KAYA N.
MATERIALS TESTING, vol.64, no.3, pp.323-338, 2022 (SCI-Expanded)

LXVI. **A novel maximum volume sampling model for reliability analysis**
Meng Z., Pang Y., Wu Z., Ren S., YILDIZ A. R.
APPLIED MATHEMATICAL MODELLING, vol.102, pp.797-810, 2022 (SCI-Expanded)

LXVII. **Comparative Performance of Twelve Metaheuristics for Wind Farm Layout Optimisation**
Kunakote T., Sabangban N., Kumar S., Tejani G. G., Panagant N., Pholdee N., Bureerat S., YILDIZ A. R.
ARCHIVES OF COMPUTATIONAL METHODS IN ENGINEERING, vol.29, no.1, pp.717-730, 2022 (SCI-Expanded)

LXVIII. **Aircraft Control Parameter Estimation Using Self-Adaptive Teaching-Learning-Based Optimization with an Acceptance Probability**
Kanokmedhakul Y., Panagant N., Bureerat S., Pholdee N., YILDIZ A. R.
COMPUTATIONAL INTELLIGENCE AND NEUROSCIENCE, vol.2021, 2021 (SCI-Expanded)

LXIX. **Optimal design of aerospace structures using recent meta-heuristic algorithms**
Korkmaz F. F., Subran M., YILDIZ A. R.
MATERIALS TESTING, vol.63, no.11, pp.1025-1031, 2021 (SCI-Expanded)

LXX. **Comparison of metaheuristic optimization algorithms for solving constrained mechanical design optimization problems**
Gupta S., Abderazek H., YILDIZ B. S., YILDIZ A. R., Mirjalili S., Sait S. M.
EXPERT SYSTEMS WITH APPLICATIONS, vol.183, 2021 (SCI-Expanded)

LXXI. **A Comparative Study of Recent Multi-objective Metaheuristics for Solving Constrained Truss Optimisation Problems**
Panagant N., Pholdee N., Bureerat S., YILDIZ A. R., Mirjalili S.
ARCHIVES OF COMPUTATIONAL METHODS IN ENGINEERING, vol.28, no.5, pp.4031-4047, 2021 (SCI-Expanded)

LXXII. **Hybrid Taguchi-Levy flight dis-tribution optimization algorithm for solving real-world design optimization problems**
Yildiz M., Panagant N., Pholdee N., Bureerat S., Sait S. M., YILDIZ A. R.
MATERIALS TESTING, vol.63, no.6, pp.547-551, 2021 (SCI-Expanded)

LXXIII. **Optimization of constrained mechanical design problems using the equilibrium optimization algorithm**
Abderazek H., YILDIZ A. R., Sait S. M.
MATERIALS TESTING, vol.63, no.6, pp.552-559, 2021 (SCI-Expanded)

LXXIV. **A novel hybrid water wave optimization algorithm for solving complex constrained engineering problems**
Gurses D., Pholdee N., Bureerat S., Sait S. M., YILDIZ A. R.
MATERIALS TESTING, vol.63, no.6, pp.560-564, 2021 (SCI-Expanded)

LXXV. **Qualitative and Quantitative Performance Comparison of Recent Optimization Algorithms for Economic Optimization of the Heat Exchangers**
Patel V., Raja B., Savsani V., YILDIZ A. R.
ARCHIVES OF COMPUTATIONAL METHODS IN ENGINEERING, vol.28, no.4, pp.2881-2896, 2021 (SCI-Expanded)

LXXVI. **Robust design of a robot gripper mechanism using new hybrid grasshopper optimization algorithm**
YILDIZ B. S., Pholdee N., Bureerat S., YILDIZ A. R., Sait S. M.

EXPERT SYSTEMS, vol.38, no.3, 2021 (SCI-Expanded)

LXXVII. **A Comparative Study of Metaheuristic Algorithms for Reliability-Based Design Optimization Problems**
Meng Z., Li G., Wang X., Sait S. M., YILDIZ A. R.
ARCHIVES OF COMPUTATIONAL METHODS IN ENGINEERING, vol.28, no.3, pp.1853-1869, 2021 (SCI-Expanded)

LXXVIII. **Multiobjective crashworthiness optimization of graphene type multi-cell tubes under various loading conditions**
Albak E. İ., Solmaz E., Yıldız A. R., Öztürk F.
Journal of the Brazilian Society of Mechanical Sciences and Engineering, vol.43, no.5, 2021 (SCI-Expanded)

LXXIX. **Comparision of the political optimization algorithm, the Archimedes optimization algorithm and the Levy flight algorithm for design optimization in industry**
Yildiz B. S., Pholdee N., Bureerat S., Erdas M. U., YILDIZ A. R., Sait S. M.
MATERIALS TESTING, vol.63, no.4, pp.356-359, 2021 (SCI-Expanded)

LXXX. **Conceptual comparison of the ecogeography-based algorithm, equilibrium algorithm, marine predators algorithm and slime mold algorithm for optimal product design**
YILDIZ B. S., Patel V., Pholdee N., Sait S. M., Bureerat S., YILDIZ A. R.
MATERIALS TESTING, vol.63, no.4, pp.336-340, 2021 (SCI-Expanded)

LXXXI. **EMoSOA: a new evolutionary multi-objective seagull optimization algorithm for global optimization**
Dhiman G., Singh K. K., Slowik A., Chang V., YILDIZ A. R., Kaur A., Garg M.
INTERNATIONAL JOURNAL OF MACHINE LEARNING AND CYBERNETICS, vol.12, no.2, pp.571-596, 2021 (SCI-Expanded)

LXXXII. **A new Hybrid Taguchi-salp swarm optimization algorithm for the robust design of real-world engineering problems**
YILDIZ A. R., Erdas M. U.
MATERIALS TESTING, vol.63, no.2, pp.157-162, 2021 (SCI-Expanded)

LXXXIII. **Comparison of the arithmetic optimization algorithm, the slime mold optimization algorithm, the marine predators algorithm, the salp swarm algorithm for real-world engineering applications**
Gures D., Bureerat S., Sait S. M., YILDIZ A. R.
MATERIALS TESTING, vol.63, no.5, pp.448-452, 2021 (SCI-Expanded)

LXXXIV. **Comparative investigation of the moth-flame algorithm and whale optimization algorithm for optimal spur gear design**
Abderazek H., Hamza F., YILDIZ A. R., Sait S. M.
MATERIALS TESTING, vol.63, no.3, pp.266-271, 2021 (SCI-Expanded)

LXXXV. **Hybrid spotted hyena-Nelder-Mead optimization algorithm for selection of optimal machining parameters in grinding operations**
Phnldee N., Patel V. K., Sait S. M., Bureerat S., Tildiz A. R.
MATERIALS TESTING, vol.63, no.3, pp.293-298, 2021 (SCI-Expanded)

LXXXVI. **A comparative analysis of the queuing search algorithm, the sine-cosine algorithm, the ant lion algorithm to determine the optimal weight design problem of a spur gear drive system**
Abderazek H., Hamza F., YILDIZ A. R., Gao L., Sait S. M.
MATERIALS TESTING, vol.63, no.5, pp.442-447, 2021 (SCI-Expanded)

LXXXVII. **A New Arithmetic Optimization Algorithm for Solving Real-World Multiobjective CEC-2021 Constrained Optimization Problems: Diversity Analysis and Validations**
Premkumar M., Jangir P., Kumar B. S., Sowmya R., Alhelou H. H., Abualigah L., YILDIZ A. R., Mirjalili S.
IEEE ACCESS, vol.9, pp.84263-84295, 2021 (SCI-Expanded)

LXXXVIII. **A novel hybrid marine predators-Nelder-Mead optimization algorithm for the optimal design of engineering problems**
Panagant N., Yildiz M., Pholdee N., YILDIZ A. R., Bureerat S., Sait S. M.
MATERIALS TESTING, vol.63, no.5, pp.453-457, 2021 (SCI-Expanded)

LXXXIX. **A Comparative Study of Recent Non-traditional Methods for Mechanical Design Optimization**
YILDIZ A. R., Abderazek H., Mirjalili S.

ARCHIVES OF COMPUTATIONAL METHODS IN ENGINEERING, vol.27, no.4, pp.1031-1048, 2020 (SCI-Expanded)

XC. **Sine-cosine optimization algorithm for the conceptual design of automobile components**
Yildiz B. S., Pholdee N., Bureerat S., YILDIZ A. R., Sait S. M.
MATERIALS TESTING, vol.62, no.7, pp.744-748, 2020 (SCI-Expanded)

XCI. **Optimum design of automobile components using lattice structures for additive manufacturing**
Aslan B., YILDIZ A. R.
MATERIALS TESTING, vol.62, no.6, pp.633-639, 2020 (SCI-Expanded)

XCII. **Seagull optimization algorithm for solving real-world design optimization problems**
Panagant N., Pholdee N., Bureerat S., YILDIZ A. R., Sait S. M.
MATERIALS TESTING, vol.62, no.6, pp.640-644, 2020 (SCI-Expanded)

XCIII. **The equilibrium optimization algorithm and the response surface based metamodel for optimal structural design of vehicle components**
Ozkaya H., Yildiz M., YILDIZ A. R., Bureerat S., Yildiz B. S., Sait S. M.
MATERIALS TESTING, vol.62, no.5, pp.492-496, 2020 (SCI-Expanded)

XCIV. **Self-adaptive many-objective meta-heuristic based on decomposition for many-objective conceptual design of a fixed wing unmanned aerial vehicle**
Champasak P., Panagant N., Pholdee N., Bureerat S., YILDIZ A. R.
AEROSPACE SCIENCE AND TECHNOLOGY, vol.100, 2020 (SCI-Expanded)

XCV. **Light-weight design of automobile suspension components using topology and shape optimization techniques**
KARADERE G., Duzcan Y., YILDIZ A. R.
MATERIALS TESTING, vol.62, no.5, pp.454-458, 2020 (SCI-Expanded)

XCVI. **Butterfly optimization algorithm for optimum shape design of automobile suspension components**
Yildiz B. S., Yıldız A. R., Albak E. İ., Abderazek H., Sait S. M., Bureerat S.
MATERIALS TESTING, vol.62, no.4, pp.365-370, 2020 (SCI-Expanded)

XCVII. **Optimum design of an air suspension seat using recent structural optimization techniques**
Balkan A., YILDIZ A. R., Sait S. M., Bureerat S.
MATERIALS TESTING, vol.62, no.3, pp.242-250, 2020 (SCI-Expanded)

XCVIII. **Comparison of recent optimization algorithms for design optimization of a cam-follower mechanism**
Abderazek H., YILDIZ A. R., Mirjalili S.
KNOWLEDGE-BASED SYSTEMS, vol.191, 2020 (SCI-Expanded)

XCIX. **The Henry gas solubility optimization algorithm for optimum structural design of automobile brake components**
Yildiz B. S., YILDIZ A. R., Pholdee N., Bureerat S., Sait S. M., Patel V.
MATERIALS TESTING, vol.62, no.3, pp.261-264, 2020 (SCI-Expanded)

C. **A novel hybrid Harris hawks-simulated annealing algorithm and RBF-based metamodel for design optimization of highway guardrails**
Kurtulus D., YILDIZ A. R., Sait S. M., Bureerat S., Kaen K.
MATERIALS TESTING, vol.62, no.3, pp.251-260, 2020 (SCI-Expanded)

CI. **A novel hybrid whale-Nelder-Mead algorithm for optimization of design and manufacturing problems**
YILDIZ A. R.
INTERNATIONAL JOURNAL OF ADVANCED MANUFACTURING TECHNOLOGY, vol.105, no.12, pp.5091-5104, 2019 (SCI-Expanded)

CII. **A new hybrid Harris hawks-Nelder-Mead optimization algorithm for solving design and manufacturing problems**
YILDIZ A. R., Yildiz B. S., Sait S. M., Bureerat S., Pholdee N.
MATERIALS TESTING, vol.61, no.8, pp.735-743, 2019 (SCI-Expanded)

CIII. **The Harris hawks optimization algorithm, salp swarm algorithm, grasshopper optimization algorithm and dragonfly algorithm for structural design optimization of vehicle components**
Yildiz B. S., YILDIZ A. R.

MATERIALS TESTING, vol.61, no.8, pp.744-748, 2019 (SCI-Expanded)

CIV. **The Harris hawks, grasshopper and multi-verse optimization algorithms for the selection of optimal machining parameters in manufacturing operations**
YILDIZ A. R., Yildiz B. S., Sait S. M., Li X.
MATERIALS TESTING, vol.61, no.8, pp.725-733, 2019 (SCI-Expanded)

CV. **A new hybrid approach for reliability-based design optimization of structural components**
Demirci E., YILDIZ A. R.
MATERIALS TESTING, vol.61, no.2, pp.111-119, 2019 (SCI-Expanded)

CVI. **Topography and topology optimization of diesel engine components for light-weight design in the automotive industry**
YILDIZ A. R., Kilicarpa U. A., Demirci E., Dogan M.
MATERIALS TESTING, vol.61, no.1, pp.27-34, 2019 (SCI-Expanded)

CVII. **Automated design of aircraft fuselage stiffeners using multiobjective evolutionary optimisation**
Sarangkum R., Wansasueb K., Panagant N., Pholdee N., Bureerat S., Yildiz A. R., Sait S. M.
INTERNATIONAL JOURNAL OF VEHICLE DESIGN, vol.80, no.2-4, pp.162-175, 2019 (SCI-Expanded)

CVIII. **Experimental and numerical fatigue-based design optimisation of clutch diaphragm spring in the automotive industry**
Karaduman A., Yildiz B. S., YILDIZ A. R.
INTERNATIONAL JOURNAL OF VEHICLE DESIGN, vol.80, no.2-4, pp.330-345, 2019 (SCI-Expanded)

CIX. **Mechanical engineering design optimisation using novel adaptive differential evolution algorithm**
Abderazek H., YILDIZ A. R., Sait S. M.
INTERNATIONAL JOURNAL OF VEHICLE DESIGN, vol.80, no.2-4, pp.285-329, 2019 (SCI-Expanded)

CX. **Multi-surrogate-assisted metaheuristics for crashworthiness optimisation**
Aye C. M., Pholdee N., Yildiz A. R., Bureerat S., Sait S. M.
INTERNATIONAL JOURNAL OF VEHICLE DESIGN, vol.80, no.2-4, pp.223-240, 2019 (SCI-Expanded)

CXI. **Comparison of recent algorithms for many-objective optimisation of an automotive floor-frame**
Panagant N., Pholdee N., Wansasueb K., Bureerat S., Yildiz A. R., Sait S. M.
INTERNATIONAL JOURNAL OF VEHICLE DESIGN, vol.80, no.2-4, pp.176-208, 2019 (SCI-Expanded)

CXII. **Optimal design of planetary gear train for automotive transmissions using advanced meta-heuristics**
Abderazek H., Sait S. M., YILDIZ A. R.
INTERNATIONAL JOURNAL OF VEHICLE DESIGN, vol.80, no.2-4, pp.121-136, 2019 (SCI-Expanded)

CXIII. **Optimum design of cam-roller follower mechanism using a new evolutionary algorithm**
Hamza F., Abderazek H., Lakhdar S., Ferhat D., YILDIZ A. R.
INTERNATIONAL JOURNAL OF ADVANCED MANUFACTURING TECHNOLOGY, vol.99, no.5-8, pp.1267-1282, 2018 (SCI-Expanded)

CXIV. **An investigation of the crash performance of magnesium, aluminum and advanced high strength steels and different cross-sections for vehicle thin walled energy absorbers**
Demirci E., Yıldız A. R.
MATERIALS TESTING, vol.60, no.7-8, pp.661-668, 2018 (SCI-Expanded)

CXV. **An experimental and numerical investigation of the effects of geometry and spot welds on the crashworthiness of vehicle thin-walled structures**
Demirci E., YILDIZ A. R.
MATERIALS TESTING, vol.60, no.6, pp.553-561, 2018 (SCI-Expanded)

CXVI. **Lightweight design of an automobile hinge component using glass fiber polyamide composites**
Guler T., Demirci E., YILDIZ A. R., Yavuz U.
MATERIALS TESTING, vol.60, no.3, pp.306-310, 2018 (SCI-Expanded)

CXVII. **Comparison of grey wolf, whale, water cycle, ant lion and sine-cosine algorithms for the optimization of a vehicle engine connecting rod**
Yildiz B. S., YILDIZ A. R.
MATERIALS TESTING, vol.60, no.3, pp.311-315, 2018 (SCI-Expanded)

CXVIII. **Moth-flame optimization algorithm to determine optimal machining parameters in manufacturing**

processes
Yildiz B. S., Yildiz A. R.
MATERIALS TESTING, vol.59, no.5, pp.425-429, 2017 (SCI-Expanded)

CXIX. **Hybrid real-code population-based incremental learning and differential evolution for many-objective optimisation of an automotive floor-frame**
Pholdee N., Bureerat S., Yildiz A. R.
INTERNATIONAL JOURNAL OF VEHICLE DESIGN, vol.73, no.1-3, pp.20-53, 2017 (SCI-Expanded)

CXX. **Preface**
Yildiz A. R.
INTERNATIONAL JOURNAL OF VEHICLE DESIGN, vol.73, no.1-3, pp.1-2, 2017 (SCI-Expanded)

CXXI. **A comparison of recent metaheuristic algorithms for crashworthiness optimisation of vehicle thin-walled tubes considering sheet metal forming effects**
Karagoz S., Yildiz A. R.
INTERNATIONAL JOURNAL OF VEHICLE DESIGN, vol.73, no.1-3, pp.179-188, 2017 (SCI-Expanded)

CXXII. **A Comparative Study of Non-traditional Methods for Vehicle Crashworthiness and NVH Optimization**
Kiani M., Yildiz A. R.
ARCHIVES OF COMPUTATIONAL METHODS IN ENGINEERING, vol.23, no.4, pp.723-734, 2016 (SCI-Expanded)

CXXIII. **Structural design of vehicle components using gravitational search and charged system search algorithms**
Yildiz B. S., Lekesiz H., Yildiz A. R.
MATERIALS TESTING, vol.58, no.1, pp.79-81, 2016 (SCI-Expanded)

CXXIV. **Optimization of thin-wall structures using hybrid gravitational search and Nelder-Mead algorithm**
Yildiz A. R., Kurtulus E., Demirci E., Yildiz B. S., Karagoz S.
MATERIALS TESTING, vol.58, no.1, pp.75-78, 2016 (SCI-Expanded)

CXXV. **Optimization of multi-pass turning operations using hybrid teaching learning-based approach**
Yildiz A. R.
INTERNATIONAL JOURNAL OF ADVANCED MANUFACTURING TECHNOLOGY, vol.66, no.9-12, pp.1319-1326, 2013 (SCI-Expanded)

CXXVI. **A new hybrid artificial bee colony algorithm for robust optimal design and manufacturing**
Yildiz A. R.
APPLIED SOFT COMPUTING, vol.13, no.5, pp.2906-2912, 2013 (SCI-Expanded)

CXXVII. **Hybrid Taguchi-differential evolution algorithm for optimization of multi-pass turning operations**
Yildiz A. R.
APPLIED SOFT COMPUTING, vol.13, no.3, pp.1433-1439, 2013 (SCI-Expanded)

CXXVIII. **A new hybrid differential evolution algorithm for the selection of optimal machining parameters in milling operations**
Yildiz A. R.
APPLIED SOFT COMPUTING, vol.13, no.3, pp.1561-1566, 2013 (SCI-Expanded)

CXXIX. **Cuckoo search algorithm for the selection of optimal machining parameters in milling operations**
Yildiz A. R.
INTERNATIONAL JOURNAL OF ADVANCED MANUFACTURING TECHNOLOGY, vol.64, no.1-4, pp.55-61, 2013 (SCI-Expanded)

CXXX. **Comparison of evolutionary-based optimization algorithms for structural design optimization**
Yildiz A. R.
ENGINEERING APPLICATIONS OF ARTIFICIAL INTELLIGENCE, vol.26, no.1, pp.327-333, 2013 (SCI-Expanded)

CXXXI. **Optimization of cutting parameters in multi-pass turning using artificial bee colony-based approach**
Yildiz A. R.
INFORMATION SCIENCES, vol.220, pp.399-407, 2013 (SCI-Expanded)

CXXXII. **A comparative study of population-based optimization algorithms for turning operations**
Yildiz A. R.
INFORMATION SCIENCES, vol.210, pp.81-88, 2012 (SCI-Expanded)

CXXXIII. **Multi-objective optimization of vehicle crashworthiness using a new particle swarm based approach**
Yildiz A. R., Solanki K. N.
INTERNATIONAL JOURNAL OF ADVANCED MANUFACTURING TECHNOLOGY, vol.59, no.1-4, pp.367-376, 2012 (SCI-Expanded)

CXXXIV. **Structural Design Optimization of Vehicle Components Using Cuckoo Search Algorithm**
Durgun I., Yildiz A. R.
MATERIALS TESTING, vol.54, no.3, pp.185-188, 2012 (SCI-Expanded)

CXXXV. **Structural Damage Detection Using Modal Parameters and Particle Swarm Optimization**
GÖKDAĞ H., YILDIZ A. R.
MATERIALS TESTING, vol.54, no.6, pp.416-420, 2012 (SCI-Expanded)

CXXXVI. **A new hybrid particle swarm optimization approach for structural design optimization in the automotive industry**
Yildiz A. R.
PROCEEDINGS OF THE INSTITUTION OF MECHANICAL ENGINEERS PART D-JOURNAL OF AUTOMOBILE ENGINEERING, vol.226, no.D10, pp.1340-1351, 2012 (SCI-Expanded)

CXXXVII. **Topology Synthesis of Multicomponent Structural Assemblies in Continuum Domains**
Yildiz A. R., Saitou K.
JOURNAL OF MECHANICAL DESIGN, vol.133, no.1, 2011 (SCI-Expanded)

CXXXVIII. **Hybrid Taguchi-Harmony Search Approach for Shape Optimization**
YILDIZ A. R., ÖZTÜRK F.
RECENT ADVANCES IN HARMONY SEARCH ALGORITHM, vol.270, pp.89-98, 2010 (SCI-Expanded)

CXXXIX. **A new design optimization framework based on immune algorithm and Taguchi's method**
Yildiz A. R.
COMPUTERS IN INDUSTRY, vol.60, no.8, pp.613-620, 2009 (SCI-Expanded)

CXL. **A novel hybrid immune algorithm for global optimization in design and manufacturing**
YILDIZ A. R.
ROBOTICS AND COMPUTER-INTEGRATED MANUFACTURING, vol.25, no.2, pp.261-270, 2009 (SCI-Expanded)

CXLI. **An effective hybrid immune-hill climbing optimization approach for solving design and manufacturing optimization problems in industry**
Yildiz A. R.
JOURNAL OF MATERIALS PROCESSING TECHNOLOGY, vol.209, no.6, pp.2773-2780, 2009 (SCI-Expanded)

CXLII. **Hybrid immune-simulated annealing algorithm for optimal design and manufacturing**
Yildiz A. R.
INTERNATIONAL JOURNAL OF MATERIALS & PRODUCT TECHNOLOGY, vol.34, no.3, pp.217-226, 2009 (SCI-Expanded)

CXLIII. **A novel particle swarm optimization approach for product design and manufacturing**
Yildiz A. R.
INTERNATIONAL JOURNAL OF ADVANCED MANUFACTURING TECHNOLOGY, vol.40, no.5-6, pp.617-628, 2009 (SCI-Expanded)

CXLIV. **Optimal structure design of vehicle components using topology design and optimization**
Yildiz A. R.
MATERIALPRUFUNG, vol.50, no.4, pp.224-228, 2008 (SCI-Expanded)

CXLV. **Hybrid Taguchi-Harmony Search Algorithm for Solving Engineering Optimization Problems**
Yildiz A. R.
INTERNATIONAL JOURNAL OF INDUSTRIAL ENGINEERING-THEORY APPLICATIONS AND PRACTICE, vol.15, no.3, pp.286-293, 2008 (SCI-Expanded)

CXLVI. **Hybrid multi-objective shape design optimization using Taguchi's method and genetic algorithm**
Yildiz A. R., Ozturk N., KAYA N., ÖZTÜRK F.
STRUCTURAL AND MULTIDISCIPLINARY OPTIMIZATION, vol.34, no.4, pp.317-332, 2007 (SCI-Expanded)

CXLVII. **Hybrid enhanced genetic algorithm to select optimal machining parameters in turning operation**
Yildiz A. R., Ozturk F.

PROCEEDINGS OF THE INSTITUTION OF MECHANICAL ENGINEERS PART B-JOURNAL OF ENGINEERING MANUFACTURE, vol.220, no.12, pp.2041-2053, 2006 (SCI-Expanded)

CXLVIII. **Hybrid approach for genetic algorithm and Taguchi's method based design optimization in the automotive industry**
Karen I., Yildiz A. R., Kaya N., Oeztuerk N., Oeztuerk F.
INTERNATIONAL JOURNAL OF PRODUCTION RESEARCH, vol.44, no.22, pp.4897-4914, 2006 (SCI-Expanded)

CXLIX. **Neuro-genetic design optimization framework to support the integrated robust design optimization process in CE**
Oeztuerk N., Yildiz A. R., Kaya N., Oeztuerk F.
CONCURRENT ENGINEERING-RESEARCH AND APPLICATIONS, vol.14, no.1, pp.5-16, 2006 (SCI-Expanded)

CL. **Optimal design of vehicle components using topology design and optimisation**
Yildiz A. R., Kaya N., Ozturk F.
INTERNATIONAL JOURNAL OF VEHICLE DESIGN, vol.34, no.4, pp.387-398, 2004 (SCI-Expanded)

CLI. **Integrated optimal topology design and shape optimization using neural networks**
Yildiz A. R., Ozturk N., Kaya N., Ozturk F.
STRUCTURAL AND MULTIDISCIPLINARY OPTIMIZATION, vol.25, no.4, pp.251-260, 2003 (SCI-Expanded)

Articles Published in Other Journals

I. **OPTIMUM DESIGN OF THERMO-PLUNGER SUPPORT IN COMMERCIAL VEHICLES BY USING STRUCTURAL DESIGN AND FINITE ELEMENT METHODS**
Kilicarpa U. A., YILDIZ B. S., Yildiz A. R.
Uludağ Üniversitesi Mühendislik Fakültesi Dergisi, vol.27, no.3, pp.1137-1146, 2022 (Peer-Reviewed Journal)

II. **A small fixed-wing UAV system identification using metaheuristics**
Nonut A., Kanokmedhakul Y., Bureerat S., Kumar S., Tejani G. G., Artrit P., YILDIZ A. R., Pholdee N.
COGENT ENGINEERING, vol.9, no.1, 2022 (ESCI)

III. **Thermodynamic optimization of Stirling heat engine with methane gas using finite speed thermodynamic model**
Mansuriya K., Raja B. D., YILDIZ A. R., Mudgal A., Patel V. K.
HEAT TRANSFER, vol.50, no.8, pp.8155-8172, 2021 (ESCI)

IV. **Nature-inspired Algorithms for Real-life Complex Engineering Problems**
Dhiman G., YILDIZ A. R.
RECENT ADVANCES IN ELECTRICAL & ELECTRONIC ENGINEERING, vol.14, no.3, pp.251, 2021 (ESCI)

V. **Optimum Design of Vehicle Components Using Structural Optimization Techniques**
Yildiz A. R.
JOURNAL OF POLYTECHNIC-POLITEKNIK DERGISI, vol.20, no.2, pp.319-323, 2017 (ESCI)

Supported Projects

Yıldız A. R., TUBITAK Project, YAPAY ZEKÂ YÖNTEMLERİ İLE ÖKZETİK ENERJİ SÖNÜMLEYİCİLERİN GELİŞTİRİLMESİ VE PROTOTİP ÜRETİMİ, 2023 - 2025

Yıldız A. R., TUBITAK Project, YAPAY ZEKÂ YÖNTEMLERİ İLE DEĞİŞKEN DEVİR ALTINDA YÜKSEK PERFORMANSLI VE KATILIKLI DEBRİYAJ DİYAFRAMI GELİŞTİRİLMESİ VE PROTOTİP ÜRETİMİ, 2017 - 2019

Yıldız A. R., TUBITAK Project, YENİ FLUENCE BAGAJ MEKANİZMASI KOLUNUN SAC MALZEMEDEN PLASTİK MALZEMEYE DÖNÜŞTÜRÜLEREK YENİDEN TASARIMI, 2015 - 2018

Yıldız A. R., TUBITAK Project, TÜRKİYE` DE İLK DEFA OVALAMA PROSESİ İLE BORU KESİTLİ OLARAK ÜRETİLECEK BİR DİZEL MOTOR KAM MİLİ PARÇASININ TASARIMI VE YERLİLEŞTİRİLMESİ, 2014 - 2018

Yıldız A. R., TUBITAK Project, Çift kütleli volan geliştirilmesi, 2016 - 2017

Yıldız A. R., Industrial Thesis Project, Taşıt Kaput Menteşelerinin Optimum Tasarımı, 2013 - 2014

Yıldız A. R., TUBITAK Project, Yapısal Optimizasyon Yapay Zeka ve Evrimsel Algoritma Yaklaşımı İle Tasarım, 2005 - 2009
Yıldız A. R., Project Supported by Higher Education Institutions, Taşıt Elemanlarının Topoloji Tasarım Yaklaşımı İle Optimum Tasarımı, 2004 - 2006

Patent

Yıldız A. R., Bir optimizasyon yöntemi., Patent, CHAPTER F Mechanical engineering; Lighting; Heating; Weaponry; Destroyed Materials, The Invention Registration Number: 2022/008694 , Standard Registration, 2024
Yıldız A. R., Korkmaz F. F., Kafes yapıların boyut optimizasyonu için bir üretim sistemi, Utility Model, CHAPTER A Human Needs, The Invention Registration Number: 2022/010853 , Standard Registration, 2024
Yıldız A. R., Subran M., Bir kafes yapısı, Patent, CHAPTER A Human Needs, The Invention Recourse Number: 2021/021100 , Standard Registration, 2021
Yıldız A. R., Pala Y., Yıldırım A., Özcan Ş., DÖRT KOL KAPUT MENTEŞE ALGORITMASI, Patent, CHAPTER B Implementation of Operations; Transport, The Invention Registration Number: 2015/08800 , Standard Registration, 2018

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