

ABDURRAHİM TOKTAŞ

PROF.

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International Researcher IDs

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Biography

Abdurrahim Toktaş received his bachelor's degree in Electrical and Electronics Engineering (English) from Gaziantep University in 2002. He completed his master's and doctorate degrees at Mersin University, Department of Electrical and Electronics Engineering in 2010 and 2014, respectively. He worked at Türk Telekom Information Networks and Transmission units between 2003-2010 and Mersin University Department of Information Processing between 2010-2015. After completing his PhD education, he worked as the founding head of the department and then as a faculty member in the Department of Electrical and Electronics Engineering at Karamanoğlu Mehmetbey University between 2015-2022. Since 2022, Abdurrahim Toktaş has been working as the founding head of the department of Artificial Intelligence and Data Engineering at Ankara University with the title of professor. His main research interests include artificial intelligence, machine learning, optimization, chaotic systems, computer vision, image retrieval, image encryption, and electromagnetic and antenna applications of artificial intelligence. So far, he has supervised 6 graduate theses and has 8 patents, 11 projects, 6 books and book chapters, 66 SCI articles, 14 international articles and 42 proceedings. Abdurrahim Toktaş has managed to enter the list of top 2% researchers in the world between 2021-2024.

Learning Knowledge

Doctorate 2010 - 2014	Mersin University, Institute Of Science, Electrical and Electronics Engineering, Turkey
Postgraduate 2007 - 2010	Mersin University, Institute Of Science, Electrical and Electronics Engineering, Turkey
Undergraduate 1997 - 2002	Gaziantep University, Faculty Of Engineering, Department Of Electrical And Electronics Engineering (English), Turkey

Foreign Languages

English, C1 Advanced

Dissertations

Doctorate, LTE, WiMAX ve WLAN iletişim sistemleri için MIMO anten tasarımları ve prototiplerinin gerçekleştirilmesi, Mersin University, Institute Of Science, Elektrik-Elektronik Mühendisliği, 2014

Postgraduate, Farksal gelişim algoritması kullanarak h şekilli mikroşerit antenlerin rezonans frekansının hesaplanması, Mersin University, Institute Of Science, Elektrik-Elektronik Mühendisliği, 2009

Academic Titles / Tasks

Professor 2023 - Continues	Ankara University, Mühendislik Fakültesi, Yapay Zeka ve Veri Mühendisliği Bölümü
Associate Professor 2022 - 2023	Ankara University, Mühendislik Fakültesi, Yapay Zeka ve Veri Mühendisliği Bölümü
Associate Professor 2018 - 2022	Karamanoglu Mehmetbey University, Faculty Of Engineering, Department Of Electrical And Electronics Engineering
Assistant Professor 2015 - 2018	Karamanoglu Mehmetbey University, Faculty Of Engineering, Department Of Electrical And Electronics Engineering

Supported Projects

1. Toktaş A., Yıldız S. A., Üstün D., Akınay Y., TUBITAK Project, Multilayer Electromagnetic Interference Shielding (MEIS) Fiber Reinforced Hybrid Composite Panel, 2022 - 2024
2. Toktaş A., Üstün D., Project Supported by Higher Education Institutions, Designin of multilayer radar absorbing material using multi-objective optimization algorithms and material measurements, 2020 - 2021
3. Toktaş A., Project Supported by Higher Education Institutions, New generation milimeter wave microstrip antenna designing and prototyping, 2018 - 2021
4. Toktaş A., Project Supported by Higher Education Institutions, Reconfigurable microstrip multiple input multiple output - MIMO antenna designing, prototyping and measuring, 2018 - 2020
5. Toktaş A., Kayabaşı A., Sabancı K., Project Supported by Higher Education Institutions, Ultra-wideband patch antenna designing, prototyping and measuring, 2017 - 2019
6. Toktaş A., Yiğit E., Sabancı K., Project Supported by Higher Education Institutions, Model Silo Üzerinde Ölçeklendirme Yöntemi İle Radar Seviye Ölçüm Sistemi Geliştirilmesi, 2017 - 2018
7. Toktaş A., Sabancı K., Kayabaşı A., Project Supported by Higher Education Institutions, Embedded system controlled weather station design and meteorological data analysis with artificial intelligence techniques, 2017 - 2018
8. Toktaş A., Project Supported by Higher Education Institutions, Reconfigurable microstrip antenna designing, and prototyping, 2015 - 2016
9. Toktaş A., Işiker H., Yiğit E., TUBITAK Project, Hastane dışında anne karnındaki bebeğin kalp atış seyrini ölçen ve kablosuz olarak ileten NST cihaz tasarımı, 2014 - 2015
10. Toktaş A., Işiker H., Yiğit E., TUBITAK Project, Tahıl silolarında radar yardımı ile üç boyutlu seviye ölçümü, 2014 - 2015
11. Toktaş A., Akdağlı A., Project Supported by Higher Education Institutions, Designing and fabricating of MIMO antenna for LTE communication systems, 2014 - 2015

Published journal articles indexed by SCI, SSCI, and AHCI

- 1. Multi-image encryption scheme using cross-plane coupling permutation and plain-by-plain wave diffusion**
Lai Q., Wang H., Erkan U., TOKTAŞ A.
Physica Scripta, vol.99, no.11, 2024 (SCI-Expanded)
- 2. Complex dynamics of a new multiscroll memristive neural network**
Chen Y., Lai Q., Zhang Y., Erkan U., TOKTAŞ A.
Nonlinear Dynamics, vol.112, no.10, pp.8603-8616, 2024 (SCI-Expanded)
- 3. 2D hyperchaotic Styblinski-Tang map for image encryption and its hardware implementation**
Ustun D., Erkan U., TOKTAŞ A., Lai Q., Yang L.
Multimedia Tools and Applications, vol.83, no.12, pp.34759-34772, 2024 (SCI-Expanded)
- 4. Securing Dual-Channel Audio Communication With a 2-D Infinite Collapse and Logistic Map**
Wu R., Gao S., Iu H. H., Zhou S., Erkan U., TOKTAŞ A., Tang X.
IEEE Internet of Things Journal, vol.11, no.6, pp.10214-10223, 2024 (SCI-Expanded)
- 5. PSO-based image encryption scheme using modular integrated logistic exponential map**
Kocak O., ERKAN U., TOKTAŞ A., Gao S.
EXPERT SYSTEMS WITH APPLICATIONS, vol.237, 2024 (SCI-Expanded)
- 6. Index-based simultaneous permutation-diffusion in image encryption using two-dimensional price map**
Lai Q., Zhang H., Ustun D., Erkan U., TOKTAŞ A.
Multimedia Tools and Applications, vol.83, no.10, pp.28827-28847, 2024 (SCI-Expanded)
- 7. A robust bit-level image encryption based on Bessel map**
TOKTAŞ A., Erkan U., Gao S., Pak C.
APPLIED MATHEMATICS AND COMPUTATION, vol.462, 2024 (SCI-Expanded)
- 8. MLMQ-IR: Multi-label multi-query image retrieval based on the variance of Hamming distance**
Akbaçak E., TOKTAŞ A., Erkan U., Gao S.
Knowledge-Based Systems, vol.283, 2024 (SCI-Expanded)
- 9. Multiobjective Design of 2D Hyperchaotic System Using Leader Pareto Grey Wolf Optimizer**
TOKTAŞ A., ERKAN U., Ustun D., Lai Q.
IEEE TRANSACTIONS ON SYSTEMS MAN CYBERNETICS-SYSTEMS, vol.54, no.9, pp.5237-5247, 2024 (SCI-Expanded)
- 10. MSLID-TCN: multi-stage linear-index dilated temporal convolutional network for temporal action segmentation**
Gao S., Wu R., Liu S., Erkan U., TOKTAŞ A., Liu J., Tang X.
International Journal of Machine Learning and Cybernetics, 2024 (SCI-Expanded)
- 11. OSMRD-IE: Octal-Based Shuffling and Multi-Layer Rotational Diffusing Image Encryption Using 2D Hybrid Michalewicz-Ackley Map**
Erkan U., TOKTAŞ A., Memiş S., Toktas F., Lai Q., Wen H., Gao S.
IEEE Internet of Things Journal, vol.11, no.21, pp.35113-35123, 2024 (SCI-Expanded)
- 12. Design, Dynamical Analysis, and Hardware Implementation of a Novel Memcapacitive Hyperchaotic Logistic Map**
Gao S., Iu H. H., Erkan U., Simsek C., Mou J., TOKTAŞ A., Wu R., Tang X.
IEEE Internet of Things Journal, vol.11, no.18, pp.30368-30375, 2024 (SCI-Expanded)
- 13. An image encryption method based on multi-space confusion using hyperchaotic 2D Vincent map derived from optimization benchmark function**
Erkan U., TOKTAŞ A., Memiş S., Lai Q., Hu G.
Nonlinear Dynamics, vol.111, no.21, pp.20377-20405, 2023 (SCI-Expanded)
- 14. Image encryption using fission diffusion process and a new hyperchaotic map**
Lai Q., Hua H., Zhao X., Erkan U., TOKTAŞ A.
Chaos, Solitons and Fractals, vol.175, 2023 (SCI-Expanded)

15. **Hyperparameter optimization of deep CNN classifier for plant species identification using artificial bee colony algorithm**
Erkan U., Toktas A., Ustun D.
JOURNAL OF AMBIENT INTELLIGENCE AND HUMANIZED COMPUTING, vol.14, no.7, pp.8827-8838, 2023 (SCI-Expanded)
16. **Parameter optimization of chaotic system using Pareto-based triple objective artificial bee colony algorithm**
TOKTAŞ A., Erkan U., Ustun D., Wang X.
Neural Computing and Applications, vol.35, no.18, pp.13207-13223, 2023 (SCI-Expanded)
17. **High-efficiency medical image encryption method based on 2D Logistic-Gaussian hyperchaotic map**
Lai Q., Hu G., Erkan U., Toktaş A.
Applied Mathematics and Computation, vol.442, 2023 (SCI-Expanded)
18. **2D hyperchaotic system based on Schaffer function for image encryption**
Erkan U., Toktaş A., Lai Q.
EXPERT SYSTEMS WITH APPLICATIONS, vol.213, pp.1-12, 2023 (SCI-Expanded)
19. **A novel pixel-split image encryption scheme based on 2D Salomon map**
Lai Q., Hu G., Erkan U., Toktaş A.
Expert Systems with Applications, vol.213, 2023 (SCI-Expanded)
20. **Ultra-Wideband Monopole Antenna with Defected Ground for Millimeter-Wave Applications**
Toktaş A., Turkmen H. A.
JOURNAL OF INFRARED MILLIMETER AND TERAHERTZ WAVES, vol.44, pp.37-51, 2023 (SCI-Expanded)
21. **Design of two dimensional hyperchaotic system through optimization benchmark function**
Erkan U., Toktaş A., Lai Q.
Chaos, Solitons and Fractals, vol.167, 2023 (SCI-Expanded)
22. **ABC algorithm-based optimization and evaluation of nano carbon black added multi-layer microwave absorbing ultra weight foam concrete**
Yildizel S. A., Toktaş A.
Materials Today Communications, vol.32, 2022 (SCI-Expanded)
23. **Modified artificial bee colony algorithm with differential evolution to enhance precision and convergence performance**
Ustun D., Toktaş A., Erkan U., Akdagli A.
Expert Systems with Applications, vol.198, 2022 (SCI-Expanded)
24. **2D e pi-map for image encryption**
Erkan U., Toktaş A., Toktas F., Alenezi F.
INFORMATION SCIENCES, vol.589, pp.770-789, 2022 (SCI-Expanded)
25. **An optimized surrogate model using differential evolution algorithm for computing parameters of antennas**
Ustun D., Toktas F., Toktaş A.
INTERNATIONAL JOURNAL OF NUMERICAL MODELLING-ELECTRONIC NETWORKS DEVICES AND FIELDS, vol.35, no.2, 2022 (SCI-Expanded)
26. **2D fully chaotic map for image encryption constructed through a quadruple-objective optimization via artificial bee colony algorithm**
Toktas A., Erkan U.
NEURAL COMPUTING & APPLICATIONS, vol.34, no.6, pp.4295-4319, 2022 (SCI-Expanded)
27. **An image encryption scheme based on chaotic logarithmic map and key generation using deep CNN**
Erkan U., Toktaş A., Enginoğlu S., Akbacak E., Thanh D. N. H.
MULTIMEDIA TOOLS AND APPLICATIONS, vol.81, no.5, pp.7365-7391, 2022 (SCI-Expanded)
28. **An image encryption scheme based on an optimal chaotic map derived by multi-objective optimization using ABC algorithm**
Toktaş A., Erkan U., Ustun D.
NONLINEAR DYNAMICS, vol.105, no.2, pp.1885-1909, 2021 (SCI-Expanded)

29. **A symbiotic organisms search algorithm-based design optimization of constrained multi-objective engineering design problems**
Ustun D., Carbas S., Toktaş A.
ENGINEERING COMPUTATIONS, vol.38, no.2, pp.632-658, 2021 (SCI-Expanded)
30. **Chaotic Map Optimization for Image Encryption Using Triple Objective Differential Evolution Algorithm**
Toktaş A., Erkan U., Toktas F., Yetgin Z.
IEEE ACCESS, vol.9, pp.127814-127832, 2021 (SCI-Expanded)
31. **Pioneer Pareto artificial bee colony algorithm for three-dimensional objective space optimization of composite-based layered radar absorber**
Toktaş A., Ustun D., Erdogan N.
APPLIED SOFT COMPUTING, vol.96, 2020 (SCI-Expanded)
32. **A Triple-Objective Optimization Scheme Using Butterfly-Integrated ABC Algorithm for Design of Multilayer RAM**
Toktaş A., Ustun D.
IEEE TRANSACTIONS ON ANTENNAS AND PROPAGATION, vol.68, no.7, pp.5602-5612, 2020 (SCI-Expanded)
33. **Global optimisation scheme based on triple-objective ABC algorithm for designing fully optimised multi-layer radar absorbing material**
Toktaş A., Ustun D., Tekbas M.
IET MICROWAVES ANTENNAS & PROPAGATION, vol.14, no.8, pp.800-811, 2020 (SCI-Expanded)
34. **Translational Motion Compensation for ISAR Images Through a Multicriteria Decision Using Surrogate-Based Optimization**
Ustun D., Toktaş A.
IEEE TRANSACTIONS ON GEOSCIENCE AND REMOTE SENSING, vol.58, no.6, pp.4365-4374, 2020 (SCI-Expanded)
35. **Multi-Objective Design of Multi-Layer Radar Absorber Using Surrogate-Based Optimization**
Toktaş A., Ustun D., Tekbas M.
IEEE TRANSACTIONS ON MICROWAVE THEORY AND TECHNIQUES, vol.67, no.8, pp.3318-3329, 2019 (SCI-Expanded)
36. **A neurocomputational model for estimating the triple-frequency of T-shaped patch antennas**
Yigit E., Kayabasi A., Toktaş A., Sabanci K.
MICROWAVE AND OPTICAL TECHNOLOGY LETTERS, vol.61, no.6, pp.1590-1597, 2019 (SCI-Expanded)
37. **A Hue-domain filtering technique for enhancing spatial sampled compressed sensing-based SAR images**
Sabanci K., Yigit E., Toktaş A., Kayabasi A.
IET RADAR SONAR AND NAVIGATION, vol.13, no.3, pp.357-367, 2019 (SCI-Expanded)
38. **A compact reconfigurable ultra-wideband G-shaped printed antenna with band-notched characteristic**
Toktaş A., Yerlikaya M.
MICROWAVE AND OPTICAL TECHNOLOGY LETTERS, vol.61, no.1, pp.245-250, 2019 (SCI-Expanded)
39. **A study on visual features of leaves in plant identification using artificial intelligence techniques**
Yigit E., Sabanci K., Toktaş A., Kayabasi A.
COMPUTERS AND ELECTRONICS IN AGRICULTURE, vol.156, pp.369-377, 2019 (SCI-Expanded)
40. **Deep neural network-based soft computing the resonant frequency of E-shaped patch antennas**
Ustun D., Toktaş A., Akdagli A.
AEU-INTERNATIONAL JOURNAL OF ELECTRONICS AND COMMUNICATIONS, vol.102, pp.54-61, 2019 (SCI-Expanded)
41. **Triangular quad-port multi-polarized UWB MIMO antenna with enhanced isolation using neutralization ring**
Kayabasi A., Toktaş A., Yigit E., Sabanci K.
AEU-INTERNATIONAL JOURNAL OF ELECTRONICS AND COMMUNICATIONS, vol.85, pp.47-53, 2018 (SCI-Expanded)

42. **AUTOMATIC CLASSIFICATION OF AGRICULTURAL GRAINS: COMPARISON OF NEURAL NETWORKS**
Kayabasi A., Toktaş A., Sabanci K., Yigit E.
NEURAL NETWORK WORLD, vol.28, no.3, pp.213-224, 2018 (SCI-Expanded)
43. **CFAR based morphological filter design to remove clutter from GB-SAR images: An application to real data**
Toktaş A., Yigit E., Sabanci K., Kayabasi A.
MICROWAVE AND OPTICAL TECHNOLOGY LETTERS, vol.59, no.10, pp.2685-2692, 2017 (SCI-Expanded)
44. **Grain classifier with computer vision using adaptive neuro-fuzzy inference system**
Sabanci K., Toktaş A., Kayabasi A.
JOURNAL OF THE SCIENCE OF FOOD AND AGRICULTURE, vol.97, no.12, pp.3994-4000, 2017 (SCI-Expanded)
45. **NOTCH ANTENNA ANALYSIS: AN EXPRESSION FOR CALCULATION OF THE OPERATING FREQUENCY**
Toktaş A., Kayabasi A., Sabanci K., Yigit E.
MICROWAVE AND OPTICAL TECHNOLOGY LETTERS, vol.59, no.6, pp.1309-1313, 2017 (SCI-Expanded)
46. **Computer vision-based method for classification of wheat grains using artificial neural network**
Sabanci K., Kayabasi A., Toktaş A.
JOURNAL OF THE SCIENCE OF FOOD AND AGRICULTURE, vol.97, no.8, pp.2588-2593, 2017 (SCI-Expanded)
47. **Notch Antenna Analysis: Artificial Neural Network-based Operating Frequency Estimator**
Sabanci K., Kayabasi A., Toktaş A., Yigit E.
APPLIED COMPUTATIONAL ELECTROMAGNETICS SOCIETY JOURNAL, vol.32, no.4, pp.303-309, 2017 (SCI-Expanded)
48. **G-shaped band-notched ultra-wideband MIMO antenna system for mobile terminals**
Toktaş A.
IET MICROWAVES ANTENNAS & PROPAGATION, vol.11, no.5, pp.718-725, 2017 (SCI-Expanded)
49. **Design of wideband orthogonal MIMO antenna with improved correlation using a parasitic element for mobile handsets**
Akdagli A., Toktaş A.
INTERNATIONAL JOURNAL OF MICROWAVE AND WIRELESS TECHNOLOGIES, vol.8, no.1, pp.109-115, 2016 (SCI-Expanded)
50. **Log-periodic dipole array-based MIMO antenna for the mobile handsets**
Toktaş A.
JOURNAL OF ELECTROMAGNETIC WAVES AND APPLICATIONS, vol.30, no.3, pp.351-365, 2016 (SCI-Expanded)
51. **Scalable Notch Antenna System for Multiport Applications**
Toktaş A.
INTERNATIONAL JOURNAL OF ANTENNAS AND PROPAGATION, vol.2016, 2016 (SCI-Expanded)
52. **A novel and simple expression to accurately calculate the resonant frequency of annular-ring microstrip antennas**
Toktaş A., Bicer M. B., Kayabasi A., Ustun D., Akdagli A., Kurt K.
INTERNATIONAL JOURNAL OF MICROWAVE AND WIRELESS TECHNOLOGIES, vol.7, no.6, pp.727-733, 2015 (SCI-Expanded)
53. **Compact multiple-input multiple-output antenna with low correlation for ultra-wide-band applications**
Toktaş A., Akdagli A.
IET MICROWAVES ANTENNAS & PROPAGATION, vol.9, no.8, pp.822-829, 2015 (SCI-Expanded)
54. **A POWERFUL METHOD BASED ON ARTIFICIAL BEE COLONY ALGORITHM FOR TRANSLATIONAL MOTION COMPENSATION OF ISAR IMAGE**
Ustun D., Ozdemir C., Akdagli A., Toktaş A., Bicer M. B.
MICROWAVE AND OPTICAL TECHNOLOGY LETTERS, vol.56, no.11, pp.2691-2698, 2014 (SCI-Expanded)
55. **Applications of ANN and ANFIS to Predict the Resonant Frequency of L-Shaped Compact Microstrip Antennas**
Kayabasi A., Toktaş A., Akdagli A., Bicer M. B., Ustun D.
APPLIED COMPUTATIONAL ELECTROMAGNETICS SOCIETY JOURNAL, vol.29, no.6, pp.460-469, 2014 (SCI-

- Expanded)
56. **Wideband MIMO antenna with enhanced isolation for LTE, WiMAX and WLAN mobile handsets**
Toktaş A., Akdagli A.
ELECTRONICS LETTERS, vol.50, no.10, pp.723-724, 2014 (SCI-Expanded)
 57. **ANFIS model for determining resonant frequency of rectangular ring compact microstrip antennas**
Akdagli A., Toktaş A., Bicer M. B., Kayabasi A., Ustun D., Kurt K.
INTERNATIONAL JOURNAL OF APPLIED ELECTROMAGNETICS AND MECHANICS, vol.46, no.3, pp.483-490, 2014 (SCI-Expanded)
 58. **AN APPLICATION OF ARTIFICIAL NEURAL NETWORK TO COMPUTE THE RESONANT FREQUENCY OF E-SHAPED COMPACT MICROSTRIP ANTENNAS**
Akdagli A., Toktaş A., Kayabasi A., Develi İ.
JOURNAL OF ELECTRICAL ENGINEERING-ELEKTROTECHNICKY CASOPIS, vol.64, no.5, pp.317-322, 2013 (SCI-Expanded)
 59. **Calculating the dual-frequencies of equilateral triangular compact microstrip antennas with a shorting-pin**
Toktaş A., Akdagli A., Yagoub M. C. E.
MICROWAVE AND OPTICAL TECHNOLOGY LETTERS, vol.55, no.6, pp.1227-1230, 2013 (SCI-Expanded)
 60. **COMPUTATION OF RESONANT FREQUENCY OF E-SHAPED COMPACT MICROSTRIP ANTENNAS**
Toktaş A., Akdagli A.
JOURNAL OF THE FACULTY OF ENGINEERING AND ARCHITECTURE OF GAZI UNIVERSITY, vol.27, no.4, pp.847-854, 2012 (SCI-Expanded)
 61. **COMPUTING RESONANT FREQUENCY OF H-SHAPED COMPACT MICROSTRIP ANTENNAS OPERATING AT UHF BAND BY USING ARTIFICIAL NEURAL NETWORKS**
Kayabasi A., Bicer M. B., Akdagli A., Toktaş A.
JOURNAL OF THE FACULTY OF ENGINEERING AND ARCHITECTURE OF GAZI UNIVERSITY, vol.26, no.4, pp.833-840, 2011 (SCI-Expanded)
 62. **SIMPLE FORMULAS FOR CALCULATING RESONANT FREQUENCIES OF C AND H SHAPED COMPACT MICROSTRIP ANTENNAS OBTAINED BY USING ARTIFICIAL BEE COLONY ALGORITHM**
Toktaş A., Bicer M. B., Akdagli A., Kayabasi A.
JOURNAL OF ELECTROMAGNETIC WAVES AND APPLICATIONS, vol.25, no.11-12, pp.1718-1729, 2011 (SCI-Expanded)
 63. **A NOVEL EXPRESSION IN CALCULATING RESONANT FREQUENCY OF H-SHAPED COMPACT MICROSTRIP ANTENNAS OBTAINED BY USING ARTIFICIAL BEE COLONY ALGORITHM**
Akdagli A., Toktaş A.
JOURNAL OF ELECTROMAGNETIC WAVES AND APPLICATIONS, vol.24, no.14-15, pp.2049-2061, 2010 (SCI-Expanded)

Articles Published in Other Journals

1. **Circularly Polarized Triangular Patch Antenna**
Toktaş A.
Recent Advances in Electrical & Electronic Engineering, vol.15, 2022 (ESCI)
2. **Küçük Boyutlu Saçak Açıklıklı ve Toprak Düzleminde Boşluk Açılmış Geniş Bant Mikroşerit Anten Tasarımı (Small Fringed Cavity and Slotted Ground Plane Broadband Microstrip Antenna Design)**
Toktaş A.
KMÜ MÜHENDİSLİK VE DOĞA BİLİMLERİ DERGİSİ, vol.1, no.1, pp.70-78, 2019 (Peer-Reviewed Journal)
3. **Üçgen Açıklıklı Ultra Geniş Bant Monopol Bir Antenin Tasarlanması (Designing an Ultra-Wideband Monopole Antenna with Triangular Aperture)**
Türkmen H. A., Toktaş A.
KMÜ MÜHENDİSLİK VE DOĞA BİLİMLERİ DERGİSİ, vol.1, no.1, pp.146-155, 2019 (Peer-Reviewed Journal)

4. **Design of Mobile Meteorological Station with Embedded System Control**
Kayabaşı A., Yıldız B., Sabancı K., Toktaş A., Yerlikaya M.
International Journal of Innovation Engineering and Science Research, vol.3, no.3, pp.34-40, 2019 (Peer-Reviewed Journal)
5. **Görüntü İşleme Tekniklerine Dayalı Sinirsel-Bulanık Sistem Modeli Kullanarak Buğday Danelerinin Sınıflandırılması**
Kayabaşı A., Sabancı K., Toktaş A.
Akıllı Sistemler ve Uygulamaları Dergisi, vol.1, no.1, pp.57-61, 2018 (Peer-Reviewed Journal)
6. **Equivalent Circuit Modelling of an L-shaped Patch Antenna by Optimizing the Lumped Elements Using Differential Evolution Algorithm**
Toktaş A.
International Journal of Intelligent Systems and Applications in Engineering, vol.5, no.4, pp.216-221, 2017 (Peer-Reviewed Journal)
7. **ANN-BASED CLASSIFIER TRAINED BY BAYESIAN REGULARIZATION FOR WHEAT GRAINS THROUGH COLOUR FEATURE**
Kayabaşı A., Yıldız B., Sabancı K., Yiğit E., Toktaş A., Tekbaş M.
International Journal of Environmental Trends, vol.1, no.1, pp.46-53, 2017 (Peer-Reviewed Journal)
8. **A Comparative Classification of Wheat Grains for Artificial Neural Network and Extreme Learning Machine**
Sabancı K., Aslan M. F., Yiğit E., Kayabaşı A., Toktaş A., Duysak H.
International Journal of Environmental Trends, vol.1, no.1, pp.14-21, 2017 (Peer-Reviewed Journal)
9. **Design of an ANN Model Trained by Various Learning Algorithms to Compute the Operating Frequency of E shaped Patch Antennas**
Kayabaşı A., Toktaş A., Akdağlı A.
Uludağ Üniversitesi Mühendislik Fakültesi Dergisi, vol.21, no.2, pp.465-471, 2016 (Peer-Reviewed Journal)
10. **Microstrip fed Triangular UWB Microstrip Antenna Based on DGS**
Toktaş A., Yerlikaya M., Yiğit E.
International Journal of Applied Mathematics, Electronics and Computers, vol.4, no.1, pp.43-47, 2016 (Peer-Reviewed Journal)
11. **Designs of multiple input multiple output antennas for GSM LTE WIMAX and WLAN standards**
Toktaş A., Akdağlı A.
International Journal of Scientific and Technological Research, vol.1, no.1, pp.61-82, 2015 (Peer-Reviewed Journal)
12. **A comparative study for slot loaded compact microstrip antennas by using methods based on FDTD FEM and MoM**
Toktaş A., Akdağlı A., Biçer M. B., Özdemir C., Yamaçlı V.
International Journal of Research in Computer and Communication Technology, vol.2, no.10, pp.920-924, 2013 (Peer-Reviewed Journal)
13. **DESIGN AND FABRICATION OF E-SHAPED COMPACT MICROSTRIP ANTENNA**
Toktaş A., Akdagli A.
SIGMA JOURNAL OF ENGINEERING AND NATURAL SCIENCES-SIGMA MUHENDISLIK VE FEN BILIMLERI DERGISI, vol.30, no.4, pp.458-466, 2012 (ESCI)
14. **Selected patents on compact microstrip antennas**
Toktaş A., Akdağlı A., Özdemir C., Biçer M. B., Toktaş F., Yılmaz B.
Recent Advances in Electrical & Electronic Engineering, vol.5, no.1, pp.1-10, 2012 (Scopus)

Books & Book Chapters

1. **Nature-Inspired Metaheuristic Algorithms For Engineering Optimization Applications**
Çarbaş S., Toktaş A., Üstün D.
Springer, London/Berlin , Singapore, 2021

2. **Multi-objective optimization of engineering design problems through Pareto-based bat algorithm**
Üstün D., Çarbaş S., Toktaş A.
in: Applications of BAT Algorithm and its Variants, Nilanjan Dey, Venkatesan Rajinikanth, Editor, Springer, London/Berlin, Singapore, pp.19-43, 2021
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1. **Design Optimization of Multilayer Microwave Filter Using Differential Evolution Algorithm**
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2. **A New Pi-based Chaotic Map for Image Encryption**
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7. **Dual-element MIMO Inverted-F Antenna for Mobile Devices**
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10. **Design of Quad-port Circular MIMO Antenna With Isolation Improved by Shorting Walls**
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11. **A Formulaic Model Calculating the Permittivity of Testing Materials Placed on a Circular Patch Antenna**
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International Conference on Artificial Intelligence and Data Processing (IDAP), Malatya, Turkey, 21 - 22 September 2019
13. **Thingspeak Based Monitoring IoT System for Counting People in A Library**
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14. **3D level measurement design by using multi static X-band radar**
Yiğit E., Toktaş A., Sabancı K., Üstün D., İşiker H.
2018 Electric Electronics, Computer Science, Biomedical Engineerings'xx Meeting (EBBT), İstanbul, Turkey, 18 - 19 April 2018
15. **Reconfigurable Band-Notched Compact C-shaped Printed Antenna for UWB Applications**
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16. **An UWB Antenna Design Having Band-Reject Characteristic by Y-Shaped Strip**
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17. **WiFi Based Indoor Localization: Application and Comparison of Machine Learning Algorithms**
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22. **ANN and ELM Based Notch Antenna Operating Frequency Determination**
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24. **Colour feature-based classification of wheat grain using ANN with bayesian regularization learning algorithm**
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25. **Classification of bread and durum wheat using ELM and ANN**
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27. **Reducing Mutual Coupling For a Square UWB MIMO Antenna Using Various Parasitic Structures**
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28. **IMAGE PROCESSING BASED ANN WITH BAYESIAN REGULARIZATION LEARNING ALGORITHM FOR CLASSIFICATION OF WHEAT GRAINS**
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29. **A GENERALIZED FORMULA IN CALCULATION OF THE RESONANT FREQUENCY OF NOTCH ANTENNA**
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5th International Symposium on Electrical and Electronics Engineering (ISEEE), Galati, Romania, 20 - 22 October 2017
30. **Printed form of LPDA based MIMO antenna system with neutralization line for mobile terminals**
Toktaş A.
4th International Conference on Advanced Technology Sciences (ICAT'xxRome), Rome, Italy, 23 - 25 November 2016
31. **Compact Coplanar UWB Monopole Antenna with Arc shaped Tapered Apertures**
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1st International Mediterranean Science and Engineering Congress (IMSEC 2016), Adana, Turkey, 26 - 28 October 2016, pp.960-966
32. **Haberleşme Sistemleri İçin Dairesel Polarizasyonlu Ultra geniş bant Yama Anten Sistemi**
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4th International Symposium on Development of KOP Region, Karaman, Turkey, 21 - 23 October 2016, pp.690-695
33. **Low Profile Reconfigurable Ultra wideband Monopole Patch Antenna**
Toktaş A., Yerlikaya M.
4th International Symposium on Development of KOP Region, Karaman, Turkey, 21 - 23 October 2016

34. **Defected ground structure based ultra wideband triangular patch antenna**
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35. **Computing the Operating Frequency of E shaped Patch Antennas by Using Decision Tables**
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36. **Design of an ultra wideband triangular monopole printed antenna**
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37. **A coplanar waveguide fed ultra wideband printed antenna**
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38. **Input and output matching circuits design for low noise amplifiers by using tapered microstrip lines**
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39. **CS-BASED RADAR MEASUREMENT OF SILOS LEVEL**
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V. URSI-Türkiye Bilimsel Kongresi, Güzelyurt, Cyprus (Kkct), 25 - 27 August 2010, pp.120-123
41. **Alternatif genişbant kablosuz erişim tekniği WI MAX**
Toktaş A., Akdağlı A.
III. İletişim Teknolojileri Ulusal Sempozyumu, Adana, Turkey, 1 - 03 February 2007, pp.1-6

Academic and Administrative Experience

2022 - Continues	Head of Department	Ankara University, Mühendislik Fakültesi, Yapay Zeka ve Veri Mühendisliği Bölümü
2015 - 2018	Head of Department	Karamanoglu Mehmetbey University, Faculty Of Engineering, Department Of Electrical And Electronics Engineering
2015 - 2017	Head of Department	Karamanoglu Mehmetbey University, Faculty Of Engineering, Department Of Electrical And Electronics Engineering
2009 - 2015	Network Sorumlusu	Mersin University, Information Technologies

Courses

Digital Logic Design, Undergraduate, 2023 - 2024

Digital Signal Processing, Undergraduate, 2023 - 2024

INTRODUCTION TO COMMUNICATION SYSTEMS, Undergraduate, 2021 - 2022

ELECTROMAGNETIC FIELDS, Undergraduate, 2021 - 2022

MICROSTRIP ANTENNAS, Postgraduate, 2021 - 2022
ADVANCED ENGINEERING ELECTROMAGNETICS, Postgraduate, 2021 - 2022
COMPUTER AIDED ANTENNA DESIGN, Postgraduate, 2021 - 2022
ADVANCED MICROWAVE TECHNIQUE, Doctorate, 2021 - 2022
MICROWAVE ENGINEERING, Postgraduate, 2021 - 2022
ELECTROMAGNETIC WAVES, Undergraduate, 2021 - 2022
ENGINEERING MATHEMATICS, Undergraduate, 2021 - 2022
OPTIMIZATION TECHNIQUES, Postgraduate, 2017 - 2018
ANTENNA THEORY, Postgraduate, 2017 - 2018
ELECTRIC ENERGY TRANSMISSION AND DISTRIBUTION, Undergraduate, 2015 - 2016

Advising Theses

Çakır G., Toktaş A., DEVELOPMENT OF INTEGRATED RECEIVER AND ANTENNA FOR PASSIVE MILLIMETER WAVE IMAGING SYSTEM, Doctorate, M.TEKBAŞ(Student), 2023
Toktaş A., Erkan U., Parçacık sürü optimizasyon algoritması ile kaotik tabanlı görüntü şifreleme, Postgraduate, Ö.KOÇAK(Student), 2021
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Toktaş A., Yapay arı koloni algoritması kullanılarak çok katmanlı mikrodalga soğurucu özellikli kalkanlayıcı beton tasarımı, Postgraduate, K.SARI(Student), 2021
Toktaş A., 5G haberleşme sistemleri için geniş bant milimetre dalga mikroşerit antenin tasarlanması ve gerçekleştirilmesi, Postgraduate, H.ALPER(Student), 2021
Toktaş A., Bant çentik anahtarlamalı ultra geniş bant anten tasarımı ve prototiplenmesi, Postgraduate, M.YERLİKAYA(Student), 2017

Patent

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Toktaş A., Erkan U., AN ENCRYPTION AND DECORING METHOD BASED ON THE SCHAFFER FUNCTION, Patent, CHAPTER H Electricity, The Invention Recourse Number: 2023/013245 , Standard Registration, 2023
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Metrics

Publication: 124

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H-Index (WoS): 22

H-Index (Scopus): 24

Research Areas

Computer Sciences, algorithms, Simulation and Modelling, Information Security and Reliability, Hiding Information, Cryptography, Computer Vision, Computer Vision, Artificial Intelligence, Computer Learning and Pattern Recognition, Computer Learning, Natural Language Processing, Human Computer Interaction, Automated Problem Solving, Theorem Proving and Logical Reasoning, Neural Networks, Software, Electrical and Electronics Engineering, Electromagnetic, Wave Propagation and Remote Sensing, Electric and Magnetic Fields, Electromagnetic Environment and Interaction, Electromagnetic Waves, Antennas and Propagation, Engineering and Technology

Non Academic Experience

State Economic Enterprise SEE, Türk Telekom, Transmission Manager

State Economic Organization SEO, TÜRK TELEKOM, Bilişim Ağları Müdürlüğü