KINGDOM OF SAUDI ARABIA

Ministry of Higher Education

University of Tabuk

**Artificial Intelligence
and Sensing Technologies**

المملكة العربيـــة السعوديــة

وزارة التعـــليم

جامعة تبوك

مركز الذكاء الاصطناعي
وتقنيات الاستشعار

Publications in 2025

No	Paper title	Published in	Journal Quartile
1	Hybrid Underwater Localization Communication Framework for Blockchain-Enabled IoT Underwater Acoustic Sensor Network	IEEE IoT Journal	Q1 (top 10%)
2	6G virtualized beamforming: a novel framework for optimizing massive MIMO in 6G networks	EURASIP Journal on Wireless Communications and Networking	Q1
3	Enhancing IoT performance in wireless and mobile networks through named data networking (NDN) and edge computing integration	Computer Networks	Q1
4	Optimization and localization based framework for priority-aware node ranking and routing in IoT-driven acoustic systems	Ad Hoc Networks	Q1
5	A CNN-Transformer Fusion Model for Proactive Detection of Schizophrenia Relapse from EEG Signals	Bioengineering	Q2
6	Optimizing load demand forecasting in educational buildings using quantum-inspired particle swarm optimization (QPSO) with recurrent neural networks (RNNs): a seasonal approach	Scientific Reports	Q1
7	AI-Assisted Real-Time Monitoring of Infectious Diseases in Urban Areas	Mathematics	Q1 (top 10%)
8	Signature-based intrusion detection using machine learning and deep learning approaches empowered with fuzzy clustering	Scientific Reports	Q1
9	Neuro-Driven Agent-Based Security for Quantum-Safe 6G Networks	Mathematics	Q1 (top 10%)
10	Utilizing a deep neural network for robot semantic classification in indoor environments	Scientific Reports	Q1

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Research Center

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No	Paper title	Published in	Journal Quartile
11	Synergistic Integration of Edge Computing and 6G Networks for Real-Time IoT Applications	Mathematics	Q1 (top 10%)
12	A comprehensive approach to mitigate cyberattacks in power systems using an AI-based detection algorithm and the unit commitment corrective action	Electric Power Systems Research	Q2
13	Analysis of entropy generation in magneto hydrodynamic convective flow of nano fluids within a wavy trapezoidal enclosure: A Brinkmann-Forchheimer model using finite element method	Thermal Engineering	Q1 (top 10%)
14	3D-MobiBrainNet: Multi-class Alzheimer's disease classification using 3D brain magnetic resonance imaging	Ain Shams Engineering Journal	Q1 (top 10%)
15	Utilizing a deep neural network for robot semantic classification in indoor environments	Scientific Reports	Q1
16	Adaptive Spectrum Management in Optical WSNs for Real- 2 Time Data Transmission and Fault Tolerance	Mathematics	Q1 (top 10%)
17	Decentralized Energy Swapping for Sustainable Wireless Sensor Networks Using Blockchain Technology	Mathematics	Q1 (top 10%)
18	Numerical Investigation of Wake Dynamics and Flow Interference Effects on Fluid-Structure Interaction of Dual Side-by-Side Rectangular Cylinders: A Lattice Boltzmann Study	Results in Engineering	Q1 (top 10%)

For more see Google scholar link of AIST research center,

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