Hossein Roshani

List of Publications by Year
in descending order

28 papers	734 citations	516710 16 h-index	526287 27 g-index
28 all docs	28 docs citations	28 times ranked	268 citing authors

#	Article	IF	Citations
1	Application of Neural Network and Time-Domain Feature Extraction Techniques for Determining Volumetric Percentages and the Type of Two Phase Flow Regimes Independent of Scale Layer Thickness. Applied Sciences (Switzerland), 2022, 12, 1336.	2.5	44
2	Applying Data Mining and Artificial Intelligence Techniques for High Precision Measuring of the Two-Phase Flow's Characteristics Independent of the Pipe's Scale Layer. Electronics (Switzerland), 2022, 11, 459.	3.1	16
3	An Investigation on Spiking Neural Networks Based on the Izhikevich Neuronal Model: Spiking Processing and Hardware Approach. Mathematics, 2022, 10, 612.	2.2	3
4	Extraction of Time-Domain Characteristics and Selection of Effective Features Using Correlation Analysis to Increase the Accuracy of Petroleum Fluid Monitoring Systems. Energies, 2022, 15, 1986.	3.1	27
5	Central Nervous System: Overall Considerations Based on Hardware Realization of Digital Spiking Silicon Neurons (DSSNs) and Synaptic Coupling. Mathematics, 2022, 10, 882.	2.2	1
6	Introducing a Precise System for Determining Volume Percentages Independent of Scale Thickness and Type of Flow Regime. Mathematics, 2022, 10, 1770.	2.2	18
7	Enhanced Gamma-Ray Attenuation-Based Detection System Using an Artificial Neural Network. Photonics, 2022, 9, 382.	2.0	5
8	Combination of X-ray tube and GMDH neural network as a nondestructive and potential technique for measuring characteristics of gas-oil–water three phase flows. Measurement: Journal of the International Measurement Confederation, 2021, 168, 108427.	5.0	116
9	Performance comparison of capacitance-based flowmeter with gamma-ray attenuation-based two-phase flowmeter for determining volume fractions in an annular flow regime's components. European Physical Journal Plus, 2021, 136, 1.	2.6	9
10	Design and Construction of Zana Robot for Modeling Human Player in Rock-paper-scissors Game using Multilayer Perceptron, Radial basis Functions and Markov Algorithms. ARO-the Scientific Journal of Koya University, 2021, 9, 67-76.	0.5	0
11	Proposing a gamma radiation based intelligent system for simultaneous analyzing and detecting type and amount of petroleum by-products. Nuclear Engineering and Technology, 2021, 53, 1277-1283.	2.3	87
12	Feasibility Study of Using X-ray Tube and GMDH for Measuring Volume Fractions of Annular and Stratified Regimes in Three-Phase Flows. Symmetry, 2021, 13, 613.	2.2	11
13	Application of Feature Extraction and Artificial Intelligence Techniques for Increasing the Accuracy of X-ray Radiation Based Two Phase Flow Meter. Mathematics, 2021, 9, 1227.	2.2	34
14	Proposing a Nondestructive and Intelligent System for Simultaneous Determining Flow Regime and Void Fraction Percentage of Gas–Liquid Two Phase Flows Using Polychromatic X-Ray Transmission Spectra. Journal of Nondestructive Evaluation, 2021, 40, 1.	2.4	4
15	Simulation Study of Utilizing X-ray Tube in Monitoring Systems of Liquid Petroleum Products. Processes, 2021, 9, 828.	2.8	25
16	Application of Artificial Intelligence and Gamma Attenuation Techniques for Predicting Gas–Oil–Water Volume Fraction in Annular Regime of Three-Phase Flow Independent of Oil Pipeline's Scale Layer. Mathematics, 2021, 9, 1460.	2.2	6
17	Application of Gamma Attenuation Technique and Artificial Intelligence to Detect Scale Thickness in Pipelines in Which Two-Phase Flows with Different Flow Regimes and Void Fractions Exist. Symmetry, 2021, 13, 1198.	2.2	29
18	Frequency Domain Feature Extraction Investigation to Increase the Accuracy of an Intelligent Nondestructive System for Volume Fraction and Regime Determination of Gas-Water-Oil Three-Phase Flows. Mathematics, 2021, 9, 2091.	2.2	33

#	Article	IF	Citations
19	Proposing an Intelligent Dual-Energy Radiation-Based System for Metering Scale Layer Thickness in Oil Pipelines Containing an Annular Regime of Three-Phase Flow. Mathematics, 2021, 9, 2391.	2.2	12
20	Controlling Effects of Astrocyte on Neuron Behavior in Tripartite Synapse Using VHDL–AMS. Mathematics, 2021, 9, 2700.	2.2	2
21	Application of Wavelet Feature Extraction and Artificial Neural Networks for Improving the Performance of Gas–Liquid Two-Phase Flow Meters Used in Oil and Petrochemical Industries. Polymers, 2021, 13, 3647.	4.5	37
22	Applications of Discrete Wavelet Transform for Feature Extraction to Increase the Accuracy of Monitoring Systems of Liquid Petroleum Products. Mathematics, 2021, 9, 3215.	2.2	27
23	Optimization of X-ray Tube Voltage to Improve the Precision of Two Phase Flow Meters Used in Petroleum Industry. Sustainability, 2021, 13, 13622.	3.2	10
24	X-ray tube with artificial neural network model as a promising alternative for radioisotope source in radiation based two phase flowmeters. Applied Radiation and Isotopes, 2020, 164, 109255.	1.5	25
25	Improving the structure of two-phase flow meter using feature extraction and GMDH neural network. Radiation Physics and Chemistry, 2020, 171, 108725.	2.8	47
26	An intelligent integrated approach of Jaya optimization algorithm and neuro-fuzzy network to model the stratified three-phase flow of gas–oil–water. Computational and Applied Mathematics, 2019, 38, 1.	2.2	21
27	Volume fraction determination of the annular three-phase flow of gas-oil-water using adaptive neuro-fuzzy inference system. Computational and Applied Mathematics, 2018, 37, 4321-4341.	1.3	18
28	Online measuring density of oil products in annular regime of gas-liquid two phase flows. Measurement: Journal of the International Measurement Confederation, 2018, 129, 296-301.	5.0	67