Shaker El-Sappagh

List of Publications by Year
in descending order

70 papers	2,798 citations	201674 27 h-index	189892 50 g-index
71 all docs	71 docs citations	71 times ranked	2130 citing authors

#	Article	IF	Citations
1	A smart healthcare monitoring system for heart disease prediction based on ensemble deep learning and feature fusion. Information Fusion, 2020, 63, 208-222.	19.1	429
2	An intelligent healthcare monitoring framework using wearable sensors and social networking data. Future Generation Computer Systems, 2021, 114, 23-43.	7.5	215
3	Transportation sentiment analysis using word embedding and ontology-based topic modeling. Knowledge-Based Systems, 2019, 174, 27-42.	7.1	131
4	A multilayer multimodal detection and prediction model based on explainable artificial intelligence for Alzheimerâ€™s disease. Scientific Reports, 2021, 11, 2660.	3.3	125
5	Multimodal multitask deep learning model for Alzheimerâ€™s disease progression detection based on time series data. Neurocomputing, 2020, 412, 197-215.	5.9	116
6	An Energy Efficient Routing Protocol Based on Improved Artificial Bee Colony Algorithm for Wireless Sensor Networks. IEEE Access, 2020, 8, 133577-133596.	4.2	101
7	A fuzzy-ontology-oriented case-based reasoning framework for semantic diabetes diagnosis. Artificial Intelligence in Medicine, 2015, 65, 179-208.	6.5	89
8	Advancing Modern Healthcare With Nanotechnology, Nanobiosensors, and Internet of Nano Things: Taxonomies, Applications, Architecture, and Challenges. IEEE Access, 2020, 8, 65230-65266.	4.2	82
9	Mobile Health in Remote Patient Monitoring for Chronic Diseases: Principles, Trends, and Challenges. Diagnostics, 2021, 11, 607.	2.6	81
10	End-To-End Deep Learning Framework for Coronavirus (COVID-19) Detection and Monitoring. Electronics (Switzerland), 2020, 9, 1439.	3.1	77
11	Robust hybrid deep learning models for Alzheimerâ€™s progression detection. Knowledge-Based Systems, 2021, 213, 106688.	7.1	65
12	Intensive Care Unit Mortality Prediction: An Improved Patient-Specific Stacking Ensemble Model. IEEE Access, 2020, 8, 133541-133564.	4.2	64
13	Medical Diagnostic Systems Using Artificial Intelligence (AI) Algorithms: Principles and Perspectives. IEEE Access, 2020, 8, 228049-228069.	4.2	63
14	DMTO: a realistic ontology for standard diabetes mellitus treatment. Journal of Biomedical Semantics, 2018, 9, 8.	1.6	60
15	Fuzzy Ontology and LSTM-based Text Mining: A Transportation Network Monitoring System for Assisting Travel. Sensors, 2019, 19, 234.	3.8	59
16	An Ontology-Based Interpretable Fuzzy Decision Support System for Diabetes Diagnosis. IEEE Access, 2018, 6, 37371-37394.	4.2	58
17	Bayesian-based optimized deep learning model to detect COVID-19 patients using chest X-ray image data. Computers in Biology and Medicine, 2022, 142, 105213.	7.0	58
18	A mobile health monitoring-and-treatment system based on integration of the SSN sensor ontology and the HL7 FHIR standard. BMC Medical Informatics and Decision Making, 2019, 19, 97.	3.0	57

#	Article	IF	Citations
19	SNOMED CT standard ontology based on the ontology for general medical science. BMC Medical Informatics and Decision Making, 2018, 18, 76.	3.0	55
20	Quality of Service Provisioning for Heterogeneous Services in Cognitive Radio-Enabled Internet of Things. IEEE Transactions on Network Science and Engineering, 2020, 7, 328-342.	6.4	47
21	Alzheimerâ€™s disease progression detection model based on an early fusion of cost-effective multimodal data. Future Generation Computer Systems, 2021, 115, 680-699.	7.5	45
22	Automatic Diabetic Retinopathy Grading System Based on Detecting Multiple Retinal Lesions. IEEE Access, 2021, 9, 15939-15960.	4.2	45
23	Merged Ontology and SVM-Based Information Extraction and Recommendation System for Social Robots. IEEE Access, 2017, 5, 12364-12379.	4.2	40
24	Comprehensive Survey of Using Machine Learning in the COVID-19 Pandemic. Diagnostics, 2021, 11, 1155.	2.6	40
25	DDO: a diabetes mellitus diagnosis ontology. Applied Informatics, 2016, 3, .	0.5	36
26	Mobile Health Technologies for Diabetes Mellitus: Current State and Future Challenges. IEEE Access, 2019, 7, 21917-21947.	4.2	32
27	A Multi-Perspective malware detection approach through behavioral fusion of API call sequence. Computers and Security, 2021, 110, 102449.	6.0	31
28	A fuzzy ontology modeling for case base knowledge in diabetes mellitus domain. Engineering Science and Technology, an International Journal, 2017, 20, 1025-1040.	3.2	27
29	Robust deep learning early alarm prediction model based on the behavioural smell for android malware. Computers and Security, 2022, 116, 102670.	6.0	27
30	Two-stage deep learning model for Alzheimerâ€™s disease detection and prediction of the mild cognitive impairment time. Neural Computing and Applications, 2022, 34, 14487-14509.	5.6	25
31	An Ontological Case Base Engineering Methodology for Diabetes Management. Journal of Medical Systems, 2014, 38, 67.	3.6	24
32	Clinical Decision Support System for Liver Fibrosis Prediction in Hepatitis Patients: A Case Comparison of Two Soft Computing Techniques. IEEE Access, 2018, 6, 52911-52929.	4.2	23
33	A Comprehensive Medical Decisionâ€“Support Framework Based on a Heterogeneous Ensemble Classifier for Diabetes Prediction. Electronics (Switzerland), 2019, 8, 635.	3.1	23
34	Rank-driven salp swarm algorithm with orthogonal opposition-based learning for global optimization. Applied Intelligence, 2022, 52, 7922-7964.	5.3	21
35	Energy Efficient Cluster Based Routing Protocol for WSN Using Firefly Algorithm and Ant Colony Optimization. Wireless Personal Communications, 2022, 125, 2167-2200.	2.7	21
36	A Three-Step Authentication Model for Mobile Phone User Using Keystroke Dynamics. IEEE Access, 2020, 8, 125909-125922.	4.2	19

#	Article	IF	Citations
37	Sepsis prediction in intensive care unit based on genetic feature optimization and stacked deep ensemble learning. Neural Computing and Applications, 2022, 34, 3603-3632.	5.6	19
38	Heterogeneous Ensemble Deep Learning Model for Enhanced Arabic Sentiment Analysis. Sensors, 2022, 22, 3707.	3.8	19
39	Objective Diagnosis for Histopathological Images Based on Machine Learning Techniques: Classical Approaches and New Trends. Mathematics, 2020, 8, 1863.	2.2	16
40	Context-Based Fake News Detection Model Relying on Deep Learning Models. Electronics (Switzerland), 2022, 11, 1255.	3.1	15
41	A diabetes diagnostic domain ontology for CBR system from the conceptual model of SNOMED CT. , 2014, , .		14
42	Contextual Identification of Windows Malware through Semantic Interpretation of API Call Sequence. Applied Sciences (Switzerland), 2020, 10, 7673.	2.5	14
43	Advanced orthogonal oppositionâ€based learningâ€driven dynamic salp swarm algorithm: Framework and case studies. IET Control Theory and Applications, 2022, 16, 945-971.	2.1	14
44	An Efficient 5G Data Plan Approach Based on Partially Distributed Mobility Architecture. Sensors, 2022, 22, 349.	3.8	13
45	Velocity clamping-assisted adaptive salp swarm algorithm: balance analysis and case studies. Mathematical Biosciences and Engineering, 2022, 19, 7756-7804.	1.9	13
46	A Comprehensive Fuzzy Ontology-Based Decision Support System for Alzheimerâ€™s Disease Diagnosis. IEEE Access, 2021, 9, 31350-31372.	4.2	12
47	An Extended Semantic Interoperability Model for Distributed Electronic Health Record Based on Fuzzy Ontology Semantics. Electronics (Switzerland), 2021, 10, 1733.	3.1	12
48	Priority-Based Cloud Computing Architecture for Multimedia-Enabled Heterogeneous Vehicular Users. Journal of Advanced Transportation, 2018, 2018, 1-12.	1.7	11
49	Distributed electronic health record based on semantic interoperability using fuzzy ontology: a survey. International Journal of Computers and Applications, 2018, 40, 223-241.	1.3	9
50	An encoding methodology for medical knowledge using SNOMED CT ontology. Journal of King Saud University - Computer and Information Sciences, 2016, 28, 311-329.	3.9	8
51	Ontology-based electronic health record semantic interoperability: A survey. , 2019, , 315-352.		8
52	A framework for chronic kidney disease diagnosis based on case based reasoning. International Journal of Advanced Computer Research, 2018, 8, 59-71.	1.0	8
53	Medical Case Based Reasoning Frameworks. International Journal of Decision Support System Technology, 2016, 8, 31-62.	0.7	7
54	Benchmarking large-scale data management for Internet of Things. Journal of Supercomputing, 2019, 75, 8207-8230.	3.6	7

#	Article	IF	Citations
55	Sentiment Analysis of Usersâ€™ Reactions on Social Media during the Pandemic. Electronics (Switzerland), 2022, 11, 1648.	3.1	7
56	A case-base fuzzification process: diabetes diagnosis case study. Soft Computing, 2019, 23, 5815-5834.	3.6	6
57	A Real-time Framework for Patient Monitoring Systems based on a Wireless Body Area Network. International Journal of Computer Applications, 2020, 176, 12-21.	0.2	6
58	A Fibrosis Diagnosis Clinical Decision Support System Using Fuzzy Knowledge. Arabian Journal for Science and Engineering, 2019, 44, 3781-3800.	3.0	5
59	A Proposed Frequent Itemset Discovery Algorithm Based on Item Weights and Uncertainty. International Journal of Sociotechnology and Knowledge Development, 2020, 12, 98-118.	1.0	5
60	Alzheimer Disease Prediction Model Based on Decision Fusion of CNN-BiLSTM Deep Neural Networks. Advances in Intelligent Systems and Computing, 2021, , 482-492.	0.6	5
61	A proposed SNOMED CT ontology-based encoding methodology for diabetes diagnosis case-base. , 2014, , .		4
62	A unified fuzzy ontology for distributed electronic health record semantic interoperability. , 2019, , 353-395.		4
63	Reasoning methodologies in clinical decision support systems: A literature review. , 2019, , 61-87.		4
64	A Fuzzy Ontological Infrastructure for Semantic Interoperability in Distributed Electronic Health Record. Intelligent Automation and Soft Computing, 0, , -1--1.	2.1	4
65	Kinship verification and recognition based on handcrafted and deep learning feature-based techniques. PeerJ Computer Science, 2021, 7, e735.	4.5	4
66	A standard fragment of EHR relational data model for diabetes mellitus diagnosis. , 2014, , .		2
67	Ontology enhanced fuzzy clinical decision support system. , 2019, , 147-177.		2
68	Staging Melanocytic Skin Neoplasms Using High-Level Pixel-Based Features. Electronics (Switzerland), 2020, 9, 1443.	3.1	2
69	Timing and Classification of Patellofemoral Osteoarthritis Patients Using Fast Large Margin Classifier. Computers, Materials and Continua, 2021, 67, 393-409.	1.9	2
70	A Semantic Approach for Extracting Medical Association Rules. International Journal of Intelligent Engineering and Systems, 2020, 13, 280-292.	0.6	1