

# Houtan Jebelli

## List of Publications by Year in descending order

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Version: 2024-02-01

47  
papers

1,662  
citations

430442

18  
h-index

610482

24  
g-index

47  
all docs

47  
docs citations

47  
times ranked

869  
citing authors

#	ARTICLE	IF	CITATIONS
1	EEG-based workers' stress recognition at construction sites. <i>Automation in Construction</i> , 2018, 93, 315-324.	4.8	207
2	Wearable Sensing Technology Applications in Construction Safety and Health. <i>Journal of Construction Engineering and Management - ASCE</i> , 2019, 145, .	2.0	142
3	Measuring Workers'™ Emotional State during Construction Tasks Using Wearable EEG. <i>Journal of Construction Engineering and Management - ASCE</i> , 2018, 144, .	2.0	129
4	Fall risk analysis of construction workers using inertial measurement units: Validating the usefulness of the postural stability metrics in construction. <i>Safety Science</i> , 2016, 84, 161-170.	2.6	115
5	EEG Signal-Processing Framework to Obtain High-Quality Brain Waves from an Off-the-Shelf Wearable EEG Device. <i>Journal of Computing in Civil Engineering</i> , 2018, 32, .	2.5	107
6	Feasibility analysis of heart rate monitoring of construction workers using a photoplethysmography (PPG) sensor embedded in a wristband-type activity tracker. <i>Automation in Construction</i> , 2016, 71, 372-381.	4.8	95
7	Feasibility analysis of electrodermal activity (EDA) acquired from wearable sensors to assess construction workers'™ perceived risk. <i>Safety Science</i> , 2019, 115, 110-120.	2.6	84
8	Brainwave-driven human-robot collaboration in construction. <i>Automation in Construction</i> , 2021, 124, 103556.	4.8	74
9	Application of Wearable Biosensors to Construction Sites. I: Assessing Workers'™ Stress. <i>Journal of Construction Engineering and Management - ASCE</i> , 2019, 145, .	2.0	69
10	Brain-computer interface for hands-free teleoperation of construction robots. <i>Automation in Construction</i> , 2021, 123, 103523.	4.8	69
11	Evaluation of hydrogen storage technology in risk-constrained stochastic scheduling of multi-carrier energy systems considering power, gas and heating network constraints. <i>International Journal of Hydrogen Energy</i> , 2020, 45, 30129-30141.	3.8	55
12	A Continuously Updated, Computationally Efficient Stress Recognition Framework Using Electroencephalogram (EEG) by Applying Online Multitask Learning Algorithms (OMTL). <i>IEEE Journal of Biomedical and Health Informatics</i> , 2019, 23, 1928-1939.	3.9	52
13	Feasibility Study of a Wristband-Type Wearable Sensor to Understand Construction Workers'™ Physical and Mental Status. , 2018, , .		44
14	Mobile EEG-Based Workers'™ Stress Recognition by Applying Deep Neural Network. , 2019, , 173-180.		43
15	Assessing occupational risk of heat stress at construction: A worker-centric wearable sensor-based approach. <i>Safety Science</i> , 2021, 142, 105395.	2.6	39
16	Assessment of construction workers'™ perceived risk using physiological data from wearable sensors: A machine learning approach. <i>Journal of Building Engineering</i> , 2021, 42, 102824.	1.6	36
17	A Supervised Learning-Based Construction Workers'™ Stress Recognition Using a Wearable Electroencephalography (EEG) Device. , 2018, , .		33
18	Feasibility of Field Measurement of Construction Workers'™ Valence Using a Wearable EEG Device. , 2017, , .		28

#	ARTICLE	IF	CITATIONS
19	Assessing the effects of slippery steel beam coatings to ironworkers' gait stability. Applied Ergonomics, 2018, 68, 72-79.	1.7	28
20	Wearable Biosensor and Collective Sensing-Based Approach for Detecting Older Adults' Environmental Barriers. Journal of Computing in Civil Engineering, 2020, 34, .	2.5	23
21	Paving the Way for Future EEG Studies in Construction: Dependent Component Analysis for Automatic Ocular Artifact Removal from Brainwave Signals. Journal of Construction Engineering and Management - ASCE, 2021, 147, .	2.0	22
22	Intelligent approach for residential load scheduling. IET Generation, Transmission and Distribution, 2020, 14, 4738-4745.	1.4	22
23	Robust scheduling of multi-chiller system with chilled-water storage under hourly electricity pricing. Energy and Buildings, 2020, 218, 110058.	3.1	18
24	Comparison of ironworker's fall risk assessment systems using an immersive biofeedback simulator. Automation in Construction, 2021, 122, 103471.	4.8	18
25	Non-invasive physical demand assessment using wearable respiration sensor and random forest classifier. Journal of Building Engineering, 2021, 44, 103279.	1.6	12
26	Ocular Artifacts Reduction in EEG Signals Acquired at Construction Sites by Applying a Dependent Component Analysis (DCA). , 2020, , .		12
27	Neurophysiological testing for assessing construction workers' task performance at virtual height. Automation in Construction, 2020, 113, 103143.	4.8	11
28	Physiology-based dynamic muscle fatigue model for upper limbs during construction tasks. International Journal of Industrial Ergonomics, 2020, 78, 102984.	1.5	10
29	A hybrid robust-stochastic optimization framework for optimal energy management of electric vehicles parking lots. Sustainable Energy Technologies and Assessments, 2021, 47, 101467.	1.7	9
30	Workers' Trust in Collaborative Construction Robots: EEG-Based Trust Recognition in an Immersive Environment. , 2022, , 201-215.		7
31	Toward Human-in-the-Loop Construction Robotics: Understanding Workers' Response through Trust Measurement during Human-Robot Collaboration. , 2022, , .		7
32	Multi-Level Assessment of Occupational Stress in the Field Using a Wearable EEG Headset. , 2020, , .		6
33	Barrier Analysis of Effective Implementation of Robotics in the Construction Industry. , 2022, , .		6
34	Intention Estimation in Physical Human-Robot Interaction in Construction: Empowering Robots to Gauge Workers' Posture. , 2022, , .		6
35	Developing an Affordable Robotic System for Automated Fall Hazard Detection and Localization in Indoor Construction Environments. , 2022, , .		5
36	Recognition of Construction Workers' Physical Fatigue Based on Gait Patterns Driven from Three-Axis Accelerometer Embedded in a Smartphone. , 2020, , .		4

#	ARTICLE	IF	CITATIONS
37	Human-Robot Co-Adaptation in Construction: Bio-Signal Based Control of Bricklaying Robots. , 2022, , .		4
38	Worker-Aware Task Planning for Construction Robots: A Physiologically Based Communication Channel Interface. , 2022, , 181-200.		3
39	Worker-in-the-Loop Cyber-Physical System for Safe Human-Robot Collaboration in Construction. , 2022, , .		3
40	Worker-Aware Robotic Motion Planner in Construction for Improved Psychological Well-Being during Worker-Robot Interaction. , 2022, , .		2
41	Enhanced Situational Awareness in Worker-Robot Interaction in Construction: Assessing the Role of Visual Cues. , 2022, , .		1
42	Smart Robotic System to Fight the Spread of COVID-19 at Construction Sites. , 2022, , .		1
43	Feasibility of Embodied Virtual Agents for Augmenting Studentsâ€™ Knowledge of Robotic Safety in Construction. , 2022, , .		1
44	An Optimal Resource Allocation Strategy for Retrofitting Unreinforced Masonry Buildings in the Pre-Disaster Stage. , 2022, , .		0
45	Feasibility of Virtual Avatar Simulator for Human-Robot Collaboration Training in Construction. , 2022, , .		0
46	Improving the Prediction Accuracy of Data-Driven Fault Diagnosis for HVAC Systems by Applying the Synthetic Minority Oversampling Technique. , 2022, , .		0
47	Investigating the Potentials of Operational Data Collected from Facilitiesâ€™ Embedded Sensors for Early Detection of HVAC Systemsâ€™ Failures. , 2022, , .		0