## Nabil I Alshurafa

List of Publications by Year in descending order

Source: https://exaly.com/author-pdf/804814/publications.pdf

Version: 2024-02-01

90 papers 1,904 citations

471509 17 h-index 477307 29 g-index

92 all docs 92 docs citations

92 times ranked 1802 citing authors

#	Article	IF	Citations
1	Deep Learning in Human Activity Recognition with Wearable Sensors: A Review on Advances. Sensors, 2022, 22, 1476.	3.8	141
2	Monitoring eating habits using a piezoelectric sensor-based necklace. Computers in Biology and Medicine, 2015, 58, 46-55.	7.0	131
3	Wearable Food Intake Monitoring Technologies: A Comprehensive Review. Computers, 2017, 6, 4.	3.3	114
4	Designing a Robust Activity Recognition Framework for Health and Exergaming Using Wearable Sensors. IEEE Journal of Biomedical and Health Informatics, 2014, 18, 1636-1646.	6.3	85
5	Recognition of Nutrition Intake Using Time-Frequency Decomposition in a Wearable Necklace Using a Piezoelectric Sensor. IEEE Sensors Journal, 2015, 15, 3909-3916.	4.7	81
6	A dense pressure sensitive bedsheet design for unobtrusive sleep posture monitoring. , 2013, , .		66
7	Automatic, wearable-based, in-field eating detection approaches for public health research: a scoping review. Npj Digital Medicine, 2020, 3, 38.	10.9	64
8	A Wearable Nutrition Monitoring System. , 2014, , .		59
9	Sleep posture analysis using a dense pressure sensitive bedsheet. Pervasive and Mobile Computing, 2014, 10, 34-50.	3.3	58
10	A wearable sensor system for medication adherence prediction. Artificial Intelligence in Medicine, 2016, 69, 43-52.	6.5	50
11	NeckSense. , 2020, 4, 1-26.		47
12	WANDA., 2012,,.		46
13	A Survey of Diet Monitoring Technology. IEEE Pervasive Computing, 2017, 16, 57-65.	1.3	46
14	UStress: Understanding college student subjective stress using wrist-based passive sensing. , 2017, , .		44
15	Determining the Single Best Axis for Exercise Repetition Recognition and Counting on SmartWatches. , 2014, , .		43
16	Dynamic Computation Offloading for Low-Power Wearable Health Monitoring Systems. IEEE Transactions on Biomedical Engineering, 2017, 64, 621-628.	4.2	43
17	BreathSens: A Continuous On-Bed Respiratory Monitoring System With Torso Localization Using an Unobtrusive Pressure Sensing Array. IEEE Journal of Biomedical and Health Informatics, 2015, 19, 1682-1688.	6.3	39
18	Detection of Gestures Associated With Medication Adherence Using Smartwatch-Based Inertial Sensors. IEEE Sensors Journal, 2016, 16, 1054-1061.	4.7	39

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19	micro-Stress EMA. , 2019, 3, 1-22.		39
20	Remote Health Monitoring Outcome Success Prediction Using Baseline and First Month Intervention Data. IEEE Journal of Biomedical and Health Informatics, 2017, 21, 507-514.	6.3	38
21	I Can't Be Myself. , 2018, 2, 1-40.		36
22	A smartwatch-based medication adherence system. , 2015, , .		35
23	I sense overeating: Motif-based machine learning framework to detect overeating using wrist-worn sensing. Information Fusion, 2018, 41, 37-47.	19.1	34
24	Improving Compliance in Remote Healthcare Systems Through Smartphone Battery Optimization. IEEE Journal of Biomedical and Health Informatics, 2015, 19, 57-63.	6.3	28
25	Is More Always Better?. , 2018, 2, 1-26.		21
26	Anti-Cheating: Detecting Self-Inflicted and Impersonator Cheaters for Remote Health Monitoring Systems with Wearable Sensors. , 2014, , .		20
27	Using Pressure Map Sequences for Recognition of On Bed Rehabilitation Exercises. IEEE Journal of Biomedical and Health Informatics, 2014, 18, 411-418.	6.3	20
28	Non-invasive detection of medication adherence using a digital smart necklace. , 2015, , .		19
29	To Mask or Not to Mask?. , 2019, 3, 1-29.		19
30	Counting Bites With Bits: Expert Workshop Addressing Calorie and Macronutrient Intake Monitoring. Journal of Medical Internet Research, 2019, 21, e14904.	4.3	19
31	FaceBit. , 2021, 5, 1-44.		19
32	Non-invasive monitoring of eating behavior using spectrogram analysis in a wearable necklace. , 2014, , .		18
33	When generalized eating detection machine learning models fail in the field. , 2017, , .		18
34	Robust human intensity-varying activity recognition using Stochastic Approximation in wearable sensors. , 2013, , .		17
35	Inconspicuous on-bed respiratory rate monitoring. , 2013, , .		15
36	Spectrogram-based audio classification of nutrition intake. , 2014, , .		15

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37	Battery optimization in smartphones for remote health monitoring systems to enhance user adherence. , $2014, \ldots$		15
38	Multiple model analytics for adverse event prediction in remote health monitoring systems. , 2014, , .		14
39	A comparison of piezoelectric-based inertial sensing and audio-based detection of swallows. Obesity Medicine, 2016, 1, 6-14.	0.9	14
40	Using electronic health records to predict severity of condition for congestive heart failure patients. , $2014$ , , .		12
41	Moving the dial on prenatal stress mechanisms of neurodevelopmental vulnerability to mental health problems: A personalized prevention proof of concept. Developmental Psychobiology, 2021, 63, 622-640.	1.6	12
42	Remote health monitoring: Predicting outcome success based on contextual features for cardiovascular disease., 2014, 2014, 1777-81.		11
43	WillSense., 2017,,.		11
44	Daily Minutes of Unprotected Sun Exposure (MUSE) Inventory: Measure description and comparisons to UVR sensor and sun protection survey data. Preventive Medicine Reports, 2018, 11, 305-311.	1.8	11
45	Deep generative cross-modal on-body accelerometer data synthesis from videos. , 2020, , .		11
46	Investigating barriers and facilitators to wearable adherence in fine-grained eating detection., 2017,,.		10
47	SwallowNet: Recurrent neural network detects and characterizes eating patterns. , 2017, , .		10
48	Assessing recall of personal sun exposure by integrating UV dosimeter and self-reported data with a network flow framework. PLoS ONE, 2019, 14, e0225371.	2.5	10
49	Food Watch: Detecting and Characterizing Eating Episodes through Feeding Gestures. , 2017, , .		10
50	Measuring fine-grained heart-rate using a flexible wearable sensor in the presence of noise. , 2018, , .		8
51	SyncWISE. , 2020, 4, 1-26.		8
52	Why Do We Need a Remote Health Monitoring System? A Study on Predictive Analytics for Heart Failure Patients., 2017,,.		8
53	A Framework for Predicting Adherence in Remote Health Monitoring Systems. , 2014, , .		7
54	Probabilistic segmentation of time-series audio signals using Support Vector Machines. Microprocessors and Microsystems, 2016, 46, 96-104.	2.8	7

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55	Association of number of bites and eating speed with energy intake: Wearable technology results under free-living conditions. Appetite, 2021, 167, 105653.	3.7	7
56	Predicting the Next-Day Perceived and Physiological Stress of Pregnant Women by Using Machine Learning and Explainability: Algorithm Development and Validation. JMIR MHealth and UHealth, 2022, 10, e33850.	3.7	7
57	On-bed monitoring for range of motion exercises with a pressure sensitive bedsheet., 2013,,.		6
58	A data-driven feature extraction framework for predicting the severity of condition of congestive heart failure patients., 2015, 2015, 2534-7.		6
59	Power optimization for wearable devices. , 2015, , .		6
60	First Steps Into the Brave New Transdiscipline of Mobile Health. JAMA Cardiology, 2017, 2, 76.	6.1	5
61	HABits Necklace., 2018,,.		5
62	Estimating caloric intake in bedridden hospital patients with audio and neck-worn sensors. , 2018, , .		5
63	Opportunistic hierarchical classification for power optimization in wearable movement monitoring systems. , 2012, , .		4
64	An automated framework for predicting obstructive sleep apnea using a brief, daytime, non-intrusive test procedure. , $2015,$ , .		4
65	Toward a precision behavioral medicine approach to addressing high-risk sun exposure: a qualitative analysis. JAMIA Open, 2019, 2, 547-553.	2.0	4
66	Artificial spider: eight-legged arachnid and autonomous learning of locomotion., 2006, 6230, 481.		3
67	Dynamic Task Optimization in Remote Diabetes Monitoring Systems. , 2012, 2012, 3-11.		3
68	Predicting Perceived Stress Through Mirco-EMAs and a Flexible Wearable ECG Device. , 2018, , .		3
69	Comparative Validity of Mostly Unprocessed and Minimally Processed Food Items Differs Among Popular Commercial Nutrition Apps Compared with a Research Food Database. Journal of the Academy of Nutrition and Dietetics, 2022, 122, 825-832.e1.	0.8	3
70	Impacts of Image Obfuscation on Fine-grained Activity Recognition in Egocentric Video., 2022,,.		3
71	Improving accuracy in E-Textiles as a platform for pervasive sensing. , 2013, , .		2
72	Effects of coaching on adherence in remote health monitoring systems. , 2015, , .		2

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73	A Robust Remote Health Monitoring and Data Processing System for Rural Area with Limited Internet Access., 2017,,.		2
74	Support vector regression to estimate the metabolic equivalent of task of exergaming actions. , 2014, , .		1
75	Personalized Medicine in the Wearable Era. , 2017, , .		1
76	Development and feasibility of a Configurable Assessment Messaging Platform for Interventions (CAMPI) Families, Systems and Health, 2021, 39, 19-28.	0.6	1
77	HeatSight: Wearable Low-power Omni Thermal Sensing. , 2021, , .		1
78	eHealth Practices in Cancer Survivors With BMI in Overweight or Obese Categories: Latent Class Analysis Study. JMIR Cancer, 2020, 6, e24137.	2.4	1
79	Towards Battery-Free Body Sensor Networks. , 2020, , .		1
80	ActiveSense: A Novel Active Learning Framework for Human Activity Recognition., 2022,,.		1
81	Opportunities in Designing HCI Tools for Lactation Consulting Professionals. , 2022, , .		1
82	Understanding Self-Tracked Data from Bounded Situational Contexts. , 2022, , .		1
83	An Iterative Dimensionality-Scaling System for Real-Time Health Monitoring Applications. , 2016, , .		0
84	Intuito., 2017,,.		0
85	Distinguishing Nigerian Food Items and Calorie Content with Hyperspectral Imaging. Lecture Notes in Computer Science, 2017, , 462-470.	1.3	0
86	Analyzing the Mutation Frequencies and Correlation of Genetic Diseases in Worldwide Populations Using Big Data Processing, Clustering, and Predictive Analytics. , 2017, , .		0
87	Six Month Abstinence Heterogeneity in the Best Quit Study. Annals of Behavioral Medicine, 2019, 53, 1032-1044.	2.9	0
88	Panel: Evolving IoT Tech Enables Aging in Place. , 2020, , .		0
89	Sensor Self-Report Alignment (SSRA): Reducing Sun Exposure Assessment Error. , 2020, , .		0
90	SmartNecklace: Designing a Wearable Multi-sensor System for Smart Eating Detection. , 2017, , .		0