

Marjorie Skubic

List of Publications by Year in descending order

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Version: 2024-02-01

120
papers

5,307
citations

136740

32
h-index

98622

67
g-index

124
all docs

124
docs citations

124
times ranked

4126
citing authors

#	ARTICLE	IF	CITATIONS
1	Novel clinically-relevant assessment of upper extremity movement using depth sensors. Topics in Stroke Rehabilitation, 2023, 30, 11-20.	1.0	4
2	Mechanism-Driven Modeling to Aid Non-invasive Monitoring of Cardiac Function via Ballistocardiography. Frontiers in Medical Technology, 2022, 4, 788264.	1.3	5
3	Non-invasive monitoring of vital signs for older adults using recliner chairs. Health and Technology, 2021, 11, 169-184.	2.1	8
4	Social practices of nurse care coordination using sensor technologies – Challenges with an alert system adoption in assisted living communities for older adults. International Journal of Nursing Sciences, 2021, 8, 289-297.	0.5	5
5	Non-Invasive Heart Rate Estimation From Ballistocardiograms Using Bidirectional LSTM Regression. IEEE Journal of Biomedical and Health Informatics, 2021, 25, 3396-3407.	3.9	8
6	Design Evolution of a Head-Worn Biofeedback System to Address Vestibular Balance Impairment. , 2021, , .		0
7	Prototype Hat as a Biofeedback System to Address Vestibular Balance Impairment. IFMBE Proceedings, 2021, , 984-993.	0.2	0
8	Leveraging Unsupervised Machine Learning to Discover Patterns in Linguistic Health Summaries for Eldercare. , 2021, 2021, 2180-2185.		3
9	Combining Physiology-Based Modeling and Evolutionary Algorithms for Personalized, Noninvasive Cardiovascular Assessment Based on Electrocardiography and Ballistocardiography. Frontiers in Physiology, 2021, 12, 739035.	1.3	6
10	Tracking personalized functional health in older adults using geriatric assessments. BMC Medical Informatics and Decision Making, 2020, 20, 270.	1.5	7
11	Human-centered approaches that integrate sensor technology across the lifespan: Opportunities and challenges. Nursing Outlook, 2020, 68, 734-744.	1.5	4
12	Associations Between Self-Reported Symptoms and Gait Parameters Using In-Home Sensors in Persons With Multiple Sclerosis. Rehabilitation Nursing, 2020, 45, 80-87.	0.3	5
13	Integrating Voice-Assisted Technology with an In-Home Sensor System. , 2020, , .		1
14	Non-Invasive In-Home Sleep Stage Classification Using a Ballistocardiography Bed Sensor. , 2019, , .		15
15	Cardiovascular Function and Ballistocardiogram: A Relationship Interpreted via Mathematical Modeling. IEEE Transactions on Biomedical Engineering, 2019, 66, 2906-2917.	2.5	41
16	VicoVR-Based Wireless Daily Activity Recognition and Assessment System for Stroke Rehabilitation. , 2018, , .		8
17	A Novel Depth Image Analysis Method to Calculate the Anterior Reach of the Modified Star Excursion Balance Test. , 2018, , .		0
18	Radar placement for fall detection: Signature and performance. Journal of Ambient Intelligence and Smart Environments, 2018, 10, 21-34.	0.8	6

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19	Multiple Instance Dictionary Learning for Beat-to-Beat Heart Rate Monitoring From Ballistocardiograms. IEEE Transactions on Biomedical Engineering, 2018, 65, 2634-2648.	2.5	26
20	Validation of a Kinect V2 based rehabilitation game. PLoS ONE, 2018, 13, e0202338.	1.1	49
21	Exploratory analysis of older adults'™ sedentary behavior in the primary living area using kinect depth data. Journal of Ambient Intelligence and Smart Environments, 2017, 9, 163-179.	0.8	9
22	Estimation of human walking speed by Doppler radar for elderly care. Journal of Ambient Intelligence and Smart Environments, 2017, 9, 181-191.	0.8	12
23	Comparison of 3D Joint Angles Measured With the Kinect 2.0 Skeletal Tracker Versus a Marker-Based Motion Capture System. Journal of Applied Biomechanics, 2017, 33, 176-181.	0.3	41
24	Heart rate monitoring using hydraulic bed sensor ballistocardiogram1. Journal of Ambient Intelligence and Smart Environments, 2017, 9, 193-207.	0.8	29
25	Angel-Echo: A Personalized Health Care Application. , 2017, , .		8
26	Development and Validation of a Portable and Inexpensive Tool to Measure the Drop Vertical Jump Using the Microsoft Kinect V2. Sports Health, 2017, 9, 537-544.	1.3	29
27	Randomized Trial of Intelligent Sensor System for Early Illness Alerts in Senior Housing. Journal of the American Medical Directors Association, 2017, 18, 860-870.	1.2	50
28	Older Adults'™ Perceptions of and Preferences for a Fall Risk Assessment System. CIN - Computers Informatics Nursing, 2017, 35, 331-337.	0.3	4
29	Continuous In-Home Symptom and Mobility Measures for Individuals With Multiple Sclerosis: A Case Presentation. Journal of Neuroscience Nursing, 2017, 49, 241-246.	0.7	1
30	Toward an ElderCare Living Lab for Sensor-Based Health Assessment and Physical Therapy. IEEE Cloud Computing, 2017, 4, 30-39.	5.3	5
31	Using Embedded Sensors in Independent Living to Predict Gait Changes and Falls. Western Journal of Nursing Research, 2017, 39, 78-94.	0.6	39
32	Exploring clinical correlations in centroid-based gait metrics from depth data collected in the home. , 2017, , .		0
33	Assistive Adjustable Smart Shower System. , 2017, , .		2
34	TigerPlace. , 2017, , 643-657.		0
35	An automatic in-home fall detection system using Doppler radar signatures. Journal of Ambient Intelligence and Smart Environments, 2016, 8, 453-466.	0.8	19
36	Heart beat characterization from ballistocardiogram signals using extended functions of multiple instances. , 2016, 2016, 756-760.		14

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37	Exploring the feasibility and acceptability of sensor monitoring of gait and falls in the homes of persons with multiple sclerosis. <i>Gait and Posture</i> , 2016, 49, 277-282.	0.6	17
38	Evaluation of the microsoft kinect skeletal versus depth data analysis for timed-up and go and figure of 8 walk tests. , 2016, 2016, 2274-2277.		8
39	Testing non-wearable fall detection methods in the homes of older adults. , 2016, 2016, 557-560.		24
40	Synchronous Big Data analytics for personalized and remote physical therapy. <i>Pervasive and Mobile Computing</i> , 2016, 28, 3-20.	2.1	26
41	Enhanced registered nurse care coordination with sensor technology: Impact on length of stay and cost in aging in-place housing. <i>Nursing Outlook</i> , 2015, 63, 650-655.	1.5	35
42	Automated In-Home Fall Risk Assessment and Detection Sensor System for Elders. <i>Gerontologist</i> , The, 2015, 55, S78-S87.	2.3	68
43	Robust heartbeat detection from in-home ballistocardiogram signals of older adults using a bed sensor. , 2015, 2015, 7175-9.		45
44	Development and preliminary validation of an interactive remote physical therapy system. , 2015, 2015, 190-3.		18
45	A New Paradigm of Technology-Enabled "Vital Signs" for Early Detection of Health Change for Older Adults. <i>Gerontology</i> , 2015, 61, 281-290.	1.4	67
46	Living Labs for Pervasive Healthcare Research. <i>IEEE Pervasive Computing</i> , 2015, 14, 86-89.	1.1	13
47	Automated Health Alerts Using In-Home Sensor Data for Embedded Health Assessment. <i>IEEE Journal of Translational Engineering in Health and Medicine</i> , 2015, 3, 1-11.	2.2	84
48	Recognizing complex instrumental activities of daily living using scene information and fuzzy logic. <i>Computer Vision and Image Understanding</i> , 2015, 140, 68-82.	3.0	32
49	Doppler Radar Fall Activity Detection Using the Wavelet Transform. <i>IEEE Transactions on Biomedical Engineering</i> , 2015, 62, 865-875.	2.5	193
50	Fall Detection in Homes of Older Adults Using the Microsoft Kinect. <i>IEEE Journal of Biomedical and Health Informatics</i> , 2015, 19, 290-301.	3.9	468
51	Average in-home gait speed: Investigation of a new metric for mobility and fall risk assessment of elders. <i>Gait and Posture</i> , 2015, 41, 57-62.	0.6	176
52	A framework for harmonizing sensor data to support embedded health assessment. , 2014, 2014, 1747-51.		5
53	Strategies for Human-Driven Robot Comprehension of Spatial Descriptions by Older Adults in a Robot Fetch Task. <i>Topics in Cognitive Science</i> , 2014, 6, 513-533.	1.1	10
54	A Theoretical study on the placement of microphone arrays for improving the localization accuracy of a fall. , 2014, 2014, 4523-6.		0

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55	Nighttime Restfulness During Daytime Dance Therapy. Western Journal of Nursing Research, 2014, 36, 362-373.	0.6	5
56	Day or Night Activity Recognition From Video Using Fuzzy Clustering Techniques. IEEE Transactions on Fuzzy Systems, 2014, 22, 483-493.	6.5	82
57	Sit-to-Stand Measurement for In-Home Monitoring Using Voxel Analysis. IEEE Journal of Biomedical and Health Informatics, 2014, 18, 1502-1509.	3.9	11
58	Quantitative Gait Measurement With Pulse-Doppler Radar for Passive In-Home Gait Assessment. IEEE Transactions on Biomedical Engineering, 2014, 61, 2434-2443.	2.5	74
59	Automated Fall Detection With Quality Improvement "Rewind" to Reduce Falls in Hospital Rooms. Journal of Gerontological Nursing, 2014, 40, 13-17.	0.3	30
60	A Memetic Algorithm for Matching Spatial Configurations With the Histograms of Forces. IEEE Transactions on Evolutionary Computation, 2013, 17, 588-604.	7.5	22
61	Toward a Passive Low-Cost In-Home Gait Assessment System for Older Adults. IEEE Journal of Biomedical and Health Informatics, 2013, 17, 346-355.	3.9	169
62	Sensor Technology to Support Aging in Place. Journal of the American Medical Directors Association, 2013, 14, 386-391.	1.2	100
63	Unobtrusive, Continuous, In-Home Gait Measurement Using the Microsoft Kinect. IEEE Transactions on Biomedical Engineering, 2013, 60, 2925-2932.	2.5	156
64	Detecting foreground disambiguation of depth images using fuzzy logic. , 2013, , .		3
65	Evaluation of Health Alerts From an Early Illness Warning System in Independent Living. CIN - Computers Informatics Nursing, 2013, 31, 274-280.	0.3	21
66	In-Home Fall Risk Assessment and Detection Sensor System. Journal of Gerontological Nursing, 2013, 39, 18-22.	0.3	45
67	Doppler radar sensor positioning in a fall detection system. , 2012, 2012, 256-9.		10
68	Activity Density Map Visualization and Dissimilarity Comparison for Eldercare Monitoring. IEEE Transactions on Information Technology in Biomedicine, 2012, 16, 607-614.	3.6	65
69	Fall detection using doppler radar and classifier fusion. , 2012, , .		10
70	Heartbeat detection from a hydraulic bed sensor using a clustering approach. , 2012, 2012, 2383-7.		48
71	Automated Technology to Speed Recognition of Signs of Illness in Older Adults. Journal of Gerontological Nursing, 2012, 38, 18-23.	0.3	69
72	Using passive sensing to estimate relative energy expenditure for eldercare monitoring. , 2011, , 642-648.		5

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73	An eldercare electronic health record system for predictive health assessment. , 2011, , .		10
74	Using sensor networks to detect urinary tract infections in older adults. , 2011, , .		43
75	Silhouette classification using pixel and voxel features for improved elder monitoring in dynamic environments. , 2011, , .		13
76	Refinement and evaluation of a hydraulic bed sensor. , 2011, 2011, 4356-60.		18
77	Evaluation of an Inexpensive Depth Camera for Passive In-Home Fall Risk Assessment. , 2011, , .		74
78	Evaluation of an inexpensive depth camera for in-home gait assessment. Journal of Ambient Intelligence and Smart Environments, 2011, 3, 349-361.	0.8	120
79	Evolution of an Early Illness Warning System to Monitor Frail Elders in Independent Living. Journal of Healthcare Engineering, 2011, 2, 337-364.	1.1	25
80	Object set matching with an evolutionary algorithm. , 2011, , .		2
81	Quantitative analysis of 180 degree turns for fall risk assessment using video sensors. , 2011, 2011, 7606-9.		9
82	Nighttime in-home action monitoring for eldercare. , 2011, 2011, 5299-302.		6
83	Gait characterization via pulse-Doppler radar. , 2011, , .		31
84	Passive Sensor Technology Interface to Assess Elder Activity in Independent Living. Nursing Research, 2011, 60, 318-325.	0.8	34
85	Improving Nurse Care Coordination With Technology. CIN - Computers Informatics Nursing, 2010, 28, 325-332.	0.3	35
86	Dance-Based Therapy in a Program of All-inclusive Care for the Elderly. Nursing Administration Quarterly, 2010, 34, 156-161.	0.9	32
87	Body sway measurement for fall risk assessment using inexpensive webcams. , 2010, 2010, 2225-9.		24
88	A modified genetic algorithm for matching building sets with the histograms of forces. , 2010, , .		3
89	Monitoring pulse and respiration with a non-invasive hydraulic bed sensor. , 2010, 2010, 2119-23.		42
90	Extracting footfalls from voxel data. , 2010, 2010, 1119-22.		16

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91	Developing a Comprehensive Electronic Health Record to Enhance Nursing Care Coordination, Use of Technology, and Research. <i>Journal of Gerontological Nursing</i> , 2010, 36, 13-17.	0.3	25
92	Reports of the AAAI 2008 Fall Symposia. <i>AI Magazine</i> , 2009, 30, 106.	1.4	0
93	Modeling Human Activity From Voxel Person Using Fuzzy Logic. <i>IEEE Transactions on Fuzzy Systems</i> , 2009, 17, 39-49.	6.5	94
94	Contour tracking of human exercises. , 2009, , .		11
95	Older adults' privacy considerations for vision based recognition methods of eldercare applications. <i>Technology and Health Care</i> , 2009, 17, 41-48.	0.5	96
96	A smart home application to eldercare: Current status and lessons learned. <i>Technology and Health Care</i> , 2009, 17, 183-201.	0.5	195
97	Linguistic summarization of video for fall detection using voxel person and fuzzy logic. <i>Computer Vision and Image Understanding</i> , 2009, 113, 80-89.	3.0	202
98	Fuzzy contour tracking of human silhouettes. , 2009, , .		2
99	Senior residents' perceived need of and preferences for "smart home" sensor technologies. <i>International Journal of Technology Assessment in Health Care</i> , 2008, 24, 120-124.	0.2	271
100	Modeling Fuzziness Measures for Best Wavelet Selection. <i>IEEE Transactions on Fuzzy Systems</i> , 2008, 16, 1259-1270.	6.5	7
101	Adaptive temporal difference learning of spatial memory in the water maze task. , 2008, , .		4
102	TigerPlace, A State-Academic-Private Project to Revolutionize Traditional Long-Term Care. <i>Journal of Housing for the Elderly</i> , 2008, 22, 66-85.	0.7	46
103	Falls, Technology, and Stunt Actors. <i>Journal of Nursing Care Quality</i> , 2008, 23, 195-201.	0.5	17
104	Findings from a participatory evaluation of a smart home application for older adults. <i>Technology and Health Care</i> , 2008, 16, 111-118.	0.5	129
105	Sensor Systems for Monitoring Functional Status in Assisted Living Facility Residents. <i>Research in Gerontological Nursing</i> , 2008, 1, 238-244.	0.2	21
106	Findings from a participatory evaluation of a smart home application for older adults. <i>Technology and Health Care</i> , 2008, 16, 111-8.	0.5	32
107	Scene Matching between a Map and a Hand Drawn Sketch Using Spatial Relations. <i>Proceedings - IEEE International Conference on Robotics and Automation</i> , 2007, , .	0.0	12
108	A Robot in a Water Maze: Learning a Spatial Memory Task. <i>Proceedings - IEEE International Conference on Robotics and Automation</i> , 2007, , .	0.0	4

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109	Using a hand-drawn sketch to control a team of robots. <i>Autonomous Robots</i> , 2007, 22, 399-410.	3.2	38
110	Adaptive Silhouette Extraction and Human Tracking in Complex and Dynamic Environments. , 2006, , .		16
111	Recognizing Falls from Silhouettes. , 2006, 2006, 6388-91.		122
112	Technology for Successful Aging. Annual International Conference of the IEEE Engineering in Medicine and Biology Society, 2006, , .	0.5	1
113	Recognizing Falls from Silhouettes. Annual International Conference of the IEEE Engineering in Medicine and Biology Society, 2006, , .	0.5	13
114	Qualitative spatial referencing for natural human-robot interfaces. <i>Interactions</i> , 2005, 12, 27-30.	0.8	1
115	COLLABORATING WITH HUMANOID ROBOTS IN SPACE. <i>International Journal of Humanoid Robotics</i> , 2005, 02, 181-201.	0.6	9
116	A technology and nursing collaboration to help older adults age in place. <i>Nursing Outlook</i> , 2005, 53, 40-45.	1.5	143
117	Older adults' attitudes towards and perceptions of "smart home"™ technologies: a pilot study. <i>Informatics for Health and Social Care</i> , 2004, 29, 87-94.	1.0	490
118	Title is missing!. <i>Autonomous Robots</i> , 2003, 14, 51-69.	3.2	38
119	Detection of lameness and determination of the affected forelimb in horses by use of continuous wavelet transformation and neural network classification of kinematic data. <i>American Journal of Veterinary Research</i> , 2003, 64, 1376-1381.	0.3	31
120	A system for automated acquisition of digital flexion using a 3-D camera and custom gantry. <i>Hand Therapy</i> , 0, , 175899832211109.	0.5	0