Marjorie Skubic

List of Publications by Year
in descending order

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	Older adults' attitudes towards and perceptions of â€˜smart homeâ€™ technologies: a pilot study. Informatics for Health and Social Care, 2004, 29, 87-94.	1.0	490
2	Fall Detection in Homes of Older Adults Using the Microsoft Kinect. IEEE Journal of Biomedical and Health Informatics, 2015, 19, 290-301.	3.9	468
3	Senior residentsâ€™ perceived need of and preferences for â€œsmart homeâ€•sensor technologies. International Journal of Technology Assessment in Health Care, 2008, 24, 120-124.	0.2	271
4	Linguistic summarization of video for fall detection using voxel person and fuzzy logic. Computer Vision and Image Understanding, 2009, 113, 80-89.	3.0	202
5	A smart home application to eldercare: Current status and lessons learned. Technology and Health Care, 2009, 17, 183-201.	0.5	195
6	Doppler Radar Fall Activity Detection Using the Wavelet Transform. IEEE Transactions on Biomedical Engineering, 2015, 62, 865-875.	2.5	193
7	Average in-home gait speed: Investigation of a new metric for mobility and fall risk assessment of elders. Gait and Posture, 2015, 41, 57-62.	0.6	176
8	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
9	Unobtrusive, Continuous, In-Home Gait Measurement Using the Microsoft Kinect. IEEE Transactions on Biomedical Engineering, 2013, 60, 2925-2932.	2.5	156
10	A technology and nursing collaboration to help older adults age in place. Nursing Outlook, 2005, 53, 40-45.	1.5	143
11	Findings from a participatory evaluation of a smart home application for older adults. Technology and Health Care, 2008, 16, 111-118.	0.5	129
12	Recognizing Falls from Silhouettes. , 2006, 2006, 6388-91.		122
13	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
14	Sensor Technology to Support Aging in Place. Journal of the American Medical Directors Association, 2013, 14, 386-391.	1.2	100
15	Older adults' privacy considerations for vision based recognition methods of eldercare applications. Technology and Health Care, 2009, 17, 41-48.	0.5	96
16	Modeling Human Activity From Voxel Person Using Fuzzy Logic. IEEE Transactions on Fuzzy Systems, 2009, 17, 39-49.	6.5	94
17	Automated Health Alerts Using In-Home Sensor Data for Embedded Health Assessment. IEEE Journal of Translational Engineering in Health and Medicine, 2015, 3, 1-11.	2.2	84
18	Day or Night Activity Recognition From Video Using Fuzzy Clustering Techniques. IEEE Transactions on Fuzzy Systems, 2014, 22, 483-493.	6.5	82

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19	Evaluation of an Inexpensive Depth Camera for Passive In-Home Fall Risk Assessment. , 2011, , .		74
20	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
21	Automated Technology to Speed Recognition of Signs of Illness in Older Adults. Journal of Gerontological Nursing, 2012, 38, 18-23.	0.3	69
22	Automated In-Home Fall Risk Assessment and Detection Sensor System for Elders. Gerontologist, The, 2015, 55, S78-S87.	2.3	68
23	A New Paradigm of Technology-Enabled â€˜Vital Signs' for Early Detection of Health Change for Older Adults. Gerontology, 2015, 61, 281-290.	1.4	67
24	Activity Density Map Visualization and Dissimilarity Comparison for Eldercare Monitoring. IEEE Transactions on Information Technology in Biomedicine, 2012, 16, 607-614.	3.6	65
25	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
26	Validation of a Kinect V2 based rehabilitation game. PLoS ONE, 2018, 13, e0202338.	1.1	49
27	Heartbeat detection from a hydraulic bed sensor using a clustering approach. , 2012, 2012, 2383-7.		48
28	TigerPlace, A State-Academic-Private Project to Revolutionize Traditional Long-Term Care. Journal of Housing for the Elderly, 2008, 22, 66-85.	0.7	46
29	Robust heartbeat detection from in-home ballistocardiogram signals of older adults using a bed sensor. , 2015, 2015, 7175-9.		45
30	In-Home Fall Risk Assessment and Detection Sensor System. Journal of Gerontological Nursing, 2013, 39, 18-22.	0.3	45
31	Using sensor networks to detect urinary tract infections in older adults. , 2011, , .		43
32	Monitoring pulse and respiration with a non-invasive hydraulic bed sensor. , 2010, 2010, 2119-23.		42
33	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
34	Cardiovascular Function and Ballistocardiogram: A Relationship Interpreted via Mathematical Modeling. IEEE Transactions on Biomedical Engineering, 2019, 66, 2906-2917.	2.5	41
35	Using Embedded Sensors in Independent Living to Predict Gait Changes and Falls. Western Journal of Nursing Research, 2017, 39, 78-94.	0.6	39
36	Title is missing!. Autonomous Robots, 2003, 14, 51-69.	3.2	38

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37	Using a hand-drawn sketch to control a team of robots. Autonomous Robots, 2007, 22, 399-410.	3.2	38
38	Improving Nurse Care Coordination With Technology. CIN - Computers Informatics Nursing, 2010, 28, 325-332.	0.3	35
39	Enhanced registered nurse care coordination with sensor technology: Impact on length of stay and cost in aging inÂplaceÂhousing. Nursing Outlook, 2015, 63, 650-655.	1.5	35
40	Passive Sensor Technology Interface to Assess Elder Activity in Independent Living. Nursing Research, 2011, 60, 318-325.	0.8	34
41	Dance-Based Therapy in a Program of All-inclusive Care for the Elderly. Nursing Administration Quarterly, 2010, 34, 156-161.	0.9	32
42	Recognizing complex instrumental activities of daily living using scene information and fuzzy logic. Computer Vision and Image Understanding, 2015, 140, 68-82.	3.0	32
43	Findings from a participatory evaluation of a smart home application for older adults. Technology and Health Care, 2008, 16, 111-8.	0.5	32
44	Detection of lameness and determination of the affected forelimb in horses by use of continuous wavelet transformation and neural network classification of kinematic data. American Journal of Veterinary Research, 2003, 64, 1376-1381.	0.3	31
45	Gait characterization via pulse-Doppler radar. , 2011, , .		31
46	Automated Fall Detection With Quality Improvement â€œRewindâ€•to Reduce Falls in Hospital Rooms. Journal of Gerontological Nursing, 2014, 40, 13-17.	0.3	30
47	Heart rate monitoring using hydraulic bed sensor ballistocardiogram1. Journal of Ambient Intelligence and Smart Environments, 2017, 9, 193-207.	0.8	29
48	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
49	Synchronous Big Data analytics for personalized and remote physical therapy. Pervasive and Mobile Computing, 2016, 28, 3-20.	2.1	26
50	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
51	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
52	Developing a Comprehensive Electronic Health Record to Enhance Nursing Care Coordination, Use of Technology, and Research. Journal of Gerontological Nursing, 2010, 36, 13-17.	0.3	25
53	Body sway measurement for fall risk assessment using inexpensive webcams. , 2010, 2010, 2225-9.		24
54	Testing non-wearable fall detection methods in the homes of older adults. , 2016, 2016, 557-560.		24

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55	A Memetic Algorithm for Matching Spatial Configurations With the Histograms of Forces. IEEE Transactions on Evolutionary Computation, 2013, 17, 588-604.	7.5	22
56	Evaluation of Health Alerts From an Early Illness Warning System in Independent Living. CIN - Computers Informatics Nursing, 2013, 31, 274-280.	0.3	21
57	Sensor Systems for Monitoring Functional Status in Assisted Living Facility Residents. Research in Gerontological Nursing, 2008, 1, 238-244.	0.2	21
58	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
59	Refinement and evaluation of a hydraulic bed sensor. , 2011, 2011, 4356-60.		18
60	Development and preliminary validation of an interactive remote physical therapy system. , 2015, 2015, 190-3.		18
61	Falls, Technology, and Stunt Actors. Journal of Nursing Care Quality, 2008, 23, 195-201.	0.5	17
62	Exploring the feasibility and acceptability of sensor monitoring of gait and falls in the homes of persons with multiple sclerosis. Gait and Posture, 2016, 49, 277-282.	0.6	17
63	Adaptive Silouette Extraction and Human Tracking in Complex and Dynamic Environments. , 2006, , .		16
64	Extracting footfalls from voxel data. , 2010, 2010, 1119-22.		16
65	Non-Invasive In-Home Sleep Stage Classification Using a Ballistocardiography Bed Sensor. , 2019, , .		15
66	Heart beat characterization from ballistocardiogram signals using extended functions of multiple instances. , 2016, 2016, 756-760.		14
67	Silhouette classification using pixel and voxel features for improved elder monitoring in dynamic environments. , 2011, , .		13
68	Living Labs for Pervasive Healthcare Research. IEEE Pervasive Computing, 2015, 14, 86-89.	1.1	13
69	Recognizing Falls from Silhouettes. Annual International Conference of the IEEE Engineering in Medicine and Biology Society, 2006, , .	0.5	13
70	Scene Matching between a Map and a Hand Drawn Sketch Using Spatial Relations. Proceedings - IEEE International Conference on Robotics and Automation, 2007, , .	0.0	12
71	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
72	Contour tracking of human exercises. , 2009, , .		11

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73	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
74	An eldercare electronic health record system for predictive health assessment. , 2011, , .		10
75	Doppler radar sensor positioning in a fall detection system. , 2012, 2012, 256-9.		10
76	Fall detection using doppler radar and classifier fusion. , 2012, , .		10
77	Strategies for Humanâ€Driven Robot Comprehension of Spatial Descriptions by Older Adults in a Robot Fetch Task. Topics in Cognitive Science, 2014, 6, 513-533.	1.1	10
78	COLLABORATING WITH HUMANOID ROBOTS IN SPACE. International Journal of Humanoid Robotics, 2005, 02, 181-201.	0.6	9
79	Quantitative analysis of 180 degree turns for fall risk assessment using video sensors. , 2011, 2011, 7606-9.		9
80	Exploratory analysis of older adultsâ€™ 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
81	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
82	Angel-Echo: A Personalized Health Care Application. , 2017, , .		8
83	VicoVR-Based Wireless Daily Activity Recognition and Assessment System for Stroke Rehabilitation. , 2018, , .		8
84	Non-invasive monitoring of vital signs for older adults using recliner chairs. Health and Technology, 2021, 11, 169-184.	2.1	8
85	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
86	Modeling Fuzziness Measures for Best Wavelet Selection. IEEE Transactions on Fuzzy Systems, 2008, 16, 1259-1270.	6.5	7
87	Tracking personalized functional health in older adults using geriatric assessments. BMC Medical Informatics and Decision Making, 2020, 20, 270.	1.5	7
88	Nighttime in-home action monitoring for eldercare. , 2011, 2011, 5299-302.		6
89	Radar placement for fall detection: SignatureÂand performance. Journal of Ambient Intelligence and Smart Environments, 2018, 10, 21-34.	0.8	6
90	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

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91	Using passive sensing to estimate relative energy expenditure for eldercare monitoring. , 2011, , 642-648.		5
92	A framework for harmonizing sensor data to support embedded health assessment. , 2014, 2014, 1747-51.		5
93	Nighttime Restfulness During Daytime Dance Therapy. Western Journal of Nursing Research, 2014, 36, 362-373.	0.6	5
94	Toward an ElderCare Living Lab for Sensor-Based Health Assessment and Physical Therapy. IEEE Cloud Computing, 2017, 4, 30-39.	5.3	5
95	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
96	Social practices of nurse care coordination using sensor technologies â€“ 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
97	Mechanism-Driven Modeling to Aid Non-invasive Monitoring of Cardiac Function via Ballistocardiography. Frontiers in Medical Technology, 2022, 4, 788264.	1.3	5
98	A Robot in a Water Maze: Learning a Spatial Memory Task. Proceedings - IEEE International Conference on Robotics and Automation, 2007, , .	0.0	4
99	Adaptive temporal difference learning of spatial memory in the water maze task. , 2008, , .		4
100	Older Adultsâ€™ Perceptions of and Preferences for a Fall Risk Assessment System. CIN - Computers Informatics Nursing, 2017, 35, 331-337.	0.3	4
101	Human-centered approaches that integrate sensor technology across the lifespan: Opportunities and challenges. Nursing Outlook, 2020, 68, 734-744.	1.5	4
102	Novel clinically-relevant assessment of upper extremity movement using depth sensors. Topics in Stroke Rehabilitation, 2023, 30, 11-20.	1.0	4
103	A modified genetic algorithm for matching building sets with the histograms of forces. , 2010, , .		3
104	Detecting foreground disambiguation of depth images using fuzzy logic. , 2013, , .		3
105	Leveraging Unsupervised Machine Learning to Discover Patterns in Linguistic Health Summaries for Eldercare. , 2021, 2021, 2180-2185.		3
106	Fuzzy contour tracking of human silhouettes. , 2009, , .		2
107	Object set matching with an evolutionary algorithm. , 2011, , .		2
108	Assistive Adjustable Smart Shower System. , 2017, , .		2

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109	Qualitative spatial referencing for natural human-robot interfaces. Interactions, 2005, 12, 27-30.	0.8	1
110	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
111	Technology for Successful Aging. Annual International Conference of the IEEE Engineering in Medicine and Biology Society, 2006, , .	0.5	1
112	Integrating Voice-Assisted Technology with an In-Home Sensor System. , 2020, , .		1
113	Reports of the AAAI 2008 Fall Symposia. AI Magazine, 2009, 30, 106.	1.4	0
114	A Theoretical study on the placement of microphone arrays for improving the localization accuracy of a fall. , 2014, 2014, 4523-6.		0
115	Exploring clinical correlations in centroid-based gait metrics from depth data collected in the home. , 2017, , .		0
116	A Novel Depth Image Analysis Method to Calculate the Anterior Reach of the Modified Star Excursion Balance Test. , 2018, , .		0
117	TigerPlace. , 2017, , 643-657.		0
118	Design Evolution of a Head-Worn Biofeedback System to Address Vestibular Balance Impairment. , 2021, , .		0
119	Prototype Hat as a Biofeedback System to Address Vestibular Balance Impairment. IFMBE Proceedings, 2021, , 984-993.	0.2	0
120	A system for automated acquisition of digital flexion using a 3-D camera and custom gantry. Hand Therapy, 0, , 175899832211109.	0.5	0