

# Babak Taati

## List of Publications by Year in descending order

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Version: 2024-02-01

77  
papers

1,763  
citations

361413

20  
h-index

377865

34  
g-index

85  
all docs

85  
docs citations

85  
times ranked

1941  
citing authors

#	ARTICLE	IF	CITATIONS
1	Estimating Parkinsonism Severity in Natural Gait Videos of Older Adults With Dementia. IEEE Journal of Biomedical and Health Informatics, 2022, 26, 2288-2298.	6.3	32
2	Detecting and predicting visually induced motion sickness with physiological measures in combination with machine learning techniques. International Journal of Psychophysiology, 2022, 176, 14-26.	1.0	21
3	Concurrent Validity of Zeno Instrumented Walkway and Video-Based Gait Features in Adults With Parkinson's Disease. IEEE Journal of Translational Engineering in Health and Medicine, 2022, 10, 1-11.	3.7	9
4	The Toronto older adults gait archive: video and 3D inertial motion capture data of older adults walking. Scientific Data, 2022, 9, .	5.3	2
5	Predicting Short-Term Risk of Falls in a High-Risk Group With Dementia. Journal of the American Medical Directors Association, 2021, 22, 689-695.e1.	2.5	12
6	A systematic review of center of pressure measures to quantify gait changes in older adults. Experimental Gerontology, 2021, 143, 111170.	2.8	15
7	A New Dataset for Facial Motion Analysis in Individuals With Neurological Disorders. IEEE Journal of Biomedical and Health Informatics, 2021, 25, 1111-1119.	6.3	26
8	Automatic Respiratory Phase Identification Using Tracheal Sounds and Movements During Sleep. Annals of Biomedical Engineering, 2021, 49, 1521-1533.	2.5	6
9	Relative tidal volume and respiratory airflow estimation using tracheal sound and movement during sleep. Journal of Sleep Research, 2021, 30, e13279.	3.2	6
10	Unobtrusive Pain Monitoring in Older Adults With Dementia Using Pairwise and Contrastive Training. IEEE Journal of Biomedical and Health Informatics, 2021, 25, 1450-1462.	6.3	12
11	Concurrent validity of human pose tracking in video for measuring gait parameters in older adults: a preliminary analysis with multiple trackers, viewing angles, and walking directions. Journal of NeuroEngineering and Rehabilitation, 2021, 18, 139.	4.6	20
12	Noncontact Sleep Monitoring With Infrared Video Data to Estimate Sleep Apnea Severity and Distinguish Between Positional and Nonpositional Sleep Apnea: Model Development and Experimental Validation. Journal of Medical Internet Research, 2021, 23, e26524.	4.3	6
13	Gait changes over time in hospitalized older adults with advanced dementia: Predictors of mobility change. PLoS ONE, 2021, 16, e0259975.	2.5	6
14	Virtual Hand Illusion in younger and older adults. Journal of Rehabilitation and Assistive Technologies Engineering, 2021, 8, 205566832110593.	0.9	1
15	Prediction of Parkinsonian Gait in Older Adults with Dementia using Joint Trajectories and Gait Features from 2D Video <sup>*</sup> , 2021, 2021, 5700-5703.		3
16	Vision-Based Assessment of Gait Features Associated With Falls in People With Dementia. Journals of Gerontology - Series A Biological Sciences and Medical Sciences, 2020, 75, 1148-1153.	3.6	22
17	Quality Indicators as Predictors of Future Inspection Performance in Ontario Nursing Homes. Journal of the American Medical Directors Association, 2020, 21, 793-798.e1.	2.5	6
18	Assessment of Parkinsonian gait in older adults with dementia via human pose tracking in video data. Journal of NeuroEngineering and Rehabilitation, 2020, 17, 97.	4.6	36

#	ARTICLE	IF	CITATIONS
19	&lt;p&gt;Sleep/Wakefulness Detection Using Tracheal Sounds and Movements&lt;/p&gt;. Nature and Science of Sleep, 2020, Volume 12, 1009-1021.	2.7	6
20	Measuring Gait Variables Using Computer Vision to Assess Mobility and Fall Risk in Older Adults With Dementia. IEEE Journal of Translational Engineering in Health and Medicine, 2020, 8, 1-9.	3.7	49
21	Toward an Automatic System for Computer-Aided Assessment in Facial Palsy. Facial Plastic Surgery and Aesthetic Medicine, 2020, 22, 42-49.	0.9	60
22	Sleep Apnea Severity Estimation From Tracheal Movements Using a Deep Learning Model. IEEE Access, 2020, 8, 22641-22649.	4.2	34
23	Distinguishing Obstructive Versus Central Apneas in Infrared Video of Sleep Using Deep Learning: Validation Study. Journal of Medical Internet Research, 2020, 22, e17252.	4.3	15
24	Ambient Pain Monitoring in Older Adults with Dementia to Improve Pain Management in Long-Term Care Facilities. , 2020, , .		0
25	Estimation of Orofacial Kinematics in Parkinsonâ€™s Disease: Comparison of 2D and 3D Markerless Systems for Motion Tracking. , 2020, , .		4
26	Vision-Based Heart and Respiratory Rate Monitoring During Sleep â€“ A Validation Study for the Population at Risk of Sleep Apnea. IEEE Journal of Translational Engineering in Health and Medicine, 2019, 7, 1-8.	3.7	21
27	Pain Expression Recognition Using Occluded Faces. , 2019, , .		6
28	Automated Non-Contact Detection of Head and Body Positions During Sleep. IEEE Access, 2019, 7, 72826-72834.	4.2	22
29	Investigating the feasibility and acceptability of real-time visual feedback in reducing compensatory motions during self-administered stroke rehabilitation exercises: A pilot study with chronic stroke survivors. Journal of Rehabilitation and Assistive Technologies Engineering, 2019, 6, 205566831983163.	0.9	19
30	Algorithmic Bias in Clinical Populationsâ€™ Evaluating and Improving Facial Analysis Technology in Older Adults With Dementia. IEEE Access, 2019, 7, 25527-25534.	4.2	41
31	Pain Expressions in Dementia: Validity of Observersâ€™ Pain Judgments as a Function of Angle of Observation. Journal of Nonverbal Behavior, 2019, 43, 309-327.	1.0	9
32	The feasibility of a vision-based sensor for longitudinal monitoring of mobility in older adults with dementia. Archives of Gerontology and Geriatrics, 2019, 82, 200-206.	3.0	20
33	Non-contact Apnea-Hypopnea Index Estimation using Near Infrared Video. , 2019, 2019, 792-795.		5
34	Sleep Apnea Severity Estimation from Respiratory Related Movements Using Deep Learning. , 2019, 2019, 1601-1604.		10
35	Use of Free-Living Step Count Monitoring for Heart Failure Functional Classification: Validation Study. JMIR Cardio, 2019, 3, e12122.	1.7	23
36	Automatic Detection of Compensation During Robotic Stroke Rehabilitation Therapy. IEEE Journal of Translational Engineering in Health and Medicine, 2018, 6, 1-7.	3.7	32

#	ARTICLE	IF	CITATIONS
37	Detecting agitation and aggression in people with dementia using sensors – A systematic review. Alzheimer's and Dementia, 2018, 14, 824-832.	0.8	61
38	P1 – 554: LONGITUDINAL VISION-BASED MONITORING OF CHANGES OF GAIT IN DEMENTIA: A PILOT STUDY. Alzheimer's and Dementia, 2018, 14, P545.	0.8	0
39	Vision-based assessment of parkinsonism and levodopa-induced dyskinesia with pose estimation. Journal of NeuroEngineering and Rehabilitation, 2018, 15, 97.	4.6	71
40	The Rubber Hand Illusion in Healthy Younger and Older Adults. Multisensory Research, 2018, 31, 537-555.	1.1	15
41	Automated assessment of levodopa-induced dyskinesia: Evaluating the responsiveness of video-based features. Parkinsonism and Related Disorders, 2018, 53, 42-45.	2.2	22
42	Automatic Detection of Amyotrophic Lateral Sclerosis (ALS) from Video-Based Analysis of Facial Movements: Speech and Non-Speech Tasks. , 2018, , .		21
43	Noncontact Vision-Based Cardiopulmonary Monitoring in Different Sleeping Positions. IEEE Journal of Biomedical and Health Informatics, 2017, 21, 1367-1375.	6.3	50
44	Mixture-Model Clustering of Pathological Gait Patterns. IEEE Journal of Biomedical and Health Informatics, 2017, 21, 1297-1305.	6.3	17
45	Video analysis of – YouTube funnies – to aid the study of human gait and falls - preliminary results and proof of concept. , 2017, 2017, 1178-1181.		3
46	An Automated Classification of Pathological Gait Using Unobtrusive Sensing Technology. IEEE Transactions on Neural Systems and Rehabilitation Engineering, 2017, 25, 2336-2346.	4.9	49
47	Detecting unseen falls from wearable devices using channel-wise ensemble of autoencoders. Expert Systems With Applications, 2017, 87, 280-290.	7.6	55
48	The toronto rehab stroke pose dataset to detect compensation during stroke rehabilitation therapy. , 2017, , .		25
49	Automated vision-based analysis of levodopa-induced dyskinesia with deep learning. , 2017, 2017, 3377-3380.		18
50	Subspace selection to suppress confounding source domain information in AAM transfer learning. , 2017, , .		2
51	Automated classification of pathological gait after stroke using ubiquitous sensing technology. , 2016, 2016, 6150-6153.		9
52	Concurrent validity of the Microsoft Kinect for Windows v2 for measuring spatiotemporal gait parameters. Medical Engineering and Physics, 2016, 38, 952-958.	1.7	75
53	Automated Video Analysis of Handwashing Behavior as a Potential Marker of Cognitive Health in Older Adults. IEEE Journal of Biomedical and Health Informatics, 2016, 20, 682-690.	6.3	33
54	Interdisciplinary development of manual and automated product usability assessments for older adults with dementia: lessons learned. Disability and Rehabilitation: Assistive Technology, 2016, 11, 581-587.	2.2	6

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55	Predicting Neck Fluid Accumulation While Supine. <i>Journal of Healthcare Engineering</i> , 2015, 6, 673-690.	1.9	2
56	Use of Accelerometer-Based Feedback of Walking Activity for Appraising Progress With Walking-Related Goals in Inpatient Stroke Rehabilitation. <i>Neurorehabilitation and Neural Repair</i> , 2015, 29, 847-857.	2.9	67
57	Lower body motion analysis to detect falls and near falls on stairs. <i>Biomedical Engineering Letters</i> , 2015, 5, 98-108.	4.1	13
58	Autonomous Unobtrusive Detection of Mild Cognitive Impairment in Older Adults. <i>IEEE Transactions on Biomedical Engineering</i> , 2015, 62, 1383-1394.	4.2	97
59	A non-contact vision-based system for respiratory rate estimation. , 2014, 2014, 2119-22.		27
60	Vision-based approach for long-term mobility monitoring: Single case study following total hip replacement. <i>Journal of Rehabilitation Research and Development</i> , 2014, 51, 1165-1176.	1.6	19
61	Vision-based categorization of upper body motion impairments and post-stroke motion synergies. <i>International Journal on Disability and Human Development</i> , 2014, 13, .	0.2	2
62	Data Mining in Bone Marrow Transplant Records to Identify Patients With High Odds of Survival. <i>IEEE Journal of Biomedical and Health Informatics</i> , 2014, 18, 21-27.	6.3	13
63	Video analysis for identifying human operation difficulties and faucet usability assessment. <i>Neurocomputing</i> , 2013, 100, 163-169.	5.9	14
64	Interdisciplinary Development of Intelligent Rehabilitation Technologies. <i>Biosystems and Biorobotics</i> , 2013, , 353-358.	0.3	0
65	3D Human Motion Analysis to Detect Abnormal Events on Stairs. , 2012, , .		27
66	Difference of Normals as a Multi-scale Operator in Unorganized Point Clouds. , 2012, , .		99
67	Vision-based posture assessment to detect and categorize compensation during robotic rehabilitation therapy. , 2012, , .		28
68	Assessment of product use by older adults with dementia: Automated video analysis. <i>Alzheimer's and Dementia</i> , 2012, 8, P444.	0.8	0
69	Towards Aging-in-Place: Automatic Assessment of Product Usability for Older Adults with Dementia. , 2011, , .		3
70	Local shape descriptor selection for object recognition in range data. <i>Computer Vision and Image Understanding</i> , 2011, 115, 681-694.	4.7	88
71	Towards a single sensor passive solution for automated fall detection. , 2011, 2011, 1773-6.		42
72	Automatic segmentation of video to aid the study of faucet usability for older adults. , 2010, , .		6

#	ARTICLE	IF	CITATIONS
73	Water Flow Detection in a Handwashing Task. , 2010, , .		10
74	Experimental Identification and Analysis of the Dynamics of a PHANToM Premium 1.5A Haptic Device. Presence: Teleoperators and Virtual Environments, 2008, 17, 327-343.	0.6	21
75	Variable Dimensional Local Shape Descriptors for Object Recognition in Range Data. , 2007, , .		24
76	Automatic Registration for Model Building using Variable Dimensional Local Shape Descriptors. International Conference on 3-D Digital Imaging and Modeling, Proceedings, 2007, , .	0.0	4
77	A Dynamic Load-Balancing Parallel Search for Enumerative Robot Path Planning. Journal of Intelligent and Robotic Systems: Theory and Applications, 2006, 47, 55-85.	3.4	5