

# Pasi A Karjalainen

## List of Publications by Year in descending order

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129  
papers

6,895  
citations

136740

32  
h-index

62479

80  
g-index

134  
all docs

134  
docs citations

134  
times ranked

7975  
citing authors

#	ARTICLE	IF	CITATIONS
1	Force-velocity profiling in ice hockey skating: reliability and validity of a simple, low-cost field method. <i>Sports Biomechanics</i> , 2023, 22, 874-889.	0.8	14
2	Autonomic responses to tooth clenching and handgrip test. <i>Acta Odontologica Scandinavica</i> , 2022, 80, 389-395.	0.9	3
3	Toward Tailored Rehabilitation by Implementation of a Novel Musculoskeletal Finite Element Analysis Pipeline. <i>IEEE Transactions on Neural Systems and Rehabilitation Engineering</i> , 2022, 30, 789-802.	2.7	5
4	An EMG-Assisted Muscle-Force Driven Finite Element Analysis Pipeline to Investigate Joint- and Tissue-Level Mechanical Responses in Functional Activities: Towards a Rapid Assessment Toolbox. <i>IEEE Transactions on Biomedical Engineering</i> , 2022, 69, 2860-2871.	2.5	13
5	Changes in elbow flexion EMG morphology during adjustment of deep brain stimulator in advanced Parkinson's disease. <i>PLoS ONE</i> , 2022, 17, e0266936.	1.1	0
6	Forces required in repositioning a patient in bed using regular sheet and slide film. <i>International Journal of Industrial Ergonomics</i> , 2022, 90, 103302.	1.5	2
7	A Perturbed Postural Balance Test Using an Instrumented Treadmill – Precision and Accuracy of Belt Movement and Test-Retest Reliability of Balance Measures. <i>Frontiers in Sports and Active Living</i> , 2021, 3, 688993.	0.9	3
8	Wearable monitoring of positive and negative myoclonus in progressive myoclonic epilepsy type 1. <i>Clinical Neurophysiology</i> , 2021, 132, 2464-2472.	0.7	7
9	Nutritive sucking creates a neurophysiological bridge over the birth gap. <i>Acta Paediatrica, International Journal of Paediatrics</i> , 2020, 109, 233-235.	0.7	1
10	Principal Component Regression on Motor Evoked Potential in Single-Pulse Transcranial Magnetic Stimulation. <i>IEEE Transactions on Neural Systems and Rehabilitation Engineering</i> , 2019, 27, 1521-1528.	2.7	13
11	Lumbopelvic movement control in contemporary dancers: A multiple case study. <i>Translational Sports Medicine</i> , 2019, 2, 214-220.	0.5	1
12	An Overview of Strategies for Reducing Upper Extremity Physical Exposure Associated With Floor Mopping: A Systematic Review. <i>Human Factors</i> , 2019, 61, 43-63.	2.1	3
13	The Potential of Dance Art in Recovery From a Stroke: A Case Study. <i>Nordic Journal of Dance</i> , 2019, 10, 32-43.	0.2	1
14	Evaluation of the Effect of Bariatric Surgery-Induced Weight Loss on Knee Gait and Cartilage Degeneration. <i>Journal of Biomechanical Engineering</i> , 2018, 140, .	0.6	21
15	Effects of Mop Handle Height on Forearm Muscle Activity, Wrist and Upper Arm Posture and Movement During Floor Mopping. <i>IIEE Transactions on Occupational Ergonomics and Human Factors</i> , 2018, 6, 84-97.	0.5	6
16	Tooth Clenching Induces Abnormal Cerebrovascular Responses in Migraineurs. <i>Frontiers in Neurology</i> , 2018, 9, 1112.	1.1	5
17	Parameters of Surface Electromyogram Suggest That Dry Immersion Relieves Motor Symptoms in Patients With Parkinsonism. <i>Frontiers in Neuroscience</i> , 2018, 12, 667.	1.4	12
18	Levodopa-Induced Changes in Electromyographic Patterns in Patients with Advanced Parkinson's Disease. <i>Frontiers in Neurology</i> , 2018, 9, 35.	1.1	21

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19	Autonomic responses to tooth clenching in migraineursâ€™ augmented trigeminocardiac reflex?. Journal of Oral Rehabilitation, 2018, 45, 764-769.	1.3	7
20	Effects of mop handle height on shoulder muscle activity and perceived exertion during floor mopping using a figure eight method. Industrial Health, 2016, 54, 58-67.	0.4	12
21	Nutritive sucking induces age-specific EEG-changes in 0â€™24 week-old infants. , 2016, 45, 98-108.		5
22	Psychophysiological responses to positive and negative food and nonfood visual stimuli.. Journal of Neuroscience, Psychology, and Economics, 2016, 9, 78-88.	0.4	11
23	Nonlinear parameters of surface EMG in schizophrenia patients depend on kind of antipsychotic therapy. Frontiers in Physiology, 2015, 6, 197.	1.3	5
24	Autonomic nervous system response to L-dopa in patients with advanced Parkinson's disease. , 2015, 2015, 6162-5.		3
25	Mouse ECG findings in aging, with conduction system affecting drugs and in cardiac pathologies: Development and validation of ECG analysis algorithm in mice. Physiological Reports, 2015, 3, e12639.	0.7	34
26	Electroencephalogram reactivity to verbal command after dexmedetomidine, propofol and sevoflurane-induced unresponsiveness. Anaesthesia, 2015, 70, 190-204.	1.8	19
27	Reduced cortical activation in inferior frontal junction in Unverrichtâ€™Lundborg disease (EPM1) â€™ A motor fMRI study. Epilepsy Research, 2015, 111, 78-84.	0.8	2
28	Heart rate variability evaluation of Emfit sleep mattress breathing categories in NREM sleep. Clinical Neurophysiology, 2015, 126, 967-974.	0.7	7
29	Signal features of surface electromyography in advanced Parkinsonâ€™s disease during different settings of deep brain stimulation. Clinical Neurophysiology, 2015, 126, 2290-2298.	0.7	26
30	Non-invasive mapping of bilateral motor speech areas using navigated transcranial magnetic stimulation and functional magnetic resonance imaging. Journal of Neuroscience Methods, 2015, 248, 32-40.	1.3	16
31	Dynamic tension EMG to characterize the effects of DBS treatment of advanced Parkinson's disease. , 2014, 2014, 3248-51.		7
32	Nonlinear State-Space Modeling of Human Motion Using 2-D Marker Observations. IEEE Transactions on Biomedical Engineering, 2014, 61, 2167-2178.	2.5	9
33	Surface EMG parameters in schizophrenia patients. , 2014, 2014, 3260-3.		1
34	The Impact of Obesity and Weight Loss on Gait in Adults. Studies in Mechanobiology, Tissue Engineering and Biomaterials, 2014, , 125-147.	0.7	1
35	Kubios HRV â€™ Heart rate variability analysis software. Computer Methods and Programs in Biomedicine, 2014, 113, 210-220.	2.6	1,878
36	EMG signal morphology and kinematic parameters in essential tremor and Parkinsonâ€™s disease patients. Journal of Electromyography and Kinesiology, 2014, 24, 300-306.	0.7	44

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37	Acral coldness in migraineurs. <i>Autonomic Neuroscience: Basic and Clinical</i> , 2014, 180, 70-73.	1.4	7
38	Lower impulsive loadings following intensive weight loss after bariatric surgery in level and stair walking: A preliminary study. <i>Knee</i> , 2014, 21, 534-540.	0.8	13
39	Novel sEMG parameters for early diagnostics of neurological diseases and aging. <i>Journal of Biomedical Technologies</i> , 2014, , 2-9.	0.0	0
40	Nitroglycerin-induced changes in facial skin temperature: "cold nose"™ as a predictor of headache?. <i>Clinical Physiology and Functional Imaging</i> , 2013, 33, 409-417.	0.5	11
41	EMG signal morphology in essential tremor and Parkinson's disease. , 2013, 2013, 5765-8.		7
42	The correlation of vectorcardiographic changes to blood lactate concentration during an exercise test. <i>Biomedical Signal Processing and Control</i> , 2013, 8, 491-499.	3.5	8
43	How creditor rights affect the value of cash: A cross-country study. <i>Journal of Corporate Finance</i> , 2013, 22, 278-298.	2.7	40
44	Causal estimation of neural and overall baroreflex sensitivity in relation to carotid artery stiffness. <i>Physiological Measurement</i> , 2013, 34, 1633-1644.	1.2	4
45	Non-Linear EMG Parameters for Differential and Early Diagnostics of Parkinson's Disease. <i>Frontiers in Neurology</i> , 2013, 4, 135.	1.1	41
46	Monitoring Functional Impairment and Recovery after Traumatic Brain Injury in Rats by fMRI. <i>Journal of Neurotrauma</i> , 2013, 30, 546-556.	1.7	35
47	Effects of Implementing an Ergonomic Work Schedule on Heart Rate Variability in Shift-working Nurses. <i>Journal of Occupational Health</i> , 2013, 55, 225-233.	1.0	13
48	Differences in Heart Rate Variability of Female Nurses between and within Normal and Extended Work Shifts. <i>Industrial Health</i> , 2013, 51, 154-164.	0.4	20
49	Asynchronicity of Facial Blood Perfusion in Migraine. <i>PLoS ONE</i> , 2013, 8, e80189.	1.1	37
50	Embodiment der Psyche des Neugeborenen. , 2013, , 113-128.		0
51	Estimation of arterial baroreflex sensitivity in relation to carotid artery stiffness. , 2012, 2012, 3408-11.		0
52	Cerebral cortex and sub-cortex lateralization in cardiovascular regulation: Correlations of BOLD fMRI and heart rate variability. , 2012, 2012, 3412-5.		1
53	Kinematic and kinetic changes in obese gait in bariatric surgery-induced weight loss. <i>Journal of Biomechanics</i> , 2012, 45, 1769-1774.	0.9	27
54	Linear and nonlinear tremor acceleration characteristics in patients with Parkinson's disease. <i>Physiological Measurement</i> , 2012, 33, 395-412.	1.2	54

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55	The effect of fMRI task combinations on determining the hemispheric dominance of language functions. <i>Neuroradiology</i> , 2012, 54, 393-405.	1.1	31
56	Heart Rate Variability Dynamics During Low-Dose Propofol and Dexmedetomidine Anesthesia. <i>Annals of Biomedical Engineering</i> , 2012, 40, 1802-1813.	1.3	23
57	EMG and acceleration signal analysis for quantifying the effects of medication in Parkinson's disease. , 2011, 2011, 7496-9.		1
58	Cholesterol metabolism, endothelial dysfunction, and carotid artery stiffness in type 1 diabetes†. <i>Artery Research</i> , 2011, 5, 8.	0.3	1
59	Measurements of skin temperature responses to cold exposure of foot and face in healthy individuals: variability and influencing factors. <i>Clinical Physiology and Functional Imaging</i> , 2011, 31, 307-314.	0.5	13
60	Analysis of EMG and Acceleration Signals for Quantifying the Effects of Deep Brain Stimulation in Parkinson's Disease. <i>IEEE Transactions on Biomedical Engineering</i> , 2011, 58, 2545-2553.	2.5	43
61	Dynamic estimation of cardiac repolarization characteristics during hypoglycemia in healthy and diabetic subjects. <i>Physiological Measurement</i> , 2011, 32, 649-660.	1.2	19
62	Hypoglycemia detection based on cardiac repolarization features. , 2011, 2011, 4697-700.		11
63	A Principal Component Regression Approach for Estimation of Ventricular Repolarization Characteristics. <i>IEEE Transactions on Biomedical Engineering</i> , 2010, 57, 1062-1069.	2.5	14
64	Gait and muscle activation changes in men with knee osteoarthritis. <i>Knee</i> , 2010, 17, 69-76.	0.8	62
65	Group-level variations in motor representation areas of thenar and anterior tibial muscles: Navigated Transcranial Magnetic Stimulation Study. <i>Human Brain Mapping</i> , 2010, 31, 1272-1280.	1.9	54
66	Analysis of heart rate variability dynamics during propofol and dexmedetomidine anesthesia. , 2010, 2010, 1634-7.		7
67	Discrimination of EMG and acceleration measurements between patients with Parkinson's disease and healthy persons. , 2010, 2010, 4878-81.		4
68	Method for Testing Motion Analysis Laboratory Measurement Systems. <i>Journal of Biomechanical Engineering</i> , 2010, 132, 114501.	0.6	3
69	Postural control and thigh muscle activity in men with knee osteoarthritis. <i>Journal of Electromyography and Kinesiology</i> , 2010, 20, 1066-1074.	0.7	40
70	The Relationship Between Spectral Changes in Heart Rate Variability and Fatigue. <i>Journal of Psychophysiology</i> , 2009, 23, 143-151.	0.3	75
71	Kalman smoother based time-varying spectrum estimation of EEG during single agent propofol anesthesia. , 2009, 2009, 5709-12.		1
72	Novel parameters of surface EMG in patients with Parkinson's disease and healthy young and old controls. <i>Journal of Electromyography and Kinesiology</i> , 2009, 19, e206-e213.	0.7	103

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73	Time-varying spectrum estimation of heart rate variability signals with Kalman smoother algorithm. , 2009, 2009, 1-4.		9
74	Analysis of Dynamic Voluntary Muscle Contractions in Parkinson's Disease. IEEE Transactions on Biomedical Engineering, 2009, 56, 2280-2288.	2.5	28
75	Baseline Removal from Near Infrared Spectroscopy Measurements for Lactate Concentration Estimation. IFMBE Proceedings, 2009, , 2042-2045.	0.2	1
76	Analysis of heart rate variability dynamics during propofol anesthesia. IFMBE Proceedings, 2009, , 868-871.	0.2	1
77	A transportable camera based motion analysis system with application to monitoring of rehabilitation of hand. IFMBE Proceedings, 2009, , 914-917.	0.2	0
78	Principal Component Approach for Mapping Functional Connectivity in Event-Related fMRI. IFMBE Proceedings, 2009, , 1029-1032.	0.2	0
79	Time-Varying Multivariate Correlation Analysis of EEG during Low Dose Propofol Anesthesia. IFMBE Proceedings, 2009, , 2028-2031.	0.2	0
80	Surface EMG and acceleration signals in Parkinsonâ€™s disease: feature extraction and cluster analysis. Medical and Biological Engineering and Computing, 2008, 46, 849-858.	1.6	78
81	R&D investments: The effects of different financial environments on firm profitability. Journal of Multinational Financial Management, 2008, 18, 79-93.	1.0	25
82	Tracking single-trial evoked potential changes with Kalman filtering and smoothing. , 2008, 2008, 157-60.		1
83	Perceived Mental Stress and Reactions in Heart Rate Variabilityâ€™A Pilot Study Among Employees of an Electronics Company. International Journal of Occupational Safety and Ergonomics, 2008, 14, 275-283.	1.1	91
84	Dynamic time-varying analysis of heart rate and blood pressure variability in cats exposed to short-term chronic intermittent hypoxia. American Journal of Physiology - Regulatory Integrative and Comparative Physiology, 2008, 295, R28-R37.	0.9	33
85	Estimation of single-trial fMRI BOLD responses using combined EEG and fMRI measurements. , 2008, 2008, 299-302.		0
86	Analysis of dynamic EMG and acceleration measurements in Parkinson's disease. , 2008, 2008, 5053-6.		2
87	A Subspace Method for Dynamical Estimation of Evoked Potentials. Computational Intelligence and Neuroscience, 2007, 2007, 1-11.	1.1	6
88	Analysis of surface EMG signal morphology in Parkinson's disease. Physiological Measurement, 2007, 28, 1507-1521.	1.2	52
89	Subspace Approaches for fMRI Time Series Estimation. Annual International Conference of the IEEE Engineering in Medicine and Biology Society, 2007, 2007, 5485-8.	0.5	0
90	Heart rate variability derived from exercise ECG in the detection of coronary artery disease. Physiological Measurement, 2007, 28, 1189-1200.	1.2	16

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91	A Principal Component Regression Approach for Estimating Ventricular Repolarization Duration Variability. <i>Eurasip Journal on Advances in Signal Processing</i> , 2007, 2007, .	1.0	0
92	Increased fMRI responses during encoding in mild cognitive impairment. <i>Neurobiology of Aging</i> , 2007, 28, 1889-1903.	1.5	298
93	Reproducibility of Loading Measurements With Skin-Mounted Accelerometers During Walking. <i>Archives of Physical Medicine and Rehabilitation</i> , 2007, 88, 907-915.	0.5	38
94	Spectral power and fractal dimension: Methodological comparison in a sample of normal sleepers and chronic insomniacs. <i>Sleep and Biological Rhythms</i> , 2007, 5, 239-250.	0.5	6
95	Effects of nutritive and non-nutritive sucking on infant heart rate variability during the first 6 months of life. , 2007, 30, 546-556.		31
96	Time-varying analysis of heart rate variability signals with a Kalman smoother algorithm. <i>Physiological Measurement</i> , 2006, 27, 225-239.	1.2	72
97	Method for testing movement analysis laboratory measurement systems. <i>Gait and Posture</i> , 2006, 24, S106-S107.	0.6	0
98	Relationship of P300 single-trial responses with reaction time and preceding stimulus sequence. <i>International Journal of Psychophysiology</i> , 2006, 61, 244-252.	0.5	35
99	Noise Sensitivity of a Principal Component Regression Based RT Interval Variability Estimation Method. , 2006, 2006, 3098-101.		1
100	Noise Sensitivity of a Principal Component Regression Based RT Interval Variability Estimation Method. <i>Annual International Conference of the IEEE Engineering in Medicine and Biology Society</i> , 2006, , .	0.5	0
101	Single-Trial Dynamical Estimation of Event-Related Potentials: A Kalman Filter-Based Approach. <i>IEEE Transactions on Biomedical Engineering</i> , 2005, 52, 1397-1406.	2.5	77
102	High-resolution QRS fiducial point corrections in sparsely sampled ECG recordings. <i>Physiological Measurement</i> , 2005, 26, 743-751.	1.2	14
103	Estimation of Nonstationary EEG With Kalman Smoother Approach: An Application to Event-Related Synchronization (ERS). <i>IEEE Transactions on Biomedical Engineering</i> , 2004, 51, 516-524.	2.5	105
104	Software for advanced HRV analysis. <i>Computer Methods and Programs in Biomedicine</i> , 2004, 76, 73-81.	2.6	593
105	Time-varying reconstruction in single photon emission computed tomography. <i>International Journal of Imaging Systems and Technology</i> , 2004, 14, 186-197.	2.7	7
106	Single-trial estimation of multichannel evoked-potential measurements. <i>IEEE Transactions on Biomedical Engineering</i> , 2003, 50, 189-196.	2.5	28
107	Heart rate variability in acute psychosis. <i>Psychophysiology</i> , 2003, 40, 716-726.	1.2	85
108	Visual Processing of Coherent Rotation in the Central Visual Field: An fMRI Study. <i>Perception</i> , 2003, 32, 1247-1257.	0.5	12

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109	An advanced detrending method with application to HRV analysis. IEEE Transactions on Biomedical Engineering, 2002, 49, 172-175.	2.5	898
110	A new computational approach for cortical imaging. IEEE Transactions on Medical Imaging, 2001, 20, 325-332.	5.4	12
111	Loss of Time-Organized Sympathetic Skin Responses in Acute Psychosis. Journal of Nervous and Mental Disease, 2001, 189, 552-556.	0.5	4
112	Analysis of galvanic skin responses with principal components and clustering techniques. IEEE Transactions on Biomedical Engineering, 2001, 48, 1071-1079.	2.5	35
113	Effects of electrode properties on EEG measurements and a related inverse problem. Medical Engineering and Physics, 2000, 22, 535-545.	0.8	34
114	Perturbation expansions in polynomial root tracking. Signal Processing, 2000, 80, 515-523.	2.1	1
115	Optimization of illumination profiles in line-scan camera systems. Measurement Science and Technology, 2000, 11, 1301-1306.	1.4	1
116	Dynamic electrical impedance tomography - phantom studies. Inverse Problems in Science and Engineering, 2000, 8, 495-510.	0.5	20
117	Effects of local skull inhomogeneities on EEG source estimation. Medical Engineering and Physics, 1999, 21, 143-154.	0.8	67
118	State Estimation in Time-Varying Electrical Impedance Tomography. Annals of the New York Academy of Sciences, 1999, 873, 430-439.	1.8	40
119	Estimation of the dynamics of event-related desynchronisation changes in electroencephalograms. Medical and Biological Engineering and Computing, 1999, 37, 309-315.	1.6	4
120	Subspace regularization method for the single-trial estimation of evoked potentials. IEEE Transactions on Biomedical Engineering, 1999, 46, 849-860.	2.5	59
121	A Kalman filter approach to track fast impedance changes in electrical impedance tomography. IEEE Transactions on Biomedical Engineering, 1998, 45, 486-493.	2.5	154
122	Tikhonov regularization and prior information in electrical impedance tomography. IEEE Transactions on Medical Imaging, 1998, 17, 285-293.	5.4	476
123	Electrical impedance tomography with basis constraints. Inverse Problems, 1997, 13, 523-530.	1.0	92
124	Assessment of errors in static electrical impedance tomography with adjacent and trigonometric current patterns. Physiological Measurement, 1997, 18, 289-303.	1.2	134
125	<title>Three-dimensional electrical impedance tomography using complete electrode model</title>. , 1997, 3171, 166.		5
126	<title>Recursive estimation of fast-impedance changes in electrical impedance tomography and a related problem</title>. , 1997, 3171, 208.		3



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127	Estimation of event-related synchronization changes by a new TVAR method. IEEE Transactions on Biomedical Engineering, 1997, 44, 649-656.	2.5	30
128	Simulation of nonstationary EEG. Biological Cybernetics, 1997, 76, 349-356.	0.6	21
129	An electrical impedance tomography measurement system for experimental use. Review of Scientific Instruments, 1996, 67, 3605-3609.	0.6	17