Mikael Forsman

List of Publications by Year
in descending order

99 papers	2,672 citations	172207 29 h-index	197535 49 g-index
103 all docs	103 docs citations	103 times ranked	2378 citing authors

#	Article	IF	Citations
1	Systematic evaluation of observational methods assessing biomechanical exposures at work. Scandinavian Journal of Work, Environment and Health, 2010, 36, 3-24.	1.7	414
2	Variability in mechanical exposure within and between individuals performing a highly constrained industrial work task. Ergonomics, 2003, 46, 800-824.	1.1	150
3	Effects of experimentally induced mental and physical stress on motor unit recruitment in the trapezius muscle. Work and Stress, 2002, 16, 166-178.	2.8	136
4	An integrated analysis of ergonomics and time consumption in Swedish â€˜craft-typeâ€™ car disassembly. Applied Ergonomics, 2005, 36, 263-273.	1.7	85
5	Intraoperative workload in robotic surgery assessed by wearable motion tracking sensors and questionnaires. Surgical Endoscopy and Other Interventional Techniques, 2017, 31, 877-886.	1.3	84
6	Consistency in physiological stress responses and electromyographic activity during induced stress exposure in women and men. Integrative Psychological and Behavioral Science, 2004, 39, 105-118.	0.3	82
7	Variation between seated and standing/walking postures among male and female call centre operators. BMC Public Health, 2012, 12, 154.	1.2	80
8	MTM-based ergonomic workload analysis. International Journal of Industrial Ergonomics, 2002, 30, 135-148.	1.5	76
9	Intramuscular pressure of the infra- and supraspinatus muscles in relation to hand load and arm posture. European Journal of Applied Physiology, 2000, 83, 223-230.	1.2	71
10	Thumb joint movement and muscular activity during mobile phone texting â€“ A methodological study. Journal of Electromyography and Kinesiology, 2011, 21, 363-370.	0.7	62
11	Ergonomic evaluation of complex work: a participative approach employing videoâ€“computer interaction, exemplified in a study of order picking. International Journal of Industrial Ergonomics, 2000, 25, 435-445.	1.5	61
12	Upper Arm Postures and Movements in Female Hairdressers across Four Full Working Days. Annals of Occupational Hygiene, 2010, 54, 584-94.	1.9	56
13	A case study of a principally new way of materials kittingâ€”an evaluation of time consumption and physical workload. International Journal of Industrial Ergonomics, 2002, 30, 49-65.	1.5	55
14	Operating hurts: a study of EAES surgeons. Surgical Endoscopy and Other Interventional Techniques, 2019, 33, 933-940.	1.3	49
15	An iPhone application for upper arm posture and movement measurements. Applied Ergonomics, 2017, 65, 492-500.	1.7	45
16	Low-threshold motor unit activity during a 1-h static contraction in the trapezius muscle. International Journal of Industrial Ergonomics, 2002, 30, 225-236.	1.5	42
17	A method for evaluation of manual work using synchronised video recordings and physiological measurements. Applied Ergonomics, 2002, 33, 533-540.	1.7	41
18	Motor-unit recruitment in the trapezius muscle during arm movements and in VDU precision work. International Journal of Industrial Ergonomics, 1999, 24, 619-630.	1.5	39

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19	Cost-efficient assessment of biomechanical exposure in occupational groups, exemplified by posture observation and inclinometry. Scandinavian Journal of Work, Environment and Health, 2014, 40, 252-265.	1.7	39
20	Inter- and intra- observer reliability of risk assessment of repetitive work without an explicit method. Applied Ergonomics, 2017, 62, 1-8.	1.7	38
21	Myofeedback training and intensive muscular strength training to decrease pain and improve work ability among female workers on long-term sick leave with neck pain: a randomized controlled trial. International Archives of Occupational and Environmental Health, 2011, 84, 335-346.	1.1	37
22	Validity of a small low-cost triaxial accelerometer with integrated logger for uncomplicated measurements of postures and movements of head, upper back and upper arms. Applied Ergonomics, 2016, 55, 108-116.	1.7	36
23	Full-Shift Trunk and Upper Arm Postures and Movements Among Aircraft Baggage Handlers. Annals of Occupational Hygiene, 2016, 60, 977-990.	1.9	35
24	A practical guidance for assessments of sedentary behavior at work: A PEROSH initiative. Applied Ergonomics, 2017, 63, 41-52.	1.7	34
25	Fusion of Heart Rate, Respiration and Motion Measurements from a Wearable Sensor System to Enhance Energy Expenditure Estimation. Sensors, 2018, 18, 3092.	2.1	34
26	Effects of visually demanding near work on trapezius muscle activity. Journal of Electromyography and Kinesiology, 2013, 23, 1190-1198.	0.7	33
27	Comparison of DSM-5 Classifications of Alcohol Use Disorders With Those of DSM-IV, DSM-III-R, and ICD-10 in a General Population Sample in Sweden. Journal of Studies on Alcohol and Drugs, 2015, 76, 773-780.	0.6	30
28	Towards Smart Work Clothing for Automatic Risk Assessment of Physical Workload. IEEE Access, 2018, 6, 40059-40072.	2.6	30
29	Musculoskeletal health and work ability in physically demanding occupations: study protocol for a prospective field study on construction and health care workers. BMC Public Health, 2014, 14, 1075.	1.2	29
30	Evaluation of physiological workload assessment methods using heart rate and accelerometry for a smart wearable system. Ergonomics, 2019, 62, 694-705.	1.1	28
31	Inter- and intra-rater reliability of the OCRA checklist method in video-recorded manual work tasks. Applied Ergonomics, 2020, 84, 103025.	1.7	26
32	Motor unit recruitment in the trapezius muscle with special reference to coarse arm movements. Journal of Electromyography and Kinesiology, 2001, 11, 207-216.	0.7	24
33	Identification and analysis of unsatisfactory psychosocial work situations: a participatory approach employing videoâ€“computer interaction. Applied Ergonomics, 2001, 32, 23-29.	1.7	22
34	Motor-unit recruitment during long-term isometric and wrist motion contractions: a study concerning muscular pain development in computer operators. International Journal of Industrial Ergonomics, 2002, 30, 237-250.	1.5	22
35	Mechanical exposure implications of rationalization: A comparison of two flow strategies in a Swedish manufacturing plant. Applied Ergonomics, 2012, 43, 1110-1121.	1.7	22
36	Neck/shoulder discomfort due to visually demanding experimental near work is influenced by previous neck pain, task duration, astigmatism, internal eye discomfort and accommodation. PLoS ONE, 2017, 12, e0182439.	1.1	22

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37	The relationship between oxygenation and myoelectric activity in the forearm and shoulder muscles of males and females. European Journal of Applied Physiology, 2011, 111, 647-658.	1.2	21
38	Reducing postural load in order picking through a smart workwear system using real-time vibrotactile feedback. Applied Ergonomics, 2020, 89, 103188.	1.7	21
39	Is what you see what you get? Standard inclinometry of set upper arm elevation angles. Applied Ergonomics, 2015, 47, 242-252.	1.7	20
40	Development and evaluation of RAMP II - a practitionerâ€™s tool for assessing musculoskeletal disorder risk factors in industrial manual handling. Ergonomics, 2020, 63, 477-504.	1.1	20
41	Assessment of time patterns of activity and rest in full-shift recordings of trapezius muscle activity â€“ Effects of the data processing procedure. Journal of Electromyography and Kinesiology, 2013, 23, 540-547.	0.7	19
42	Innovation and employee injury risk in automotive disassembly operations. International Journal of Production Research, 2018, 56, 3188-3203.	4.9	18
43	Effects of cholera toxin on the potential difference and motor responses induced by distension in the rat proximal small intestine in vivo. American Journal of Physiology - Renal Physiology, 2006, 290, G948-G958.	1.6	17
44	Oxygenation and Hemodynamics Do Not Underlie Early Muscle Fatigue for Patients with Work-Related Muscle Pain. PLoS ONE, 2014, 9, e95582.	1.1	17
45	Participatory Video-Assisted Evaluation of Truck Driversâ€™ Work Outside Cab: Deliveries in Two Types of Transport. International Journal of Occupational Safety and Ergonomics, 2014, 20, 477-489.	1.1	17
46	Cervical musculoskeletal disorders and their relationships with personal and work-related factors among electronic assembly workers. Journal of Safety Research, 2019, 71, 79-85.	1.7	16
47	Eye- and neck/shoulder-discomfort during visually demanding experimental near work. Work, 2012, 41, 3388-3392.	0.6	15
48	Development and evaluation of RAMP I â€“ a practitionerâ€™s tool for screening of musculoskeletal disorder risk factors in manual handling. International Journal of Occupational Safety and Ergonomics, 2019, 25, 165-180.	1.1	15
49	Activity in five muscles during joint securing using pneumatic nutrunners. International Journal of Industrial Ergonomics, 2002, 29, 21-32.	1.5	14
50	Risk factors contributing to truck driversâ€™ non-driving occupational accidents. International Journal of Physical Distribution and Logistics Management, 2018, 48, 183-199.	4.4	14
51	Exposure to Upper Arm Elevation During Work Compared to Leisure Among 12 Different Occupations Measured with Triaxial Accelerometers. Annals of Work Exposures and Health, 2018, 62, 689-698.	0.6	14
52	P-Ergonomics Platform: Toward Precise, Pervasive, and Personalized Ergonomics using Wearable Sensors and Edge Computing. Sensors, 2019, 19, 1225.	2.1	14
53	Shoulder and forearm oxygenation and myoelectric activity in patients with work-related muscle pain and healthy subjects. European Journal of Applied Physiology, 2013, 113, 1103-1115.	1.2	13
54	Effects of Sensor Types and Angular Velocity Computational Methods in Field Measurements of Occupational Upper Arm and Trunk Postures and Movements. Sensors, 2021, 21, 5527.	2.1	13

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55	Bias and imprecision in posture percentile variables estimated from short exposure samples. BMC Medical Research Methodology, 2012, 12, 36.	1.4	12
56	Activity in neck-shoulder and lower arm muscles during computer and smartphone work. International Journal of Industrial Ergonomics, 2019, 74, 102870.	1.5	11
57	A comparison of muscular activity during single and double mouse clicks. European Journal of Applied Physiology, 2005, 94, 158-167.	1.2	10
58	Head movements during two computer work tasks assessed by accelerometry. Applied Ergonomics, 2011, 42, 309-313.	1.7	10
59	Study on the Associations of Individual and Work-Related Factors with Low Back Pain among Manufacturing Workers Based on Logistic Regression and Structural Equation Model. International Journal of Environmental Research and Public Health, 2021, 18, 1525.	1.2	10
60	Ciliary muscle contraction force and trapezius muscle activity during manual tracking of a moving visual target. Journal of Electromyography and Kinesiology, 2016, 28, 193-198.	0.7	9
61	Self-recordings of upper arm elevation during cleaning â€“ comparison between analyses using a simplified reference posture and a standard reference posture. BMC Musculoskeletal Disorders, 2018, 19, 402.	0.8	8
62	Effect of ciliary-muscle contraction force on trapezius muscle activity during computer mouse work. European Journal of Applied Physiology, 2019, 119, 389-397.	1.2	8
63	Prevention of Work: Related Musculoskeletal Disorders Using Smart Workwear â€“ The Smart Workwear Consortium. Advances in Intelligent Systems and Computing, 2019, , 477-483.	0.5	8
64	Temporal Co-Variation between Eye Lens Accommodation and Trapezius Muscle Activity during a Dynamic Near-Far Visual Task. PLoS ONE, 2015, 10, e0126578.	1.1	8
65	How does accelerometry-measured arm elevation at work influence prospective risk of long-term sickness absence?. Scandinavian Journal of Work, Environment and Health, 2022, 48, 137-147.	1.7	8
66	Participative development of packages in the food industry â€“ evaluation of ergonomics and productivity by objective measurements. Work, 2012, 41, 1751-1755.	0.6	7
67	An Exploratory Study on the Physical Activity Health Paradoxâ€”Musculoskeletal Pain and Cardiovascular Load during Work and Leisure in Construction and Healthcare Workers. International Journal of Environmental Research and Public Health, 2022, 19, 2751.	1.2	7
68	Surgeonsâ€™ physical workload in open surgery versus robot-assisted surgery and nonsurgical tasks. Surgical Endoscopy and Other Interventional Techniques, 2022, 36, 8178-8194.	1.3	7
69	Comparing two methods to record maximal voluntary contractions and different electrode positions in recordings of forearm extensor muscle activity: Refining risk assessments for work-related wrist disorders. Work, 2018, 59, 231-242.	0.6	6
70	Validity of heart-rate based measurements of oxygen consumption during work with light and moderate physical activity. Work, 2012, 41, 5475-5476.	0.6	5
71	Delivery Truck Drivers' and Stakeholders' Video-Assisted Analyses of Work Outside the Truck Cabs. International Journal of Sustainable Transportation, 2015, 9, 254-265.	2.1	5
72	Ergonomic risk assessment in DHM tools employing motion data - exposure calculation and comparison to epidemiological reference data. International Journal of Human Factors Modelling and Simulation, 2018, 6, 31.	0.1	5

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73	Prevalence and associated factors of lower extremity musculoskeletal disorders among manufacturing workers: a cross-sectional study in China. BMJ Open, 2022, 12, e054969.	0.8	5
74	Co-variation in time between near-far accommodation of the lens and trapezius muscle activity. Work, 2012, 41, 3393-3397.	0.6	4
75	Delivery Truck Driversâ€™ Work Outside Their Cabs: Ergonomic Video Analyses Supplemented with National Accident Statistics. Human Factors and Ergonomics in Manufacturing, 2015, 25, 340-352.	1.4	4
76	Health risk appraisals in Swedish occupational health services. Work, 2016, 55, 849-859.	0.6	4
77	Can a metric combining arm elevation and trapezius muscle activity predict neck/shoulder pain? A prospective cohort study in construction and healthcare. International Archives of Occupational and Environmental Health, 2021, 94, 647-658.	1.1	4
78	Measurements and observations of movements at work for warehouse forklift truck operators. International Journal of Occupational Safety and Ergonomics, 2022, 28, 1840-1848.	1.1	4
79	Concerning a Work Movement Velocity Action Level Proposed in â€œAction Levels for the Prevention of Work-Related Musculoskeletal Disorders in the Neck and Upper Extremities: A Proposalâ€•by Inger Arvidsson et al. (2021). Annals of Work Exposures and Health, 2022, 66, 130-131.	0.6	4
80	Effectiveness and usability of real-time vibrotactile feedback training to reduce postural exposure in real manual sorting work. Ergonomics, 2022, , 1-19.	1.1	4
81	Derived patterns of musculoskeletal symptoms and their relationships with ergonomic factors among electronic assembly workers: A latent class analysis. Journal of Safety Research, 2022, , .	1.7	4
82	Temporal aspects of increases in eye-neck activation levels during visually deficient near work. Work, 2012, 41, 3379-3384.	0.6	3
83	Digging deeper into the assessment of upper arm elevation angles using standard inclinometry. Applied Ergonomics, 2015, 51, 102-103.	1.7	2
84	Non-participation in initial and repeated health risk appraisals â€“ a drop-out analysis based on a health project. BMC Health Services Research, 2019, 19, 130.	0.9	2
85	Exploring ergonomistsâ€™ experiences after participation in a theoretical and practical research project on observational risk assessment tools. International Journal of Occupational Safety and Ergonomics, 2022, 28, 1136-1144.	1.1	2
86	Mechanisms for Work Related Disorders Among Computer Workers. Lecture Notes in Computer Science, 2007, , 57-64.	1.0	2
87	Welding Fume Retention in Lungs of Previously Unexposed Subjects. , 1989, , 477-480.		2
88	Ergonomic Evaluation of a Prototype Console for Robotic Surgeries via Simulations with Digital Human Manikins. Advances in Intelligent Systems and Computing, 2019, , 351-363.	0.5	2
89	A possible revival of population-representing digital human manikins in static work situations â€“exemplified through an evaluation of a prototype console for robotic surgery. Work, 2021, 70, 1-19.	0.6	2
90	Reaction force exposure for tightening tool users: A psychophysical based experimental study of electric right-angle nutrunners. Applied Ergonomics, 2022, 103, 103776.	1.7	2

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91	Delivery truck driversâ€™ work outside the cab: psychosocial discomforts and risks based on participatory video analyses. European Transport Research Review, 2018, 10, .	2.3	1
92	A Low-Cost Sensor-Based Smartphone App for Wrist Velocity Measurements. Lecture Notes in Networks and Systems, 2021, , 763-767.	0.5	1
93	Motor-Unit Recruitment in the Trapezius Muscle during a Computer Typing Task. Proceedings of the Human Factors and Ergonomics Society, 2000, 44, 640-643.	0.2	0
94	Temporal Dependence of Trapezius Muscle Activation during Sustained Eye-Lens Accommodation at Near. Lecture Notes in Computer Science, 2013, , 269-275.	1.0	0
95	Reaction Force Exposure for Tightening Tool Users: An Experimental Study on Nutrunners. Lecture Notes in Networks and Systems, 2021, , 423-431.	0.5	0
96	Towards Innovative Bathroom Solutions for All - A Needs Analysis. Lecture Notes in Networks and Systems, 2021, , 376-383.	0.5	0
97	Concrete Casting â€“ Construction Engineersâ€™ Attitudes and Knowledge About Work Environment, Risk Factors, Injuries and Self-compacting Concrete. Lecture Notes in Networks and Systems, 2021, , 323-328.	0.5	0
98	Smart Work Clothes Give Better Health - Through Improved Work Technique, Work Organization and Production Technology. Advances in Intelligent Systems and Computing, 2019, , 515-519.	0.5	0
99	Sleep-Related Problems and Associations with Occupational Factors among Home Care Personnel. Nordic Journal of Working Life Studies, 0, , .	0.5	0