Kalev Kuklane

List of Publications by Year
in descending order

88 papers	2,896 citations	159525 30 h-index	182361 51 g-index
90 all docs	90 docs citations	90 times ranked	1813 citing authors

#	Article	IF	Citations
1	Using a thermal manikin to determine evaporative resistance and thermal insulation â€“ A comparison of methods. Journal of Industrial Textiles, 2021, 50, 1493-1515.	1.1	4
2	Physiological Capacity During Simulated Stair Climbing Evacuation at Maximum Speed Until Exhaustion. Fire Technology, 2021, 57, 767-790.	1.5	6
3	The impact of carrying load on physical performance during ascending evacuation movement. Fire and Materials, 2021, 45, 488-497.	0.9	4
4	Common clothing area factor estimation equations are inaccurate for highly insulating (<i>I</i>_{cl}>2 clo) and non-western loose-fitting clothing ensembles. Industrial Health, 2021, 59, 107-116.	0.4	6
5	Footwear for cold weather conditions. , 2021, , 323-360.		1
6	Validation of ISO 9920 clothing item insulation summation method based on an ambulance personnel clothing system. Industrial Health, 2021, 59, 27-33.	0.4	3
7	Industrial workwear for hot workplace environments: thermal management attributes. International Journal of Biometeorology, 2021, 65, 1751-1765.	1.3	3
8	Effects of leg fatigue due to exhaustive stair climbing on gait biomechanics while walking up a 10Â° incline â€“ Implications for evacuation and work safety. Fire Safety Journal, 2021, 123, 103342.	1.4	5
9	ClimAppâ€"Integrating Personal Factors with Weather Forecasts for Individualised Warning and Guidance on Thermal Stress. International Journal of Environmental Research and Public Health, 2021, 18, 11317.	1.2	14
10	Insulation and Evaporative Resistance of Clothing for Sugarcane Harvesters and Chemical Sprayers, and Their Application in PHS Model-Based Exposure Predictions. International Journal of Environmental Research and Public Health, 2020, 17, 3074.	1.2	7
11	Heat Stress in Indoor Environments of Scandinavian Urban Areas: A Literature Review. International Journal of Environmental Research and Public Health, 2019, 16, 560.	1.2	44
12	Thermal-Performance Evaluation of Bicycle Helmets for Convective and Evaporative Heat Loss at Low and Moderate Cycling Speeds. Applied Sciences (Switzerland), 2019, 9, 3672.	1.3	7
13	Is there a Need to Integrate Human Thermal Models with Weather Forecasts to Predict Thermal Stress?. International Journal of Environmental Research and Public Health, 2019, 16, 4586.	1.2	23
14	Surveillance of work environment and heat stress assessment using meteorological data. International Journal of Biometeorology, 2019, 63, 195-196.	1.3	2
15	Occupational heat stress assessment and protective strategies in the context of climate change. International Journal of Biometeorology, 2018, 62, 359-371.	1.3	112
16	Limitations of oxygen uptake and leg muscle activity during ascending evacuation in stairways. Applied Ergonomics, 2018, 66, 52-63.	1.7	19
17	Exploring how a traditional diluted yoghurt drink may mitigate heat strain during medium-intensity intermittent work: a multidisciplinary study of occupational heat strain. Industrial Health, 2018, 56, 106-121.	0.4	9
18	Oxygen uptake and muscle activity limitations during stepping on a stair machine at three different climbing speeds. Ergonomics, 2018, 61, 1382-1394.	1.1	13

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19	A Comparison Between Physical and Virtual Experiments of Convective Heat Transfer Between Head and Bicycle Helmet. Advances in Intelligent Systems and Computing, 2018, , 517-527.	0.5	1
20	Human responses in heat â€“ comparison of the Predicted Heat Strain and the Fiala multi-node model for a case of intermittent work. Journal of Thermal Biology, 2017, 70, 45-52.	1.1	25
21	Ascending stair evacuation: walking speed as a function of height. Fire and Materials, 2017, 41, 514-534.	0.9	17
22	0211â€…Occupational heat stress and heat strain assessment using climate service information. , 2017, , .		0
23	Types of thermal manikin. , 2017, , 25-54.		6
24	Validation of the thermophysiological model by Fiala for prediction of local skin temperatures. International Journal of Biometeorology, 2016, 60, 1969-1982.	1.3	27
25	A model to estimate vertical speed of ascending evacuation from maximal work capacity data. Safety Science, 2016, 89, 369-378.	2.6	15
26	Use of a novel smart heating sleeping bag to improve wearersâ€™ local thermal comfort in the feet. Scientific Reports, 2016, 6, 19326.	1.6	12
27	Opportunities and constraints of presently used thermal manikins for thermo-physiological simulation of the human body. International Journal of Biometeorology, 2016, 60, 435-446.	1.3	32
28	Evaluation of Thermal Resistance of the Military Sleeping Bags. Advanced Materials Research, 2015, 1117, 299-302.	0.3	0
29	Smart heating sleeping bags for improving wearers' thermal comfort at the feet. Extreme Physiology and Medicine, 2015, 4, A92.	2.5	4
30	Cold-induced vasodilation during continuous exercise in the extreme cold air (-30.6 Â°c). Extreme Physiology and Medicine, 2015, 4, .	2.5	1
31	Thermal effects of headgear: state-of-the-art and way forward. Extreme Physiology and Medicine, 2015, 4, .	2.5	3
32	Evaporative resistance of newly designed bicycle helmets. Extreme Physiology and Medicine, 2015, 4, .	2.5	0
33	A ventilation cooling shirt worn during office work in a hot climate: cool or not?. International Journal of Occupational Safety and Ergonomics, 2015, 21, 457-463.	1.1	32
34	A review on ergonomics of headgear: Thermal effects. International Journal of Industrial Ergonomics, 2015, 45, 1-12.	1.5	37
35	Protection Against Cold in Prehospital Care: Wet Clothing Removal or Addition of a Vapor Barrier. Wilderness and Environmental Medicine, 2015, 26, 11-20.	0.4	29
36	Ebola: Improving the Design of Protective Clothing for Emergency Workers Allows Them to Better Cope with Heat Stress and Help to Contain the Epidemic. Annals of Occupational Hygiene, 2015, 59, 258-61.	1.9	25

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37	Validation of standard ASTM F2732 and comparison with ISO 11079 with respect to comfort temperature ratings for cold protective clothing. Applied Ergonomics, 2015, 46, 44-53.	1.7	17
38	Working spectacles for sorting mail. Work, 2014, 47, 319-327.	0.6	0
39	Validity and reliability of the Cold Discomfort Scale: a subjective judgement scale for the assessment of patient thermal state in a cold environment. Journal of Clinical Monitoring and Computing, 2014, 28, 287-291.	0.7	24
40	Occupational heat stress and associated productivity loss estimation using the PHS model (ISO 7933): a case study from workplaces in Chennai, India. Global Health Action, 2014, 7, 25283.	0.7	40
41	A study on local cooling of garments with ventilation fans and openings placed at different torso sites. International Journal of Industrial Ergonomics, 2013, 43, 232-237.	1.5	118
42	Human thermal response with improved AVA modeling of the digits. International Journal of Thermal Sciences, 2013, 67, 41-52.	2.6	55
43	A laboratory validation study of comfort and limit temperatures of four sleeping bags defined according to EN 13537 (2002). Applied Ergonomics, 2013, 44, 321-326.	1.7	19
44	Evaporative cooling: effective latent heat of evaporation in relation to evaporation distance from the skin. Journal of Applied Physiology, 2013, 114, 778-785.	1.2	102
45	The torso cooling of vests incorporated with phase change materials: a sweat evaporation perspective. Textile Reseach Journal, 2013, 83, 418-425.	1.1	48
46	Footwear for cold weather conditions. , 2013, , 283-317.		3
47	The Universal Thermal Climate Index UTCI Compared to Ergonomics Standards for Assessing the Thermal Environment. Industrial Health, 2013, 51, 16-24.	0.4	98
48	Effects of Heat Stress on Working Populations when Facing Climate Change. Industrial Health, 2013, 51, 3-15.	0.4	209
49	Effects of Various Protective Clothing and Thermal Environments on Heat Strain of Unacclimated Men: the PHS (predicted heat strain) Model Revisited. Industrial Health, 2013, 51, 266-274.	0.4	64
50	Protection against Cold in Prehospital Care: Evaporative Heat Loss Reduction by Wet Clothing Removal or the Addition of a Vapor Barrierâ€"A Thermal Manikin Study. Prehospital and Disaster Medicine, 2012, 27, 53-58.	0.7	34
51	Comments on â€œCorrection of the evaporative resistance of clothing by the temperature of skin fabric on a sweating and walking thermal manikinâ€• Textile Reseach Journal, 2012, 82, 1827-1829.	1.1	2
52	Parallel and Serial Methods of Calculating Thermal Insulation in European Manikin Standards. International Journal of Occupational Safety and Ergonomics, 2012, 18, 171-179.	1.1	19
53	Thermal responses to wholeâ€body cooling in air with special reference to arteriovenous anastomoses in fingers. Clinical Physiology and Functional Imaging, 2012, 32, 463-469.	0.5	31
54	Localised boundary air layer and clothing evaporative resistances for individual body segments. Ergonomics, 2012, 55, 799-812.	1.1	43

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55	Personal cooling with phase change materials to improve thermal comfort from a heat wave perspective. Indoor Air, 2012, 22, 523-530.	2.0	144
56	Effect of temperature difference between manikin and wet fabric skin surfaces on clothing evaporative resistance: how much error is there?. International Journal of Biometeorology, 2012, 56, 177-182.	1.3	30
57	Cooling vests with phase change materials: the effects of melting temperature on heat strain alleviation in an extremely hot environment. European Journal of Applied Physiology, 2011, 111, 1207-1216.	1.2	116
58	Can the PHS model (ISO7933) predict reasonable thermophysiological responses while wearing protective clothing in hot environments?. Physiological Measurement, 2011, 32, 239-249.	1.2	61
59	Determination of Clothing Evaporative Resistance on a Sweating Thermal Manikin in an Isothermal Condition: Heat Loss Method or Mass Loss Method?. Annals of Occupational Hygiene, 2011, 55, 775-83.	1.9	43
60	Development and validity of a universal empirical equation to predict skin surface temperature on thermal manikins. Journal of Thermal Biology, 2010, 35, 197-203.	1.1	49
61	The thermal insulation difference of clothing ensembles on the dry and perspiration manikins. Measurement Science and Technology, 2010, 21, 085203.	1.4	5
62	Heat Gain From Thermal Radiation Through Protective Clothing With Different Insulation, Reflectivity and Vapour Permeability. International Journal of Occupational Safety and Ergonomics, 2010, 16, 231-244.	1.1	35
63	A Review of Technology of Personal Heating Garments. International Journal of Occupational Safety and Ergonomics, 2010, 16, 387-404.	1.1	101
64	Testing Sleeping Bags According to EN 13537:2002: Details That Make the Difference. International Journal of Occupational Safety and Ergonomics, 2010, 16, 199-216.	1.1	7
65	Experimental and Theoretical Study of Ventilation and Heat Loss From Isothermally Heated Clothed Vertical Cylinder in Uniform Flow Field. Journal of Applied Mechanics, Transactions ASME, 2010, 77, .	1.1	12
66	Cooling vests with phase change material packs: the effects of temperature gradient, mass and covering area. Ergonomics, 2010, 53, 716-723.	1.1	118
67	Testing Cold Protection According to EN ISO 20344: Is There Any Professional Footwear that Does Not Pass?. Annals of Occupational Hygiene, 2009, 53, 63-8.	1.9	5
68	Protection Against Cold in Prehospital Careâ€"Thermal Insulation Properties of Blankets and Rescue Bags in Different Wind Conditions. Prehospital and Disaster Medicine, 2009, 24, 408-415.	0.7	46
69	Footwear for cold weather conditions. , 2009, , 342-373.		5
70	Protection of Feet in Cold Exposure. Industrial Health, 2009, 47, 242-253.	0.4	41
71	Non-evaporative effects of a wet mid layer on heat transfer through protective clothing. European Journal of Applied Physiology, 2008, 104, 341-349.	1.2	28
72	Apparent latent heat of evaporation from clothing: attenuation and â€œheat pipeâ€•effects. Journal of Applied Physiology, 2008, 104, 142-149.	1.2	126

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73	Calculation of Clothing Insulation by Serial and Parallel Methods: Effects on Clothing Choice by IREQ and Thermal Responses in the Cold. International Journal of Occupational Safety and Ergonomics, 2007, 13, 103-116.	1.1	31
74	Minute Volumes and Inspiratory Flow Rates During Exhaustive Treadmill Walking Using Respirators. Annals of Occupational Hygiene, 2007, 51, 327-35.	1.9	8
75	Test of Firefighterâ€™s Turnout Gear in Hot and Humid Air Exposure. International Journal of Occupational Safety and Ergonomics, 2006, 12, 297-305.	1.1	39
76	Effectiveness of a Light-Weight Ice-Vest for Body Cooling While Wearing Fire Fighterâ€™s Protective Clothing in the Heat. International Journal of Occupational Safety and Ergonomics, 2004, 10, 111-117.	1.1	62
77	The Use of Footwear Insulation Values Measured on a Thermal Foot Model. International Journal of Occupational Safety and Ergonomics, 2004, 10, 79-86.	1.1	24
78	Thermal Manikin Measurementsâ€"Exact or Not?. International Journal of Occupational Safety and Ergonomics, 2004, 10, 291-300.	1.1	31
79	Comparison of thermal manikins of different body shapes and size. European Journal of Applied Physiology, 2004, 92, 683-688.	1.2	26
80	Relationship Between Clothing Ventilation and Thermal Insulation. AIHA Journal: A Journal for the Science of Occupational and Environmental Health and Safety, 2002, 63, 262-268.	0.4	86
81	A field study in dairy farms: thermal condition of feet. International Journal of Industrial Ergonomics, 2001, 27, 367-373.	1.5	16
82	Validation of a Model for Prediction of Skin Temperatures in Footwear.. Journal of Physiological Anthropology and Applied Human Science, 2000, 19, 29-34.	0.4	16
83	hange of Footwear Insulation at Various Sweating Rates.. Applied Human Science: Journal of Physiological Anthropology, 1999, 18, 161-168.	0.2	24
84	Determination of Heat Loss from the Feet and Insulation of the Footwear. International Journal of Occupational Safety and Ergonomics, 1999, 5, 465-476.	1.1	20
85	A Comparison of Two Methods of Determining Thermal Properties of Footwear. International Journal of Occupational Safety and Ergonomics, 1999, 5, 477-484.	1.1	8
86	Effect of Sweating on Insulation of Footwear. International Journal of Occupational Safety and Ergonomics, 1998, 4, 123-136.	1.1	30
87	Effect of Footwear Insulation on Thermal Responses in the Cold. International Journal of Occupational Safety and Ergonomics, 1998, 4, 137-152.	1.1	21
88	Tactile Sensitivity of Gloved Hands in the Cold Operation.. Applied Human Science: Journal of Physiological Anthropology, 1997, 16, 229-236.	0.2	7