Kalev Kuklane

List of Publications by Year
in descending order

88	2,896	159525 30	182361 51
papers	citations	h-index	g-index

90	90	90	1813
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Effects of Heat Stress on Working Populations when Facing Climate Change. Industrial Health, 2013, 51, 3-15.	0.4	209
2	Personal cooling with phase change materials to improve thermal comfort from a heat wave perspective. Indoor Air, 2012, 22, 523-530.	2.0	144
3	Apparent latent heat of evaporation from clothing: attenuation and â€œheat pipeâ€•effects. Journal of Applied Physiology, 2008, 104, 142-149.	1.2	126
4	Cooling vests with phase change material packs: the effects of temperature gradient, mass and covering area. Ergonomics, 2010, 53, 716-723.	1.1	118
5	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
6	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
7	Occupational heat stress assessment and protective strategies in the context of climate change. International Journal of Biometeorology, 2018, 62, 359-371.	1.3	112
8	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
9	A Review of Technology of Personal Heating Garments. International Journal of Occupational Safety and Ergonomics, 2010, 16, 387-404.	1.1	101
10	The Universal Thermal Climate Index UTCI Compared to Ergonomics Standards for Assessing the Thermal Environment. Industrial Health, 2013, 51, 16-24.	0.4	98
11	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
12	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
13	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
14	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
15	Human thermal response with improved AVA modeling of the digits. International Journal of Thermal Sciences, 2013, 67, 41-52.	2.6	55
16	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
17	The torso cooling of vests incorporated with phase change materials: a sweat evaporation perspective. Textile Reseach Journal, 2013, 83, 418-425.	1.1	48
18	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

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19	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
20	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
21	Localised boundary air layer and clothing evaporative resistances for individual body segments. Ergonomics, 2012, 55, 799-812.	1.1	43
22	Protection of Feet in Cold Exposure. Industrial Health, 2009, 47, 242-253.	0.4	41
23	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
24	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
25	A review on ergonomics of headgear: Thermal effects. International Journal of Industrial Ergonomics, 2015, 45, 1-12.	1.5	37
26	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
27	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
28	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
29	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
30	Thermal Manikin Measurementsâ€”Exact or Not?. International Journal of Occupational Safety and Ergonomics, 2004, 10, 291-300.	1.1	31
31	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
32	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
33	Effect of Sweating on Insulation of Footwear. International Journal of Occupational Safety and Ergonomics, 1998, 4, 123-136.	1.1	30
34	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
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	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

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37	Validation of the thermophysiological model by Fiala for prediction of local skin temperatures. International Journal of Biometeorology, 2016, 60, 1969-1982.	1.3	27
38	Comparison of thermal manikins of different body shapes and size. European Journal of Applied Physiology, 2004, 92, 683-688.	1.2	26
39	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
40	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
41	hange of Footwear Insulation at Various Sweating Rates.. Applied Human Science: Journal of Physiological Anthropology, 1999, 18, 161-168.	0.2	24
42	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
43	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
44	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
45	Effect of Footwear Insulation on Thermal Responses in the Cold. International Journal of Occupational Safety and Ergonomics, 1998, 4, 137-152.	1.1	21
46	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
47	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
48	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
49	Limitations of oxygen uptake and leg muscle activity during ascending evacuation in stairways. Applied Ergonomics, 2018, 66, 52-63.	1.7	19
50	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
51	Ascending stair evacuation: walking speed as a function of height. Fire and Materials, 2017, 41, 514-534.	0.9	17
52	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
53	A field study in dairy farms: thermal condition of feet. International Journal of Industrial Ergonomics, 2001, 27, 367-373.	1.5	16
54	A model to estimate vertical speed of ascending evacuation from maximal work capacity data. Safety Science, 2016, 89, 369-378.	2.6	15

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55	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
56	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
57	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
58	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
59	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
60	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
61	Minute Volumes and Inspiratory Flow Rates During Exhaustive Treadmill Walking Using Respirators. Annals of Occupational Hygiene, 2007, 51, 327-35.	1.9	8
62	Tactile Sensitivity of Gloved Hands in the Cold Operation.. Applied Human Science: Journal of Physiological Anthropology, 1997, 16, 229-236.	0.2	7
63	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
64	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
65	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
66	Types of thermal manikin. , 2017, , 25-54.		6
67	Physiological Capacity During Simulated Stair Climbing Evacuation at Maximum Speed Until Exhaustion. Fire Technology, 2021, 57, 767-790.	1.5	6
68	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
69	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
70	Footwear for cold weather conditions. , 2009, , 342-373.		5
71	The thermal insulation difference of clothing ensembles on the dry and perspiration manikins. Measurement Science and Technology, 2010, 21, 085203.	1.4	5
72	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

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73	Smart heating sleeping bags for improving wearers' thermal comfort at the feet. Extreme Physiology and Medicine, 2015, 4, A92.	2.5	4
74	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
75	The impact of carrying load on physical performance during ascending evacuation movement. Fire and Materials, 2021, 45, 488-497.	0.9	4
76	Footwear for cold weather conditions. , 2013, , 283-317.		3
77	Thermal effects of headgear: state-of-the-art and way forward. Extreme Physiology and Medicine, 2015, 4, .	2.5	3
78	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
79	Industrial workwear for hot workplace environments: thermal management attributes. International Journal of Biometeorology, 2021, 65, 1751-1765.	1.3	3
80	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
81	Surveillance of work environment and heat stress assessment using meteorological data. International Journal of Biometeorology, 2019, 63, 195-196.	1.3	2
82	Cold-induced vasodilation during continuous exercise in the extreme cold air (-30.6 Â°c). Extreme Physiology and Medicine, 2015, 4, .	2.5	1
83	Footwear for cold weather conditions. , 2021, , 323-360.		1
84	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
85	Working spectacles for sorting mail. Work, 2014, 47, 319-327.	0.6	0
86	Evaluation of Thermal Resistance of the Military Sleeping Bags. Advanced Materials Research, 2015, 1117, 299-302.	0.3	0
87	Evaporative resistance of newly designed bicycle helmets. Extreme Physiology and Medicine, 2015, 4, .	2.5	0
88	0211â€…Occupational heat stress and heat strain assessment using climate service information. , 2017, , .		0