

# The use of thermal imaging in assessing skin temperature

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Citation Report

#	ARTICLE	IF	CITATIONS
1	Medical applications of infrared thermography: A review. <i>Infrared Physics and Technology</i> , 2012, 55, 221-235.	2.9	847
2	Conventional and newly developed bioheat transport models in vascularized tissues: A review. <i>Journal of Thermal Biology</i> , 2013, 38, 107-125.	2.5	141
3	Actual temperature during and thermal response after whole-body cryotherapy in cryo-cabin. <i>Journal of Thermal Biology</i> , 2013, 38, 186-191.	2.5	54
4	Current Issues in Medical Thermography. <i>Lecture Notes in Computational Vision and Biomechanics</i> , 2013, , 223-237.	0.5	21
6	The Effect of Three Different (-135Å°C) Whole Body Cryotherapy Exposure Durations on Elite Rugby League Players. <i>PLoS ONE</i> , 2014, 9, e86420.	2.5	68
7	Whole-body cryotherapy: empirical evidence and theoretical perspectives. <i>Open Access Journal of Sports Medicine</i> , 2014, 5, 25.	1.3	93
8	Anthropometric Characteristics and Sex Influence Magnitude of Skin Cooling following Exposure to Whole Body Cryotherapy. <i>BioMed Research International</i> , 2014, 2014, 1-7.	1.9	24
9	Effects of Whole Body Cryotherapy and Cold Water Immersion on Knee Skin Temperature. <i>International Journal of Sports Medicine</i> , 2014, 35, 35-40.	1.7	26
10	Reliability and validity of skin temperature measurement by telemetry thermistors and a thermal camera during exercise in the heat. <i>Journal of Thermal Biology</i> , 2014, 45, 141-149.	2.5	61
11	Considerations for the measurement of core, skin and mean body temperatures. <i>Journal of Thermal Biology</i> , 2014, 46, 72-101.	2.5	298
12	Whole-body cryostimulation increases parasympathetic outflow and decreases core body temperature. <i>Journal of Thermal Biology</i> , 2014, 45, 75-80.	2.5	30
13	Whole-body cryotherapy (extreme cold air exposure) for preventing and treating muscle soreness after exercise in adults. <i>The Cochrane Library</i> , 2015, 2015, CD010789.	2.8	65
14	Does the technique employed for skin temperature assessment alter outcomes? A systematic review. <i>Physiological Measurement</i> , 2015, 36, R27-R51.	2.1	31
15	Effect of cryotherapy on the ankle temperature in athletes: ice pack and cold water immersion. <i>Fisioterapia Em Movimento</i> , 2015, 28, 23-30.	0.1	0
16	Effects of cold water immersion on variables of balance in healthy subjects with open and closed eyes. <i>Fisioterapia Em Movimento</i> , 2015, 28, 467-475.	0.1	2
17	Temperature determining method from motion detection using thermal images. , 2015, , .		3
18	The effect of using different regions of interest on local and mean skin temperature. <i>Journal of Thermal Biology</i> , 2015, 49-50, 33-38.	2.5	30
19	Infrared thermal facial image sequence registration analysis and verification. <i>Infrared Physics and Technology</i> , 2015, 69, 1-6.	2.9	13

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20	Classification of factors influencing the use of infrared thermography in humans: A review. <i>Infrared Physics and Technology</i> , 2015, 71, 28-55.	2.9	354
21	Suitability of frequency modulated thermal wave imaging for skin cancer detection – A theoretical prediction. <i>Journal of Thermal Biology</i> , 2015, 51, 65-82.	2.5	27
22	Detection by Infrared Thermography of the Effect of Local Cryotherapy Exposure on Thermal Spread in Skin. <i>Journal of Imaging</i> , 2016, 2, 20.	3.0	4
23	Validity of inner canthus temperature recorded by infrared thermography as a non-invasive surrogate measure for core temperature at rest, during exercise and recovery. <i>Journal of Thermal Biology</i> , 2016, 62, 50-55.	2.5	25
24	Theoretical modeling of time-dependent skin temperature and heat losses during whole-body cryotherapy: A pilot study. <i>Medical Hypotheses</i> , 2016, 96, 11-15.	1.5	17
25	The use of thermal imaging to assess the effectiveness of ice massage and cold-water immersion as methods for supporting post-exercise recovery. <i>Journal of Thermal Biology</i> , 2016, 60, 20-25.	2.5	35
26	Can Water Temperature and Immersion Time Influence the Effect of Cold Water Immersion on Muscle Soreness? A Systematic Review and Meta-Analysis. <i>Sports Medicine</i> , 2016, 46, 503-514.	6.5	149
27	The influence of various types of artificial turfs on football fields and their effects on the thermal profile of surfaces. <i>Proceedings of the Institution of Mechanical Engineers, Part P: Journal of Sports Engineering and Technology</i> , 2017, 231, 21-32.	0.7	4
28	Skin temperature changes after exercise and cold water immersion. <i>Sport Sciences for Health</i> , 2017, 13, 195-202.	1.3	17
29	Modélisation mathématique de la réponse thermique cutanée en cryothérapie corps entier (CCE): une étude pilote. <i>Kinesithérapie</i> , 2017, 17, 11-17.	0.1	2
30	Infrared Thermography for Detection of Diabetic Neuropathy and Vascular Disorder. <i>Series in Bioengineering</i> , 2017, , 217-247.	0.6	9
31	Thermal asymmetries in striking combat sports athletes measured by infrared thermography. <i>Science and Sports</i> , 2017, 32, e61-e67.	0.5	10
32	The use of infrared thermal imaging in the diagnosis of deep vein thrombosis. <i>Infrared Physics and Technology</i> , 2017, 86, 120-129.	2.9	33
33	Thermographic imaging in sports and exercise medicine: A Delphi study and consensus statement on the measurement of human skin temperature. <i>Journal of Thermal Biology</i> , 2017, 69, 155-162.	2.5	225
34	Analysis, design and construction of electronic ice cuff for athletes. <i>International Journal of Medical Engineering and Informatics</i> , 2017, 9, 220.	0.3	1
35	CRIOTERAPIA EM MODELO DE COMPRESSÃO DO NERVO ISQUIMICO: ANÁLISE FUNCIONAL E MORFOLÓGICA. <i>Revista Brasileira De Medicina Do Esporte</i> , 2018, 24, 54-59.	0.2	1
36	Thermal map of the diabetic foot using infrared thermography. <i>Infrared Physics and Technology</i> , 2018, 93, 59-62.	2.9	27
37	Contact skin temperature measurements and associated effects of obstructing local sweat evaporation during mild exercise-induced heat stress. <i>Physiological Measurement</i> , 2018, 39, 075003.	2.1	12

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38	Clinical-like cryotherapy improves footprint patterns and reduces synovial inflammation in a rat model of post-traumatic knee osteoarthritis. <i>Scientific Reports</i> , 2019, 9, 14518.	3.3	23
39	Solving inverse geometry heat conduction problems by postprocessing steady thermograms. <i>International Journal of Heat and Mass Transfer</i> , 2019, 143, 118490.	4.8	11
40	Design and demonstration of antenna-coupled Schottky diodes in a foundry complementary metal-oxide semiconductor technology for electronic detection of far-infrared radiation. <i>Journal of Applied Physics</i> , 2019, 125, 194501.	2.5	11
41	The use of infrared thermal imaging to measure spatial and temporal sweat retention in clothing. <i>International Journal of Biometeorology</i> , 2019, 63, 885-894.	3.0	11
42	Local cryostimulation acutely preserves maximum isometric handgrip strength following fatigue in young women. <i>Cryobiology</i> , 2019, 87, 40-46.	0.7	4
43	Detecting Damage in Thin Plates by Processing Infrared Thermographic Data with Topological Derivatives. <i>Advances in Mathematical Physics</i> , 2019, 2019, 1-18.	0.8	7
44	Pain Tolerance: The Influence of Cold or Heat Therapy. <i>Journal of Chiropractic Medicine</i> , 2019, 18, 261-269.	0.7	4
46	Human comfort modelling for elderly people by infrared thermography: Evaluating the thermoregulation system responses in an indoor environment during winter. <i>Building and Environment</i> , 2020, 186, 107354.	6.9	39
47	Infrared thermal imaging based study of localized cold stress induced thermoregulation in lower limbs: The role of age on the inversion time. <i>Journal of Thermal Biology</i> , 2020, 94, 102781.	2.5	6
48	Application of the topological derivative to post-processing infrared time-harmonic thermograms for defect detection. <i>Journal of Mathematics in Industry</i> , 2020, 10, .	1.2	4
49	High-impact Routines to Ameliorate Trunk and Lower Limbs Flexibility in Women. <i>International Journal of Sports Medicine</i> , 2020, 41, 1039-1046.	1.7	4
50	Preliminary study on the effect of sex on skin cooling response during whole body cryostimulation ( $\hat{\sim}110\text{Å}\text{Å}^{\circ}\text{C}$ ): Modeling and prediction of exposure durations. <i>Cryobiology</i> , 2020, 97, 12-19.	0.7	12
51	Infrared cameras overestimate skin temperature during rewarming from cold exposure. <i>Journal of Thermal Biology</i> , 2020, 91, 102614.	2.5	10
52	Thirty days after anterior cruciate ligament transection is sufficient to induce signs of knee osteoarthritis in rats: pain, functional impairment, and synovial inflammation. <i>Inflammation Research</i> , 2020, 69, 279-288.	4.0	9
53	Infrared Thermography as a Means of Monitoring and Preventing Sports Injuries. , 2021, , 832-865.		1
54	Fabrication and characterization of PVC based flexible nanocomposites for the shielding against EMI, NIR, and thermal imaging signals. <i>Results in Physics</i> , 2021, 24, 104183.	4.1	24
55	Assessment of the Dynamics of Temperature Changes in the Knee Joint Area in Response to Selected Cooling Agents in Thermographic Tests. <i>International Journal of Environmental Research and Public Health</i> , 2021, 18, 5326.	2.6	7
56	Influence of infrared camera model and evaluator reproducibility in the assessment of skin temperature responses to physical exercise. <i>Journal of Thermal Biology</i> , 2021, 98, 102913.	2.5	10

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57	Intramuscular Temperature Changes in the Quadriceps Femoris Muscle After Post-Exercise Cold-Water Immersion (10°C for 10 min): A Systematic Review With Meta-Analysis. <i>Frontiers in Sports and Active Living</i> , 2021, 3, 660092.	1.8	6
58	Fluorescence and thermal imaging of non-melanoma skin cancers before and during photodynamic therapy. <i>Photodiagnosis and Photodynamic Therapy</i> , 2021, 34, 102327.	2.6	0
59	The use of infrared thermography for the dynamic measurement of skin temperature of moving athletes during competition; methodological issues. <i>Physiological Measurement</i> , 2021, 42, 084004.	2.1	14
60	Screening Evaporative Dry Eyes Severity Using an Infrared Image. <i>Journal of Ophthalmology</i> , 2021, 2021, 1-8.	1.3	7
61	Validity, Reliability, and Reproducibility of Skin Temperature in Healthy Subjects Using Infrared Thermography. , 2017, , 1311-1318.		2
62	Muscle, Skin and Core Temperature after ~110°C Cold Air and 8°C Water Treatment. <i>PLoS ONE</i> , 2012, 7, e48190.	2.5	114
63	A Comparison between Conductive and Infrared Devices for Measuring Mean Skin Temperature at Rest, during Exercise in the Heat, and Recovery. <i>PLoS ONE</i> , 2015, 10, e0117907.	2.5	52
64	Comparison of Thermal Foot Maps between Diabetic Patients with Neuropathic, Vascular, Neurovascular, and No Complications. <i>Current Diabetes Reviews</i> , 2019, 15, 503-509.	1.3	11
66	Cutaneous Implications of Whole Body Cryotherapy. <i>SKIN the Journal of Cutaneous Medicine</i> , 2017, 1, 15-17.	0.3	2
67	Tissue viability imaging of skin microcirculation following exposure to whole body cryotherapy (-110°C) and cold water immersion (8°C). <i>Archives of Exercise in Health and Disease</i> , 2014, 4, 243-250.	0.6	7
68	Pain Relief Effect of Cryotherapy in Parturients. <i>International Journal of Childbirth</i> , 2016, 6, 149-156.	0.3	0
69	Infrared Thermography as a Means of Monitoring and Preventing Sports Injuries. <i>Advances in Medical Technologies and Clinical Practice Book Series</i> , 2017, , 165-198.	0.3	4
70	Combining Infrared Thermography and Computational Fluid Dynamics to Optimize Whole Body Cryotherapy Protocols. <i>Lecture Notes in Computational Vision and Biomechanics</i> , 2019, , 199-207.	0.5	0
71	Sources of uncertainty in the evaluation of thermal images in medicine. , 2019, , .		2
72	The evolution of the mechanical properties of orthodontic arches by stimulated infrared thermography. , 2019, , .		1
73	Heat transfer between human and fluid under extreme conditions of partial body cryotherapy. <i>Journal of Physics: Conference Series</i> , 2020, 1683, 022021.	0.4	2
74	Cryotherapy. , 2020, , 79-95.		0
75	Experimental and computational thermal analysis of partial-body cryotherapy. <i>International Journal of Heat and Mass Transfer</i> , 2022, 183, 122194.	4.8	9

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76	Acute effects of cold spray application on mechanical properties of the rectus femoris muscle in athletes. <i>Journal of Bodywork and Movement Therapies</i> , 2022, 30, 100-104.	1.2	2
77	Efficiency of a Whole-Body Cryotherapy protocol at -110°C for hand rheumatoid arthritis: a controlled trial. <i>Journal of Thermal Analysis and Calorimetry</i> , 0, , 1.	3.6	0
78	Modeling of an Innovative Nitrogen-Free Cryotherapy Device. <i>Dynamics</i> , 2021, 1, 204-216.	1.2	2
79	Thermodynamic Correlation between Actual Temperature and Cryogenic Flow Rate in an Empty Cryosauna. <i>Heat Transfer Engineering</i> , 2022, 43, 1743-1754.	1.9	1
80	Effect of compression by elastic bandages on pain and function in individuals with knee osteoarthritis: protocol of a randomised controlled clinical trial. <i>BMJ Open</i> , 2022, 12, e066542.	1.9	0
81	The Effects of Kinesiotape on Injury Risk in Young Tennis Players: A Randomized Trial. <i>International Journal of Traditional and Complementary Medicine Research</i> , 0, , .	0.1	0
82	A single session of whole-body cryotherapy boosts maximal cycling performance and enhances vagal drive at rest. <i>Experimental Brain Research</i> , 2023, 241, 383-393.	1.5	3
83	Validity, Reliability, and Reproducibility of Skin Temperature in Healthy Subjects Using Infrared Thermography. , 2015, , 1-9.		2
84	Enhanced bone healing using local cryostimulation: In vivo rat study. <i>Journal of Thermal Biology</i> , 2023, 113, 103501.	2.5	3
85	Newborn Time - improved newborn care based on video and artificial intelligence - study protocol. , 2023, 1, .		2
86	The Effects of Wetted Ice on Dynamic Stability over a Rewarming Period. <i>Central European Journal of Sport Sciences and Medicine</i> , 2023, 41, 13-23. Farinotomy cryostimulation does not impact peripheral microvascular responsiveness but reduces muscular metabolic O2 consumption (m<math>T_j ETQq1 1 0.784314 rgBT /Overlock 10 Tf 50 312 Td (xmlns:mml="http://www.w3	0.1	0
87	rest. <i>Cryobiology</i> , 2023, 112, 104561.	0.7	2
88	The influencing factors and an error correction method of the use of infrared thermography in human facial skin temperature. <i>Building and Environment</i> , 2023, 244, 110736.	6.9	2
89	Influence of Body Heat Loss on Temperature and Velocity Fields in a Whole-Body Cryotherapy Chamber. <i>Fluids</i> , 2023, 8, 252.	1.7	0
90	A century of exercise physiology: concepts that ignited the study of human thermoregulation. Part 2: physiological measurements. <i>European Journal of Applied Physiology</i> , 2023, 123, 2587-2685.	2.5	3
91	Human body numerical simulation: An accurate model for a thigh subjected to a cold treatment. <i>Computers in Biology and Medicine</i> , 2024, 168, 107689.	7.0	0
92	Comprehensive Physiotherapeutic Management of Cervical and Lumbar Disc Disease: A Case Study. <i>Cureus</i> , 2024, , .	0.5	0
93	Exploring Thermography as a Diagnostic Tool in Ballet: Assessing Injury Prevention and Performance Enhancement. <i>Lecture Notes in Bioengineering</i> , 2023, , 555-563.	0.4	0

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94	Investigating Heat Transfer in Whole-Body Cryotherapy: A 3D Thermodynamic Modeling Approach with Participant Variability. <i>Fluids</i> , 2024, 9, 61.	1.7	0
95	Exploring the role of skin temperature in thermal sensation and thermal comfort: A comprehensive review. <i>Energy and Built Environment</i> , 2024, , .	5.9	0
96	Toward Personalized Protocols: A Scoping Review. , 2024, , 209-222.		0