***Методология медицинского тепловидения (частные вопросы, технические решения)***

1. Способ проведения бесконтактной инфракрасной термографии кожи (авт.: Аветисов С.Э., Луцевич Е.Э., Новиков И.А. и др.). Патент РФ № 2667625. 21.09.2018. Бюл. № 27.
2. Конвертер сигнала температуры кожи человека в кожный кровоток (Сагайдачный А.А., Фомин А.В.). Свидетельство о Гос. регистрации программы для ЭВМ № 2016618593 от 02.08.2016 (приоритет от 04.05.2016).
3. Активная тепловизионная метка. Авт. свидетельство № 1806701 // Изобретения стран мира. 1993. Бюл. № 13 / Матвейков Г.П., Губкин С.В., Елинсон И.С.
4. Программа для построения карты распределения теплофизических свойств кожи на основе анализа инфракрасных термограмм. Свидетельство о государственной регистрации программы для ЭВМ № 2021681103 Российская Федерация. № 2021669774. заявл. 05.12.2021: опубл. 17.12.2021 / Майсков Д.И., Фомин А.В., Залетов И.С. и др.
5. Устройство регистрации колебаний объёмного кровенаполнения. Патент на полезную модель № 203214 U1 Российская Федерация, МПК A61B 5/01, A61B 5/026.: № 2020133083. заявл. 08.10.2020: опубл. 26.03.2021 / Волков И.Ю., Сагайдачный А.А., Майсков Д.И. и др.
6. Realtime Temperature into Blood Flow Converter (Сагайдачный А.А., Фомин А.В.). Свидетельство о Гос. регистрации программы для ЭВМ № 20186115429 от 08.05.2018 (приоритет от 21.03.2016).
7. Алехин А.И., Гончаров Н.Г., Калинушкин В.П. и др. (…И.М.Долгов) Исследовательский тепловизионный медицинский комплекс «МЕД-ИК» // Альманах клинической медицины, 2006, 12, с. 3.
8. Вайнер Б.Г. Матричные тепловизионные системы в медицине // Врач, 1999. № 10, С. 30-31.
9. Вайнер Б.Г. Медицинское тепловидение высокого разрешения: новые возможности // Врач. 1999, № 2, С. 25-27.
10. Вайнер Б.Г. Коротковолновые матричные тепловизоры – оптимальное средство медицинской диагностики и контроля // Больничный лист. 2002. № 9. С. 14-21.
11. Воловик М.Г., Колесов С.Н., Пронин А.В. Итоги клинических испытаний новых тепловизоров в линейке NEC для медицинской диагностики // Труды XI Междунар. конф. «Прикладная оптика-2014». СПб., 21-24 октября 2014 г. Т. 4. С. 127-131.
12. Габуния Р.И., Анцыферов С.С., Ленская О.П. и др. Испытания метода автоматизированного анализа тепловых изображений медико-биологических объектов // IV Симпоз. по применению математич. методов и ЭВМ в мед.-биол. исследованиях. Тез. докл. Гагра, 1985. С. 215.
13. Гераськин Д.П. Устройства информационно-управляющей системы медицинского робота тепловизионной диагностики. Автореф. дис. … канд. техн. наук. Новочеркасск, 2001.
14. Гераськин Д.П. Принцип построения интерактивной системы тепловизионной диагностики в медицине // Изв. вузов. Сев.-Кавк. регион. Техн. науки. 1998. № 2. С. 10-12.
15. Гераськин Д.П. Основные функциональные операции робота при проведении тепловизионной диагностики в медицине // Изв. вузов. Сев.-Кавк. регион. Техн. науки. 1999. № 2. С. 103-104.
16. Гераськин Д.П. Ультразвуковая локационная система мобильного медицинского робота тепловизионной диагностики // Изв. вузов. Сев.-Кавк. регион. Техн. науки. 2000. № 1. С. 94-97.
17. Гераськин Д.П. Количественная оценка эффективности инфракрасной системы технического зрения медицинского робота тепловизионной диагностики // Изв. вузов. Электромеханика. 2000. № 2. С.93-96.
18. Гераськин Д.П. Бионический подход к созданию системы технического зрения медицинского робота тепловизионной диагностики // Изв. вузов. Сев.-Кавк. регион. Техн. науки. 2000. № 2. С. 84-85.
19. Гераськин Д.П. Алгоритм планирования действий медицинского робота тепловизионной диагностики // Изв. вузов. Сев.-Кавк. регион. Техн. науки. 2000. № 3. С. 107-109.
20. Гераськин Д.П. Оптимальная нейрофильтрация медицинских термограмм в биотронной системе зрения диагностического робота // Изв. вузов. Сев.-Кавк. регион. Техн. науки. 2001. № 2. C. 11-14.
21. Гераськин Д.П., Кравченко B.C. Практическая реализация интерактивной термовидеоскопической системы медицинского робота // Изв. вузов. Сев.-Кавк. регион. Техн. науки. 2000. № 4. С. 97-98.
22. Гончаров Н.Г., Алехин А.И., Ляпунов С.И. и др. Автоматизированный медицинский исследовательский комплекс Мед-ИК // Здравоохранение и медицинская техника, 2005, № 10, С. 36-38.
23. Гуляев Е.В. Годик Э.Э., Дементиенко В.В. и др. О возможностях акустической термографии биологических объектов // Докл Акад Наук СССР. 1985;283(6):1495-1499. PMID: 4064899
24. Гуляев Е.В. Годик Э.Э., Дементиенко В.В. и др. Радиотепловое динамическое картирование биологических объектов // Докл Акад Наук СССР. 1988;299(5):1259-1262. PMID: 3396456
25. Дружкин Е.В., Хацевич Т.Н., Бровка Н.В. [Тепловизионный прибор для медицинских целей](https://elibrary.ru/item.asp?id=26711900) // [Оптический журнал](https://elibrary.ru/contents.asp?id=34265618). 2015. Т. 82. [№ 7](https://elibrary.ru/contents.asp?id=34265618&selid=26711900). С. 15-18.
26. Загороднюк В.Т., Гераськин Д.П. Принцип построения инфракрасной системы технического зрения медицинского робота тепловизионной диагностики // Изв. вузов. Сев.-Кавк. регион. Техн. науки. 1999. № 4. С. 87-89.
27. Загороднюк В.Т., Гераськин Д.П. Супервизорный робот тепловизионной диагностики в медицине // Изв. вузов. Сев.-Кавк. регион. Техн. науки. 1998. № 3. С. 17-18.
28. Загороднюк В.Т., Гераськин Д.П. Медицинский робототехнический комплекс тепловизионной диагностики в диалоговом режиме // Вестник Гиппократа. 1999. № 1. С. 60-62.
29. Загороднюк В.Т., Гераськин Д.П. Роботизация процесса тепловизионной диагностики в медицине / Труды Международного Форума по проблемам науки, техники и образования. М.: АНЗ, 1999. С. 128.
30. Загороднюк В.Т., Гераськин Д.П. Медицинское мониторирование на основе системы интеллектного анализа тепловизионного робота // Сб. трудов Международ, науч. конф. "Математические методы в технике и технологиях ММТГ-2000". 27-29 июня 2000 г. Санкт-Петербургский гос. технол. ин-т (техн. ун-т). Санкт-Петербург, 2000. Т. 4. С. 189-190.
31. Загороднюк В.Т., Гераськин Д.П. Обработка изображения в биотронной системе зрения медицинского робота тепловизионной диагностики // Изв. вузов. Сев.-Кавк. регион. Техн. науки. 2000. № 3. С. 105-107.
32. Загороднюк В.Т., Гераськин Д.П. Система интеллектной тепловизионной диагностики медицинского робота // Изв. вузов. Сев.-Кавк. регион. Техн. науки. 2000. № 4. С. 94-96.
33. Загороднюк В.Т., Гераськин Д.П. Нейробионическая модель системы технического зрения медицинского робота тепловизионной диагностики // Тезисы докладов 2 Всероссийской научно-технической конференции "Компьютерные технологии в науке, проектировании и производстве": 34 февраля 2000 г. Нижний Новгород. Часть 6. НГТУ, 2000. С.ЗЗ.
34. Загороднюк В.Т., Гераськин Д.П. Медико-технические аспекты информационного обеспечения роботизации тепловизионной диагностики // Тезисы докладов Всероссийской научно-технической конференции «Методы и средства измерений» (Computer-Based Conference). Ч. 1. Нижний Новгород: Верхне-Волжское отделение Академии технологических наук РФ, 2000. С. 12.
35. Загороднюк В.Т., Гераськин Д.П. Моделирование нейроструктуры биотронной системы зрения медицинского робота тепловизионной диагностики // Тезисы докладов Всероссийской научно-технической конференции «Методы и средства измерений» (Computer-Based Conference). Ч. 2. Нижний Новгород: Верхне-Волжское отделение Академии технологических наук РФ, 2000. С. 17.
36. Иваницкий Г.Р., Маевский Е.И., Смуров С.В. и др. Повышение диагностической информативности инфракрасных изображений с использованием методов нелинейного контрастирования // Известия института инженерной физики. 2016. №4 (42). C. 83-89.
37. Калинушкин В.П., Юрьев В.А., Алехин А.И. и др. Возможности современных матричных тепловизионных комплексов, работающих в диапазоне 3-5 мкм, для диагностики лечения заболеваний // Альманах клинической медицины. 2008. С. 199-202.
38. Калинушкин В.П., Юрьев В.А., Ляпунов С.И., Пронин А.В. Медицинский исследовательский тепловизионный комплекс «Мед-ИК» // Январь 2005. URL: <https://www.researchgate.net/publication/283419942_Poster_Medicinskij_issledovatelskij_teplovizionnyj_kompleks_Med-IK_The_MED-IK_medical_research_thermal_imaging_station>
39. Колесов С.Н., Абызов А.А., Белов И.Ф. и др. Комплекс тепловизионной и многочастотной радиотермометрии для регистрации температурных реакций в норме и при различной патологии // Система терморегуляции при адаптации организма к факторам среды: Тез. докл. Новосибирск, 1990. Т. 2. С. 262-263.
40. Колесов С.Н., Анцыферов С.С., Голубь Б.И., Ширяев С.В. Построение медицинских систем распознавания тепловизионных образов // Биомедицинские технологии и радиоэлектроника. 2001. № 1. С. 25.
41. Куртев Н.Д., Анцыферов С.С. Анализ тепловых изображений // Медицинская техника. 1980;4:29-32.
42. Куртев Н.Д., Анцыферов С.С. Автоматизированный анализ тепловых изображений медико-биологических объектов и его практическое осуществление // Тепловизионная медицинская аппаратура и практика ее применения – ТеМП-85: труды Всесоюзн. конф. Л.: ГОИ, 1987. Ч. 1, с. 37-42.
43. Куртев Н.Д., Анцыферов С.С. Алгоритм обучения автоматизированных систем диагностики по тепловым изображениям. В: Тепловидение (сб.). Под ред. Н.Д.Куртева. М.: МИРЭА, 1988. Вып. 7, с. 100-103.
44. Куртев Н.Д., Анцыферов С.С. Автоматизированные системы диагностики по тепловым изображениям и перспективы их развития. В: Тепловидение в медицине. Под ред. М.М.Мирошникова. Л.: ГОИ им. Н.И.Вавилова, 1990. С. 51-57.
45. Курышев Г.Л., Ковчавцев А.П., Вайнер Б.Г. и др. Медицинский тепловизор на основе матричного ФПУ128×128 для диапазона длин волн 2.8-3.05 мкм// Автометрия, 1998, № 4, с. 5-12.
46. Майсков Д.И., Фомин А.В., Залетов И.С. Свидетельство о государственной регистрации программы для ЭВМ № 2021681103 Российская Федерация. Программа для построения карты распределения теплофизических свойств кожи на основе анализа инфракрасных термограмм: № 2021669774: заявл. 05.12.2021: опубл. 17.12.2021; заявитель Федеральное государственное бюджетное образовательное учреждение высшего образования «Саратовский национальный исследовательский государственный университет имени Н.Г. Чернышевского». EDN HHIDFX.
47. Майсков Д.И., Фомин А.В., Залетов И.С., Антонов А.В. Интегральное и корреляционное картирование инфракрасных термограмм // В сборнике: Методы компьютерной диагностики в биологии и медицине - 2022 Сборник статей Всероссийской школы-семинара. Саратов, 2022 С. 18-20.
48. Перцов О.Л., Самков В.М. Медико-технические аспекты развития современных тепловизорных методов в теоретической и практической медицине // Материалы IX Международной конференции «Прикладная оптика – 2010». СПб., 2010. С. 18-21.
49. Розенфельд Л.Г., Венгер Е.Ф., Коллюх А.Г. и др. Матричный полупроводниковый фотоприемник инфракрасного излучения и его применение в биотехнологиях // Электроника и связь. Биомедицинские приборы и системы, 2007. 2: 27-29.
50. Сагайдачный А.А., Фомин А.В., Волков И.Ю. Предельные возможности современных тепловизоров как инструмента для исследования колебаний периферического кровотока человека в различных диапазонах частот // Медицинская Физика. 2016, № 4. С. 84-93.
51. Ставоровский К.М. Автоматическая диагностика и анализ термограмм в медицинской практике // Биомедицинские приборы и системы. 2014. С. 47-55.
52. Хижняк Л.Н., Хижняк Е.П., Маевский Е.И. Возможность применения миниатюрных инфракрасных камер нового поколения в медицинской диагностике // Вестник новых медицинских технологий. 2018. №4. С. 101-109. DOI: 10.24411/1609-2163-2018-16279
53. Kiporenko P.V., Gordiyenko E.Yu., Fomenko Yu.V., Shustakova G.V. The procedure for measurement of the human temperature field dynamics // Ukr Metrol J. 2018;3:62-66. https://doi.org/10.24027/2306-7039.3.2018.153131
54. Markov A.G., Zakharov P.V. A speedy all-purpose system for dynamic IR-Thermography. In K. Ammer & E. F. Ring (Eds.), The thermal image in medicine and biology (pp. 47-49). Uhlen-Verlag: Wien, 1995.
55. Rosenfeld L.G., Machulin V.F., Venger E.F. et al. Remote infrared thermography: achievements, modern possibilities, prospects // Medical business, 2008. 5-6, 119-124 [in Ukrainian].
56. Shevchenko V.S., Nazarchuk S.S., Dunaevskyi V.I. et al. Improving the informativeness of thermographic images in medical practice // Bulletin of KPI. Instrument making series, 2019. 57(1), 96-101 [in Ukrainian].
57. Vainer B.G. Focal plane array based infrared thermography in fine physical experiment // J. Phys. D Appl. Phys., 2008; 41:065102.
58. Vainer B.G., Moskalev A.S. Heterogeneous thermograms: the methods of attack // Acta Bio-Optica et Informatica Medica, 2008. V. 14. No. 2. pp. 143-144.
59. Vainer B.G. Lasers and infrared thermography: advantageous cooperation // Appl. Optics, 2016; 55:D95-D100.
60. Vainer B.G., Kurishev G.L. Irregular pixel defects in hybrid IR-sensitive integrated circuits and their effect on results of measurements in medicine and multichannel spectrometry // 6-th International Conference on Actual Problems of Electronic Instrument Engineering, APEIE-2002, Novosibirsk, September 23-26, 2002 Proceedings, Volume 1. Russia, Novosibirsk, State Techn. Univ., 2002, p. 77-85.

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

1. Abbas A.K., Hussein A.F., Basil M., Habash Q.A. Thermography Quantification of Human Perfusion Thermal Signature // Preprint. August 2018. 14 pp. DOI: [10.20944/preprints201808.0152.v1](http://dx.doi.org/10.20944/preprints201808.0152.v1)
2. Agostini V., Delsanto S., Knaﬂitz M., Molinari F. Noise estimation in infrared image sequences: a tool for the quantitative evaluation of the effectiveness of registration algorithms // IEEE Transactions on Biomedical Engineering 2008. 55, 1917-1920.
3. Alfieri F.M., Dias C., de Oliveira Vargas e Silva N.C. et al. Comparison of iOS smartphone-attached infrared camera and conventional FLIR camera for human temperature measurement: An agreement study // Thermology International, August 2020. 30(3):91.
4. Ammer K. Employment of FLIR ONE Infrared Cameras in Medicine – A literature overview // Thermology International, November 2020;30(4):128-145.
5. Anbar M. Multiple wavelength infrared cameras and their biomedical applications // Proc. SPIE 2473, Thermosense XVII: An International Conference on Thermal Sensing and Imaging Diagnostic Applications, (28 March 1995). <https://doi.org/10.1117/12.204870>
6. Anbar M., Brown S.A., Milescu L., Babalola J.A. Clinical applications of DAT using a QWIP FPA camera // Proc. SPIE 3698, Infrared Technology and Applications XXV (26 July 1999). <https://doi.org/10.1117/12.354508>
7. Apa H., Gözmen S., Keskin-Gözmen Ş. et al. Clinical accuracy of non-contact infrared thermometer from umbilical region in children: A new side // Turk J Pediatr. 2016;58(2):180-86.
8. Arunachalam K., Stauffer P., Maccarini P. et al. Characterization of a Digital Microwave Radiometry System for Noninvasive Thermometry using Temperature Controlled Homogeneous Test Load // Physics in Medicine and Biology August 2008, 53(14):3883-901. РТМ
9. Atena E., Khalili K., Zolfaghari A. Measurement of temperature changes at body surface against rapid variations of local skin temperature using thermography technique. Thesis for: MSc, September 2018. Advisor: Supervisor: Prof. Khalil Khalili / Advisor: Dr Alireza Zolfaghari. [in Persian]
10. Bajwa U.I., Vardasca R., Ring E.F.J., Plassmann P. Comparison of boundary detection techniques to improve image analysis in medical thermography // Imaging Science Journal The. February 2010;58:12-19. DOI: [10.1179/136821909X12520525092846](http://dx.doi.org/10.1179/136821909X12520525092846)
11. Barcelos E.Z., Caminhas W.M., Ribeiro E. et al. A combined method for segmentation and registration for an advanced and progressive evaluation of thermal images // Sensors 2014, 14:21950-21967. doi:10.3390/s141121950
12. Barker N, Julin L. Demonstration of superficial veins by infrared photography // Proc Staff Mtgs Mayo Clinic. 1934. Vol. 9. P. 68-70.!!!
13. Barone S., Paoli A., Razionale A.V. A biomedical application combining visible and thermal 3D imaging // presented at the XVIII Congreso internacional de Ingenieria Graica, Barcelona, 2006.
14. Benjamin A. How to eliminate reflections in cholesteric liquid crystal photography // Photographic Applications in Science, Technology and Medicine 6:30-31, Mar 1971.
15. Bilodeau G.-A., Torabi A., Lévesque M. et al. Body temperature estimation of a moving subject from thermographic images // Machine Vision and Applications. March 2012, Vol. 23, Is. 2, pp. 299-311. DOI 10.1007/s00138-010-0313-9
16. Black C.M., Clark R.P., Darton K. et al. A pyroelectric thermal imaging system for use in medical diagnosis // J Biomed Eng. 12(4):281-286, 1990.
17. Blanik N., Abbas A.K., Venema B. et al. Hybrid optical imaging technology for long-term remote monitoring of skin perfusion and temperature behavior // Journal of Biomedical Optics. January 2014, Vol. 19(1) 016012-1-10. DOI:10.1117/1.JBO.19.1.016012
18. Blasco J.M., Sanchis-Sánchez E., Martín J.D. et al. A Matlab based interface for infrared thermographic diagnosis of pediatric musculoskeletal injuries // Infrared Phys Technol. 2016;76:500-503. doi:10.1016/j.infrared.2016.04.018
19. Braga B., Queiros G., Abreu C., Lopes S.I. Assessment of Low-Cost Infrared Thermography Systems for Medical Screening in Nursing Homes // 2021 17th International Conference on Wireless and Mobile Computing, Networking and Communications (WiMob). October 2021. 6 pp. DOI: [10.1109/WiMob52687.2021.9606256](http://dx.doi.org/10.1109/WiMob52687.2021.9606256)
20. Brioschi M.L., Colman D., Mello Neto H. Fusing IR and magnetic resonance (MR) image // J Korean Med Thermol. 2:57-58, 2002a.
21. Burnham R.S., McKinley R.S., Vincent D.D. Three types of skin-surface thermometers: a comparison of reliability, validity, and responsiveness // Am J Phys Med Rehabil. 2006;85 (7):553-558. doi:10.1097/01.phm.0000223232.32653.7f
22. Cade C.M. High-speed thermography, thermography & its clinical applications. Ed.H.E. Whipple // Annals of the New York Academy of Sciences. 1964;121:71-79.
23. Carlak H.F., Gencer N.G., Besikci C. Theoretical assessment of electro-thermal imaging: A new technique for medical diagnosis // Infrared Physics & Technology. 2016;76:227-234.
24. Casa D.J., Becker S.M., Ganio M.S. et al. Validity of devices that assess body temperature during outdoor exercise in the heat // J Athl Train. 2007;42(3):333-342.
25. Chan F.H., So A.T., Lam F.K. Generation of three-dimensional medical thermograms // Biomed Mater Eng. 1996;6:415-428.
26. Chao H., Luximon A., Yeung K.W. Functional 3D human model design: a pilot study based on surface anthropometry and infrared thermography // Comput. Aided Design Applic. 2015;12:475-484. doi: 10.1080/16864360.2014.997644
27. Chen F., Müller Jan, Müller Jens et al. Motion Correction for Thermography using Co-registered Visual-Light Images // 2019 IEEE Biomedical Circuits and Systems Conference (BioCAS). October 2019. DOI: [10.1109/BIOCAS.2019.8918761](https://www.researchgate.net/deref/http%3A%2F%2Fdx.doi.org%2F10.1109%2FBIOCAS.2019.8918761?_sg%5B0%5D=HrwrDp7cBCi_ohA_Yslc3gmBeC79on19_ISdoPSm7i9-m-xv0K02eeH4VHBbXhcJuWQXnGR8mA7dGz6TLIeGeoNOXA.hT16Mk4xM6zcdQMT-l3S2ejVSKHKK_aH-EwRTAb8qYmSF-QfzpioqQCBDvOrMTRtSvlFPlu9n_9pjjaxRkSiHg)
28. Chen J., Wang J.-P., Shen T.-Y. Et al. High precision infrared temperature measurement system based on distance compensation // ITM Web Conferences 2017;12:03021.
29. [Chen Z](http://www.ophsource.org/periodicals/ophtha/medline/record/MDLN.17282534)., [Jiang G](http://www.ophsource.org/periodicals/ophtha/medline/record/MDLN.17282534)., [Zheng F](http://www.ophsource.org/periodicals/ophtha/medline/record/MDLN.17282534). et al. A Correction Method of Medical Thermography's Distortion // Conf Proc IEEE Eng Med Biol Soc. 2005; 2:1677-1679. doi: 10.1109/IEMBS.2005.1616765
30. Cheng V.S., Bai J., Chen Y. A high-resolution three-dimensional far-infrared thermal and true-color imaging system for medical applications // Med Eng Phys. 2009; 31(9): 1173-1181.
31. Chernov G., Chernov V., Davila-Peralta C. et al. 3D infrared thermography system for biomedical applications (extended abstract) // Thermology International. 2015, 25(3) 98.
32. Chinzei T., Mabuchi K., Abe Y., Fujimasa I., Atsumi K. Thermal rhythm spectrography // Biomedical Thermology. vol. 7(1), pp. 62-65, 1987 (in Japanese).
33. Chinzei T., Saito I., Ikeda M. et al. Thermal-rhythm imaging of skin temperature with a high-speed thermal camera // Biomed Thermology. 1995; IS: 150-152.
34. Cho Y., Bianchi-Berthouze N., Julier S.J., Marquardt N. ThermSense: Smartphone-based breathing sensing platform using noncontact low-cost thermal camera // 2017 Seventh International Conference on Affective Computing and Intelligent Interaction Workshops and Demos (ACIIW). 83-84. DOI:https://doi.org/10.1109/ACIIW.2017.8272593
35. Cho Y., Bianchi-Berthouze N., Marquardt N., Julier S.J. Deep Thermal Imaging: Proximate Material Type Recognition in the Wild Through Deep Learning of Spatial Surface Temperature Patterns // Proceedings of the 2018 CHI Conference on Human Factors in Computing Systems (CHI ’18), New York, NY, USA, 2018, pp. 2:1-2:13. DOI: https://doi.org/10.1145/3173574.3173576
36. Choi J.K., Miki K., Sagawa S., Shiraki K. Evaluation of mean skin temperatures formulas by infrared thermography // Intern J Biometeorol. 1997;41(2):68-75.
37. Chromy A., Klima O. A 3D scan model and thermal image data fusion algorithms for 3D thermography in medicine // Journal of Healthcare Engineering 2017, art. no. 5134021. doi: 10.1155/2017/5134021
38. Clark K.P., Gottl M.R., Culley J.K. High resolution thermography in medicine // J. Photogr. Sci., 1989, vol.37, p. 168-171, plates XII-XIII.
39. Conci A., Galvão S.S.L., Sequeiros G.O. et al. A new measure for comparing biomedical regions of interest in segmentation of digital images // Discret Appl Math. (2015) 103-113. doi: https://doi.org/10.1016/j.dam.2015.06.002
40. Conway J. et al. An experimental study of electrical impedance tomography (EIT) for thermal monitoring in the human body // Thermology. 1990;3:182-186.
41. Coşar S., Zhi Yan, Feng Zhao et al. Thermal Camera Based Physiological Monitoring with an Assistive Robot // 2018 40th Annual International Conference of the IEEE Engineering in Medicine and Biology Society (EMBC). 5010-5013.
42. Cruz-Albarran I.A., Benitez-Rangel J.P., Osornio-Rios R.A. et al. A new approach to obtain a colour palette in thermographic images // Quantitative InfraRed Thermography Journal. 2018. 20 pp. DOI: 10.1080/17686733.2018.1509199
43. Cuadras A., Casas S. High resolution temperature measurement [Biomedical applications] // Proc. IEEE Sensors (2004), pp. 13631368.
44. Dereniak E.L., Roehrig H., Wolfe W.L. Results of Ratio Temperature Thermography // Proc. SPIE 0078, Low Light Level Devices for Science and Technology. (27 July 1976). <https://doi.org/10.1117/12.954791>
45. de Souza M.A., Chagas Paz A.A.; Sanches I.J. et al. 3D thermal medical image visualization tool: Integration between MRI and thermographic images // Proceedings of the 2014 36th Annual International Conference of the IEEE Engineering in Medicine and Biology Society, Chicago, IL, USA, 26-30 August 2014; pp. 5583-5586.
46. Di Romualdo S., Merla A., Romani G.L. Superimposition of thermal imaging to visual imaging using homography // Conf Proc IEEE Eng Med Biol Soc. vol. 2007, pp. 3365-3368, 2007.
47. Diao Y., Li K., Sasaki K. et al. Effect of Incidence Angle on the Spatial-Average of Incident Power Density Definition to Correlate Skin Temperature Rise for Millimeter Wave Exposures // IEEE Transactions on Electromagnetic Compatibility. August 2021;(99):1-16. DOI: [10.1109/TEMC.2021.3098594](http://dx.doi.org/10.1109/TEMC.2021.3098594)
48. Diao Y., Rashed E., Hirata A. Assessment of absorbed power density and temperature rise for nonplanar body model under electromagnetic exposure above 6 GHz // Physics in Medicine and Biology, October 2020. DOI: [10.1088/1361-6560/abbdb7](https://www.researchgate.net/deref/http%3A%2F%2Fdx.doi.org%2F10.1088%2F1361-6560%2Fabbdb7?_sg%5B0%5D=Og3qRWp9RbFiOwP53Rl8yHW90xj8Ryuv00ooyBINA7bMVAU9gUdqYjJNkD7pRnQVQoS98h5gcX67E7_0u_Y5T8G8Tw.8AXTi8tZanPc-TNPlCI4sMS-nrRgeWTVgCul3ExnygdRJ7yO9dZCshbGo9W8nrg77D7HMpD3dAROnVWQ966RTg)
49. Diemer F. SensiblerHelfer – Diagnoseinstrument Thermometer // Physiopraxis. September 2021;19(09):26-29. DOI: [10.1055/a-1553-1785](http://dx.doi.org/10.1055/a-1553-1785)
50. Duarte A., Carrão L., Espanha M. et al. Segmentation algorithms for thermal images // Procedia Technol. 2014. 16, 1560-1569.
51. Farnell S., Maxwell L., Tan S. Et al. Temperature measurement: comparison of non-invasive methods used in adult critical care // J Clin Nurs 2005;14:632-639.
52. Fitriyah H., Rachmadi A., Setyawan G.E. Automatic Measurement of Human Body Temperature on Thermal Image Using Knowledge-Based Criteria // Journal of Information Technology and Computer Science Volume 2, Number 2, 2017, pp. 90- 97. DOI: [10.25126/jitecs.20172235](http://dx.doi.org/10.25126/jitecs.20172235)
53. Fletcher T., Whittam A., Simpson R., Machin G. Comparison of non-contact infrared skin thermometers // Journal of Medical Engineering & Technology. 2018;42:65-71. DOI: 10.1080/03091902.2017.1409818
54. Fochem K., Pflanzer K. Indicationsmoglichkeiten der Plattenthermographie // Roengen-Berichte, 1975, 4:169-174. [in German]
55. Font-Aragones X., Faundez-Zanuy M., Mekyska J. Thermal hand image segmentation for biometric recognition // IEEE Aerosp Electron Syst Mag. (2013) 28:4-14. https://doi.org/10.1109/MAES.2013.6533739
56. Fujimasa I. et al. A New Computer Image Processing System for the Analysis of Neuromuscular Thermograms: A Feasibility study // Thermology. 1986; 1, 221.
57. Garrido I., Lagüela S., Román J.V. et al. Computation of thermophysical properties for magnetite-based hyperthermia treatment simulations using infrared thermography // International Journal of Heat and Mass Transfer, June 2020, 154:119770. DOI: [10.1016/j.ijheatmasstransfer.2020.119770](https://www.researchgate.net/deref/http%3A%2F%2Fdx.doi.org%2F10.1016%2Fj.ijheatmasstransfer.2020.119770?_sg%5B0%5D=FLqKH_bx72YAUl8TPWdYc1HMK7VbxnF01418wIJkcSzNEhBeD9NDwBcU0tSsmYxZsmgfjxjMmDmhcQhR4ajRY-TK2w.JaxX0TKN9VvVFA99D5_cY1Mz95xO0UG29q2BtOUGtIzvQnt-6JqKjKDWdUbOsLgpdbLBKDf-GZCdcDNp3hQfmw)
58. Gaspar G., Ďuďák J., Mikolajcikova M., Gurin D. Proposal of a Skin Temperature Measurement System Based on Digital Thermometers // IEEE Access. January 2023;PP(99):1-14. DOI: [10.1109/ACCESS.2023.3255511](http://dx.doi.org/10.1109/ACCESS.2023.3255511)
59. Gauci J., Camilleri K.P., Falzon O. Principal component analysis for dynamic thermal video analysis // Infrared Phys Technol. (2020) 109:103359. doi: 10.1016/j.infrared.2020.103359
60. Gavriloaia G., Neamtu C., Gavriloaia M., Ghemigan A. Anisotropic diffusion filtering of infrared medical images // In the 18 International Conference on Systems, Signals and Image Processing (IWSSIP), IEEE, pp. 1-4, 2011.
61. Gavriloaia B.M.G., Vizireanu R.C.R., Neamtu C.M. et al. An improved method for IR image filtering from living beings // Engineering in Medicine and Biology Society (EMBC), 2013 the 35 Annual International Conference of the IEEE, pp. 3395-3398, IEEE, 2013. DOI: 10.1109/EMBC.2013.6610270
62. Gavriloaia B.M, Vizireanu C.R., Fratu O. et al. Thermal image filtering by bi-dimensional empirical mode decomposition // Advanced Topics in Optoelectronics, Microelectronics, and Nanotechnologies, Volume 9258, 2015. doi:10.1117/12.2070375
63. Ghosh P., Mitchell M., Gold J. Segmentation of medical images using a genetic algorithm // Image Process Mach Vis Appl. (2010) III: 75380D
64. Giansanti S., Maccioni G., Development and testing of a wearable Integrated Thermometer sensor for skin contact thermography // Medical Engineering & Physics, 2007, 29(5): 556-565.
65. Giansanti D., Maccioni G., Gigante G.E. A comparative study for the development of a thermal odoscope for the wearable dynamic thermography monitoring // Medical Engineering and Physics. May 2006. [28 (4](http://www.sciencedirect.com/science?_ob=PublicationURL&_tockey=%23TOC%235117%232006%23999719995%23619179%23FLA%23&_cdi=5117&_pubType=J&view=c&_auth=y&_acct=C000050221&_version=1&_urlVersion=0&_userid=10&md5=217801ec1eb804f9a80cc028d34c5b43)): 363-371.
66. Gibson H. Medical infrared color photography // Vis Med. 1967;2(3):43-51. !!!
67. Gnyawali S.C., Chen Y., Wu F. et al. Determination of surface temperature distribution in biological tissues during laser-immunotherapy // Proc. SPIE 6438, Biophotonics and Immune Responses II, 64380D (13 February 2007). <https://doi.org/10.1117/12.698017>
68. Gonzalez F.J., Gonzalez R., López J.C. Thermal contrast of active dynamic thermography versus static thermography // Biomedical Spectroscopy and Imaging 8 (July 2019) 41-45. DOI: [10.3233/BSI-190188](https://www.researchgate.net/deref/http%3A%2F%2Fdx.doi.org%2F10.3233%2FBSI-190188?_sg%5B0%5D=L_B2pJaENzEJdPzvsfWlKZ_x9FL_rk1BFPObh4Ww7WJfD3IwrJ1SrU6gXBCLsK8Or-BhhoEsn8Bb83YwbzS6m7C01g.E_SMGopgkahDYRsLHNSmOKaApG_QnnhAZfi-jziRnymzmx9IVdMattdTBStPPXn5GxOidQtRkZjS_rfEwEu9iw)
69. Goodman P.H. et. al. Detection of intentionally produced thermal artifacts by repeated thermographic imaging // Thermology 1991; 3:253-260.
70. Grassmann C.G., Coninck J.C.P., Ripka W., Ulbricht L. Thermal Evaluation to Identify Nodules Using Semivariogram Curves // 43rd Annual International Conference of the IEEE Engineering in Medicine & Biology Society (EMBC). November 2021. DOI: [10.1109/EMBC46164.2021.9630072](http://dx.doi.org/10.1109/EMBC46164.2021.9630072)
71. Grubisic I., Gjenero L., Lipic T. et al. Medical 3D thermography system // Period Biol. 2011;113:401-406.
72. Grubisic I., Gjenero L., Lipic T. et al. 4D thermal imaging system for medical applications // Periodicum Biologorum UDC. 2011;113:4:407-416.
73. Grubisic I., Gjenero L., Lipic T. et al. Active 3D scanning based 3D thermography system and medical applications // Proceedings of the 34th International Convention MIPRO, Opatija, Croatia, 23-27 May 2011; pp. 269-273.
74. Haldeman L.A., Allen T.L., Chan K.J., Snow G.L. Feasibility and utility of infrared thermography as a thermometer: Comparison with oral and tympanic thermometry // Annals of Emergency Medicine, October 2004, Vol. 44, 4, Suppl. 1, S53-S53.
75. Harper-Smith A., Crabtree D., Bilzon J., Walsh N. The validity of wireless iButtons® and thermistors for human skin temperature measurement // Physiol Meas. 2010, 31:95-114.
76. Harrison D.K., Abbot N.C., Beck J.S., McCollum P.T. Laser Doppler perfusion imaging compared with light-guide laser Doppler flowmetry, dynamic thermographic imaging and tissue spectrophotometry for investigating blood flow in human skin // Adv Exp Med Biol. 1994; 345:853-859.
77. Hart J., Omolo B., Boone W.R. et al. Intra- and Inter-Examiner Reliability and Comparison of Computer-Aided Methods of Thermal Pattern Analysis // JCCA. In press.
78. Hart J., Omolo B., Boone W.R. et al. Reliability of three methods of computer-aided thermal pattern analysis // J Can Chiropr Assoc. 2007; 51(3): 175-185.
79. Herry C.L. Segmentation and extraction of regions of interest for automated detection of anomalies in clinical thermal infrared images. Ph.D. thesis, Carleton University Ottawa, Ottawa, ON, Canada, 2008.
80. Higuita M.C.H., Fernández M.H., Martínez D.A., Toro H.F. Analysis of Finger Thermoregulation by Using Signal Processing Techniques. In book: Bioinformatics and Biomedical Engineering, April 2019. Chapter. DOI: [10.1007/978-3-030-17935-9\_48](http://dx.doi.org/10.1007/978-3-030-17935-9_48)
81. Howell W.L. Apparatus for use in differential clinical thermometry; 1967. US Patent 3,339,542.
82. Huang S.Y., Mao C.W., Cheng K. A vq-based approach to thermal image analysis for printed circuit boards diagnosis // IEEE Trans Instrum Meas., vol. 54, pp. 3281-2388, Dec. 2005.
83. Ismail E., Merla A. Modeling Thermal Infrared Imaging Data for Differential Diagnosis. In book: Application of Infrared to Biomedical Sciences, March 2017. Chapter. DOI: [10.1007/978-981-10-3147-2\_27](http://dx.doi.org/10.1007/978-981-10-3147-2_27)
84. Jayalatsumi U., Feza Naaz A., Sravani K. et al. A Low Cost Thermal Imaging System for Medical Diagnostic Applications // International Journal of Engineering & Technology, 7 (3.27) (2018) 314-317. DOI: 10.14419/ijet.v7i3.27.17897
85. Kaczmarek M., Borwanski M. Resolution enhancement of thermal images in active dynamic thermography sequences // 11th Intern. Сonf. on Quantitative InfraRed thermography. 11-14 June 2012. Naples Italy. N 274. URL: <http://www.ndt.net/article/qirt2012/papers/QIRT-2012-274.pdf>
86. [Kaczmarek M., Nowakowski A. Measurement of Thermal Properties of Biological Tissues – Comparison of Different thermal NDT techniques // 5th International Workshop on Advanced Infrared Technology and Applications, Venice, 1999](http://www-med.eti.pg.gda.pl/~mariusz/abstrakty.html#pub5).
87. Kaczmarek M., Rumiński J., Nowakowski A. Data processing Methods for Dynamic Medical Thermography // Proceedings of International Federation for Medical and Biological Engineering, EMBEC’02, Wiedeń, 2002 str. 1098-1099, 3 rys., 4 poz. bibl.
88. Kafieh R., Rabbani H. Wavelet-based medical infrared image noise reduction using local model for signal and noise // IEEE Statistical Signal Processing Workshop 2011. 549-552.
89. Kakuta N., Yokoyama S., Mabuchi K. Human thermal models for evaluating infrared images // IEEE Eng Med Biol Mag. 2002; 21(6):65-72.
90. Kelechi T., Michel Y., Wiseman J. Are infrared and thermistor thermometers interchangeable for measuring localized skin temperature? // J Nurs Meas. 2006;14:19-30.
91. Kim K.B., Song D.H. Automatic Intelligent Asymmetry Detection Using Digital Infrared Imaging with K-Means Clustering // International Journal of Fuzzy Logic and Intelligent Systems. September 2015;15(3):180-185. <http://dx.doi.org/10.5391/IJFIS.2015.15.3.180>
92. Kirimtat A., Krejcar O. FLIR vs SEEK in Biomedical Applications of Infrared Thermography // International Conference on Bioinformatics and Biomedical Engineering. Granada, Spain, 25-27 April 2018.
93. Kirimtat A., Krejcar O. FLIR vs SEEK in Biomedical Applications of Infrared Thermography. In book: Bioinformatics and Biomedical Engineering. January 2018. Chapter / International Work-Conference on Bioinformatics and Biomedical Engineering (IWBBIO 2019): Bioinformatics and Biomedical Engineering, pp. 221-230. DOI: [10.1007/978-3-319-78759-6\_21](http://dx.doi.org/10.1007/978-3-319-78759-6_21)
94. Kirimtat A., Krejcar O., Selamat A., Herrera-Viedma E. FLIR vs SEEK thermal cameras in biomedicine: comparative diagnosis through infrared thermography // BMC Bioinformatics. 2020, 21(Suppl 2):88-97. From: 6th International Work-Conference on Bioinformatics and Biomedical Engineering Granada, Spain. 25-27 April 2018. https://doi.org/10.1186/s12859-020-3355-7
95. Kistemaker J.A., Den Hartog E.A., Daanen H.A.M. Reliability of an infrared forehead skin thermometer for core temperature measurements // J Med Eng Technol 2006; 30: 252-261.
96. Klaessens H.G.M., Noordmans H.J., Nelisse M., Verdaasdonk R.M. Non-contact multi-spectral imaging combined with thermography to determine physiological changes in perfusion during clinical interventions // 11th International Conference on Quantitative InfraRed Thermography (QIRT-2012). June 11-14, 2012, Naples, Italy. 8 pp.
97. Klaessens J.H., van der Veen A., Verdaasdonk R.M. Comparison of the temperature accuracy between smart phone based and high-end thermal cameras using a temperature gradient phantom // Proc. SPIE 10056, Design and Quality for Biomedical Technologies X, 100560D (16 March 2017). <https://doi.org/10.1117/12.2252898>
98. Knish A., Rabin N. Thermal heat distribution features for hand identification // Expert System with Applications. May 2022;203(4):117462. DOI: [10.1016/j.eswa.2022.117462](http://dx.doi.org/10.1016/j.eswa.2022.117462)
99. Kolaric D., Skala K., Dubravic. A ThermoWEB-Remote Control and Measurement of Temperature over the Web // Periodicum biologorum 2007. 108(6):631-637.
100. Kondo K., Kakuta N., Chinzei T. Thermal rhythmography-topograms of the spectral analysis of fluctuations in skin temperature // Engineering in Medicine and Biology Society, 2001. Proceedings of the 23rd Annual International Conference of the IEEE. February 2001. Volume: 3. 5 pp. DOI: [10.1109/IEMBS.2001.1017370](https://www.researchgate.net/deref/http%3A%2F%2Fdx.doi.org%2F10.1109%2FIEMBS.2001.1017370?_sg%5B0%5D=EGEJKdo45kC_raBWJqxNEMEclXF1yIMeUmod1vCnK-sqFcCzl_BtVY5WdcDuLYa-rrJoBTkpa7-PONwtKeurYk-1wg.OR_D4DVcSFi7dLTJPkardUA-Vcu97YTNY3inb3r8OsDwvI-MytX-6evCS5Ch4CYB0K1KAB-VCNq9AJNOJEYHNw)
101. Koprowski R. Some selected quantitative methods of thermal image analysis in Matlab // J. Biophotonics 2016, 9, 510-520. [CrossRef] [PubMed]
102. Koprowski R., Wilczynski S., Lanza M. Special Issue on Application of Image Processing in Medicine // Appl. Sci. 2023, 13, 337. 2 pp. https://doi.org/10.3390/ app13010337
103. Koprowski R., Wilczynski S., Wrobel Z., Błonska-Fajfrowska B. Dynamic thermal imaging analysis in the effectiveness evaluation of warming and cooling formulations // Computers in Biology and Medicine, vol. 54, pp. 129-136, 2014.
104. Krefer A.G., Lie M.M.I., Borba G.B. et al. A method for generating 3D thermal models with decoupled acquisition. Comput. Methods Programs Biomed. 2017, 151, 79-90.
105. Kumar U.S., Sudharsan N.M. Enhancement techniques for abnormality detection using thermal image // The Journal of Engineering, 2018(5), 279-283.
106. Kutas M. Staring Focal Plane Array for Medical Thermal Imaging. In: Ammer K., Ring E.F.J., eds: The thermal image in Medicine and Biology, Uhlen-Verlag, Vienna, 1995, p. 40-46.
107. Kwang Baek Kim, Doo Hoen Song. Automatic Intelligent Asymmetry Detection Using Digital Infrared Imaging with K-Means Clustering // International Journal of Fuzzy Logic and Intelligent Systems, September 2015, 15 (3): 180-185. http://dx.doi.org/10.5391/IJFIS.2015.15.3.180
108. Langston T. Reflectance-based skin detection in the short wave infrared band and its application to video // J Appl Remote Sens. 2016, 10, 046026. [CrossRef]
109. Lazri Z.M., Zhu Q., Chen M. et al. Detecting Essential Landmarks Directly in Thermal Images for Remote Body Temperature and Respiratory Rate Measurement with a Two-Phase System // IEEE Access, vol. 10, pp. 39080-39094, 2022. doi: 10.1109/ACCESS.2022.3161968
110. Lee J.H., Choi J.S., Jeon E.S. et al. Robust pedestrian detection by combining visible and thermal infrared cameras // Sensors (Basel). 2015 May 5;15(5):10580-10615. doi: 10.3390/s150510580
111. Li K.Y., Dong Y.G., Chen C., Zhang S.P. The noninvasive reconstruction of 3D temperature field in a biological body by Monte Carlo Method // J Neurocomputing. 2008; 72: 128-133.
112. London R.S., Murphy L. et al. Reliability of contact thermogram reading services // Reprod Med. 1984; 29(9): 686-688.
113. López-Varela K.A., Cayetano-Castro N., Kolosovas-Machuca E.S. et al. Dynamic Infrared Thermography of Nanoheaters Embedded in Skin-Equivalent Phantoms // Journal of Nanomaterials. January 2018 (2):1-8. DOI: 10.1155/2018/3847348
114. Lorato I., Bakkes T., Stuijk S. et al. Unobtrusive Respiratory Flow Monitoring Using a Thermopile Array: A Feasibility Study // Applied Sciences. June 2019;9(12):2449. 15 pp. DOI: [10.3390/app9122449](http://dx.doi.org/10.3390/app9122449)
115. Mabuchi K., Chinzei T., Fujimasa I. et al. An Image-Processing Program for the Evaluation of Asymmetrical Thermal Distributions // Proceedings of the 19th Annual International Conference of the IEEE Engineering in Medicine and Biology Society. Chicago, IL 1997:725-728.
116. Mabuchi K., Chinzei T., Fujimasa I. et al. Evaluating asymmetrical thermal distributions through image processing // IEEE Engineering in Medicine and Biology Magazine. 1998;17(2):47-55. doi: 10.1109/memb.1998.687963
117. Mabuchi K., Kanbara O., Genno H. et al. Automatic control of optimum ambient thermal conditions using feedback of skin temperature // Biomedical Thermology. 1997. 16, 6-13. <https://doi.org/10.1111/apha.12231>
118. Machin G., Lu X., del Campo D. et al. Improving body temperature measurement on a global basis // Thermology international 2021, 31(1) 5-10.
119. Madhvapathy S.R., Arafa H., Patel M.J. et al. Advanced thermal sensing techniques for characterizing the physical properties of skin // Applied Physics Reviews. December 2022;9(4):041307. DOI: [10.1063/5.0095157](http://dx.doi.org/10.1063/5.0095157)
120. Magalhães M., Mendes J.G., Vardasca R. Meta-Analysis and Systematic Review of the Application of Machine Learning Classifiers in Biomedical Applications of Infrared Thermography // Applied Sciences. January 2021, 11(2):842. DOI: [10.3390/app11020842](https://www.researchgate.net/deref/http%3A%2F%2Fdx.doi.org%2F10.3390%2Fapp11020842?_sg%5B0%5D=nuru5Xx1cuFSgy6aEY3em9xae445hLDsV9IK0DgFL1dWkrHNTu_XRxRoOhMd99lyXLLVLqTesGR8VQNlGzgFK0ptVw.1M8fuca0vDFn3IsiN5vlaPrf2GQEDP-_9pfDFDp9G2Az9cXz98Kn4EkSglW0m0R9dEfLw8KHn3gpH0W9kFjDfg)
121. Mah A.J., Ghazi Zadeh L., Khoshnam Tehrani M. et al. Studying the Accuracy and Function of Different Thermometry Techniques for Measuring Body Temperature // Biology 2021, 10, 1327. https:// doi.org/10.3390/biology10121327
122. Mamouni A., Nguyen D.D., Ribillard A. et al. Nouvelles methodes diagnostiques foude'es sur la mesure du bruit thermique emis par les tissus vivants // Linole Eleotrique. 1980. V. 6, N 12. P. 30-36. [in French]
123. Mao P., Li H., Yu Z. A Review of Skin-Wearable Sensors for Non-Invasive Health Monitoring Applications // Sensors 2023, 23, 3673. 37 pp. https://doi.org/10.3390/s23073673
124. Marinetti S., Cesaratto P.G. Emissivity estimation for accurate quantitative thermography // NDT E Int (2012) 51:127-134. doi:10.1016/j.ndteint.2012.06.001
125. Marjanovic E.J., Britton J., Howell K., Murray A.K. Quality assurance for a multicentre thermography study // Thermology international 2018;28(1):7-13.
126. Marques R.S., Conci A., Pérez M.G. et al. An Approach for Automatic Segmentation of Thermal Images in Computer Aided Diagnosis // IEEE Latin America Transactions, Vol.14, No.4, (2016).
127. Marques R.S., Conci A., Perez M.G. et al. An approach for automatic segmentation of thermal images in computer aided diagnosis // IEEE Latin America Transactions, vol. 14, no. 4, pp. 1856-1865, 2016.
128. Martin M.J., Knazovicka L., McEvoy H. et al. Use of infrared ear thermometers to perform traceable non-contact measurements of human body temperature. Bureau International des Poids et Measures (<https://www.bipm.org/fr/home>). 2nd version. Under the auspices of the Consultative Committee for Thermometry. March 2021. 18 pp.
129. Martin M.J., Knazovicka L., McEvoy H. et al. Use of infrared forehead thermometers to perform traceable non-contact measurements of human body temperature. Bureau International des Poids et Measures (<https://www.bipm.org/fr/home>). 2nd version. Under the auspices of the Consultative Committee for Thermometry. March 2021. 22 pp.
130. Matsui T., Suzuki S., Sun G., Ng E.Y.K. Sensors and Data Processing Techniques for Future Medicine // Journal of Sensors (Hindawi). 2018. Volume 2018, Article ID 1210609, 2 pp. https://doi.org/10.1155/2018/1210609
131. Matsukawa T., Ozaki M., Okusawa Y. et al. Cjmparison of infrared thermometer with thermocouple for monitoring skin temperature // Crit Care Med. 2000;28(2):532-536.
132. Mazdeyasna S., Ghassemi P., Wang Q. et al. External factors affecting performance of infrared thermographs for screening elevated body temperature // Optical Diagnostics and Sensing XXIII: Toward Point-of-Care Diagnostics (Presentation). March 2023. DOI: [10.1117/12.2647127](http://dx.doi.org/10.1117/12.2647127)
133. Merino E., Mannrich G., Guimarães B. et al. Implementation of Integrated Instrumentation in Assistive Technology // Advances in Intelligent Systems and Computing. July 2018. 12 pp. DOI: 10.1007/978-3-319-60582-1\_55
134. Merla A., Cardone D., Pinti P., DiDonato L. IRI – ImagePro©: A software tool for advanced processing of thermal IR imaging data (extended abstract) // Thermology International. 2015, 25(3) 98.
135. Merla A., Di Donato L., Romani G.L. ImagePro: Software for Infrared Functional Imaging // Proceedings of the 2nd European Medical and Biological Engineering Conference EMBEC02, Vienna, Vienna, 4-8 December 2002; Volume 2, pp. 1612-1613.
136. Merla A., Di Donato L.D., Silvano D.L. et al. Quantifying the relevance and stage of disease with the Tau image technique // IEEE Eng. Med. Biol. Mag. 2002. Vol. 21. P. 86-91. doi: 10.1109/MEMB.2002.1175143
137. Mihai-Bogdan G., Constantin-Radu V., Octavian F. et al. Thermal image filtering by bi-dimensional empirical mode decomposition // Proceedings of SPIE – The International Society for Optical Engineering, February 2015, 9258. DOI: 10.1117/12.2070375
138. Milbrath J.R., Schlager K.J. Direct Measurement and On-Line Automatic Interpretation of Breast Thermographs // Proc. SPIE 0233, Application of Optical Instrumentation in Medicine VIII (18 August 1980). <https://doi.org/10.1117/12.958936>
139. Motta L.S., Conci A., Lima R.C.F., Diniz E.M. Automatic segmentation on thermograms in order to aid diagnosis and 2D modeling // Proceedings of 10th Work shop em Informatica Medica, Belo Horizonte, MG, Brazil, 2010, vol. 1, pp. 1610-1619. Available in: /http://www.visual.ic.uff.br/proengS, accessed:27 January 2012
140. Murawski K., Rozanowski K., Krej M. Research and Parameter Optimization of the Pattern Recognition Algorithm for the Eye Tracking Infrared Sensor // Acta Physica Polonica Series a, September 2013. 124(3):513-516. DOI: 10.12693/APhysPolA.124.513
141. Murawski P., Jung A., Ring E.F.J. et al. «Image therma Base» – a software tool to capture and analyze thermal images // Thermology International 2002, 12 (2) 60.
142. Murawski P., Jung A., Ring E.F.J. et al. «Image therma Base» – a software program to capture and analyze thermographic images // Thermol International 2003, 13 (1), 5-9.
143. Neves E.B., Brioschi M.L. Is it possible to use low-cost infrared cameras (thermal resolution of 80×60 pixels) in medical applications? // Pan American Journal of Medical Thermology. 2017. 4: 5-6.
144. Ng E.Y.K., Acharya R. Remote-sensing infrared thermography // IEEE Eng. Med. Biol. 2009;28:76-83. [[PubMed](http://www.ncbi.nlm.nih.gov/pubmed/19150773)]
145. Ng Y.M.H., Du R. Reconstruction of 3D thermal distribution from infrared images // International Symposium on Mechatronics: Proceedings of the First Asia International Symposium on Mechatronics; 2004 Sept; Xian, China. Xian; 2004. P. 379-383. PMid:15165063.
146. Nguyen-Duc T., Chan P., Tay A et al. Estimation of Clinical Workload and Patient Activity using Deep Learning and Optical Flow // arXiv:2202.04748v1 [cs.CV] 9 Feb 2022 Preprint. 4 pp.
147. Nowakowski A., Kaczmarek M., Rumiński J. Synthetic pictures in thermographic diagnostics // W: [CD-ROM] Second Joint EMBS-BMES Conference 2002. 24th Annual International Conference of the Engineering in Medicine and Biology Society Annual Fall Meeting of the Biomedical Engineering Society. Bioengineering – Integrative Methodologies, New Technologies. Houston, USA, 23-26 October 2002. New Jersey: IEEE 2002, T. 2, S. 1131-1132, 3 rys. bibliogr. 17 poz.
148. Ornek A.H., Ceylan M. Comparison of Traditional Transformations for Data Augmentation in Deep Learning of Medical Thermography // 42nd International Conference on Telecommunications and Signal Processing (TSP), July 2019. DOI: 10.1109/TSP.2019.8769068
149. Owens E. Thermographic pattern analysis using objective numeric methods // The Journal of Chiropractic Education, 2000. Vol. 14, No. 1, P. 26.
150. Pan Chien-Yuan et al. Infrared image processing for a physiological information telemetry system // Wireless Personal Communications 83.4 (2015): 3181-3208.
151. Pascoe D. Potential Errors in Mean Skin Temperature Calculation Due to Thermistor Placement as Determined by Infrared Thermography. In: Humbert, P., Maibach, H., Fanian, F., Agache, P. (eds) Agache’s Measuring the Skin. Springer, Cham, 2015. <https://doi.org/10.1007/978-3-319-26594-0_75-1>
152. Paul M., Behr S.C., Weiss C. et al. Spatio-temporal and -spectral feature maps in photoplethysmography imaging and infrared thermography // BioMedical Engineering OnLine. January 2021;20(1). 55 pp. DOI: [10.1186/s12938-020-00841-9](https://biomedical-engineering-online.biomedcentral.com/articles/10.1186/s12938-020-00841-9)
153. Paulus D.W., Greiner T., Knuevener C. Watershed transformation of time series of medical thermal images. In. Casasent D.P.; Ed Intelligent Robots and Computer Vision XIV: Algorithms, Techniques, Active Vision, and Materials Handling. Proc. SPIE. 1995, Vol. 2588, p. 700-711.
154. Paulus D.W., Greiner T., Knuevener C. Wasserscheidentransformation fur Thermographiebilder. In Sagerer G., Posch S., Kummert F., Hrg. Mustererkennung, 1995, Springer, Berlin, P. 355-362. [in German]
155. Payne R. Infrared photography of the superficial venous system // Lancet. 1934. Vol. 226. P. 235-236.!!!
156. Perdew W., Jenness M.E., Daniels J.S. et al. A determination of the reliability and concurrent validity of certain body surface temperature measuring instruments // Dig Chiro Econ. May/June:60-65.
157. Peregrina-Barreto H., Morales-Hernández L.A., Rangel-Magdaleno J.J. et al. Thermal image processing for quantitative determination of temperature variations in plantar angiosomes // 2013 IEEE International Instrumentation and Measurement Technology Conference (I2MTC). Minneapolis, MN, USA, 06-09 May 2013. 978-1-4673-4623-8/2013
158. Perpetuini D., Cardone D., Filippini C. et al. Modelling impulse response function of functional infrared imaging for general linear model analysis of autonomic activity // Sensors. (2019) 19:849. doi: 10.3390/ s19040849
159. Perpetuini D., Cardone D., Filippini C. et al. A Motion Artifact Correction Procedure for fNIRS Signals Based on Wavelet Transform and Infrared Thermography Video Tracking // Sensors 2021, 21, 5117. 14 pp. https:// doi.org/10.3390/s21155117
160. Petrova N. et al. Reliability of a novel thermal imaging system for temperature assessment of healthy feet // Journal of Foot and Ankle Research, vol. 11, no. 1, 2018.
161. Planiol P.Th., Ferrey G., Fischgold A. Essais preliminaires d'une technique thermographique // J Radiol Electrol. 1967. V. 8, N l-2. P. 41-45. [in French]
162. Plassman P., Murawski P. CTHERM for standardised thermography”, 9th European Congress of Medical Thermology, May 30th -1st June 2003, Krakow, Poland, 2003.
163. Plassmann P., Ring E.F.J. An Open System for the Acquisition and Evaluation of Medical Thermological Images // Eur. J Thermology 1997; 7(4): 216-220.
164. Playà-Montmany N., Tattersall G.J. Spot size, distance and emissivity errors in field applications of infrared thermography // Methods Ecol. Evol. 2021, 12, 828-840. doi:10.1111/2041-210X.13563
165. Pušnik I., Geršak G. Evaluation of the Size-of-Source Effect in Thermal Imaging Cameras // Sensors 2021, 21, 607. <https://doi.org/10.3390/s21020607>
166. Puttagunta M., Ravi S. Medical image analysis based on deep learning approach // Multimed Tools Appl. 2021;80:24365-24398.
167. Ramesh V. A Review on Application of Deep Learning in Thermography // International Journal of Engineering and Management Research. May-June 2017;7(3):489-493.
168. Rezaee K., Khosravi M., Neshat N., Moghimi M.K. Deep Transfer Learning-Based Fall Detection Approach Using IoMT-Enabled Thermal Imaging-Assisted Pervasive Surveillance and Big Health Data // Journal of Circuits, Systems and Computers. May 2022;31(12).  DOI: [10.1142/S0218126622400059](http://dx.doi.org/10.1142/S0218126622400059)
169. Ring E.F.J., Dicks J.M. Spatial Resolution of New Thermal Imaging Systems // Thermology international 1999, 9(1): 7-14.
170. Rodríguez de Rivera P.J., Rodríguez de Rivera M., Socorro F. et al. Advantages of in vivo measurement of human skin thermal conductance using a calorimetric sensor // Journal of Thermal Analysis and Calorimetry. March 2022;147(18). DOI: [10.1007/s10973-022-11275-x](http://dx.doi.org/10.1007/s10973-022-11275-x)
171. Rumiński J., Kaczmarek M., Nowakowski A. Medical active thermography – a new image reconstruction method // Proceedings. 9th International Conference, CAIP 2001 Computer Analysis of Images and Patterns. Warsaw, Poland, September 2001. Ed. W. Skarbek. Berlin: Springer 2001 s. 274-281, 7 rys. 2 tab. bibliogr. 13 poz., Lecture Notes in Computer Science [nr] 2124. Ed. G. Goos, J. Hartmanis, J. van Leeuwen.
172. Rumiński J., Kaczmarek M. Synthesis of parametric images in the medical active thermography // Int. J. Image Processing a. Communications 2002 vol. 8 nr 1 s. 45-53, 12 rys. bibliogr. 15 poz.
173. Rumiński J., Kaczmarek M., Nowakowski A. Dynamic, medical thermography - image reconstruction data sequences // Proceedings 16th Biennial International Eurasip Conference Biosignal 2002. [Brno, 26-28 June 2002]. Ed. J.Jan, J. Kozumplik, I. Provaznik. Brno: Univ. Tech., VUTIUM Press 2002 s. 259-261, 3 rys. bibliogr. 6 poz.
174. Rumiński J., Nowakowski A., Kaczmarek M. Model-Based Parametric Images in Dynamic Thermography // III Symposium on Medical Physics, Polish Journal of Medical Physics and Engineering, Wisła 2000.
175. Sanches I.J. Sobreposição de Imagens de Termografia e Ressonância Magnética: Uma Nova Modalidade de Imagem Médica Tridimensional. Tese de Doutorado, CPGEI, – Universidade Tecnologica Federal de Parana (UTFPR), Curitiba-PR, 2009. [in Portuguese]
176. Sanches I.J., Cruz F.P.F., Bichinho G.L. et al. Registro e visualizacao 3-D de imagens de ressonancia magnetica e termografia // XX CBEB: Anais do Congresso Brasileiro de Engenharia Biomedica; 2006 Out; Sao Pedro. Sao Pedro; 2006. [in Portuguese]
177. Sanches I.J., Gamba H.R., de Souza M.A. et al. 3D de imagens de MRI/CT e termografia // Rev Bras Eng Biomed 2013; 29: 298-308. <http://dx.doi.org/10.4322/rbeb.2013.031> [in Portuguese]
178. Sato Y., Kobayashi Y., Koike H. 2000. Fast tracking of hands and fingertips in infrared images for augmented desk interface // [Proceedings 4th IEEE International Conference on](http://ieeexplore.ieee.org/xpl/mostRecentIssue.jsp?punumber=6770) Automatic Face and Gesture Recognition, 30 March 2000. 6 pp. DOI: [10.1109/AFGR.2000.840675](https://doi.org/10.1109/AFGR.2000.840675)
179. Savasci D., Ornek A.H., Ervural S. et al. Classification of unhealthy and healthy neonates in neonatal intensive care units using medical thermography processing and artificial neural network. In book: Artificial Intelligence Techniques and Applications in Radiology. Publisher: Turkiye Klinikleri. Konya, July 2020. Chapter. 27 pp.
180. Saxena A., Ng E.Y.K., Raman V. A novel approach to analyze transient image series in active dynamic thermography of superficial skin tissue // World Congress on Medical Physics & Biomedical Engineering. At: Prague, Czech Republic, June 2018.
181. Saxena A., Ng E.Y.K., Raman V. Single image reconstruction in active dynamic thermography: A novel approach // Infrared Physics & Technology. July 2018, 93(C):53-58. DOI: 10.1016/j.infrared.2018.07.020
182. Saxena A., Raman V., Ng E.Y.K. Study on methods to extract high contrast image in active dynamic thermography // Quantitative InfraRed Thermography Journal. 2019, 1-17. doi:10.1080/17686733.2019.1586376
183. Schadeck C., Ganacim F., Ulbricht L. Image Processing as an Auxiliary Methodology for Analysis of Thermograms // XXVII Brazilian Congress in Biomedical Engineering. Vitoria (Brazil). November 2020. P. 2301-2306.
184. Schadeck C.A., Ganacim F., Ulbricht L. Processamento de imagens como metodologia auxiliar à análise de termogramas // Pan Am J Med Thermol. May 2021; 6:31-41. [in Portugal]
185. Schadeck C.A., Ganacim F., Ulbricht L., Schadeck C. Image Processing as an Auxiliary Methodology for Analysis of Thermograms. In book: XXVII Brazilian Congress on Biomedical Engineering. January 2022. Chapter. DOI: [10.1007/978-3-030-70601-2\_228](http://dx.doi.org/10.1007/978-3-030-70601-2_228)
186. Schaefer G., Huguet J., Zhu S.Y. et al. Adopting the DICOM standard for medical infrared images // Conference on the Proceedings of IEEE Engineering, Medicine and Biology Society, vol. 1, 2006, pp. 236-239.
187. Schaefer G., Merla A. Image Processing Tools for Biomedical Infrared Imaging. In book: Biocomputation and Biomedical Informatics: Case Studies and Applications. Editor: A.A.Lazakidou (University of Peloponnese, Greece). Medical Information Science Reference. Illustrated edition. January 2010. Chapter 12. P. 187-197. DOI: [10.4018/978-1-60566-768-3.ch012](https://www.researchgate.net/deref/http%3A%2F%2Fdx.doi.org%2F10.4018%2F978-1-60566-768-3.ch012?_sg%5B0%5D=fFgQXJ8VDgK1-CRf95FN1v8xOZ40GKuYFmHa5pZauUA2zoxLNJgzCt23vRsErpMaoryzOsyYTKASKrJSBhbwkqOWcQ.H31F6IhGrh25VT7ebiyHl2PMsgHIPiV78tuDC788iAEsHmgzL2vN5GQ4qiej23ClJ-spq7cSZm4ddy32QeH9nQ)
188. Schaefer G., Tait R., Zhu S.Y. Overlay of thermal and visual medical images using skin detection and image registration // Proceedings of the 28th IEEE, EMBS Annual International Conference. New York City, USA, 2006 August 30 – September 3.
189. Schaefer G., Tait R., Zhu S.Y. Overlay of thermal and visual image using skin detection and image registration // Eng Med Biol Soc. (EMBS) 2006;3:965-967. [[PubMed](http://www.ncbi.nlm.nih.gov/pubmed/17946430)]
190. Schaefer G., Tait R.J., Howell K. et al. Automated overlay of infrared and visual medical images. In: IGI Global, 2008, chapter 7, p. 166-173.
191. Schaefer G., Tait R.J., Howell K. et al. Automated overlay of infrared and visual medical images // User Centered Design for Medical Visualization (2008) 174-183. <https://doi.org/10.4018/978-1-59904-777-5.ch008>
192. Schaefer G., Zhu S.Y., Jones B. An image retrieval approach for thermal medical images // Medical Image Understanding and Analysis. (2004). P. 181-183.
193. Selvarasu N., Nachiappan A., Nandhitha N.M. Extraction Algorithms for Abnormality Quantification from Medical Thermograms // International Journal of Recent Trends in Engineering. 2009. Vol. 1, N 3. P. 73-75.
194. Selvarasu N., Nachiappan A., Nandhitha N.M. Feature extraction algorithms for abnormality quantification from medical Thermograms // Int J Recent Trends Engneering. 2009. 1:350-352.
195. Selvarasu N., Nachiappan A., Nandhitha N. Abnormality detection from medical thermographs in human using Euclidean distance based color image segmentation. In 2010 International Conference on Signal Acquisition and Processing // IEEE; 2010: 73-75.
196. Selvarasu N., Nachiappan A., Nandhitha N. Euclidean Distance Based Color Image Segmentation of Abnormality Detection from Pseudo Color Thermographs // International Journal of Computer Theory and Engineering. pp. 514-516, 2010. http://dx.doi.org/ 10.7763/IJCTE.2010.V2.194
197. Selvarasu N., Vivek S., Nandhitha N.M. Performance Evaluation of Image Processing Algorithms for Automatic Detection and Quantification of Abnormality in Medical Thermograms // International Conference on Computational Intelligence and Multimedia Applications. vol. 3, P. 388-393, 2007. <https://doi.org/10.1109/ICCIMA.2007.216>
198. Shaikh S., Manza R., Akhter N. Medical Image Processing of Thermal Images in Light of Applied Color Palettes // International Journal of Engineering and Advanced Technology (IJEAT). August 2019. 5 pp. DOI: [10.35940/ijeat.F8148.088619](https://www.researchgate.net/deref/http%3A%2F%2Fdx.doi.org%2F10.35940%2Fijeat.F8148.088619?_sg%5B0%5D=22JyJkOUmK7GlVrUdQ2McmbDN43N3DBQyQq8tGvwZ6QwGKudsgSmDG3YpIkXiTV9yO1ZBAk5foYonllcNSagP2NELQ.7t1V7-ShBvlnIap4zSlAVz_QK70y5gox_xXtjJo_BaqBW2C309ZvVn7nfdBNumXjKheB3uDi2ziPDTsJpXYRNA)
199. Sharma A., Yadav A.R. Image processing based body temperature estimation using thermal video sequence // [2017 International Conference on Computing Methodologies and Communication (ICCMC)](https://ieeexplore.ieee.org/xpl/conhome/8269782/proceeding). Erode, India, 18-19 July 2017. IEEE Xplore. February 2018. INSPEC Accession Number: 17575204. DOI: [10.1109/ICCMC.2017.8282585](https://doi.org/10.1109/ICCMC.2017.8282585)
200. Silletta E.V., Jershow A., Madelin G., Alon L. Multinuclear Absolute MR Thermometry // Preprint. arXiv:1905.12742v1 [physics.med-ph] 29 May 2019. 15 pp. Available from: <https://www.researchgate.net/publication/333505487_Multinuclear_Absolute_MR_Thermometry>
201. Skala K., Lipic T., Sovic I. et al. 4D thermal imaging system for medical applications // Periodicum biologorum, 2011. 113(4), 407-416.
202. Skala K., Skala Kavanah H., Lipic T. et al. 5D thermal imaging system for body dissipation monitoring in motion // 18th International THERMO Conference, 2011. 24 pp.
203. Skouroliakou A., Seferis I., Sianoudi I. et al. Infrared Thermography Imaging: Evaluating Surface Emissivity and Skin Thermal Response to IR Heating // E J. Sci. Technol. 2014, 3, 9-14.
204. Sruthi S., Sasikala M. A low cost thermal imaging system for medical diagnostic applications // 2015 International Conference on Smart Technologies and Management for Computing, Communication, Controls, Energy and Materials (ICSTM), Chennai, 2015, pp. 621-623. doi: 10.1109/ICSTM.2015.7225488
205. Stewart M.S., Riffle D.W., Boone W.R. Computer-aided pattern analysis of temperature differentials // J Manipulative Physiol Ther. 1989;12(5):345-352.
206. Strakowska M., Chatzipanagiotou P., Wiecek P. et al. Novel software for medical and technical Thermal Object Identification TOI using dynamic temperature measurements by fast IR cameras // 14th Quantitanive InfraRed Thermography Conference (QIRT-2018). Berlin, Germany, June 24-29, 2018. We.4.B.5, 8 pp.
207. Strąkowska M., Strąkowski R. Automatic eye corners detection and tracking algorithm in sequence of thermal medical images // Measurement Automation Monitoring (2015) 61:199-202.
208. Strąkowska M., Strąkowski R., Strzelecki M. et al. Thermal modelling and screening method for skin pathologies using active thermography // Biocybernetics and Biomedical Engineering, Vol. 38, Is. 3, 2018, P. 602-610, <https://doi.org/10.1016/j.bbe.2018.03.009>
209. Strakowska M., Strakowski R., Wiecek B., Strzelecki M. Cross-correlation based movement correction method for biomedical dynamic infrared imaging // 11th International Conference on Quantitative InfraRed Thermography, QIRT-2012, 11-14 June 2012, Naples-Italy.
210. Tait R.J., Schaefer G., Howell K. et al. Automated overlay of visual and thermal medical image // Proceedings of the 18th International EURASIP Conference Biosignal; Brno, Czech Republic. June 28-30, 2006; pp. 260-262.
211. Tangherlini A., Merla A., Romani G.L. Field-warp registration for biomedical high-resolution thermal infrared images // Engineering in Medicine and Biology Society, 28 Annual International Conference of the IEEE, pp. 961-964, 2006. DOI: 10.1109/IEMBS.2006.260664
212. Tattersall G.J., Danner R.M., Chaves J.A., Levesque D.L. Activity analysis of thermal imaging videos using a difference imaging approach // Journal of Thermal Biology; May 2020. DOI: [10.1016/j.jtherbio.2020.102611](https://www.researchgate.net/deref/http%3A%2F%2Fdx.doi.org%2F10.1016%2Fj.jtherbio.2020.102611?_sg%5B0%5D=la9wk5OOinYw0UGStdfKVIsKIGRyv-xn7awHtG2exdYA0Hr2vv4nGPOdZzyoYu3YIEwwMtLUp-Hi84i07sSwWlq_8w.TG8Qic3LljjRNTYdnd6BUfOsTt8vi5rFik7N8kgJxvgMlNsHRxI-Xg4dTfBJ47_WCAPs9dwm-_0b_F4NTsCp-w)
213. The methods in infrared thermal imaging diagnosis technology of power equipment // 2013 IEEE 4th International Conference on Electronics Information and Emergency Communication; 2013. IEEE.
214. Topal Y., Yilanci A., Yurtseven S. et al. Triple Point of Water Cell Based Reference Radiation Source for Medical Thermography Applications // 2019 IEEE International Symposium on Medical Measurements and Applications (MeMeA), June 2019. DOI: 10.1109/MeMeA.2019.8802174
215. Tricoire J. La thermographie en plaque // Press Med. 1970, 78, 2481-2482. [in French]
216. Twelves S., Payeur P., Frize M. Toward the Detection of Overlapping Body Parts in Infrared Images // Conference Paper, FICCDAT At: Toronto, June 2011**.** Volume CMBES.4 pp.
217. Tyagi M.S., Amhia M.H., Tyagi M.S. Comparative Study of Image Enhancement and Analysis of Thermal Images Using Image Processing and Wavelet Techniques // International Journal of Computational Engineering Research, 2013. 3(4), 32-38.
218. Tyler C.J. The effect of skin thermistor fixation method on weighted mean skin temperature // Physiol. Meas. 2011; 32: 1541-1547.
219. Umadevi V., Suresh S., Raghavan S.V. Improved infrared thermography based image construction for biomedical applications using Markov Chain Monte Carlo Method // Proceedings of the 31st Annual International Conference of the IEEE Engineering in Medicine and Biology Society; 2009 September 2-6; Minneapolis, Minnesota, USA.
220. Usamentiaga R., Garcia D.F. Infrared Thermography Sensor for Temperature and Speed Measurement of Moving Material // Sensors 2017, 17, 1157. doi:10.3390/s17051157
221. Vardasca R., Gabriel J. Is the low cost thermal camera FLIR C2 suitable for medical thermal measurements? (extended abstract) // Thermology International 2016, 26 (Supplement) S5.
222. Vardasca R., Gabriel J., Plassmann P. et al. Comparison of Different Image Enhancing Techniques for Medical Thermal Images // Journal of Medical Imaging and Health Informatics 2015; 5(4): 709-714.
223. Vardasca R., Magalhaes C., Marques D. et al. Bilateral assessment of body core temperature through axillar, tympanic and inner canthi thermometers in a young population // Physiol. Meas. 2019, 40, 094001. doi:10.1088/1361-6579/ab2af6
224. Vardasca R., Maghalaes C., Silva P. et al. Are the IR cameras FLIRONE suitable for clinical applications? // Thermology International August 2019, 29(3):95-102.
225. Vardasca T., Martins H.M.G., Vardasca R., Gabriel J. Integrating Medical Thermography on a RIS Using DICOM Standard // EAT2012 Book of Proceedings - Appendix 1 of Thermology international, July 2012;22(3):79-81.
226. Varga M.J., Hanka R. Automatic thermal image analysis for medical diagnosis. // Proceedings of the international conference on image processing and its applications. Maastricht, 7-9 April 1992, pp. 526-529. New York: IEEE.
227. Villa E., Arteaga Marrero N., Ruiz Alzola J. Performance Assessment of Low Cost Thermal Cameras for Medical Applications // Sensors. 2020, 20, 1321-1347. doi:10.3390/s20051321
228. Wahab A.A., Salim M.I.M., Yunus J. Thermal distribution analysis in multi-layers homogeneous phantom using Infrared Imaging Technique: a preliminary study. In: Biomedical Engineering and Sciences (IECBES), 2014 IEEE Conference on, 2014, pp. 628-633.
229. Wakamiya J. Data-processing method for standardization of thermographic diagnosis // Engineering in Medicine and Biology Society. 2000: Proceedings of the 22nd Annual International Conference of the IEEE, 2000. Vol. 2. P 1432-1435.
230. Wang J., Chen D., Chen H., Yang J. On Pedestrian Detection and Tracking in Infrared Videos // Pattern Recognit. Lett. 2012, 33, 775-785. <https://doi.org/10.1016/j.patrec.2011.12.011>
231. Wang Y.-P., Cheng R.-H., He Y., Mu L.-Z. Thermal Analysis of Blood Flow Alterations in Human Hand and Foot Based on Vascular-Porous Media Model // Front. Bioeng. Biotechnol. (2022) 9:786615. 17 pp. doi: 10.3389/fbioe.2021.786615
232. Wang X., Feng X., Li M., Fan W. Research on scene temperature calibration method for medical infrared temperature measurement components // Proc. SPIE 11431, MIPPR 2019: Parallel Processing of Images and Optimization Techniques; and Medical Imaging, 114310G (14 February 2020). <https://doi.org/10.1117/12.2541793>
233. Wang Y., Chen R., He Y., Mu L. Thermal Analysis of Blood Flow Alterations in Human Hand and Foot Based on Vascular-Porous Media Model // Frontiers in Bioengineering and Biotechnology. December 2021; 9:786615. DOI: [10.3389/fbioe.2021.786615](http://dx.doi.org/10.3389/fbioe.2021.786615)
234. Watmough D.J., Fowler P.W., Oliver R. The thermal scanning of a curved isothermal surface: implications for clinical thermography // Phys. Med. Biol. 1970. 15, 1-8. doi:10.1088/0031-9155/15/1/301
235. Webb R.C., Pielak R.M., Bastien P. et al. Thermal Transport Characteristics of Human Skin Measured In Vivo Using Ultrathin Conformal Arrays of Thermal Sensors and Actuators // PLoS ONE. 2015;10(2):e0118131. 17 pp. doi:10.1371/journal.pone.0118131
236. Webb R.C., Bonifas A.P., Behnaz A. et al. Ultrathin conformal devices for precise and continuous thermal characterization of human skin // Nat. Mater. 2013. 12, 938-944.
237. Wen-Chin Yang, You-Gang Yang, Yun-Chung Liu, Wei-Min Liu. Impact analysis of temporal resolution in thermal signal reconstruction via infrared imaging // Conference: Signal and Information Processing Association Annual Summit and Conference (APSIPA), 2013 Asia-Pacific. DOI 10.1109/APSIPA.2013.6694311
238. Wideł M., Grzegorczyn S. New possibilities of graphics software in the analysis of thermograms of patient’s lower limbs – a technical note // Polish Journal of Medical Physics and Engineering. June 2021;27(2):175-180. DOI: [10.2478/pjmpe-2021-0021](http://dx.doi.org/10.2478/pjmpe-2021-0021)
239. Wiecek B., Danych R., Zwolenik Z. et al. Advanced thermal image processing for medical and biological applications // Annual EMBS International Conference of the IEEE: Proceedings of the 23rd Annual EMBS International Conference of the IEEE; 2001; Turkey. IEEE; 2001. P. 2805-2807.
240. Wiecek B., Jakubowska T., Wysocki M. et al. Przetwarzanie obrazów termograficznych w zastosowaniach medycznych [Thermal image processing for medical applications] // Elektronika: prace naukove, January 2004. 9: 125-144. [in Polish]
241. Wiecek B., Strzelecki M., Jakubowska T. et al. Advanced Thermal Image Processing. In book: Med. Infrared Imaging, N.A. Diakides, J.D. Bronzino (Eds.), CRC Press, 2007: 12.1-12.13.
242. Wilson S.B., Spence V.A. A tissue heat transfer model for relating dynamic skin temperatures changes to physiological parameters // Phys. Med. Biol. 1988. 33, 895-912.
243. Yeh K., Bhargava R. Discrete frequency infrared imaging using quantum cascade lasers for biological tissue analysis // Progress in Biomedical Optics and Imaging – Proceedings of SPIE 2016; 9704, art no970406.
244. Yogita Shrivas. A Review on Various Types of Clinical Thermometers with Respect to Technological Advancements, Pros and Cons, and Accuracy as Crucial Diagnostic Devices // [ECS Transactions](https://iopscience.iop.org/journal/1938-5862), [Volume 107](https://iopscience.iop.org/volume/1938-5862/107), [Number 1](https://iopscience.iop.org/issue/1938-5862/107/1), 16223. DOI 10.1149/10701.16223ecst
245. Yoon S.J., Noh S.C., Choi H.H. A Study of Thermographic Diagnosis System and Imaging Algorithm by Distributed Thermal Data using Single Infrared Sensor // Engineering in Medicine and Biology Society, 2007. EMBS 2007. 29th Annual International Conference of the IEEE pp. 3319-3322 IEEE (2007).
246. Yoshikawa H., Uchiyama A., Higashino T. ThermalWrist: Smartphone Thermal Camera Correction Using a Wristband Sensor // Sensors, September 2019. 19(18):3826. DOI: [10.3390/s19183826](https://www.researchgate.net/deref/http%3A%2F%2Fdx.doi.org%2F10.3390%2Fs19183826?_sg%5B0%5D=5x3W36cSN7I7n8krIP4luqigrqueoZkcu-iUeA1KUwGTHgfcYwzkVglfV1zL7h6jSwzEiiwXRFCTl38zK-Rp0V_Cww.X-BsJ2Gs2dKRSbZiS2pM3nt_pVdctOonQiU9m4ZId0XnjvmfkV2mqEwDx9_FGYgD3y_-VwRQWEajYp_P_kHLNQ)
247. Youell P.D., Dickinson M.R., King T.A. Thermal measurements in a soft tissue model during irradiation by a high-power semiconductor diode laser // Proc. SPIE 2624, Laser-Tissue Interaction and Tissue Optics (10 January 1996). <https://doi.org/10.1117/12.229546>
248. Yousefi B., Memarzadeh Sharifipour H., Eskandari M. et al. Incremental low rank noise reduction for robust infrared tracking of body temperature during medical imaging // Electronics, 2019. 8(11), 1301.
249. Zhao E.Q., Vilesov A., Athreya S. et al. Making Thermal Imaging More Equitable and Accurate: Resolving Solar Loading Biases // Preprint. arXiv:2304.08832v1 [eess.IV] 18 Apr. 2023. 28 pp.
250. Zhao Y., Bergmann J.H.M. Non-Contact Infrared Thermometers and Thermal Scanners for Human Body Temperature Monitoring: A Systematic Review // Sensors 2023, 23, 7439. https://doi.org/10.3390/s23177439
251. Zhou Q., Li Z., Aggarwal J.K. Boundary Extraction in Thermal images by edge map // ACM Symposium on applied computing, 2004. <https://doi.org/10.1145/967900.967956>
252. Zhou Q., Li Z., Aggarwal J.K. Boundary extraction in thermal images by edge map // Proceedings of the 2004 ACM Symposium on Applied Computing, pp. 254-258.