Guang Hao Sun

List of Publications by Year
in descending order

		623574	642610
83 papers	848 citations	14 h-index	23 g-index
86 all docs	86 docs citations	86 times ranked	710 citing authors

#	ARTICLE	IF	CITATIONS
1	Medical Radar Signal Dataset for Non-Contact Respiration and Heart Rate Measurement. Data in Brief, 2022, 40, 107724.	0.5	11
2	Noncontact Monitoring of Relative Changes in Blood Pressure Using Microwave Radar Sensors. Journal of Biomedical Science and Engineering, 2022, 15, 51-65.	0.2	1
3	A medical radar system for non-contact vital sign monitoring and clinical performance evaluation in hospitalized older patients. Biomedical Signal Processing and Control, 2022, 75, 103597.	3.5	15
4	Short time cardio-vascular pulses estimation for dengue fever screening via continuous-wave Doppler radar using empirical mode decomposition and continuous wavelet transform. Biomedical Signal Processing and Control, 2021, 65, 102361.	3.5	6
5	High Accuracy Heartbeat Detection from CW-Doppler Radar Using Singular Value Decomposition and Matched Filter. Sensors, 2021, 21, 3588.	2.1	19
6	Development of a Novel Web Camera-Based Contact-Free Major Depressive Disorder Screening System Using Autonomic Nervous Responses Induced by a Mental Task and Its Clinical Application. Frontiers in Physiology, 2021, 12, 642986.	1.3	9
7	Return-to-Work Screening by Linear Discriminant Analysis of Heart Rate Variability Indices in Depressed Subjects. Sensors, 2021, 21, 5177.	2.1	6
8	Machine learning based classification model for screening of infected patients using vital signs. Informatics in Medicine Unlocked, 2021, 24, 100592.	1.9	5
9	Evaluation of Remote Photoplethysmography Measurement Conditions toward Telemedicine Applications. Sensors, 2021, 21, 8357.	2.1	13
10	Design and Evaluation of Digital Filters for Non-Contact Measuring of HRV using Medical Radar and Its Application in Bedside Patient Monitoring System. , 2021, 2021, 6962-6965.		4
11	Non-contact Measurement of Pulse Rate Variability Using a Webcam and Application to Mental Illness Screening System. , 2021, 2021, 7016-7019.		1
12	Proof-of-principle Experiment on 24 GHz Medical Radar for Non-contact Vital Signs Measurement. , 2021, 2021, 6884.		6
13	Development and Clinical Application of a Novel Non-contact Early Airflow Limitation Screening System Using an Infrared Time-of-Flight Depth Image Sensor. Frontiers in Physiology, 2020, 11, 552942.	1.3	5
14	Visualisation of epidemiological map using an Internet of Things infectious disease surveillance platform. Critical Care, 2020, 24, 400.	2.5	6
15	A Non-contact Spirometer with Time-of-Flight Sensor for Assessment of Pulmonary Function. , 2020, 2020, 4114-4117.		3
16	Contactless Heartbeat Detection from CW-Doppler Radar using Windowed-Singular Spectrum Analysis. , 2020, 2020, 477-480.		3
17	Usefulness of heart rate variability indices in assessing the risk of an unsuccessful return to work after sick leave in depressed patients. Neuropsychopharmacology Reports, 2020, 40, 239-245.	1.1	8
18	A Pneumonia Screening System based on Parasympathetic Activity Monitoring in Non-contact Way using Compact Radars Beneath the Bed Mattress.. Journal of Infection, 2020, 81, e142-e144.	1.7	8

#	Article	IF	Citations
19	Contactless Vital Signs Measurement System Using RGB-Thermal Image Sensors and Its Clinical Screening Test on Patients with Seasonal Influenza. Sensors, 2020, 20, 2171.	2.1	57
20	Non-contact Doppler radar screening system for the detection of COPD. , 2020, , .		0
21	Development of non-contact real-time pneumonia monitor Long-term continuous operation in a recuperation hospital. Ningen Kogaku = the Japanese Journal of Ergonomics, 2020, 56, 1G2-02-1G2-02.	0.0	0
22	Demonstration of a noncontact infection screening system based on RGB–thermal-imaging processing for detection of patients with suspected infectious disease. , 2020, , .		1
23	Dengue Fever Screening Using Vital Signs by Contactless Microwave Radar and Machine Learning. , 2019, , .		4
24	Non-contact Vital Sign Measurement with Medical Radar and its Clinical Applications. , 2019, , .		3
25	Precise Heart Rate Measurement Using Non-contact Doppler Radar Assisted by Machine-Learning-Based Sleep Posture Estimation. , 2019, 2019, 788-791.		15
26	Infection Screening System Using Thermography and CCD Camera with Good Stability and Swiftness for Non-contact Vital-Signs Measurement by Feature Matching and MUSIC Algorithm. , 2019, 2019, 3183-3186.		13
27	Proposal of a hierarchical topology and spatial reuse superframe for enhancing throughput of a cluster‐based WBAN. ETRI Journal, 2019, 41, 648-657.	1.2	5
28	A non-contact infection screening system using medical radar and Linux-embedded FPGA: Implementation and preliminary validation. Informatics in Medicine Unlocked, 2019, 16, 100225.	1.9	6
29	Millimeter-Wave Cost-Effective Phased-Array Radar with Orthogonally Located Linear Tx and Rx Arrays. , 2019, , .		5
30	Development of a Mental Disorder Screening System Using Support Vector Machine for Classification of Heart Rate Variability Measured from Single-lead Electrocardiography. , 2019, , .		8
31	Detection of Fetal ECG R Wave From Single-Lead Abdominal ECG Using a Combination of RR Time-Series Smoothing and Template-Matching Approach. IEEE Access, 2019, 7, 66633-66643.	2.6	25
32	Extracting Cardiac Information From Medical Radar Using Locally Projective Adaptive Signal Separation. Frontiers in Physiology, 2019, 10, 568.	1.3	6
33	Twenty‐four‐hour continuous and remote monitoring of respiratory rate using a medical radar system for the early detection of pneumonia in symptomatic elderly bedridden hospitalized patients. Clinical Case Reports (discontinued), 2019, 7, 83-86.	0.2	15
34	A novel machine-learning-based infection screening system via 2013–2017 seasonal influenza patients' vital signs as training datasets. Journal of Infection, 2019, 78, 409-421.	1.7	13
35	Non-Contact Blood Pressure Measurement Scheme Using Doppler Radar. , 2019, 2019, 778-781.		14
36	Development of a low-cost, portable, pediatric infection screening system using simultaneous measurement of multiple vital signs. , 2019, 2019, 7181-7184.		1

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37	Non-contact monitoring of heart rate variability using medical radar for the evaluation of dynamic changes in autonomic nervous activity during a head-up tilt test. Journal of Medical Engineering and Technology, 2019, 43, 411-417.	0.8	5
38	Random tree algorithm-based pediatric pneumonia screening using heart rate, respiration rate and temperature. , 2019, 1, .		0
39	Non-contact radar screening system in patients with chronic obstructive pulmonary disease. , 2019, , .		0
40	The development of a novel high-precision major depressive disorder screening system using transient autonomic responses induced by dual mental tasks. Journal of Medical Engineering and Technology, 2018, 42, 121-127.	0.8	2
41	Vision-based HRV Measurement for HRI Study. , 2018, , .		0
42	Dengue Fever Detecting System Using Peak-detection of Data from Contactless Doppler Radar. , 2018, 2018, 542-545.		6
43	Stable Contactless Sensing of Vital Signs Using RGB-Thermal Image Fusion System with Facial Tracking for Infection Screening. , 2018, 2018, 4371-4374.		10
44	Clinical Application of Multiple Vital Signs-Based Infection Screening System in a Mongolian Hospital: Optimization of Facial Temperature Measurement by Thermography at Various Ambient Temperature Conditions Using Linear Regression Analysis. , 2018, 2018, 5313-5316.		6
45	Sensors and Data Processing Techniques for Future Medicine. Journal of Sensors, 2018, 2018, 1-2.	0.6	0
46	Vital-SCOPE: Design and Evaluation of a Smart Vital Sign Monitor for Simultaneous Measurement of Pulse Rate, Respiratory Rate, and Body Temperature for Patient Monitoring. Journal of Sensors, 2018, 2018, 1-7.	0.6	21
47	Development and Clinical Application of a Novel Autonomic Transient Response-Based Screening System for Major Depressive Disorder Using a Fingertip Photoplethysmographic Sensor. Frontiers in Bioengineering and Biotechnology, 2018, 6, 64.	2.0	26
48	Remote sensing of multiple vital signs using a CMOS camera-equipped infrared thermography system and its clinical application in rapidly screening patients with suspected infectious diseases. International Journal of Infectious Diseases, 2017, 55, 113-117.	1.5	67
49	Applications of Infrared Thermography for Noncontact and Noninvasive Mass Screening of Febrile International Travelers at Airport Quarantine Stations. Series in Bioengineering, 2017, , 347-358.	0.3	17
50	Development of an EMG-based Human-Machine Interface on Open-source Linux Platform for Evaluating the Motor Skill Acquisition Process. IFMBE Proceedings, 2017, , 38-42.	0.2	0
51	Simple and objective screening of major depressive disorder by heart rate variability analysis during paced respiration and mental task conditions. , 2017, 2017, 1316-1319.		9
52	Field evaluation of an infectious disease/fever screening radar system during the 2017 dengue fever outbreak in Hanoi, Vietnam: a preliminary report. Journal of Infection, 2017, 75, 593-595.	1.7	9
53	Online state space filtering of biosignals using neural network-augmented Kalman filter. , 2017, , .		1
54	Non-contact acquisition of respiration and heart rates using Doppler radar with time domain peak-detection algorithm. , 2017, 2017, 2847-2850.		27

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55	Estimation of autonomic nervous activity toward affective human-robot interaction. , 2017, , .		1
56	Efficient Active Sensing with Categorized Further Explorations for a Home Behavior-Monitoring Robot. Journal of Healthcare Engineering, 2017, 2017, 1-16.	1.1	6
57	Short Time and Contactless Virus Infection Screening System with Discriminate Function Using Doppler Radar. Communications in Computer and Information Science, 2017, , 263-273.	0.4	0
58	Estimation of Autonomic Nervous Activity for Communication Robot. The Proceedings of JSME Annual Conference on Robotics and Mechatronics (Robomec), 2017, 2017, 2A1-L07.	0.0	0
59	Evaluation of a Home Biomonitoring Autonomous Mobile Robot. Computational Intelligence and Neuroscience, 2016, 2016, 1-8.	1.1	4
60	An Objective Screening Method for Major Depressive Disorder Using Logistic Regression Analysis of Heart Rate Variability Data Obtained in a Mental Task Paradigm. Frontiers in Psychiatry, 2016, 7, 180.	1.3	38
61	Clinical evaluation of the newly developed infectious disease/fever screening radar system using the neural network and fuzzy grouping method for travellers with suspected infectious diseases at Narita International Airport Clinic. Journal of Infection, 2016, 72, 121-123.	1.7	10
62	Multiple Vital-Sign-Based Infection Screening Outperforms Thermography Independent of the Classification Algorithm. IEEE Transactions on Biomedical Engineering, 2016, 63, 1025-1033.	2.5	30
63	Rapid and stable measurement of respiratory rate from Doppler radar signals using time domain autocorrelation model. , 2015, 2015, 5985-8.		8
64	Development of a wireless physiological computing platform using a national instruments' myRIO embedded device. , 2015, , .		0
65	An infectious disease/fever screening radar system which stratifies higher-risk patients within ten seconds using a neural network and the fuzzy grouping method. Journal of Infection, 2015, 70, 230-236.	1.7	52
66	A compact and hand-held infection-screening system for use in rapid medical inspection at airport quarantine stations: system design and preliminary validation. Journal of Medical Engineering and Technology, 2015, 39, 185-190.	0.8	11
67	Non-contact measurement of respiratory and heart rates using a CMOS camera-equipped infrared camera for prompt infection screening at airport quarantine stations. , 2015, , .		27
68	KAZEKAMO: An infection screening system remote monitoring of multiple vital-signs for prevention of pandemic diseases. , 2014, , .		5
69	Vital-CUBE: A Non-Contact Vital Sign Monitoring System Using Medical Radar for Ubiquitous Home Healthcare. Journal of Medical Imaging and Health Informatics, 2014, 4, 863-867.	0.2	12
70	Design an easy-to-use infection screening system for non-contact monitoring of vital-signs to prevent the spread of pandemic diseases. , 2014, 2014, 4811-4.		6
71	Rapid screening for influenza using a multivariable logistic regression model to save labor at a clinic in Iwaki, Fukushima, Japan. American Journal of Infection Control, 2014, 42, 551-553.	1.1	4
72	Fever screening of seasonal influenza patients using a cost-effective thermopile array with small pixels for close-range thermometry. International Journal of Infectious Diseases, 2014, 25, 56-58.	1.5	26

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73	Development of an infection screening system for entry inspection at airport quarantine stations using ear temperature, heart and respiration rates. , 2013, 2013, 6716-9.		12
74	A Portable Infection Screening System Designed for Onboard Entry Screening Based on Multi-Parameter Vital Signs. International Journal of E-Health and Medical Communications, 2013, 4, 20-35.	1.4	7
75	A neural network-based infection screening system that uses vital signs and percutaneous oxygen saturation for rapid screening of patients with influenza. Health, 2013, 05, 7-12.	0.1	2
76	A screening method based on amplitude probability distribution analysis for detecting the disordered breathing using microwave radar respiration signals. , 2012, , .		4
77	A novel infection screening method using a neural network and k-means clustering algorithm which can be applied for screening of unknown or unexpected infectious diseases. Journal of Infection, 2012, 65, 591-592.	1.7	25
78	A portable screening system for onboard entry screening at international airports using a microwave radar, reflective photo sensor and thermography. , 2011, , .		8
79	The Effect of an Auxiliary Stimulation on Motor Function Restoration by FES. Journal of Medical Systems, 2011, 35, 855-861.	2.2	4
80	A novel stress monitoring method through stress-induced respiratory alterations: non-contact measurement of respiratory V(T)/T(I) alterations induced by stressful sound using a 10 GHz microwave radar. Journal of Medical Engineering and Technology, 2011, 35, 416-419.	0.8	6
81	A Novel Non-contact Infection Screening System Based on Self-Organizing Map with K-means Clustering. Communications in Computer and Information Science, 2011, , 125-132.	0.4	3
82	Noncontact Monitoring of Vital Signs with RGB and Infrared Camera and Its Application to Screening of Potential Infection. , 0, , .		5
83	Development of a Novel Vital-Signs-Based Infection Screening Composite-Type Camera With Truncus Motion Removal Algorithm to Detect COVID-19 Within 10 Seconds and Its Clinical Validation. Frontiers in Physiology, 0, 13, .	1.3	4