Guang Hao Sun

List of Publications by Year
in descending order

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83	848	623574	642610
papers	citations	14 h-index	23 g-index

86	86	86	710
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	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
2	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
3	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
4	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
5	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
6	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
7	Non-contact acquisition of respiration and heart rates using Doppler radar with time domain peak-detection algorithm. , 2017, 2017, 2847-2850.		27
8	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
9	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
10	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
11	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
12	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
13	High Accuracy Heartbeat Detection from CW-Doppler Radar Using Singular Value Decomposition and Matched Filter. Sensors, 2021, 21, 3588.	2.1	19
14	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
15	Precise Heart Rate Measurement Using Non-contact Doppler Radar Assisted by Machine-Learning-Based Sleep Posture Estimation. , 2019, 2019, 788-791.		15
16	Twentyâ€fourâ€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
17	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
18	Non-Contact Blood Pressure Measurement Scheme Using Doppler Radar. , 2019, 2019, 778-781.		14

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19	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
20	A novel machine-learning-based infection screening system via 2013â€“2017 seasonal influenza patients' vital signs as training datasets. Journal of Infection, 2019, 78, 409-421.	1.7	13
21	Evaluation of Remote Photoplethysmography Measurement Conditions toward Telemedicine Applications. Sensors, 2021, 21, 8357.	2.1	13
22	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
23	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
24	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
25	Medical Radar Signal Dataset for Non-Contact Respiration and Heart Rate Measurement. Data in Brief, 2022, 40, 107724.	0.5	11
26	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
27	Stable Contactless Sensing of Vital Signs Using RGB-Thermal Image Fusion System with Facial Tracking for Infection Screening. , 2018, 2018, 4371-4374.		10
28	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
29	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
30	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
31	A portable screening system for onboard entry screening at international airports using a microwave radar, reflective photo sensor and thermography. , 2011, , .		8
32	Rapid and stable measurement of respiratory rate from Doppler radar signals using time domain autocorrelation model. , 2015, 2015, 5985-8.		8
33	Development of a Mental Disorder Screening System Using Support Vector Machine for Classification of Heart Rate Variability Measured from Single-lead Electrocardiography. , 2019, , .		8
34	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
35	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
36	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

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37	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
38	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
39	Efficient Active Sensing with Categorized Further Explorations for a Home Behavior-Monitoring Robot. Journal of Healthcare Engineering, 2017, 2017, 1-16.	1.1	6
40	Dengue Fever Detecting System Using Peak-detection of Data from Contactless Doppler Radar. , 2018, 2018, 542-545.		6
41	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
42	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
43	Extracting Cardiac Information From Medical Radar Using Locally Projective Adaptive Signal Separation. Frontiers in Physiology, 2019, 10, 568.	1.3	6
44	Visualisation of epidemiological map using an Internet of Things infectious disease surveillance platform. Critical Care, 2020, 24, 400.	2.5	6
45	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
46	Return-to-Work Screening by Linear Discriminant Analysis of Heart Rate Variability Indices in Depressed Subjects. Sensors, 2021, 21, 5177.	2.1	6
47	Proof-of-principle Experiment on 24 GHz Medical Radar for Non-contact Vital Signs Measurement. , 2021, 2021, 6884.		6
48	KAZEKAMO: An infection screening system remote monitoring of multiple vital-signs for prevention of pandemic diseases. , 2014, , .		5
49	Noncontact Monitoring of Vital Signs with RGB and Infrared Camera and Its Application to Screening of Potential Infection. , 0, , .		5
50	Proposal of a hierarchical topology and spatial reuse superframe for enhancing throughput of a clusterâ€based WBAN. ETRI Journal, 2019, 41, 648-657.	1.2	5
51	Millimeter-Wave Cost-Effective Phased-Array Radar with Orthogonally Located Linear Tx and Rx Arrays. , 2019, , .		5
52	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
53	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
54	Machine learning based classification model for screening of infected patients using vital signs. Informatics in Medicine Unlocked, 2021, 24, 100592.	1.9	5

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55	The Effect of an Auxiliary Stimulation on Motor Function Restoration by FES. Journal of Medical Systems, 2011, 35, 855-861.	2.2	4
56	A screening method based on amplitude probability distribution analysis for detecting the disordered breathing using microwave radar respiration signals. , 2012, , .		4
57	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
58	Evaluation of a Home Biomonitoring Autonomous Mobile Robot. Computational Intelligence and Neuroscience, 2016, 2016, 1-8.	1.1	4
59	Dengue Fever Screening Using Vital Signs by Contactless Microwave Radar and Machine Learning. , 2019, , .		4
60	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
61	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
62	Non-contact Vital Sign Measurement with Medical Radar and its Clinical Applications. , 2019, , .		3
63	A Non-contact Spirometer with Time-of-Flight Sensor for Assessment of Pulmonary Function. , 2020, 2020, 4114-4117.		3
64	Contactless Heartbeat Detection from CW-Doppler Radar using Windowed-Singular Spectrum Analysis. , 2020, 2020, 477-480.		3
65	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
66	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
67	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
68	Online state space filtering of biosignals using neural network-augmented Kalman filter. , 2017, , .		1
69	Estimation of autonomic nervous activity toward affective human-robot interaction. , 2017, , .		1
70	Development of a low-cost, portable, pediatric infection screening system using simultaneous measurement of multiple vital signs. , 2019, 2019, 7181-7184.		1
71	Demonstration of a noncontact infection screening system based on RGBâ€“thermal-imaging processing for detection of patients with suspected infectious disease. , 2020, , .		1
72	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

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73	Non-contact Measurement of Pulse Rate Variability Using a Webcam and Application to Mental Illness Screening System. , 2021, 2021, 7016-7019.		1
74	Development of a wireless physiological computing platform using a national instruments' myRIO embedded device. , 2015, , .		0
75	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
76	Vision-based HRV Measurement for HRI Study. , 2018, , .		0
77	Sensors and Data Processing Techniques for Future Medicine. Journal of Sensors, 2018, 2018, 1-2.	0.6	0
78	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
79	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
80	Random tree algorithm-based pediatric pneumonia screening using heart rate, respiration rate and temperature. , 2019, 1, .		0
81	Non-contact radar screening system in patients with chronic obstructive pulmonary disease. , 2019, , .		0
82	Non-contact Doppler radar screening system for the detection of COPD. , 2020, , .		0
83	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