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How accurate is pulse rate variability as an estimate of heart rate variability? A review on studies comparing photoplethysmographic technology with an electrocardiogra

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#	Paper	IF	Citations
440	Association between heart rate variability and fluctuations in resting-state functional connectivity. 2013 , 68, 93-104		217
439	Effects of slow breathing rate on blood pressure and heart rate variabilities. <i>International Journal of Cardiology</i> , 2013 , 169, e6-8	3.2	29
438	Increasing Stability of Real-Time Pulse Wave Velocity Estimation by Combining Established and New Approaches. 2013 ,		4
437	Don't Add or Miss a Beat: A Guide to Cleaner Heart Rate Variability Recordings. 2013 , 41, 121-130		13
436	Touch increases autonomic coupling between romantic partners. 2014 , 8, 95		62
435	A combined segmenting and non-segmenting approach to signal quality estimation for ambulatory photoplethysmography. 2014 , 35, 2543-61		14
434	Evaluation of wearable consumer heart rate monitors based on photoplethysmography. 2014 , 2014, 3670-3		69
433	Recovering pulse rate during motion artifact with a multi-imager array for non-contact imaging photoplethysmography. 2014 ,		38
432	Hybrid classification engine for cardiac arrhythmia cloud service in elderly healthcare management. 2014 , 25, 745-753		15
431	Sternal pulse rate variability compared with heart rate variability on healthy subjects. 2014 , 2014, 3394-7		5
430	An improved algorithm for the detection of photoplethysmographic percussion peaks. 2014 ,		0
429	Physiological and behavioral responses reveal 9-month-old infants' sensitivity to pleasant touch. 2014 , 25, 1124-31		157
428	Validation of pulse rate variability as a surrogate for heart rate variability in chronically instrumented rabbits. 2014 , 307, H97-109		14
427	Heart Rate Variability. 2014 ,		38
426	A healthy heart is not a metronome: an integrative review of the heart's anatomy and heart rate variability. 2014 , 5, 1040		632
425	A wireless, low-power, smart sensor of cardiac activity for clinical remote monitoring. 2015 ,		2
424	Multiscale entropy and poincare plot-based analysis of pulse rate variability and heart rate variability of ICU patients. 2015 ,		3

423	Gamification on Steppy application in the development of the electronic health record as health service users of SHESOP. 2015 ,	0
422	Influence of a skin status on the light interaction with dermis. 2015 , 6, 4326-34	20
421	Concurrent validity of resting pulse-rate measurements: a comparison of 2 smartphone applications, the polar H7 belt monitor, and a pulse oximeter with bluetooth. 2015 , 24, 171-8	28
420	Effect of changes in sympathovagal balance on the accuracy of heart rate variability obtained from photoplethysmography. 2015 , 10, 2311-2318	17
419	Extraction of heart rate variability from smartphone photoplethysmograms. 2015 , 2015, 516826	89
418	A Robust Algorithm for Real-Time Peak Detection of Photoplethysmograms Using a Personal Computer Mouse. 2015 , 15, 4651-4659	11
417	Towards a physiology based difficulty control system for serious games. 2015 ,	4
416	Decreased heart rate variability responses during early postoperative mobilization--an observational study. 2015 , 15, 120	8
415	High natural killer cell number might identify stroke patients at risk of developing infections. 2015 , 2, e71	15
414	Estimation of heart rate and heart rate variability from pulse oximeter recordings using localized model fitting. 2015 , 2015, 3815-8	4
413	Evaluation of the beat-to-beat detection accuracy of PulseOn wearable optical heart rate monitor. 2015 , 2015, 8099-102	45
412	Mobile health technologies. Preface. 2015 , 1256, v-vi	6
411	Using the multi-parameter variability of photoplethysmographic signals to evaluate short-term cardiovascular regulation. 2015 , 29, 605-12	5
410	Respiratory sinus arrhythmia stabilizes mean arterial blood pressure at high-frequency interval in healthy humans. 2015 , 115, 521-30	17
409	Combining ensemble empirical mode decomposition with spectrum subtraction technique for heart rate monitoring using wrist-type photoplethysmography. 2015 , 21, 119-125	62
408	Effects of frame rate and image resolution on pulse rate measured using multiple camera imaging photoplethysmography. 2015 ,	7
407	Maternal bonding in childhood moderates autonomic responses to distress stimuli in adult males. 2015 , 292, 428-31	19
406	Assessment of skin blood flow following spinal manual therapy: a systematic review. 2015 , 20, 228-49	16

405	Incision and stress regulation in borderline personality disorder: neurobiological mechanisms of self-injurious behaviour. 2015 , 207, 165-72	81
404	Measuring Photoplethysmogram-Based Stress-Induced Vascular Response Index to Assess Cognitive Load and Stress. 2015 ,	27
403	Facial Video-Based Photoplethysmography to Detect HRV at Rest. 2015 , 36, 474-80	25
402	Co-Located Multimodal Sensing: A Next Generation Solution for Wearable Health. 2015 , 15, 138-145	18
401	Autonomic dysfunction in acute ischemic stroke: an underexplored therapeutic area?. 2015 , 348, 24-34	68
400	Body-monitoring and health supervision by means of optical fiber-based sensing systems in medical textiles. 2015 , 4, 330-55	85
399	Comparison of Pulse Rate Variability and Heart Rate Variability for Hypoglycemia Syndrome. 2016 , 55, 250-7	4
398	Spectral-spatial fusion model for robust blood pulse waveform extraction in photoplethysmographic imaging. 2016 , 7, 4874-4885	16
397	Accurate measurement of the pulse wave delay with imaging photoplethysmography. 2016 , 7, 5138-5147	29
396	Comparison of Non-Invasive Individual Monitoring of the Training and Health of Athletes with Commercially Available Wearable Technologies. 2016 , 7, 71	74
395	Evaluation of agreement between temporal series obtained from electrocardiogram and pulse wave.. 2016 , 705, 012038	3
394	Computers Helping People with Special Needs. 2016 ,	3
393	A methodology to quantify the differences between alternative methods of heart rate variability measurement. 2016 , 37, 128-44	6
392	Alterations in electrodermal activity and cardiac parasympathetic tone during hypnosis. 2016 , 53, 268-77	22
391	Workload management through glanceable feedback: The role of heart rate variability. 2016 ,	0
390	Measuring pulse rate variability using long-range, non-contact imaging photoplethysmography. 2016 , 2016, 3930-3936	12
389	Accuracy of pulse interval timing in ambulatory blood pressure measurement. 2016 , 6, 37472	2
388	A comprehensive assessment of cardiovascular autonomic control using photoplethysmograms recorded from the earlobe and fingers. 2016 , 37, 580-95	15

- 387 Ambient temperature effect on pulse rate variability as an alternative to heart rate variability in young adult. **2016**, 30, 939-948 25
- 386 Dominant hemisphere lateralization of cortical parasympathetic control as revealed by frontotemporal dementia. **2016**, 113, E2430-9 78
- 385 A Proximity Coupling RF Sensor for Wrist Pulse Detection Based on Injection-Locked PLL. **2016**, 64, 1667-1676 18
- 384 Analyzing heart rate variability using a photoplethysmographic signal measuring system. **2016**, 47
- 383 Relationships between heart-rate variability and pulse-rate variability obtained from video-PPG signal using ZCA. **2016**, 37, 1934-1944 47
- 382 Combining Nonlinear Adaptive Filtering and Signal Decomposition for Motion Artifact Removal in Wearable Photoplethysmography. **2016**, 16, 7133-7141 60
- 381 Using Psychophysiological Parameters to Support Users in Setting Effective Activity Goals. **2016**, 4
- 380 Towards efficient heart rate variability estimation in artifact-induced Photoplethysmography signals. **2016**, 1
- 379 Can PPG be used for HRV analysis?. **2016**, 2016, 2945-2949 47
- 378 Remote detection of photoplethysmographic signal and SVM based classification. **2016**, 1
- 377 Correlation between RR, inter-systolic and inter-diastolic intervals and their differences for the analysis of spontaneous heart rate variability. **2016**, 37, 1120-8 13
- 376 Short-term pulse rate variability is better characterized by functional near-infrared spectroscopy than by photoplethysmography. **2016**, 21, 091308 8
- 375 Heart rate variability (HRV) in deep breathing tests and 5-min short-term recordings: agreement of ear photoplethysmography with ECG measurements, in 343 subjects. **2016**, 116, 1527-35 28
- 374 Validation of a New Heart Rate Measurement Algorithm for Fingertip Recording of Video Signals with Smartphones. **2016**, 22, 631-6 39
- 373 Long-range non-contact imaging photoplethysmography: cardiac pulse wave sensing at a distance. **2016**, 3
- 372 Heart rate variability and self-control--A meta-analysis. **2016**, 115, 9-26 75
- 371 A literature review of heart rate variability in depressive and bipolar disorders. **2016**, 50, 511-9 43
- 370 Chemosensory perception, symptoms and autonomic responses during chemical exposure in multiple chemical sensitivity. **2016**, 89, 79-88 28

369	Photoplethysmography Revisited: From Contact to Noncontact, From Point to Imaging. 2016 , 63, 463-77	260
368	Type 2 Diabetes Screening Test by Means of a Pulse Oximeter. 2017 , 64, 341-351	12
367	Reduction of Periodic Motion Artifacts in Photoplethysmography. 2017 , 64, 196-207	38
366	Age-related alterations in the sign series entropy of short-term pulse rate variability. 2017 , 228, 213-219	5
365	Towards Photoplethysmography-Based Estimation of Instantaneous Heart Rate During Physical Activity. 2017 , 64, 2042-2053	39
364	A multispectral testbed for cardiovascular sensing using imaging photoplethysmography. 2017 ,	1
363	Prediction of intraventricular haemorrhage in preterm infants using time series analysis of blood pressure and respiratory signals. 2017 , 7, 46538	9
362	Pulse Rate Measurement During Sleep Using Wearable Sensors, and its Correlation with the Menstrual Cycle Phases, A Prospective Observational Study. 2017 , 7, 1294	36
361	Contactless heart rate variability measurement by IR and 3D depth sensors with respiratory sinus arrhythmia. 2017 , 109, 498-505	5
360	Comparison of Heart-Rate-Variability Recording With Smartphone Photoplethysmography, Polar H7 Chest Strap, and Electrocardiography. 2017 , 12, 1324-1328	122
359	Office orthostatic blood pressure measurements and ambulatory blood pressure monitoring in the prediction of autonomic dysfunction. 2017 , 23, 3	8
358	Heart rate variability in bipolar disorder: A systematic review and meta-analysis. 2017 , 73, 68-80	47
357	Measuring Mental Workload With Low-Cost and Wearable Sensors: Insights Into the Accuracy, Obtrusiveness, and Research Usability of Three Instruments. 2017 , 11, 323-336	12
356	Wearable Heart Rate Monitor Technology Accuracy in Research: A Comparative Study Between PPG and ECG Technology. 2017 , 61, 1292-1296	27
355	Technology Demo of using Real-time Biofeedback of Heart Rate Variability Measures to Track and Help Improve Levels of Attention and Relaxation. 2017 ,	0
354	Comparison of Polar M600 Optical Heart Rate and ECG Heart Rate during Exercise. 2017 , 49, 2600-2607	37
353	Insomnia and Autonomic Function Predict Well-Being in Patients Receiving Palliative Care. 2017 , 20, 1395-1399	4
352	Agreement Between a Smartphone Pulse Sensor Application and Electrocardiography for Determining lnRMSSD. 2017 , 31, 380-385	28

351	Ambulatory and Non-Contact Recording Methods. 300-338	2
350	Using Real-time Biofeedback of Heart Rate Variability Measures to Track and Help Improve Levels of Attention and Relaxation. 2017 ,	4
349	. 2017 , 19, 340-353	19
348	Reproducibility of photoplethysmography-based local pulse transit time measurement. 2017 , 2017, 246-249	4
347	Can accelerometry data improve estimates of heart rate variability from wrist pulse PPG sensors?. 2017 , 2017, 1587-1590	9
346	A novel approach for comparison of heart rate variability derived from synchronously measured electrocardiogram and photoplethysmogram. 2017 ,	2
345	Heart Rate Variability and Cardiac Vagal Tone in Psychophysiological Research - Recommendations for Experiment Planning, Data Analysis, and Data Reporting. 2017 , 8, 213	690
344	The Maastricht Acute Stress Test (MAST): Physiological and Subjective Responses in Anticipation, and Post-stress. 2017 , 8, 567	16
343	Hidden Signals-The History and Methods of Heart Rate Variability. 2017 , 5, 265	38
342	The PhysioCam: A Novel Non-Contact Sensor to Measure Heart Rate Variability in Clinical and Field Applications. 2017 , 5, 300	18
341	A Real-Time Analysis Method for Pulse Rate Variability Based on Improved Basic Scale Entropy. 2017 , 2017, 7406896	9
340	A Hybrid Wavelet-Based Method for the Peak Detection of Photoplethysmography Signals. 2017 , 2017, 9468503	3
339	Diurnal Variation and Twenty-Four Hour Sleep Deprivation Do Not Alter Supine Heart Rate Variability in Healthy Male Young Adults. 2017 , 12, e0170921	10
338	Association of physical capacity with heart rate variability based on a short-duration measurement of resting pulse rate in older adults with obesity. 2017 , 12, e0189150	9
337	Pulse Wave Analysis During Sleep. 2017 , 1624-1632.e4	6
336	Fusing Partial Camera Signals for Noncontact Pulse Rate Variability Measurement. 2018 , 65, 1725-1739	16
335	A YellowOrange Wavelength-Based Short-Term Heart Rate Variability Measurement Scheme for Wrist-Based Wearables. 2018 , 67, 1091-1101	8
334	Can Wearable Devices Accurately Measure Heart Rate Variability? A Systematic Review. 2018 , 60, 7-20	68

333	Pulse rate estimation using imaging photoplethysmography: generic framework and comparison of methods on a publicly available dataset. 2018 , 4, 045001	34
332	What to Put on the User. 2018 ,	5
331	Heart rate variability associated with grey matter volumes in striatal and limbic structures of the central autonomic network. 2018 , 1681, 14-20	26
330	Heart Rate Variability and Its Relation to Chronic Kidney Disease: Results From the PREVEND Study. 2018 , 80, 307-316	11
329	Detection of beat-to-beat intervals from wrist photoplethysmography in patients with sinus rhythm and atrial fibrillation after surgery. 2018 ,	4
328	Task-induced deactivation in diverse brain systems correlates with interindividual differences in distinct autonomic indices. 2018 , 113, 29-42	4
327	Real-time heart activity monitoring with optical illusion using a smartphone. 2018 , 77, 6209-6224	2
326	Direct and indirect effects of age on interoceptive accuracy and awareness across the adult lifespan. 2018 , 25, 1193-1202	38
325	Chronic pain-related changes in cardiovascular regulation and impact on comorbid hypertension in a general population: the Tromsø study. 2018 , 159, 119-127	29
324	Noncontact measurement of emotional and physiological changes in heart rate from a webcam. 2018 , 55, e13005	8
323	PhysioLab - a multivariate physiological computing toolbox for ECG, EMG and EDA signals: a case of study of cardiorespiratory fitness assessment in the elderly population. 2018 , 77, 11521-11546	9
322	Using photoplethysmography data to estimate heart rate variability and its association with organ dysfunction in pediatric oncology patients. 2018 , 1, 29	9
321	A Quantitative Exploration of Two Teachers with Contrasting Emotions: Intra-Individual Process Analyses of Physiology and Interpersonal Behavior. 2018 , 162-185	10
320	The Accuracy of Atrial Fibrillation Detection from Wrist Photoplethysmography. A Study on Post-Operative Patients. 2018 , 2018, 1-4	7
319	Reliability of Short-Term Heart Rate Variability Indexes Assessed through Photoplethysmography. 2018 , 2018, 5610-5513	13
318	Local Interval Estimation Improves Accuracy and Robustness of Heart Rate Variability Derivation from Photoplethysmography. 2018 , 2018, 3558-3561	5
317	Use of photoplethysmography to predict mortality in intensive care units. 2018 , 14, 311-320	4
316	Comparing Real-Time Self-Tracking and Device-Recorded Exercise Data in Subjects with Type 1 Diabetes. 2018 , 9, 919-926	6

315	Comparison Between Heart Rate Variability and Pulse Rate Variability for Bradycardia and Tachycardia Subjects. 2018 ,	3
314	A Modified Mask for Continuous Cardiac Monitoring during Positive Airway Pressure Therapy. 2018 , 2018, 4363-4366	1
313	Evaluation of a real-time low-power cardiorespiratory sensor for the IoT. 2018 , 2018, 5382-5385	2
312	Respiratory muscle training positively affects vasomotor response in young healthy women. 2018 , 13, e0203347	9
311	Sinus or not: a new beat detection algorithm based on a pulse morphology quality index to extract normal sinus rhythm beats from wrist-worn photoplethysmography recordings. 2018 , 39, 115007	10
310	Quantification of error between the heartbeat intervals measured from photoplethysmogram and electrocardiogram by synchronisation. 2018 , 42, 389-396	2
309	Sleep stage classification based on multi-level feature learning and recurrent neural networks via wearable device. 2018 , 103, 71-81	37
308	Using imaging photoplethysmography for heart rate estimation in non-human primates. 2018 , 13, e0202581	8
307	Heart rate variability is associated with outcome in spontaneous intracerebral hemorrhage. 2018 , 48, 85-89	9
306	A Wide QRS Complex Illusion. 2018 , 178, 982-983	1
305	A novel wearable sensor device for continuous monitoring of cardiac activity during sleep. 2018 ,	5
304	Analysis of a Pulse Rate Variability Measurement Using a Smartphone Camera. 2018 , 2018, 4038034	29
303	An Autonomic Network: Synchrony Between Slow Rhythms of Pulse and Brain Resting State Is Associated with Personality and Emotions. 2018 , 28, 3356-3371	16
302	Affective and autonomic response to dynamic rhythmic entrainment: Mechanisms of a specific music therapy factor. 2018 , 60, 48-54	9
301	Profiling the propagation of error from PPG to HRV features in a wearable physiological-monitoring device. 2018 , 5, 59-64	20
300	AltitudeOmics: Baroreflex Sensitivity During Acclimatization to 5,260 m. 2018 , 9, 767	7
299	Measurement, Prediction, and Control of Individual Heart Rate Responses to Exercise-Basics and Options for Wearable Devices. 2018 , 9, 778	17
298	Estimation of Mental Distress from Photoplethysmography. 2018 , 8, 69	30

297	Human-centric predictive model of task difficulty for human-in-the-loop control tasks. 2018 , 13, e0195053	4
296	Comparison between Electrocardiographic and Earlobe Pulse Photoplethysmographic Detection for Evaluating Heart Rate Variability in Healthy Subjects in Short- and Long-Term Recordings. 2018 , 18,	30
295	Seasonal differences in brown adipose tissue density and pulse rate variability in a thermoneutral environment. 2018 , 37, 6	10
294	Video pulse rate variability analysis in stationary and motion conditions. 2018 , 17, 11	14
293	. 2018 , 6, 44010-44021	42
292	Towards pulse rate parametrization during free-living activities using smart wristband. 2018 , 39, 055007	8
291	Cardiovascular assessment by imaging photoplethysmography - a review. 2018 , 63, 617-634	47
290	Non-Contact Reflectance Photoplethysmography: Progress, Limitations, and Myths. 2018 ,	6
289	Multifunctional Photoplethysmography Sensor Design for Respiratory and Cardiovascular Diagnosis. 2019 , 905-909	5
288	Heart rate variability as a biomarker in health and affective disorders: A perspective on neuroimaging studies. 2019 , 202, 116072	35
287	The Handbook of Cuffless Blood Pressure Monitoring. 2019 ,	13
286	Relationship between Ischemic Stroke and Pulse Rate Variability as a Surrogate of Heart Rate Variability. 2019 , 9,	6
285	Evaluating the accuracy of heart rate sensors based on photoplethysmography for in-the-wild analysis. 2019 ,	12
284	Stressing the accuracy: Wrist-worn wearable sensor validation over different conditions. 2019 , 56, e13441	43
283	An Autonomous Wireless Health Monitoring System Based on Heartbeat and Accelerometer Sensors. 2019 , 8, 39	11
282	Self-Compassion and Psycho-Physiological Recovery From Recalled Sport Failure. 2019 , 10, 1564	20
281	Speckleplethysmographic (SPG) Estimation of Heart Rate Variability During an Orthostatic Challenge. 2019 , 9, 14079	9
280	SVR ensemble-based continuous blood pressure prediction using multi-channel photoplethysmogram. 2019 , 113, 103392	12

279	Following the heart. 2019,	3
278	Non-invasive evaluation of coronary heart disease in patients with chronic kidney disease using photoplethysmography. 2019, 12, 538-545	5
277	Optimal fiducial points for pulse rate variability analysis from forehead and finger photoplethysmographic signals. 2019, 40, 025007	19
276	The Accuracy of Acquiring Heart Rate Variability from Portable Devices: A Systematic Review and Meta-Analysis. 2019, 49, 417-435	57
275	. 2019, 7, 58361-58367	11
274	Validation of Polar OH1 optical heart rate sensor for moderate and high intensity physical activities. 2019, 14, e0217288	25
273	A low-complexity photoplethysmographic systolic peak detector for compressed sensed data. 2019, 40, 065007	3
272	Baroreflex Sensitivity Measured by Pulse Photoplethysmography. 2019, 13, 339	7
271	Estimation of Heart Rate Recovery after StairClimbing Using aWrist-Worn Device. 2019, 19,	9
270	A Review of Psychophysiological Measures to Assess Cognitive States in Real-World Driving. 2019, 13, 57	105
269	Evaluation of Coherence Between ECG and PPG Derived Parameters on Heart Rate Variability and Respiration in Healthy Volunteers With/Without Controlled Breathing. 2019, 39, 783-795	15
268	Digital biomarkers for Alzheimer's disease: the mobile/ wearable devices opportunity. 2019, 2,	112
267	Comparison of short-term heart rate variability indexes evaluated through electrocardiographic and continuous blood pressure monitoring. 2019, 57, 1247-1263	31
266	A Prototype Photoplethysmography Electronic Device that Distinguishes Congestive Heart Failure from Healthy Individuals by Applying Natural Time Analysis. 2019, 8, 1288	21
265	HRV Assessment Using Finger-tip Photoplethysmography (PulseRate) as Compared to ECG on Healthy Subjects During Different Postures and Fixed Breathing Pattern. 2019, 161, 535-543	4
264	Commodity Sensors, Physiological Signals, Research Opportunities, and Practical Issues. 2019,	
263	Effects of R-R time series accuracy on heart rate variability indexes. 2019, 27-35	2
262	Proposal of Procedure for Heart Rate Variability Monitoring in Oncologic Patients Using a New Technology. 2019,	0

261	Detection of Daily Emotions by Wearable Biometric Sensors. 2019 ,	3
260	Wearable Sleep Technology in Clinical and Research Settings. 2019 , 51, 1538-1557	115
259	Deep Recurrent Neural Network for Extracting Pulse Rate Variability from Photoplethysmography During Strenuous Physical Exercise. 2019 ,	5
258	Assessing Drivers' Physiological Responses Using Consumer Grade Devices. 2019 , 9, 5353	7
257	State of the science: heart rate variability in health and disease. 2019 , 9, 274-276	2
256	A common neural substrate for elevated PTSD symptoms and reduced pulse rate variability in combat-exposed veterans. 2020 , 57, e13352	6
255	Self-monitoring Usability evaluation of heart rate monitoring using wearable devices in patients with acquired brain injury. 2020 , 22, 364-372	2
254	Comparison of multiple cardiac signal acquisition technologies for heart rate variability analysis. 2020 , 34, 743-752	5
253	Simulation and in vivo investigation of light-emitting diode, near infrared Gaussian beam profiles. 2020 , 28, 37-50	4
252	Sensors Capabilities, Performance, and Use of Consumer Sleep Technology. 2020 , 15, 1-30	30
251	Mild Dehydration Identification Using Machine Learning to Assess Autonomic Responses to Cognitive Stress. 2019 , 12,	6
250	Reliable Detection of Atrial Fibrillation with a Medical Wearable during Inpatient Conditions. 2020 , 20,	5
249	Validity of Smartphone Heart Rate Variability Pre- and Post-Resistance Exercise. 2020 , 20,	3
248	Intranasal oxytocin increases heart-rate variability in men at clinical high risk for psychosis: a proof-of-concept study. 2020 , 10, 227	4
247	Validation of a Wireless Bluetooth Photoplethysmography Sensor Used on the Earlobe for Monitoring Heart Rate Variability Features during a Stress-Inducing Mental Task in Healthy Individuals. 2020 , 20,	8
246	The effect of using activity workstations on heart rate variability during complex cognitive tasks. 2020 , 1-8	1
245	Comparison of Wearable and Clinical Devices for Acquisition of Peripheral Nervous System Signals. 2020 , 20,	7
244	Heart Rate Variability (HRV) and Pulse Rate Variability (PRV) for the Assessment of Autonomic Responses. 2020 , 11, 779	38

243	Changes in Continuous, Long-Term Heart Rate Variability and Individualized Physiological Responses to Wellness and Vacation Interventions Using a Wearable Sensor. 2020 , 7, 120	3
242	Heart rate entropy is associated with mortality after intracerebral hemorrhage. 2020 , 418, 117033	3
241	Predefined vs data-guided training prescription based on autonomic nervous system variation: A systematic review. 2020 , 30, 2291-2304	6
240	Wearable monitoring of sleep-disordered breathing: estimation of the apnea-hypopnea index using wrist-worn reflective photoplethysmography. 2020 , 10, 13512	17
239	Herzfrequenzvariabilitätsanalyse in der betrieblichen Praxis. 2020 , 70, 269-277	4
238	A Practical Guide to Resonance Frequency Assessment for Heart Rate Variability Biofeedback. 2020 , 14, 570400	15
237	Optimal filter characterization for photoplethysmography-based pulse rate and pulse power spectrum estimation. 2020 , 2020, 914-917	1
236	Not All Competitions Come to Harm! Competitive Biofeedback to Increase Respiratory Sinus Arrhythmia in Managers. 2020 , 14, 855	0
235	Neural correlates of fluctuations in the intermediate band for heart rate and respiration are related to interoceptive perception. 2020 , 57, e13594	7
234	Effects of Capsinoid Intake on Brown Adipose Tissue Vascular Density and Resting Energy Expenditure in Healthy, Middle-Aged Adults: A Randomized, Double-Blind, Placebo-Controlled Study. 2020 , 12,	4
233	A Study on the Effect of Contact Pressure during Physical Activity on Photoplethysmographic Heart Rate Measurements. 2020 , 20,	11
232	Heart Rate Variability and Multi-Site Pulse Rate Variability for the Assessment of Autonomic Responses to Whole-Body Cold Exposure. 2020 , 2020, 2618-2621	
231	. 2020 , 8, 216083-216103	12
230	Smart Wireless Wearable ECG to Measure Heart Function. 2020 , 1624, 062012	1
229	Platform for Analysis and Labeling of Medical Time Series. 2020 , 20,	1
228	Comparison of Heart Rate Variability Responses to Varying Resistance Exercise Volume-Loads. 2020 , 1-10	0
227	Automatic sleep-stage scoring based on photoplethysmographic signals. 2020 , 41, 065008	6
226	Graphene coated textile based highly flexible and washable sports bra for human health monitoring. 2020 , 193, 108792	27

225	Compliance of self-measured HRV using smartphone applications in collegiate athletes. 2020 , 31, 100376	0
224	Measurement latency significantly contributes to reduced heart rate measurement accuracy in wearable devices. 2020 , 44, 125-132	2
223	Assessing the Quality of Heart Rate Variability Estimated from Wrist and Finger PPG: A Novel Approach Based on Cross-Mapping Method. 2020 , 20,	11
222	Media Exposure to Terrorism and Perception of Immigrants as a Threat: The Role of Emotional Intelligence and Psychophysiological Self-Regulation. 2020 , 40, 1666-1676	1
221	Pulse rate variability in cardiovascular health: a review on its applications and relationship with heart rate variability. 2020 , 41, 07TR01	19
220	Uncovering complex central autonomic networks at rest: a functional magnetic resonance imaging study on complex cardiovascular oscillations. 2020 , 17, 20190878	23
219	Holistically Engineered Polymer-Polymer and Polymer-Ion Interactions in Biocompatible Polyvinyl Alcohol Blends for High-Performance Triboelectric Devices in Self-Powered Wearable Cardiovascular Monitorings. 2020 , 32, e2002878	33
218	Heart Rate Variability as an Index of Differential Brain Dynamics at Rest and After Acute Stress Induction. 2020 , 14, 645	6
217	Differences in pulse rate variability with measurement site. 2020 , 39, 4	8
216	Functional Overreaching in Endurance Athletes: A Necessity or Cause for Concern?. 2020 , 50, 1059-1073	8
215	Comparing apples and oranges or different types of citrus fruits? Using wearable versus stationary devices to analyze psychophysiological data. 2020 , 57, e13551	9
214	Quantitative Comparison of the Performance of Piezoresistive, Piezoelectric, Acceleration, and Optical Pulse Wave Sensors. 2019 , 10, 1563	8
213	Linking Pain Sensation to the Autonomic Nervous System: The Role of the Anterior Cingulate and Periaqueductal Gray Resting-State Networks. 2020 , 14, 147	13
212	Artificial Intelligence Supported Educational Technologies. 2020 ,	2
211	Feasible assessment of recovery and cardiovascular health: accuracy of nocturnal HR and HRV assessed via ring PPG in comparison to medical grade ECG. 2020 , 41, 04NT01	39
210	Preliminary Comparison of Zero-Gravity Chair With Tilt Table in Relation to Heart Rate Variability Measurements. 2020 , 8, 1900308	
209	Nail tip sensor: Toward reliable daylong monitoring of heart rate. 2020 , 15, 902-908	1
208	Equine-assisted therapeutic activities and their influence on the heart rate variability: A systematic review. 2020 , 39, 101167	1

207	. 2020 , 8, 74118-74128	7
206	Validation of the Polar OH1 and M600 optical heart rate sensors during front crawl swim training. 2020 , 15, e0231522	6
205	Enhancing the Robustness of Smartphone Photoplethysmography: A Signal Quality Index Approach. 2020 , 20,	8
204	Photoplethysmographic Waveform Analysis for Autonomic Reactivity Assessment in Depression. 2021 , 68, 1273-1281	7
203	ECG changes in patients with opioid use disorder; P-QT wave dispersion: a retrospective study. 2021 , 39, 234-240	1
202	Photoplethysmographic Waveform and Pulse Rate Variability Analysis in Hyperbaric Environments. 2021 , 25, 1550-1560	2
201	Sleep and Circadian Regulation of the Autonomic Nervous System. 2021 , 63-69	0
200	Investigation on Pulse Wave Forward Peak Detection and Its Applications in Cardiovascular Health. 2021 , PP,	1
199	Autonomic nervous activity in rats can be evaluated by blood photoplethysmography-derived pulse rate variability analysis. 2021 , 3, 17-21	0
198	Variability of peripheral pulse wave velocity in patients with diabetes mellitus type 2 during orthostatic challenge. 2020 , 69, S433-S441	2
197	UBFC-Phys: A Multimodal Database For Psychophysiological Studies Of Social Stress. 2021 , 1-1	8
196	An Exploration of Influence of Duration on Physiological Effects of Asanas. 2021 , 451-474	0
195	Prediction of Menstrual Cycle Phase by Wearable Heart Rate Sensor. 2021 , 1-15	
194	HRV and Stress: A Mixed-Methods Approach for Comparison of Wearable Heart Rate Sensors for Biofeedback. 2021 , 9, 14005-14024	7
193	Impact of the PPG sampling rate in the pulse rate variability indices evaluating several fiducial points in different pulse waveforms. 2021 , PP,	2
192	Z-score neurofeedback, heart rate variability biofeedback, and brain coaching for older adults with memory concerns. 2021 , 39, 9-37	0
191	HRVCam: robust camera-based measurement of heart rate variability. 2021 , 26,	10
190	Heart Rate Variability as a Potential Non-invasive Marker of Blood Glucose Level. 2021 , 47, 209-218	

189	HRV in Active-Duty Special Forces and Public Order Military Personnel. 2021 , 13, 3867	2
188	Don't Stress, It's Under Control: Neural Correlates of Stressor Controllability in Humans.	
187	Comparison of Pulse Wave Signal Monitoring Techniques with Different Fiber-Optic Interferometric Sensing Elements. 2021 , 8, 142	6
186	Transfer learning from ECG to PPG for improved sleep staging from wrist-worn wearables. 2021 ,	3
185	Overnight Oximetry-derived Pulse Rate Variability Predicts Stroke Risk in Patients with Obstructive Sleep Apnea. 2021 , 204, 106-109	3
184	Association of Heart rate variability measured by RR interval from ECG and pulse to pulse interval from Photoplethysmography. 2021 , 10, 100698	3
183	Wearable Devices for Physical Activity and Healthcare Monitoring in Elderly People: A Critical Review. 2021 , 6,	8
182	Accuracy of heart rate variability estimated with reflective wrist-PPG in elderly vascular patients. 2021 , 11, 8123	5
181	Differential effects of the blood pressure state on pulse rate variability and heart rate variability in critically ill patients. 2021 , 4, 82	5
180	A Review of Deep Learning-Based Contactless Heart Rate Measurement Methods. 2021 , 21,	16
179	Alternative Devices for Heart Rate Variability Measures: A Comparative Test-Retest Reliability Study. 2021 , 11,	0
178	Heart rate variability in late pregnancy: exploration of distinctive patterns in relation to maternal mental health. 2021 , 11, 286	4
177	Interpersonal autonomic nervous system synchrony and its association to relationship and performance - a systematic review and meta-analysis. 2021 , 235, 113391	3
176	Pre-surgical heart-rate variability strongly predicts less post-operative pain in patients with epilepsy. 2021 , 145, 110421	0
175	Association of Nocturnal Hypoxemia and Pulse Rate Variability with Incident Atrial Fibrillation in Patients Investigated for Obstructive Sleep Apnea. 2021 , 18, 1043-1051	6
174	Heart rate variability as a strain indicator for psychological stress for emergency physicians during work and alert intervention: a systematic review. 2021 , 16, 24	4
173	Brief induction of loneliness decreases vagal regulation during social information processing. 2021 , 164, 112-120	0
172	Physiological Measurements of Stress Preceding Incidents of Challenging Behavior in People With Severe to Profound Intellectual Disabilities: Longitudinal Study Protocol of Single-Case Studies. 2021 , 10, e24911	2

171	Pilot Study on Reducing Symptoms of Anxiety with a Heart Rate Variability Biofeedback Wearable and Remote Stress Management Coach. 2021 , 46, 347-358	5
170	The accuracy of heartbeat detection using photoplethysmography technology in cardiac patients. 2021 , 67, 148-157	0
169	Real-Time Quality Index to Control Data Loss in Real-Life Cardiac Monitoring Applications. 2021 , 21,	0
168	Multimodal Assessment of the Pulse Rate Variability Analysis Module of a Photoplethysmography-Based Telemedicine System. 2021 , 21,	2
167	Correspondence of parasympathetic-mediated heart rate variability derived from electrocardiogram and photoplethysmography signals in ethnically diverse adolescents. 2021 , 167, 7-14	
166	Analysis and Comparison of Heart Rate Variability Signals Derived from PPG and ECG Sensors. 2022 , 9-16	
165	The Assessment of Autonomic Nervous System Activity Based on Photoplethysmography in Healthy Young Men. 2021 , 12, 733264	1
164	Cardiovascular risk and mortality prediction in patients suspected of sleep apnea: a model based on an artificial intelligence system. 2021 , 42,	2
163	Heart Rate Variability and Its Ability to Detect Worsening Suicidality in Adolescents: A Pilot Trial of Wearable Technology. 2021 , 18, 928-935	1
162	A deep transfer learning approach for wearable sleep stage classification with photoplethysmography. 2021 , 4, 135	9
161	Immersive Virtual Reality Influences Physiologic Responses to Submaximal Exercise: A Randomized, Crossover Trial. 2021 , 12, 702266	0
160	Measuring human physiological indices for thermal comfort assessment through wearable devices: A review. 2021 , 183, 109872	8
159	Tracking transient changes in the intrinsic neural frequency architecture: Oxytocin facilitates non-harmonic relationships between alpha and theta rhythms in the resting brain. 2021 , 133, 105397	0
158	Tracking white-matter brain modifications in chronic non-bothersome acoustic trauma tinnitus. 2021 , 31, 102696	1
157	Methodological Issues. 2014 , 51-118	2
156	iPhysioMeter: a smartphone photoplethysmograph for measuring various physiological indices. 2015 , 1256, 305-26	9
155	Autonomic Modulation During a Cognitive Task Using a Wearable Device. 2019 , 69-77	1
154	Initialization of Pulse Transit Time-Based Blood Pressure Monitors. 2019 , 163-190	4

153	Ectopic Beat Detection from Wrist Optical Signals for Sinus Rhythm and Atrial Fibrillation Subjects. 2020 , 150-158	4
152	Evaluation of the accuracy and reliability for photoplethysmography based heart rate and beat-to-beat detection during daily activities. 2018 , 145-148	21
151	Assessment of In-ear Photoplethysmography as a Surrogate for Electrocardiography in Heart Rate Variability Analysis. 2019 , 293-297	3
150	Stressreduktion durch Binaurale Stimulation? Eine experimentelle Untersuchung zum Effekt einer Alpha-Stimulation auf die psychophysiologische Entspannungsreaktion. 2015 , 26, 239-248	1
149	[Heart Rate Variability - State of Research and Clinical Applicability]. 2019 , 108, 461-468	3
148	Emotional metacognition: stimulus valence modulates cardiac arousal and metamemory. 2021 , 35, 705-721	3
147	DBD-RCO: Derivative Based Detection and Reverse Combinatorial Optimization to improve heart beat detection for wearable devices.	3
146	Stress-reducing effects of a brief mindfulness intervention in palliative care: Results from a randomised, crossover study. 2020 , 29, e13249	3
145	Stress assessment by means of heart rate derived from functional near-infrared spectroscopy. 2018 , 23, 1-12	9
144	A pilot study: Can heart rate variability (HRV) be determined using short-term photoplethysmograms?. 2016 , 5, 2354	2
143	Quantitative detection of sleep apnea with wearable watch device. 2020 , 15, e0237279	6
142	Mobile Device for Monitoring of Cardiovascular System State Based on Assessment of Synchronization of its Low-Frequency Rhythms. 2018 , 10, 46-51	2
141	Methodological Shortcomings of Wrist-Worn Heart Rate Monitors Validations. 2018 , 20, e10108	21
140	Instant Stress: Detection of Perceived Mental Stress Through Smartphone Photoplethysmography and Thermal Imaging. 2019 , 6, e10140	22
139	Design Rationale and Performance Evaluation of the Wavelet Health Wristband: Benchtop Validation of a Wrist-Worn Physiological Signal Recorder. 2018 , 6, e11040	20
138	Associations Between Heart Rate Variability Measured With a Wrist-Worn Sensor and Older Adults' Physical Function: Observational Study. 2019 , 7, e13757	9
137	Pulse Rate Variability in Emergency Physicians During Shifts: Pilot Cross-Sectional Study. 2019 , 7, e13909	4
136	Accuracy of Optical Heart Rate Sensing Technology in Wearable Fitness Trackers for Young and Older Adults: Validation and Comparison Study. 2020 , 8, e14707	16

135	Measuring Heart Rate Variability in Free-Living Conditions Using Consumer-Grade Photoplethysmography: Validation Study. 2020 , 5, e17355	5
134	Heart Rate Variability Analysis: How Much Artifact Can We Remove?. 2020 , 17, 960-965	4
133	Relevant Errors Relating to the Measuring Method. 2016 , 113, 374	1
132	A Critical Review of Ultra-Short-Term Heart Rate Variability Norms Research. 2020 , 14, 594880	23
131	Compatibility of pulse-pulse intervals with R-R intervals in assessing cardiac autonomic function and its relation to risks of atherosclerosis. 2020 , 32, 41-46	1
130	The Physiological Response during Divergent Thinking. 2016 , 06, 28-37	4
129	The Physiological Response to Drawing and Its Relation to Attention and Relaxation. 2017 , 07, 111-124	4
128	Resonance Frequency Assessment: The Challenge of Standardizing Heart Rate Variability Biofeedback Research. 2020 , 48, 7-15	3
127	Feasibility of assessing ultra-short-term pulse rate variability from video recordings. 2020 , 8, e8342	4
126	The association between pain-induced autonomic reactivity and descending pain control is mediated by the periaqueductal grey. 2021 , 599, 5243-5260	0
125	Age-Related Alterations in the Sign Series Entropy of Short-Term Pulse Rate Variability. 2015 , 723-729	
124	A Smart Cloth for ECG Monitoring of Children with Autism Spectrum Disorders. 2016 , 555-562	1
123	In Reply. 2016 , 113, 374	1
122	An Effect of Sampling Rate to the Time and Frequency Domain Analysis of Pulse Rate Variability. 2016 , 65, 1247-1251	
121	Non-contact measurement of emotional and physiological changes in heart rate from a webcam.	
120	Historical Development of HRV Analysis. 2017 , 13-74	
119	Using imaging photoplethysmography for heart rate estimation in non-human primates.	
118	CameraHRV: Robust measurement of heart rate variability using a camera. 2018 ,	1

- 117 Methodological Shortcomings of Wrist-Worn Heart Rate Monitors Validations (Preprint).
- 116 Task-induced deactivation in diverse brain systems correlates with interindividual differences in distinct autonomic indices.
- 115 A common neural substrate for elevated PTSD symptoms and reduced pulse rate variability in combat-exposed veterans. 1
- 114 Kardiovaskuläre autonome Dysfunktion bei psychischen Erkrankungen. **2018**, 29, 24-28
- 113 Comparison of Heart Rate Variability and Pulse Rate Variability of Respiratory Control. **2019**, 193-197
- 112 Unique Characteristics of Heart Rate Variability Obtained from Pulse Wave Signals during Work. **2019**, 10, 131-136
- 111 Emotional State Recognition with Micro-expressions and Pulse Rate Variability. **2019**, 26-35 0
- 110 Photoplethysmographic Sensors in Automatized Diagnosis of the Cardiovascular System. **2019**, 240-265 0
- 109 Associations Between Heart Rate Variability Measured With a Wrist-Worn Sensor and Older Adults' Physical Function: Observational Study (Preprint).
- 108 Accuracy of Optical Heart Rate Sensing Technology in Wearable Fitness Trackers for Young and Older Adults: Validation and Comparison Study (Preprint).
- 107 Pulse Transition Time Method for Unobtrusive Blood Pressure Estimation. **2020**, 1477-1484 1
- 106 Effects of Astaxanthin on Pulse Rate Variability of Mice Under Chronic Stress. **2020**, 718-723
- 105 Emotional Metacognition: Stimulus Valence Modulates Cardiac Arousal and Metamemory. 1
- 104 Psychophysiological correlates of pain resilience in anticipating, experiencing, and recovering from pain. **2021**, e13962
- 103 A Learning Attention Monitoring System via Photoplethysmogram Using Wearable Wrist Devices. **2020**, 133-150 1
- 102 Don't stress, it's under control: Neural correlates of stressor controllability in humans. **2021**, 245, 118701 1
- 101 Dynamics of peripheral blood flow across sleep stages.
- 100 Quantitative detection of sleep apnea with wearable watch device. 2

99	The association between pain-induced autonomic reactivity and descending pain control is mediated by the periaqueductal grey.	1
98	Comparison of wearable and clinical devices for acquisition of peripheral nervous system signals.	1
97	Beat-to-Beat Detection Accuracy Using the Ultra Low Power Senbiosys PPG Sensor. 2021 , 178-188	1
96	Physiological Measurements of Stress Preceding Incidents of Challenging Behavior in People With Severe to Profound Intellectual Disabilities: Longitudinal Study Protocol of Single-Case Studies (Preprint).	
95	Photoplethysmography signal processing and synthesis. 2022 , 69-146	4
94	Wearable photoplethysmography devices. 2022 , 401-439	4
93	Estimating Resting HRV during fMRI: A Comparison between Laboratory and Scanner Environment. 2021 , 21,	0
92	Impact of Equine-Assisted Interventions on Heart Rate Variability in Two Participants with 22q11.2 Deletion Syndrome: A Pilot Study. 2021 , 8,	
91	Evidence for engagement of the nucleus of the solitary tract in processing intestinal chemonociceptive input irrespective of conscious pain response in healthy humans. 2021 ,	0
90	Predicting Heart Rate Variability Parameters in Healthy Korean Adults: A Preliminary Study. 2021 , 58, 469580211056201	
89	Estimation of Heart Rate Variability from Finger Photoplethysmography During Rest, Mild Exercise and Mild Mental Stress.. 2021 , 12, 89-102	0
88	A New Sleep Staging System for Type III Sleep Studies Equipped with a Tracheal Sound Sensor. 2021 , PP,	
87	ACUTE TRANSCRANIAL DIRECT CURRENT STIMULATION (tDCS) IMPROVES VENTILATORY VARIABILITY AND AUTONOMIC MODULATION IN RESISTANT HYPERTENSIVE PATIENTS.. 2021 , 297, 103830	0
86	Sustained Attention Detection System in Learning Environments. 2020 ,	0
85	Interbeat Interval Detection from Synthetic Photoplethysmography Signals. 2021 ,	
84	Reliability of Pulse Rate Variability in Elderly Men and Women: an Application of Cross-Mapping Approach. 2021 , 2021, 492-495	
83	RMSSD Estimation From Photoplethysmography and Accelerometer Signals Using a Deep Convolutional Network. 2021 , 2021, 228-231	
82	Reducing Motion Artifacts of Pulse Intervals from Photoplethysmogram of a Commercial Wristband for Heart Rate Variability Analysis. 2021 , 2021, 47-51	0

81	Relationship Between Heart Rate Variability and Pulse Rate Variability Measures in Patients After Coronary Artery Bypass Graft Surgery.. 2021 , 8, 749297	
80	Heart rate and heart rate variability in patients with chronic inflammatory joint disease: the role of pain duration and the insular cortex.. 2022 , 23, 75	1
79	Measuring the Rate of Information Exchange in Point-Process Data With Application to Cardiovascular Variability. 2022 , 1,	1
78	Remote Healthcare for Elderly People Using Wearables: A Review.. 2022 , 12,	4
77	Digital Health and Care Study on Elderly Monitoring. 2021 , 13, 13376	3
76	Toward the Personalization of Biceps Fatigue Detection Model for Gym Activity: An Approach to Utilize Wearables' Data from the Crowd.. 2022 , 22,	1
75	Validation of a smart shirt for heart rate variability measurements at rest and during exercise.. 2022 ,	1
74	Acute and Short-Term Autonomic and Hemodynamic Responses to Transcranial Direct Current Stimulation in Patients With Resistant Hypertension.. 2022 , 9, 853427	0
73	Monitoring Heart Rate under Psychological Stress: A Validation Study Comparing a Fitbit Wearable to an ECG Gold Standard (Preprint).	
72	Wearable Photoplethysmography for Cardiovascular Monitoring.. 2022 , 110, 355-381	4
71	Photoplethysmogram Analysis and Applications: An Integrative Review.. 2021 , 12, 808451	4
70	On the spatial phase distribution of cutaneous low-frequency perfusion oscillations.. 2022 , 12, 5997	0
69	Effects of using different algorithms and fiducial points for the detection of interbeat intervals, and different sampling rates on the assessment of pulse rate variability from photoplethysmography.. 2022 , 218, 106724	0
68	Deep convolutional neural network-based signal quality assessment for photoplethysmogram.. 2022 , 145, 105430	1
67	Effect of Filtering of Photoplethysmography Signals in Pulse Rate Variability Analysis. 2021 , 2021, 5500-5503	0
66	Ear and Finger PPG Wearables for Night and Day Beat-to-Beat Interval Detection. 2021 , 2021, 1686-1689	
65	Validity of the Wrist-Worn Polar Vantage V2 to Measure Heart Rate and Heart Rate Variability at Rest.. 2021 , 22,	3
64	Combination of ECG And PPG Signals For Smart HealthCare Systems: Techniques, Applications, and Challenges. 2021 ,	1

- 63 Heart Rate Variability from Wearable Photoplethysmography Systems: Implications in Sleep Studies at High Altitude.. **2022**, 22, o
- 62 Cardiovascular Autonomic Responses to Aerobic, Resistance and Combined Exercises in Resistance Hypertensive Patients.. **2022**, 2022, 8202610
- 61 Data_Sheet_1.PDF. **2020**,
- 60 Data_Sheet_1.docx. **2020**,
- 59 Data_Sheet_1.PDF. **2020**,
- 58 Table_1.DOCX. **2020**,
- 57 The indirect impact of heart rate variability on cold pressor pain tolerance and intensity through psychological distress in individuals with chronic pain: the Tromsø Study.. **2022**, 7, e970 o
- 56 Contactless Monitoring of Heart Rate Variability During Respiratory Maneuvers. **2022**, 1-1 1
- 55 Examining weekly heart rate variability changes: a comparison between wearable devices running head: weekly heart rate variability changes. **2022**, 25, 1 1
- 54 Non-invasive Solutions to Identify Distinctions Between Healthy and Mild Cognitive Impairments Participants. **2022**, 1-1 o
- 53 Heart-brain synchronization breakdown in Parkinson's disease. **2022**, 8,
- 52 Prediction of Menstrual Cycle Phase by Wearable Heart Rate Sensor. **2022**, 528-543
- 51 Duration of Photoplethysmographic Signals for the Extraction of Pulse Rate Variability.
- 50 Sensors on the Wrist. **2022**,
- 49 Design of Emotion-Driven Game Interaction Using Biosignals. **2022**, 160-179
- 48 Overnight pulse rate variability and risk of major neurocognitive disorder in older patients with obstructive sleep apnea. o
- 47 Wearables: An R Package With Accompanying Shiny Application for Signal Analysis of a Wearable Device Targeted at Clinicians and Researchers. 16, o
- 46 Detection of Drowsiness Using the Pulse Rate Variability of Finger. **2022**, 3,

- 45 A scoping review of heart rate variability in sport and exercise psychology. 1-75 2
- 44 Reduced heart rate variability is related to the number of metabolic syndrome components and manifest diabetes in the sixth Tromsø study 2007-2008. **2022**, 12,
- 43 A wearable heart rate monitoring system based on over-ear headphones. 1-4
- 42 A silicon photomultiplier-based analog front-end for DC component rejection and pulse wave recording in photoplethysmographic applications. **2022**,
- 41 Photoplethysmography-Based Pulse Rate Variability and Haemodynamic Changes in the Absence of Heart Rate Variability: An In-Vitro Study. **2022**, 12, 7238
- 40 Effects of Missing Data on Heart Rate Variability Metrics. **2022**, 22, 5774 o
- 39 Nutzen und Grenzen mobiler und tragbarer Technologien zur Individualisierung von hochintensivem Intervalltraining in der Bewegungstherapie. **2022**, 38, 181-186
- 38 Accurate detection of heart rate using in-ear photoplethysmography in a clinical setting. 4,
- 37 Impact of natural window views on perceptions of indoor environmental quality: An overground experimental study. **2022**, 86, 104133
- 36 The oscillating pulse arrival time as a physiological explanation regarding the difference between ECG- and Photoplethysmogram-derived heart rate variability parameters. **2023**, 79, 104033
- 35 Pre-partum HRV as a predictor of postpartum depression: The potential use of a smartphone application for physiological recordings. **2022**, 319, 172-180 o
- 34 Multi-Task Multi-Attention Residual Shrinkage Convolutional Neural Network for Sleep Apnea Detection Based on Wearable Bracelet Photoplethysmography. **2022**, 1-1 1
- 33 Reply to Role in nocturnal pulse rate variability in predicting clinical outcome for patients with OSA o
- 32 Wearable sensors for prediction of intraamniotic infection in women with preterm premature rupture of membranes: a prospective proof of principle study. o
- 31 Role of nocturnal pulse rate variability in predicting clinical outcome for patients with OSA. o
- 30 Reliability of pulse photoplethysmography sensors: Coverage using different setups and body locations. 3, o
- 29 Long- and short-term fluctuations compared for several organ systems across sleep stages. 2, o
- 28 Pulse Oximetry: The Working Principle, Signal Formation, and Applications. **2022**, 205-218 o

27	Comparing a Fitbit Wearable to an ECG Gold Standard as a Measure of Heart Rate Under Psychological Stress: A Validation Study (Preprint).	0
26	Changes in Nutritional State and Cardiovascular Parameters in Alimentary Obese Children after a Month-Long Stay in Children's Treatment Center. 2022 , 9, 1610	0
25	Effects of noise and filtering strategies on the extraction of pulse rate variability from photoplethysmograms. 2023 , 80, 104291	1
24	Duration of photoplethysmographic signals for the extraction of Pulse Rate Variability Indices. 2023 , 80, 104214	0
23	The Dosage Effect of Laser Acupuncture at PC6 (Neiguan) on Heart Rate Variability: A Pilot Study. 2022 , 12, 1951	1
22	Biomedical Signal Processing: The Cornerstone of Artificial Intelligence in Healthcare Wearables.	0
21	Classification of Blood Pressure Levels Based on Photoplethysmogram and Electrocardiogram Signals with a Concatenated Convolutional Neural Network. 2022 , 12, 2886	0
20	Spectral analysis for pulse rate variability assessment from simulated photoplethysmographic signals. 13,	0
19	Problem of power spectra estimation in application to the analysis of heart rate variability.	0
18	MS-Net: Sleep apnea detection in PPG using multi-scale block and shadow module one-dimensional convolutional neural network. 2023 , 106469	1
17	Flexible, Implantable, Pulse Oximetry Sensors: Toward Long-Term Monitoring of Blood Oxygen Saturations.	0
16	Determining Heart Rate Variability in Oncological Patients Using ECG Holter vs Photoplethysmography - Old vs New Method. 2022 ,	0
15	Immediate autonomic nervous system activity in skin microcirculation during osteopathic cranial vault hold intervention.	0
14	Sleep Quality Evaluation Based on Single-Lead Wearable Cardiac Cycle Acquisition Device. 2023 , 23, 328	0
13	Influence of temperature on heart rate variability parameters. 2023 , 2, 42-53	0
12	Automated analysis of finger blood pressure recordings provides insight in determinants of baroreflex sensitivity and heart rate variabilityThe HELIUS study.	0
11	Potential impact of non-dipping pulse rate pattern and nocturnal high pulse rate variability on target organ damage in patients with cardiovascular risk.	0
10	A Survey on Wearable Sensors for Mental Health Monitoring. 2023 , 23, 1330	0

- 9 Contactless Cardiovascular Assessment by Imaging Photoplethysmography: A Comparison with Wearable Monitoring. **2023**, 23, 1505 ○
- 8 Potential of electronic devices for detection of health problems in older adults at home: A systematic review and meta-analysis. **2023**, 51, 54-64 ○
- 7 Impact of antidepressant use on the autonomic nervous system: A meta-analysis and systematic review. **2023**, 71, 75-95 ○
- 6 Are Activity Wrist-Worn Devices Accurate for Determining Heart Rate during Intense Exercise?. **2023**, 10, 254 ○
- 5 Comparison of pulse rate variability from post-auricula and heart rate variability during different body states for healthy subjects. 1-10 ○
- 4 Channel Intensity and Edge-Based Estimation of Heart Rate via Smartphone Recordings. **2023**, 12, 43 ○
- 3 Extremely Lightweight Skin Segmentation Networks to Improve Remote Photoplethysmography Measurement. **2023**, 454-459 ○
- 2 Screening for Major Depressive Disorder Using a Wearable Ultra-Short-Term HRV Monitor and Signal Quality Indices. **2023**, 23, 3867 ○
- 1 Learning Attention Level Prediction via Multimodal Physiological Data Using Wearable Wrist Devices. **2022**, ○