## Guy A. Dumont

# List of Publications by Year in Descending Order

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The third column is the impact factor (IF) of the journal, and the fourth column is the number of citations of the article.

61 38 5,425 322 h-index g-index citations papers 6,540 5.88 356 3.4 avg, IF L-index ext. citations ext. papers

#	Paper	IF	Citations
322	Real-Time Multi-Level Neonatal Heart and Lung Sound Quality Assessment for Telehealth Applications. <i>IEEE Access</i> , <b>2022</b> , 10, 10934-10948	3.5	1
321	Neonatal Heart and Lung Sound Quality Assessment for Robust Heart and Breathing Rate Estimation for Telehealth Applications. <i>IEEE Journal of Biomedical and Health Informatics</i> , <b>2021</b> , 25, 425	55 <sup>7</sup> 4266	5 7
320	Iterative Learning Control for Beam Loading Cancellation in Electron Linear Accelerator. <i>IFAC-PapersOnLine</i> , <b>2021</b> , 54, 55-60	0.7	O
319	Pregnancy Outcomes and Blood Pressure Visit-to-Visit Variability and Level in Three Less-Developed Countries. <i>Hypertension</i> , <b>2021</b> , 77, 1714-1722	8.5	1
318	Effect of ketamine on the NeuroSENSE WAV during propofol anesthesia; a randomized feasibility trial. <i>Journal of Clinical Monitoring and Computing</i> , <b>2021</b> , 35, 557-567	2	3
317	Robust PID control of propofol anaesthesia: Uncertainty limits performance, not PID structure. <i>Computer Methods and Programs in Biomedicine</i> , <b>2021</b> , 198, 105783	6.9	2
316	The Effect of Low-Dose Intraoperative Ketamine on Closed-Loop-Controlled General Anesthesia: A Randomized Controlled Equivalence Trial. <i>Anesthesia and Analgesia</i> , <b>2021</b> , 133, 1215-1224	3.9	1
315	Blood pressure thresholds in pregnancy for identifying maternal and infant risk: a secondary analysis of Community-Level Interventions for Pre-eclampsia (CLIP) trial data. <i>The Lancet Global Health</i> , <b>2021</b> , 9, e1119-e1128	13.6	2
314	Causes and circumstances of maternal death: a secondary analysis of the Community-Level Interventions for Pre-eclampsia (CLIP) trials cohort. <i>The Lancet Global Health</i> , <b>2021</b> , 9, e1242-e1251	13.6	1
313	Model-plant mismatch detection for cross-directional processes. <i>ISA Transactions</i> , <b>2021</b> , 117, 150-159	5.5	
312	Safety enforcement in closed-loop anesthesia comparison study. <i>Control Engineering Practice</i> , <b>2020</b> , 105, 104653	3.9	1
311	Smart triage: triage and management of sepsis in children using the point-of-care Pediatric Rapid Sepsis Trigger (PRST) tool. <i>BMC Health Services Research</i> , <b>2020</b> , 20, 493	2.9	5
310	An Optimization Framework for the Design of Noise Shaping Loop Filters with Improved Stability Properties. <i>Circuits, Systems, and Signal Processing</i> , <b>2020</b> , 39, 6276-6298	2.2	
309	Models for control of intravenous anesthesia <b>2020</b> , 119-166		О
308	Whole blood genome-wide transcriptome profiling and metagenomics next-generation sequencing in young infants with suspected sepsis in low-and middle-income countries: A study protocol. <i>Gates Open Research</i> , <b>2020</b> , 4, 139	2.4	
307	Evaluating NeuroSENSE for assessing depth of hypnosis during desflurane anesthesia: an adaptive, randomized-controlled trial. <i>Canadian Journal of Anaesthesia</i> , <b>2020</b> , 67, 324-335	3	2
306	Support vector machine approach for model-plant mismatch detection. <i>Computers and Chemical Engineering</i> , <b>2020</b> , 133, 106660	4	4

### (2019-2020)

305	Association of cortical spreading depression and seizures in patients with medically intractable epilepsy. <i>Clinical Neurophysiology</i> , <b>2020</b> , 131, 2861-2874	4.3	4
304	Individualized closed-loop anesthesia through patient model partitioning. <i>Annual International Conference of the IEEE Engineering in Medicine and Biology Society IEEE Engineering in Medicine and Biology Society Annual International Conference</i> , <b>2020</b> , 2020, 361-364	0.9	2
303	The Community-Level Interventions for Pre-eclampsia (CLIP) cluster randomised trials in Mozambique, Pakistan, and India: an individual participant-level meta-analysis. <i>Lancet, The</i> , <b>2020</b> , 396, 553-563	40	17
302	Falsified Model-Invariant Safety-Preserving Control With Application to Closed-Loop Anesthesia. <i>IEEE Transactions on Control Systems Technology</i> , <b>2020</b> , 28, 617-625	4.8	3
301	. IEEE Transactions on Control Systems Technology, <b>2020</b> , 28, 254-263	4.8	3
300	Extended habituating model predictive control of propofol and remifentanil anesthesia. <i>Biomedical Signal Processing and Control</i> , <b>2020</b> , 55, 101656	4.9	9
299	. IEEE Transactions on Control Systems Technology, <b>2020</b> , 28, 2490-2496	4.8	6
298	How Uncertain Is Our Reference Standard for Respiratory Rate Measurement?. <i>American Journal of Respiratory and Critical Care Medicine</i> , <b>2019</b> , 199, 1036-1037	10.2	7
297	Ultra-low Noise EEG at LSBB: Effective Connectivity Analysis. <i>E3S Web of Conferences</i> , <b>2019</b> , 88, 02002	0.5	
296	Model-invariant viability kernel approximation. Systems and Control Letters, 2019, 127, 13-18	2.4	1
295	Optical Assessment of Spinal Cord Tissue Oxygenation Using a Miniaturized Near Infrared Spectroscopy Sensor. <i>Journal of Neurotrauma</i> , <b>2019</b> , 36, 3034-3043	5.4	10
294	Identification of symmetric noncausal processes. <i>Automatica</i> , <b>2019</b> , 103, 515-530	5.7	O
293	Optimizing Robust PID Control of Propofol Anesthesia for Children: Design and Clinical Evaluation. <i>IEEE Transactions on Biomedical Engineering</i> , <b>2019</b> , 66, 2918-2923	5	11
292	An Explicit Reference Governor Scheme for Closed-Loop Anesthesia <b>2019</b> ,		10
291	Current-Iteration Non-Causal Iterative Learning Control for Beam Loading Cancellation in Particle Accelerators <b>2019</b> ,		1
290	Are respiratory rate counters really so bad? Throwing the baby out with the bath water. <i>EClinicalMedicine</i> , <b>2019</b> , 16, 14	11.3	2
289	A formalized safety system for closed-loop anesthesia with pharmacokinetic and pharmacodynamic constraints. <i>Control Engineering Practice</i> , <b>2019</b> , 84, 23-31	3.9	5
288	Pediatric pulse oximetry-based OSA screening at different thresholds of the apnea-hypopnea index with an expression of uncertainty for inconclusive classifications. <i>Sleep Medicine</i> , <b>2019</b> , 60, 45-52	4.6	13

287	Feasibility of continuous sedation monitoring in critically ill intensive care unit patients using the NeuroSENSE WAV index. <i>Journal of Clinical Monitoring and Computing</i> , <b>2018</b> , 32, 1081-1091	2	7
286	A Multi-Week Assessment of a Mobile Exergame Intervention in an Elementary School. <i>Games for Health Journal</i> , <b>2018</b> , 7, 1-8	4.2	7
285	Patient and health care professional perspectives on using telehealth to deliver pulmonary rehabilitation. <i>Chronic Respiratory Disease</i> , <b>2018</b> , 15, 71-80	3	18
284	Design and Evaluation of a Closed-Loop Anesthesia System With Robust Control and Safety System. <i>Anesthesia and Analgesia</i> , <b>2018</b> , 127, 883-894	3.9	29
283	. IEEE Transactions on Control Systems Technology, <b>2018</b> , 26, 1758-1770	4.8	19
282	Multi-model robust control of depth of hypnosis. <i>Biomedical Signal Processing and Control</i> , <b>2018</b> , 40, 44.	3 <sub>4</sub> 453	20
281	Coordinated semi-adaptive closed-loop control for infusion of two interacting medications. <i>International Journal of Adaptive Control and Signal Processing</i> , <b>2018</b> , 32, 134-146	2.8	3
280	Night to night pulse oximetry variability in children with suspected sleep apnea. <i>Annual</i> International Conference of the IEEE Engineering in Medicine and Biology Society IEEE Engineering in Medicine and Biology Society Annual International Conference, <b>2018</b> , 2018, 179-182	0.9	2
279	Symbolic dynamics to enhance diagnostic ability of portable oximetry from the phone oximeter in the detection of paediatric sleep apnoea. <i>Physiological Measurement</i> , <b>2018</b> ,	2.9	5
278	Extracting Instantaneous Respiratory Rate From Multiple Photoplethysmogram Respiratory-Induced Variations. <i>Frontiers in Physiology</i> , <b>2018</b> , 9, 948	4.6	27
277	Performance Assessment of Cross-Directional Control for Paper Machines. <i>IEEE Transactions on Control Systems Technology</i> , <b>2017</b> , 25, 208-221	4.8	4
276	A semi-adaptive control approach to closed-loop medication infusion. <i>International Journal of Adaptive Control and Signal Processing</i> , <b>2017</b> , 31, 240-254	2.8	9
275	In Response. Anesthesia and Analgesia, <b>2017</b> , 124, 1735-1736	3.9	
274	Detecting obstructive sleep apnea in children by self-affine visualization of oximetry. <i>Annual International Conference of the IEEE Engineering in Medicine and Biology Society IEEE Engineering in Medicine and Biology Society Annual International Conference</i> , <b>2017</b> , 2017, 3757-3760	0.9	1
273	Model-Plant Mismatch Detection with Support Vector Machines. IFAC-PapersOnLine, 2017, 50, 7993-799	<b>98</b> .7	2
272	A roadmap for the implementation of mHealth innovations for image-based diagnostic support in clinical and public-health settings: a focus on front-line health workers and health-system organizations. <i>Global Health Action</i> , <b>2017</b> , 10, 1340254	3	13
271	Medical mobile technologies - what is needed for a sustainable and scalable implementation on a global scale?. <i>Global Health Action</i> , <b>2017</b> , 10, 1344046	3	9
270	Closed-Loop Control of Total Intravenous Anesthesia During Significant Intraoperative Blood Loss: A Case Report. <i>A &amp; A Case Reports</i> , <b>2017</b> , 9, 239-243		3

#### (2015-2017)

269	A delayed functional observer/predictor with bounded-error for depth of hypnosis monitoring. Journal of Clinical Monitoring and Computing, <b>2017</b> , 31, 1043-1052	2	4
268	A Formally-Verified Safety System for Closed-Loop Anesthesia. <i>IFAC-PapersOnLine</i> , <b>2017</b> , 50, 4424-4429	0.7	7
267	Correntropy-Based Pulse Rate Variability Analysis in Children with Sleep Disordered Breathing. <i>Entropy</i> , <b>2017</b> , 19, 282	2.8	3
266	Model-invariant safety-preserving control <b>2016</b> ,		4
265	Identifying individual sleep apnea/hypoapnea epochs using smartphone-based pulse oximetry.  Annual International Conference of the IEEE Engineering in Medicine and Biology Society IEEE  Engineering in Medicine and Biology Society Annual International Conference, 2016, 2016, 3195-3198	0.9	12
264	Semi-adaptive feedback control of opioid infusion <b>2016</b> ,		2
263	Ultra-low Noise EEG at LSBB: New results. <i>E3S Web of Conferences</i> , <b>2016</b> , 12, 05003	0.5	1
262	A Procedural Electroencephalogram Simulator for Evaluation of Anesthesia Monitors. <i>Anesthesia and Analgesia</i> , <b>2016</b> , 123, 1136-1140	3.9	11
261	On the Existence and Design of Functional Observers for LTI Systems, with Application to User Modeling. <i>Asian Journal of Control</i> , <b>2016</b> , 18, 192-205	1.7	6
260	An Observer/Predictor-Based Model of the User for Attaining Situation Awareness. <i>IEEE Transactions on Human-Machine Systems</i> , <b>2016</b> , 46, 279-290	4.1	7
259	Evaluation of a Novel Mobile Exergame in a School-Based Environment. <i>Cyberpsychology, Behavior, and Social Networking</i> , <b>2016</b> , 19, 186-92	4.4	15
258	Evaluation of cardiac modulation in children in response to apnea/hypopnea using the Phone Oximeter(¶ <i>Physiological Measurement</i> , <b>2016</b> , 37, 187-202	2.9	16
257	Automatic tuning of robust constrained cross-direction controllers. <i>International Journal of Adaptive Control and Signal Processing</i> , <b>2016</b> , 30, 1550-1567	2.8	3
256	Respiratory rate and pulse oximetry derived information as predictors of hospital admission in young children in Bangladesh: a prospective observational study. <i>BMJ Open</i> , <b>2016</b> , 6, e011094	3	16
255	A synthesis method for automatic handling of inter-patient variability in closed-loop anesthesia <b>2016</b> ,		9
254	Non-invasive monitoring of spreading depression. <i>Neuroscience</i> , <b>2016</b> , 333, 1-12	3.9	8
253	Impact of model plant mismatch on performance of control systems: An application to paper machine control. <i>Control Engineering Practice</i> , <b>2015</b> , 43, 59-68	3.9	8
252	Closed-loop target-controlled infusion systems: stability and performance aspects. <i>Military Medicine</i> , <b>2015</b> , 180, 96-103	1.3	4

251	Variability in estimating shunt from single pulse oximetry measurements. <i>Physiological Measurement</i> , <b>2015</b> , 36, 967-81	2.9	4
250	A model-based approach to stability analysis of autonomic-cardiac regulation. <i>Computers in Biology and Medicine</i> , <b>2015</b> , 61, 119-26	7	5
249	Moving beyond silos: How do we provide distributed personalized medicine to pregnant women everywhere at scale? Insights from PRE-EMPT. <i>International Journal of Gynecology and Obstetrics</i> , <b>2015</b> , 131 Suppl 1, S10-5	4	8
248	Scalable Safety-Preserving Robust Control Synthesis for Continuous-Time Linear Systems. <i>IEEE Transactions on Automatic Control</i> , <b>2015</b> , 60, 3065-3070	5.9	18
247	Delay-incorporating observability and predictability analysis of safety-critical continuous-time systems. <i>IET Control Theory and Applications</i> , <b>2015</b> , 9, 1692-1699	2.5	4
246	Assessment of a Mobile Game ("MobileKids Monster Manor") to Promote Physical Activity Among Children. <i>Games for Health Journal</i> , <b>2015</b> , 4, 149-58	4.2	43
245	Identification of scalp EEG circadian variation using a novel correlation sum measure. <i>Journal of Neural Engineering</i> , <b>2015</b> , 12, 056004	5	1
244	Signal Processing and Automation in Anesthesia [Life Sciences]. <i>IEEE Signal Processing Magazine</i> , <b>2015</b> , 32, 138-144	9.4	2
243	Detecting model-plant mismatch without external excitation 2015,		1
242	Assessing the incremental value of blood oxygen saturation (SpO(2)) in the miniPIERS (Pre-eclampsia Integrated Estimate of RiSk) Risk Prediction Model. <i>Journal of Obstetrics and Gynaecology Canada</i> , <b>2015</b> , 37, 16-24	1.3	24
241	Moving-Horizon Predictive Input Design for Closed-Loop Identification. <i>IFAC-PapersOnLine</i> , <b>2015</b> , 48, 135-140	0.7	3
240	The Performance of a Mobile Phone Respiratory Rate Counter Compared to the WHO ARI Timer. <i>Journal of Healthcare Engineering</i> , <b>2015</b> , 6, 691-703	3.7	7
239	Development and Internal Validation of a Predictive Model Including Pulse Oximetry for Hospitalization of Under-Five Children in Bangladesh. <i>PLoS ONE</i> , <b>2015</b> , 10, e0143213	3.7	12
238	Estimation of respiratory rate from photoplethysmographic imaging videos compared to pulse oximetry. <i>IEEE Journal of Biomedical and Health Informatics</i> , <b>2015</b> , 19, 1331-8	7.2	27
237	Analysis of L1 adaptive state feedback control. Why does it approximate an implementable LTI controller?. <i>European Journal of Control</i> , <b>2015</b> , 23, 1-7	2.5	3
236	Cross-directional controller performance monitoring for paper machines <b>2015</b> ,		1
235	Estimating instantaneous respiratory rate from the photoplethysmogram. <i>Annual International Conference of the IEEE Engineering in Medicine and Biology Society IEEE Engineering in Medicine and Biology Society Annual International Conference</i> , <b>2015</b> , 2015, 6150-3	0.9	6
234	Automatic tuning of paper machines cross-direction controllers via linear matrix inequalities. Journal of Electrical Systems and Information Technology, 2015, 2, 283-295	2	4

#### (2014-2015)

233	Safety-preserving closed-loop control of anesthesia. <i>Annual International Conference of the IEEE Engineering in Medicine and Biology Society Annual International Conference</i> , <b>2015</b> , 2015, 454-7	0.9	3
232	Pulse oximetry recorded from the Phone Oximeter for detection of obstructive sleep apnea events with and without oxygen desaturation in children. Annual International Conference of the IEEE Engineering in Medicine and Biology Society Annual	0.9	16
231	Usability and Feasibility of PIERS on the Move: An mHealth App for Pre-Eclampsia Triage. <i>JMIR MHealth and UHealth</i> , <b>2015</b> , 3, e37	5.5	51
230	Design and Clinical Evaluation of Robust PID Control of Propofol Anesthesia in Children. <i>IEEE Transactions on Control Systems Technology</i> , <b>2014</b> , 22, 491-501	4.8	66
229	Noninvasive subject-specific monitoring of autonomic-cardiac regulation. <i>IEEE Transactions on Biomedical Engineering</i> , <b>2014</b> , 61, 1196-207	5	3
228	Noninvasive Optical Monitoring of Bladder Filling to Capacity Using a Wireless Near Infrared Spectroscopy Device. <i>IEEE Transactions on Biomedical Circuits and Systems</i> , <b>2014</b> , 8, 325-33	5.1	14
227	Improving the accuracy and efficiency of respiratory rate measurements in children using mobile devices. <i>PLoS ONE</i> , <b>2014</b> , 9, e99266	3.7	45
226	Development of a screening tool for sleep disordered breathing in children using the phone Oximeter []PLoS ONE, <b>2014</b> , 9, e112959	3.7	77
225	Preliminary results on quantification of Seismocardiogram morphological changes, using principal component analysis. Annual International Conference of the IEEE Engineering in Medicine and Biology Society IEEE Engineering in Medicine and Biology Society Annual International Conference, 2014,	0.9	1
224	2014, 6092-5 Sensitivity of MIMO controller performance to model-plant mismatch, with applications to paper machine control <b>2014</b> ,		2
223	Sharing Vital Signs between mobile phone applications. <i>Annual International Conference of the IEEE Engineering in Medicine and Biology Society IEEE Engineering in Medicine and Biology Society Annual International Conference</i> , <b>2014</b> , 2014, 3646-9	0.9	1
222	Respiratory rate assessment from photoplethysmographic imaging. <i>Annual International Conference of the IEEE Engineering in Medicine and Biology Society IEEE Engineering in Medicine and Biology Society Annual International Conference</i> , <b>2014</b> , 2014, 5397-400	0.9	4
221	Oxygen saturation resolution influences regularity measurements. <i>Annual International Conference of the IEEE Engineering in Medicine and Biology Society IEEE Engineering in Medicine and Biology Society Annual International Conference</i> , <b>2014</b> , 2014, 2257-60	0.9	3
220	Development of mHealth applications for pre-eclampsia triage. <i>IEEE Journal of Biomedical and Health Informatics</i> , <b>2014</b> , 18, 1857-64	7.2	55
219	Sensitivity of controller performance indices to model-plant mismatch: An application to paper machine control <b>2014</b> ,		3
218	Using machine-to-machine / Internet of ThingsItommunication to simplify medical device information exchange <b>2014</b> ,		3
217	Precordial vibrations provide noninvasive detection of early-stage hemorrhage. Shock, <b>2014</b> , 41, 91-6	3.4	37
216	Automated decomposition of needle EMG signal using STFT and wavelet transforms <b>2014</b> ,		2

215	Feedback control for clinicians. Journal of Clinical Monitoring and Computing, 2014, 28, 5-11	2	9
214	Estimating respiratory and heart rates from the correntropy spectral density of the photoplethysmogram. <i>PLoS ONE</i> , <b>2014</b> , 9, e86427	3.7	69
213	Decision Support and Closed-Loop Systems <b>2014</b> , 41-46		
212	Monitoring the EEG for Assessing Depth of Anesthesia <b>2014</b> , 255-260		1
211	Monitoring nociception during general anesthesia with cardiorespiratory coherence. <i>Journal of Clinical Monitoring and Computing</i> , <b>2013</b> , 27, 551-60	2	13
210	Multiparameter respiratory rate estimation from the photoplethysmogram. <i>IEEE Transactions on Biomedical Engineering</i> , <b>2013</b> , 60, 1946-53	5	226
209	Machine Fault Diagnosis Using Mutual Information and Informative Wavelet 2013, 183-192		
208	Robust closed-loop control of induction and maintenance of propofol anesthesia in children. <i>Paediatric Anaesthesia</i> , <b>2013</b> , 23, 712-9	1.8	61
207	Predictive optimal control for thermo-mechanical pulping processes with multi-stage low consistency refining. <i>Journal of Process Control</i> , <b>2013</b> , 23, 1001-1011	3.9	21
206	Quantification of the variability in response to propofol administration in children. <i>IEEE Transactions on Biomedical Engineering</i> , <b>2013</b> , 60, 2521-9	5	34
205	2013,		7
204	AWARE: A video monitoring library applied to the Air Traffic Control context 2013,		4
203	Modeling the User as an Observer to Determine Display Information Requirements 2013,		5
202	Individualized closed-loop control of propofol anesthesia: A preliminary study. <i>Biomedical Signal Processing and Control</i> , <b>2013</b> , 8, 500-508	4.9	63
201	Analyzing the resting state functional connectivity in the human language system using near infrared spectroscopy. <i>Frontiers in Human Neuroscience</i> , <b>2013</b> , 7, 921	3.3	28
200	Predicting epileptic seizures in scalp EEG based on a variational Bayesian Gaussian mixture model of zero-crossing intervals. <i>IEEE Transactions on Biomedical Engineering</i> , <b>2013</b> , 60, 1401-13	5	98
199	Lagrangian methods for approximating the viability kernel in high-dimensional systems. <i>Automatica</i> , <b>2013</b> , 49, 2017-2029	5.7	73
198	Experience report <b>2013</b> ,		12

197	Design and evaluation of a low-cost smartphone pulse oximeter. Sensors, 2013, 13, 16882-93	3.8	46
196	Closed-loop control of anesthesia: a primer for anesthesiologists. <i>Anesthesia and Analgesia</i> , <b>2013</b> , 117, 1130-8	3.9	60
195	Closed-loop fluid resuscitation: robustness against weight and cardiac contractility variations. <i>Anesthesia and Analgesia</i> , <b>2013</b> , 117, 1110-8	3.9	28
194	Real-time cardiorespiratory coherence is blind to changes in respiration during general anesthesia.  Annual International Conference of the IEEE Engineering in Medicine and Biology Society IEEE  Engineering in Medicine and Biology Society Annual International Conference, 2013, 2013, 5360-4	0.9	
193	Detection of the optimal region of interest for camera oximetry. <i>Annual International Conference of the IEEE Engineering in Medicine and Biology Society IEEE Engineering in Medicine and Biology Society Annual International Conference</i> , <b>2013</b> , 2013, 2263-6	0.9	7
192	Oxygen saturation in children with and without obstructive sleep apnea using the phone-oximeter.  Annual International Conference of the IEEE Engineering in Medicine and Biology Society IEEE  Engineering in Medicine and Biology Society Annual International Conference, 2013, 2013, 2531-4	0.9	15
191	Circadian variation of scalp EEG: a novel measure based on wavelet packet transform and differential entropy. Annual International Conference of the IEEE Engineering in Medicine and Biology Society IEEE Engineering in Medicine and Biology Society Annual International Conference, 2013,	0.9	1
190	2013, 6297-300 Changes in cardiac index and blood pressure on positioning children prone for scoliosis surgery.  Anaesthesia, 2013, 68, 742-6	6.6	16
189	Pulse rate variability compared with Heart Rate Variability in children with and without sleep disordered breathing. Annual International Conference of the IEEE Engineering in Medicine and Biology Society IEEE Engineering in Medicine and Biology Society Annual International Conference,	0.9	29
188	A novel approach to the design of an artificial bionic baroreflex. <i>Annual International Conference of the IEEE Engineering in Medicine and Biology Society IEEE Engineering in Medicine and Biology Society Annual International Conference</i> , <b>2013</b> , 2013, 3813-6	0.9	1
187	Recognition of correct finger placement for photoplethysmographic imaging. <i>Annual International Conference of the IEEE Engineering in Medicine and Biology Society IEEE Engineering in Medicine and Biology Society Annual International Conference</i> , <b>2013</b> , 2013, 7480-3	0.9	4
186	Ultra-low-cost clinical pulse oximetry. <i>Annual International Conference of the IEEE Engineering in Medicine and Biology Society IEEE Engineering in Medicine and Biology Society Annual International Conference</i> , <b>2013</b> , 2013, 2874-7	0.9	6
185	Experience report. ACM SIGPLAN Notices, 2013, 48, 357-362	0.2	5
184	An evaluation of an expert system for detecting critical events during anesthesia in a human patient simulator: a prospective randomized controlled study. <i>Anesthesia and Analgesia</i> , <b>2013</b> , 117, 380	)-919	14
183	Circadian variation of heart rate variability across sleep stages. <i>Sleep</i> , <b>2013</b> , 36, 1919-28	1.1	101
182	Circadian adaptation to night shift work influences sleep, performance, mood and the autonomic modulation of the heart. <i>PLoS ONE</i> , <b>2013</b> , 8, e70813	3.7	68
181	Photoplethysmogram Processing Using an Adaptive Single Frequency Phase Vocoder Algorithm. <i>Communications in Computer and Information Science</i> , <b>2013</b> , 31-42	0.3	1
180	Usability testing of a prototype Phone Oximeter with healthcare providers in high- and low-medical resource environments. <i>Anaesthesia</i> , <b>2012</b> , 67, 957-67	6.6	33

179	. IEEE Transactions on Systems, Man and Cybernetics, Part A: Systems and Humans, <b>2012</b> , 42, 685-706		14
178	A direct dynamic dose-response model of propofol for individualized anesthesia care. <i>IEEE Transactions on Biomedical Engineering</i> , <b>2012</b> , 59, 571-8	5	31
177	A monitor-decoupled pharmacodynamic model of propofol in children using state entropy as clinical endpoint. <i>IEEE Transactions on Biomedical Engineering</i> , <b>2012</b> , 59, 736-43	5	5
176	Closed-Loop Anesthesia in Children using a PID controller: A Pilot Study. <i>IFAC Postprint Volumes IPPV / International Federation of Automatic Control</i> , <b>2012</b> , 45, 317-322		8
175	Simulated mid-ranging control of propofol and remifentanil using EEG-measured hypnotic depth of anesthesia <b>2012</b> ,		5
174	Improving maternal and perinatal outcomes in the hypertensive disorders of pregnancy: a vision of a community-focused approach. <i>International Journal of Gynecology and Obstetrics</i> , <b>2012</b> , 119 Suppl 1, S30-4	4	13
173	Robust closed-loop control of hypnosis with propofol using WAVCNS index as the controlled variable. <i>Biomedical Signal Processing and Control</i> , <b>2012</b> , 7, 517-524	4.9	35
172	Wavelet-based motion artifact removal for functional near-infrared spectroscopy. <i>Physiological Measurement</i> , <b>2012</b> , 33, 259-70	2.9	275
171	System identification and closed-loop control of end-tidal CO2 in mechanically ventilated patients. <i>IEEE Transactions on Information Technology in Biomedicine</i> , <b>2012</b> , 16, 1176-84		7
170	A circadian rhythm in heart rate variability contributes to the increased cardiac sympathovagal response to awakening in the morning. <i>Chronobiology International</i> , <b>2012</b> , 29, 757-68	3.6	70
169	Detection of epileptic seizures in scalp electroencephalogram: an automated real-time wavelet-based approach. <i>Journal of Clinical Neurophysiology</i> , <b>2012</b> , 29, 1-16	2.2	14
168	Computing the viability kernel using maximal reachable sets <b>2012</b> ,		29
167	Adaptive pulse segmentation and artifact detection in photoplethysmography for mobile applications. <i>Annual International Conference of the IEEE Engineering in Medicine and Biology Society IEEE Engineering in Medicine and Biology Society Annual International Conference</i> , <b>2012</b> , 2012, 3131-4	0.9	45
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155	2012,		4	
154	The continual reachability set and its computation using maximal reachability techniques 2011,		14	
153	Reconstructing Paper Machine Sheet Process Data Variation Using Compressive Sensing. <i>IFAC Postprint Volumes IPPV / International Federation of Automatic Control</i> , <b>2011</b> , 44, 4266-4271			
152	Advanced Step Nonlinear Model Predictive Control for Two-stage Thermo Mechanical Pulping Processes*. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2011, 44, 3653-	-3658	1	
151	Two-stage vs mixed-effect approach to pharmacodynamic modeling of propofol in children using state entropy. <i>Paediatric Anaesthesia</i> , <b>2011</b> , 21, 691-8	1.8	9	
150	Exponential stabilisation of periodic orbits for running of a three-dimensional monopedal robot. <i>IET Control Theory and Applications</i> , <b>2011</b> , 5, 1304-1320	2.5	5	
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142	Direct estimation of residence time from input and output data. <i>Canadian Journal of Chemical Engineering</i> , <b>2011</b> , 89, 1502-1507	2.3	2
141	Automated Validation of Capillary Refill Time Measurements Using Photo-Plethysmogram from a Portable Device for Effective Triage in Children <b>2011</b> ,		2
140	Correlation of heart rate variability and circadian markers in humans. <i>Annual International Conference of the IEEE Engineering in Medicine and Biology Society IEEE Engineering in Medicine and Biology Society Annual International Conference</i> , <b>2011</b> , 2011, 681-2	0.9	24
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137	Nonholonomic motion planning based on optimal control for flight phases of planar bipedal running. <i>Electronics Letters</i> , <b>2011</b> , 47, 1120	1.1	0
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135	Individualized PID control of depth of anesthesia based on patient model identification during the induction phase of anesthesia <b>2011</b> ,		10
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116		5	<ul><li>137</li><li>5</li></ul>
	on wavelet packet transform. <i>IEEE Transactions on Biomedical Engineering</i> , <b>2010</b> , 57, 1639-51  A Cusum-based multilevel alerting method for physiological monitoring. <i>IEEE Transactions on</i>		5
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115	on wavelet packet transform. <i>IEEE Transactions on Biomedical Engineering</i> , <b>2010</b> , 57, 1639-51  A Cusum-based multilevel alerting method for physiological monitoring. <i>IEEE Transactions on Information Technology in Biomedicine</i> , <b>2010</b> , 14, 1046-52  Energy optimization in a pulp and paper mill cogeneration facility. <i>Applied Energy</i> , <b>2010</b> , 87, 3514-3525		5
115 114 113	on wavelet packet transform. <i>IEEE Transactions on Biomedical Engineering</i> , <b>2010</b> , 57, 1639-51  A Cusum-based multilevel alerting method for physiological monitoring. <i>IEEE Transactions on Information Technology in Biomedicine</i> , <b>2010</b> , 14, 1046-52  Energy optimization in a pulp and paper mill cogeneration facility. <i>Applied Energy</i> , <b>2010</b> , 87, 3514-3525  Closed-loop identification for model predictive control: Direct method <b>2009</b> ,  Clinical evaluation of algorithms for context-sensitive physiological monitoring in children. <i>British</i>	10.7	5 40 1
115 114 113	on wavelet packet transform. <i>IEEE Transactions on Biomedical Engineering</i> , <b>2010</b> , 57, 1639-51  A Cusum-based multilevel alerting method for physiological monitoring. <i>IEEE Transactions on Information Technology in Biomedicine</i> , <b>2010</b> , 14, 1046-52  Energy optimization in a pulp and paper mill cogeneration facility. <i>Applied Energy</i> , <b>2010</b> , 87, 3514-3525  Closed-loop identification for model predictive control: Direct method <b>2009</b> ,  Clinical evaluation of algorithms for context-sensitive physiological monitoring in children. <i>British Journal of Anaesthesia</i> , <b>2009</b> , 102, 686-91  Sensor fusion using a hybrid median filter for artifact removal in intraoperative heart rate	10.7	5 40 1
115 114 113 112	on wavelet packet transform. <i>IEEE Transactions on Biomedical Engineering</i> , <b>2010</b> , 57, 1639-51  A Cusum-based multilevel alerting method for physiological monitoring. <i>IEEE Transactions on Information Technology in Biomedicine</i> , <b>2010</b> , 14, 1046-52  Energy optimization in a pulp and paper mill cogeneration facility. <i>Applied Energy</i> , <b>2010</b> , 87, 3514-3525  Closed-loop identification for model predictive control: Direct method <b>2009</b> ,  Clinical evaluation of algorithms for context-sensitive physiological monitoring in children. <i>British Journal of Anaesthesia</i> , <b>2009</b> , 102, 686-91  Sensor fusion using a hybrid median filter for artifact removal in intraoperative heart rate monitoring. <i>Journal of Clinical Monitoring and Computing</i> , <b>2009</b> , 23, 75-83  Comparison between a dorsal and a belt tactile display prototype for decoding physiological events	10.7 5.4 2	5 40 1 12 13

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