Manuela Ferrario

List of Publications by Year
in descending order

86 papers	1,605 citations	394421 19 h-index	345221 36 g-index
95 all docs	95 docs citations	95 times ranked	2489 citing authors

#	Article	IF	Citations
1	Metabolites Concentration in Plasma and Heart Tissue in Relation to High Sensitive Cardiac Troponin T Level in Septic Shock Pigs. Metabolites, 2022, 12, 319.	2.9	0
2	Evaluation of autonomic modulation of lung function and heart rate in children with cystic fibrosis. Pediatric Pulmonology, 2021, 56, 120-128.	2.0	1
3	The autonomic nervous system in septic shock and its role as a future therapeutic target: a narrative review. Annals of Intensive Care, 2021, 11, 80.	4.6	33
4	Persistent hyperammonia and altered concentrations of urea cycle metabolites in a 5-day swine experiment of sepsis. Scientific Reports, 2021, 11, 18430.	3.3	4
5	Application of an Exploratory Knowledge-Discovery Pipeline Based on Machine Learning to Multi-Scale OMICS Data to Characterise Myocardial Injury in a Cohort of Patients with Septic Shock: An Observational Study. Journal of Clinical Medicine, 2021, 10, 4354.	2.4	3
6	Tachycardia control in septic shock with esmolol and ivabradine: a comparison on heart function. , 2020, 2020, 2756-2759.		1
7	Reducing tachycardia in septic shock patients: do esmolol and ivabradine have a chronotropic effect only?. , 2020, 2020, 382-385.		3
8	Vascular Decoupling in Septic Shock: The Combined Role of Autonomic Nervous System, Arterial Stiffness, and Peripheral Vascular Tone. Frontiers in Physiology, 2020, 11, 594.	2.8	17
9	The Systemic Alterations of Lipids, Alanine-Glucose Cycle and Inter-Organ Amino Acid Metabolism in Swine Model Confirms the Role of Liver in Early Phase of Septic Shock. Frontiers in Physiology, 2019, 10, 11.	2.8	15
10	A Mathematical Model of dP/dt Max for the Evaluation of the Dynamic Control of Heart Contractility in Septic Shock. IEEE Transactions on Biomedical Engineering, 2019, 66, 2719-2727.	4.2	6
11	An Innovative Approach for The Integration of Proteomics and Metabolomics Data In Severe Septic Shock Patients Stratified for Mortality. Scientific Reports, 2018, 8, 6681.	3.3	28
12	Baroreflex Sensitivity and Blood Pressure Variability can Help in Understanding the Different Response to Therapy During Acute Phase of Septic Shock. Shock, 2018, 50, 78-86.	2.1	17
13	Modeling physiological responses induced by an emotion recognition task using latent class mixed models. PLoS ONE, 2018, 13, e0207123.	2.5	3
14	Blood pressure variability, heart functionality, and left ventricular tissue alterations in a protocol of severe hemorrhagic shock and resuscitation. Journal of Applied Physiology, 2018, 125, 1011-1020.	2.5	10
15	Supplementation with QterÂ® and Creatine improves functional performance in COPD patients on long term oxygen therapy. Respiratory Medicine, 2018, 142, 86-93.	2.9	28
16	Late Breaking Abstract - QterÂ® and Creatine improve functional performance in COPD patients on long-term oxygen therapy. , 2018, , .		0
17	Analysis of metabolomic data: tools, current strategies and future challenges for omics data integration. Briefings in Bioinformatics, 2017, 18, bbw031.	6.5	121
18	Heart period and blood pressure characteristics in splanchnic arterial occlusion shock-induced collapse. Journal of Clinical Monitoring and Computing, 2017, 31, 167-175.	1.6	7

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19	Correlation of pre‐operative plasma protein concentrations in cardiac surgery patients with bleeding outcomes using a targeted quantitative proteomics approach. Proteomics - Clinical Applications, 2017, 11, 1600175.	1.6	5
20	Hemorrhage Prediction Models in Surgical Intensive Care: Bedside Monitoring Data Adds Information to Lab Values. IEEE Journal of Biomedical and Health Informatics, 2017, 21, 1703-1710.	6.3	13
21	The possible role of the vagal nervous system in the recovery of the blood pressure control after cardiac arrest: a porcine model study. Physiological Measurement, 2017, 38, 63-76.	2.1	4
22	The EU ShockOmics Project International Workshop at ICCAI'17. Journal of Critical Care, 2017, 42, 375-376.	2.2	2
23	Complex and Nonlinear Analysis of Heart Rate Variability in the Assessment of Fetal and Neonatal Wellbeing. , 2017, , 427-450.		4
24	Characterization of Brain–Heart Interactions in a Rodent Model of Sepsis. Molecular Neurobiology, 2017, 54, 3745-3752.	4.0	8
25	Characterization of a metabolomic profile associated with responsiveness to therapy in the acute phase of septic shock. Scientific Reports, 2017, 7, 9748.	3.3	59
26	Feasibility study for the assessment of cardio-respiratory coupling in newborn infants. , 2016, 2016, 5509-5512.		6
27	Mortality prediction in patients with severe septic shock: a pilot study using a target metabolomics approach. Scientific Reports, 2016, 6, 20391.	3.3	126
28	ShockOmics: multiscale approach to the identification of molecular biomarkers in acute heart failure induced by shock. Scandinavian Journal of Trauma, Resuscitation and Emergency Medicine, 2016, 24, 9.	2.6	20
29	A review of methods for the signal quality assessment to improve reliability of heart rate and blood pressures derived parameters. Medical and Biological Engineering and Computing, 2016, 54, 1025-1035.	2.8	36
30	The Forgotten Role of Central Volume in Low Frequency Oscillations of Heart Rate Variability. PLoS ONE, 2015, 10, e0120167.	2.5	18
31	Mortality Prediction Model of Septic Shock Patients Based on Routinely Recorded Data. Computational and Mathematical Methods in Medicine, 2015, 2015, 1-7.	1.3	16
32	Non-Linear Heart Rate Variability Indices in the Frequent Hemodialysis Network Trials of Chronic Hemodialysis Patients. Blood Purification, 2015, 40, 99-108.	1.8	8
33	Classification of cardiac rhythm using heart rate dynamical measures: validation in MIT–BIH databases. Journal of Electrocardiology, 2015, 48, 943-946.	0.9	18
34	Heart rate dynamics distinguish among atrial fibrillation, normal sinus rhythm and sinus rhythm with frequent ectopy. Physiological Measurement, 2015, 36, 1873-1888.	2.1	87
35	Respiration in cardiovascular regulation models: Signal or confounding factor? A review. , 2014, , .		0
36	Classification of cardiac rhythm based on heart rate dynamics. , 2014, , .		3

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37	Application of dynamical analyses of heart rate to rhythm classification and prognosis. , 2014, 2014, 1723-6.		0
38	Heart rate dynamics predict 2-year mortality risk in ambulatory patients undergoing Holter monitoring. , 2014, , .		0
39	Fluid responsiveness in liver surgery: comparisons of different indices and approaches. Journal of Computational Surgery, 2014, 1, .	0.6	3
40	Effects of fluid overload on heart rate variability in chronic kidney disease patients on hemodialysis. BMC Nephrology, 2014, 15, 26.	1.8	35
41	Is there a chronic sleep stage-dependent linear and nonlinear cardiac autonomic impairment in obstructive sleep apnea?. Sleep and Breathing, 2014, 18, 403-409.	1.7	21
42	Baroreflex sensitivity variations in response to propofol anesthesia: comparison between normotensive and hypertensive patients. Journal of Clinical Monitoring and Computing, 2013, 27, 417-426.	1.6	24
43	Artificial intelligence models to stratify cardiovascular risk in incident hemodialysis patients. Expert Systems With Applications, 2013, 40, 4679-4686.	7.6	25
44	Short-term variability of blood pressure: effects of lower-body negative pressure and long-duration bed rest. American Journal of Physiology - Regulatory Integrative and Comparative Physiology, 2012, 303, R77-R85.	1.8	13
45	Predictive modeling of cardiovascular complications in incident hemodialysis patients. , 2012, 2012, 3943-6.		2
46	Effects of propofol anesthesia induction on the relationship between arterial blood pressure and heart rate. , 2012, 2012, 2835-8.		4
47	Heart rate variability in children with cyanotic and acyanotic congenital heart disease: Analysis by spectral and non linear indices. , 2012, 2012, 4189-92.		12
48	Blood pressure variability and cardiovascular autonomic control during hemodialysis in peripheral vascular disease patients. Physiological Measurement, 2012, 33, 667-678.	2.1	9
49	Mining Medical Data to Develop Clinical Decision Making Tools in Hemodialysis. , 2012, , .		2
50	Comparisons of predictors of fluid responsiveness in major surgery. , 2012, 2012, 3128-30.		1
51	Heart Rate Variability Analysis for the Monitoring of Fetal Distress and Neonatal Critical Care. , 2012, , 113-136.		0
52	Body Composition and Heart Rate Variability to Achieve Dry Weight and Tolerance. Contributions To Nephrology, 2011, 171, 181-186.	1.1	4
53	Telefetalcare: A first prototype of a wearable fetal electrocardiograph. , 2011, 2011, 6899-902.		17
54	Estimation of baroreflex sensitivity during anesthesia induction with propofol. , 2011, 2011, 3788-91.		1

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55	Alteration of autonomic blood pressure control during hemodialysis in peripheral vascular disease patients. , 2011, 2011, 5511-4.		0
56	System identification of baroreflex response to mild lower body negative pressure. , 2011, 2011, 2550-3.		0
57	Advances in monitoring cardiovascular signals. Contribution of nonlinear signal processing. , 2011, 2011, 6568-71.		7
58	Arterial blood pressure regulation following aorta clamping and declamping during surgery. , 2011, 2011, 8428-31.		0
59	Effects of Dialysate Glucose Concentration on Heart Rate Variability in Chronic Hemodialysis Patients: Results of a Prospective Randomized Trial. Kidney and Blood Pressure Research, 2011, 34, 334-343.	2.0	12
60	Mining Medical Data to Develop Clinical Decision Making Tools in Hemodialysis. International Journal of Knowledge Discovery in Bioinformatics, 2011, 2, 1-17.	0.8	0
61	Long-term Correlations and Complexity Analysis of the Heart Rate Variability Signal during Sleep. Methods of Information in Medicine, 2010, 49, 479-483.	1.2	17
62	Relative Blood Volume Monitoring during hemodialysis in end stage renal disease patients. , 2010, 2010, 5282-5.		2
63	Study of the autonomic response in hemodialysis patients with different fluid overload levels. , 2010, 2010, 3796-9.		2
64	Prototype of a wearable system for remote fetal monitoring during pregnancy. , 2010, 2010, 5815-8.		23
65	Motor variability in sports: A non-linear analysis of race walking. Journal of Sports Sciences, 2010, 28, 1327-1336.	2.0	62
66	Intraoperative haemodynamic monitoring: A pilot study on integrated data collection, processing and modelling for extracting vital signs and beyond. , 2010, , .		4
67	Identification of vascular responses to exercise and orthostatic stress in bed rest-induced cardiovascular deconditioning. , 2009, 2009, 5332-5.		2
68	Multiparameter analysis of heart rate variability signal for the investigation of high risk fetuses. , 2009, 2009, 4662-5.		10
69	Complexity analysis of the fetal heart rate variability: early identification of severe intrauterine growth-restricted fetuses. Medical and Biological Engineering and Computing, 2009, 47, 911-919.	2.8	86
70	The Fetal Heart Rate Variability due to vibro-acustic stimulation: a complexity analysis. IFMBE Proceedings, 2009, , 1353-1356.	0.3	1
71	A blind method for the estimation of the Hurst exponent in time series: Theory and application. Chaos, 2008, 18, 033126.	2.5	20
72	Long-term invariant parameters obtained from 24-h Holter recordings: A comparison between different analysis techniques. Chaos, 2007, 17, 015108.	2.5	40

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73	Estimation of long-term correlations from Fetal Heart Rate variability signal for the identification of pathological fetuses. Annual International Conference of the IEEE Engineering in Medicine and Biology Society, 2007, 2007, 295-8.	0.5	5
74	Comparison between Fetal Heart Rate Standard Parameters and Complexity Indexes for the Identification of Severe Intrauterine Growth Restriction. Methods of Information in Medicine, 2007, 46, 186-190.	1.2	38
75	Nonlinear Indices of Heart Rate Variability in Chronic Heart Failure Patients: Redundancy and Comparative Clinical Value. Journal of Cardiovascular Electrophysiology, 2007, 18, 425-433.	1.7	121
76	2CTG2: A new system for the antepartum analysis of fetal heart rate. , 2007, , 781-784.		12
77	Self-similarity behavior characterization of Fetal Heart Rate signal in healthy and Intrauterine Grow Retardated fetuses. , 2006, 2006, 6157-60.		4
78	Comparison of Entropy-Based Regularity Estimators: Application to the Fetal Heart Rate Signal for the Identification of Fetal Distress. IEEE Transactions on Biomedical Engineering, 2006, 53, 119-125.	4.2	152
79	New indexes from the Fetal Heart Rate analysis for the identification of severe intra uterine growth restricted fetuses. , 2006, 2006, 1458-61.		6
80	Clinical correlates of non-linear indices of heart rate variability in chronic heart failure patients. Biomedizinische Technik, 2006, 51, 220-223.	0.8	14
81	Nonlinear analysis of Heart Rate Variability signal for the characterization of Cardiac Heart Failure patients. , 2006, 2006, 3431-4.		21
82	New indexes from the Fetal Heart Rate analysis for the identification of severe intra uterine growth restricted fetuses. Annual International Conference of the IEEE Engineering in Medicine and Biology Society, 2006, , .	0.5	0
83	Analysis of echographic and heart rate time and frequency domain parameters for the antepartun fetal surveillance. , 2005, , .		3
84	Linear and non-linear indices of heart rate variability in chronic heart failure: mutual interrelationships and prognostic value. , 2005, , .		4
85	Complexity analysis of the fetal heart rate for the identification of pathology in fetuses. , 2005, , .		12
86	Complexity analysis of 24 hours heart rate variability time series. , 2004, 2004, 3956-9.		14