

INFORMAZIONI PERSONALI

Beatrice De Maria



Sesso Femmina | Data di nascita [REDACTED] | Nazionalità Italiana

TITOLO DI STUDIO

Ingegnere biomedico

ESPERIENZE PROFESSIONALI

Settembre 2018 – ad oggi

Responsabile del Laboratorio di Bioingegneria di IRCCS Istituti Clinici Scientifici Maugeri, sedi di Milano via Camaldoli e di Lissone

Agosto 2015 – agosto 2018

Borsista di AriSLA, Fondazione Italiana di Ricerca per la Sclerosi Laterale Amiotrofica per lo svolgimento del progetto CARDINALS (Studio della regolazione nervosa cardiovascolare nella SLA), presso IRCCS Istituti Clinici Scientifici Maugeri, Milano.

Agosto 2014 – agosto 2018

Attività di ricerca in qualità di borsista bioingegnere presso Istituti Clinici Scientifici Maugeri di Milano, via Camaldoli

Maggio 2014 – luglio 2014

Osservatore presso Istituti Clinici Scientifici Maugeri di Milano, via Camaldoli

ISTRUZIONE E FORMAZIONE

Dicembre 2018

DOTTORATO DI RICERCA IN BIOINGEGNERIA presso il Politecnico di Milano, con tesi "Asymmetry of cardiac and sympathetic baroreflex in healthy subjects and in amyotrophic lateral sclerosis patients"

Aprile 2014

LAUREA MAGISTRALE IN INGEGNERIA BIOMEDICA presso il Politecnico di Milano con tesi "Effetto della stimolazione e dell'inibizione simpatica sulla variabilità del periodo cardiaco e dell'intervallo QT nell'uomo e in animali da laboratorio", effettuata in collaborazione con il Labs dell'Istituto Ortopedico Galeazzi di Milano, coordinato dal Prof. Alberto Porta della Facoltà di Medicina dell'Università degli Studi di Milano, votazione 108/110

Febbraio 2012

LAUREA IN INGEGNERIA BIOMEDICA presso il Politecnico di Milano con tesi "Caratterizzazione meccanica di gel per protesi mammarie", votazione 91/110

Luglio 2008

DIPLOMA DI LICEO LINGUISTICO presso l'Istituto Magistrale Statale "Teresa Ciceri" di Como con votazione 91/100

COMPETENZE PERSONALI

LINGUA MADRE Italiano

ALTRE LINGUE

	COMPRESIONE		PARLATO		PRODUZIONE SCRITTA
	ASCOLTO	LETTURA	INTERAZIONE	PRODUZIONE ORALE	
Inglese	OTTIMO	OTTIMO	BUONO	OTTIMO	BUONO
Francese	OTTIMO	OTTIMO	BUONO	OTTIMO	BUONO
Tedesco	SUFFICIENTE	SUFFICIENTE	SUFFICIENTE	SUFFICIENTE	SUFFICIENTE

CERTIFICAZIONI DI LINGUA OTTENUTE

- Inglese: TOEIC, livello europeo C1
- Francese: DELF, livello europeo B2
- Tedesco: ZERTIFIKAT DEUTSCH, livello europeo B1

COMPETENZE COMUNICATIVE

Ottime capacità di comunicazione e di interazione, consolidate nelle presentazioni dei risultati di ricerca a congressi sia nazionali che internazionali e durante le lezioni a studenti universitari

COMPETENZE ORGANIZZATIVE E GESTIONALI

- Ottime capacità di lavoro di gruppo, finalizzate al raggiungimento di obiettivi collettivi e al rispetto delle scadenze
- Ottime capacità di adattamento e di condivisione degli spazi
- Ottime capacità organizzative e di coordinamento tra varie figure professionali

COMPETENZE INFORMATICHE

- Ottima padronanza nell'utilizzo degli strumenti Microsoft Office, in particolare Word, Excel e PowerPoint
- Buone capacità nell'utilizzo di software di calcolo (ad esempio Matlab) e di software per l'analisi statistica dei dati.
- Sufficienti capacità di programmazione in C++

ALTRE COMPETENZE

Lo sviluppo del progetto di tesi specialistica e le recenti attività di ricerca mi hanno permesso di maturare conoscenze nell'ambito dell'analisi dei segnali biomedici, in particolar modo cardiovascolari. Nella mia attuale posizione lavorativa mi occupo anche di raccolta dati, organizzazione di database, analisi statistica dei risultati e preparazione degli articoli scientifici.

PATENTE DI GUIDA Patente B

ULTERIORI INFORMAZIONI

PUBBLICAZIONI SCIENTIFICHE Elenco dettagliato in allegato

H-INDEX 17 (Fonte SCOPUS)

PREMI

- AAS-Lundbeck travel fellowship award – 27th International Conference of the American Autonomic Society – San Diego – California - 2-5 Novembre 2017
- Finalist of the Rosanna Degani Young Investigator Award competition – Computing in Cardiology – Rennes – Francia – Settembre 2017
- Semi-finalist of the Rosanna Degani Young Investigators' Award competition - 46th Computing in Cardiology Conference (CinC), Singapore, 13-16 settembre 2019
- Mortara Fellow for the Computing in Cardiology Meeting - 46th Computing in Cardiology Conference (CinC), Singapore, 13-16 settembre 2019
- Premio per tesi di dottorato sulla sclerosi laterale amiotrofica – V edizione PriSLA - associazione "Io corro con Giovanni" – Premiazione nell'ambito del meeting Focus on heterogeneity – Istituto di ricerche farmacologiche Mario Negri, 4-5 luglio 2019, Milano
- Best Online Poster Presentation Award - 47th Computing in Cardiology Conference (CinC), Rimini, Italia, 13-16 settembre 2020

DATI PERSONALI

Autorizzo il trattamento dei miei dati personali ai sensi del Decreto Legislativo 30 giugno 2003, n. 196
"Codice in materia di protezione dei dati personali"

Milano, 12.06.2023

Dr. Beatrice De Maria

Elenco pubblicazioni De Maria Beatrice

1. Bari et al., Entropy, 2014
Bari V, Marchi A, **De Maria B**, Girardengo G, George AL, Jr, Brink PA, Cerutti S, Crotti L, Schwartz PJ, Porta A. Low-Pass Filtering Approach via Empirical Mode Decomposition Improves Short-Scale Entropy-Based Complexity Estimation of QT Interval Variability in Long QT Syndrome Type 1 Patients. *Entropy*. 2014; 16(9):4839-4854
2. Dalla Vecchia et al., Physiological Measurement, 2015
L. Dalla Vecchia, B. De Maria, K. Marinou, R. Sideri, A. Lucini, A. Porta and G. Mora, "Cardiovascular neural regulation is impaired in amyotrophic lateral sclerosis patients. A study by spectral and complexity analysis of cardiovascular oscillations," *Physiol. Meas.*, vol. 36, (4), pp. 659-670, Apr, 2015
3. Porta et al., PlosOne, 2015
A. Porta, L. Faes, G. Nollo, V. Bari, A. Marchi, B. De Maria, A. C. Takahashi and A. M. Catai, "Conditional Self-Entropy and Conditional Joint Transfer Entropy in Heart Period Variability during Graded Postural Challenge," *PLoS One*, vol. 10, (7), pp. e0132851, Jul 15, 2015.
4. Porta et al., Physiological Measurement, 2015
A. Porta, V. Bari, A. Marchi, B. De Maria, P. Castiglioni, M. di Rienzo, S. Guzzetti, A. Cividjian and L. Quintin, "Limits of permutation-based entropies in assessing complexity of short heart period variability," *Physiol. Meas.*, vol. 36, (4), pp. 755-765, Apr, 2015.
5. Porta et al., Frontiers in Physiology, 2015 a
A. Porta, V. Bari, A. Marchi, B. De Maria, D. Cysarz, P. Van Leeuwen, A. C. Takahashi, A. M. Catai and T. Gneccchi-Ruscone, "Complexity analyses show two distinct types of nonlinear dynamics in short heart period variability recordings," *Front. Physiol.*, vol. 6, pp. 71, Mar 10, 2015.
6. Porta et al., Frontiers in Physiology, 2015 b
A. Porta, L. Faes, A. Marchi, V. Bari, B. De Maria, S. Guzzetti, R. Colombo and F. Raimondi, "Disentangling cardiovascular control mechanisms during head-down tilt via joint transfer entropy and self-entropy decompositions," *Front. Physiol.*, vol. 6, pp. 301, Oct 27, 2015.
7. Bari et al., Entropy, 2015
Bari V., Girardengo G., Marchi A., De Maria B., Brink P.A., Crotti L., Schwartz P.J., Porta A., "A Refined Multiscale Self-Entropy Approach for the Assessment of Cardiac Control Complexity: Application to Long QT Syndrome Type 1 Patients", *Entropy*, 17(11), 7768-7785, 2015
8. Porta et al., Physiol Meas, 2016
A. Porta, V. Bari, A. Marchi, B. De Maria, A. C. Takahashi, S. Guzzetti, R. Colombo, A. M. Catai and F. Raimondi, "Effect of variations of the complexity of the target variable on the assessment of Wiener-Granger causality in cardiovascular control studies," *Physiol. Meas.*, vol. 37, (2), pp. 276-290, Feb, 2016
9. Marchi et al., Am J Physiol, 2016
A. Marchi, V. Bari, B. De Maria, M. Esler, E. Lambert, M. Baumert and A. Porta, "Calibrated variability of muscle sympathetic nerve activity during graded head-up tilt in humans and its link with noradrenaline data and cardiovascular rhythms," *Am. J. Physiol. Regul. Integr. Comp. Physiol.*, vol. 310, (11), pp. R1134-43, Jun 1, 2016.
10. Marchi et al., Frontiers in Physiology, 2016
A. Marchi, V. Bari, B. De Maria, M. Esler, E. Lambert, M. Baumert and A. Porta, "Simultaneous Characterization of Sympathetic and Cardiac Arms of the Baroreflex through Sequence Techniques during Incremental Head-Up Tilt," *Front. Physiol.*, vol. 7, pp. 438, Sep 29, 2016.
11. Bari et al., Philos Trans A Math Phys Eng Sci, 2016
V. Bari, A. Marchi, B. De Maria, G. Rossato, G. Nollo, L. Faes and A. Porta, "Nonlinear effects of respiration on the crosstalk between cardiovascular and cerebrovascular control systems," *Philos. Trans. A. Math. Phys. Eng. Sci.*, vol. 374, (2067), pp. 10.1098/rsta.2015.0179, May 13, 2016.

12. Porta et al., IEEE Trans Biomed Eng, 2017
A. Porta, B. De Maria, V. Bari, A. Marchi and L. Faes, "Are Nonlinear Model-Free Conditional Entropy Approaches for the Assessment of Cardiac Control Complexity Superior to the Linear Model-Based One?" *IEEE Trans. Biomed. Eng.*, vol. 64, (6), pp. 1287-1296, Jun, 2017.
13. Mazzucco et al., Physiological Measurement, 2017
C. E. Mazzucco, A. Marchi, V. Bari, B. De Maria, S. Guzzetti, F. Raimondi, E. Catena, D. Ottolina, C. Amadio, S. Cravero, T. Fossali, R. Colombo and A. Porta, "Mechanical ventilatory modes and cardioventilatory phase synchronization in acute respiratory failure patients," *Physiol. Meas.*, vol. 38, (5), pp. 895-911, May, 2017.
14. Porta et al., Physiological Measurement, 2017
A. Porta, V. Bari, B. De Maria, N. M. Perseguini, J. Milan, P. Rehder-Santos, V. Minatel, A. C. M. Takahashi and A. M. Catai, "Assessing the evolution of redundancy/synergy of spontaneous variability regulation with age," *Physiol. Meas.*, vol. 38, (5), pp. 940-958, May, 2017.
15. Bari et al., Physiological Measurement, 2017
V. Bari, B. De Maria, C. E. Mazzucco, G. Rossato, D. Tonon, G. Nollo, L. Faes and A. Porta, "Cerebrovascular and cardiovascular variability interactions investigated through conditional joint transfer entropy in subjects prone to postural syncope," *Physiol. Meas.*, vol. 38, (5), pp. 976-991, May, 2017.
16. Porta et al., IEEE Trans Biomed Eng, 2018
A. Porta, V. Bari, B. De Maria, A. C. M. Takahashi, S. Guzzetti, R. Colombo, A. M. Catai, F. Raimondi and L. Faes, "Quantifying Net Synergy/Redundancy of Spontaneous Variability Regulation via Predictability and Transfer Entropy Decomposition Frameworks," *IEEE Trans. Biomed. Eng.*, vol. 64, (11), pp. 2628-2638, Nov, 2017.
17. Porta et al., Physiological Measurement, 2017
A. Porta, V. Bari, B. De Maria and M. Baumert, "A network physiology approach to the assessment of the link between sinoatrial and ventricular cardiac controls," *Physiol. Meas.*, vol. 38, (7), pp. 1472-1489, Jun 27, 2017.
18. Pinna et al., J Hypertension, 2017
G. D. Pinna, A. Porta, R. Maestri, B. De Maria, L. A. Dalla Vecchia and M. T. La Rovere, "Different estimation methods of spontaneous baroreflex sensitivity have different predictive value in heart failure patients," *J. Hypertens.*, vol. 35, (8), pp. 1666-1675, Aug, 2017.
19. Porta et al., Philos Trans A Math Phys Eng Sci, 2017
A. Porta, A. Marchi, V. Bari, B. De Maria, M. Esler, E. Lambert and M. Baumert, "Assessing the strength of cardiac and sympathetic baroreflex controls via transfer entropy during orthostatic challenge," *Philos. Trans. A. Math. Phys. Eng. Sci.*, vol. 375, (2096), pp. 10.1098/rsta.2016.0290, Jun 28, 2017.
20. Porta et al., Chaos, 2017
A. Porta, V. Bari, G. Ranuzzi, B. De Maria and G. Baselli, "Assessing multiscale complexity of short heart rate variability series through a model-based linear approach," *Chaos*, vol. 27, (9), pp. 093901, Sep, 2017.
21. Bari et al., Int J Cardiol, 2018
V. Bari, M. Ranucci, B. De Maria, B. Cairo, V. Pistuddi and A. Porta, "Model-based directional analysis of cardiovascular variability identifies patients developing atrial fibrillation after coronary artery bypass grafting," *Int. J. Cardiol.*, vol. 258, pp. 97-102, May 1, 2018.
22. Porta et al., Scientific Reports, 2018
A. Porta, R. Colombo, A. Marchi, V. Bari, B. De Maria, G. Ranuzzi, S. Guzzetti, T. Fossali and F. Raimondi, "Association between autonomic control indexes and mortality in subjects admitted to intensive care unit," *Sci. Rep.*, vol. 8, (1), pp. 3486-018-21888-8, Feb 22, 2018.
23. De Maria et al., MBEC, 2018

- B. De Maria, V. Bari, M. Ranucci, V. Pistuddi, G. Ranuzzi, A. C. M. Takahashi, A. M. Catai, L. Dalla Vecchia, S. Cerutti and A. Porta, "Separating arterial pressure increases and decreases in assessing cardiac baroreflex sensitivity via sequence and bivariate phase-rectified signal averaging techniques," *Med. Biol. Eng. Comput.*, vol. 56, (7), pp. 1241-1252, Jul, 2018.
24. [Porta et al., Frontiers in Physiology, 2018](#)
A. Porta, V. Bari, B. Maria, B. Cairo, E. Vaini, M. Malacarne, M. Pagani and D. Lucini, "Peripheral Resistance Baroreflex During Incremental Bicycle Ergometer Exercise: Characterization and Correlation With Cardiac Baroreflex," *Front. Physiol.*, vol. 9, pp. 688, Jun 5, 2018.
 25. [Porta et al., Physiological Measurement, 2019](#)
A. Porta, V. Bari, B. De Maria, B. Cairo, E. Vaini, N. M. Perseguini, J. Milan-Mattos, P. Rehder-Santos, V. Minatel, A. C. M. Takahashi and A. M. Catai, "Comparison between probabilistic and Wiener-Granger causality in assessing modifications of the cardiac baroreflex control with age," *Physiol. Meas.*, vol. 39, (10), pp. 104004-6579/aae0ec, Oct 22, 2018.
 26. [Porta et al., Entropy, 2019](#)
Porta A., Maestri R., Bari V., De Maria B., Cairo B., Vaini E., La Rovere M.T., Pinna G.D., "Paced Breathing increases the Redundancy of Cardiorespiratory Control in Healthy Individuals and Chronic Heart Failure Patients", *Entropy*, 20(12), 949, 2018
 27. [Galizia et al., European Journal of Physical and Rehabilitation Medicine, 2019](#)
G. Galizia, G. Balestrieri, B. De Maria, C. Lastoria, M. Monelli, S. Salvaderi, G. Romanelli and L. A. Dalla Vecchia, "Role of rehabilitation in the elderly after an acute event: insights from a real-life prospective study in the subacute care setting," *Eur. J. Phys. Rehabil. Med.*, vol. 54, (6), pp. 934-938, Dec, 2018.
 28. [Porta et al., IEEE Trans Biomed Eng, 2019](#)
A. Porta, V. Bari, B. De Maria, B. Cairo, E. Vaini, M. Malacarne, M. Pagani and D. Lucini, "On the Relevance of Computing a Local Version of Sample Entropy in Cardiovascular Control Analysis," *IEEE Trans. Biomed. Eng.*, vol. 66, (3), pp. 623-631, Mar, 2019.
 29. [Monelli et al., Vascular Health and Risk Management, 2019](#)
M. Monelli, M. Molteni, G. Casseti, L. Bagnara, V. De Grazia, L. Zingale, F. Zilli, M. Bussotti, P. Totaro, B. De Maria and L. A. Dalla Vecchia, "Non-vitamin K oral anticoagulant use in the elderly: a prospective real-world study - data from the REGIstry of patients on Non-vitamin K oral Anticoagulants (REGINA)," *Vasc. Health. Risk Manag.*, vol. 15, pp. 19-25, Feb 14, 2019.
 30. [De Maria et al., Frontiers in Physiology, 2019](#)
B. De Maria, V. Bari, B. Cairo, E. Vaini, M. Esler, E. Lambert, M. Baumert, S. Cerutti, L. Dalla Vecchia and A. Porta, "Characterization of the Asymmetry of the Cardiac and Sympathetic Arms of the Baroreflex From Spontaneous Variability During Incremental Head-Up Tilt," *Front. Physiol.*, vol. 10, pp. 342, Apr 2, 2019.
 31. [de Oliveira Gois et al., MBEC, 2019 \[28\]](#)
M. de Oliveira Gois, A. Porta, R. P. Simoes, V. C. Kunz, P. Driusso, H. S. Hirakawa, B. De Maria and A. M. Catai, "The additional impact of type 2 diabetes on baroreflex sensitivity of coronary artery disease patients might be undetectable in presence of deterioration of mechanical vascular properties," *Med. Biol. Eng. Comput.*, Mar 7, 2019.
 32. [Bari et al., Physiological Measurement, 2019 \[29\]](#)
V. Bari, E. Vaini, V. Pistuddi, A. Fantinato, B. Cairo, B. De Maria, M. Ranucci and A. Porta, "Short-term multiscale complexity analysis of cardiovascular variability improves low cardiac output syndrome risk stratification after coronary artery bypass grafting," *Physiol. Meas.*, vol. 40, (4), pp. 044001-6579/ab12f0, Apr 26, 2019.
 33. [Cairo et al., Physiological Measurement, 2019 \[30\]](#)
B. Cairo, B. De Maria, V. Bari, E. Vaini, K. Heusser, J. Tank, J. Jordan, F. Barbic, R. Furlan, K. Marinou, L. Dalla Vecchia and A. Porta, "Information-domain method for the quantification of the complexity

- of the sympathetic baroreflex regulation in healthy subjects and amyotrophic lateral sclerosis patients," *Physiol. Meas.*, vol. 40, (3), pp. 034004-6579/ab0d4b, Apr 4, 2019.
34. [Dalla Vecchia et al., PlosOne, 2019 \[31\]](#)
L. A. Dalla Vecchia, F. Barbic, B. De Maria, D. Cozzolino, R. Gatti, F. Dipaola, E. Brunetta, A. R. Zamuner, A. Porta and R. Furlan, "Can strenuous exercise harm the heart? Insights from a study of cardiovascular neural regulation in amateur triathletes," *PLoS One*, vol. 14, (5), pp. e0216567, May 7, 2019.
 35. [Vaini et al., Physiological Measurement, 2019](#)
E. Vaini, V. Bari, A. Fantinato, V. Pistuddi, B. Cairo, B. De Maria, M. Ranucci and A. Porta, "Causality analysis reveals the link between cerebrovascular control and acute kidney dysfunction after coronary artery bypass grafting," *Physiol. Meas.*, vol. 40, (6), pp. 064006-6579/ab21b1, July 01, 2019.
 36. [De Maria et al., Am J Physiol, 2019](#)
B. De Maria, V. Bari, B. Cairo, E. Vaini, R. Martins de Abreu, N. M. Perseguini, J. Milan-Mattos, P. Rehder-Santos, V. Minatel, A. M. Catai, L. A. Dalla Vecchia and A. Porta, "Cardiac baroreflex hysteresis is one of the determinants of the heart period variability asymmetry," *Am. J. Physiol. Regul. Integr. Comp. Physiol.*, vol. 317, (4), pp. R539-R551, Oct 1, 2019.
 37. [De Maria et al., Frontiers in Physiology, 2019](#)
B. De Maria, V. Bari, A. Sgoifo, L. Carnevali, B. Cairo, E. Vaini, A. M. Catai, A. C. de Medeiros Takahashi, L. A. Dalla Vecchia and A. Porta, "Concomitant Evaluation of Heart Period and QT Interval Variability Spectral Markers to Typify Cardiac Control in Humans and Rats," *Front. Physiol.*, vol. 10, pp. 1478, Nov 29, 2019.
 38. [Bari et al., Frontiers in Physiology, 2019](#)
V. Bari, E. Vaini, V. Pistuddi, A. Fantinato, B. Cairo, B. De Maria, L. A. Dalla Vecchia, M. Ranucci and A. Porta, "Comparison of Causal and Non-causal Strategies for the Assessment of Baroreflex Sensitivity in Predicting Acute Kidney Dysfunction After Coronary Artery Bypass Grafting," *Front. Physiol.*, vol. 10, pp. 1319, October 18, 2019.
 39. [Dalla Vecchia et al., Giornale Italiano di Medicina del Lavoro ed Ergonomia, 2020](#)
L. A. Dalla Vecchia, B. De Maria and F. Perego, "A case of highly disabling orthostatic hypotension: when an integrated cardiac rehabilitation approach makes the difference," *G. Ital. Med. Lav. Ergon.*, vol. 42, (2), pp. 121-123, June 01, 2020.
 40. [Porta et al., Entropy, 2020](#)
A. Porta, J. F. Valencia, B. Cairo, V. Bari, B. De Maria, F. Gelpi, F. Barbic and R. Furlan, "Are Strategies Favoring Pattern Matching a Viable Way to Improve Complexity Estimation Based on Sample Entropy?" *Entropy (Basel)*, vol. 22, (7), pp. 10.3390/e22070724, June 30, 2020.
 41. [Porta et al., Biomedical Signal Processing and Control, 2020](#)
A. Porta, V. Bari, B. Cairo, B. De Maria, E. Vaini, F. Barbic, R. Furlan, "Comparison of symbolization strategies for complexity assessment of spontaneous variability in individuals with signs of cardiovascular control impairment, *Biomedical Signal Processing and Control*, vol 62, 2020
 42. [Porta et al., PlosOne, 2020](#)
A. Porta, A. Fantinato, V. Bari, F. Gelpi, B. Cairo, B. De Maria, E. G. Bertoldo, V. Fiolo, E. Callus, C. De Vincentiis, M. Volpe, R. Molfetta and M. Ranucci, "Evaluation of the impact of surgical aortic valve replacement on short-term cardiovascular and cerebrovascular controls through spontaneous variability analysis," *PLoS One*, vol. 15, (12), pp. e0243869, December 10, 2020.
 43. [Tinti et al., Journal of Hospice and Palliative Care, 2021](#)
S. Tinti, A. Destrebecq, S. Terzoni, B. De Maria, G. Falcone, D. Da Col, G. Pairona, C. Longhi, E. Giudici, I. M. Pidone, A. Alberti, M. Sofia, I. Ramponi and M. L. Campbell, "Respiratory Distress Observation Scale Italian Version: Cultural-Linguistic Validation and Psychometric Properties," *J. Hosp. Palliat. Nurs.*, vol. 23, (2), pp. 187-194, April 01, 2021.
 44. [Tinti et al., Journal of Pain and Symptom Management, 2021](#)

- S. Tinti, B. De Maria, M. Parati, S. Terzoni, M. C. Rossi, D. Da Col, G. Pairona, C. Longhi, E. Giudici, I. Pidone, A. Alberti, M. Sofia, I. Ramponi, N. Urbano, K. Tanaka and A. Destrebecq, "Italian Version of Cancer Dyspnea Scale: Cultural-Linguistic and Clinical Validation in Patients With Advanced Cancer Disease in Palliative Care Settings," *J. Pain Symptom Manage.*, vol. 61, (3), pp. 571-578.e1, March 01, 2021.
45. [Porta et al., IEEE Transaction on Biomedical Engineering, 2021](#)
A. Porta, F. Gelpi, V. Bari, B. Cairo, B. De Maria, D. Tonon, G. Rossato, M. Ranucci and L. Faes, "Categorizing the Role of Respiration in Cardiovascular and Cerebrovascular Variability Interactions," *IEEE Trans. Biomed. Eng.*, vol. PP, pp. 10.1109/TBME.2021.3135313, December 14, 2021.
46. [Cairo et al., Philos. Trans. A. Math. Phys. Eng. Sci. 2021](#)
B. Cairo, R. M. de Abreu, V. Bari, F. Gelpi, B. De Maria, P. Rehder-Santos, C. A. Sakaguchi, C. D. da Silva, E. De Favari Signini, A. M. Catai and A. Porta, "Optimizing phase variability threshold for automated synchrogram analysis of cardiorespiratory interactions in amateur cyclists," *Philos. Trans. A. Math. Phys. Eng. Sci.*, vol. 379, (2212), pp. 20200251, December 13, 2021.
47. [De Maria et al., PlosOne, 2021](#)
B. De Maria, L. A. Dalla Vecchia, R. Maestri, G. D. Pinna, M. Parati, F. Perego, V. Bari, B. Cairo, F. Gelpi, M. T. La Rovere and A. Porta, "Lack of association between heart period variability asymmetry and respiratory sinus arrhythmia in healthy and chronic heart failure individuals," *PLoS One*, vol. 16, (2), pp. e0247145, February 16, 2021.
48. [De Maria et al., OpenHeart, 2021](#)
B. De Maria, M. de Oliveira Gois, A. M. Catai, C. Marra, D. Lucini, A. Porta, M. Pagani and L. A. Dalla Vecchia, "Ten-year follow-up of cardiac function and neural regulation in a group of amateur half-marathon runners," *Open Heart*, vol. 8, (1), pp. 10.1136/openhrt-2020, February 01, 2021.
49. [Perego et al., International Journal of Environmental Research and Public Health, 2021](#)
F. Perego, B. De Maria, M. Bova, A. Petraroli, A. Marcelli Cesoni, V. De Grazia, L. C. Zingale, A. Porta, G. Spadaro and L. A. Dalla Vecchia, "Analysis of Heart-Rate Variability during Angioedema Attacks in Patients with Hereditary C1-Inhibitor Deficiency," *Int. J. Environ. Res. Public. Health.*, vol. 18, (6), pp. 10.3390/ijerph18062900, March 12, 2021.
50. [Perego et al., Medicina, 2021](#)
F. Perego, B. De Maria, L. Bagnara, V. De Grazia, M. Monelli, M. Cesari and L. A. Dalla Vecchia, "The Dilemma of Falls in Older Persons: Never Forget to Investigate the Syncope," *Medicina (Kaunas)*, vol. 57, (6), pp. 10.3390/medicina57060623, June 15, 2021.
51. [Bari et al., Biomedical Signal Processing and Control, 2021](#)
V. Bari, A. Fantinato, E. Vaini, F. Gelpi, B. Cairo, B. De Maria, V. Pistuddi, M. Ranucci, A. Porta, "Impact of propofol general anesthesia on cardiovascular and cerebrovascular closed loop variability interactions", *Biomedical Signal Processing and Control*, vol. 68, 2021, doi 10.1016/j.bspc.2021.102735
52. [De Maria et al., Herzschrittmacherther Elektrophysiol, 2021](#)
B. De Maria, L. A. Dalla Vecchia, A. Porta and M. T. La Rovere, "Autonomic dysfunction and heart rate variability with Holter monitoring: a diagnostic look at autonomic regulation," *Herzschrittmacherther Elektrophysiol*, vol. 32, (3), pp. 315-319, September 01, 2021.
53. [Raglio et al., Journal of Personalized Medicine, 2021](#)
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