

# Leonardo Bocchi

## List of Publications by Year in descending order

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Version: 2024-02-01

119  
papers

1,856  
citations

279487

23  
h-index

329751

37  
g-index

125  
all docs

125  
docs citations

125  
times ranked

2644  
citing authors

| #  | ARTICLE   | IF  | CITATIONS |
|----|---|-----|-----------|
| 1  | In vivo administration of urolithin A and B prevents the occurrence of cardiac dysfunction in streptozotocin-induced diabetic rats. <i>Cardiovascular Diabetology</i> , 2017, 16, 80.   | 2.7 | 99        |
| 2  | Detection of single and clustered microcalcifications in mammograms using fractals models and neural networks. <i>Medical Engineering and Physics</i> , 2004, 26, 303-312.  | 0.8 | 97        |
| 3  | Î±-Actin isoform distribution in normal and failing human heart: a morphological, morphometric, and biochemical study. <i>Journal of Pathology</i> , 2003, 199, 387-397.  | 2.1 | 96        |
| 4  | Titanium dioxide nanoparticles promote arrhythmias via a direct interaction with rat cardiac tissue. <i>Particle and Fibre Toxicology</i> , 2014, 11, 63.   | 2.8 | 76        |
| 5  | Trimethylamine-N-Oxide (TMAO)-Induced Impairment of Cardiomyocyte Function and the Protective Role of Urolithin B-Glucuronide. <i>Molecules</i> , 2018, 23, 549.  | 1.7 | 71        |
| 6  | Dynamic Contrast-Enhanced Ultrasound Identifies Microcirculatory Alterations in Sepsis-Induced Acute Kidney Injury. <i>Critical Care Medicine</i> , 2018, 46, 1284-1292.  | 0.4 | 65        |
| 7  | Resveratrol Treatment Reduces Cardiac Progenitor Cell Dysfunction and Prevents Morpho-Functional Ventricular Remodeling in Type-1 Diabetic Rats. <i>PLoS ONE</i> , 2012, 7, e39836.   | 1.1 | 63        |
| 8  | Bioaccumulation of resveratrol metabolites in myocardial tissue is dose-time dependent and related to cardiac hemodynamics in diabetic rats. <i>Nutrition, Metabolism and Cardiovascular Diseases</i> , 2014, 24, 408-415.  | 1.1 | 52        |
| 9  | The histone deacetylase inhibitor suberoylanilide hydroxamic acid reduces cardiac arrhythmias in dystrophic mice. <i>Cardiovascular Research</i> , 2010, 87, 73-82.   | 1.8 | 43        |
| 10 | Real-time optical manipulation of cardiac conduction in intact hearts. <i>Journal of Physiology</i> , 2018, 596, 3841-3858.   | 1.3 | 42        |
| 11 | Detecting Vascular Age Using the Analysis of Peripheral Pulse. <i>IEEE Transactions on Biomedical Engineering</i> , 2018, 65, 2742-2750.  | 2.5 | 41        |
| 12 | Enhanced engraftment and repairing ability of human adipose-derived stem cells, conveyed by pharmacologically active microcarriers continuously releasing HGF and IGF-1, in healing myocardial infarction in rats. <i>Journal of Biomedical Materials Research - Part A</i> , 2015, 103, 3012-3025. | 2.1 | 37        |
| 13 | Correlation of Î±-skeletal actin expression, ventricular fibrosis and heart function with the degree of pressure overload cardiac hypertrophy in rats. <i>Experimental Physiology</i> , 2006, 91, 571-580.  | 0.9 | 36        |
| 14 | Subchronic exposure to titanium dioxide nanoparticles modifies cardiac structure and performance in spontaneously hypertensive rats. <i>Particle and Fibre Toxicology</i> , 2019, 16, 25.   | 2.8 | 32        |
| 15 | Growth Factor-Induced Mobilization of Cardiac Progenitor Cells Reduces the Risk of Arrhythmias, in a Rat Model of Chronic Myocardial Infarction. <i>PLoS ONE</i> , 2011, 6, e17750.   | 1.1 | 31        |
| 16 | Assessment of cutaneous microcirculation by laser Doppler flowmetry in type 1 diabetes. <i>Microvascular Research</i> , 2019, 124, 91-96.   | 1.1 | 31        |
| 17 | Preservation of ventricular performance at early stages of diabetic cardiomyopathy involves changes in myocyte size, number and intercellular coupling. <i>Basic Research in Cardiology</i> , 2007, 102, 488-499.   | 2.5 | 30        |
| 18 | High-resolution cry analysis in preterm newborn infants. <i>Medical Engineering and Physics</i> , 2009, 31, 528-532.  | 0.8 | 30        |

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|----|--|-----|-----------|
| 19 | Validity of jitter measures in non-quasi-periodic voices. Part II: The effect of noise. Logopedics Phoniatrics Vocology, 2011, 36, 78-89.  | 0.5 | 30        |
| 20 | Objective vocal fold vibration assessment from videokymographic images. Biomedical Signal Processing and Control, 2006, 1, 129-136.  | 3.5 | 29        |
| 21 | Augmented Reality in Surgery: A Scoping Review. Applied Sciences (Switzerland), 2022, 12, 6890.  | 1.3 | 28        |
| 22 | Blockade of Oncogenic NOTCH1 with the SERCA Inhibitor CAD204520 in T Cell Acute Lymphoblastic Leukemia. Cell Chemical Biology, 2020, 27, 678-697.e13.  | 2.5 | 27        |
| 23 | Validity of jitter measures in non-quasi-periodic voices. Part I: Perceptual and computer performances in cycle pattern recognition. Logopedics Phoniatrics Vocology, 2011, 36, 70-77.   | 0.5 | 25        |
| 24 | Modulation of actin isoform expression before the transition from experimental compensated pressure-overload cardiac hypertrophy to decompensation. American Journal of Physiology - Heart and Circulatory Physiology, 2009, 296, H1625-H1632. | 1.5 | 24        |
| 25 | Automatic newborn cry analysis: A Non-invasive tool to help autism early diagnosis. , 2012, 2012, 2953-6.  |     | 24        |
| 26 | Perturbation measurements in highly irregular voice signals: Performances/validity of analysis software tools. Biomedical Signal Processing and Control, 2012, 7, 409-416.   | 3.5 | 24        |
| 27 | Actin isoform pattern expression: a tool for the diagnosis and biological characterization of human rhabdomyosarcoma. Virchows Archiv Fur Pathologische Anatomie Und Physiologie Und Fur Klinische Medizin, 2003, 442, 31-38.                  | 1.4 | 23        |
| 28 | To what degree of voice perturbation are jitter measurements valid? A novel approach with synthesized vowels and visuo-perceptual pattern recognition. Biomedical Signal Processing and Control, 2012, 7, 37-42.                               | 3.5 | 23        |
| 29 | Antiarrhythmic effect of growth factor-supplemented cardiac progenitor cells in chronic infarcted heart. American Journal of Physiology - Heart and Circulatory Physiology, 2016, 310, H1622-H1648.  | 1.5 | 23        |
| 30 | Tissue characterization from X-ray images. Medical Engineering and Physics, 1997, 19, 336-342.   | 0.8 | 22        |
| 31 | Videokymographic image processing: Objective parameters and user-friendly interface. Biomedical Signal Processing and Control, 2012, 7, 192-201.   | 3.5 | 22        |
| 32 | A slowly inactivating sodium current (INa2) in the plateau range in canine cardiac Purkinje single cells. Experimental Physiology, 2007, 92, 161-173.  | 0.9 | 21        |
| 33 | A multipurpose user-friendly tool for voice analysis: Application to pathological adult voices. Biomedical Signal Processing and Control, 2009, 4, 212-220.  | 3.5 | 21        |
| 34 | HDAC Inhibition Improves the Sarcoendoplasmic Reticulum Ca <sup>2+</sup> -ATPase Activity in Cardiac Myocytes. International Journal of Molecular Sciences, 2018, 19, 419.   | 1.8 | 21        |
| 35 | Cobalt oxide nanoparticles induce oxidative stress and alter electromechanical function in rat ventricular myocytes. Particle and Fibre Toxicology, 2021, 18, 1.   | 2.8 | 21        |
| 36 | Recovery of 0.1Hz microvascular skin blood flow in dysautonomic diabetic (type 2) neuropathy by using Frequency Rhythmic Electrical Modulation System (FREMS). Medical Engineering and Physics, 2010, 32, 407-413.                             | 0.8 | 19        |

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|----|---|-----|-----------|
| 37 | Automated tracking of quantitative parameters from single line scanning of vocal folds: A case study of the "messa di voce"™ exercise. <i>Logopedics Phoniatrics Vocology</i> , 2015, 40, 44-54.                                      | 0.5 | 18        |
| 38 | Shape analysis of microcalcifications using Radon transform. <i>Medical Engineering and Physics</i> , 2007, 29, 691-698.  | 0.8 | 16        |
| 39 | Spatial heterogeneity in the time and frequency properties of skin perfusion. <i>Physiological Measurement</i> , 2017, 38, 860-876.   | 1.2 | 15        |
| 40 | The Histone Deacetylase Inhibitor Suberoylanilide Hydroxamic Acid (SAHA) Restores Cardiomyocyte Contractility in a Rat Model of Early Diabetes. <i>International Journal of Molecular Sciences</i> , 2019, 20, 1873.                  | 1.8 | 15        |
| 41 | Parenchymal and Stromal Cells Contribute to Pro-Inflammatory Myocardial Environment at Early Stages of Diabetes: Protective Role of Resveratrol. <i>Nutrients</i> , 2016, 8, 729.   | 1.7 | 14        |
| 42 | Analysis of Feasibility, Adherence, and Appreciation of a Newly Developed Tele-Rehabilitation Program for People With MCI and VCI. <i>Frontiers in Neurology</i> , 2020, 11, 583368.  | 1.1 | 14        |
| 43 | Multiple Genetic Snakes for Bone Segmentation. <i>Lecture Notes in Computer Science</i> , 2003, , 346-356.  | 1.0 | 14        |
| 44 | An artificial neural network architecture for skeletal age assessment. , 0, , .   |     | 13        |
| 45 | Characterization of the slowly inactivating sodium current $I_{Na2}$ in canine cardiac single Purkinje cells. <i>Experimental Physiology</i> , 2008, 93, 347-361.   | 0.9 | 13        |
| 46 | Central blood oxygen saturation vs crying in preterm newborns. <i>Biomedical Signal Processing and Control</i> , 2012, 7, 88-92.  | 3.5 | 13        |
| 47 | Metaheuristics for Specialization of a Segmentation Algorithm for Ultrasound Images. <i>IEEE Transactions on Evolutionary Computation</i> , 2016, 20, 730-741.  | 7.5 | 13        |
| 48 | Effect of local blood flow in thermal regulation in diabetic patient. <i>Microvascular Research</i> , 2013, 88, 42-47.  | 1.1 | 12        |
| 49 | Long-Term Oral Administration of Theaphenon-E Improves Cardiomyocyte Mechanics and Calcium Dynamics by Affecting Phospholamban Phosphorylation and ATP Production. <i>Cellular Physiology and Biochemistry</i> , 2018, 47, 1230-1243. | 1.1 | 12        |
| 50 | A New Evolutionary Algorithm for Image Segmentation. <i>Lecture Notes in Computer Science</i> , 2005, , 264-273.  | 1.0 | 11        |
| 51 | Pulse decomposition analysis in photoplethysmography imaging. <i>Physiological Measurement</i> , 2020, 41, 095009.  | 1.2 | 11        |
| 52 | Reputation matters the most: The reputation inertia effect. <i>Human Behavior and Emerging Technologies</i> , 2020, 2, 71-81.   | 2.5 | 10        |
| 53 | Social stress, myocardial damage and arrhythmias in rats with cardiac hypertrophy. <i>Physiology and Behavior</i> , 2001, 73, 351-358.  | 1.0 | 9         |
| 54 | Image Segmentation by a Genetic Fuzzy c-Means Algorithm Using Color and Spatial Information. <i>Lecture Notes in Computer Science</i> , 2004, , 260-269.  | 1.0 | 9         |

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|----|---|-----|-----------|
| 55 | A Robust Tool for Newborn Infant Cry Analysis. , 2006, 2006, 509-12.  |     | 8         |
| 56 | Improvements of radar clutter classification in air traffic control environment. , 2007, , .  |     | 8         |
| 57 | Differences in ionic currents between canine myocardial and Purkinje cells. Physiological Reports, 2013, 1, .   | 0.7 | 8         |
| 58 | Modelling of Thermal Hyperemia in the Skin of Type 2 Diabetic Patients. Journal of Healthcare Engineering, 2013, 4, 541-554.  | 1.1 | 7         |
| 59 | Real time intention recognition. , 2016, , .  |     | 7         |
| 60 | Wearable Detection of Trunk Flexions: Capacitive Elastomeric Sensors Compared to Inertial Sensors. Sensors, 2021, 21, 5453.   | 2.1 | 7         |
| 61 | Wavelet Phase Coherence Between the Microvascular Pulse Contour and the Respiratory Activity. IFMBE Proceedings, 2019, , 311-314.   | 0.2 | 7         |
| 62 | Quantification of Myocyte Disarray in Human Cardiac Tissue. Frontiers in Physiology, 2021, 12, 750364.  | 1.3 | 7         |
| 63 | Vascular ageing and peripheral pulse: an improved model for assessing their relationship. Physiological Measurement, 2021, 42, 125002.  | 1.2 | 7         |
| 64 | Vulnerability to ventricular arrhythmias and heterogeneity of action potential duration in normal rats. Experimental Physiology, 2004, 89, 387-396.   | 0.9 | 6         |
| 65 | Effects of the $\alpha$ -Adrenergic/DA2-Dopaminergic Agonist CHF-1024 in Preventing Ventricular Arrhythmogenesis and Myocyte Electrical Remodeling, in a Rat Model of Pressure-Overload Cardiac Hypertrophy. Journal of Cardiovascular Pharmacology, 2006, 47, 295-302. | 0.8 | 6         |
| 66 | Real time detection and tracking of Gauzes by RFID UWB technique. , 2010, , .   |     | 6         |
| 67 | Resonance artefacts in modern pressure monitoring systems. Journal of Clinical Monitoring and Computing, 2016, 30, 707-714.   | 0.7 | 6         |
| 68 | FMECA Design Analysis: Risk Management for the Manufacture of a CBCT Scanner. IEEE Access, 2019, 7, 181546-181564.  | 2.6 | 6         |
| 69 | Effects of Standardized Green Tea Extract and Its Main Component, EGCG, on Mitochondrial Function and Contractile Performance of Healthy Rat Cardiomyocytes. Nutrients, 2020, 12, 2949.   | 1.7 | 6         |
| 70 | Elevated miR-34a expression and altered transcriptional profile are associated with adverse electromechanical remodeling in the heart of male rats exposed to social stress. Stress, 2021, 24, 621-634.   | 0.8 | 6         |
| 71 | A fractal approach to predict fat content in meat images. , 0, , .  |     | 5         |
| 72 | Segmentation of Ultrasound Breast Images: Optimization of Algorithm Parameters. Lecture Notes in Computer Science, 2011, , 163-172.   | 1.0 | 5         |

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|----|--|-----|-----------|
| 73 | Analysis of the microcirculatory pulse wave: age-related alterations. , 2015, 2015, 7362-5.  |     | 5         |
| 74 | Effect of ultrasounds on neurons and microglia: Cell viability and automatic analysis of cell morphology. Biomedical Signal Processing and Control, 2015, 22, 44-53.                       | 3.5 | 5         |
| 75 | Cardiac pulse waves modeling and analysis in laser Doppler perfusion signals of the skin microcirculation. IFMBE Proceedings, 2017, , 20-25.   | 0.2 | 5         |
| 76 | GOAL (Games for Olders Active Life): A Web-Application for Cognitive Impairment Tele-Rehabilitation. IFMBE Proceedings, 2019, , 177-182.   | 0.2 | 5         |
| 77 | Pulse decomposition analysis in camera-based photoplethysmography. , 2019, 2019, 3179-3182.  |     | 5         |
| 78 | Video-Based Human Motion Estimation System. Lecture Notes in Computer Science, 2009, , 132-139.  | 1.0 | 5         |
| 79 | Semiautomated breast cancer classification from ultrasound video. , 2012, , .  |     | 4         |
| 80 | Morphological analysis of neurons: Automatic identification of elongations. , 2015, 2015, 8131-4.  |     | 4         |
| 81 | Glycemic Control Maintained over Time and Joint Stiffness in Young Type 1 Patients: What Is the Mathematical Relationship?. Journal of Diabetes Science and Technology, 2019, 13, 728-733. | 1.3 | 4         |
| 82 | Linear and Nonlinear Directed Connectivity Analysis of the Cardio-Respiratory System in Type 1 Diabetes. Frontiers in Network Physiology, 2022, 2, .                                       | 0.8 | 4         |
| 83 | Detection of snow clutter in ATC ground radar signal. , 2008, , .  |     | 3         |
| 84 | Shape analysis of the microcirculatory flow wave. Physiological Measurement, 2015, 36, 2147-2158.  | 1.2 | 3         |
| 85 | Monitoring the microcirculation at the bedside using hand-held imaging microscopes: Automatic tracking of erythrocytes. , 2015, 2015, 7378-81.   |     | 3         |
| 86 | Particle tracking for the assessment of microcirculatory perfusion. Physiological Measurement, 2017, 38, 358-373.  | 1.2 | 3         |
| 87 | Monitoring of preterm infants during crying episodes. IFMBE Proceedings, 2007, , 449-452.  | 0.2 | 3         |
| 88 | Evaluation of spatial distribution of skin blood flow using optical imaging. IFMBE Proceedings, 2017, , 74-80.   | 0.2 | 3         |
| 89 | Monitoring Flexions and Torsions of the Trunk via Gyroscope-Calibrated Capacitive Elastomeric Wearable Sensors. Sensors, 2021, 21, 6706.   | 2.1 | 3         |
| 90 | Bone segmentation using multiple communicating snakes. , 2003, , .   |     | 2         |

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|-----|---|-----|-----------|
| 91  | Non-invasive distress evaluation in preterm newborn infants. , 2008, 2008, 2908-11.   |     | 2         |
| 92  | A Mathematical Model for Reverberations in Biomedical Ultrasound Transducers: a case study. , 2018, , .   |     | 2         |
| 93  | Automatic System for the Analysis and the Discrimination of Breast Nodules in Ultrasound Imaging. IFMBE Proceedings, 2009, , 1949-1952.   | 0.2 | 2         |
| 94  | Fuzzy FMECA Process Analysis for Managing the Risks in the Lifecycle of a CBCT Scanner. IEEE Access, 2021, 9, 135723-135741.  | 2.6 | 2         |
| 95  | Non invasive distress monitoring in children hospital intensive care unit. , 2008, , .  |     | 2         |
| 96  | A comparison between internal and surface temperature measurement techniques during phacoemulsification cataract surgery: thermocamera versus thermocouple. Journal of Applied Biomaterials and Biomechanics, 2008, 6, 151-6. | 0.4 | 2         |
| 97  | Wearable Kinematic Monitoring System Based on Piezocapacitive Sensors. Studies in Health Technology and Informatics, 2019, 261, 103-108.  | 0.2 | 2         |
| 98  | The Role of New Technological Opportunities and the Need to Evaluate the Activities Performed in the Prevention of Diabetic Foot with Exercise Therapy. Medicines (Basel, Switzerland), 2021, 8, 76.                          | 0.7 | 2         |
| 99  | Video-based human motion estimation system for gaming user interface. , 2009, , .   |     | 1         |
| 100 | Detection of runway boundary in ATC ground radar. , 2010, , .   |     | 1         |
| 101 | Automatic Detection of Snore Events from Full Night Audio Recordings. IFMBE Proceedings, 2011, , 183-186.   | 0.2 | 1         |
| 102 | A Genetic Fuzzy Rules Learning Approach for Unseeded Segmentation in Echography. Lecture Notes in Computer Science, 2012, , 305-314.  | 1.0 | 1         |
| 103 | Modeling of thermal regulation of peripheral circulation. , 2014, , .   |     | 1         |
| 104 | Analysis of myogenic and respiratory oscillatory components in laser Doppler flowmetry pulse waveforms. , 2020, , .   |     | 1         |
| 105 | An Improved Model for the Assessment of Cutaneous Microcirculation in Type 1 Diabetes. IFMBE Proceedings, 2021, , 37-46.  | 0.2 | 1         |
| 106 | Wavelet Phase Coherence Analysis Between the Respiratory Activity and the Microcirculation: The Effects of Type 1 Diabetes. IFMBE Proceedings, 2020, , 61-65.   | 0.2 | 1         |
| 107 | Evolution of Communicating Individuals. Lecture Notes in Computer Science, 2010, , 328-335.   | 1.0 | 1         |
| 108 | A mathematical model of the effect of metabolic control on joint mobility in young type 1 diabetic subjects. IFMBE Proceedings, 2017, , 355-359.  | 0.2 | 1         |

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|-----|---|-----|-----------|
| 109 | Discrimination of Fatigue in Walking Patterns. IFMBE Proceedings, 2009, , 1275-1278.  | 0.2 | 1         |
| 110 | Mortality Risk Associated with Diabetic Foot Complications in People with or without History of Diabetic Foot Hospitalizations. Journal of Clinical Medicine, 2022, 11, 2454.                 | 1.0 | 1         |
| 111 | Texture analysis and optical anisotropy measurements of leukocytes for early diagnostics of diabetes mellitus. , 0, , .   |     | 0         |
| 112 | Real-Time Optical Manipulation of Cardiac Conduction in Intact Hearts. Biophysical Journal, 2018, 114, 166a.  | 0.2 | 0         |
| 113 | Image Space Colonization Algorithm. Lecture Notes in Computer Science, 2006, , 356-367.   | 1.0 | 0         |
| 114 | System for Tracing of blood transfusions and RFID. IFMBE Proceedings, 2007, , 1062-1065.  | 0.2 | 0         |
| 115 | Effect of Frequency Rhythmic Electrical Modulation System (FREMS) on 0.1 Hz microvascular skin blood flow in dysautonomic diabetic (type 2) neuropathy. IFMBE Proceedings, 2009, , 1283-1286. | 0.2 | 0         |
| 116 | Differences in ionic currents between myocardial and Purkinje cells of canine heart. FASEB Journal, 2012, 26, 1053.5.   | 0.2 | 0         |
| 117 | Multi-gaussian Decomposition of the Microvascular Pulse Detects Alterations in Type 1 Diabetes. IFMBE Proceedings, 2019, , 173-176.   | 0.2 | 0         |
| 118 | Modeling of the Microvascular Pulse for Tracking the Vasoconstriction Response to Deep Inspiratory Gasp. IFMBE Proceedings, 2019, , 307-310.  | 0.2 | 0         |
| 119 | A Robust Tool for Newborn Infant Cry Analysis. Annual International Conference of the IEEE Engineering in Medicine and Biology Society, 2006, , .   | 0.5 | 0         |