

Roberto Di Marco

Curriculum Vitae

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Keywords:
biomechanics; motion capture; wearable devices;
inertial sensors; rehabilitation engineering;
sports biomechanics



Education

- Nov 2012–Jun 2017 **PhD in co-tutelle between Sapienza University of Rome & The University of Sheffield:**
◦ **PhD in Industrial Production Engineering** – CUM LAUDE
Department of Mechanical and Aerospace Engineering, Sapienza University of Rome, IT
◦ **PhD in Mechanical Engineering**
Department of Mechanical Engineering, The University of Sheffield, Sheffield, UK
Thesis title: Kinematic modelling of the foot-ankle complex for gait analysis
- Feb 10–Mar 12 **MSc in Biomedical Engineering** – 110 CUM LAUDE
Engineering School, Sapienza University of Rome, IT
Thesis title: Evaluation of the effects of magnetic field variations on measurements conducted with Inertial Measurement Units
- Sept 06–Dec 09 **BSc in Clinical Engineering** – 110/110
Engineering School, Sapienza University of Rome, IT
Thesis title: Analysis of a bone marrow model with pharmacokinetics: study the optimal dose of a chemotherapy drug

Other certifications

- May 2013 PhD course in *Advanced Musculoskeletal modeling techniques*, Aalborg University, Aalborg, DK – 4 ECTS
- Mar 2013 Engineering License, Engineering School, Sapienza University of Rome, IT – Industrial Engineer Registry, section A (n.34287)

Professional Experience

Current position

- Apr 22–Mar 25 **Assistant Professor**, (RTD-a, Italian L. 240/2010)
DEPARTMENT OF ENGINEERING FOR INNOVATION MEDICINE, UNIVERSITY OF VERONA, Verona, IT
Former: *Department of Computer Science, University of Verona, Verona, IT*
SSD: IINF-05/A (ex ING-INF/05)

Past positions

- Feb 22–Mar 22 **Post-doctoral Researcher**, (1.5 month)
DEPARTMENT OF INDUSTRIAL ENGINEERING, UNIVERSITY OF PADOVA, Padova, IT
Olimpia "New technologies for the paralympic athlete"
SSD: IIND-03/A (ex ING-IND/14)
- Feb 19–Jan 22 **Post-doctoral Researcher**, (36 months)
DEPARTMENT OF NEUROSCIENCE, UNIVERSITY OF PADOVA, Padova, IT
Online monitoring of movement impairment as clinical outcome prediction in people with advanced Parkinson's disease
SSD: IBIO-01/A (ex ING-INF/06)

- Feb 17–Jan 2019 **Bioengineer, Technical Manager**
LABORATORY OF CLINICAL ANALYSIS AND BIOMECHANICS OF MOVEMENT AND POSTURE, University Hospital of Padova - Section of Rehabilitation, Padova, IT
- Nov 15– Oct 16 **Research Assistant**, (12 months)
DEPARTMENT OF MECHANICAL AND AEROSPACE ENGINEERING, SAPIENZA UNIVERSITY OF ROME, Rome, IT
Sensorization of the exoskeleton WAKE-up! (Wearable Ankle Knee Exoskeleton) for gait detection in children with neurological diseases
SSD: IMIS-01/A (ex ING-IND/12)
- Feb 12–Feb 18 **Biomedical Engineer**
MOVEMENT ANALYSIS AND ROBOTICS LABORATORY (MARLAB), Children Hospital Bambino Gesù, Rome, IT
[Other research contract](#)
- Jul 18–Oct 18 **Research contract**
DEPARTMENT OF NEUROSCIENCE, UNIVERSITY OF PADOVA, Padova, IT – *Definition of the temporal and pressure parameters characterizing Dravet's Syndrome via baropodometric examination of gait*
- Mar 17–Jul 17 **Research contract**
DEPARTMENT OF NEUROSCIENCE, UNIVERSITY OF PADOVA, Padova, IT – *Improve residual neuromuscular capacity in disabled athletes in the practice of wheelchair rugby*

Research abroad

- Jul 2018 **Visiting Post-doctoral Researcher**
Department of Information and Communication Technologies, Universitat Pompeu Fabra, Barcelona (ES). Host researcher: Dr Simone Tassani.
Funding: BTS Bioengineering - Best Young Researcher SIAMOC 2017.
- Feb–Sept 2015 **PhD Student** - co-tutelle
INSIGNEO Institute for *in silico* medicine, Department of Mechanical Engineering, The University of Sheffield, Sheffield (UK). Supervisor: Prof Claudia Mazzà.
- Mar–Aug 2014 **PhD Student** - co-tutelle
INSIGNEO Institute for *in silico* medicine, Department of Mechanical Engineering, The University of Sheffield, Sheffield (UK). Supervisor: Prof Claudia Mazzà.

Involvement in Research Projects

Current

- Jun-2024–today **ECLYPSE-HF – L'Esercizio Aerobico Eccentrico: Analisi di Efficacia, Fattibilità ed Impatto nello Stile di Vita nella popolazione Cardiopatica Sarcopenica, UNIVR - iNEST, Interconnected Nord-Est Innovation Ecosystem,**
ROLE: PRINCIPAL INVESTIGATOR.
€ 48 022.35 – Duration: 1 year
- 2024–today **Pro-Olympia – Sistemi di produzione e prodotti per le paralimpiadi, INAIL, PI: N Petrone,**
ROLE: RESEARCHER.
€ 2 M – Duration: 3 year

Past

- 2022–2023 **Olimpia, INAIL, PI: N Petrone,**
ROLE: RESEARCHER.
€ 1,2 M – Duration: 2 year

- 2021–2022 **Sensorimotor integration in scoliosis**, Project "Dipartimento di Eccellenza" - University of Padova, PI: S Masiero,
ROLE: RESEARCHER.
€ 50 000 – Duration: 2 years
- 2019–2022 **PD_Pal: Palliative care in Parkinson's Disease**, EU H2020, Grant Agreement n.825785, Coordinator: A Antonini, University of Padova, IT - PI: B Bloem, Radboud University Medical Center, NL,
ROLE: QUALITY MANAGER & CLINICAL TRIAL COORDINATOR @ UNIPD.
€ 3 995 437,50 – Duration: 3,5 years
- 2019–Present **Soft-Act: Prevention of falls: a synergic soft exoskeleton with integrated muscle and brain biosignals to minimize gait instability in the elderly**, Ministry of "Affari Esteri e della Cooperazione Internazionale", N. PGR-00807, PI: A Del Felice, University of Padova, IT,
ROLE: RESEARCHER.
€ 150 000 – Duration: 3 years
- 2018–Present **Pro Gait: Physiological and Rehabilitation Outcomes Gains from Automated Interventions in Stroke Therapy**, EU H2020, Grant Agreement n.778043, PI: O Lennon, University College Dublin, IE,
ROLE: RESEARCHER.
€ 144 000 – Duration: 4 years
- 2018–2020 **A Standardized Thermal Protocol for Parkinson's Disease: a longitudinal, randomized, controlled, blinded study**, FoRST – Foundation for Thermal scientific research, PI: S Masiero, University of Padova, IT,
ROLE: PROJECT MANAGER & RESEARCHER.
€ 90 000 – Duration: 2 years
- 2013–2017 **MD-PAEDIGREE: Model-Driven European Paediatric Digital Repository**, EU Seventh Framework Programme, Grant Agreement n.600932, PI: B Dalla Piccola, Children Hospital "Bambino Gesù", Rome, IT,
ROLE: RESEARCHER of the WP5,10 and WP6,11: protocol preparation, data collection and analysis of people with Juvenile Idiopathic Arthritis and Neurological and Neuromuscular Diseases.
€ 11 869 000 – Duration: 4 years 3 months
- 2013–2016 **Mechanical measurements for the musculoskeletal apparatus: novel and standardizable methodologies for metrological assessment of measurement system**, MIUR - PRIN 2012, n.20127XJX57, PI: Paolo Cappa, Sapienza University of Rome, Rome, IT,
ROLE: RESEARCHER.
€ 120 050 – Duration: 3 years
- PI**
- 2014 **Analysis of the metrological quality of measurements conducted to develop a musculoskeletal model of the ankle for studying the robot-patient interaction**, "Avvio alla Ricerca" Grant 2014, Sapienza University of Rome, Rome, IT.
€ 1500 – Duration: 1 year
- 2013 **Sensorization of a novel X-Y robot for dynamic posturography: on-line compensation of the acceleration effects on the load-cell outputs**, "Avvio alla Ricerca" Grant 2013, Sapienza University of Rome, Rome, IT.
€ 2000 – Duration: 1 year

Third Parties Research Contracts

Past

- Nov 2023–Dec 2023 **Department of Industrial Engineering - University of Padova (Prof Nicola Petrone, Project Olimpia**,
ROLE: CONSULTANT & SCIENTIFIC COORDINATOR, €12300,00.
Duration: 2 months

Editorial Activities

- 2023–Present ACADEMIC EDITOR
PLOS ONE (link) – ISSN: 1932-6203
- 2023–Present GUEST EDITOR
ENTROPY (link) – ISSN: 1099-4300
Special Issue Title: Nonlinear Methods for Biomedical Engineering (link)
- 2022–Present REVIEWER BOARD
INTERNATIONAL JOURNAL OF ENVIRONMENTAL RESEARCH AND PUBLIC HEALTH (link)
– ISSN: 1660-4601
- 2021–Present REVIEWER BOARD
BIOSENSORS (link) – ISSN: 2079-6374
- 2020–Present REVIEW EDITOR
FRONTIERS IN REHABILITATION SCIENCE (SECTION: INTERVENTIONS FOR REHABILITATION) (link)
- 2020–Present REVIEWER BOARD
SENSORS (link) – ISSN: 1424-8220
- 2020–Present REVIEW EDITOR
FRONTIERS IN SPORTS AND ACTIVE LIVING (SECTION: SPORTS SCIENCE, TECHNOLOGY AND ENGINEERING) (link) – ISSN: 2624-9367

Roles in Scientific events

- 2024 **XXIV National Congress SIAMOC**, *Lago Maggiore - Stresa (VB) - Italy*,
ROLE: SCIENTIFIC COMMITTEE MEMBER.
2-5 October 2024
- 2021 **Webinar "Robotics in Rehabilitation"**, *University of Padova, Harvard Medical School (US), Ulster University (UK) & University College Dublin (IE)*,
ROLE: CO-ORGANIZER.
2 December 2021
- 2020 **Webinar "EEG, EMG & robotics for enhancing mobility"**, *University of Padova & Harvard Medical School*,
ROLE: CO-ORGANIZER.
3 December 2020
- 2019 **XX National Congress SIAMOC**, *University of Bologna, Bologna, IT*,
ROLE: SESSION CHAIR.
9-12 October 2019
- 2019 **Soft-Act kick-off meeting**, *Bo Palace, University of Padova, Padova, IT*,
ROLE: CO-ORGANIZER.
8 June 2019
- 2019 **PD_Pal Project kick-off meeting**, *Bo Palace, University of Padova, Padova, IT*,
ROLE: CO-ORGANIZER.
13-14 February 2019

Awards

- 2017 Best Young Reasercher BTS - SIAMOC 2017, 1st place
- 2016 Best Young Reasercher BTS - SIAMOC 2016, 2nd place

Scientific Society Memberships

- Member GNB: National Group of Bioengineering
- Member IEEE: Institute of Electrical and Electronics Engineers
- Member IEEE EMBS: IEEE Engineering in Medicine and Biology Society

- Member SIAMOC: Italian Society of Clinical Movement Analysis
- Member ESMAC: European Society for Movement Analysis in Adults and Children
- Member ESB: European Society of Biomechanics

Invited talks

- Dec 2021 **Walking features before and after Exoskeleton Training**, Webinar "*Robotics in Rehabilitation*", University of Padova & Harvard Medical School, University of Padova, Harvard Medical School (US), Ulster University (UK) & University College Dublin (IE).
- Dec 2020 **Preliminary results on the investigation of EEG and EMG patterns during the performance of balance tasks**, M Rubega & R Di Marco, Webinar "*EEG, EMG & Robotics for enhancing mobility*", University of Padova & Harvard Medical School (US).
- Feb 2020 **Sensors for motion monitoring**, MOVE ON - Movement and Control in Parkinson's Disease, Zambon Italia srl, Rome - IT.
- Mar 2018 **Static and Dynamic Posturography: instrumental evaluation of balance**, School of Physical and Rehabilitation Medicine, Department of Neuroscience, University of Padova, Padova - IT.
- Sept 2016 **"Misure cinematiche nella Biomeccanica - con contributi impostati e coordinati da Paolo Cappa"**, XV Congress of Mechanical and Thermal Measurement (MMT), 2016, Benevento - IT.

Institutional Roles

- Apr 23–Today **"Referente per l'Internazionalizzazione"**, COLLEGIO DIDATTICO INTERATENEO DI INGEGNERIA DELL'INFORMAZIONE, Department of Engineering for Innovation Medicine, University of Verona, Verona - IT.
17th April, 2023
- Apr 23–Today **"Commissione Pratiche Studenti" (member)**, COLLEGIO DIDATTICO INTERATENEO DI INGEGNERIA DELL'INFORMAZIONE, Department of Engineering for Innovation Medicine, University of Verona, Verona - IT.
17th April, 2023
- Jan 23–Today **Internship Commission (member)**, COLLEGIO DIDATTICO INTERATENEO DI INGEGNERIA DELL'INFORMAZIONE, Department of Engineering for Innovation Medicine, University of Verona, Verona - IT.
23rd January, 2023

Teaching

- Sept 24–Today **Lecturer**,
TECHNIQUES AND ALGORITHMS FOR BIOMECHANICS OF MOVEMENT, (2.5 CFU)
PhD in Dottorato in Ingegneria dei Sistemi Intelligenti, Department of Engineering for Innovation Medicine Science, University of Verona, Verona - IT.
SSD: n.d.
- Sept 24–Today **Lecturer**,
BASIS OF MOTION ANALYSIS, (3 CFU)
BSc in Human Centered Medical System Engineering, Department of Engineering for Innovation Medicine Science, University of Verona, Verona - IT.
SSD: n.d.
- Sept 22–Today **Lecturer**,
PROGRAMMING LANGUAGES AND PROGRAMING TOOLS WITH LABORATORY – LAB 1 AND LAB 2, (2 + 2 CFU - 48 academic hours/year)
BSc in Human Centered Medical System Engineering, Department of Engineering for Innovation Medicine Science, University of Verona, Verona - IT.
SSD: INF/01

- Apr 22–Sept 22 **Lecturer**,
PROGRAMMING LANGUAGES AND PROGRAMING TOOLS WITH LABORATORY – LAB 2, (2 CFU - 28 academic hours)
BSc in Human Centered Medical System Engineering, Department of Computer Science, University of Verona, Verona - IT.
SSD: INF/01
- Oct 21–Sept 22 **Lecturer ("Professore a Contratto")**,
MATLAB AND COMPUTATIONAL COGNITION, (4 CFU - 28 academic hours)
Cognitive Neuroscience and Clinical Neuropsychology, Department of General Psychology, University of Padova, Padova - IT.
SSD: n.d.
- 2021 **Invited Lecturer**
CLINICAL GAIT ANALYSIS, (2 academic hours)
Physical and Rehabilitation medicine, L/SNT-2
School of Medicine and Surgery, University of Padova, Padova - IT.
- Jun 20–Dec 20 **Lecturer ("Professore a Contratto")**,
NEW TECHNOLOGIES FOR REHABILITATION, (2 CFU - 14 academic hours)
School of Physical and Rehabilitation Medicine, Department of Neuroscience, University of Padova, Padova - IT.
SSD: MED/34
- 2019–2020 **Invited Lecturer**
CLINICAL GAIT ANALYSIS, (2 academic hours)
Physical and Rehabilitation medicine, L/SNT-2
School of Medicine and Surgery, University of Padova, Padova - IT.
- 2019 **Lecturer**
KINEMATIC ANALYSIS OF THE FOOT-ANKLE COMPLEX (2 academic hours)
Professional Course "Clinical Anatomy of the musculoskeletal system"
University of Padova, Padova - IT.
- 2017 **Invited Lecturer, Examination board member**
CLINICAL GAIT ANALYSIS, (1 hour)
Laboratory Medicine, LM-41
School of Medicine and Surgery, University of Padova, Padova - IT.
- 2015–2017 **Teaching Assistant ("Cultore della Materia")**
- BIOMECHANICS, LM-21, LM-33
Lectures on Human Movement Analysis and Data Processing (20 academic hours/year), Lab Tutor (20 academic hours/year), Examination board member
 - MECHANICAL AND THERMAL MEASUREMENTS, LM-21, LM-33
Lab Tutor, Examination board member
 - INDUSTRIAL MEASUREMENTS, LM-33
Lab Tutor (10 academic hours), Examination board member
Engineering School, Sapienza University of Rome, Rome - IT,
SSD: ING-IND/12, ING-IND/34
- 2014–2015 **Teaching Tutor**
- BIOMECHANICS, LM-21, LM-33, & LABORATORY OF MEASUREMENTS FOR BIOMECHANICS, LM-33
Lectures on Human Movement Analysis and Data Processing (20 academic hours), Lab Tutor (40 academic hours), Examination board member
 - LABORATORY OF MEASUREMENTS FOR BIOMECHANICS, LM-33
Lab Tutor, Examination board member
 - INDUSTRIAL MEASUREMENTS, LM-33
Lab Tutor, Examination board member
Engineering School, Sapienza University of Rome, Rome - IT,
SSD: ING-IND/12, ING-IND/34

- 2012–2014 **Teaching Tutor**
- BIOMECHANICS, LM-21, LM-33, & LABORATORY OF MEASUREMENTS FOR BIOMECHANICS, LM-33
Lab Tutor (40 hours/academic year), Examination board member
 - INDUSTRIAL MEASUREMENTS, LM-33
Lab Tutor (6 hours), Examination board member
- Engineering School, Sapienza University of Rome, Rome - IT,
SSD: ING-IND/12, ING-IND/34

Teaching events

- Oct 2023 **Mirandola Summer Camp 2023 - 2nd Edition**, *Organizing Committee*, University of Verona, University of Trento & University of Modena-Reggio Emilia, 2-4 October, 2023; Mirandola (MO) & Modena - IT.
website: event.unitn.it/mirandola-summer-camp
- Sept 2022 **Mirandola Summer Camp 2022 - 1st Edition**, *Organizing Committee*, University of Verona, University of Trento & University of Modena-Reggio Emilia, 27-29 September, 2022; Mirandola (MO) - IT.
website: event.unitn.it/2022/mirandola-summer-camp




Software Skills

- Advanced MATLAB, C, L^AT_EX, Vicon Nexus, Microsoft Office
Intermediate Python, R, Vicon Polygon, Adobe Illustrator, HTML, SPSS Statistics, LABView
Basic AnyBody Modelling System, SolidWorks

Languages

- Italian **Mother tongue**
English **Advanced** *C2: listening, reading, writing, interaction, speaking*

Publications

	Author IDs:	H-index	Citations
	0000-0002-3644-352X	–	–
	SkQFhQgAAAAJ&hl	15	520
Scopus	56524248800	13	343
	AAL-1586-2020	11	276

Scientific production summary

Author type	→ 1st	2nd	Other	Corresp
Research Papers	10	4	8	10
Conference Proceedings	4	–	6	4
Conference Abstracts	9	2	7	9

Research Papers

Di Marco R: bold text — Corresponding author: ✉ — Equal contribution: *

- 2024 Boldo M, **Di Marco R** ✉, Martini E, Nardon M, Bertucco M, Bombieri N – *On the reliability of single-camera markerless systems for overground gait monitoring*, Computers in Biology and Medicine 171:108101
doi: 10.1016/j.compbiomed.2024.108101

- 2023 Paramento M, Rubega M, **Di Marco R**, Agostini M, Cantele F, Masiero S, Formaggio E – *Experimental protocol to investigate cortical, muscular and body representation alterations in Adolescent Idiopathic Scoliosis*, PLOS One 18(10): e0292864
doi: 10.1371/journal.pone.0292864
- 2023 **Di Marco R***, Rubega M* ✉, Lennon O, Vianello A, Masiero S, Formaggio E, Del Felice A, on behalf of the PRO GAIT Consortium & Local collaborators – *Exoskeleton training modulates complexity in movement patterns and cortical activity in able-bodied volunteers*, IEEE Transactions on Neural Systems and Rehabilitation Engineering 31:2381-2390
doi: 10.1109/TNSRE.2023.3273819
- 2023 Aldegheri S, Artusi CA, Camozzi S, **Di Marco R** ✉, Geroïn C, Imbalzano G, Lopiano L, Tinazzi M, Bombieri N – *Camera- and Viewpoint-agnostic evaluation of axial postural abnormalities in people with Parkinson's Disease through augmented Human Pose Estimation*, Sensors 23(6):3193
doi: 10.3390/s23063193
- 2022 Formaggio E, Bertuccelli M, Rubega M ✉, **Di Marco R**, Cantele F, Gottardello F, De Giuseppe M, Masiero S – *Brain oscillatory activity in adolescent idiopathic scoliosis*, Scientific Reports 12:17266
doi: 10.1038/s41598-022-19449-1
- 2022 Bisi MC, **Di Marco R**, Ragona F, Darra F, Vecchi M, Masiero S, Del Felice A ✉, Stagni A – *Quantitative characterization of motor control during gait in Dravet Syndrome using wearable sensors: a preliminary study*, Sensors 22(6):2140
doi: 10.3390/s22062140
- 2022 **Di Marco R** ✉, Pistonesi F, Cianci V, Weis L, Biundo R, Baba A, Rubega M, Gentile G, Carecchio M, Tedesco C, Antonini A, Masiero A – *Effect of thermal aquatic exercise on a group of people with Parkinson's Disease: a longitudinal study*, Healthcare 10(2):368
doi: 10.3390/healthcare10020368
- 2021 Luis R, **Di Marco R**, Weis L, Cianci V, Pistonesi F, Baba A, Carecchio M, Biundo R, Tedesco C, Masiero S, Antonini A ✉ – *Impact of mobility restrictions in Parkinson's disease during COVID-19 lockdown*, BMC Neurology 21:332
doi: 10.1186/s12883-021-02364-9
- 2021 **Di Marco R*** ✉, Rubega M* ✉, Lennon O, Formaggio E, Sutaj N, Dazzi G, Venturin C, Bonini I, Ortner R, Cerrel Bazo H A, Tonin L, Tortora S, Masiero S, Del Felice A on behalf of the PRO GAIT Consortium – *Experimental protocol to assess neuromuscular plasticity induced by an exoskeleton training session*, Methods and Protocols 4(3):48
doi: 10.3390/mps4030048
- 2021 Rubega M, Formaggio E, **Di Marco R**, Bertuccelli M, Tortora S, Menegatti E, Cattelan M, Bonato P, Masiero S, Del Felice A ✉ – *Cortical analysis in upright dynamic and static balance in the elderly*, Scientific report 11:14132
doi: 10.1038/s41598-021-93556-3
- 2021 Rubega M ✉, Formaggio E, Molteni F, Guanziroli E, **Di Marco R**, Baracchini C, Ermani M, Ward NS, Masiero S, Del Felice A – *EEG fractal analysis reflects brain impairment after stroke*, Entropy 23(5):592
doi: 10.3390/e23050592
- 2021 Rubega M*, **Di Marco R***, Zampini M, Formaggio E, Masiero S, Bonato P, Del Felice A ✉ – *Muscular and cortical activation during walking and upright stance in the elderly: A Scoping Review*, Aging Brain 1:100013
doi: 10.1016/j.nbas.2021.100013
- 2021 Wyers L* ✉, **Di Marco R***, Zambelli S, Masiero S, Hallemans A, Van de Walle P, Desloovere K, Del Felice A – *Foot-floor contact pattern in children and adults with Dravet Syndrome*, Gait Posture 84:315-320
doi: 10.1016/j.gaitpost.2020.12.030

- 2021 Marcante A*, **Di Marco R*** ✉, Gentile G ✉, Pellicano C, Assogna F, Pontieri FE, Spalletta G, Macchiusi L, Gatsios D, Giannakis A, Chondrogiorgi M, Konitsiotis S, Fotiadis DI, Antonini A – *Foot pressure wearable sensors for freezing of gait detection in Parkinson's disease*, *Sensors* 21(1):128
doi: 10.3390/s21010128
 - 2020 Lennon O ✉, Tonellato M, Del Felice A, **Di Marco R**, Fingleton C, Korik A, Guanziroli E, Molteni F, Guger C, Othner R, Coyle D – *A Systematic Review Establishing the Current State-of-the-Art, the Limitations, and the DESIRED Checklist in Studies of Direct Neural Interfacing With Robotic Gait Devices in Stroke Rehabilitation*, *Front Neurosci*
doi: 10.3389/fnins.2020.00578
 - 2019 Montefiori E ✉, Modenese L, **Di Marco R**, Magni-Manzoni S, Malattia C, Petrarca M, Ronchetti A, Tanturri de Horatio L, van Dijkhuizen P, Wang A, Wesarg S, Viceconti M, Mazzà C and for the MD-PAEDIGREE Consortium – *Linking Joint Impairment and Gait Biomechanics in Patients with Juvenile Idiopathic Arthritis*, *Ann Biomed Eng* 47(11):2155-2167
doi: 10.1007/s10439-019-02287-0
 - 2019 **Di Marco R** ✉, Hallemans A, Bellon G, Ragona F, Piazza E, Granata T, Ceulemans B, Schoonjans AS, van de Walle P, Darra F, Dalla Bernardina B, Vecchi M, Sawacha Z, Scarpa B, Masiero S, Benedetti MG, Del Felice A – *Gait abnormalities in people with Dravet syndrome: A cross-sectional multi-center study*, *Eur J Paediatr Neuro* 23(6):808-818
doi: 10.1016/j.ejpn.2019.09.010
 - 2019 Montefiori E ✉, Modenese L, **Di Marco R**, Magni-Manzoni S, Malattia C, Petrarca M, Ronchetti A, Tanturri de Horatio L, van Dijkhuizen P, Wang A, Wesarg S, Viceconti M, Mazzà C and for the MD-PAEDIGREE Consortium – *An image-based kinematic model of the tibiotalar and subtalar joints and its application to gait analysis in children with Juvenile Idiopathic Arthritis*, *J Biomech* 85(6):27-36
doi: 10.1016/j.jbiomech.2018.12.041
 - 2019 Scalona E ✉, **Di Marco R**, Castelli E, Desloovere K, Van Der Krogt M, Cappa P, Rossi S – *Inter-laboratory and inter-operator reproducibility in gait analysis measurements in pediatric subjects*, *International Biomech* 6(1):19-33
doi: 10.1080/23335432.2019.1621205
 - 2018 **Di Marco R*** ✉, Scalona E*, Pacilli A, Cappa P, Mazzà C, Rossi S – *How to choose and interpret similarity indices to quantify the variability in gait joint kinematics*, *International Biomech* 5(1):1-8
doi: 10.1080/23335432.2018.1426496
 - 2017 **Di Marco R** ✉, Rossi S, Castelli E, Patanè F, Mazzà C, Cappa P – *Effects of the calibration procedure on the metrological performances of stereophotogrammetric systems for human movement analysis*, *Measurement* 101:265-271
doi: 10.1016/j.measurement.2016.01.008
 - 2016 **Di Marco R** ✉, Rossi S, Racic V, Cappa P, Mazzà C – *Concurrent repeatability and reproducibility analyses of four marker placement protocols for the foot-ankle complex*, *J Biomech* 49(14):3168-3176
doi: 10.1016/j.jbiomech.2016.07.041
 - 2016 Prinold JAI, Mazzà C ✉, **Di Marco R**, Hannah I, Malattia C, Magni-Manzoni S, Petrarca M, Ronchetti A, Tanturri de Horatio L, van Dijkhuizen P, Wesarg S, Viceconti M and MD-PAEDIGREE Consortium – *1*, *Ann Biomed Eng* 44(1):247-257
doi: 10.1007/s10439-015-1451-z
- PhD Thesis**
- 2016 **Di Marco R** – *Kinematic modelling of the foot-ankle complex for gait analysis*, Supervisors: Mazzà C, Palermo E

Conference presentations summary (abstracts & proceedings)

	Presentation type → Oral (presenter)	Poster (presenter)
N.	21 (10)	13 (6)

Conference Proceedings

Presenting Authors are underlined.

- 2024 Breban SG, Toniutto A, **Di Marco R**, Migliore GL, Cutti AG, Petrone N – *Comparison of long jump GRFs and ROS curves from able-bodied and paralympic amputee athletes*, 15th International Conference on the Engineering of Sport (ISEA 2024), Loughborough - UK, July 8-11, 2024
- 2024 Aldegheri S, Boldo M, Bozzini C, De Marchi M, **Di Marco R**, Martini E, Bombieri N – *A Verification Platform for Human Pose Estimation Models*, 25th IEEE Latin American Test Symposium (LATS 2024), Maceio - BR, April 9-12, 2024
- 2023 Barbacane S, Breban S, Fabris G, Scapinello M, **Di Marco R**, Marcolin G, Migliore GL, Cutti AG, Petrone N – *Analysis of an Elite Amputee Paralympic Sprinter in Track Running Pilot Tests*, 8th Congress of the National Group of Bioengineering (GNB 2023), Padova - IT, June 21-23, 2023
- 2023 Breban SG, Barbacane S, Pelusi V, Di Marco R, Marcolin G, Migliore GL, Cutti AG, Petrone N – *Comparative Analysis of Steady and Resisted Accelerated Treadmill Running of an Elite Amputee Paralympic Sprinter*, 8th Congress of the National Group of Bioengineering (GNB 2023), Padova - IT, June 21-23, 2023
- 2022 Breban SG, Bettella F, **Di Marco R**, Migliore GL, Cutti AG, Petrone N – *GRF analysis of two elite paralympic sprinters in steady and resisted accelerated treadmill running*, 40th International Society of Biomechanics in Sports Conference (ISBS 2022), Liverpool - UK, July 19-23, 2022
- 2021 **Di Marco R**, Rubega M, Antonini A, Formaggio E, Masiero S, Del Felice A – *Fractal Analysis of Lower Back Acceleration Profiles in balance tasks*, The 2021 IEEE 43rd Annual International Conference of the IEEE Engineering in Medicine and Biology Society (EMBC 2021), Virtual, October 31-November 4, 2021
- 2021 Tortora S, Rubega M, Formaggio E, **Di Marco R**, Masiero S, Menegatti E, Tonin L, Del Felice A – *Age-related differences in visual P300 ERP during dual-task postural balance*, The 2021 IEEE 43rd Annual International Conference of the IEEE Engineering in Medicine and Biology Society (EMBC 2021), Virtual, October 31-November 4, 2021
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