Paolo Rocco
Curriculum vitae

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Short CV

Paolo Rocco was born in Busto Arsizio (Italy) in 1966. He received the 'Laurea' degree cum laude in Electronics Engineering and the Doctorate degree in Computer Science and Automation in 1991 and 1995, respectively, both from Politecnico di Milano, Italy.

After a research stay at Georgia Tech, Atlanta, USA, since 1996 he has been with the Department of Electronics, Information and Bioengineering of Politecnico di Milano, where he is currently Full Professor in Systems and Control. He teaches Automatic Control and Robotics courses. From 2013 to 2018 he served as Chair of the BSc and MSc Programs in Automation and Control Engineering at Politecnico di Milano. At present he sits in the Board of Governors of Politecnico di Milano, for the triennium 2022-24.

Dr. Rocco has served in the executive board of SIDRA, the national society of Italian Professors in Automatic Control, and of ANIPLA, the Italian National Association for the Automation. He has also served in the Board of Directors of MADE, the Industry 4.0 Competence Center based in Milano, where he is currently scientifically responsible for the projects. At present, he sits in the Board of Directors of euRobotics, the association of all stakeholders in robotics in Europe, and of I-RIM, the association of robotics and intelligent machines in Italy.

Paolo Rocco served as a Founding Senior Editor for the IEEE Robotics and Automation Letters and is currently serving as an Associate Editor for the IFAC journal Mechatronics. His research interests include industrial robotics, with particular reference to collaborative robotics. He is the author of about 200 papers in international journals, book chapters and both international and national conferences.

Paolo Rocco is in charge of the MERLIN mechatronics and industrial robotics laboratory. He is currently, and has been in the past, the holder of research contracts with private companies and of some research projects financed by public bodies. The technology transfer activity led to the filing of some patent applications and the creation of the startup Smart Robots, a spinoff of the Politecnico di Milano, of which he is co-founder.

He serves as an expert for the European Commission and for the Italian Ministry of University and Research for the evaluation of proposals and ongoing projects.

Extended CV

Bio

Paolo Rocco was born in Busto Arsizio (Italy) in 1966.

He is married and has two children.

Education

- 1985: High school scientific degree (60/60) from Liceo Scientifico Statale "A. Tosi", Busto Arsizio, Italy.
- 1991: 'Laurea' degree (equivalent to a MSc degree) (100/100 *cum laude*) in Electronic Engineering from Politecnico di Milano, Italy.
- 1995: Doctorate degree in Computer Science and Automation from Politecnico di Milano, Italy.

Professional experience

- 1991: Internship (8 months) in Tecnospazio, a company active in space robotics
- 1995: Visiting Scholar at the School of Mechanical Engineering of Georgia Tech, Atlanta, USA
- 1996-1998: Researcher (Assistant Professor) in Systems and Control at Politecnico di Milano, Italy
- 1998-2007: Associate Professor in Systems and Control at Politecnico di Milano, Italy
- 2007-present: Full Professor in Systems and Control at Politecnico di Milano, Italy

Academic roles

- 1999-2002: Member of the administrative board of the Department of Electronics and Information at Politecnico di Milano
- 2000-2010: Member of the Board of Professors of the Doctorate Program in Information Technology at Politecnico di Milano
- 2005-2006: Co-chair of a Master in Design of Mechatronic Systems at Politecnico di Milano
- 2007-2010: Vice-chair of the Board of Professors of the Doctorate Program in Information Technology at Politecnico di Milano
- 2007-2012: Secretary (vice-chair) of the BSc and MSc Programs in Automation and Control Engineering at Politecnico di Milano
- 2013-2018: Chair of the BSc and MSc Programs in Automation and Control Engineering at Politecnico di Milano (approximately 1000 students)
- 2022-present: Member of the Board of Governors of Politecnico di Milano

Editorial duties

- 2001-2010: Member of the International Program Committee for the IEEE/ASME International Conference on Advanced Intelligent Mechatronics (AIM)

- 2004: Co-editor of a special issue on Mechatronics of the IFAC journal "Annual reviews in control"
- 2004-2008: Associate Editor for the IEEE Transactions on Robotics
- 2007-2013: Member of the Conference Editorial Board of the Robotics and Automation Society of the IEEE, serving as Associate Editor for ICRA (IEEE International Conference on Robotics and Automation), the flagship conference of the society
- 2007-2013: Chair of the ANIPLA National Congress on Motion Control (editions 2007, 2010, and 2013) and organizer of several workshop in the same area
- 2009-2011: Associate Editor for IROS (IEEE/RSJ International Conference on Intelligent Robots and Systems)
- 2010-present: Member of the EURON (later EuRobotics) Education and Training Board, in charge of the evaluation of candidates for the PhD Thesis award in Robotics at European level
- 2015-2020: Senior Editor for the journal IEEE Robotics and Automation Letters
- 2016-present: Associate Editor of the IFAC journal Mechatronics

Organizational duties

- 2003-2017: Member of the executive board of ANIPLA, the Italian National Association for the Automation
- 2011-2016: Member of the executive board of SIDRA, the National Society of Italian Professors in Automatic Control
- 2017-2020 and 2021-present: Member of the Board of Directors of euRobotics, the association of all stakeholders in robotics in Europe
- 2019-present: Member of the Board of Directors of I-RIM, the Italian Institute of Robotics and Intelligent Machines
- 2019-2021: Member of the Board of Directors of MADE, the Industry 4.0 National Competence Center in Milano
- 2019-present: Scientific Responsible for the area of projects in MADE, the Industry 4.0 National Competence Center in Milano
- 2020-present: Member of the Advisory Board of the CLC-South of EIT Manufacturing
- 2020: nominated by the Ministry of University and Research in the panel of five experts for the preparation of the National Research Program in the area of robotics

Projects

- 2002-2009: in charge of several research projects with industrial partners and public bodies (the Lombardy Region, the Italian Ministry for Research and University, the European Commission), for an overall grant of approximately 500 k€
- 2009-2013: person in charge for Politecnico di Milano in the FP7 four years long European Integrating Project ROSETTA (ICT - 230902) on robotics (grant approximately 1 M€)
- 2015: in charge for Politecnico di Milano of a national project on robotics and of an industrial project with a major robotics company, for an overall grant of approximately 260 k€
- 2016-2018: in charge for Politecnico di Milano of several industrial projects with companies, for an overall grant of approximately 750 k€

- 2018-2021: in charge for Politecnico di Milano of a regional project on the cyber physical production systems (grant approximately 170 k€)
- 2019-2021: in charge for Politecnico di Milano of industrial projects with companies, for an overall grant of approximately 300 k€

Technology transfer

- Paolo Rocco is co-inventor of the following international patents, filed as extensions of already granted national patents:

    - "Method and device for controlling the motion of one or more collaborative robots" PCT/IB2017/052932
    - "A predictive control method of a robot and related control system" PCT/IB2019/054763

  and of the following national patent:

    - "Metodo per generare un segnale di consapevolezza di un robot collaborativo e relativo sistema hardware", Italian patent 102018000007934

- Paolo Rocco is co-founder of Smart Robots, a spin-off company of Politecnico di Milano

Scientific qualification

Dr. Rocco's research interests include industrial robotics, physical human-robot interaction, redundant manipulators, use of computer vision in robotics, control of servomechanisms, and mechatronics in general. He is the author of about 200 papers in international journals, book chapters and both international and national conferences. He serves as an expert for the European Commission and for the Italian Ministry of University and Research for the evaluation of proposals and ongoing projects.

Awards

- KUKA Innovation Award 2014 (finalist)
- Co-author of "Achieving humanlike motion: resolving redundancy for anthropomorphic industrial manipulators" (by A.M. Zanchettin, L. Bascetta, P. Rocco), winner of the 2014 Young Author Best Paper Award of the Italian Chapter of the IEEE Robotics and Automation Society, 2014
- Co-author of "Pre-collision control strategy for human-robot Interaction based on dissipated energy in potential inelastic impacts" (by R. Rossi, M. Parigi Polverini, A.M. Zanchettin, P. Rocco), finalist of IROS 2015 Best Student Paper Award, 2015
- Co-author of "Data-driven design of implicit force control for industrial robots" (by M. Parigi Polverini, S. Formentin, L. Ahn Dao, P. Rocco), finalist of ICRA 2017 Best Student Paper Award, 2017
- euRobotics Technology Transfer Award 2018 (ranked third) with Smart Robots
- Innovation Award MECSPE 2019 (finalist) with Smart Robots, ABB, and Vodafone
- CES 2020 Innovation Awards Honoree with Smart Robots

Publications

Papers in International Journals

[IJ69] C. MESSERI, A. BICCHI, A. M. ZANCHETTIN, P. ROCCO
A dynamic task allocation strategy to mitigate the human physical fatigue in collaborative robotics
IEEE Robotics and Automation Letters, Vol. 7, pp. 2178-2185, April 2022
(also to be presented at ICRA 2022)

[IJ68] D. BAZZI, G. PRIORA, A. M. ZANCHETTIN, P. ROCCO
RRT∗ and goal-driven variable admittance control for obstacle avoidance in manual guidance applications
IEEE Robotics and Automation Letters, Vol. 7, pp. 1920-1927, April 2022
(also to be presented at ICRA 2022)

[IJ67] R. MADERNA, M. POZZI, A. M. ZANCHETTIN, P. ROCCO, D. PRATTICCHIZZO
Flexible scheduling and tactile communication for human-robot collaboration
Robotics and Computer Integrated Manufacturing, Vol. 73, Article 102233, February 2022

[IJ66] A. SCIUTTI, F. BATTAGLIA, M. R. FOSSATI, V. CALDERAI, M. G. CATALANO, G. ANTONELLI, G. M. DI NUNZIO, N. DUBBINI, L. GIARRE, E. MENEGATTI, F. NEGRELLO, F. PASCUCCI, M. PIVETTI, A. M. ZANCHETTIN, A. BARONCELLI, S. MAJORANA, C. MARCHISIO, B. SICILIANO, P. ROCCO, G. METTA, C. MELCHIORRI, C. LASCHI, E. GUGLIELMELLI, A. DE LUCA, P. DARIO, A. BICCHI
Making an opportunity out of a crisis: the inclusive approach of the Italian robotics community
IEEE Robotics and Automation Magazine, Vol. 28, pp. 79-91, December 2021

[IJ65] R. JIN, P. ROCCO, X. CHEN, Y. GENG
LPV-based offline model predictive control for free-floating space robots
IEEE Transactions on Aerospace and Electronic Systems, Vol. 57, pp. 3896-3904, December 2021

[IJ64] C. MESSERI, G. MASOTTI, A. M. ZANCHETTIN, P. ROCCO
Human-robot collaboration: optimizing stress and productivity based on game theory
IEEE Robotics and Automation Letters, Vol. 6, pp. 8061-8068, October 2021
(also presented at IROS 2021)

[IJ63] D. BAZZI, F. ROVEDA, A. M. ZANCHETTIN, P. ROCCO
A unified approach for virtual fixtures and goal-driven variable admittance control in manual guidance applications
IEEE Robotics and Automation Letters, Vol. 6, pp. 6378-6385, October 2021
(also presented at IROS 2021)

[IJ62] R. JIN, P. ROCCO, Y. GENG
Observer-based fixed-time tracking control for space robots in task space
Acta astronautica, Volume 184, July 2021, pp. 35-45

[IJ61] R. JIN, P. ROCCO, Y. GENG
Cartesian trajectory planning of space robots using a multi-objective optimization
Aerospace Science and Technology, Volume 108, January 2021, Article number 106360

[IJ60] A. CASALINO, A. M. ZANCHETTIN, L. PIRODDI, P. ROCCO
Optimal scheduling of human-robot collaborative assembly operations with time Petri nets
IEEE Transactions on Automation Science and Engineering, Vol. 18, pp. 70-84, January 2021

[IJ59] N. LUCCI, B. LACEVIC, A. M. ZANCHETTIN, P. ROCCO
Combining speed and separation monitoring with power and force limiting for safe collaborative robotics applications
IEEE Robotics and Automation Letters, Vol. 5, pp. 6121-6128, October 2020
(also presented at IROS 2020)

[IJ58] C. MESSERI, A. M. ZANCHETTIN, P. ROCCO, E. GIANOTTI, A. CHIRICO, S. MAGONI, A. GAGGIOLI
On the effects of leader-follower roles in dyadic human-robot synchronisation
IEEE Transactions on Cognitive and Developmental Systems, available on line, DOI: 10.1109/TCDS.2020.2991864

[IJ57] D. NICOLIS, F. ALLEVI, P. ROCCO
Operational space model predictive sliding mode control for redundant manipulators
IEEE Transactions on Robotics, Vol. 36, pp. 1348-1355, August 2020

[IJ56] M. PARIGI POLVERINI, S. FORMENTIN, L. MERZAGORA, P. ROCCO
Mixed data-driven and model-based robot implicit force control: a hierarchical approach
IEEE Transactions on Control Systems Technology, Vol. 28, pp. 1258-1271, July 2020

[IJ55] F. FERRAGUTI, R. VILLA, C. TALIGNANI LANDI, A. M. ZANCHETTIN, P. ROCCO, C. SECCHI
A unified architecture for physical and ergonomic human-robot collaboration
Robotica, Vol. 38, pp. 669-683, April 2020

[IJ54] M. PARIGI POLVERINI, A. M. ZANCHETTIN, P. ROCCO
A constraint-based programming approach for robotic assembly skills implementation
Robotics and Computer Integrated Manufacturing, Vol. 59, pp. 69-81, October 2019.

[IJ53] A. M. ZANCHETTIN, P. ROCCO, R. ROSSI, S. CHIAPPA
Towards an optimal avoidance strategy for collaborative robots
Robotics and Computer Integrated Manufacturing, Vol. 59, pp. 47-55, October 2019.

[IJ52] A. M. ZANCHETTIN, A. CASALINO, L. PIRODDI, P. ROCCO
Prediction of human activity patterns for human-robot collaborative assembly tasks
IEEE Transactions on Industrial Informatics, Vol. 15, No. 7, pp. 3934-3942, July 2019

[IJ51] A. CASALINO, C. MESSERI, M. POZZI, A. M. ZANCHETTIN, P. ROCCO, D. PRATTICHIZZO
Operator awareness in human-robot collaboration through wearable vibrotactile feedback
IEEE Robotics and Automation Letters, Vol. 3, No. 4, pp. 4289-4296, October 2018
(also presented at IROS 2018)

[IJ50] M. RAGAGLIA, A.M. ZANCHETTIN, P. ROCCO
Trajectory generation algorithm for safe human-robot collaboration based on multiple depth sensor measurements
Mechatronics, Vol. 55, pp. 267-281, November 2018

[IJ49] D. NICOLIS, M. PALUMBO, A. M. ZANCHETTIN, P. ROCCO
Occlusion-free visual servoing for the shared autonomy teleoperation of dual-arm robots
IEEE Robotics and Automation Letters, Vol. 3, No. 2, pp. 796-803, April 2018
(also presented at ICRA 2018)

[IJ48] M. BUIZZA AVANZINI, A.M. ZANCHETTIN, P. ROCCO

Constrained model predictive control for mobile robotic manipulators
Robotica, Vol. 36, No.1, pp. 19-38, January 2018

[IJ47] M. PARIGI POLVERINI, A.M. ZANCHETTIN, P. ROCCO
A computationally efficient safety assessment for collaborative robotics applications
Robotics and Computer Integrated Manufacturing, Vol. 46, pp. 25-37, August 2017

[IJ46] M. PARIGI POLVERINI, D. NICOLIS, A.M. ZANCHETTIN, P. ROCCO
Implicit robot force control based on set invariance
IEEE Robotics and Automation Letters, Vol. 2, No.3, pp. 1288-1295, July 2017
(also presented at ICRA 2017)

[IJ45] R. ROSSI, A. SANTAMARIA-NAVARRO, J. ANDRADE-CETTO, P. ROCCO
Trajectory generation for unmanned aerial manipulators through quadratic programming
IEEE Robotics and Automation Letters, Vol. 2, No.2, pp. 389-396, April 2017
(also presented at ICRA 2017)

[IJ44] A.M. ZANCHETTIN, P. ROCCO
Motion planning for robotic manipulators using robust constrained control
Control Engineeering Practice, Vol. 59, pp. 127-136, February 2017

[IJ43] M. RAGAGLIA, A.M. ZANCHETTIN, L. BASCETTA, P. ROCCO
Accurate sensorless lead-through programming for lightweight robots in structured environments
Robotics and Computer Integrated Manufacturing, Vol. 39, pp. 9-21, June 2016

[IJ42] A.M. ZANCHETTIN, N.M. CERIANI, P. ROCCO, H. DING, B. MATTHIAS
Safety in human-robot collaborative manufacturing environments: metrics and control
IEEE Transactions on Automation Science and Engineering, Vol. 13, No. 2, pp. 882-893, April 2016

[IJ41] D. NICOLIS, A.M. ZANCHETTIN, P. ROCCO
Constraint-based and sensorless force control with an application to a lightweight dual-arm robot
IEEE Robotics and Automation Letters, Vol. 1, No. 1, pp. 340-347, January 2016.
(also presented at ICRA 2016)

[IJ40] N.M. CERIANI, A.M. ZANCHETTIN, P. ROCCO, A. STOLT, A. ROBERTSSON
Reactive task adaptation based on hierarchical constraints classification for safe industrial robots
IEEE/ASME Transactions on Mechatronics, Vol. 20, No. 6, pp. 2935-2949, December 2015

[IJ39] A.M. ZANCHETTIN, B. LACEVIC, P. ROCCO
Passivity-based control of robotic manipulators for safe cooperation with humans
International Journal of Control, Vol. 28, No. 2, pp. 429-439, February 2015.

[IJ38] G. BUIZZA AVANZINI, N.M. CERIANI, A.M. ZANCHETTIN, P. ROCCO, L. BASCETTA
Safety control of industrial robots based on a distributed distance sensor
IEEE Transactions on Control Systems Technology, Vol. 22, No. 6, pp. 2127-2140, November 2014.

[IJ37] A.M. ZANCHETTIN, L. BASCETTA, P. ROCCO
Achieving humanlike motion: resolving redundancy for anthropomorphic industrial manipulators

IEEE Robotics and Automation Magazine, Vol. 20, No. 4, pp. 131-138, December 2013.

[IJ36] A.M. ZANCHETTIN, L. BASCETTA, P. ROCCO
Acceptability of robotic manipulators in shared working environments through human-like redundancy resolution
Applied Ergonomics, Vol. 44, No. 6, pp. 982-989, November 2013.

[IJ35] B. LACEVIC, P. ROCCO, A.M. ZANCHETTIN
Safety assessment and control of robotic manipulators using danger field
IEEE Transactions on Robotics, Vol. 29, No. 5, pp. 1257-1270, October 2013.

[IJ34] L. BASCETTA, G. FERRETTI, G. MAGNANI, P. ROCCO
Walk-through programming for robotic manipulators based on admittance control
Robotica, Vol. 31, No. 7, pp. 1143-1153, October 2013

[IJ33] B. LACEVIC, P. ROCCO
Safety-Oriented Path Planning for Articulated Robots
Robotica, Vol. 31, No. 6, pp. 861-874, September 2013.

[IJ32] L. BASCETTA, P. ROCCO, A.M. ZANCHETTIN, G. MAGNANI
Velocity control of a washing machine: a mechatronic approach
Mechatronics, Vol. 22, No. 6, pp. 778-787, September 2012.

[IJ31] A.M. ZANCHETTIN, P. ROCCO.
A general user-oriented framework for holonomic redundancy resolution in robotic manipulators using task augmentation.
IEEE Transactions on Robotics , Vol. 28, No. 2, pp. 514-521, April 2012.

[IJ30] B. LACEVIC, P. ROCCO.
Closed form solution to controller design for human-robot interaction.
ASME Journal of Dynamic Systems, Measurement, and Control, Vol. 133, No. 2, March 2011.

[IJ29] L. BASCETTA, P. ROCCO.
Revising robust control for rigid robot manipulators.
IEEE Transactions on Robotics , Vol. 26, No. 1, pp. 180-187, February 2010.

[IJ28] G. MAGNANI, P. ROCCO.
Mechatronic analysis of a complex transmission chain for performance optimization in a machine tool.
Mechatronics, Vol. 20, No. 1, pp. 85-101, February 2010

[IJ27] L. BASCETTA, G. MAGNANI, P. ROCCO, A. ZANCHETTIN.
Performance limitations in Field Oriented Control for asynchronous machines with low resolution position sensing.
IEEE Transactions on Control Systems Technology , Vol. 18, No. 3, pp. 559-573, May 2010.

[IJ26] L. BASCETTA, P. ROCCO, G. MAGNANI.
Force ripple compensation in linear motors based on closed loop position dependent identification.
IEEE/ASME Transactions on Mechatronics , Vol. 15, No. 3, pp. 349-359, June 2010.

[IJ25] L. BASCETTA, G. MAGNANI, P. ROCCO.
Velocity estimation: assessing the performance of non model-based techniques.

IEEE Transactions on Control Systems Technology , Vol. 17, No. 2, pp. 424-433, March 2009.

[IJ24] L. BASCETTA, P. ROCCO.
Two-time scale visual servoing of eye-in-hand flexible manipulators
IEEE Transactions on Robotics , Vol. 22, No. 4, pp. 818-830, August 2006.

[IJ23] L. BASCETTA, P. ROCCO.
End-point vibration sensing of planar flexible manipulators through visual servoing
Mechatronics, Vol. 16, pp. 221-232, 2006.

[IJ22] G.FERRETTI, G.MAGNANI, P.ROCCO, L. VIGANO
Modelling and Simulation of a Gripper with DYMOLA
Mathematical and Computer Modelling of Dynamical Systems, Vol. 12, pp. 89-102, 2006.

[IJ21] G.FERRETTI, G.MAGNANI, P.ROCCO
Single and Multi-State Integral Friction Models,
IEEE Transactions on Automatic Control, Vol. 49, December 2004, pp. 2292-2297.

[IJ20] G.FERRETTI, G.MAGNANI, P.ROCCO
Virtual Prototyping of Mechatronic Systems,
Annual Reviews in Control, Vol. 28, 2004, pp. 193-206.

[IJ19] G.FERRETTI, G.MAGNANI, P.ROCCO
Impedance Control for Elastic Joints Industrial Manipulators,
IEEE Transactions on Robotics and Automation, Vol. 20, June 2004, pp. 488-498.

[IJ18] L. BASCETTA, P.ROCCO
Modelling Flexible Manipulators with Motors at the Joints,
Mathematical and Computer Modelling of Dynamical Systems, Vol. 8, 2002, pp. 157-183.

[IJ17] G.FERRETTI, G.MAGNANI, P.ROCCO
Modeling and Experimental Analysis of the Vibrations in Hard Disk Drives,
IEEE/ASME Transactions on Mechatronics, Vol. 7, June 2002, pp. 152-160.

[IJ16] C.MAFFEZZONI, P. ROCCO
The Index of PDAEs Applied to the Modelling of a Flexible Mechanical System,
Mathematical and Computer Modelling of Dynamical Systems, Vol.7, 2001, pp.305-321.

[IJ15] G.FERRETTI, G.MAGNANI, P.ROCCO
Triangular Force/Position Control with Application to Robotic Deburring,
Machine Intelligence and Robotic Control, Vol. 2, June/July 2000, pp. 83-91.

[IJ14] G.FERRETTI, S. FILIPPI, C. MAFFEZZONI, G.MAGNANI, P.ROCCO
A Modular Approach to Dynamic Virtual Reality Modeling of Robotic Systems,
IEEE Robotics and Automation Magazine, Vol. 6, December 1999, pp. 13-23.

[IJ13] G.FERRETTI, G.MAGNANI, P.ROCCO
Force Oscillations in Contact Motion of Industrial Robots: an Experimental Investigation,
IEEE/ASME Transactions on Mechatronics, Vol. 4, March 1999, pp. 86-91.

[IJ12] G.FERRETTI, G.MAGNANI, P.ROCCO

Modelling, Identification and Compensation of Pulsating Torque in Permanent Magnet AC Motors,
IEEE Transactions on Industrial Electronics, Vol. 45, December 1998, pp. 912-920.

[IJ11] P.ROCCO
Singular Perturbation Model of Robots with Elastic Joints and Elastic Links Constrained by Rigid Environment,
Journal of Intelligent and Robotic Systems, Vol. 22, June 1998, pp. 143-152.

[IJ10] G.FERRETTI, G.MAGNANI, P.ROCCO
Towards the Implementation of Hybrid Position/Force Control in Industrial Robots,
IEEE Transactions on Robotics and Automation, Vol. 13, December 1997, pp. 838-844.

[IJ9] P.ROCCO, G.FERRETTI, G.MAGNANI
Implicit Force Control for Industrial Robots in Contact with Stiff Surfaces,
Automatica, Gran Bretagna, Vol. 33, November 1997, pp. 2041-2047.

[IJ8] P.ROCCO
On 'Stability and Control of Elastic-Joint Robotic Manipulators During Constrained-Motion Tasks',
IEEE Transactions on Robotics and Automation, Vol. 13, June 1997, pp. 467-469.

[IJ7] C.MAFFEZZONI, P.ROCCO
Robust Tuning of PID Regulators Based on Step-Response Identification,
European Journal of Control, Vol. 3, 1997, pp. 125-136.

[IJ6] P.ROCCO
Stability of PID Control for Industrial Robot Arms,
IEEE Transactions on Robotics and Automation, Vol.12, August 1996, pp. 606-614.

[IJ5] G.FERRETTI, G.MAGNANI, P.PUTZ, P.ROCCO
The Structured Design of an Industrial Robot Controller,
Control Engineering Practice, Vol.4, March 1996, pp.239-249.

[IJ4] G.FERRETTI, C.MAFFEZZONI, G.MAGNANI, P.ROCCO
Simulating Discontinuous Phenomena Affecting Robot Motion,
Journal of Intelligent & Robotic Systems, Vol.15, 1996, pp.53-65.

[IJ3] G.FERRETTI, G.MAGNANI, P.ROCCO
On the Stability of Integral Force Control in Case of Contact with Stiff Surfaces,
Transactions of the ASME: Journal of Dynamic Systems, Measurements and Control, Vol.117, December 1995, pp.547-553.

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Joint Stiffness Estimation Based on Force Sensor Measurements in Industrial Manipulators,
Transactions of the ASME: Journal of Dynamic Systems, Measurements and Control, Vol.116, March 1994, pp.163-167.

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Decoupling Force and Motion Control in Industrial Robots,
Control Engineering Practice, Vol.1, November 1993, pp.1019-1027.

Editorials in International Journals

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Introduction to the special issue on modular physical modelling,
Mathematical and Computer Modelling of Dynamical Systems, Vol. 12, pp. 1-3, 2006.

[EIJ1] G.MAGNANI, P.ROCCO
Introduction to the special section on mechatronics,
Annual Reviews in Control, Vol. 28, 2004, pp. 179-180.

International books chapters

[IBC4] G.FERRETTI, G.MAGNANI, P.ROCCO:
Web-based industrial robot teleoperation : an application,
in: **Web-based control and robotics education**,S. G. Tzafestas Ed., Springer, (The Netherlands), 2009, pp. 249-266.

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Model Based Friction Compensation,
in: **Advances in Control of Articulated and Mobile Robots**, B. Siciliano, A. De Luca, C. Melchiorri and G. Casalino Eds., STAR, Springer, Heidelberg, 2003, pp. 87-100.

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Modelling and Control of Servomechanisms,
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