

Curriculum vitae

Davide M. Raimondo

Born: 07-11-1981, Pavia, Italy

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EDUCATION

Nov. 05 – Nov. 08	UNIVERSITÀ DEGLI STUDI DI PAVIA Ph.D. in electronic, computer and electrical engineering , Identification and Control of Dynamic Systems Laboratory, Department of Computer Engineering and Systems Science. Thesis: <i>Nonlinear Model Predictive Control: Stability, Robustness and Applications</i> . Advisor: Prof. Lalo Magni (Ph.D. thesis defended on January 16, 2009)	Pavia Italy
Oct. 03 – Jul. 05	UNIVERSITÀ DEGLI STUDI DI PAVIA Master in Automatic Control Engineering – Thesis: <i>Robust control of nonlinear systems</i> (110/110 cum laude)	Pavia Italy
Oct. 00 – Sep. 03	UNIVERSITÀ DEGLI STUDI DI PAVIA Bachelor in Computer Science Engineering – Thesis: <i>Modeling and control of a crane</i> (110/110 cum laude)	Pavia Italy
Nov. 00 – Jul. 05	ALMO COLLEGIO BORROMEO Student . Almo Collegio Borromeo has been recognized by the Italian Ministry of Education, Universities and Research as a “Highly qualified cultural institute”.	Pavia Italy
Nov. 00 – Nov. 05	INSTITUTE FOR ADVANCED STUDY OF PAVIA (IUSS) Student . In July 2005, IUSS-Pavia was recognized as an independent and autonomous “Scuola Superiore ad ordinamento speciale” in virtue of the excellent quality of the activities carried out, attaining the same status as the Scuola Normale and the Scuola Sant’Anna in Pisa, and the SISSA in Trieste.	Pavia Italy

LANGUAGES

Italian: mother tongue - **english:** proficient - **spanish:** fluent - **german:** basic knowledge.

QUALIFICATIONS

Jan. 14	Qualified at the national level for the position of Associate Professor, section 09/G1 Automatica	Italy
Nov. 05	UNIVERSITÀ DEGLI STUDI DI PAVIA <i>Professional practice examination for engineering licence (“esame di stato”) passed in Pavia, Italy.</i>	Pavia Italy

ACADEMIC AND RESEARCH EMPLOYMENT

May 15 -	UNIVERSITÀ DEGLI STUDI DI PAVIA Associate Professor in the Identification and Control of Dynamic Systems Laboratory, Department of Electrical, Computer and Biomedical Engineering	Pavia Italy
Dec. 10 – May 15	UNIVERSITÀ DEGLI STUDI DI PAVIA Assistant Professor (tenured 29/12/2013) in the Identification and Control of Dynamic Systems Laboratory, Department of Electrical, Computer and Biomedical Engineering	Pavia Italy
Jan. 09 – Dec. 10	SWISS FEDERAL INSTITUTE FOR TECHNOLOGY (ETH) Postdoc in the Automatic Control Laboratory, Department of Information Technology and Electrical Engineering	Zürich Switzerland
Nov. 08 – Dec. 08	SWISS FEDERAL INSTITUTE FOR TECHNOLOGY (ETH) Employee in the Automatic Control Laboratory, Department of Information Technology and Electrical Engineering	Zürich Switzerland
Jul. 07 – Jan. 08	UNIVERSITÀ DEGLI STUDI DI PAVIA Contracted for the development of predictive control techniques for biological applications	Pavia Italy
Sep. 05 – Nov. 05	UNIVERSITÀ DEGLI STUDI DI PAVIA Contracted for the Development of robust model predictive controllers for nonlinear systems	Pavia Italy

OTHER WORK EXPERIENCE

Sep. 01 – Jul. 05	ALMO COLLEGIO BORROMEO Responsible of system administration	Pavia Italy
Jul. 00 – Aug. 00	GSMBOX s.p.a. Contracted as computer programmer	Pavia Italy

TEACHING AND STUDENT ADVISING

Lecturer

2014-2015	Basics of Automatic Control, Università di Pavia (~100 hours/year, 9 credits)	Pavia Italy
2013-2014	Basics of Automatic Control, Università di Pavia (~100 hours/year, 9 credits)	Pavia Italy
2012-2013	Automatic Control and Process Control, Università di Pavia (~100 hours/year, 9 credits)	Mantova Italy
2011-2012	Automatic Control and Process Control, Università di Pavia (~100 hours/year, 9 credits)	Mantova Italy

2006-2007	Introduction to systems analysis, Università di Pavia (~20 hours/year, 1 credit)	Pavia Italy
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Teaching assistant

2009-2011	Model Predictive Control, ETH (seminars, ~10 hours/year)	Zürich Switzerland
2007	Master in Methods for Management of Complex Systems, IUSS, Pavia (seminars ~10 hours)	Pavia Italy
2001 –2005	Tutor of computer programming (Java), Università di Pavia (~50 hours/year)	Pavia Italy

Teaching rating

According to the requirements necessary to apply for the *una tantum* incentive for the years 2012 and 2013, I declare to have obtained a rating equal to or greater than 7 in the teaching evaluation questionnaires, derived from the average of the items of evaluation D7, D8 and D9:

- D7: Are the arguments clearly stated by the professor?
- D8: Is the professor available for clarifications and explanations?
- D9: Is the schedule of lectures, tutorials and other educational activities respected?

Participation as president in exam committees

- Course: *Basics of Automatic Control*, Università di Pavia, Pavia, Italy
Number of evaluated tests: 167
Number of exam sessions: 7
- Course: *Automatic Control and Process Control*, Università di Pavia, Mantova, Italy
Number of evaluated tests: 85
Number of exam sessions: 18

Student advising

Master theses

Pavia – Italy

1. Optimal placement of **wind turbines** on a continuous domain: an MILP-based approach, A. Arbasini
2. **Fast evaluation** of explicit nonlinear MPC, F. Fassina (Erasmus at Ruhr Universität Bochum)
3. Automatic remote control of 1:27 scale **race cars**, F. Fiorentino (Erasmus at Ruhr Universität Bochum)
4. Optimal placement of **wind turbines** of a wind farm, D. Colli
5. Design and implementation of **infrared vision system** and **braking control** of a small-scale train, A. Barbieri
6. Nonlinear model predictive control of **glycaemia** in type 1 diabetic patients, S. Rivero
7. Validation of a linear model predictive control of **glycaemia** in type 1 diabetic patients,

G. Ferrario

8. Experimentation in silico of predictive control algorithms for the control of **glycaemia** in type 1 diabetic patients, R. Tessera
9. Modeling and control of the start-up phase of a **combined cycle power plant**, A. Ferramosca
10. Predictive control of the start-up phase of a **combined cycle power plant**, D. Polli

Zürich – Switzerland

1. Implementation of a **stochastic reachability** framework for **surveillance** with pan-tilt-zoom cameras, S. Aufdenblatten
2. **Reachability** analysis of **nonlinear systems**: an approach based on conservative approximations, O. Huber
3. **Patrolling** algorithms for pan-tilt-zoom **cameras**, M. Pattarello
4. Control of Multiple Cameras for Tracking and **Surveillance**, D. Sturzenegger
5. A set theoretic method for verifying feasibility of a **fast** explicit **nonlinear** model predictive **controller**, S. Rivero

Bachelor theses

Pavia – Italy

1. **Design and construction** of a **small-scale submarine**, C. Vazzana
2. Design and validation of a **control system** for a **small-scale submarine**, D. Gioria
3. **Design and implementation** of an automatic **system for handling goods**, L. Vantadori
4. **Modeling and control** of a **system for handling goods**, A. Spinoglio
5. Simulation and **implementation** of **control** strategies for an **RC helicopter**, F. Seccamonte
6. **Path following control** of a Lego Mindstorm mobile vehicle, D. Procop
7. **Speed control** of a small scale train with MPC, M. Arcuri
8. Design and implementation of a 3D **infrared vision system**, M. Grecchi
9. Adaptive control of an RC helicopter based on the **modeling** of the **lithium battery**, G. Bellazzi
10. Design of a remote control system for an **RC helicopter**, A. Ricci
11. **Embedded tracking control** of an inverted pendulum, M. Rotulo
12. **Embedded predictive control** of an inverted pendulum, A. Mezzadra
13. Implementation HW and SW of an angular position transducer for a laboratory **crane**, T. Barroero

Zürich – Switzerland

1. MPC based **Trajectory Tracking** for 1:43 scale race cars, L. Wunderli
2. Software Framework for **Position Control** of 1:43 scale **race cars**, F. Ferrara

3. Infrared based **vision system** for tracking 1:43 scale **race cars**, M. Rutschmann

Internship supervision

1. Development of control logics of a **coal power plant**, Erika Strotz
2. Standardization of HMI interfaces on **injection presses**, Daniele Prando
3. Development of a distributed control system for the supervision of a **metro station**, Nabih Sawers Ebied Fady
4. Implementation of **cryptographic** algorithms for the security of **telemetric data** archives, Lorenzo Merlano

Stage for high school students at the Faculty of Engineering, University of Pavia

2012 – 2014 *Computer Science for automation (~3hours/year)*

Presentation at high schools

2012 *Automatic control: from robotics to biomedicine* Mantova
Italy

ORGANIZATIONAL ACTIVITIES

Jul. 15 – Coordinator of promotional activities (Area Automatica) COR Pavia
Centro Orientamento Italy

Jan. 13 – Head of the educational Process Control Laboratory, Pavia
Department of Electrical, Computer and Biomedical Italy
Engineering

OTHER INSTITUTIONAL ACTIVITIES

2012– Member of the committee for the qualification to the profession Pavia
of Computer Science Engineer Italy

OTHER COMMITTEE MEMBER

2012– Advisory board member of the Alumni IUSS Association Pavia
Italy

RESEARCH ACTIVITY

RESEARCH INTERESTS

Optimization-based control, model predictive control, fault-tolerant control, distributed control, high-speed control, autonomous surveillance, renewable energy and control of glucose concentration in subjects with diabetes.

FUNDED RESEARCH PROJECTS

- PRIN project, Ministero dell'Università e della Ricerca Scientifica e Tecnologica, Italy
Artificial pancreas: physiological models, control algorithms and clinical trial
Pavia Unit: *Predictive control algorithms for the artificial pancreas* (2008 - 2010)

Role: participant

- FEEDNETBACK (2008-2011)
EU's Senventh Framework Programme
Role: participant
- IMPROVE (2009-2012) *Implementing manufacturing science solutions to increase equipment productivity and fab performance*
European Nanoelectronics Initiative Advisory Council
Role: participant
- AP@HOME (2010-2014) *Bringing the Artificial Pancreas Home*
EU's Senventh Framework Programme
Role: participant
- CESI-RICERCA, Centro Elettrotecnico Sperimentale Italiano (2006)
Research contract number: ODAR06436
Optimized procedures for the start-up of combined cycle plants
Role: participant
- PROJECT PAVIA-BOSTON
Project promoted by the Pro-Rector in charge of the Third Mission, University of Pavia.
Total funding received 8k€

EDITORIAL ACTIVITIES AND PROGRAM COMMITTEES

Editorial Board

May 2015 - Subject editor for the journal Optimal Control Applications and Methods

International Program Committees

2015	International program committee member of the Nonlinear Model Predictive Control 2015 (NMPC'15)	Sevilla Spain
2015	Conference Editorial Board member of the European Control Conference 2014 (ECC'15)	Linz Austria
2015	International program committee member of the International Symposium on Advanced Control of Chemical Processes (ADCHEM 2015)	Whistler Canada
2014	Conference Editorial Board member of the European Control Conference 2014 (ECC'14)	Strasbourg France
2013	International program committee member of the European Control Conference 2013 (ECC'13)	Zürich Switzerland
2012	International program committee member of the Nonlinear Model Predictive Control 2012 (NMPC'12)	Noordwijkerhout The Netherlands

Organization of scientific events

2010	Invited session Nonlinear Model Predictive Control, 10 th IFAC Symposium on Nonlinear Control Systems	Bologna <i>Italy</i>
2008	Co-chair of the International workshop on Assessment and Future Direction of Nonlinear Model Predictive Control	Pavia <i>Italy</i>
2007	Invited session New Development in NMPC, 7 th IFAC Symposium on Nonlinear Control Systems	Pretoria <i>South Africa</i>

Reviewer activity

Reviewer of Applied Mathematics and Computation, Automatica, IEEE Transaction on Automatic Control, IEEE Transaction on Biomedical Engineering, International Journal of Control, International Journal of Adaptive Control and Signal Processing, International Journal of Robust and Nonlinear Control, International Journal of System Science, Journal of Process Control, SIAM Journal on Control and Optimization, System & Control Letters, Springer Lectures Notes in Control and Information Sciences Series (LNCIS), Conference on Nonlinear Model Predictive Control (NMPC), European Control Conference (ECC), IEEE American Control Conference (ACC), IEEE Conference on Decision and Control (CDC), IFAC World Congress, IFAC Symposium on Nonlinear Control Systems (NOLCOS), IFAC Workshop on Estimation and Control of Networked Systems, International Symposium on Mathematical Theory of Networks and Systems, Mediterranean Conference on Control and Automation.

PH.D. STUDENTS

Ph.D. courses

2015	Model Predictive Control (Special Topics in Cyber-Physical Systems), Computer Engineering PhD School, TU Wien (role: lecturer, ~30 hours)	Vienna <i>Austria</i>
2014	Short course on Moving Horizon Estimation as part of the Hybrid Systems Course, TU Wien (role: lecturer, ~10 hours)	Vienna <i>Austria</i>
2014	Model Predictive Control (Special Topics in Cyber-Physical Systems), Computer Engineering PhD School, TU Wien (role: lecturer, ~30 hours)	Vienna <i>Austria</i>

Advising

Nov. 12 -	<i>Roberto Giuseppe Marseglia</i> (supervisor: Dr. Davide M. Raimondo) Topic: Fault tolerant control	Pavia <i>Italy</i>
Nov. 13 -	<i>Marcello Torchio</i> (supervisor: Prof. Lalo Magni) Topic: Energy efficient control	Pavia <i>Italy</i>

External Ph.D. thesis committee member

2014	PhD committee member for Feng Xu, Automatic Control Departament, Universitat Politècnica de Catalunya	Barcelona <i>Spain</i>
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2013	PhD committee member for Isabel Jurado Flores, Department of Systems Engineering and Automation, University of Seville	Sevilla Spain
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Management of seminars and international research exchange visits

Organization of PhD courses at University of Pavia

Sep. 2015	Prof. Richard D. Braatz, Process Systems Engineering Laboratory, Massachusetts Institute of Technology, <i>The LMI/BMI Approach to Optimal Control</i> (12 hours)	Pavia Italy
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Organization of seminars at University of Pavia

Jul. 2013	Joel Paulson, Process Systems Engineering Laboratory, Massachusetts Institute of Technology, <i>Stochastic Nonlinear Model Predictive Control with Probabilistic Constraints</i>	Pavia Italy
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May 2014	Prof. Ali Mesbah, Dept. of Chemical and Biomolecular Engineering, University of California, Berkeley, <i>Advanced Control for Complex Dynamical Systems</i>	Pavia Italy
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Jul. 2013	Dr. Joseph K. Scott, Process Systems Engineering Laboratory, Massachusetts Institute of Technology, <i>Input Design for Guaranteed Fault Diagnosis Using Zonotopes</i> .	Pavia Italy
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Mar. 2013	Stefano Grassi, Department of Civil, Environmental and Geomatic, ETH Zurich, <i>Optimal spatio-temporal exploitation of renewable energy resources: biomass and wind case studies</i> .	Pavia Italy
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Organization of research exchange visits at University of Pavia

1. Prof. Richard D. Braatz, Process Systems Engineering Laboratory, Massachusetts Institute of Technology duration: 3 days (Sept. 2015). The exchange was possible thanks to the project Pavia-Boston.
2. Dr. Joseph K. Scott, Postdoc, Process Systems Engineering Laboratory, Massachusetts Institute of Technology, duration: 1 month (June-July 2013).
3. Joel Paulson, Ph.D. student, Process Systems Engineering Laboratory, Massachusetts Institute of Technology, duration: 1 month (June-July 2014). The visit was possible thanks to the project Cariplo "Support to the internationalization of Ph.D. students".
4. Lucas Charles Foguth, Ph.D. student, Process Systems Engineering Laboratory, Massachusetts Institute of Technology, duration: 1 month (June-July 2015). The exchange was possible thanks to the project Pavia-Boston.

Organization of research exchange visits at Massachusetts Institute of Technology (MIT)

1. Roberto Marseglia, Ph.D. student, duration: 5 months (August-December 2013).
2. Roberto Marseglia, Ph.D. student, duration: 1.5 months (November-December 2014). The visit was possible thanks to the project Pavia-Boston.

3. Marcello Torchio, Ph.D. student, duration: 5 months (November 2014-March 2015).

Results in technology transfer

Patents

- Magni L. D. M. Raimondo, G. De Nicolao, C. Dalla Man and C. Cobelli **Predictive Control Based System And Method For Control Of Insulin Delivery In Diabetes Using Glucose Sensing**, International Patent Application Serial No. PCT/US2008/082063, filed 31/10/2008

Invited seminars, participation to international conferences and research exchange visits

Participation in International Conferences

Overall 16 presentations held at international conferences (SysTol, ECC, NMPC, IFAC WC, IFAC NOLCOS, IFAC NecSys'09, Diabetes Technology Society Annual Meetings).

Invited talks held at International Conferences

Jul. 13	<i>Approximate nonlinear explicit MPC based on reachability analysis</i> , European Control Conference (ECC) 2013	Zürich Switzerland
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Papers at invited sessions of international conferences

Sep. 10	<i>Fast explicit nonlinear model predictive control via multiresolution function approximation with guaranteed stability</i> , Symposium on Nonlinear Control Systems (NOLCOS) 2010	Bologna Italy
Sep. 10	<i>A Nonlinear Model Predictive Control Scheme with Multirate Integral Sliding Mode</i> , Symposium on Nonlinear Control Systems (NOLCOS) 2010	Bologna Italy
Aug. 07	<i>Regional Input-to-State Stability of Min-Max Model Predictive Control</i> , Symposium on Nonlinear Control Systems (NOLCOS) 2007	Pretoria South Africa
Aug. 07	<i>A Decentralized MPC Algorithm for Nonlinear Systems</i> , Symposium on Nonlinear Control Systems (NOLCOS) 2007	Pretoria South Africa

Research exchange visits

Jan. 15 - Feb. 15	MASSACHUSETTS INSTITUTE OF TECHNOLOGY (MIT) Visiting scholar in Prof. Braatz group, Department of Chemical Engineering	Cambridge USA
Sep. 14 - Nov. 14	MASSACHUSETTS INSTITUTE OF TECHNOLOGY (MIT) Visiting scholar in Prof. Braatz group, Department of Chemical Engineering	Cambridge USA

<i>Mar. 14 - May. 14</i>	VIENNA UNIVERSITY OF TECHNOLOGY (TU WIEN) Visiting professor at the Computer Engineering PhD School	Vienna Austria
<i>Aug. 13 - Sep. 13</i>	MASSACHUSETTS INSTITUTE OF TECHNOLOGY (MIT) Visiting scholar in Prof. Braatz group, Department of Chemical Engineering	Cambridge USA
<i>Mar. 12 - Jun. 12</i>	MASSACHUSETTS INSTITUTE OF TECHNOLOGY (MIT) Visiting scholar in Prof. Braatz group, Department of Chemical Engineering	Cambridge USA
<i>Oct. 06 - May 07</i>	UNIVERSIDAD DE SEVILLA Academic Guest in the Department of Automation and System Engineering	Sevilla Spain

Invited Seminars

Apr 15	<i>Real-time Model Predictive Control for Optimal Charging of a Li-ion Battery, TU Wien, Ring Lecture Current Trends in Computer Science</i>	Vienna Austria
May 14	<i>Active Fault Diagnosis for Uncertain Systems, TU Wien, Ring Lecture Current Trends in Computer Science</i>	Vienna Austria
Jan. 14	<i>Active Input Design for Fault Diagnosis: a Set-Based Approach, Automatic Control Laboratory, TU Wien</i>	Vienna Austria
Jan. 14	<i>Active Input Design for Fault Diagnosis: a Set-Based Approach, Automatic Control Laboratory, ABB Schweiz AG</i>	Baden Switzerland
Jan. 14	<i>Active Input Design for Fault Diagnosis: a Set-Based Approach, Automatic Control Laboratory, IfA, ETH</i>	Zürich Switzerland
Sep. 13	<i>Active Input Design for Fault Diagnosis: a Set-Based Approach, Automatic Control Laboratory, EPFL</i>	Lausanne Switzerland
Sep. 13	<i>Design of Active Inputs for Set-Based Fault Diagnosis, Mitsubishi Electric Research Laboratories</i>	Cambridge USA
Apr. 13	<i>Optimal placement of wind turbines, Institute of Cartography and Geoinformation (IKG), ETH</i>	Zürich Switzerland
May 12	<i>Time-optimal control for constrained nonlinear systems: A fast explicit approximation, Process systems engineering laboratory seminar, Department of Chemical Engineering, MIT</i>	Cambridge USA
Jan. 12	<i>An approximate explicit minimum time controller for nonlinear systems with feasibility and stability guarantees, ABB Schweiz AG</i>	Baden Switzerland
Oct. 11	<i>An approximate explicit minimum time controller for nonlinear systems with feasibility and stability guarantees, Ruhr-Universität Bochum</i>	Bochum Germany

BIBLIOMETRIC PROFILE

Davide M. Raimondo currently (December 4, 2014) has an h index of 11 (Scopus) - 14 (Google Scholar) and a number of citations equal to 673 (Scopus) - 1182 (Google Scholar).

Selected Publications

International Journals	Citations Scopus	Citations Scholar	Impact Factor
1. D.M. Raimondo, M. Rubagotti, C.N. Jones, L. Magni, A. Ferrara, M. Morari, Multirate sliding mode disturbance compensation for model predictive control , International Journal of Robust and Nonlinear Control (IJRNC), published online, DOI: 10.1002/rnc.3244, 2014			2.652
2. N. Kariotoglou, D.M. Raimondo, S. Summers, J. Lygeros, Design of intelligent surveillance systems using stochastic reachability and hierarchical task allocation , Journal of Dynamic Systems, Measurement, and Control, 137(3), 031008, 2014			1.039
3. J. K. Scott, R. Findeisen, R. D. Braatz, D. M. Raimondo, Input Design for Guaranteed Fault Diagnosis Using Zonotopes , Automatica, 50(6),1580-1589, 2014		2	3.132
4. M. N. Zeilinger, D. M. Raimondo, A. Domahidi, M. Morari, C. N. Jones, On Real-time Robust Model Predictive Control , Automatica, 50(3), 683-694, 2014	1	4	3.132
5. D. Axehill, T. Besselmann, D. M. Raimondo, M. Morari, A Parametric Branch and Bound Approach to Suboptimal Explicit Hybrid MPC , Automatica, 50(1), 240-246, 2014		2	3.132
6. F. Tedesco, D. M. Raimondo, A. Casavola, Collision avoidance command governor for multi-vehicle unmanned systems , International Journal of Robust and Nonlinear Control (IJRNC), 24(16), 2309-2330, 2014	1	2	2.652
7. M. Rubagotti, D.M. Raimondo, A. Ferrara and L. Magni, Robust model predictive control with integral sliding mode in continuous-time sampled-data nonlinear systems . IEEE Transactions on Automatic Control, 56(3), 556-570, 2011	20	32	3.167
8. L. Magni, D. M. Raimondo, C. Dalla Man, G. De Nicolao, B. Kovatchev, C. Cobelli, Model Predictive Control of glucose concentration in type I diabetic patients: an in silico trial , Biomedical Signal Processing and Control, 4(4), 338-346, 2009	64	68	1.532

9.	G. Pin, D. M. Raimondo, L. Magni, T. Parisini, Robust Model Predictive Control of Nonlinear Systems with Bounded and State-Dependent Uncertainties , IEEE Transactions on Automatic Control, 54(7), 1681-1687, 2009	30	41	3.167
10.	D. M. Raimondo, D. Limon, M. Lazar, L. Magni and E. F. Camacho, Min-max model predictive control of nonlinear systems: a unifying overview on stability , European Journal of Control, 15(1), 5-21, 2009	34	53	0.792
11.	L. Magni, D. M. Raimondo, C. Dalla Man, M. Breton, S. Patek, G. de Nicolao, C. Cobelli, and B. Kovatchev. Evaluating the efficacy of closed-loop glucose regulation via control-variability grid analysis (CVGA) . Journal of Diabetes Science and Technology, 2(4), 630-635, 2008	70	80	n.a.
12.	E. Franco, L. Magni, T. Parisini, M. M. Polycarpou and D. M. Raimondo, Cooperative Constrained Control of Distributed Agents with Nonlinear Dynamics and Delayed Information Exchange: a Stabilizing Receding Horizon Approach , IEEE Transactions on Automatic Control, 53(1), 324-338, 2008	53	85	3.167
13.	L. Magni, D. M. Raimondo, L. Bossi, C. Dalla Man, G. De Nicolao, B. Kovatchev and Claudio Cobelli, Model Predictive Control of type 1 diabetes: an in silico trial , Journal of Diabetes Science and Technology, 1(6), 804-812, 2007	116	138	n.a.
14.	D. M. Raimondo, L. Magni and R. Scattolini, Decentralized MPC of Nonlinear Systems: an Input-to-State Stability Approach , International Journal of Robust and Nonlinear Control, 17(17), 1651-1667, 2007	53	86	2.652
15.	C. Dalla Man, D. M. Raimondo, R. A. Rizza, C. Cobelli, GIM, Simulation Software of Meal Glucose-Insulin Model , Journal of Diabetes Science and Technology, 1(3), 323-330, 2007	87	134	n.a.
16.	L. Magni, D. M. Raimondo and R. Scattolini, Regional Input-to-state Stability for Nonlinear Model Predictive Control , IEEE Transactions on Automatic Control, 51(9), 1548-1553, 2006	85	100	3.167

Average numer of citations per publication (selected publications only)

38.375 (Scopus) - 51.688 (Scholar)

Total impact factor (selected publications only): 33.383

Average impact factor (selected publications with available impact factor only): 2.567

Average impact factor (selected publications only): 2.086

Full Publication List

Books	Citations Scopus	Citations Scholar
1. L. Magni, D.M. Raimondo, F. Allgower (EDS), Nonlinear model predictive control: Towards new challenging applications , Springer Lecture Notes in Control and Information Sciences series, vol. 384, 2009.		92

International Journals	Citations Scopus	Citations Scholar	Impact Factor
1. D.M. Raimondo, M. Rubagotti, C.N. Jones, L. Magni, A. Ferrara, M. Morari, Multirate sliding mode disturbance compensation for model predictive control , International Journal of Robust and Nonlinear Control (IJRNC), published online, DOI: 10.1002/rnc.3244, 2014			2.652
2. N. Kariotoglou, D.M. Raimondo, S. Summers, J. Lygeros, Design of intelligent surveillance systems using stochastic reachability and hierarchical task allocation , Journal of Dynamic Systems, Measurement, and Control, 137(3), 031008, 2014			1.039
3. H. Zisser, E. Renard, B. Kovatchev, C. Cobelli, A. Avogaro, R. Nimri, B.A. Buckingham, H.P. Chase, F.J. Doyle III, J. Lum, P. Calhoun, C. Kollman, E. Dassau, A. Farret, J. Place, M. Breton, C. Dalla Man, S. Del Favero, D. Bruttomesso, A. Filippi, R. Scotton, L. Magni, C. Toffanin, D.M. Raimondo, G. De Nicolao, M. Phillip, E. Atlas, I. Muller, S. Miller, R.W. Beck for the Control to Range Study Group, Multi-center Closed-Loop Insulin Delivery Study Identifies Challenges for Keeping Blood Glucose in a Safe Range by a Control Algorithm in Adults and Adolescents with Type 1 Diabetes From Various Sites , Diabetes Technology and Therapeutics, 16(10),1-10, 2014			2.293
4. M. Jiang, X. Zhu, M. Molaro, M. Rasche, H. Zhang, K. Chadwick, D.M. Raimondo, K.K.K. Kim, L. Zhou, Z. Zhu, M. Wong, D. O'Grady, D. Hebrault, J. Tedesco, R.D. Braatz, Modification of Crystal Shape through Deep Temperature Cycling , Industrial & Engineering Chemistry Research, 53(13), 5325-5336, 2014		2	2.235
5. J. K. Scott, R. Findeisen, R. D. Braatz, D. M. Raimondo, Input Design for Guaranteed Fault Diagnosis Using Zonotopes , Automatica, 50(6),1580-1589, 2014		2	3.132
6. M. N. Zeilinger, D. M. Raimondo, A. Domahidi, M. Morari, C. N. Jones, On Real-time Robust Model	1	4	3.132

	Predictive Control , Automatica, 50(3), 683-694, 2014			
7.	D. Axehill, T. Besselmann, D. M. Raimondo, M. Morari, A Parametric Branch and Bound Approach to Suboptimal Explicit Hybrid MPC , Automatica, 50(1), 240-246, 2014		2	3.132
8.	F. Tedesco, D. M. Raimondo, A. Casavola, Collision avoidance command governor for multi-vehicle unmanned systems , International Journal of Robust and Nonlinear Control (IJRNC), 24(16), 2309-2330, 2014	1	2	2.652
9.	M. Rubagotti, D.M. Raimondo, A. Ferrara and L. Magni, Robust model predictive control with integral sliding mode in continuous-time sampled-data nonlinear systems . IEEE Transactions on Automatic Control, 56(3), 556-570, 2011	20	32	3.167
10.	L. Magni, D. M. Raimondo, C. Dalla Man, G. De Nicolao, B. Kovatchev, C. Cobelli, Model Predictive Control of glucose concentration in type I diabetic patients: an in silico trial , Biomedical Signal Processing and Control, 4(4), 338-346, 2009	64	68	1.532
11.	G. Pin, D. M. Raimondo, L. Magni, T. Parisini, Robust Model Predictive Control of Nonlinear Systems with Bounded and State-Dependent Uncertainties , IEEE Transactions on Automatic Control, 54(7), 1681-1687, 2009	30	41	3.167
12.	D. M. Raimondo, D. Limon, M. Lazar, L. Magni and E. F. Camacho, Min-max model predictive control of nonlinear systems: a unifying overview on stability , European Journal of Control, 15(1), 5-21, 2009	34	53	0.792
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Davide M. Raimondo is also coauthor of the following deliverables of the European Project Feednetback FP7 ICT-2007.3.7 Project reference: 223866

1. Deliverable D6.1: **Integration of control, communication, computation, complexity and energy considerations in a coherent design strategy**, Davide Raimondo, Peter Hokayem, Stephan Huck, John Lygeros, Manfred Morari, Alireza Farhadi, Carlos Canudas de Wit, Sandro Zampieri, Luca Schenato, Angelo Cenedese, Paul Smyth, Jacek Czyz, Giambattista Gennari
2. Deliverable 09.11: **Exploitation Plan**, Costis Kompis, Prateek Sureka, Stephan Huck, Davide Raimondo, Francisco Rubio, Carlo Fischione, Tobias Oechtering, Angelo Cenedese, Luca Schenato, Olivier DeBardonneche, Giambattista Gennari, Piero Donaggio, Paul Smyth, Jacek Czyz

Pavia 01/09/2015

Sincerely,
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