

Silvia Siri's Curriculum Vitae

(Last update on October 2020)

PERSONAL DATA

Name: Silvia

Surname: Siri

Nationality: italian

Date of birth: 31/05/1978

Place of birth: Savona

E-mail address: silvia.siri@unige.it

EDUCATION, PAST AND PRESENT POSITION

- 2002: Master Degree in Management Science Engineering, University of Genova (110/110 cum Laudem)
- 2006: Ph.D. Degree in Information and Communication Technologies, University of Genova - Thesis on "Modelling, optimization and control of logistic systems"
- 2006-2015: Postdoctoral research fellow, firstly in the Department of Communications, Computer and Systems Science of the University of Genova, and then in the Department of Informatics, Bioengineering, Robotics and Systems Engineering, University of Genova
- 2016-2018: Assistant Professor in Automatic Control in the Department of Informatics, Bioengineering, Robotics and Systems Engineering, University of Genova
- Since 2019: Associate Professor in Automatic Control in the Department of Informatics, Bioengineering, Robotics and Systems Engineering, University of Genova

RESEARCH ACTIVITY

Research activity and collaborations

Her research interests deal with modelling, optimization and control of complex dynamical systems, in the area of traffic, logistic and energy systems. Most of her research activity has involved modelling and control of road traffic systems, specifically referring to the development of multi-class traffic dynamic models and the definition of optimization-based control schemes, for the real-time regulation of freeway traffic systems including also the improvement of system sustainability. Now her research interests in the area of traffic flow are devoted to modelling the interaction of connected and automated vehicles with conventional ones and developing control frameworks for this mixed traffic scenario. In the area of intermodal freight logistics, her research studies have been focused on the definition of mathematical models and algorithms for the optimal planning of intermodal nodes and logistic networks, with specific attention to train load planning problems in seaport terminals. A more recent research activity is related to the definition of optimization tools for the design of electric mobility systems and distributed energy systems.

Main collaborations:

- A. Ferrara, Department of Electrical, Computer and Biomedical Engineering, University of Pavia
- M. Papageorgiou, Dynamic Systems and Simulation Laboratory, Technical University of Crete
- B. De Schutter, Delft Center for Systems and Control, Delft University of Technology
- C. Vivas, Department of Systems and Automatic Engineering, University of Seville
- M. Longo, Department of Energy, Politecnico di Milano
- P. Goatin, INRIA, Sophia Antipolis

- G. Sansavini, M. Mazzotti, Institute of Energy and Process Engineering, ETH Zurich
- K.H. Johansson, Division of Decision and Control Systems, KTH Royal Institute of Technology Stockholm

Roles as Principal Investigator in projects or contracts with companies

- 2018-2020: “Simulation analysis of mobility scenarios in the city of Rapallo” (funded by the Municipality of Rapallo)
- 2018-2020: “Development of methodologies for the estimation of freight traffic flows in seaports” (funded by Liguria region)
- 2018-2020: “Definition of KPIs for intermodal logistic nodes” (funded by Liguria region)
- Since 2019: “Models and optimization methods for the decision support on first/last mile trip combinations” (funded by Circle S.p.A.)
- 2020: “Sustainable mobility for the historical city centre of Savona” (funded by IRE S.p.A.)

Involvement in research projects and collaboration with companies

- 2004-2005: “Models for optimization, control and coordination of distributed production systems” (funded by the Italian Ministry for Research)
- 2006-2007: “Analysis, optimization and coordination of logistic and production systems” (funded by the Italian Ministry for Research)
- 2006-2007: “Integration and supervision centre for urban mobility in the city of Bologna” (funded by Elsag S.p.A.)
- 2007-2008: “Feasibility study, design and implementation of a demo system of a dynamic model for the control and real-time management of complex logistic networks” (funded by Liguria Region)
- 2008-2010: “Decision models for planning and managing logistic networks characterized by high information integration” (funded by the Italian Ministry for Research)
- 2009: “Guidelines for a pre-trip web-based system: analysis and definition of system requirements” (funded by SINA S.p.A.)
- 2009-2012: “Security, logistics and port intermodality” (funded by the Italian Ministry for Economic Development)
- 2010-2011: “Definition of a methodology for closed-loop models to evaluate the performance of naval units for specified tasks” (funded by Orizzonte Sistemi Navali S.p.A.)
- 2011-2012: “Definition of algorithms for optimizing rail operational processes in container terminals” (funded by Novaconsult)
- 2011-2014: Working group Hycon2-WP5 Traffic Show Case framework, within the European project “FP7 NoE HYCON2, Highly-complex and networked control systems”
- 2012-2014: “Innovative methods for decision support to optimize activities in container terminals” (funded by Sardegna Region)
- Since 2018: European project “SUSHI - Sustainable Historic City Districts”, promoted by Climate-KIC within ‘Smart Sustainable Districts’ programme
- Since 2020: European project “SRSP-New Economic Regulation for Transport in case of Emergency Events”, grant agreement SRSS/S2019/063
- Since 2020: European Project “MYSUN - Malaysia Sustainable University Campus Network”, Erasmus+ KA2 CBHE programme, ‘Capacity Building in Higher Education’ action

Invited talks

- 2016: “Two-class freeway traffic control to reduce congestion and emissions”, TRAM3 Terminus Workshop, Inria, Sophia Antipolis
- 2016: “Two-class freeway traffic control for reducing congestion and emissions: a computational analysis”, 1st Symposium on Management of Future motorway and urban Traffic Systems, Chania
- 2017: “Optimal control for regulating traffic in freeway systems via ramp metering with multiple objectives”, Workshop on Transport Modeling and Management: Vehicles and Crowds, Rome
- 2017: “Traffic control for sustainable mobility in freeways”, Reunion Conference of the Long Program on New Directions in Mathematical Approaches for Traffic Flow Management, Los Angeles
- 2018: “Discrete-time queuing models and multi-objective programming for the optimal planning in inter-modal terminals”, Workshop on Smart Freight Mobility - Current Applications and Guidelines for Future Development, 21st IEEE International Conference on Intelligent Transportation Systems
- 2019: “Traffic control for sustainable freeway networks”, Workshop on Connected and Automated Vehicles for Energy Efficiency and Environmental Impact, IFPEN, Rueil-Malmaison
- 2019: “Decision problems and optimization methods for rail operations in maritime container terminals”, Workshop on Smart Initiatives and Intelligent Freight Transportation, 22nd IEEE International Conference on Intelligent Transportation Systems, Auckland
- 2019: “Traffic systems and logistic networks: models and methods for analysis, planning and control”, Institute of Energy and Process Engineering, ETH Zurich
- 2020: “Traffic control for sustainable mobility in freeways: not only travel times reduction, but also decrease of emissions and accidents”, Division of Decision and Control Systems, KTH Royal Institute of Technology, Stockholm

Activity as Reviewer

- Since 2004: reviewer of more than 50 papers for international journals in the area of automatic control, operations research, transport systems
- Since 2004: reviewer of more than 100 papers for international conferences in the area of automatic control, operations research, transport systems
- 2015: reviewer of the PhD Thesis by José Ramón D. Frejo on “Model Predictive Control for Freeway Traffic Networks”, System Engineering and Automation Department, University of Seville
- 2017: reviewer of a book proposal for Elsevier
- 2016-2018: reviewer of 4 research project proposals and 1 research project, for METRANS Transportation Center, U.S. Department of Transportation and California Department of Transportation
- 2020: reviewer of 1 research project, for the National Center for Sustainable Transportation, Institute of Transportation Studies di University of California, Davis
- 2019-2020: reviewer of 7 PhD Thesis for the IEEE ITS Best Dissertation Award

ORGANIZATIONAL AND EDITORIAL ACTIVITY

Activity in Technical Committees and Societies

- Since 2012: Member of the IEEE Control Systems Society and IEEE Robotics & Automation Society
- Since 2014: Member of the IEEE Intelligent Transportation Systems Society
- Since 2012: Member of the IFAC “TC 7.4 Transportation systems” Technical Committee
- 2017-2018: Co-Chair of the Technical Committee on “Logistics” of the IEEE Intelligent Transportation Systems Society

- Since 2017: Vice-Chair for Social Media of the IFAC “TC 7.4 Transportation systems” Technical Committee
- Since 2019: Co-Chair of the Technical Committee on “Planning and Control of Transportation and Logistic Networks” of the IEEE Intelligent Transportation Systems Society
- Since 2019: Member of the Board of Governors of the IEEE Intelligent Transportation Systems Society

Activity as Associate Editor in journals

- Since 2016: Associate Editor for the IEEE Transactions on Intelligent Transport Systems
- 2016: Guest Editor, with Antonella Ferrara (University of Pavia) and Simona Sacone (University of Genova) for the International Journal of Robust and Nonlinear Control, organizing the Special Issue on “Recent Trends in Traffic Modelling and Control”
- 2020: Lead Guest Editor with R. Carlson (Federal University of Santa Caterina) and S. Lin (University of Chinese Academy of Sciences) for the journal Frontiers in Future Transportation, organizing a special issue on “Enabling modern urban and motorway traffic systems through modelling and control”

Organizational roles in conferences

- 2018: Co-Chair of the National Organizing Committee of the 15th IFAC Symposium on Control in Transportation Systems, Genova
- 2021: Co-Chair of the International Program Committee of the 16th IFAC Symposium on Control in Transportation Systems, Lille

Associate Editor or Member of the International Program Committees for conferences

- Since 2013: Associate Editor and Member of the IPC for the International IEEE Conference on Intelligent Transport Systems
- 2013-2017: Member of the IPC of the IEEE International Conference on Systems, Man, and Cybernetics
- 2015: Member of the IPC of the IFAC Conference on Analysis and Design of Hybrid Systems
- 2016-2018: Member of the IPC of the International Conference on Vehicle Technology and Intelligent Transport Systems
- Since 2016: Member of the IPC of the Symposium on Management of Future Motorway and Urban Traffic Systems
- Since 2016: Associate Editor and Member of the IPC for the IFAC Symposium on Control in Transportation Systems
- 2016: Member of the IPC for the IEEE International Smart Cities Conference
- 2017: Associate Editor and Member of the IPC for the IEEE International Conference on Service Operations and Logistics, and Informatics
- Since 2019: Associate Editor and Member of the IPC for the European Control Conference
- Since 2019: Associate Editor and Member of the IPC for the IEEE Intelligent Vehicles Symposium
- 2019: Member of the IPC for the IFAC Workshop on Control of Transportation Systems
- 2020: Associate Editor and Member of the IPC for the IFAC World Congress

Organization of special sessions and tracks at conferences

- 2011: organization with Simona Sacone (University of Genova) of the session on “Automation Methods in Transportation Systems and Logistics”, 7th annual IEEE Conference on Automation Science and Engineering

- 2012: organization with Simona Sacone (University of Genova) of the session on “Hybrid techniques for traffic systems modeling and control”, 4th IFAC Conference on Analysis and Design of Hybrid Systems
- organization with Antonella Ferrara (University of Pavia) and Simona Sacone (University of Genova) of the session on “Recent trends in traffic modelling and control”, 52nd IEEE Conference on Decision and Control
- 2015: organization with Simona Sacone (University of Genova) of the session on “Discrete-event and hybrid techniques applied to transportation systems: new trends and opportunities”, 5th IFAC Conference on Analysis and Design of Hybrid Systems
- 2016: organization with Claudio Roncoli (Technical University of Crete) of the session on “Management and control of motorway traffic systems”, 14th IFAC Symposium on Control in Transportation Systems
- 2016: organization with Simona Sacone (University of Genova) of the session on “Planning and control of freight transportation systems”, 14th IFAC Symposium on Control in Transportation Systems
- 2017: organization with Rudy Negenborn (Delft University of Technology) and Simona Sacone (University of Genova) of the Open Invited Track on “Control and coordination for synchmodal transport systems”, IFAC 2017 World Congress
- 2016: organization with Claudio Roncoli (Technical University of Crete) of the session “Recent advances in motorway traffic control”, IEEE 19th International Conference on Intelligent Transportation Systems
- 2018: organization with Cecilia Pasquale (University of Genova) and Antonella Ferrara (University of Pavia) of the Invited Session on “New trends in control and estimation for road traffic systems”, 57nd IEEE Conference on Decision and Control
- 2019: organization with C. Pasquale (University of Genova) and N. Geroliminis (Ecole Polytechnique Fédérale de Lausanne) of the Invited Session on “Management and control strategies for road traffic networks”, European Control Conference
- 2019: organization with M.L. Delle Monache (Inria, Grenoble) and C. Pasquale (University of Genova) of the Invited Session on “Models and control methods for traffic networks”, 58th Conference on Decision and Control
- 2020: organization with C. Pasquale and S. Sacone (University of Genova) of the Tutorial Session on “Innovative topics and future challenges in traffic control”, IFAC 2020 World Congress,
- 2021: organization with A. Malikopoulos (University of Delaware) of the Workshop on “Modeling and Control Tools for Sustainable and Connected Mobility in Smart Cities”, 29th Mediterranean Conference on Control and Automation

TEACHING ACTIVITY

Roles in PhD Programs

- 2017-2019: Member of the PhD Program Committee in “Transportation and Logistics”, University of Genova
- Since 2019: Member of the PhD Program Committee in “Computer Science and Systems Engineering”, University of Genova

Supervisor of PhD students

- Since 2018: Supervisor of Enrico Siri, PhD Program in “Computer Science and Systems Engineering”, University of Genova
- Since 2019: Supervisor of Najib Hamade, PhD Program in “Computer Science and Systems Engineering”, University of Genova

Teaching activity in Bachelor and Master Degrees

- from a.y. 2009-2010 to a.y. 2016-2017: Professor of “Planning methods for transportation and logistic systems” for the Master Degree in Management Engineering, University of Genova

- a.y. 2016-2017: Professor of “Systems Theory” for the Bachelor Degree in Management and Industrial Engineering, University of Genova
- from a.y. 2017-2018 to a.y. 2019-2020: Professor of “Models and Methods for Automation” for the Bachelor Degree in Management and Industrial Engineering, University of Genova
- Since a.y. 2017-2018: Professor of “Models and Methods for Optimization and Control” for the Master Degree in Management Engineering, University of Genova
- Since a.y. 2020-2021: Professor of “Systems Theory” for the Bachelor Degree in Mechanical Engineering, University of Genova
- Since a.y. 2020-2021: Professor of “Optimization and Control of Logistics Systems” for the Master Degree in Computer Engineering, University of Genova

Other teaching activities

- Since 2008: teaching activities in masters, specialization and professional courses
- Since 2017: teaching activities with high schools
- Since 2004: supervisor of more than 100 Bachelor or Master Degree Theses

PUBLICATIONS

International books

- [B1] A. Ferrara, S. Sacone, S. Siri, “Freeway Traffic Modelling and Control”, Advances in Industrial Control series, Springer International Publishing, 2018

Papers in International Journals

- [J1] A. Alessandri, S. Sacone, S. Siri, “Modelling and optimal receding-horizon control of maritime container terminals”, *Journal of Mathematical Modelling and Algorithms*, 6 (1), pp. 109-133, 2007
- [J2] S. Sacone, S. Siri, “An integrated simulation-optimization framework for the operational planning of seaport container terminals”, *Mathematical and Computer Modelling of Dynamical Systems*, 15 (3), pp. 275-293, 2009
- [J3] D. Giglio, R. Minciardi, S. Sacone, S. Siri, “Optimal control of production processes with variable execution times”, *Discrete Event Dynamic Systems: Theory and Applications*, 19 (3), pp. 423-448, 2009
- [J4] C. Caligaris, S. Sacone, S. Siri, “On the Payne-Whitham differential model: stability constraints in one-class and two-class cases”, *Applied Mathematical Sciences*, 4 (76), pp. 3795-3821, 2010
- [J5] S. Bracco, S. Siri, “Energetic optimization of single level combined gas-steam power plants considering different objective functions”, *Energy*, 35 (12) pp. 5365-5373, 2010
- [J6] C. Caligaris, S. Sacone, S. Siri, “On an implicit and stable resolution scheme for the Payne-Whitham model”, *Mathematical and Computer Modelling*, 54 (1-2), pp. 378-387, 2011
- [J7] D. Anghinolfi, M. Paolucci, S. Sacone, S. Siri, “Freight transportation in railway networks with automated terminals: a mathematical model and MIP heuristic approaches”, *European Journal of Operational Research*, 214 (3), pp. 588-594, 2011
- [J8] S. Sacone, S. Siri, “A control scheme for freeway traffic systems based on hybrid automata”, *Discrete Event Dynamic Systems: Theory and Applications*, 22 (1), pp. 3-25, 2012
- [J9] S. Bracco, G. Dentici, S. Siri, “Economic and environmental optimization model for the design and the operation of a combined heat and power distributed generation system in an urban area”, *Energy*, 55, pp. 1014-1024, 2013
- [J10] D. Ambrosino, C. Caballini, S. Siri, “A mathematical model to evaluate different train loading and stacking policies in a container terminal”, *Maritime Economics & Logistics*, 15 (3), pp. 292-308, 2013

- [J11] D. Giglio, R. Minciardi, S. Sacone, S. Siri, “Linear optimal control strategies for production systems with a discrete-event demand pattern”, *Discrete Event Dynamic Systems: Theory and Applications*, 24 (3), pp. 339-352, 2014
- [J12] C. Caballini, C. Pasquale, S. Sacone, S. Siri, “An event-triggered receding-horizon scheme for planning rail operations in maritime terminals”, *IEEE Transactions on Intelligent Transportation Systems*, 15 (1), pp. 365-375, 2014
- [J13] S. Sacone, S. Siri, “Optimal shipment policies for distribution systems with a limited fleet of capacitated vehicles”, *IEEE Transactions on Automation Science and Engineering*, 11 (3), pp. 948-953, 2014
- [J14] A. Ferrara, A. Nai Oleari, S. Sacone, S. Siri, “Freeways as Systems of Systems: A Distributed Model Predictive Control Scheme”, *IEEE Systems Journal*, 9 (1), pp. 312-323, 2015
- [J15] C. Pasquale, I. Papamichail, C. Roncoli, S. Sacone, S. Siri, M. Papageorgiou, “Two-class freeway traffic regulation to reduce congestion and emissions via nonlinear optimal control”, *Transportation Research C*, 55, pp. 85-99, 2015
- [J16] D. Ambrosino, S. Siri, “Comparison of solution approaches for the train load planning problem in seaport terminals”, *Transportation Research E*, 79, pp. 65-82, 2015
- [J17] A. Ferrara, S. Sacone, S. Siri, “Event-triggered model predictive schemes for freeway traffic control”, *Transportation Research C*, 58, pp. 554-567, 2015
- [J18] S. Bracco, G. Dentici, S. Siri, “DESOD: a mathematical programming tool to optimally design a distributed energy system”, *Energy*, 100, pp. 298-309, 2016
- [J19] A. Ferrara, S. Sacone, S. Siri, “Design of networked freeway traffic controllers based on event-triggered control concepts”, *International Journal of Robust and Nonlinear Control*, 26 (6), pp. 1162-1183, 2016
- [J20] A. Ferrara, S. Sacone, S. Siri, “Editorial for the Special Issue on recent trends in traffic modelling and control”, *International Journal of Robust and Nonlinear Control*, 26 (6), pp. 1159-1161, 2016
- [J21] C. Caballini, S. Fioribello, S. Sacone, S. Siri, “An MILP optimization problem for sizing port rail networks and planning shunting operations in container terminals”, *IEEE Transactions on Automation Science and Engineering*, 13 (4), pp. 1492-1503, 2016
- [J22] C. Pasquale, S. Sacone, S. Siri, B. De Schutter, “A multi-class model-based control scheme for reducing congestion and emissions in freeway networks by combining ramp metering and route guidance”, *Transportation Research C*, 80, pp. 384-408, 2017
- [J23] C. Pasquale, S. Sacone, S. Siri, M. Papageorgiou, “Optimal Control for Reducing Congestion and Improving Safety in Freeway Systems”, *IEEE Transactions on Intelligent Transportation Systems*, 19 (11), pp. 3613-3625, 2018
- [J24] C. Pasquale, S. Sacone, S. Siri, A. Ferrara, “Traffic control for freeway networks with sustainability-related objectives: Review and future challenges”, *Annual Reviews in Control*, 48, pp. 312-324, 2019
- [J25] S. Bracco, F. Delfino, M. Longo, S. Siri, “Electric vehicles and storage systems integrated within a sustainable urban district fed by solar energy”, *Journal of Advanced Transportation*, Article ID 9572746, pp. 1-19, 2019
- [J26] P. Gabrielli, A. Acquilino, S. Siri, S. Bracco, G. Sansavini, M. Mazzotti, “Optimization of low-carbon multi-energy systems with seasonal geothermal energy storage: The Anergy Grid of ETH Zurich”, *Energy Conversion and Management*, 8, 100052, pp. 1-16, 2020
- [J27] C. Pasquale, S. Sacone, S. Siri, A. Ferrara, “Hierarchical Centralized/Decentralized Event-Triggered Control of Multi-Class Traffic Networks”, published online su *IEEE Transactions on Control Systems Technology*, 2020, doi: 10.1109/TCST.2020.3016341

Chapters in International Books

- [B1] D. Giglio, R. Minciardi, S. Sacone, S. Siri, “On optimizing production nodes in supply chain systems”, in *Innovations in Distribution Logistics*, L. Bertazzi, M.G. Speranza, J. van Nunen (Eds.), vol. 619, Lecture Notes in Economics and Mathematical Systems, Springer Verlag, pp. 149-174, 2009

- [B2] D. Ambrosino, S. Siri, “Models for train load planning problems in a container terminal”, *Computer-based modelling and optimization in transportation*, J.F. de Sousa, R. Rossi (Eds.), vol. 262, Advances in Intelligent Systems and Computing, Springer International Publishing Switzerland, pp. 15-25, 2014
- [B3] C. Pasquale, S. Sacone, S. Siri, “Sustainable ramp metering for freeway traffic control”, *Intelligent Transport Systems (ITS): Past, Present and Future Directions*, G. Fusco (Ed.), Nova Science, pp. 201-230, 2017
- [B4] D. Ambrosino, D. Anghinolfi, M. Paolucci, S. Siri, “An optimization approach for the train load planning problem in seaport container terminals”, *Collaborative logistics and intermodality. Models and solutions for global environments*, J.E. Hernandez, D. Li, J.E. Jimenez-Sanchez, M.G. Cedillo-Campos, L. Wenping (Eds.), Production & Process Engineering, Springer, 2019

Papers in International Conference Proceedings

- [C1] A. Alessandri, S. Sacone, S. Siri, “Receding-horizon optimal control for container transfer in intermodal terminals”, *Tristan V, Fifth Triennial Symposium on Transportation Analysis*, Le Gosier, Guadeloupe, June 13-18, 2004
- [C2] A. Alessandri, S. Sacone, S. Siri, “Management of intermodal container terminals using feedback control”, *ITSC '04, 7th International IEEE Conference on Intelligent Transportation Systems*, Washington D.C., USA, October 3-6, 2004, pp. 882-887
- [C3] M. Magliolo, M. Bacchi, S. Sacone, S. Siri, “Traffic mean speed evaluation in freeway systems”, *ITSC '04, 7th International IEEE Conference on Intelligent Transportation Systems*, Washington D.C., USA, October 3-6, 2004, pp. 233-238
- [C4] D. Giglio, R. Minciardi, S. Sacone, S. Siri, “A hybrid model for optimal control of single nodes in supply chains”, *16th IFAC World Congress*, Prague, Czech Republic, July 4-8, 2005, pp. 7-12
- [C5] A. Alessandri, S. Sacone, S. Siri, “A queue model for the operational planning of maritime container terminals”, *5th Mathmod, Vienna International Conference on Mathematical Modelling*, Vienna, Austria, February 8-10, 2006
- [C6] D. Giglio, R. Minciardi, S. Sacone, S. Siri, “Supply chain management and optimization”, *LT'06, International Workshop on Logistics and Transportation*, Hammamet, Tunisia, April 30-May 2, 2006, pp. 206-211
- [C7] M. Lombardo, M. Paolucci, V. Recagno, S. Sacone, S. Siri, “Operational planning of long-haul intermodal freight transportation”, *Odysseus 2006, Third International Workshop on Freight Transportation and Logistics*, Altea, Spain, May 23-26, 2006, pp. 231-233
- [C8] A. Alessandri, S. Sacone, S. Siri, “Optimal control of maritime container terminals for tactical-operational planning”, *Odysseus 2006, Third International Workshop on Freight Transportation and Logistics*, Altea, Spain, May 23-26, 2006, pp. 23-25
- [C9] D. Giglio, R. Minciardi, S. Sacone, S. Siri, “Optimization of multi-product nodes in supply chains”, *ICRA '07, 2007 IEEE International Conference on Robotics and Automation*, Rome, Italy, April 10-14, 2007, pp. 1578-1583
- [C10] D. Anghinolfi, M. Paolucci, S. Sacone, S. Siri, “A metaheuristic approach for the operational planning of freight intermodal transportation”, *Tristan VI, Sixth Triennial Symposium on Transportation Analysis*, Phuket Island, Thailand, June 10-15, 2007
- [C11] D. Giglio, R. Minciardi, S. Sacone, S. Siri, “On optimizing replenishment policies in production nodes of supply chain models”, *ECC '07, European Control Conference*, Kos, Greece, July 2-5, 2007, pp. 2776-2783
- [C12] C. Caligaris, S. Sacone, S. Siri, “Optimal ramp metering and variable speed signs for multiclass freeway traffic”, *ECC '07, European Control Conference*, Kos, Greece, July 2-5, 2007, pp. 1780-1785
- [C13] C. Caligaris, S. Sacone, S. Siri, “Freeway traffic modeling: extension to different vehicle classes and numerical analysis”, *ITSC '07, 10th International IEEE Conference on Intelligent Transportation Systems*, Seattle, Washington, USA, September 30-October 3, 2007, pp. 325-330
- [C14] C. Caligaris, S. Sacone, S. Siri, “Multiclass freeway traffic: Model Predictive Control and microscopic simulation”, *MED'08, 16th Mediterranean Conference on Control and Automation*, Ajaccio, Corsica, France, June 25-27, 2008, pp. 1862-1867

- [C15] D. Giglio, R. Minciardi, S. Sacone, S. Siri, "Optimization of inventory levels and production effort in Hybrid Inventory-Production (HIP) systems", *CASE 2008, 4th annual IEEE Conference on Automation Science and Engineering*, Washington D.C., U.S.A, August 23-26, 2008, pp. 8-15
- [C16] S. Sacone, S. Siri, "A planning approach for freight transportation operations in railway networks", *ICAL 2008, IEEE International Conference on Automation and Logistics*, Qingdao, China, September 1-3, 2008, pp. 2633-2638
- [C17] S. Sacone, S. Siri, "Optimization of freight transportation operations on railway networks", *ICNPAA08, International Conference on Mathematical Problems in Engineering, Aerospace and Sciences*, Genova, Italy, June 25-27, 2008, Chapter 11, pp. 107-117
- [C18] C. Caligaris, S. Sacone, S. Siri, "Numerical Analysis of a Freeway Traffic Model", *ICNPAA08, International Conference on Mathematical Problems in Engineering, Aerospace and Sciences*, Genova, Italy, June 25-27, 2008, Chapter 34, pp. 368-377
- [C19] C. Caballini, P.P. Puliafito, S. Sacone, S. Siri, "Strategic planning of an automatic freight railway terminal", *ICNPAA08, International Conference on Mathematical Problems in Engineering, Aerospace and Sciences*, Genova, Italy, June 25-27, 2008, Chapter 54, pp. 551-559
- [C20] S. Sacone, S. Siri, "Optimal planning of order-based operations for intermodal freight transportation", *ITFTC 2008, International Trade and Freight Transportation Conference*, Ayia Napa, Cyprus, September 1-3, 2008, pp. 138-146
- [C21] C. Caballini, P.P. Puliafito, S. Sacone, S. Siri, "Modelling and strategic design of automatic intermodal freight terminals", *ITFTC 2008, International Trade and Freight Transportation Conference*, Ayia Napa, Cyprus, September 1-3, 2008, pp. 17-24
- [C22] D. Giglio, R. Minciardi, S. Sacone, S. Siri, "Optimal control of manufacturing processes in Hybrid Inventory-Production systems", *ECC '09, European Control Conference*, Budapest, Hungary, August 23-26, 2009, pp. 2560-2565
- [C23] C. Caligaris, S. Sacone, S. Siri, "Model predictive control for multiclass freeway traffic", *ECC '09, European Control Conference*, Budapest, Hungary, August 23-26, 2009, pp. 1764-1769
- [C24] C. Caballini, P.P. Puliafito, S. Sacone, S. Siri, "Modelling for the optimal sizing of an automatic intermodal freight terminal", *CTS '09, 12th IFAC Symposium on Control in Transportation Systems*, Redondo Beach, California, USA, September 2-4, 2009, pp. 31-37
- [C25] D. Anghinolfi, M. Paolucci, S. Sacone, S. Siri, "Order-based freight transportation operation planning in railway networks", *IVC & ITS 2009, Third International Workshop on Intelligent Vehicle Controls and Intelligent Transportation Systems*, Milan, Italy, July 4-5, 2009, pp. 27-36
- [C26] C. Bersani, D. Giglio, R. Minciardi, M. Robba, R. Sacile, S. Sacone, S. Siri, "A model of an interregional logistic system for the statement and solution of decision problems at the operational level", *IVC & ITS 2009, Third International Workshop on Intelligent Vehicle Controls and Intelligent Transportation Systems*, Milan, Italy, July 4-5, 2009, pp. 76-85
- [C27] D. Giglio, R. Minciardi, S. Sacone, S. Siri, "Service rate optimization in inventory-production systems with time-varying and incomplete deterministic demand", *ETFA 2009, 14th IEEE International Conference on Emerging Technologies and Factory Automation*, Mallorca, Spain, September 22-26, 2009, pp. 1-8
- [C28] D. Anghinolfi, M. Paolucci, S. Sacone, S. Siri, "Aggregate planning in general freight intermodal transportation networks", *Tristan VII, Seventh Triennial Symposium on Transportation Analysis*, Tromso, Norway, June 20-25, 2010, pp. 37-40
- [C29] D. Ambrosino, S. Sacone, S. Siri, "Train load planning in seaport container terminals", *Tristan VII, Seventh Triennial Symposium on Transportation Analysis*, Tromso, Norway, June 20-25, 2010, pp. 21-24
- [C30] S. Sacone, S. Siri, "Optimal Vendor-Managed Inventory policies in distribution systems with discrete-event processes", *WODES 2010, 10th IFAC International Workshop on Discrete Event Systems*, Berlin, Germany, August 30-September 1, 2010, pp. 454-459
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- [C32] S. Sacone, S. Siri, “Inventory optimization of distribution networks with discrete-event processes by vendor-managed policies”, *18th IFAC World Congress*, August 28-September 2, 2011, pp. 9524-9529
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