

## **Publications in Journals Regarding Evolvable Assembly Systems:**

- Rakotondrabe M.; Haddab Y.; Lutz P. Voltage/frequency proportional control of stick-slip microsystems. *IEEE Transactions on Control Systems Technology*
- M.Onori Miracles take a Little Longer. *Viewpoint, Journal of Assembly Automation*, Emerald Press, Vol.28, No.2, 2008
- D. Semere; M. Onori; A. Maffei; R. Adamietz Evolvable Assembly Systems: coping with variations through evolvability. *Journal of Assembly Automation*, Emerald Press, Vol.28, No.2, 2008
- C.Hanisch; G.Munz Evolvability and the Intangibles. *Journal of Assembly Automation*, Emerald Press, Vol.28, No.3, 2008
- M. Rakotondrabe; Y. Haddab; P. Lutz Development, sub-step modelling and control of micro/nano positioning 2DoF stick-slip device. *IEEE/ASME Transactions on Mechatronics*, Accepted in May 2008
- M. Rakotondrabe; Y. Haddab; P. Lutz Plurilinear modelling and robust control of a nonlinear piezoelectric cantilever. *IEEE Transactions on Control Systems Technology*, Accepted December 2007, in press (the paper is accessible with IExplore)
- M. Onori; D. Semere; B. Lindberg Evolvable systems: an approach to self-x production. *International journal of Computer Integrated Manufacturing*, Taylor & Francis, 2010

- D. Semere; M. Onori; A. Maffei; R. Adamietz Evolvable assembly systems: coping with variations through evolvability. *Journal of Assembly Automation*, Emerald Press, Vol. 28, No. 2, 2008
- Mauro Onori; José Barata Oliveira Outlook report on the future of European assembly automation. *Assembly Automation*, 2010, Vol. 30 Iss: 1, pp.7 – 31
- M. Onori Holistic precision and the global economy. *Viewpoint, Journal of Assembly Automation*, 2011, Vol. 31 Iss: 4
- A. Maffei; M. Onori Evolvable production systems: environment for new business models. *Journal on Key Engineering Materials*, Trans Tech Publications (2011) Vols. 467 - 469, pp. 1592 - 1597, Switzerland

### **Conference Publications Regarding Evolvable Assembly Systems:**

- Rakotondrabe M.; Haddab Y.; Lutz P. Modelling and H1 force control of a nonlinear piezoelectric cantilever. *Proc. (DVD ROM) of 2007 IEEE/RSJ International Conference on Intelligent Robots and Systems, IROS'2007*, October 29 - November 2, San Diego, California, USA, 2007
- Rakotondrabe M.; Clévy C.; Lutz P. H1 deflection control of a unimorph piezoelectric cantilever under thermal disturbance. *Proc. (DVD ROM) of 2007 IEEE/RSJ International Conference on Intelligent Robots and Systems, IROS'2007*, October 29 - November 2, San Diego, California, USA, 2007
- Rakotondrabe M.; Haddab Y.; Lutz P. Nonlinear modelling and estimation of force in a piezoelectric cantilever. *Proc. of 2007 IEEE/ASME International Conference on Advanced Intelligent Mechatronics, AIM'2007*, September 4-7, Zurich, Switzerland, 2007

- Rakotondrabe M.; Haddab Y.; Lutz P. High-Stroke Motion Modelling and Voltage/Frequency Proportional Control of a Stick-Slip Microsystem. *Proc. (DVD ROM) of the International Conference on Robotics and Automation, ICRA'2007*, Rome, Italy
  
- Haddab Y.; Chen Q.; Lutz P.; Munz G. A Low Cost Coarse/Fine Piezoelectrically Actuated Microgripper With Force Measurement. *accepté à EUSPEN 2007*, Bremen, Germany
  
- Rakotondrabe M.; Haddab Y.; Lutz P. Plurilinear Modelling and discrete  $\mu$ -Synthesis Control of a Hysteretic and Creeped Unimorph Piezoelectric Cantilever. *IEEE conference ICARCV*, 6-9 décembre 2006, Singapore
  
- J. Barata; M. Onori; L. Camarinha-Matos A Multiagent Based Control Approach for Evolvable Assembly Systems. *INDIN '05*
  
- M. Onori; J. Barata Dynamic Architecture for an Application of Evolvable Assembly Systems. *Proceedings of the ISATP 2005*, Montreal, Canada.
  
- Lohse, N.; Valtchanov, G.; Ratchev, S.; Onori, M.; Barata, J. Towards a Unified Assembly System Design Ontology using Protégé. *8th Intl. Protégé Conference - July 18-21, 2005 - Madrid, Spain*
  
- J. Barata; P. Santana; M. Onori Evolvable Assembly Systems: A Development Roadmap. *12th IFAC Symposium on Information Control Problems in Manufacturing*, St.Etienne, France, May 2006
  
- M. Onori; J. Barata; R. Frei Evolvable Assembly and Exploiting Emergent Behavior. *Proceedings of the IEEE/ISIE International Symposium on Industrial Electronics*, Montreal, Canada, July 2006
  
- T. Maraldo; M. Onori; J. Barata; D. Semere Evolvable Assembly Systems: Clarifications and Developments to Date. *Proceedings of the CIRP / IWES 6th International Workshop*

on Emergent Synthesis

, Kashiwa, Japan, August 2006

- M. Onori; J. Barata; R. Frei Applying Evolvable Assembly Systems. *Proceedings of the 7th IFIP Conference on Information Technology for Balanced Automation Systems in Manufacturing and Services, BASYS06*, Niagara Falls, USA, September 2006

- D. Semere; J. Barata; M. Onori Evolvable assembly Systems: Developments and Advances. *Proceedings of the International Symposium on Assembly and Manufacturing, ISAM/IEEE*, USA, July 2007

- J. Barata; M. Onori; R. Frei; P. Leitão Evolvable Production Systems: Enabling Research Domains. *Proceedings of the International Conference on Changeable, Agile, Reconfigurable and Virtual Production*, Toronto, Canada July 2007

- M. Paris; Y. Haddab; P. Lutz A new approach for microparts feeding system based on inertial force. *International Workshop on Microfactories, IWMF 2008*, October 2008, Evanston, USA

- M. Paris; Y. Haddab; P. Lutz Practical Characterization of the force friction for the positioning and orientation of micro-components. *Proc (DVD ROM) of IEEE/RSJ International Conference on Intelligent Robots and Systems, IROS 2008*, Nice, France

- Philippe Lutz Achieve functions of microrobotics environment to succeed in micro-assembly: the case of the feeding function. *Workshop on Grand Challenges in Microrobotics and Microassembly*, 28th June, 2008, RSS conference, Zurich, Switzerland

- Kenty Rabenorosoa; Yassine Haddab; Philippe Lutz A Low Cost Coarse/Fine Piezoelectrically Actuated Microgripper with Force Measurement Adapted to EUPASS Control Structure. *IPAS 2008*, Chamonix

- Mauro Onori; José Barata Evolvable Production Systems: Mechatronic Production Equipment with Process-based Distributed Control. *SYROCO2009*

- Niko Siltala; Andreas F. Hofmann; Reijo Tuokko; Georg Bretthauer Emplacement and Blue Print – An Approach to Handle and Describe Modules for Evolvable Assembly Systems. *SYROCO2009*
  
- Antonio Maffei; Kerstin Dencker; Marcus Bjelkemyr; Mauro Onori From Flexibility to Evolvability: Ways to Achieve Self-reconfigurability and Fullautonomy, *SYROCO2009*
  
- N. Lohse; P. Ferreira; S. Ratchev Multi-Agent Architecture for Self-Configuring Modular Assembly Systems. *SYROCO2009*
  
- L. Ribeiro; J. Barata; J. Ferreira An agent-based interaction-oriented shop floor to support emergent diagnosis. *8th IEEE International Conference on Industrial Informatics (INDIN)*, 13-16 July 2010, Osaka, Japan
  
  
- L. Ribeiro; J. Barata; J. Ferreira The Meaningfulness of Consensus and Context in Diagnosing Evolvable Production Systems. *Doceis2010*, Portugal
  
  
- Luis Ribeiro; José Barata; Gonçalo Cândido; Mauro Onori Evolvable Production Systems: An Integrated View on Recent Developments. *DET2010*
  
  
- N. Siltala; A. Hofmann; R. Tuokko; G. Bretthauer Emplacement and blue print – An approach to handle and describe modules for evolvable assembly systems. *Proceedings of DET2009 6<sup>th</sup> International Conference on Digital Enterprise Technolgy*, 14-16 December 2009, Hong Kong
  
  
- L. Ribeiro; J. Barata; J. Ferreira An agent-based interaction-oriented shop floor to support emergent diagnosis. *Proceedings of 8<sup>th</sup> International Conference on Industrial Informatics (INDIN)*, July 2010, Osaka, Japan
  
  
- H. Akillioglu; P. Neves; M. Onori Evolvable Assembly Systems: mechatronic architecture implications and future research. *3<sup>rd</sup> CIRP Conference on Assembly Technologies and Systems (CATS'10)*, June 2010, Trondheim, Norway

- A. Hofmann A comprehensive micro-assembly process oriented methodology supporting the realisation of evolvable micro production systems. *Proceedings of DET2009 6<sup>th</sup> International Conference on Digital Enterprise Technology*, 14th-16th December, Hong Kong
  
- M. Onori; J. Barata Evolvable production systems: new applications in mechatronic equipment. *Transactions on Industrial Electronics, IEEE Journal*, 2010, IES Society
  
- A. Maffei; M. Onori Evolvable produktion system: Business perspective. *IEEE International Conference on Materials, Mechatronics and Automation (ICMMA)*, 2011, Melbourne, Australia
  
- A. Maffei Evolvable production system: A new business environment. *International Symposium on Assembly and Manufacturing (ISAM)*, 2011, Tampere, Finland
  
- M. Onori; P. Neves; H. Akillioglu; A. Hofmann Dealing with the unpredictable: An evolvable assembly cell. *Intenational Symposium on Assembly and Manufacturing (ISAM)*, 2011, Tampere, Finland
  
- H. Akillioglu; M. Onori Evolvable production systems and impacts on production planning. *International Symposium on Assembly and Manufacturing (ISAM)*, 2011, Tempere, Finland
  
- A. Maffei; H. Akillioglu; P. Neves; J. Ferreira; M. Onori Emerging behaviour as a driver for the sustainability of a modular, "skill-centric" produktion system. *Africon'2011*, Zambia
  
- M. Onori; P. Neves; A. Maffei; H. Akillioglu; N. Siltala Dealing with the unpredictable. An evolvable robotic cell. *4th International Conference on Changeable, Agile and Reconfigurable Systems (CARV)*, 2011, 2nd - 5th October, Montreal, Canada

- M. Onori; H. Akillioglu; A. Hofmann An evolvable robotic cell. *37th Annual Conference of the IEEE Industrial Electronics Society (IECON)*, 2011, Melbourne, Australia
  
- P. Neves; J. Ferreira; M. Onori; J. Barata Context and implications of learning in evolvable production systems. *37th Industrial Electronics Conference (IECON)*, 2011, Melbourne, Australia
  
- A. Maffei; A. Hofmann From flexibility to true evolvability: An introduction to the basic requirements. *International Symposium on Industrial Electronics (ISIE)*, July 2010, Bari, Italy
  
- A. Maffei Evolvable production systems: A new business environment. *International Symposium on Assembly and Manufacturing (ISAM)*, May 2011, Tampere, Finland
  
- H. Akillioglu; M. Onori Evolvable production systems and impacts on production planning. *International Symposium on Assembly and Manufacturing (ISAM)*, May 2011, Tampere, Finland
  
- A. Hofmann; G. Bretthauer; N. Siltala; T. Tuokko Evolvable micro production systems: Specific needs and differences to macro. *International Symposium on Assembly and Manufacturing (ISAM)*, May 2011, Tampere, Finland
  
- L. Ribeiro; G. Candido; J. Barata; S. Schuetz IT support of mechatronic networks: A brief survey. *International Symposium on Industrial Electronics (ISIE)*, June 2011, Gdansk, Poland
  
- L. Ribeiro; J. Barata; M. Onori; C. Hanisch; J. Hoos; R. Rosa Self-organization in automation - the IDEAS pre-demonstrator. *37th Annual Conference on IEEE Industrial Electronics Society (IECON)*, Nov. 2011, Melbourne, Australia
  
- L. Ribeiro, R. Rosa; A. Cavalcante; J. Barata IADE - IDEAS Agent development environment: Lessons learned and research directions. *CIRP Conference on Assembly Technologies And Systems (CATS)*, 2012, Ann Arbor, USA
  
- H. Akillioglu; A. Maffei; P. Neves; J. Ferreira Operational characterization of evolvable production systems. *CIRP Conference on Assembly Technologies and Systems*, 2012, Michigan, USA
  
- M. Onori; J. Barata; F. Durand Evolvable assembly systems: Entering the second generation. *CIRP Conference on Assembly Technologies and Systems*, 2012, Michigan,

USA

- P. Ferreira; N. Lohse Configuration model for evolvable assembly systems. *CIRP Conference on Assembly Technologies and Systems*, 2012, Michigan, USA

- M. S. Sayed; N. Lohse Distributed bayesian diagnosis for modular assembly systems - a case study. *CIRP Conference on Assembly Technologies and Systems*, 2012, Michigan, USA

- P. Ferreira; N. Lohse; M. Razgon; P. Larizza; G. Triggiani Skill based configuration methodology for evolvable mechatronic systems. *38th Annual Conference on IEEE Industrial Electronics Society (IECON)*, Oct. 2012, Montreal, QC