

# **CURRICULUM VITAE**



**DR. GIUSEPPINA AMBROGIO**

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## **Personal details**

**Name:** Giuseppina AMBROGIO  
**Place and date of birth:** Cosenza, August, 5<sup>th</sup> 1973  
**Nationality:** Italian  
**Private address:** Via della Resistenza 186,  
87036 Rende (CS) – Italy  
Phone: +39 3204258046  
**Actual position:** Senior Assistant Professor of “Manufacturing Processes and  
Production Management”  
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## **Education:**

<b>2012</b>	Qualified as “Associate Professor” in Manufacturing field (ING-IND/16) by the Italian Ministry of University and Research	
<b>2005</b>	Faculty of Engineering University of Calabria	PhD in Mechanical and Manufacturing Engineering
<b>2000</b>	Faculty of Engineering University of Calabria	Master degree in Management Engineering
<b>1995</b>	Math and Science Academy (Highschool).	

## **Previous academic positions**

<b>2005 - today</b>	Assistant Professor, University of Calabria, Italy
<b>Jul '07-Aug '07</b>	Visiting Researcher at RWTH University of Aachen, Aachen (DE), Germany
<b>Feb '04-Aug '04</b>	Visiting Scholar at The Institute of Metal Forming, Aachen (DE), (Sheet Metal Forming Research Group – Director. Prof. R. Koop)

## **Membership**

since 2003                    Associazione Italiana Tecnologia Meccanica (AITEM)  
since 2003                    ESAFORM – European Scientific Association for material FORMing

## **Research fields**

- Sheet metal forming processes design and optimization;
- Incremental Sheet Metal forming techniques;
- FEM-AI hybrid approaches for process optimization;
- Light weight materials: formability analysis, product design and accuracy measurement.

The main results achieved in these researches have represented the object of more than 100 scientific papers on international journals and on the proceedings of international conference. The list of the most relevant publications is attached to this curriculum.

Giuseppina Ambrogio actively collaborates with several International Research Groups sited in RWTH University of Aachen (Germany), Katholique University of Leuven (Belgium), Technique University of Cottbus (Germany).

## **Educational Activities**

Giuseppina Ambrogio has been involved in the teaching of manufacturing processes and development product design both from a theoretical and applicative point of view. Her expertise is focused also on the CNC programming and on ERP customization. She is assistant professor at University of Calabria since 2003 and she is chair for the following academic courses since 2005:

### From A.A. 2005-06 to A.A. 2009-10

- "Enterprise resource planning" (5 CFU) for Master Degree in Management Engineering;
- "Methods for industrial production management" (4 CFU) for Bachelor Degree in Management Engineering;
- "Manufacturing processes" (5 CFU) for Bachelor Degree in Mechanical Engineering;

### From A.A. 2010-11 to A.A. 2015-16

- "Product Design and Production Planning and Management" (9 CFU) for Master Degree in Management Engineering;
- "CAD/CAM techniques" (3 CFU) for Bachelor Degree in Mechanical Engineering;

## **Editorships**

Invited reviewer of scientific and technical papers for 15 international journals and 1 international conferences.

## **Member of International Scientific Committees, Scientific Coordinator and Chair sessions**

Secretary of the 10th CIRP International Workshop on Modeling of Machining Operations, 27 – 28 August 2007, Reggio Calabria (Italy)

Co-Coordinator of the minisymposium on Incremental and Sheet Metal Forming within the 19th International ESAFORM Conference, Nantes (France).

Chair for different sessions within international conferences.

## **Research Projects Participation**

Giuseppina Ambrogio was involved in different research projects and cooperates with several universities and research centers in Italy and in other countries.

The main project in which she was involved are:

2008-2010: PRIN DAMEN (Coordinated by University of Padua, IT) – Formability and fracture analysis of sheet worked at elevated temperature: new models implementation and procedure set up - provided by Italian Ministry of University and Research (MIUR), in partnership with other Italian Research groups, as member of Research Unit;

2011-2015: PON SCILLA-M (Coordinated by ANSALDOBREDA spa, IT) provided by Italian Ministry of University and Research (MIUR), in partnership with other Italian Research groups and industrial Companies, as member of Research Unit;

Giuseppina Ambrogio also promoted a number of joint-ventures between industries and university with the aim to develop new knowledge in product and process design. The current research funding are:

- 2012-2016: PRIN BIOFORMING (Coordinated by Polytechnic University of Bari, IT), provided by Italian Ministry of University and Research (MIUR), in partnership with other Italian Research groups, as leader of the UNICAL Research Unit.

## **Graduate Students**

(Total: 120 MS and 5 PhD Students)

Current Graduate Students: 2 PhD candidates and 10 MS students

PhD Graduates during the Last Five Years:

- G.L. Manco (PhD, 2010; Co-advised with Prof. L. Filice)
- O. Anghinelli (PhD, 2013)
- C. Ciancio (PhD, 2015)

Post-Doc supervisor during the Last Five years:

- Dr. Francesco Gagliardi (More Experienced Marie Curie researcher)
- Dr. Jakub Korta (Experienced Marie Curie Researcher)

## **Modules Offered**

- ❑ Manufacturing Processes (sheet metal forming, stamping, joining, welding)
- ❑ Advanced Tools (FEM, CAD/CAM) for Manufacturing Processes Analysis
- ❑ Production process management.
- ❑ Product design and development. Product life-cycle management.
- ❑ ERP implementation and management. Inbound and outbound flow. Production planning (master data definition, bill of material, routing, MRP, scheduling, machine capacity).

## **List of publications**

### **Journals and international publications**

#### **ISI International Journals**

1. G. Ambrogio, C. Ciancio, F. Gagliardi, R. Musmanno, (2015) "Heuristic Techniques to Optimize Neural Network Architecture", *Neural Comput & Applic* (In press);
2. G. F. Gagliardi, G. Ambrogio, (2015) "Temperature Variation during High Speed Incremental Forming on different lightweight alloys", *International Journal of Advanced Manufacturing Technology*, DOI 10.1007/s00170-014-6398-y;
3. G. F. Gagliardi, T. Citrea, G. Ambrogio, L. Filice, (2014) "Influence of the Process Setup on the Microstructure and Mechanical Properties Evolution in Porthole Die Extrusion", *Materials and Design* vol. 60, pp. 274–281;
4. G. Ambrogio, F. Gagliardi, S. Bruschi, L. Filice, (2013) "On the high-speed Single Point Incremental Forming of titanium alloys", *CIRP Annals - Manufacturing Technology* vol. 62 (1), pp. 243– 246;
5. F. Gagliardi, I. Alfaro, G. Ambrogio, L. Filice and E. Cueto, (2013) "NEMFEM Comparison on Porthole Die Extrusion of AA-6082", *Journal of Mechanical Science and Technology* vol. 27 (4), pp. 1089-1095;
6. G. Ambrogio, F. Gagliardi (2012), "Design of an optimized procedure to predict opposite performances in porthole die extrusion", *Neural Comput & Applic*, DOI 10.1007/s00521-012- 0916-3;
7. F. Gagliardi, G. Ambrogio, L. Filice (2012) "On the die design in AA6082 porthole extrusion", *CIRP Annals – Manufacturing Technology*, vol. 61, pp. 231-234.
8. G. Ambrogio, L. Filice, F. Gagliardi (2012) "Formability of lightweight alloys by hot incremental sheet forming", *Materials & Design*, vol. 34, pp. 501-508. ISSN 0264-1275.
9. G. Ingarao, G. Ambrogio, F. Gagliardi, R. Di Lorenzo (2012) "A sustainability point of view on sheet metal forming operations: material wasting and energy consumption in incremental forming and stamping processes". *Journal of Cleaner Production*, vol. 29-30, pp.255-268.
10. G. Ambrogio, L. Filice, F. Gagliardi (2011) "Improving industrial suitability of Incremental Sheet Forming process", *International Journal of Advanced Manufacturing Technology*, Vol. 58, num 9-12, pp. 941-947. DOI: 10.1007/s00170-011-3448-6.
11. G. Ambrogio, L. Filice, F. Guerriero, R. Guido, D. Umbrello (2011) "Prediction of incremental sheet forming process performance by using a neural network approach", *International Journal of Advanced Manufacturing Technology*, vol. 54, N. 9-21, pp. 921-930. DOI: 10.1007/s00170-010-3011-x.
12. G. Ambrogio, L. Filice, G.L. Manco (2011) "Analysis of the thickness distribution varying tool trajectory in Single Point Incremental Forming", *Journal of Engineering Manufacturing – Part B*, Vol. 225/3, pp.348-356. ISSN 0954-4054, DOI 10.1177/09544054JEM1958.
13. M. Alfano, G. Ambrogio, F. Crea, L. Filice, F. Furgiuele (2011) "Influence of laser surface modification on bonding strength of Al/Mg adhesive joints", *Journal of Adhesion Science and Technology*, Vol. 25, pp. 1261-1276.
14. D. Umbrello, G. Ambrogio, L. Filice, F. Guerriero, R. Guido (2010) "A clustering approach for determining the optimal process parameters in cutting", *Journal of Intelligent Manufacturing*, Springer, Vol. 21, pp. 787-795. DOI: 10.1007/s10845-009-0254-1.
15. G. Ambrogio, L. Filice, G.L. Manco (2008), "Warm incremental forming of magnesium alloy AZ31", *Annals of the CIRP*, Vol. 57/1/2008, pp. 257-260, Elsevier.
16. D. Umbrello, G. Ambrogio, L. Filice, R. Shivpuri (2008), "A Hybrid FEM-ANN Approach for Predicting Residual Stresses and the Optimal Cutting Conditions during Hard Turning of AISI 52100 Bearing Steel", *Materials & Design*, Vol. 29/4, pp. 873-883, ELSEVIER SCIENCE SA.
17. D. Umbrello, G. Ambrogio, L. Filice, R. Shivpuri (2007), "An ANN Approach for Predicting Subsurface Residual Stresses and the Desired Cutting Conditions during Hard Turning", *Journal of Material Processing Technology*, Vol. 189/1-3, pp. 143-152.

18. G. Ambrogio, V. Cozza, L. Filice, F. Micari (2007) "An analytical model for improving precision in Single Point Incremental Forming", *Journal of Material Processing Technology*, Vol. 191, pp. 92-95.
19. F. Micari, G. Ambrogio, L. Filice (2007) "Shape and dimensional accuracy in Single Point Incremental Forming: state of the art and future trends", *Journal of Material Processing Technology*, Vol. 191, pp. 390-395.
20. L. Filice, G. Ambrogio, F. Micari (2006), "On-Line Control of Single Point Incremental Forming Operations through Punch Force Monitoring", *Annals of the CIRP*, Vol. 55/1/2006, pp. 245-248.
21. G. Ambrogio, L. Filice, F. Micari (2006), "A force measuring based strategy for failure prevention in incremental forming", *Journal of Materials Processing Technology*, Vol. 177, pp. 413-416.
22. G. Ambrogio, L. De Napoli, L. Filice, F. Gagliardi, M. Muzzupappa (2005), "Application of Incremental Forming process for high customised medical product manufacturing", *International Journal of Materials Processing Technology*, vol. 162-163, pp. 156-162.
23. G. Ambrogio, L. Filice, G. Palumbo, S. Pinto (2005), "Prediction of formability extension in deep drawing when superimposing a thermal gradient", *International Journal of Materials Processing Technology*, vol. 162-163, pp. 454-460.
24. G. Ambrogio, L. Filice, L. De Napoli and M. Muzzupappa (2005), "A simple approach for reducing profile diverting in a single point incremental forming process", *Journal of Engineering Manufacture – Part B*, Vol. 219, pp. 823 – 830.
25. L. Fratini, G. Ambrogio, R. Di Lorenzo, L. Filice, F. Micari (2004) "Influence of Mechanical Properties of the Sheet Material on Formability in Single Point Incremental Forming", *Annals of the CIRP*, vol. 53/1/2004, pp. 207-210.
26. G. Ambrogio, I. Costantino, L. De Napoli, L. Filice, L. Fratini, M. Muzzupappa (2004), "Influence of some relevant process parameters on the dimensional accuracy in incremental forming: a numerical and experimental investigation", *International Journal of Materials Processing Technology*, vol. 153-154/C, pp.501-507.

### **Other Journals (classified as Conference Paper)**

27. G. Ambrogio, R. Conte, L. De Napoli, G. Fragomeni and F. Gagliardi, (2015) "Forming approaches comparison for high customised skull manufacturing", *Key Engineering Materials* Vol. 651-653, pp. 925-931;
28. G. Ambrogio, G. Ingarao, F. Gagliardi, R. Di Lorenzo, (2014) "Analysis of energy efficiency of different setups able to perform single point incremental forming (SPIF) processes", *2014 Procedia CIRP*, Vol. 15, pp. 111-116;
29. F. Gagliardi, T. Citrea, G. Ambrogio, L. Filice, (2014) "Numerical Analysis on Surface Ductile Fractures for Some Extrusion Conditions", *Key Engineering Materials* vol. 585, pp. 51-58;
30. G. Ambrogio, A. Cossari, L. Filice and G.L. Manco (2010) "Incremental Forming of Multislope Shaped Components", *Advanced Materials Research (special edition)*, Vols. 83-86, pp.94-100, Trans tech Publications, Switzerland.
31. G. Ambrogio, L. Filice (2009), "Application of Neural Network technique to predict the formability in Incremental Forming Process", *Key Engineering Materials (Special Issue of Shemet 2009)*, Vols. 410-411, pp. 381-389.
32. G. Ambrogio, L. Filice, A. Forcellese, G.L. Manco, M. Simoncini (2009), "Process parameter effects on the LDR in warm deep drawing of magnesium alloys", *Key Engineering Materials (Special Issue of Shemet 2009)*, Vols. 410-411, pp. 587-593.
33. G. Ambrogio, L. Filice, G.L. Manco (2008), "Improvement of material breaking knowledge in SPIF for changing wall slope", *Steel Research International (special edition)*, vol.1/2008, pp. 624-631.
34. G. Ambrogio, C. Bruni, L. Filice and F. Gabrielli (2007), "On the formability of magnesium Alloy sheets in warm conditions", *Key Engineering Materials (special Issue of Shemet 2007)*, Vol. 344, pp. 55-62.
35. G. Ambrogio, L. De Napoli, L. Filice and M. Muzzupappa (2007), "Experimental evidences concerning geometrical accuracy after unclamping and trimming incrementally formed components", *Key Engineering Materials (special Issue of Shemet 2007)*, Vol. 344, pp. 535-542.
36. G. Ambrogio, L. Filice, F. Gagliardi and F. Micari (2005) "Sheet thinning prediction in Single Point Incremental Forming", *Advanced Material Research (special edition)*, Vol. 6-8, pp. 479-486.

### **Proceedings of International Conference**

37. G. Ambrogio, L. Filice, F. Gagliardi (2012), "The application of a damage model based on the absorbed plastic energy for sheet-breaking prediction in Incremental Forming", The 14<sup>th</sup> International Metalforming Conference, 16-19 September 2012, Krakow (Poland), pp.435-438.
38. G. Ingarao, F. Gagliardi, G. Ambrogio, R. Di Lorenzo (2012), "An experimental campaign to investigate sustainability issues in Single Point Incremental Forming processes", The 14<sup>th</sup> International Metalforming Conference, 16-19 September 2012, Krakow (Poland), pp.451-454.
39. L. Marretta, R. Di Lorenzo, G. Ambrogio, O. Anghinelli, D. Dornfeld (2012) "Deep drawing versus incremental forming processes: a comparative cradle to gate analysis" Steel Research International, Special edition of the 14<sup>th</sup> International Metalforming Conference, 16-19 September 2012, Krakow (Poland), pp.431-434.
40. G. Ambrogio, F. Gagliardi, L. Filice (2012), "Robust design of Incremental Sheet Forming by Taguchi's method", 8<sup>th</sup> CIRP Int. Conf. on Int. Comp. Manuf. Eng. In. Cogn. Prod. Tech. Syst., July 2012, Ischia (Gulf of Naples), Italy.
41. L. Filice, G. Ambrogio, F. Guerriero (2012) "A multi-objective approach for wire-drawing process", proc. of the 8<sup>th</sup> CIRP Conference on Intelligent Computation in Manufacturing Engineering, Ischia (Naples), Italy, 18 - 20 July 2012.
42. F. Gagliardi, G. Ambrogio, L. Filice (2012) "Optimization of aluminium extrusion by porthole die using a down scaled equipment", Key Engineering Materials, Vol. 491 (Special Edition Extrusion Workshop 2012), Trans Tech Publications, ISBN 978-3-03785-250-7, pp. 173-180.
43. G. Ambrogio, F. Gagliardi, L. Filice, O. Anghinelli (2012) "Towards Energy Efficiency in Incremental Forming of Titanium", Key Engineering Materials Vols. 504-506 (Special Edition of Esaform 2012), Part 1, pp. 821-826, ISBN-13 978-3-03785-366-5 (Special issue of the 15<sup>th</sup> Esaform Conf. 14-16 march 2012, Erlangen)
44. O. Anghinelli, G. Ambrogio, R. Di Lorenzo, G. Ingarao (2011), "Environmental Costs of Single Point Incremental Forming", Steel Research International (special Edition of the 10<sup>th</sup> International Conference on Technology of Plasticity, 25-30 October 2011 Aachen –Germany), pp 525- 530.
45. M. Alfano, G. Ambrogio, L. Filice, F. Furgiuele, E. Gallus, D. D'Antuoni (2011) "On the Performance of Welded, Riveted and Adhesive Bonded Al/Mg Sheet Metal Joints", Key Engineering Materials (Special Issue of Shemet 2011), vol. 473, pp. 237-242. ISSN 1013-9826, DOI 10.4028/www.scientific.net/KEM.473.237.
46. G. Ingarao, G. Ambrogio, R. Di Lorenzo, F. Micari (2011) "On the sustainability evaluation in sheet metal forming processes" Key Engineering Materials (Special Issue of Shemet 2011), vol. 473, pp. 824-829. ISSN 1013-9826, DOI 10.4028/www.scientific.net/KEM.473.824.
47. G. Ambrogio, L. Filice, F. Gagliardi (2011) "Enhancing Incremental Sheet Forming Performance Using High Speed", Key Engineering Materials (Special Issue of Shemet 2011), vol. 473, pp. 847-852. ISSN 1013-9826, DOI 10.4028/www.scientific.net/KEM.473.847.
48. G. Ambrogio, L. Filice, G. Gautier, S. Rizzuti (2011), "Influence of tool coating on the process performance of AISI 304 Incremental Sheet Forming", Proceedings of the 10<sup>th</sup> International Conference on Technology of Plasticity, 25-30 October 2011 Aachen (Germany), pp 513- 518.
49. G. Ambrogio, L. Filice, F. Gagliardi (2011) "Formability of Titanium Alloys in Incremental Sheet Forming Process with Local Material Heating", Proceedings of the 10<sup>th</sup> International Conference on Technology of Plasticity, 25-30 October 2011 Aachen (Germany), pp 536- 540.
50. G. Ambrogio, L. Filice, G.L. Manco (2010), "Improving process performance in Incremental Sheet Forming", Proceedings of Advances in Materials and Processing Technologies AMPT, Paris (France), October 24-27 2010.
51. G. Ambrogio, L. Filice, F. Gagliardi, G.L. Manco and S. Lazzàro (2010), "Manufacturing of an aircraft component by hot forming of Titanium alloy", CIRP ICME '10 - 7<sup>th</sup> CIRP Int. Conf. on Int. Comp. Manuf. Eng. In. Cogn. Prod. Tech. Syst., 23 - 25 June 2010, Capri (Gulf of Naples), Italy.
52. G. Ambrogio, L. Filice, G.L. Manco (2010), "A Neural Network approach to predict the maximum thinning in SPIF of different material", CIRP ICME '10 - 7<sup>th</sup> CIRP Int. Conf. on Int. Comp. Manuf. Eng. In. Cogn. Prod. Tech. Syst., 23 - 25 June 2010, Capri (Gulf of Naples), Italy.
53. G. Ambrogio, L. Filice, G.L. Manco (2010), "Some consideration on friction in incremental sheet forming processes", Proceedings of the 4<sup>th</sup> International Conference on Tribology in Manufacturing Processes, pp.633-641, Nice (France), June 13-15 2010.



54. G. Ambrogio, L. Filice, M. Gaudioso, G.L. Manco (2010), "Optimal tool-path design to reduce thinning in ISF process", Proceedings of the 13<sup>th</sup> International ESAFORM Conference on Material Forming, Brescia (IT), April 7-9 2010.
55. G. Ambrogio, G.L. Manco (2010), "Influence of thickness on formability in 6082-T6", Proceedings of the 13<sup>th</sup> International ESAFORM Conference on Material Forming, Brescia (IT), April 7-9 2010.
56. G. Ambrogio, L. Filice, G.L. Manco (2009) "The use of back-drawing incremental forming (bif) to improve geometrical accuracy in sheet metal parts" Proceedings of Advances in Materials and Processing Technologies AMPT, 26–29 October 2009, Kuala Lumpur (Malaysia), CD-ROM.
57. G. Ambrogio, L. Filice, G.L. Manco (2009) "Some considerations on sheet thinning in incremental forming at varying of the process parameters" Proceedings of Advances in Materials and Processing Technologies AMPT, 26–29 October 2009, Kuala Lumpur (Malaysia), CD-ROM.
58. G. Ambrogio, C. Bruni, A. Forcellese, F. Gabrielli, M. Simoncini (2009), "Flow stress prediction in warm forming conditions of AZ31 magnesium alloy sheets using an ANN-based model", Proceedings of the 2nd International Researchers Symposium 2009 on INNOVATIVE PRODUCTION MACHINES AND SYSTEMS, Ischia (NA), Italy, July 22-24.
59. G. Ambrogio, S. Bruschi, A. Ghiotti, L. Filice (2009), "Formability of AZ31 Magnesium Alloy in Warm incremental Forming Process", proceedings of the 12<sup>th</sup> International ESAFORM Conference on Material Forming, Enschede (NL), April 27-29.
60. G. Ambrogio, L. De Napoli, L. Filice (2009), "A Novel Approach Based on Multiple Back-Drawing Incremental Forming to Reduce Geometry Deviation", proceedings of the 12<sup>th</sup> International ESAFORM Conference on Material Forming, Enschede (NL), April 27-29.
61. D. Mundo, G. Gatti, G.A. Danieli, G. Ambrogio, L. Filice (2008), "Considerations on process performance in incremental forming by inducing high frequency vibration", Proceedings of the 2nd European Conference on Mechanism Science Eucomes 2008, Cassino 17-20 September 2008.
62. G. Ambrogio , C. Bruni , S. Bruschi , L. Filice , A. Ghiotti and M. Simoncini (2008), "Characterisation of AZ31B magnesium alloy formability in warm forming conditions", International Journal of Material Forming, DOI 10.1007/s12289-008-0027-y, Springer Publications.
63. G. Ambrogio, L. Filice, F. Gagliardi, L. Manco (2008), "Some considerations on Incremental Forming of Aluminum Foams Sandwiches", proceedings of the 5<sup>th</sup> Int. Conf. on Porous Metals and Metallic Foams, Montreal (CA), 5-7 settembre 2007, Montreal (CA), pp. 403-406, ISBN 978-1-932078-28-2.
64. G. Ambrogio, J. Duflou, L. Filice and R. Aereens (2007), "Some considerations on force trends in Incremental Forming of different materials", AIP Conference Proceedings – 10th ESAFORM Conference, 18 – 20 April 2007, Zaragoza (Spain), Vol. 907, pp. 193-198.
65. G. Ambrogio, L. Filice, L. Manco and F. Micari (2007), "A depth dependent analytical approach to determine material breaking in SPIF" , AIP Conference Proceedings – 10th ESAFORM Conference, 18 – 20 April 2007, Zaragoza (Spain), Vol. 907, pp. 331-336.
66. G. Ambrogio, L. Filice, L. Fratini, G. Ingarao, L. Manco (2007), "Measuring of geometrical precision of some parts obtained by asymmetric incremental forming process after trimming", AIP Conference Proceedings – 9th Numiform Conference, 17–21 June 2007, Oporto (Portugal), Vol. 978, pp. 431 – 436.
67. G. Ambrogio, L. De Napoli, L. Filice, F. Micari, M. Muzzupappa (2006) "Some considerations on the precision of incrementally formed double-curvature sheet components", Proceedings of the 9<sup>th</sup> Esaform Conference on Material Forming, Glasgow, 26-28 Aprile, pp. 199-202.
68. G. Ambrogio, L. Filice, F. Silvestri, F. Micari (2006) "Rapid Prototyping through the application of AISF technique", Keynote paper, Proceedings of the 9<sup>th</sup> Esaform Conference on Material Forming, Glasgow, 26-28 April, pp. 875-878.
69. G. Ambrogio, M. Bambach, L. Filice, G. Hirt (2006) "Basic investigations into wrinkling limits for incremental sheet forming", Proceedings of International Deep Drawing Research Group 2006, Porto, 19-21 June, pp. 191-197.
70. G. Ambrogio, L. Fratini, F. Micari, (2006), "Incremental Forming of Friction Stir Welded Tailored Sheets", 8th Biennal ASME Conference on Engineering Design Systems and Analysis, Torino (Italy), 4-7 July. ISBN 0-7918-3779-3.

71. G. Ambrogio, D. Umbrello, L. Filice, F. Micari (2006) "Neural network based approach for improving geometrical precision in Incremental Forming", Proc. of the 5th CIRP international seminar on Intelligent Computation in Manufacturing Engineering (ICME), 25-28 July 2006, Ischia (Italy), pp. 25-29 (ISBN 88-95028-01-5 978-88-95028-01-9).
72. G. Ambrogio, D. Umbrello, L. Filice (2006) "Diffusion wear modeling in machining using ANN", proc. of the 5th CIRP international seminar on Intelligent Computation in Manufacturing Engineering (ICME), 25-28 July 2006, Ischia (Italy), pp. 69-73 (ISBN 88-95028-01-5 978-88-95028-01-9).
73. G. Ambrogio, L. De Napoli, L. Filice and M. Muzzupappa (2006) "Rapid prototyping of a steering wheel by using backdrawing incremental forming technique", Proc. of AMPT Conference - Jul 30-Aug 3, 2006, Las Vegas, USA. Proceedings on a CD.
74. G. Ambrogio, L. Filice, F. Gagliardi, F. Micari and D. Umbrello (2005) "Application of the Neural Network technique for reducing springback in Incremental Forming processes", Proc. of the 8<sup>th</sup> ESAFORM Conference, April 27<sup>th</sup>-29<sup>th</sup> 2005, Cluj-Napoca (Romania), pp. 699-702.
75. G. Ambrogio, L. Filice, F. Gagliardi and F. Micari (2005) "Three-dimensional FE simulation of single point incremental forming: experimental evidences and process design improvements", Proc. of the Eighth International Conference on Computational Plasticity, September 5<sup>th</sup>-7<sup>th</sup> 2005, Barcelona (Spain), pp. 259-262.
76. G. Ambrogio, L. Filice, F. Gagliardi, F. Micari (2005) "Sheet Incremental Forming: a new process configuration allowing controlled flow of the sheet material under the blank-holder", Proc. of Advanced Technology of Plasticity – Proceeding of the 8<sup>th</sup> ICTP, October 9-13 2005, Verona (Italy), pp. 351-352.
77. G. Ambrogio, L. Filice (2005) "A simple strategy for improving geometry precision in single point incremental forming", Proc. of Advanced Technology of Plasticity – Proceeding of the 8<sup>th</sup> ICTP, October 9-13 2005, Verona (Italy), pp. 357-358.
78. G. Ambrogio, F. Gagliardi, L. Filice, (2004), "First experimental and numerical evidences concerning the Hydropiercing process", Proc. of the 7<sup>th</sup> Esaform conference on material forming, 28-30 Aprile 2004, Trondheim (Norway), pp. 733-736.
79. G. Ambrogio, L. Filice, D. Umbrello, (2004), "Numerical analysis of the fracture surface in thick sheet blanking", Proc. of the 7<sup>th</sup> Esaform conference on material forming, 28-30 Aprile 2004, Trondheim (Norway), pp. 757-760.
80. G. Ambrogio, L. Filice, G. Palumbo, S. Pinto (2004) "Enhancing LDR in deep drawing by superimposing thermal gradients", Proc. of the 8<sup>th</sup> International Conference on Numerical Methods in Industrial Forming Processes (NUMIFORM) 13 – 17 June 2004, Columbus, OH (USA), pp. 916-921.
81. G. Ambrogio, L. Filice, L. Fratini, F. Micari (2004) "Process mechanics analysis in Single Point Incremental Forming", Proc. of the 8<sup>th</sup> International Conference on Numerical Methods in Industrial Forming Processes (NUMIFORM) 13 – 17 June 2004, Columbus, OH (USA), pp. 922-927.
82. G. Ambrogio, R. Di Lorenzo, L. Filice, L. Fratini, F. Gagliardi and F. Micari (2004) "Pre-forming optimisation in tube hydroforming processes", Proc. of CIRP-ICME 2004, 30 June – 2 July, Sorrento (Italy), pp. 251-256.
83. G. Ambrogio, R. Di Lorenzo (2004) "An economical model for investment decisions in flexible manufacturing processes: an application to sheet metal forming operations", Proc. of World Automation Congress 2004, June 28 – July 1, 2004, Seville (Spain).
84. G. Ambrogio, L. Filice, L. Fratini, F. Micari (2003) "Some relevant correlations between process parameters and process performance in incremental forming of metal sheets", Proceedings of the 6<sup>th</sup> Esaform Conference on Material Forming, Salerno, Italy, pp. 175-178.

## National Journals

85. G. Ambrogio, O. Anghinelli, G. Gautier, S. Rizzuti (2012) "L'utilizzo di rivestimenti per utensili nel processo di Incremental Sheet Forming", *Lamiera, Tecniche Nuove*, Agosto 2012, pp. 28-31.
86. G. Ambrogio, C. Maletta, L. Filice, F. Furguele (2010) "Prototipazione di un elemento elastico a memoria di forma mediante formatura incrementale", *Lamiera, Tecniche Nuove*, Giugno 2010, pp.32-34.
87. G. Ambrogio, G. Buffa, L. Filice, L. Fratini (2009) "Sequenziamento di processi innovativi per la lavorazione della lamiera", *Lamiera, Tecniche Nuove*, Agosto 2009, pp. 22-27.

88. G. Ambrogio, M. Bambach, L. Filice, G. Hirt, L. Manco, M. Todorova (2008), "La formatura incrementale: stato dell'arte e nuove sfide", *Tecniche Nuove*, Agosto 2008, pp. 36-41.
89. G. Ambrogio, C. Bruni, L. Filice, A. Forcellese, F. Gabrielli, M. Simoncini (2007) "Lavorazioni plastiche d lamiere in lega di magnesio:limiti di formabilità in temperatura", *Lamiera, Tecniche Nuove*, Febbraio 2007, pp. 42-45.
90. G. Ambrogio, L. Filice, F. Micari (2007), "Formatura della lamiera: il processo incrementale", *Stampi, Tecniche Nuove*, Novembre 2007, pp. 88-91.
91. G. Ambrogio, L. Filice, F. Micari (2007) "Realizzazione di prodotti in lamiera mediante formatura incrementale", *Lamiera, Tecniche Nuove*, Marzo 2007, pp. 66-69.
92. G. Ambrogio, L. Filice, F. Micari, (2004) "Verso il Dieless: la Formatura Incrementale", *Lamiera, Tecniche Nuove*, Novembre 2004, pp. 74-80.
93. G. Ambrogio, L. Filice, F. Micari, (2004) "Analisi numerico sperimentale del processo di piegatura di Tubi", *Lamiera, Tecniche Nuove*, Febbraio 2004, pp. 66-71.

### **Proceedings of National Conference**

94. G. Ambrogio, L. Filice, F. Gagliardi (2011) "On the Warm Incremental Forming of Titanium Alloys", X Congresso AITEM, Napoli (Italy), 12-14 September 2011, pp. 73-74.
95. A. Gallo, G. Ambrogio, M. Muzzupappa, L. Luchi (2011) "Acquisizione 3D in luce strutturata per il controllo dell'accuratezza dimensionale nei processi di incremental forming", *Atti del 10° Congresso Nazionale AIAS, Capo Vaticano (VV)*, 5-8 Settembre 2010, pag. 5-9.
96. G. Ambrogio (2009), "The role of tool trajectory in SPIF process formability", *Atti dell' IX Congresso A.I.TE.M.*, 7-9 settembre 2009, Torino (TO).
97. G. Ambrogio, L. Filice, L. Manco, A. Forcellese, M. Simoncini (2007), "A FE approach to design warm deep-drawing operations of magnesium alloys", *Atti dell' VIII Congresso A.I.TE.M.*, 10-12 settembre 2007, Montecatini (FI), pp. 109-110.
98. G. Ambrogio, L. Filice, F. Gagliardi, F. Micari (2005) "Analysis of the punch force in incremental forming for revealing failure approaching", *Atti del VII Congresso A.I.TE.M.*, 7-9 settembre 2005, Lecce.
99. G. Ambrogio, R. Di Lorenzo, F. Micari (2003) "Analysis of the economical effectiveness of the Incremental Forming Processes: an industrial case study", *Atti del VI Congresso A.I.TE.M.*, 8-10 settembre 2003, Gaeta.

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