

**CURRICULUM VITAE
OF
CARMINE MALETTA**

GENERAL INFORMATION

Name: Carmine MALETTA

Date and place of birth: April 5 1973, Cosenza (Italy).

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EDUCATION

- **Ph.D.:** Structural Engineering taken at University of Calabria (Italy), 2005; the dissertation focused on the numerical analysis of heterogeneous materials, by Voronoi Cell based Finite Element Methods (VCFEM);
 - **Master Degree:** Mechanical Engineering (summa cum laude), taken at University of Calabria (Italy), 1999; the thesis focused on the application of Finite Element Method (FEM) and Computational Fluid Dynamics (CFD) to yacht design.
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CURRENT POSITION AND PREVIOUS EXPERIENCES

- **01/2005-Current:** Assistant professor of Machine Design at University of Calabria (Italy);
 - **10/2002-10/2005:** PhD Student in Materials and Structures Engineering at University of Calabria (Italy);
 - **09/2001-12/2001:** Visiting PhD Student at the Fraunhofer Institute LBF for Structural Durability and System Reliability, Darmstadt (Germany);
 - **12/2000-10/2002:** Business consultant in the consulting company Accenture, Rome (Italy).
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IT EXPERIENCES

- **General purpose tools:**
 - Matlab & Matlab Simulink [U] (level: Good)
 - Mathematica [U] (level: Good)

- **FE solver packages:**
 - MSC Nastran (level: Good)
 - MSC Marc (level: Good)
 - MSC Dytran (level: Basic)
- **CAD packages:**
 - Pro/Engineer [U] (level: Basic)
 - Rhinoceros [U] (level: Basic)

RESEARCH INTERESTS

The current research interests cover the following topics:

- Numerical methods for structural engineering;
- Numerical analysis of advanced materials (advanced ceramics, composites, shape memory alloys);
- Experimental characterization of Nickel-Titanium (NiTi) based Shape Memory Alloys (SMA);
- Fatigue and fracture of conventional and unconventional engineering materials.

RESEARCH PROJECTS

Dr. Carmine MALETTA has been the coordinator of the following industrial research projects

- *Analisi di rivestimenti in materiale ceramico per applicazioni in ambito odontoiatrico.* Tecnologica s.r.l. (KR), 2007-2008, (85k euro);
- *Caratterizzazione meccanica di materiali ceramici per applicazioni odontoiatriche.* Tecnologica s.r.l. (KR), 2008, (30k euro);
- *Produzione e caratterizzazione di giunti saldati in lega a memoria di forma.* Consorzio CALEF, c/o Centro Ricerche ENEA della Trisaia (MT), 2008, (70k euro);
- *Analisi di accoppiamenti protesi-moncone: gap marginale, resistenza meccanica.* Dentalia S.r.l. (KR), 2009-2010, (15k euro);
- *Tecniche e materiali innovativi per la realizzazione di calzature artigianali.* De Tommaso ACL artigiani calzaturieri (CS), 2007-2008, (5k euro);
- *Analisi termo-meccanica di caldaie a combustibile solido di tipo pellet.* Ungaro S.r.l. (CZ), 2011, (15k euro).

Member of the research team for the following industrial research projects:

- *Dimensionamento strutturale di una gru a portale.* Costruit s.r.l. (CS), 2006;
- *Progettazione di stampi e formatura a freddo di lamiera.* MAP Engineering S.p.A. (TO), 2008-2009;
- *Verifica a fatica del sistema lama mobile/cremagliera di un veicolo ferroviario con trazione ad aderenza disaccoppiabile mediante sistema di ingresso a lama mobile.* Ferrovie della Calabria (CS), 2010-2011.

Member of the research team for the following government research projects:

- *MAPROD (Materiali e Processi Innovativi epr l'Odontoiatria con Applicazioni in Campo Odontoiatrico)*, Progetto FIT - Ministero dello Sviluppo Economico
- *MATRECO (Materiali Avanzati per Trasposti Ecosostenibili)*, PON R&C 2007/13
- *ECOFIBAR (Compositi cementizi ECOcompatibili realizzati con Fibra di Basalto e con Aggregati di Riciclo)*, PON R&C 2007/13

- *FlexProd (Sistemi di Produzione Flessibili ed Eco-Efficienti per Veicoli su Gomma)*, Industria 2015

SCIENTIFIC REVIEW ACTIVITIES

Dr Carmine MALETTA serve as a reviewer for the following scientific journals:

- *Finite Element in Analysis and Design*;
- *Smart Materials and Structures*;
- *International Journal of Mechanics and Materials in Design*;
- *Journal of Materials Research*;
- *Material Science and Engineering: A Structural Materials*;
- *Material Science and Engineering: C Materials for Biological Applications*;
- *Journal of Sound and Vibration*;
- *Journal of Materials Engineering and Performance*;
- *Journal of Optics and Laser Technology*;
- *Lasers in Engineering; International Journal of Engineering, Science and Technology*;
- *International Journal of Fracture; Journals of alloys and Compounds*;
- *Meccanica*;
- *Metals*;
- *Acta Mechanica*.

Scientific evaluator for the following research programs:

- *Partnership Programme - Joint Applied Research Projects - PCCA 2011* - Romanian National Council for Development and Innovation.
- *National Research Program - FIRB Futuro in Ricerca 2013* – Italian Ministry of University and Research
- *Partnership Programme - Joint Applied Research Projects - PCCA 2013* - Romanian National Council for Development and Innovation.

TEACHING ACTIVITIES

Professor of the following courses at University of Calabria:

- *Finite Element Method*, Bachelor's Degree in Mechanical Engineering, from: A.Y. 2004/05 to: A.Y. 2009/10;
- *Mechanics of Materials*, Bachelor's Degree in Management Engineering, from: A.Y. 2004/05 to: A.Y. 2006/07;
- *Mechanical Engineering Design*, Bachelor's Degree in Management Engineering, from: A.Y. 2007/08 to: A.Y. 2009/10;
- *Numerical Methods for Solids Mechanics*, Master's Degree in Mechanical Engineering, A.Y. 2008/09;
- *Selection of Engineering Materials*, Master's Degree in Mechanical Engineering, A.Y. 2009/10;
- *Mechanical Construction Techniques*, Bachelor's Degree in Mechanical Engineering, from: A.Y. 2010/11 to: A.Y. 2013/14;
- *Advanced Materials and Design Methods*, Master's Degree in Mechanical Engineering, A.Y. 2013/14

Teaching support for the following courses:

- *Quality in Mechanical Engineering Design* (3 CFU), Bachelor's Degree in Management Engineering, from: A.Y. 2002/03 to: A.Y. 2003/04;
- *Finite Element Method*, Bachelor's Degree in Mechanical Engineering, A.Y. 2003/04;
- *Mechanical Engineering Design*, Master's Degree in Mechanical Engineering, from: A.Y. 2003/04 to: A.Y. 2009/10.

Seminars:

- *Shape memory alloys: experimental characterization and numerical modeling*, University of Applied Science, Bochum Germany, Dec. 2007;
- *NiTi based Shape Memory Alloys*, University of Southampton, Southampton United Kingdom, June 2008;
- *Applications of NiTi based Shape Memory Alloys*, University of Applied Science, Bochum Germany, June 2008.

Other teaching activities:

- Tutor and co-tutor of several Bachelor's and Master's Degree thesis in Mechanical Engineering at University of Calabria
- Co-tutor of PhD students in Engineering Materials and Structures at University of Calabria.

ORGANIZATION ACTIVITIES

Dr. Carmine MALETTA has been a member of the organizing committee for the following conferences:

- *18° National Conference of the Italian Group of Fracture, Cetraro (CS), Italy, 2006;*
- *XXXIX National Conference on Stress Analysis, Maratea (PZ), Italy, 2010;*

He participated to the organization of the following scientific events:

- Symposium on "*Shape memory alloys: present and future perspectives*" within the *International Conference on Mechanics ICM II*, Cernobbio (Italy) (2011);
- Organization of the sessions "*SMA Devices I*" and "*SMA Devices III*" Within the *ASME Conference on Smart Materials Adaptive Structures & Intelligent Systems (SMASIS2011)*, Phoenix (AZ), USA (2011);

He has been Chairman of several conference sessions and scientific meetings.

He is a member of the executive committee of the Italian Group on Fracture (<http://www.gruppofrattura.it/sito/en/aboutus/exco>)

He has a member of the editorial board of the following journals:

- *Fracture and Structural Integrity* (<http://www.gruppofrattura.it/sito/en/journal>)
- *Chinese Journal of Material Science* (<http://www.hindawi.com/journals/cjms/editors/>)

PUBLICATIONS

1. Di Cocco, V., Iacoviello, F., Maletta, C., Natali, S., (2014). *Cyclic microstructural transitions and fracture micromechanisms in a near equiatomic NiTi alloy* *International Journal of Fatigue* 58 , pp. 136-143
1. Maletta, C., Sgambitterra, E., Furgiuele, F. (2013) *Crack tip stress distribution and stress intensity factor in shape memory alloys*, *Fatigue and Fracture of Engineering Materials and Structures* 36 (9) , pp. 903-912

2. Marrelli, M., Maletta, C., Inchingolo, F., Alfano, M., Tatullo, M., (2013). Three-point bending tests of zirconia core/veneer ceramics for dental restorations, *International Journal of Dentistry* 2013 , art. no. 831976
3. Maletta, C., Filice, L., Furgiuele, F., (2013). NiTi Belleville washers: Design, manufacturing and testing, *Journal of Intelligent Material Systems and Structures* 24 (6) , pp. 695-703
4. Furgiuele, F., Maletta, C., Niccoli, F., Sgambitterra, E., (2013). A Thermo-Mechanical Model for SMA-Based Crank Heat Engine, In: *Proceedings of ASME Conference - SMASIS 2011. Snowbird, Utah (USA) 16-18 September, 2013*
5. Corigliano, P., Bruno, L., Crupi, V., Guglielmino, E., Maletta, C., (2013). Applicazione di Tecniche a Pieno Campo per l'Analisi della Trasformazione di Fase in Leghe NiTi, In: *Atti del 42° Convegno Nazionale AIAS. Salerno, Italia, September 2013*
6. Santoro, A., Alfano, M., Bruno, L., Maletta, C., (2013). Adhesion strength of adhesive bonded NiTi thin metal sheets. In: *Atti del 22° Convegno Nazionale IGF. Roma, Italia, July 2013*
7. Bruno, L., F. Furgiuele, F., Maletta, C., (2013). Full field displacement measurements of notched pseudoelastic specimens, In: *Atti del 22° Convegno Nazionale IGF. Roma, Italia, July 2013*
8. Maletta, C., Furgiuele, F., Sgambitterra, E., (2012), Fracture mechanics of pseudoelastic NiTi alloys: Review of the research activities carried out at university of Calabria, *Frattura ed Integrità Strutturale* 23 , pp. 13-24
9. Maletta C (2012). A novel fracture mechanics approach for shape memory alloys with trilinear stress-strain behavior. *INTERNATIONAL JOURNAL OF FRACTURE*, vol. 177, p. 39-51, ISSN:0376-9429, doi: 10.1007/s10704-012-9750-y
10. Maletta C, Furgiuele F, Sgambitterra E, Callisti M, Mellor BG, Wood RJK (2012). Indentation response of a NiTi shape memory alloy: Modeling and experiments. *FRATTURA E INTEGRITÀ STRUTTURALE*, vol. 21, p. 5-12, ISSN: 1971-8993, doi: 10.3221/IGF-ESIS.21.01
11. Maletta C, Sgambitterra E, Furgiuele F, Casati R, Tuissi A (2012). Fatigue of pseudoelastic NiTi within the stress-induced transformation regime: a modified CoffinManson approach. *SMART MATERIALS AND STRUCTURES*, vol. 21, 112001, ISSN: 0964-1726, doi: 10.1088/0964-1726/21/11/112001
12. Maletta C, Furgiuele F (2012). 1D Phenomenological Modeling of Shape Memory and Pseudoelasticity in NiTi Alloys. In: *Smart Actuation and Sensing Systems - Recent Advances and Future Challenges*. p. 121-144, RIJEKA:INTECH open, ISBN: 978-953-51-0798-9
13. Furgiuele F, Maletta C, Sgambitterra E, Casati R, Tuissi A (2012). Fatica oligociclica in una lega pseudoelastica. In: *Atti del 41° Convegno nazionale AIAS. Vicenza, 5-8 settembre 2012, AIAS Associazione Italiana per le Analisi delle Sollecitazioni*
14. Bruno L, Castiglione T, Maletta C, Ungaro A (2012). Analisi termo-meccanica di una caldaia a biomassa. In: *Atti del 2° Congresso Nazionale del Coordinamento della Meccanica Italiana. Ancona, 25-26 Giugno 2012, Congresso Nazionale del Coordinamento della Meccanica Italiana*
15. Maletta C, Sgambitterra E, Furgiuele F, Casati R, Tuissi A (2012). Low cycle fatigue of a pseudoelastic NiTi alloys. In: *Proceedings of the International Conference on Crack Path 2012. Gaeta (LT), Italy, 19-21 September, 2012, PARMA:International Conference on Crack Paths*
16. Iacoviello F, Di Cocco V, Natali S, Maletta C (2012). Microstructural influences on crack initiation and growth in an equiatomic NiTi PE alloy. In: *Proceedings of the International Conference on Crack Path 2012. Gaeta (LT), Italy, 19-21 September 2012, PARMA:International Conference on Crack Paths*
17. Maletta C, Furgiuele F, Sgambitterra E, Callisti M, Mellor BG, Wood RJK (2012). Static and cyclic indentation of a NiTi shape memory alloy. In: *Proceedings of the Workshop IGF 2012. Forni di Sopra (UD), Italia, 1-3 marzo 2012, CASSINO:IGF - Gruppo Italiano Frattura*
18. De Gaetano G, Cosco FI, Maletta C, Mundo D, Donders S (2012). Dynamic FE-based method for concept modelling of vehicle beam-like structures. In: *Proceedings of the 25th International Conference on Noise and Vibration engineering (ISMA2012). Leuven (Belgium), 17-19 September*
19. Furgiuele F, Maletta C, Sgambitterra E (2012). Force-deflection characteristics of SMA-based Belleville springs. In: *Proceedings of the ASME 2012 . Stone Mountain, Georgia, USA, September 19-21, 2012, New York:ASME - American Society of Mechanical Engineers*
20. Maletta C, Di Cocco V, Natali S (2011). Structural transitions in a NiTi alloy: a multistage loading-unload cycle". *Frattura ed Integrità Strutturale. FRATTURA E INTEGRITÀ STRUTTURALE*, vol. 18, p. 45-53, ISSN: 1971-8993

21. Maletta C, Di Cocco V, Natali S (2011). *Structural transitions under uniaxial deformation in a NiTi pseudo-elastic alloy*. In: *Atti del convegno IGF XXI*. CASSINO:IGF - Gruppo Italiano Frattura, Cassino, 13-15 giugno 2011
22. Maletta C, Filice L, Furgieuele F (2011). *MODELING, MANUFACTURING AND EXPERIMENTAL CHARACTERIZATION OF NITI BASED BELLEVILLE SPRINGS*. In: *Proceedings of ASME Conference - SMASIS 2011*. Phoenix, 18-21 September, 2011, ASME
23. Maletta C, Young ML (2011). *Stress-Induced Martensite in Front of Crack Tips in NiTi Shape Memory Alloys: Modeling Versus Experiments*. *JOURNAL OF MATERIALS ENGINEERING AND PERFORMANCE*, vol. 20, p. 597-604, ISSN: 1059-9495, doi: 10.1007/s11665-011-9852-0
24. Maletta C, Furgieuele F (2011). *Fracture control parameters for NiTi based shape memory alloys*. *INTERNATIONAL JOURNAL OF SOLIDS AND STRUCTURES*, vol. 48, p. 1658-1664, ISSN: 0020-7683, doi: 10.1016/j.ijsolstr.2011.02.014
25. Maletta C, Tuissi A (2011). *Tenacità e fatica delle leghe a memoria di forma*. In: *Tenacità e resistenza a fatica delle leghe metalliche*. p. 305-336, Milan:Associazione Italiana di Metallurgia, ISBN:978-88-85298-86-6
26. MALETTA C, M.L. YOUNG (2010). *CRACK TIP STRESS-INDUCED MARTENSITE IN NITI ALLOYS:ANALYTICAL MODELING AND EXPERIMENTAL VALIDATION*. In: *Atti del XXXIX convegno nazionale AIAS*. Maratea (PZ), Settembre 2010, COSENZA:R. Olivito
27. G. AMBROGIO, MALETTA C, L. FILICE E F. FURGIUELE (2010). *REALIZZAZIONE DI UN ELEMENTO ELASTICO IN LEGA NICHEL TITANIO MEDIANTE FORMATURA INCREMENTALE*. In: *ATTI DEL I CONGRESSO DEL COORDINAMENTO DELLA MECCANICA ITALIANA*. Palermo, Giugno 2010
28. MALETTA C, M. L. YOUNG (2010). *Modeling and Experimental Measurements of Stress-Induced Martensite in Front of Cracks in NiTi Alloys*. In: *Proceedings of SMST 2010*. Asilomar:SMST, Monterey (CA), USA, May 2010
29. MALETTA C, F. FURGIUELE (2010). *Stress Intensity Factor in Shape Memory Alloys*. In: *Proceedings of SMST conference 2010*. Monterey (CA), USA, May 2010
30. F. FURGIUELE, MALETTA C (2010). *FATTORE DI INTENSIFICAZIONE DELLE TENSIONI NELLE LEGHE A MEMORIA DI FORMA*. In: *Atti del XXXIII Convegno AIM*. Brescia, Novembre 2010
31. V. DI COCCO, F. FURGIUELE, F. IACOVIELLO, MALETTA C (2010). *PROPRIETA' MECCANICHE ED EVOLUZIONE DELLA MICROSTRUTTURA DI LEGHE NiTi DURANTE PROVE DI TRAZIONE MONOASSIALE*. In: *Atti del XXXIX Convegno Nazionale AIAS*. Maratea (PZ), Settembre 2010, RENDE:R. Olivito
32. Maletta C, Furgieuele F (2010). *Analytical modeling of stress-induced martensitic transformation in the crack tip region of nickel-titanium alloys*. *ACTA MATERIALIA*, vol. 58, p. 92-101, ISSN: 1359-6454, doi: 10.1016/j.actamat.2009.08.060
33. Barcellona A, Fratini L, Palmeri D, Maletta C, Brandizzi M (2010). *FRICION STIR PROCESSING OF NITI SHAPE MEMORY ALLOY: MICROSTRUCTURAL CHARACTERIZATION*. *INTERNATIONAL JOURNAL OF MATERIAL FORMING*, vol. 3, p. 1047-1050, ISSN: 1960-6206, doi: 10.1007/s12289-010-0950-6
34. MALETTA C, PAGNOTTA L (2009). *Optimization of NiTi Based Smart Composites for Shape Control*. In: *Proceedings of ICCE-17*. Honolulu, Hawaii, USA, July 2009
35. MALETTA C, FURGIUELE F (2009). *TRASFORMAZIONE DI FASE ALL'APICE DI DIFETTI IN LEGHE A MEMORIA DI FORMA*. In: *Atti del XXXVIII Convegno Nazionale AIAS*. Torino, Settembre 2009
36. Maletta C, Falvo A, Furgieuele F, Barbieri G, Brandizzi M (2009). *Fracture Behaviour of Nickel-Titanium Laser Welded Joints*. *JOURNAL OF MATERIALS ENGINEERING AND PERFORMANCE*, vol. 18, p.569-574, ISSN: 1059-9495, doi: 10.1007/s11665-009-9351-8
37. Falvo A, Furgieuele F, Leonardi A, Maletta C (2009). *Stress-Induced Martensitic Transformation in the Crack Tip Region of a NiTi Alloy*. *JOURNAL OF MATERIALS ENGINEERING AND PERFORMANCE*, vol. 18, p. 679-685, ISSN: 1059-9495, doi: 10.1007/s11665-009-9361-6
38. Alfano M, Furgieuele F, Leonardi A, Maletta C, Paulino GH (2009). *Mode I fracture of adhesive joints using tailored cohesive zone models*. *INTERNATIONAL JOURNAL OF FRACTURE*, vol. 157, p. 193-204,ISSN: 0376-9429, doi: 10.1007/s10704-008-9293-4
39. Maletta C, Falvo A, Furgieuele F, Reddy JN (2009). *A phenomenological model for superelasticity in*

- NiTi alloys. *SMART MATERIALS AND STRUCTURES*, vol. 18, p. 1-9, ISSN: 0964-1726, doi:10.1088/0964-1726/18/2/025005
40. BRUNO L, MALETTA C (2008). *Real-Time Calibration of Open-Loop Piezoelectric Actuators for Interferometric Applications*. *INTERNATIONAL JOURNAL OF MECHANICS AND MATERIALS IN DESIGN*, vol. 4, p. 97-103-103, ISSN: 1569-1713, doi: 10.1007/s10999-008-9055-5
 41. FALVO A, FURGIUELE F, LEONARDI A, MALETTA C (2008). *Evoluzione della Trasformazione di Fase all'apice di Difetti Acuti in Leghe NiTi*. In: *Atti del convegno XXXVII Convegno Nazionale AIAS*. Roma, Settembre 2008
 42. FALVO A, FURGIUELE F, LEONARDI A, MALETTA C (2008). *Fracture analysis of NiTi Alloys by Finite Element Method*. In: *Proceedings of 17th European Conference on Fracture (ECF 17)*. BRNO, Czech republic, September 2008
 43. ALFANO M, MALETTA C, INCHINGOLO F, MARRELLI M (2008). *Caratterizzazione meccanica di materiali ceramici per applicazioni odontoiatriche*. In: *Atti del convegno XXXVII Convegno Nazionale AIAS*. Roma, Settembre 2008
 44. ALFANO M, FURGIUELE F, MALETTA C, PAULINO G. H (2008). *Failure Analysis of Aluminium/Epoxy joints using the cohesive zone model*. In: *Atti del convegno XXXVII Convegno Nazionale AIAS*. Roma, Settembre 2008
 45. Cirello A, Furgieuele F, Maletta C, Pasta A (2008). *Numerical simulations and experimental measurements of the stress intensity factor in perforated plates*. *ENGINEERING FRACTURE MECHANICS*, vol. 75, p. 4383-4393, ISSN: 0013-7944, doi:10.1016/j.engfracmech.2008.05.007
 46. Falvo A, Furgieuele FM, Maletta C (2008). *Functional behaviour of a NiTi-welded joint: Two-way shape memory effect*. *MATERIALS SCIENCE AND ENGINEERING A-STRUCTURAL MATERIALS PROPERTIES MICROSTRUCTURE AND PROCESSING*, vol. 481, p. 647-650, ISSN: 0921-5093, doi:10.1016/j.msea.2006.11.178
 47. Falvo A, Furgieuele F, Maletta C (2008). *Hysteresis modeling of two-way shape memory effect in NiTi alloys*. *MECCANICA*, vol. 43, p. 165-172, ISSN: 0025-6455, doi: 10.1007/s11012-008-9118-6
 48. Maletta C, Falvo A, Furgieuele F (2008). *A phenomenological approach for real-time simulation of the two-way shape memory effect in NiTi alloys*. *JOURNAL OF ENGINEERING MATERIALS AND TECHNOLOGY*, vol. 130, ISSN: 0094-4289, doi: 10.1115/1.2806264
 49. ALFANO M, FURGIUELE F, LEONARDI A, MALETTA C, PAULINO G. H (2007). *Cohesive zone modeling of mode I fracture in adhesive bonded joints*. In: *Advances in Fracture and Damage Mechanics VI. KEY ENGINEERING MATERIALS*, vol. 348, p. 13-16, Trans Tech Publications, ISSN: 1662-9795
 50. MALETTA C, FALVO A, FURGIUELE F (2007). *Modello Fenomenologico per la Simulazione della Memoria di Forma a Due Vie in Leghe Niti*. In: *Atti del convegno XXXV AIAS*. Ischia (NA), Settembre
 51. ALFANO M, FURGIUELE F, LEONARDI A, MALETTA C, PAULINO G. H (2007). *Fracture analysis of adhesive joints using intrinsic cohesive zone models*. In: *Atti del convegno Nazionale del Gruppo Italiano Frattura*. Milano, Giugno 2007, p. 77-84
 52. ALFANO M, FURGIUELE F, LEONARDI A, MALETTA C (2007). *Mixed mode fracture toughness of adhesive bonded joints*. In: *Proceedings of the 13th International Conference on Experimental Mechanics*. Alexandroupolis, ALEXANDROUPOLIS:Gdoutos E.
 53. Falvo A, Furgieuele F, Maletta C (2007). *Two-way shape memory effect of a Ti rich NiTi alloy: experimental measurements and numerical simulations*. *SMART MATERIALS AND STRUCTURES*, vol. 16, p. 771-778, ISSN: 0964-1726, doi: 10.1088/0964-1726/16/3/026
 54. Bruno L, Furgieuele FM, Maletta C (2007). *A hybrid method for the thermo-mechanical analysis of elastic cracks in two-dimensional heterogeneous materials*. *FINITE ELEMENTS IN ANALYSIS AND DESIGN*, vol. 43, p. 444-452, ISSN: 0168-874X, doi: 10.1016/j.finel.2006.11.001
 55. Furgieuele F, Maletta C (2007). *Thermo-mechanical analysis of alumina-zirconia composites by a hybrid finite element method*. *MECHANICS OF ADVANCED MATERIALS AND STRUCTURES*, vol. 14, p. 399-412, ISSN: 1537-6494, doi: 10.1080/15376490701298843
 56. Falvo A., Furgieuele F., Maletta C, Lucente R. (2007). *Effect of laser welding on the TWSME of a NiTi alloy*. *METALLURGIA ITALIANA*, vol. 99, p. 3-8, ISSN: 0026-0843
 57. MALETTA C, FURGIUELE F. M, ALFANO M (2006). *Stress Intensity Factor in Alumina-Zirconia Composites*. In: *Fracture and Damage Mechanics V. KEY ENGINEERING MATERIALS*, vol. 324-325, p.1135-1138, Trans Tech Publications, ISSN: 1662-9795

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59. ALFANO M, FURGIUELE F, LEONARDI A, MALETTA C (2006). *Analisi di sistemi bimeriale in presenza di difetti all'interfaccia mediante elementi finiti ibridi*. In: *Atti del convegno IGF 18. Cetraro (CS)*, p. 13-21
60. ALFANO M, FURGIUELE F, MALETTA C (2006). *Analisi della resistenza a frattura di un giunto incollato in presenza di difetti all'interfaccia*. In: *Atti del convegno IGF 18. Cetraro (CS)*
61. BRUNO L, MALETTA C (2006). *Hysteresis Compensation of an Open-Loop Piezoelectric Actuator for Interferometric Applications*. In: *Proceedings of Mechanics & Materials in Design 2006. Oporto, June 2006, OPORTO:Silva Gomez J., Meguid S. A.*
62. Cesari F, Esposito L, Furgiuele FM, Maletta C, Tucci A (2006). *Fracture toughness of alumina-zirconia composites*. *CERAMICS INTERNATIONAL*, vol. 32, p. 249-255, ISSN: 0272-8842, doi: 10.1016/j.ceramint.2005.02.012
63. MALETTA C, FURGIUELE F. M, CESARI F (2005). *The Determination of Stress Distribution and Elastic Properties for Heterogeneous Materials with Hybrid Finite Element*. *INTERNATIONAL JOURNAL OF MECHANICS AND MATERIALS IN DESIGN*, vol. 2, p. 1-13, ISSN: 1569-1713, doi:10.1007/s10999-005-3309-2
64. MALETTA C, COGNINI F., FALVO A., FURGIUELE F. M. (2005). *EFFECT OF LASER WELDING ON SHAPE MEMORY BEHAVIOUR*. In: *Proceedings of the II ECCOMAS Thematic Conference on Smart Structures and Materials (SMART'05)*. vol. 1, Lisbon, 18-21 July 2005
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