

Personal details

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Education

1991: PhD in Structural Mechanics from Bologna University (with partnership from Padova and Ancona Universities, Italy)
1986: Laurea "cum laude" in Civil Engineering (Structural Curriculum) from Padova University (Italy)
1980: High School Degree for scientific studies

Training

- 1992-1994: Post-Doctoral fellowship from the Department of Structural Engineering of the Technical University (Politecnico) of Milano, Italy
- 1991-1992: Research fellowship from Padova University, jointly with the 'Consorzio Padova Ricerche' (a private research institution in Padova, Italy)
- 1991-1992: Part-time employee of a Structural Engineering Design Office in Padova, Italy
- 1986-1987: Employee of a Civil Engineering Construction Company in Padova, Italy

Academic positions

- 1998-todate: Associate Professor of Mechanics of Solids and Structures at the Politecnico di Milano, Italy
- 1995-1998: Assistant Professor of Mechanics of Solids and Structures at the Politecnico di Milano, Italy

Teaching experience

- 2012-todate: Mechanics of Solids and Structures for Civil and Environmental Engineering students
- 2008-todate: Computational Mechanics for Civil Engineering students
- 2007-2012 and 2014: short Master course on Computational Structural Mechanics, Ecole des Mines de Paris at Sophia-Antipolis, France
- 1998-2013: Mechanics of Solids and Structures for Industrial Engineering students
- 1992-1997: teaching assistance in Mechanics of Solids and Structures at the Politecnico di Milano (Schools of Architecture and Engineering)
- 1989-1991: teaching assistance in Mechanics of Solids and Structures at Padova University (School of Engineering)
- 1987-1991: teaching assistance in Computational Structural Mechanics at Padova University (School of Engineering)

Research stays

- 2005, 2006: Research at the Instituto de Tecnologia Ceramica (ITC) at Castellon de la Plana, Spain within EU KMM-NoE Project
- 2005: Research at the Institute of Mechanics, Technical University Darmstadt, Germany within EU KMM-NoE Project
- 2001, 2003: Visiting Professor at the Faculty of Environmental Science and Technology, Okayama University, Okayama, Japan
- 1996-1999: Research visits at the University of the New South Wales (UNSW), Sydney, Australia
- 1995: Research stay at the 'Laboratoire de Mécanique et Technologie' in Cachan (Paris), France

Industrial research grants (personal responsibility)

- 2009-todate: Mechanical characterization of beverage packaging, TetraPak Italia
- 2011-2012: Evaluation of residual stress evaluation techniques based on indentation test, Venezia Technologie S.p.A.

- 2008-2010: Development of a non-destructive diagnostic in-situ technique based on indentation tests for pipeline systems, Venezia Tecnologie S.p.A.
- 2008-2011: Diagnosis of industrial plants and mechanical characterization of materials by means of indentation tests, inverse analysis and numerical treatment of data, eni S.p.A., E&P Division

Coordination of Politecnico di Milano unit in national/international R&D programs

- 2012-2015: INNVIN – Innovative materials solutions for Transport, Energy and Biomedical sectors by strengthening integration and enhancing research dynamics of the European Virtual Institute KMM-VIN
- 2006-2008: European Network of Excellence KMM-NoE – Knowledge-based Multicomponent Materials for safe and durable performances
- 2003-2004: PRIN 2003 – Non-destructive methods for the identification and the diagnosis of materials and structures

Additional information

- Faculty member of the Ph.D. School in Structural, Seismic and Geotechnical Engineering at the Politecnico di Milano, supervisor of several PhD theses.
- Participation to research projects and collaborative programs sponsored by national and international agencies (Italian Ministry of University and Research - MIUR, Australian Research Council - ARC, Japan Society for the Promotion of Science - JSPS, EU-HCM, EU-Copernicus, EU-IALAD, KMM-NoE, KMM-VIN, Macsi-Net).
- Reviewer for several international Journals in the field of the Mechanics of Solids and Structures (ASCE Journal of Engineering Mechanics; ASCE Journal of Geotechnical and Geo-environmental Engineering; Composites B; Computational Methods in Applied Mechanics and Engineering; Engineering Structures; Engineering Fracture Mechanics; European Journal of Environmental and Civil Engineering; European Journal of Mechanics A/Solids; Finite Elements in Analysis and Design; International Journal for Numerical and Analytical Methods in Geomechanics; International Journal of Fracture; International Journal of Solids and Structures; Inverse Problems in Engineering; Journal of Materials Research; Journal of Materials Science; Materials Chemistry and Physics; Meccanica; Mechanics of Materials; Polymer Engineering & Science; Recent Patents on Mechanical Engineering; Strain; Structural Engineering and Mechanics)
- More than 100 contributions in international journals, books and conference proceedings related to: constitutive modelling of multi-component materials; simulation of quasi-brittle fracture processes; parameter identification by deterministic and stochastic techniques.

Patent

G. Maier, B. Molinas, G. Bolzon, D. Giantin, P. Zonta (2011). Sistema integrato sperimentale e computazionale per la determinazione non-distruttiva di parametri che quantificano le proprietà meccaniche di materiali o gli stati tensionali locali per la diagnosi strutturale in loco di componenti strutturali e impiantistiche nell'industria del petrolio, del gas e petrolchimica.

Publications

Contributions to Peer Reviewed International Journals

1. G. Bolzon, R. Vitaliani. Derivation of hyperelastic incompressible material constitutive tensor within a total lagrangian framework. *Computers & Structures*, Vol. 33, pp. 221-227, 1989.
2. G. Bolzon, R. Vitaliani. The Blatz-Ko material model and homogenization. *Archive of Applied Mechanics*. Vol. 63, pp. 228-241, 1993.
3. G. Bolzon. On a class of constitutive models for highly deformable compressible materials. *Archive of Applied Mechanics*, Vol. 63, pp. 296-300, 1993.
4. G. Bolzon, B.A. Schrefler. State surfaces of partially saturated soils: an effective pressure approach. *Applied Mechanics Reviews*, Vol. 48, pp. 643-649, 1995.
5. G. Bolzon, B.A. Schrefler, O.C. Zienkiewicz. Elastoplastic soil constitutive laws generalized to partially saturated states. *Géotechnique*, Vol. 46, pp. 279-289, 1996.
6. G. Bolzon. An approximate method for fatigue-life prediction of framed structures. *Fatigue and Fracture of Engineering Materials and Structures*, Vol. 19, pp. 1481-1491, 1996.
7. G. Bolzon. Hybrid finite element approach to quasi-brittle fracture. *Computers & Structures*, Vol. 60, pp.733-741, 1996.
8. G. Bolzon, A. Corigliano. A discrete formulation for elastic solids with damaging interfaces. *Computer Methods in Applied Mechanics and Engineering*, Vol. 140, pp. 329-359, 1997.
9. G. Bolzon, G. Maier, F. Tin-Loi. On multiplicity of solutions in quasi-brittle fracture computations. *Computational Mechanics*, Vol. 19, pp. 511-516, 1997.
10. B.A. Schrefler, G. Bolzon, V. Salomoni, L. Simoni. On compaction in gas reservoirs. *Rend. Fis. Acc. Lincei, serie IX*, vol. VIII, fasc. 4, pp. 235-248, 1997.

11. G. Bolzon, G. Cocchetti. On a case of crack path bifurcation in cohesive materials. *Archive of Applied Mechanics*, Vol. 68, pp. 513-523, 1998.
12. G. Bolzon, F. Tin-Loi. Physical instability and geometric effects in frames. *Engineering Structures*, Vol. 21, pp. 557-567, 1999.
13. G. Bolzon, A. Corigliano. Finite elements with embedded displacement discontinuity. A generalised variable formulation. *International Journal for Numerical Methods in Engineering*, Vol. 49, pp. 1227-1266, 2000.
14. G. Bolzon. Formulation of a triangular element with an embedded interface via isoparametric mapping. *Computational Mechanics*, Vol. 27, pp. 463-473, 2001.
15. G. Bolzon, R. Fedele, G. Maier. Parameter identification of a cohesive crack model by Kalman filter. *Computer Methods in Applied Mechanics and Engineering*, Vol. 191, pp. 2847-2871, 2002.
16. G. Bolzon, D. Ghilotti, G. Maier. Strength of periodic elastic-brittle composites evaluated through homogenization and parameter identification. *European Journal of Mechanics A/Solids*, Vol. 21, pp. 355-378, 2002.
17. G. Bolzon, G. Cocchetti. Direct assessment of structural resistance against pressurized fracture. *International Journal for Numerical and Analytical Methods in Geomechanics*, Vol. 27, pp. 353-378, 2003.
18. G. Bolzon. Size effects in concrete gravity dams. *Engineering Fracture Mechanics*, Vol. 71, pp. 1891-1906, 2004.
19. G. Bolzon, G. Maier, M. Panico. Material model calibration by indentation, imprint mapping and inverse analysis. *International Journal of Solids and Structures*, Vol. 41, pp. 2957-2975, 2004.
20. M. Bocciarelli, G. Bolzon, G. Maier. Parameter identification in anisotropic elastoplasticity by indentation and imprint mapping. *Mechanics of Materials*, Vol. 37, pp. 855-868, 2005.
21. G. Bolzon, B.A. Schrefler. Thermal effects in partially saturated soils: a constitutive model. *International Journal for Numerical and Analytical Methods in Geomechanics*, Vol. 29, pp. 861-877, 2005.
22. G. Maier, M. Bocciarelli, G. Bolzon, R. Fedele. On inverse analysis in fracture mechanics. *International Journal of Fracture*, Vol. 138, pp. 47-73, 2006.
23. E. Puntel, G. Bolzon, V. Saouma. A fracture mechanics based model for joints under cyclic loading. *ASCE Journal of Engineering Mechanics*, Vol. 132, pp. 1151-1159, 2006.
24. M. Bocciarelli, G. Bolzon. Indentation and imprint mapping for the identification of constitutive parameters of thin layers on substrate: perfectly bonded interfaces. *Materials Science & Engineering A*, Vol. 448, pp. 303-314, 2007.
25. M. Bocciarelli, G. Bolzon, G. Maier. A constitutive model of metal-ceramic functionally graded material behavior: Formulation and parameter identification. *Computational Materials Science*, Vol. 43, pp. 16-26, 2008.
26. M. Ageno, G. Bolzon, G. Maier. An inverse analysis procedure for the material parameter identification of elastic-plastic free-standing foils. *Structural and Multidisciplinary Optimization*, Vol. 38, pp. 229-243, 2009.
27. M. Bocciarelli, G. Bolzon. Indentation and imprint mapping for the identification of interface properties in film-substrate systems. *International Journal of Fracture*, Vol. 155, pp.1-17, 2009.
28. G. Bolzon. Collapse mechanisms at the foundation interface of geometrically similar concrete gravity dams. *Engineering Structures*, Vol. 32, pp. 1304-1311, 2010.
29. G. Bolzon, E.J. Chiarullo, P. Egizabal, C. Estournes. Constitutive modelling and mechanical characterization of aluminium-based metal matrix composites produced by spark plasma sintering. *Mechanics of Materials*, Vol. 42, pp. 548-558, 2010.
30. G. Bolzon, E.J. Chiarullo, V. Casalegno, M. Salvo. Residual stresses in a Cu-CFC component for thermonuclear application: numerical prediction and experimental evaluation by an indentation technique. *Strain*, Vol. 47, pp. e474-e483, 2011.
31. G. Bolzon, V. Buljak. An indentation based technique to determine in-depth residual stress profiles induced by surface treatment of metal components. *Fatigue and Fracture of Engineering Materials and Structures*, Vol. 34, pp. 97-107, 2011.
32. G. Bolzon, V. Buljak, G. Maier, B. Miller. Assessment of elastic-plastic material parameters comparatively by three procedures based on indentation test and inverse analysis. *Inverse Problems in Science and Engineering*, Vol. 19, pp. 815-837, 2011.
33. G. Bolzon, V. Buljak. An effective computational tool for parametric studies and identification problems in materials mechanics. *Computational Mechanics*, Vol. 48, pp. 675-687, 2011.
34. G. Bolzon, B. Molinas, M. Talassi. Mechanical characterisation of metals by indentation tests: an experimental verification study for on-site applications. *Strain*, Vol. 48, pp. 517-527, 2012.
35. G. Bolzon, M. Talassi. An effective inverse analysis tool for parameter identification of anisotropic material models. *International Journal of Mechanical Sciences*, Vol. 77, pp. 130-144, 2013.
36. G. Bolzon. Advances in experimental mechanics by the synergetic combination of full-field measurement techniques and computational tools. *Measurement*, Vol. 54, pp. 159-165, 2014.
37. G. Bolzon, M. Talassi. A combined experimental and numerical study of the behaviour of paperboard composites up to failure. *Composites B*, Vol. 66, pp. 358-367, 2014.
38. G. Bolzon, G. Gabetta, B.J. Molinas. Integrity assessment of pipeline systems by an enhanced indentation technique. *ASCE Journal of Pipeline Systems Engineering and Practice*, Vol. 6(1), 04014010, 2015

Contributions to International Books

39. G. Bolzon, B.A. Schrefler, R. Vitaliani. Finite element analysis of rubber membranes. In *Computational Mechanics of Nonlinear Response of Shells* (W.B. Krätzig, E. Oñate, eds.), Springer-Verlag, Berlin, pp. 348-377, 1990.
40. G. Bolzon, G. Maier, G. Novati. Some aspects of quasi-brittle fracture analysis as a linear complementarity problem. In *Fracture and Damage in Quasi-brittle Structures* (Z.P. Bazant, Z. Bittnar, M. Jirásek, J. Mazars, eds.), E&FN Spon, London, pp. 159-174, 1994.

41. G. Maier, G. Bolzon, F. Tin-Loi. Mathematical programming in engineering mechanics: some current problems. In *Complementarity: Applications, Algorithms and Extensions* (M.C. Ferris, O.L. Mangasarian, J.-S. Pang, eds.), Applied Optimization, Vol. 50, Kluwer Academic Publisher, Chapter 10, pp. 201-232, 2001.
42. G. Stavroulakis, G. Bolzon, Z. Waszczyszyn, L. Ziemianski. Inverse Analysis. In *Comprehensive Structural Integrity* (B. Karihaloo, R.O. Ritchie, I. Milne, eds in chief), Vol. 3: *Numerical and Computational Methods* (R. de Borst, H.A. Mang, eds.), Chapter 13, pp. 685-718, Elsevier Science Ltd, 2003.
43. G. Bolzon, M. Bocciarelli, E.J. Chiarullo. Mechanical characterisation of materials by microindentation and AFM scanning. In *Applied Scanning Probe Methods XII Characterization* (B. Bhushan, H. Fuchs, eds.), Springer-Verlag, Heidelberg, Ch. 13, pp. 85-120, 2008.
44. G. Maier, G. Bolzon, V. Buljak, T. Garbowski, B. Miller, Synergic combinations of computational methods and experiments for structural diagnoses. In *Computer Methods in Mechanics, Lectures of the CMM 2009* (M. Kuczma, K. Wilmanski, eds.), Advanced Structured Materials Series, Vol. 1, Springer-Verlag, Berlin Heidelberg, pp. 453-476, 2010.
45. G. Bolzon, The mechanical response of metal-ceramic functionally graded materials: models and experiences. In: *Functionally graded materials* (N.J. Reynolds ed.), Nova Science Publisher Inc., Ch. 5, pp. 181-192, 2012.
46. G. Bolzon, M. Talassi, Model reduction techniques in computational materials mechanics. In: *Bytes and Science* (G. Zavarise, D.P. Boso, eds), CIMNE, Barcelona, Spain, pp. 131-143, 2012.

Contributions to Peer Reviewed National Journals

47. G. Bolzon, M. Bocciarelli, E.J. Chiarullo. Mechanical characterization of metal-ceramic composites. *Frattura ed Integrità Strutturale*, Vol. 10, pp. 56-63, 2009.
48. G. Bolzon, V. Buljak, E. Zappa. Characterization of fracture properties of thin aluminum inclusions embedded in anisotropic laminate composites. *Frattura ed Integrità Strutturale*, Vol. 19, pp. 20-28, 2012.
49. G. Bolzon, G. Gabetta, B. Molinas. An investigation on corrosion protection layers in pipelines transporting hydrocarbons. *Frattura ed Integrità Strutturale*, Vol. 30, pp. 31-39, 2014.

Contributions to National and International Conferences

50. G. Bolzon, A. Natali, R. Vitaliani. Investigation on the response of hyperelastic material under finite displacement and strain. ICES Journal (Proceedings ICES Conference, Monaco), Vol. 19, pp. 137-149, 1987.
51. G. Bolzon, B.A. Schrefler, R. Vitaliani. Finite element analysis of flexible dams made of rubber-textile composites. In *Computer Modelling in Ocean Engineering* (B.A. Schrefler, O.C. Zienkiewicz eds.), A.A. Balkema, Rotterdam, pp. 591-596, 1988.
52. G. Bolzon, B.A. Schrefler, R. Vitaliani. A 3-D geometrically non linear analysis of inflated cord reinforced membranes of rubber like materials. In *Computational Mechanics '88* (S.N. Atluri, G. Yagawa eds.), Springer-Verlag, Berlin, Vol. 1, 27ii.1-27ii.4, 1988.
53. L. Briseghella, R. Vitaliani, G. Bolzon, A. Saetta. Aspetti computazionali della teoria del danno. Atti del III Convegno Italiano di Meccanica Computazionale (AIMETA), Palermo, pp. 73-76, 1988.
54. G. Bolzon, L. Briseghella, A. Saetta, R. Vitaliani. Finite element analysis of shear bearing walls under cycling loading. Proceedings IX ECEE Moscow, pp. 20-29, 1990.
55. G. Bolzon, R. Vitaliani. Analisi meccanica di materiali compositi a matrice gommosa tramite il metodo degli elementi finiti. Atti del Convegno Italiano sui Problemi di Meccanica dei Materiali e delle Strutture, Amalfi, 9 pp., 1991.
56. G. Bolzon, R. Vitaliani. The mechanical characterization of rubber composites. Theory and experiments. In *Experimental Techniques and Design in Composite Materials*, Cagliari, pp. 221-232, 1992.
57. G. Bolzon. Omogeneizzazione di materiali eterogenei non lineari. Atti del XI Congresso Nazionale AIMETA, Trento, pp. 109-114, 1992.
58. G. Bolzon, G. Belz. Effetto della introduzione di cenere volante sulla durabilità dei manufatti in calcestruzzo, con particolare riguardo alla prefabbricazione. Atti del Seminario girILEM su Riuso dei Materiali Provenienti da Demolizioni e Sottoprodotti Industriali, Cosenza, pp. 207-223, 1992.
59. G. Bolzon, A. Cazzani. Modelli elastici non lineari per l'analisi di membrane secondo un approccio di tipo misto. Atti del VII Convegno Italiano di Meccanica Computazionale (AIMETA), Trieste, pp. 40-43, 1993.
60. G. Bolzon, A. Corigliano. Generalized variable formulation of interface elements. Atti del VIII Convegno Italiano di Meccanica Computazionale (AIMETA), Torino, pp. 90-95, 1994.
61. A. Corigliano, G. Bolzon. A numerical study of multiple crack propagation. Atti del VIII Convegno Italiano di Meccanica Computazionale (AIMETA), Torino, pp. 96-100, 1994.
62. G. Bolzon, G. Cocchetti, G. Maier, G. Novati, G. Giuseppetti. Boundary element and finite element fracture analysis of dams by the cohesive crack model: a comparative study. In *Dam Fracture and Damage* (E. Bourdarot, J. Mazars, V. Sauma eds.), Balkema, Rotterdam, pp. 69-78, 1994.
63. A. Corigliano, G. Bolzon. Numerical simulation of debonding phenomena in composite materials. Proceedings COMPLAS4 - Fourth International Conference on Computational Plasticity, Barcelona, pp. 1179-1190, 1995.
64. G. Bolzon, G. Maier, F. Tin-Loi. Holonomic and nonholonomic simulations of quasi-brittle fracture: a comparative study of mathematical programming approaches. In *Fracture Mechanics of Concrete Structures* (F.H. Wittmann ed.), Aedificatio Publishers, Freiburg, pp. 885-898, 1995.
65. B.A. Schrefler, G. Bolzon. Soil behaviour under suction and temperature changes. In *Computational Mechanics '95* (S.N. Atluri, G. Yagawa, T.A. Cruse eds.), Springer, Berlin, pp. 785-790, 1995.
66. G. Bolzon, G. Maier, F. Tin-Loi. On holonomic structural analysis as a complementarity problem. Proceedings APCOM '96 (C.K. Choi, C.B. Yun, D.G. Lee eds.), Techno-Press, Vol. 1, pp. 409-414, 1996.

67. G. Bolzon, G. Cocchetti, G. Maier, F. Tin-Loi. On computing all the solutions in decohesion problems. Proceedings of the Joint Conference of Italian Group of Computational Mechanics and Ibero-Latin American Association of Computational Methods in Engineering, Padova, pp. 205-207, 1996.
68. G. Bolzon, A. Corigliano. Simulation of quasi-brittle fracture based on embedded cracks and interface variables. Proceedings of the Joint Conference of Italian Group of Computational Mechanics and Ibero-Latin American Association of Computational Methods in Engineering, Padova, pp. 81-84, 1996.
69. G. Bolzon. La stima del fattore di intensificazione degli sforzi in travi fessurate. Atti del XII Convegno Nazionale Gruppo Italiano Frattura (IGF12), Parma, pp. 253-262, 1996.
70. G. Bolzon, A. Corigliano. An interface variables formulation for embedded-crack finite elements. Proceedings COMPLAS 5 (D.R.J. Owen, E. Oñate and E. Hinton eds.), pp. 1617-1624, Barcelona, 1997.
71. G. Bolzon, A. Corigliano. An embedded-crack finite element approach to quasi-brittle fracture. In Advances in Fracture Research (B.L. Karihaloo, Y.-W. Mai, M.I. Ripley and R.O. Ritchie eds), Pergamon Press, Vol. 4, pp. 2127-2134, 1997.
72. G. Bolzon, D. Ghilotti, G. Maier. Parameter identification of the cohesive crack model. In Material Identification Using Mixed Numerical Experimental Methods (H. Sol and C.W.J. Oomens eds), Kluwer Academic Publisher, Dordrecht, pp. 213-222, 1997.
73. G. Bolzon, B.A. Schrefler. Compaction in gas reservoirs due to capillary effects. Proceedings COMPLAS 5 (D.R.J. Owen, E. Oñate and E. Hinton eds), Barcelona, pp. 1625-1630, 1997.
74. L. Simoni, G. Bolzon, B.A. Schrefler. Un modello di plasticità generalizzata per lo studio della deformazione di giacimenti di gas naturale. Atti del XIII Congresso Nazionale AIMETA, Siena, Vol. III, pp.103-108, 1997.
75. G. Bolzon. Sui domini di stabilità di aste elasto-plastiche inflesse: alcune soluzioni di riferimento. Atti del XI Convegno Italiano di Meccanica Computazionale, Trento, 13-15 luglio 1998, pp. 25-28, 1998.
76. G. Bolzon, G. Maier. Identification of cohesive crack models for concrete on the basis of three-point-bending tests. In Computational Modelling of Concrete Structures (R. de Borst, N. Bicanic, H. Mang, G. Meschke eds), Balkema, Rotterdam, pp. 301-310, 1998.
77. R. Fedele, G. Bolzon, G. Maier, M. Whelan. Identification of local (phase) parameters in heterogeneous media. Proceedings of the Third Joint Conference of Italian Group of Computational Mechanics and Ibero-Latin American Association of Computational Methods in Engineering, Giulianova, June 24-26, 2002.
78. M. Bocciarelli, G. Bolzon, G. Maier. Calibrazione di modelli meccanici anisotropi con prove d'indentazione, rilievo dell'impronta ed analisi inversa. XV Convegno Italiano di Meccanica Computazionale, Genova, 21-23 giugno 2004 (CD).
79. M. Ageno, M. Bocciolone, G. Bolzon, A. Cigada, G. Maier, E. Zappa. Mechanical characterization of thin foils by profilometer measurements of inflated membranes. Proceedings ICEM12, 12th International Conference on Experimental Mechanics, Bari, Italy, August 29 – September 2, 2004.
80. G. Bolzon, B.A. Schrefler. A constitutive framework for the description of the thermo-mechanical behaviour of clays. Proceedings of the 6th Word Conference on Computational Mechanics, WCCM VI in conjunction with APCOM'04, *Beijing, China, September 5-10*, Tsinghua University Press & Springer-Verlag, 2004 (CD).
81. G. Bolzon. LEM and cohesive-crack approaches to safety evaluation of concrete gravity dams. Proceedings of the 6th Word Conference on Computational Mechanics, WCCM VI in conjunction with APCOM'04, *Beijing, China, September 5-10*, Tsinghua University Press & Springer-Verlag, 2004 (CD).
82. M. Bocciarelli, G. Bolzon, G. Maier. Mechanical characterization of anisotropic materials by indentation test, imprint mapping and inverse analysis. Proceedings of the 6th Word Conference on Computational Mechanics, WCCM VI in conjunction with APCOM'04, *Beijing, China, September 5-10*, Tsinghua University Press & Springer-Verlag, 2004 (CD).
83. E. Puntel, G. Bolzon, V.E. Saouma. An experimental and numerical investigation of concrete dam joints. Proceedings of the 11th International Conference on Fracture, ICF11, *Torino, Italy, March 20-25, 2005* (CD).
84. M. Bocciarelli, G. Bolzon, G. Maier. Three-Point-Bending and indentation tests for the calibration of functionally graded material models by inverse analysis. Proceedings of the III European Conference on Computational Mechanics - Solids, Structures and Coupled Problems in Engineering, C.A. Mota Soares et.al. (eds.) , Lisbon, Portugal, June 5-9, 2006 (CD).
85. M. Bocciarelli, G. Bolzon, G. Maier. Calibration of fracture parameters of bulk ceramics and thin coatings by instrumented indentation and test simulation. Proceedings of the 16th European Conference of Fracture, ECF16, Alexandroupolis, Greece, July 3-7, 2006 (CD).
86. G. Bolzon. Size effects in quasi-brittle structures by mathematical programming under complementarity constraints. Proceedings of the Second International Conference on Nonsmooth/Nonconvex Mechanics with Applications in Engineering, Thessaloniki, Greece, July 7-8, pp. 285-291, 2006.
87. M. Bocciarelli, G. Bolzon, G. Maier. On the calibration of elastic-plastic models for metal-ceramic functionally graded materials. Proceedings of *Multiscale and Functionally Graded Materials Conference 2006 (FGM2006)*, Honolulu, USA, October 15-18, 2006.
88. M. Ageno, G. Bolzon, G. Maier. An inverse analysis procedure for the material parameter identification of elastic-plastic free-standing foils. Proceedings of *CMM-2007 Computer Methods in Mechanics*, Łódź–Spała, Poland, June 19-22, 2007 (6pp., CD).
89. G. Bolzon, V. Buljak. An indentation based technique to detect residual stress profiles in manufactured components. Proceedings of Third International Conference on Advances and Trends in Engineering Materials and their Applications (AES-ATEMA' 2009 Third International Conference), Montreal, Canada, July 6-10, 2009, pp. 59-63.
90. M. Bocciarelli, G. Bolzon. Indentation and imprint mapping for the identification of interface properties in film-substrate systems. Proceedings of the 12th International Conference on Fracture, ICF12, Ottawa, Canada, July 12-17, 2009 (6 pp., su CD).

91. G. Gabetta, B. Molinas, G. Bolzon, A. Zuppello, M. Elhakim. Contribution to integrity assessment of an oil pipeline with the use of corrosion models, flow codes and mechanical properties. Proceedings OMC 2011 - 10th Offshore Mediterranean Conference, Ravenna, March 23-25, 2011 (11 pp., CD).
92. G. Bolzon, M. Talassi, E. Zappa, V. Buljak. Non conventional fracture tests of heterogeneous and anisotropic paperboard composites. Atti del Convegno Nazionale IGF XXI, Cassino, June 13-15, 2011, pp. 317-321.
93. G. Gabetta, V. Balostro, G. Bolzon, M. Battagliarin, B. Molinas. Mechanical properties of iron-based scales in CO₂ corrosion modelling. Nace Corrosion 2012, Research in Progress Symposium, March 11-15, 2012, Salt Lake City, Utah, USA.
94. P.P. Zonta, B. Molinas, G. Bolzon, G. Maier. Sistema integrato sperimentale-computazionale ("IMPRINT" – Inverse Method PProfile INdenTation) per la caratterizzazione meccanica di materiali in situ. Atti del Convegno SAFAP 2012, Napoli, June 14-15, 2012 (10 pp.).
95. G. Bolzon, G. Gabetta, A. Cornaggia, Fracture of corrosion protecting layers: investigation by indentation test. 19th European Conference on Fracture (ECF19), Kazan, Russia, August 26-31, 2012 (8 pp., CD).
96. G. Bolzon, A. Cornaggia, Damaging mechanisms and constitutive modeling of metal–matrix composites. European Congress on Computational Methods in Applied Sciences and Engineering (ECCOMAS 2012) J. Eberhardsteiner et al. (eds.), Vienna, Austria, September 10-14, 2012 (10 pp., CD).
97. G. Bolzon, POD-RBF approximation in material characterization problems assisted by simulation models of the experiments. First International Conference on Engineering and Applied Sciences Optimization (OPTI 2014), Kos, Greece, June 4-6, 2014.

Conference presentations (abstract only)

98. B.A. Schrefler, G. Bolzon, R. Gori. Un metodo di controllo sui risultati per analisi per elementi finiti in campo strutturale. Atti del IV Convegno Italiano di Meccanica Computazionale (AIMETA), Padova, 1989.
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