CURRICULUM VITAE

INFORMAZIONI PERSONALI

Nome	**FERDINANDO AURICCHIO**
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Nazionalità	**Italiana**
Data di nascita	**1 giugno 1965**

ESPERIENZA LAVORATIVA

Sett. 2001 – ad oggi	**Professore Ordinario** in Scienza delle Costruzioni (ICAR-08), presso il Dipartimento di Ingegneria Civile e Architettura dell'Università degli Studi di Pavia
Nov. 1998 – Sett. 2001	**Professore Associato** nel settore scientifico-disciplinare Scienza delle Costruzioni. Presa servizio nel Novembre 1998 presso il Dipartimento di Meccanica Strutturale dell'Università degli Studi di Pavia
Sett. 1994 – Ott. 1998	**Ricercatore Universitario** nel settore scientifico-disciplinare Scienza delle Costruzioni (H07A, ICAR-08) presso il Dipartimento di Ingegneria Civile dell'Università di Roma "Tor Vergata"

ISTRUZIONE E FORMAZIONE

Settembre 1995	***Doctor of Philosophy*** (Ph.D.) nel 1995 presso il Dipartimento di Ingegneria Civile dell'Università della California a Berkeley (USA)
Maggio 1991	***Master of Science*** (M.S.) nel 1991 presso di Dipartimento di Ingegneria Civile dell'Università della California a Berkeley (USA)
Ottobre 1989	**Laurea in Ingegneria Civile** nel 1989 presso il Dipartimento di Tecnica delle Costruzioni della Facoltà di Ingegneria dell'Università di Napoli

CAPACITÀ LINGUISTICHE

PRIMA LINGUA	**ITALIANO**
ALTRE LINGUE	**INGLESE**

ALTRO / CAPACITÀ E COMPETENZE

- **Direttore del Dipartimento di Ingegneria Civile e Architettura**
- **Incaricato di ricerca** presso l'Istituto di Matematica Applicata e

Competenze non precedentemente indicate.

Tecnologie Informatiche del C.N.R. a Pavia

- **Responsabile del gruppo di ricerca di Meccanica Computazionale e Materiali Avanzati (cfr. sito: www.unipv.it/compmech)**
- **Coordinatore** del programma di **Dottorato in Ingegneria Civile e Architettura** dell'Università di Pavia, in collaborazione con lo IUSS (Istituto Universitario di Studi Superiori di Pavia)
- **Responsabile del gruppo di ricerca** "Meccanica Computazionale e Materiali Avanzati" presso il Centro Europeo di Formazione e Ricerca in Ingegneria Sismica (EUCENTRE) di Pavia
- **Membro del comitato scientifico** del Centro di Simulazione Numerica Avanzata (CeSNA) dello IUSS
- **Vicepresidente** dell'**ECCOMAS** (European Community of Computational Methods in Applied Sciences)
- **Membro dell'Editorial Board** delle seguenti riviste internazionali: Journal of Computational Bioengineering, Curved and Layered Structures, Computer Assisted Methods in Engineering and Science, Advanced Modelling and Simulation in Engineering Sciences, Computational Mechanics, Computer Methods in Applied Mechanics in Engineering, Annals of Solid and Structural Mechanics, International Journal for Numerical Methods in Engineering; **Corresponding Editor** di Computer Modeling in Engineering & Sciences
- **Supervisore** di 6 assegnisti post-doc, 20 studenti di dottorato, 8 studenti di master e più di 30 tesisti
- IACM (International Association for Computational Mechanics) Fellow Award 2012
- Vincitore di **finanziamenti alla ricerca** come leader di progetto o di unità locale; in particolare si citano i finanziamenti al momento attivi:
  - "iCardioCloud. Bringing cardiovascular virtual reality to clinical bedside practice through cloud platform: implementation of a US excellence paradigm into Lombardia SSR", finanziato da Regione Lombardia e Fondazione Cariplo, 2014-2017
  - "Fab@Hospital. Hospital Factory for Manufacturing Customized, Patient Specific 3D Anatomo-Functional Model and Prostheses", funded by CNR (National Research Council), 2014
  - "Advanced mechanical modeling of new materials and technologies for the solution of 2020 European challenges", finanziato dal MIUR, 2012-2015

PUBBLICAZIONI

- **127 pubblicazioni su riviste internazionali** con **h-index = 30** secondo ISI Web of Knowlegde e **h-index = 33** secondo SCOPUS
- Più di 50 presentazioni su invito a conferenze internazionali

ALLEGATI

Allegato 1: Principali Pubblicazioni su Riviste internazionali

ALLEGATO 1

PRINCIPALI PUBBLICAZIONI su RIVISTE INTERNAZIONALI

1. D. Asprone, F. Auricchio, A. Reali. Modified Finite Particle Method: applications to elasticity and plasticity problems. Published online on International Journal of Computational Methods, doi: 10.1142/S0219876213500503, (2014)
2. F. Auricchio, A. Constantinescu, G. Scalet. Fatigue of 316L stainless steel notched µm-size components. Published online on International Journal of Fatigue, doi: 10.1016/j.ijfatigue.2014.04.013 (2014)
3. F. Auricchio, M. Conti, A. Ferrara. How Constitutive Model Complexity can Affect the Capability to Fit Experimental Data: a Focus on Human Carotid Arteries and Extension/Inflation Data. Published online on Archives of Computational Methods in Engineering, doi: 10.1007/s11831-014-9105-0 (2014)
4. F. Auricchio, E. Bonetti, G. Scalet, F. Ubertini. Theoretical and numerical modeling of shape memory alloys accounting for multiple phase transformations and martensite reorientation. International Journal of Plasticity, 59: 30–54 (2014)
5. J.F. Caseiro, R.A.F. Valente, A. Reali, J. Kiendl, F. Auricchio, R.J. Alves de Sousa. On the Assumed Natural Strain method to alleviate locking in solid-shell NURBS-based finite elements, Published online on Computational Mechanics, doi: 10.1007/s00466-014-0978-4 (2014)
6. F. Auricchio, M. Conti, A. Lefieux, S. Morganti, A. Reali, F. Sardanelli, F. Secchi, S. Trimarchi, A. Veneziani. Patient-specific analysis of post-operative aortic hemodynamics: a focus on thoracic endovascular repair (TEVAR), Published online on Computational Mechanics, doi: 10.1007/s00466-014-0976-6 (2014)
7. F. Auricchio, G. Scalet, M. Urbano. A Numerical/Experimental Study of Nitinol Actuator Springs, Published online on Journal of Materials Engineering and Performance, doi: 10.1007/s11665-014-0883-1 (2014)
8. M. Rezaiee-Pajand, F. Auricchio, M. Sharifian, M. Sharifian. Computational plasticity of mixed hardening pressure-dependency constitutive equations. Published online on Acta Mechanica, doi 10.1007/s00707-013-0998-8 (2014)
9. F. Auricchio, M. Conti, C. Ferrazzano, Sgueglia GS. A simple framework to generate 3D patient-specific model of coronary artery bifurcation from single-plane angiographic images. Computers in Biology and Medicine, 44: 97-109 (2014)
10. F. Auricchio, M. Conti, A. Ferrara, S. Morganti, A. Reali. Patient-specific simulation of a stentless aortic valve implant: the impact of fibers on leaflet performance. Computer Methods in Biomechanics and Biomedical Engineering, 17: 277-285 (2014)
11. S. Morganti, A.Valentini, V. Favalli, A. Serio, F. I. Gambarin, D. Vella, L. Mazzocchi, M. Massetti, F. Auricchio, E. Arbustini. Aortic root 3D parametric morphological model from 2D-echo images. Computers in Biology and Medicine, 43: 2196–2204 (2013)
12. F. Auricchio, L. Beirao da Veiga, C. Lovadina, A. Reali, R.L. Taylor, P. Wriggers. Approximation of incompressible large deformation elastic problems: some unresolved issues. Computational Mechanics, 52: 1153-1167 (2013)
13. F. Auricchio, G. Balduzzi, C. Lovadina. The dimensional reduction modelling approach for 3D beams: Differential equations and finite-element solutions based on Hellinger–Reissner principle. International Journal of Solids and Structures, 50: 4184–4196 (2013)
14. F. Auricchio, L. Beirao da Veiga, J. Kiendl, C. Lovadina, A. Reali. Locking-free isogeometric collocation methods for spatial Timoshenko rods. Computer Methods in Applied Mechanics and Engineering, 263: 113-126 (2013)
15. D. Asprone, F. Auricchio, C. Menna, A. Prota, S. Morganti, A. Reali. Statistical Finite Element Analysis of the Buckling Behavior of Honeycomb Structures. Composite Structures, 105: 240–255 (2013)
16. F. Auricchio, E. Bonetti. A new flexible 3D macroscopic model for shape memory alloys. Discrete and Continuous Dynamical Systems, 6: 277-291 (2013)
17. G. van Bogerijen, J. L. Tolenaar, M. Conti, F. Auricchio, F. Secchi, F. Sardanelli, F. L. Moll, J. A. van

Herwaarden, V. Rampoldi, S. Trimarchi. Contemporary Role of Computational Analysis in Endovascular Treatment for Thoracic Aortic Disease. Aorta, 1:171–181 (2013)

18. F. Auricchio, M. Conti, A. Ferrara, S. Morganti, A. Reali. Patient-specific finite element analysis of carotid artery stenting: a focus on vessel modeling, International Journal for Numerical Methods in Biomedical Engineering, 29: 645-664 (2013)

19. F. Auricchio, M. Conti, S. Morganti, A. Reali. Simulation of transcatheter aortic valve implantation: a patient-specific finite element approach. Published online on Computer Methods in Biomechanics and Biomedical Engineering, doi: 10.1080/10255842.2012.746676 (2013)

20. F. Auricchio, M. Conti, S. Marconi, A. Reali, J. Tolenaar, S. Trimarchi. Patient-specific aortic endografting simulation: from diagnosis to prediction. Computers in Biology and Medicine, 43: 386-394 (2013)

21. G. De Santis, M. Conti, B. Trachet, T. De Schryver, M. De Beule, J. Degroote, J. Vierendeels, F. Auricchio, P. Segers, P. Verdonck, B. Verhegghe. Hemodynamic impact of stent-vessel (mal)apposition following carotid artery stenting: mind the gaps !. Computer Methods in Biomechanics and Biomedical Engineering, 16: 648-659 (2013)

22. P. Totaro, S. Morganti, C. L. Ngo Yon, R. Dore, M. Conti, F. Auricchio, M. Viganò. "Computational Finite Element Analyses to Optimize Graft Sizing During Aortic Valve-Sparing Procedure", The Journal of Heart Valve Disease, 21: 141-147 (2012)

23. H.A.F. Argente dos Santos, F. Auricchio, M. Conti. "Fatigue life assessment of cardiovascular balloon-expandable stents: A two-scale plasticity–damage model approach", Journal of the Mechanical Behavior of Biomedical Materials, 15: 78-92 (2012)

24. F. Auricchio, A. Ferrara, S. Morganti. "Comparison and critical analysis of invariant-based models with respect to their ability in fitting human aortic valve data", Annals of Solid and Structural Mechanics, 4:1-14 (2012)

25. F. Auricchio, L. Beirao da Veiga, T.J.R. Hughes, A. Reali, G. Sangalli. "Isogeometric collocation for elastostatics and explicit dynamics", Computer Methods in Applied Mechanics and Engineering, 249-252:2-14 (2012)

26. F. Auricchio, F Calabrò, T.J.R. Hughes, A. Reali, G. Sangalli. "A Simple Algorithm for Obtaining Nearly Optimal Quadrature Rules for NURBS-based Isogeometric Analysis", Computer Methods in Applied Mechanics and Engineering, 249-252:15–27 (2012)

27. F. Auricchio, M. Conti, M. Ferraro, A. Reali. "Evaluation of carotid stent scaffolding through patient-specific finite element analysis", International Journal for Numerical Methods in Biomedical Engineering, 28:1043–1055 (2012)

28. F. Auricchio, M. Conti, S. Morganti, P. Totaro. "A computational tool to support pre- operative planning of stentless aortic valve prosthesis", Medical Engineering & Physics, 33: 1183-1192 (2011)

29. F. Auricchio, M. Conti, S. Demertzis, S. Morganti. "A Finite element analysis of aortic root dilation: a new procedure to reproduce pathology based on experimental data", Computer Methods in Applied Mechanics and Biomedical Engineerging, 14: 875-882 (2011)

30. P. Totaro, S. Morganti, F. Auricchio, M. Viganò. "Computer-based analysis to optimize prosthesis sizing during aortic valve surgery, International Journal of Cardiology, 151: 253-254 (2011)

31. F. Auricchio, S. Morganti, A. Reali, M. Urbano. "Theoretical and experimental study of the shape memory effect of beams in bending conditions", Journal of Materials Engineering and Performance, 20: 712-718 (2011)

32. G. Attanasi, F. Auricchio. "Innovative Superelastic Isolation Device", Journal of Earthquake Engineering, 15: 72-89 (2011)

33. M. Conti, D. Van Loo, F. Auricchio, M. De Beule, G. De Santis, B. Verhegghe, S. Pirrelli, A. Odero. "Impact of Carotid Stent Cell Design on Vessel Scaffolding: A Case Study Comparing Experimental Investigation and Numerical Simulations", Journal of Endovascular Therapy, 18: 397-406 (2011)

34. J. Arghavani, F. Auricchio, R. Naghdabadi, A. Reali. "An improved, fully symmetric, finite-strain phenomenological constitutive model for shape memory alloys", Finite Elements in Analysis and Design, 47: 166-174 (2011)

35. G. Attanasi, F. Auricchio, M. Urbano. "Theoretical and Experimental Investigation on SMA Superelastic

Springs", Journal of Materials Engineering and Performance, 20: 706-711 (2011)

36. J. Arghavani, F. Auricchio, R. Naghdabadi, A. Reali. "On the robustness and efficiency of integration algorithms for a 3D finite strain phenomenological SMA constitutive model", International Journal for Numerical Methods in Engineering, 85: 107-134 (2011)

37. O. Ben Mekki, F. Auricchio. "Performance evaluation of shape-memory-alloy superelastic behavior to control a stay cable in cable-stayed bridges", International Journal of Non-Linear Mechanics, 46: 470-477 (2011)

38. F. Auricchio, A.-L. Bessoud, A. Reali, U. Stefanelli. "A three-dimensional phenomenological model for Magnetic Shape Memory Alloys", GAMM- Mitteilungen, 34: 90-96 (2011)

39. F. Auricchio, M. Conti, M. De Beule, G. De Santis, B. Verhegghe. "Carotid artery stenting simulation: From patient-specific images to finite element analysis", Medical Engineering & Physics 33: 281-289 (2011)

40. J.Arghavani, F.Auricchio, R.Naghdabadi. "A finite strain kinematic hardening constitutive model based on Hencky strain: general framework, solution algorithm and application to shape memory alloys", International Journal of Plasticity 27 : 940–961 (2011)

41. D. Asprone, F. Auricchio, A. Reali. "Novel Finite Particle Formulations Based on Projection Methodologies", International Journal for Numerical Methods in Fluids, 65: 1376-1388 (2011)

42. J.Arghavani, F.Auricchio, R.Naghdabadi, A.Reali, S.Sohrabpour. "A 3D finite strain phenomenological constitutive model for shape memory alloys considering martensite reorientation", Continuum Mechanics and Thermodynamics, 22: 345-362 (2010)

43. F. Auricchio, G. Balduzzi, C. Lovadina. "A new modeling approach for planar beams: finite-element solutions based on mixed variational derivations", Journal of Mechanics of Materials and Structures, 5: 771-794 (2010)

44. D. Asprone, F. Auricchio, G. Manfredi, A. Prota, A. Reali, G. Sangalli. "SPH methods for a 1D elastic model problem: error analysis and development of a second-order accurate formulation", Computer Modeling in Engineering & Sciences (CMES), 62: 1-22 (2010)

45. F. Auricchio, M. Conti, S. Morganti, A. Reali. "Shape Memory Alloy: from constitutive modelling to finite element analysis of stent deployment", Computer Modeling in Engineering & Sciences (CMES), 57: 225-243 (2010)

46. F. Auricchio, L. Beirao da Veiga, T.J.R. Hughes, A. Reali, G. Sangalli. "Isogeometric Collocation Methods", Mathematical Models and Methods in Applied Sciences, 20: 2075-2107 (2010)

47. F. Auricchio, E. Bonetti, A. Marigonda. "A metric approach to plasticity via Hamilton-Jacobi equation", Mathematical Models and Methods in Applied Sciences, 20: 1617-1647 (2010)

48. F.Auricchio, A.Reali, A.Tardugno. "Shape-memory alloys: effective 3D modeling, computational aspects and design of devices", International Journal of Computer Applications in Technology, 3: 199-223 (2010)

49. J.Arghavani, F.Auricchio, R.Naghdabadi, A.Reali, S.Sohrabpour. "A 3D phenomenological constitutive model for shape memory alloys under multiaxial loadings", International Journal of Plasticity, 26: 976-991 (2010)

50. F.Auricchio, L.Beirao da Veiga, C.Lovadina, A.Reali. "The importance of the exact satisfaction of the incompressibility constraint in nonlinear elasticity: mixed FEMs versus NURBS-based approximations", Computer Methods in Applied Mechanics and Engineering, 199: 314-323 (2010)

51. F.Auricchio, A.Coda, A.Reali, M.Urbano. "SMA numerical modeling versus experimental results: parameter identification and model prediction capabilities", Journal of Materials Engineering and Performance, 18:649-654 (2009)

52. M.Conti, M.De Beule, P.Mortier, D.Van Loo, P.Verdonck, F.Vermassen, P.Segers, B.Verhegghe, F.Auricchio. "Nitinol Embolic Protection Filters: Design Investigation By Finite Element Analysis", Journal of Materials Engineering and Performance. 18:787-792 (2009)

53. G.Attanasi, F.Auricchio, G.L.Fenves. "Feasibility investigation of superelastic effect devices for seismic isolation applications", Journal of Materials Engineering and Performance, 18:729-737 (2009)

54. F.Auricchio, A.Reali, U.Stefanelli. "A macroscopic 1D model for shape memory alloys including asymmetric behaviors and transformation-dependent elastic properties", Computer Methods in Applied Mechanics and Engineering, 198:1631-1637 (2009)

55. G.Attanasi, F.Auricchio, G.L.Fenves. "Feasibility assessment of an innovative isolation bearing system with shape memory alloys" Journal of Earthquake Engineering, 13: 18-39 (2009)

56. F.Auricchio, A.Reali. "Shape Memory Alloys: Material Modeling and Device Finite Element Simulations". Materials Science Forum, 583:257-275 (2008)

57. F.Auricchio, P.Carotenuto, A.Reali. "On the geometrically exact beam model: a consistent, effective and simple derivation from three-dimensional finite elasticity", International Journal of Solids and Structures, 45:4766-4781 (2008)

58. F.Auricchio, D.Fugazza, R.DesRoches. "Rate-dependent thermo-mechanical modelling of superelastic shape memory alloys for seismic applications", Journal of Intelligent Material Systems and Structures, 19:47-61 (2008)

59. F.Auricchio, A.Mielke, U.Stefanelli, "A rate-indipendent model for the isothermal quasi-static evolution of shape-memory materials", Mathematical Models and Methods in Applied Sciences, 18:125-164 (2008)

60. J.McCormick, R.DesRoches, D.Fugazza, F.Auricchio, "Seismic assessment of concentrically-braced steel frames with shape memory alloy braces ", ASCE Journal of Structural Engineering 133:862-870 (2007)

61. E.Artioli, F.Auricchio, L.Beirao da Veiga, "Generalized midpoint integration algorithms for J2 plasticity with linear hardening", International Journal for Numerical Methods in Engineering, 72:422-463 (2007)

62. F.Auricchio, L.Beirao da Veiga, A.Buffa, C.Lovadina, A.Reali, G.Sangalli "A fully locking-free isogeometric approach for plane linear elasticity problems: a stream function formulation", Computer Methods in Applied Mechanics and Engineering, 197:160-172 (2007)

63. F.Auricchio, D.Fugazza, R.DesRoches, "A 1D rate-dependent viscous constitutive model for superelastic shape-memory alloys: formulation and comparison with experimental data", Smart Materials and Structures, vol.16: S39-S50 (2007)

64. F.Auricchio, A.Reali, U.Stefanelli, "A three-dimensional model describing stress-induced solid phase transformation with permanent inelasticity", International Journal of Plasticity, 23:207-226 (2007)

65. E.Artioli, F.Auricchio, L.Beirao da Veiga, "Second-order accurate integration algorithms for von-Mises plasticity with a nonlinear kinematic hardening mechanism", Computer Methods in Applied Mechanics and Engineering, 196:1827-1846 (2007)

66. F.Auricchio, A.Reali. "A Phenomenological One-dimensional Model Describing Stress-induced Solid Phase Transformation with Permanent Inelasticity", Mechanics of Advanced Materials and Structures, 14:43–55 (2007)

67. E.Artioli, F.Auricchio, L.Beirao da Veiga, "A novel optimal exponential-based integration algorithm for von-Mises plasticity with linear hardening: Theoretical analysis on yield consistency, accuracy, convergence and numerical investigations ", International Journal for Numerical Methods in Engineering, 67:449-498 (2006)

68. F.Auricchio, D.Fugazza and R.DesRoches, "Numerical and experimental evaluation of the damping properties of shape-memory alloys" Journal of Engineering Materials and Technology, Transactions of the ASME 128:312-319 (2006)

69. J. McCormick, R. DesRoches, D. Fugazza, F. Auricchio, "Seismic vibration control using superelastic shape memory alloys " Journal of Engineering Materials and Technology, Transactions of the ASME 128:294-301 (2006)

70. F.Auricchio, E.Sacco, G.Vairo, "A mixed FSDT finite element for monoclinic laminated plates", Computers & Structures, 84:624-639 (2006)

71. F.Nanni, F.Auricchio, F.Sarchi, G.Forte, G.Gusmano, "Self-sensing CF-GFRP rods as mechanical reinforcement and sensors of concrete beams", Smart Materials and Structures, 15:182-186 (2006)

72. F.Auricchio, D.Fugazza, R.DesRoches, "Earthquake Performance of Steel Frames with Nitinol Braces", Journal of Earthquake Engineering, 10: 45-66 (2006)

73. L.Petrini, F.Migliavacca, P.Massarotti, S.Schievano, G.Dubini, F.Auricchio "Computational studies of Shape Memory Alloy behaviour in biomedical applications", ASME Journal of Biomechanical Engineering 127:716-725 (2005)

74. E.Artioli, F.Auricchio, L.Beirao da Veiga, "Integration schemes for von-Mises plasticity based on exponential maps: numerical investigations and theoretical considerations", International Journal for

Numerical Methods in Engineering" 64:1133-1165 (2005)

75. F.Auricchio, U.Stefanelli , "Well-posedness and approximation for a one-dimensional model for shape memory alloys", Mathematical Models & Methods in Applied Sciences, 15:1301-1327 (2005)

76. F.Auricchio, L.Beirao da Veiga, C.Lovadina, A.Reali, "A Stability Study of some Mixed Elements for Finite Elasticity Problems", Computer Methods in Applied Mechanics and Engineering, 194:1075-1092 (2005)

77. F.Auricchio, L.Beirao da Veiga, C.Lovadina, A.Reali, "An Analysis of some Mixed-Enhanced Finite Element for Plane Linear Elasticity", Computer Methods in Applied Mechanics and Engineering, 194:2947-2968 (2005)

78. F.Migliavacca, L.Petrini, V.Montanari, I.Quagliana, F.Auricchio, G.Dubini, "A predictive study of the mechanical behaviour of coronary stents by computer modeling", Medical Engineering & Physics, 27:13-18 (2005)

79. F.Auricchio, C.Lovadina, A.L.Madureira, "An asymptotically optimal model for isotropic heterogeneous linearly elastic plates", ESAIM Mathematical Modelling and Numerical Analysis, 38:877-897 (2004)

80. F.Migliavacca, L.Petrini, P.Massarotti, S.Schievano, F.Auricchio, G.Dubini, "Stainless and shape memory alloy coronary stents: a computational study on the interaction with the vascular wall" Biomechanics and Modeling in Mechanobiology, 2:205-217 (2004)

81. F.Auricchio, U.Stefanelli, "Numerical Analysis of a three-dimensional super-elastic constitutive model", International Journal for Numerical Methods in Engineering, 61:142-155 (2004)

82. F.Auricchio, L.Petrini, "A three-dimensional model describing stress-temperature induced solid phase transformations: solution algorithm and boundary value problems", International Journal for Numerical Methods in Engineering, 61:807-836 (2004)

83. F.Auricchio, L.Petrini, "A three-dimensional model describing stress-temperature induced solid phase transformations: thermomechanical coupling and hybrid composite applications", International Journal for Numerical Methods in Engineering, 61:716-737 (2004)

84. L.Petrini, F.Migliavacca, F.Auricchio, G.Dubini, "Numerical investigation of the intravascular coronary stent flexibility", Journal of Biomechanics, 37:495-501 (2004)

85. G.M.Calvi, P.Ceresa, D.Bolognini, C.Casarotti, F.Auricchio, "Effects of axial force variation in the seismic response of bridges isolated with friction pendulum systems", Journal of Earthquake Engineering, 8:187-224 (2004)

86. R.L.Taylor, F.C.Filippou, A.Saritas, F.Auricchio, "Mixed finite element method for beam and frame problems", Computational Mechanics, 31:192-203 (2003)

87. F.Auricchio, S. Marfia, E.Sacco, "Modeling of SMA materials: training and two way shape memory effects", Computers & Structures, 81:2301-2317 (2003)

88. V.Cacciafesta, M.F.Sfondrini, A.Scribante, F.Auricchio, "Evaluation of friction of stainless steel and esthetic self-ligating brackets in various bracket-archwire combinations", American Journal of Orthodontics and Dentofacial Orthopedics, 124:395-402 (2003)

89. V.Cacciafesta, M.F.Sfondrini, A.Scribante, C.Klersy, F.Auricchio, "Evaluation of friction of conventional and metal-insert ceramic brackets in various bracket-archwire combinations", American Journal of Orthodontics and Dentofacial Orthopedics 124:403-409 (2003)

90. F.Auricchio, E.Sacco, "Refined first-order shear deformation theory models for composite laminates", Journal of Applied Mechanics, 70:381-390 (2003)

91. C.Lovadina, F.Auricchio, "On the enhanced strain technique for elasticity problems", Computer & Structures, 81:777-787 (2003)

92. F.Auricchio, L.Petrini, R.Pietrabissa, E.Sacco, "Numerical modeling of shape-memory alloys in orthodontics", Computer Modeling in Engineering & Sciences, 4:365-380 (2003)

93. F.Auricchio, L.Beirao da Veiga, "On a new integration scheme for von-Mises plasticity with linear hardening", International Journal for Numerical Methods in Engineering, 56:1375-1396 (2003)

94. F.Auricchio, L.Petrini, "Improvements & algorithmical considerations on a recent three-dimensional model describing stress-induced solid phase transformations", International Journal for Numerical Methods in Engineering, 55:1255-1284 (2002)

95. F.Auricchio, L.Beirao da Veiga, C.Lovadina, "Remarks on the asymptotic behaviour of Koiter shells", Computer & Structures, 80:735-745 (2002)

96. F. Migliavacca, L. Petrini, M. Colombo. F.Auricchio, R.Pietrabissa, "Mechanical behavior of coronary stents investigated through the finite element method", Journal of Biomechanics, 35:803-811 (2002)

97. F.Auricchio, E.Sacco, "On the thermo-mechanical response of a superelastic shape-memory wire under cyclic stretching-bending loadings", International Journal Solids and Structures, 38:6123-6145 (2001)

98. F.Auricchio, "A robust integration-algorithm for a finite-strain shape-memory-alloy superelastic model", International Journal of Plasticity, 17:971-990 (2001)

99. F.Auricchio, M. Di Loreto, E.Sacco, "Finite element analysis of a stenotic artery revascularization through stent insertion", Computer Methods in Biomechanics and Biomedical Engineering, 4:249-263 (2001)

100. M.Arrigoni, F.Auricchio, V.Cacciafesta, L.Petrini, R.Pietrabissa, "Mechanical characterisation of orthodontic superelastic Ni-Ti wires", Journal de Physique IV, 11:509-514 (2001)

101. F.Auricchio, "Three-dimensional modeling of shape-memory materials", Journal de Physique IV, 11:577-582 (2001)

102. G.Alfano, F.Auricchio, L.Rosati, E.Sacco, "MITC finite elements for laminated composite plates", International Journal for Numerical Methods in Engineering, 50:707-738 (2001)

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