

The starred publications are in Peer-reviewed Congress Proceedings, the others are in Peer-Reviewed Journals

2018

[178] I. Giorgio, F. dell’Isola and D. J. Steigmann “Axisymmetric deformations of a 2nd grade elastic cylinder”, *Mechanics Research Communications*, Available online 8 September 2018. [DOI: <https://doi.org/10.1016/j.mechrescom.2018.09.004>]

[177] I. Giorgio, P. Harrison, F. dell’Isola, J. Alsayednoor and E. Turco “Wrinkling in engineering fabrics: a comparison between two different comprehensive modelling approaches”, *Proceedings of The Royal Society A Mathematical, Physical and Engineering Sciences*, vol. 474 (2216), 2018, 20 pages, [DOI: 10.1098/rspa.2018.0063].

[176] F. dell’Isola, P. Seppecher, J. J. Alibert, T. Lekszycki, R. Grygoruk, M. Pawlikowski, D. Steigmann, I. Giorgio, U. Andreaus, E. Turco, M. Gołaszewski, N. Rizzi, C. Boutin, V. A. Eremeyev, A. Misra, L. Placidi, E. Barchiesi, L. Greco, M. Cuomo, A. Cazzani, A. Della Corte, A. Battista, D. Scerrato, I. Z. Eremeeva, Y. Rahali, J.-F. Ganghoffer, W. Müller, G. Ganzosch, M. Spagnuolo, A. Phaff, K. Barcz, K. Hoschke, J. Neggers and F. Hild “Pantographic metamaterials: an example of mathematically driven design and of its technological challenges”, *Continuum Mechanics and Thermodynamics*, Available online 30 June 2018. pp. 1-34. [DOI: 10.1007/s00161-018-0689-8].

[175] E. Turco, A. Misra, M. Pawlikowski, F. dell’Isola and F. Hild “Enhanced Piola–Hencky discrete models for pantographic sheets with pivots without deformation energy: numerics and experiments”, *International Journal of Solids and Structures*, Available online 17 May 2018. 34 pages. [DOI: 10.1016/j.ijsolstr.2018.05.015].

[174] V. E. Eremeyev and F. dell’Isola “A Note on reduced strain gradient elasticity”, *Generalized Models and Non-classical Approaches in Complex Materials 1*, FIRST ONLINE: 25 March 2018. pp. 301-310 [DOI: 10.1007/978-3-319-72440-9_15].

[173] F. dell’Isola and V. A. Eremeyev “Some introductory and historical remarks on mechanics of microstructured materials”, *Advances in Mechanics of Microstructured Media and Structures*, FIRST ONLINE: 28 February 2018. pp. 1-20 [DOI: 10.1007/978-3-319-73694-5_1].

[172] E. Barchiesi, F. dell’Isola, M. Laudato, L. Placidi and P. Seppecher “A 1D continuum model for beams with pantographic microstructure: Asymptotic micro-macro identification and numerical results”, *Advances in Mechanics of Microstructured Media and Structures*, FIRST ONLINE: 28 February 2018. pp. 43-74 [DOI: 10.1007/978-3-319-73694-5_4].

[171] F. dell’Isola “In Memoriam: Richard A. Toupin, 1926–2017”, *Mathematics and Mechanics of Solids*, vol. 23 (2), 2018, pp. 133-135. [DOI: 10.1177/1081286517752589].

[170] A. Battista, A. Della Corte, F. dell’Isola and P. Seppecher “Large deformations of 1D microstructured systems modeled as generalized Timoshenko beams”, *ZAMP – Zeitschrift für angewandte Mathematik und Physik*, Available online 06 April 2018, 26 pages

[169] A. Misra, T. Lekszycki, I. Giorgio, G. Ganzoschf, W. H. Müller and F. dell’Isola “Pantographic Metamaterials Show Atypical Poynting Effect Reversal”, *Mechanics Research Communications*, vol. 89, 2018, pp. 6-10. (FIRST online 24 February 2018). [DOI: <https://doi.org/10.1016/j.mechrescom.2018.02.003>].

[168] S. R. Eugster and F. dell’Isola “Exegesis of Sect. III.B from “Fundamentals of the Mechanics of Continua” by E. Hellinger”, *ZAMM – Journal of Applied Mathematics and Mechanics / Zeitschrift für Angewandte Mathematik und Mechanik*, vol. 98 (1), 2018, pp. 69-105. (First published: 15 September 2017) [DOI: 10.1002/zamm.201700112]

[167] S. R. Eugster and F. dell’Isola “Exegesis of Sect. II and III.A from “Fundamentals of the Mechanics of Continua” by E. Hellinger”, *ZAMM – Journal of Applied Mathematics and Mechanics / Zeitschrift für Angewandte Mathematik und Mechanik*, vol. 98 (1), 2018, pp. 31-68. (First published: 18 July 2017) (DOI: 10.1002/zamm.201600293).

2017

- [166] S. R. Eugster and F. dell’Isola “An ignored source in the foundations of continuum physics “Die Allgemeinen Ansätze der Mechanik der Kontinua” by E. Hellinger”, *Proceedings in Applied Mathematics and Mechanics*, 22 May 2017, 2 pages.
- [165] V. A. Eremeyev, F. dell’Isola, C. Boutin and D. Steigmann “Linear pantographic sheets: Existence and uniqueness of weak solutions”, *Journal of Elasticity*, First Online: 06 November 2017, pp. 1-22. (DOI 10.1007/s10659-017-9660-3).
- [164] E. Turco, I. Giorgio, A. Misra and F. dell’Isola “King post truss as a motif for internal structure of (meta)material with controlled elastic properties”, *Royal Society Open Science*, Published 18 October 2017, 20 pages. (DOI: 10.1098/rsos.171153).
- [163] G. Ganzosch, F. dell’Isola, E. Turco, T. Lekszycki and W. H. Müller “Shearing tests applied to pantographic structures”, *Acta Polytechnica CTU Proceedings*, vol. 7, 2017, pp. 1-6. (DOI:10.14311/APP.2017.7.0001).
- [162] B. E. Abali, W. H. Müller and F. dell’Isola “Theory and computation of higher gradient elasticity theories based on action principles”, *Archive of Applied Mechanics*, vol. 87 (9), 2017, pp. 1495-1510. (FIRST ONLINE 05 June 2017). (DOI: 10.1007/s00419-017-1266-5).
- [161] G. Rosi, L. Placidi and F. dell’Isola ““Fast” and “slow” pressure waves electrically induced by nonlinear coupling in Biot-type porous medium saturated by a nematic liquid crystal”, *ZAMP – Zeitschrift für angewandte Mathematik und Physik*, vol. 68 (2), 2017, 14 pages.
- [160] M. Spagnuolo, K. Barcz, A. Pfaff, F. dell’Isola and P. Franciosi “Qualitative pivot damage analysis in aluminum printed pantographic sheets: Numerics and experiments”, *Mechanics Research Communications*, vol. 83, 2017, pp. 47-52.
- [159] A. Della Corte, A. Battista, F. dell’Isola and I. Giorgio “Modeling deformable bodies using discrete systems with centroid-based propagating interaction: Fracture and crack evolution”, *Mathematical Modelling in Solid Mechanics Volume 69 of the series Advanced Structured Materials*, 2017, pp. 59-88.

- [158] C. Boutin, F. dell’Isola, I. Giorgio and L. Placidi ” Linear pantographic sheets: Asymptotic micro-macro models identification”, *Mathematics and Mechanics of Complex Systems*, vol. 5 (2), 2017, pp. 127–162. (DOI: 10.2140/memocs.2017.5.127).
- [157] I. Giorgio, U. Andreaus, F. dell’Isola and T. Lekszycki “Viscous second gradient porous materials for bones reconstructed with bio-resorbable grafts”, *Extreme Mechanics Letters.*, vol. 13, 2017, pp. 141-147. (DOI: 10.1016/j.eml.2017.02.008).
- [156] A. Della Corte, F. dell’Isola, R. Esposito and M. Pulvirenti “Equilibria of a clamped Euler beam (Elastica) with distributed load: large deformations”. *Mathematical Models and Methods in Applied Sciences*, vol. 27 (8), 2017, pp. 1391-1421.
- [155] I. Giorgio, A. Della Corte and F. dell’Isola “Dynamics of 1D nonlinear pantographic continua”, *Nonlinear Dynamics.*, vol. 88 (1), 2017, pp. 21-31. (First online: 29 November 2016). (DOI: 10.1007/s11071-016-3228-9).
- [154] M. Cuomo, F. dell’Isola, L. Greco and N. L. Rizzi “First versus second gradient energies for planar sheets with two families of inextensible fibres: Investigation on deformation boundary layers, discontinuities and geometrical instabilities”, *Composites Part B Engineering*, vol. 115, 2017, pp. 423-448. (DOI: 0.1016/j.compositesb.2016.08.043).
- [153] S. R. Eugster and F. dell’Isola “Exegesis of the Introduction and Sect. I from “Fundamentals of the Mechanics of Continua” by E. Hellinger”, *ZAMM – Zeitschrift für Angewandte Mathematik und Mechanik.*, vol. 97 (4), 2017, pp. 477-506. (First Published 17 November 2016). (DOI: 10.1002/zamm.201600108).
- [152] P. Boisse, N. Hamila, E. Guzman-Maldonado, A. Madeo, G. Hivet and F. dell’Isola “The bias-extension test for the analysis of in-plane shear properties of textile composite reinforcements and preregs: a review”, *International Journal of Material Forming*, vol. 10 (4), 2017, pp. 473-492. (Published online: 11 April 2016). (DOI: 10.1007/s12289-016-1294-7).

2016

- [151] U. Andreaus, F. dell'Isola, I. Giorgio, L. Placidi, T. Lekszycki and N. L. Rizzi "Numerical simulations of classical problems in two-dimensional (non) linear second gradient elasticity", *International Journal of Engineering Science*, vol. 108, 2016, pp. 34-50.
- [150] F. dell'Isola, M. Cuomo, L. Greco and A. Della Corte "Bias extension test for pantographic sheets: numerical simulations based on second gradient shear energies", *Journal of Engineering Mathematics*, 2016, pp. 1-31 (DOI: 10.1007/s10665-016-9865-7).
- [149] E. Turco, F. dell'Isola, N. L. Rizzi, R. Grygoruk, W. H. Müller and C. Liebold "Fiber rupture in sheared planar pantographic sheets: Numerical and experimental evidence", *Mechanics Research Communications*, vol. 76, September 2016 (First online: 1 August 2016), pp. 86-90. (DOI: 10.1016/j.mechrescom.2016.07.007).
- [148] E. Turco, F. dell'Isola, A. Cazzani and N. L. Rizzi "Hencky-type discrete model for pantographic structures: numerical comparison with second gradient continuum models", *Zeitschrift für angewandte Mathematik und Physik*, vol. 67 (4), August 2016 (First online: 25 June 2016), 28 pages. (DOI: 10.1007/s00033-016-0681-8).
- [147] F. dell'Isola, S. Bucci and A. Battista "Against the fragmentation of knowledge: The power of multidisciplinary research for the design of metamaterials", *Advanced Methods of Continuum Mechanics for Materials and Structures Volume 60 of the series Advanced Structured Materials*, 2016, pp. 523-545.
- [146] F. dell'Isola, A. Della Corte, R. Esposito, L. Russo "Some cases of unrecognized transmission of scientific knowledge: From antiquity to Gabrio Piola's peridynamics and generalized continuum theories", *Generalized Continua as Models for Classical and Advanced Materials, Volume 42 of the series Advanced Structured Materials*, 2016, pp. 77-128.
- [145] F. dell'Isola, V. A. Eremeyev and P. Schiavone "A special issue in honor of Prof. David Steigmann", *Continuum Mechanics and Thermodynamics*, vol. 28 (1), 2016, pp. 1-3.
- [144] M. Cuomo, F. dell'Isola and L. Greco "Simplified analysis of a generalized bias-test for fabrics with two families of inextensible fibres", *Zeitschrift für angewandte Mathematik und Physik*, 2016, 39 pages. (DOI: 10.1007/s00033-016-0653-z).

- [143] I. Giorgio, A. Della Corte, F. dell’Isola and D. J. Steigmann “Buckling modes in pantographic lattices”, *Comptes Rendus – Mécanique*, vol. 344 (7), 2016 pp. 487-501. (DOI:10.1016/j.crme.2016.02.009).
- [142] F. dell’Isola, A. Della Corte, I. Giorgio and D. Scerrato “Pantographic 2D sheets: Discussion of some numerical investigations and potential applications”, *International Journal of Non-Linear Mechanics*, vol. 80, 2016, pp. 200-208.
- [141] F. dell’Isola, D. Steigmann and A. Della Corte “Synthesis of fibrous complex structures: designing microstructure to deliver targeted macroscale response”, *Applied Mechanics Reviews*, vol. 67 (6), 2016, 060804, 21 pages. (DOI: 10.1115/1.4032206).
- [140] F. dell’Isola, A. Madeo and P. Seppecher “Cauchy tetrahedron argument applied to higher contact interactions”, *Archive for Rational Mechanics and Analysis*, vol. 219 (3), 2016, pp. 1305-1341 (Published online before print September 2015).
- [139] I. Giorgio, U. Andreaus, D. Scerrato and F. dell’Isola “A visco-poroelastic model of functional adaptation in bones reconstructed with bio-resorbable materials”, *Biomechanics and Modeling in Mechanobiology*, vol. 15 (5), 2016, pp. 1325-1343. [Published online before print 30 January 2016] (DOI: 10.1007/s10237-016-0765-6).
- [138] F. dell’Isola, I. Giorgio, M. Pawlikowski and N. L. Rizzi “Large deformations of planar extensible beams and pantographic lattices: heuristic homogenization, experimental and numerical examples of equilibrium”, *Proceedings of the Royal Society of London A*, vol. 472 (2185), 2016, 23 pages.
- [137] F. dell’Isola, A. Della Corte and I. Giorgio “Higher-gradient continua: The legacy of Piola, Mindlin, Sedov and Toupin and some future research perspectives”, *Mathematics and Mechanics of Solids*, Published online before print January 14, 2016, 21 pages. (DOI: 10.1177/1081286515616034)
- [136] F. dell’Isola, A. Della Corte, L. Greco and A. Luongo “Plane bias extension test for a continuum with two inextensible families of fibers: A variational treatment with Lagrange multipliers and a perturbation solution”, *International Journal of Solids and Structures*, vol. 81, 2016, pp. 1-12.

[135] F. dell’Isola, M.V. d’Agostino, A. Madeo, P. Boisse and D. Steigmann “Minimization of shear energy in two dimensional continua with two orthogonal families of inextensible fibers: The case of standard bias extension test”, *Journal of Elasticity* vol. 122 (2), 2016, pp 131-155. (Published online before print 09 July 2015).

[134] A. Della Corte, A. Battista and F. dell’Isola “Referential description of the evolution of a 2D swarm of robots interacting with the closer neighbors: Perspectives of continuum modeling via higher gradient continua”, *International Journal of Non-Linear Mechanics*, vol. 80, 2016, pp. 209–220. (Published online before print 24 August 2015. DOI: 10.1016/j.ijnonlinmec.2015.06.016).

2015

[133] F. dell’Isola, I. Giorgio and U. Andreaus “Elastic pantographic 2D lattices: a numerical analysis on the static response and wave propagation”, *Proceedings of the Estonian Academy of Sciences*, vol. 64 (3), 2015, pp. 219-225.

[132] F. dell’Isola, P. Seppecher and A. Della Corte “The postulations *à la D’Alembert* and *à la Cauchy* for higher gradient continuum theories are equivalent: a review of existing results”, *Proceedings of The Royal Society A*, vol. 471 (2183), 2015, 25 pages.

[131] Y. Rahali, I. Giorgio, J.F. Ganghoffer and F. dell’Isola “Homogenization *à la Piola* produces second gradient continuum models for linear pantographic lattices”, *International Journal of Engineering Science*, vol. 97, 2015, pp. 148-172.

[130] F. dell’Isola “Models to detect scientific creativity: Why something simpler than Fréchet Metric Manifolds?”, *Mechanics and Mathematics of Solids (MMS)*, vol. 20 (9), 2015, pp. 1146-1149.

[129] N. Auffray, F. dell’Isola, V. Eremeyev, A. Madeo and G. Rosi “Analytical continuum mechanics *à la Hamilton-Piola*: least action principle for second gradient continua and capillary fluids”, *Mechanics and Mathematics of Solids (MMS)*, vol. 20 (4), 2015, pp. 375-417. (Published online before print August 28, 2013).

[128] F. dell’Isola, U. Andreaus and L. Placidi “At the origins and in the vanguard of peridynamics, non-local and higher gradient continuum mechanics. An underestimated and still topical contribution of Gabrio Piola”, *Mechanics and Mathematics of Solids (MMS)*, vol. 20 (8), 2015, pp. 887-928. (Published online before print February 2, 2014).

[127] I. Giorgio, R. Grygoruk, F. dell’Isola and D.J. Steigmann “Pattern formation in the three-dimensional deformations of fibered sheets”, *Mechanics Research Communications*, vol. 69, 2015, pp. 164–171.

[126] D.J. Steigmann and F. dell’Isola “Mechanical response of fabric sheets to three-dimensional bending, twisting, and stretching”, *Acta Mechanica Sinica*, vol. 31 (3), 2015, pp. 373-382.

[125] F. dell’Isola, T. Lekszycki, M. Pawlikowski, R. Grygoruk and L. Greco “Designing a light fabric metamaterial being highly macroscopically tough under directional extension: first experimental evidence”, *Zeitschrift für angewandte Mathematik und Physik ZAMP* vol. 66 (6), 2015, pp. 3473-3498.

[124] A. Carcaterra, F. dell’Isola, R. Esposito and M. Pulvirenti “Macroscopic description of microscopically strongly inhomogeneous systems: A mathematical basis for the synthesis of higher gradients metamaterials”, *Archive for Rational Mechanics and Analysis*, vol. 218 (3), 2015, pp. 1239-1262.

[123] A. Madeo, M. Ferretti, F. dell’Isola and P. Boisse “Thick fibrous composite reinforcements behave as special second-gradient materials: three-point bending of 3D interlocks”, *Zeitschrift für angewandte Mathematik und Physik*, vol. 66 (4), 2015, pp. 2041-2060.

[122] F. dell’Isola and D. Steigmann “A two-dimensional gradient-elasticity theory for woven fabrics”, *Journal of Elasticity*, vol. 118 (1), 2015, pp. 113-125.

2014

[121] F. dell’Isola, J. Pouget and M. Rousseau “Gérard A. Maugin: engineering scientist. Celebrating his 70th anniversary”, *Archives of Applied Mechanics*, vol. 84 (9-11), 2014, pp. 1221-1227.

[120] F. dell’Isola “A difficult problem for artificial intelligence: how to assess originality of scientific research and the dangers of apostrophes in family names”, 5 June 2014, 33 pages.

[119] M. Ferretti, A. Madeo, F. dell’Isola and P. Boisse “Modelling the onset of shear boundary layers in fibrous composite reinforcements by second gradient theory”, *Zeitschrift für angewandte Mathematik und Physik*, vol.65 (3), 2014, pp.587-612.

2013

[118] A.Madeo, F. dell’Isola and F. Darve “A continuum model for deformable, second gradient porous media partially saturated with compressible fluids”, *Journal of the Mechanics and Physics of Solids*, vol. 61 (11), 2013, pp. 2196-2211.

[117] A. Javili, F. dell’Isola and P. Steinmann “Geometrically nonlinear higher-gradient elasticity with energetic boundaries”, *Journal of the Mechanics and Physics of Solids*, vol. 61 (12), 2013. pp. 2381–2401.

2012

[116] T. Lekszycki and F. dell’Isola “A mixture model with evolving mass densities for describing synthesis and resorption phenomena in bones reconstructed with bio-resorbable materials”, *ZAMM – Journal of Applied Mathematics and Mechanics / Zeitschrift für Angewandte Mathematik und Mechanik*, vol. 92 (6), 2012, pp. 426-444.

[115] F. dell’Isola, P. Seppecher and A. Madeo “How contact interactions may depend on the shape of Cauchy cuts in N-th gradient continua: approach “à la D’Alembert” “, *Zeitschrift für Angewandte Mathematik und Physik (ZAMP)*, vol. 63 (6), 2012, pp. 1119-1141.

[114] F. dell’Isola, A. Madeo and L. Placidi “Linear plane wave propagation and normal transmission and reflection at discontinuity surfaces in second gradient 3D Continua”, *ZAMM – Journal of Applied Mathematics and Mechanics / Zeitschrift für Angewandte Mathematik und Mechanik*, vol. 92 (1), 2012, pp. 52-71.

[113]* F. dell'Isola and L. Placidi "Variational principles are a powerful tool also for formulating field theories", *Variational Models and Methods in Solid and Fluid Mechanics CISM Courses and Lectures* vol. 535, 2012, pag. 1-15.

[112]* F. dell'Isola, P. Seppecher and A. Madeo "Fluid Shock Wave Generation at Solid-Material Discontinuity Surfaces in Porous Media", *Variational Models and Methods in Solid and Fluid Mechanics CISM Courses and Lectures* vol. 535, 2012, pag.315-358.

[111]* F. dell'Isola, P. Seppecher and A. Madeo "Beyond Euler-Cauchy Continua: The structure of contact actions in N-th gradient generalized continua: a generalization of the Cauchy tetrahedron argument", *Variational Models and Methods in Solid and Fluid Mechanics CISM Courses and Lectures* vol. 535, 2012, pag. 17-106.

2011

[110] P. Seppecher, J.-J. Alibert and F. dell'Isola "Linear elastic trusses leading to continua with exotic mechanical interactions", *Journal of Physics: Conference Series*, vol. 319 (1), 2011, 13 pages.

[109] A. Madeo, T. Lekszycki and F. dell'Isola "A continuum model for the bio-mechanical interactions between living tissue and bio-resorbable graft after bone reconstructive surgery", *Comptes Rendus Mecanique*, vol. 339 (10), 2011, pp. 625-682.

[108] F. dell'Isola and P. Seppecher, "Commentary about the paper "Hypertractions and hyperstresses convey the same mechanical information Continuum Mech. Thermodyn. (2010) 22:163-176 " by Prof. Podio Guidugli and Prof. Vianello and some related papers on higher gradient theories", *Continuum Mechanics and Thermodynamics*, vol. 23 (5), 2011, pp. 473-478.

2010

[107] H. Shen, J. Qiu, H. Ji, K. Zhu, M. Balsi, I. Giorgio and F. dell'Isola, "A low-power circuit for piezoelectric vibration control by synchronized switching on voltage source", *Sensors and Actuators A: Physical*, vol. 161 (1-2), 2010, pp. 245-255.

[106] G. Rosi, J. Pouget and F. dell'Isola, "Control of sound radiation and transmission by a piezoelectric plate with an optimized resistive electrode", *European Journal of Mechanics, A/Solids*, vol. 29 (5), 2010, pp. 859-870.

2009

[105]* F. dell'Isola, A. Madeo, and P. Seppecher, "Shock waves in porous media: A variational approach", *19ème Congrès Français de Mécanique*, Marseille, 24-28 August 2009.

[104] F. dell'Isola, A. Madeo, and P. Seppecher, "Boundary conditions at fluid-permeable interfaces in porous media: A variational approach", *International Journal of Solids and Structures*, vol. 46(17) 3150-3164, 2009.

[103] F. dell'Isola, G. Sciarra, and S. Vidoli, "Generalized Hooke's law for isotropic second gradient materials", *Royal Society of London*, vol. 465, 2009, pp. 2177-2196.

2008

[102]* F. Vestroni, J. Ciambella, F. dell'Isola and S. Vidoli, "Damage detection with auxiliary subsystems", *CIMTEC 2008 – proceedings of 3rd International Conference on Smart Materials, Structures and Systems – Embodying Intelligence in Structures and Integrated Systems* 56, pp. 401-413.

[101] A. Madeo, F. dell'Isola, N. Ianiro, and G. Sciarra, "A variational deduction of second gradient poroelasticity II: An application to the consolidation problem", *Journal of Mechanics of Materials and Structures*, vol. 3 (4), 2008, pp. 607-625.

[100]* A. Madeo, F. dell'Isola, N. Ianiro, G. Sciarra, "A second gradient poroelastic model of consolidation", *SIMAI 2008*, Rome 15 – 19 September 2008.

[99] G. Sciarra, F. dell'Isola, N. Ianiro, and A. Madeo, "A variational deduction of second gradient poroelasticity part I: General theory", *Journal of Mechanics of Materials and Structures*, vol. 3 (3), 2008, pp. 507-526.

[98] L. Placidi, F. dell'Isola, N. Ianiro, and G. Sciarra, "Variational formulation of pre-stressed solid-fluid mixture theory, with an application to wave phenomena", *European Journal of Mechanics, A/Solids*, vol. 27 (4), 2008, pp. 582-606.

2007

[97]* A. Del Monte, F. dell'Isola, A.M. Bersani, "Demand Instability, Cost Flexibility and Optimal Mode of Organization", *XXXI Convegno AMASES* 3-6 settembre 2007, Lecce.

[96]* C. Maurini, J. Pouget and F. dell'Isola "Poutres composites piézoélectriques: modélisation des effets 3D, validations numériques et expérimentales", *8e Colloque National en Calculus des Structures* 21-25 Mai 2007, Giens (Var).

[95] G. Sciarra, F. dell'Isola, and O. Coussy, "Second gradient poromechanics", *International Journal of Solids and Structures*, vol. 44, 2007, p. 6607–6629.

2006

[94] C. Maurini, J. Pouget, and F. dell'Isola, "Extension of the Euler Bernoulli model of piezoelectric laminates to include 3D effects via a mixed approach", *Computers and Structures*, vol. 84 (22-23), 2006, pp. 1438-1458.

[93]* F. dell'Isola, N. Ianiro, and L. Placidi, "Instability of pre-stressed solid-fluid", *WASCOM 2005 13th International Conference on Waves and Stability in Continuous Media*, Hackensack, NJ: World Sci. Publ., 2006, pp. 170-175.

2005

[92]* G. Sciarra, F. dell'Isola, and O. Coussy, "A second gradient theory for deformable fluidsaturated porous media", *Proceeding of the 3rd Biot Conference on Poromechanics*, 24-27 May 2005.

- [91] F. dell'Isola, G. Sciarra and R. Batra, "A second gradient model for deformable porous matrices filled with an inviscid fluid", *Solid Mechanics and its Applications – IUTAM Symposium on Physicochemical and Electromechanical Interactions in Porous Media*, Vol. 125, 2005, pp. 221-229.
- [90]* C. Maurini, J. Pouget and F. dell'Isola, "Corrections to the constitutive equations of piezoelectric laminated beams through a mixed variational approach", *II ECCOMAS Thematic Conference on Smart Structures and Material*, Lisbon, Portugal, July 18 – 21, 2005.
- [89] F. dell'Isola, F. Vestroni, and S. Vidoli, "Structural-damage detection by distributed piezoelectric transducers and tuned electric circuits", *Research in Nondestructive Evaluation*, vol. 16, 2005, pp. 101-118.
- [88] G. Sciarra, F. dell'Isola, and K. Hutter, "Dilatational and compacting behavior around a cylindrical cavern leached out in a solid-fluid elastic rock salt", *International Journal of Geomechanics*, vol. 5 (3), 2005, pp. 233-243.
- [87] M. Porfiri, F. dell'Isola, and E. Santini, "Modeling and design of passive electric networks interconnecting piezoelectric transducers for distributed vibration control", *International Journal of Applied Electromagnetics and Mechanics*, vol. 21 (2), 2005, pp. 69-87.
- [86] R. Batra, F. dell'Isola, and G. Ruta, "Second-order solution of Saint-Venant's problem for an elastic bar predeformed in flexure", *International Journal of Non-Linear Mechanics*, vol. 40 (2-3), 2005, p. 411–422.
- [85] R. Batra, F. dell'Isola, S. Vidoli, and D. Vigilante, "Multimode vibration suppression with passive two-terminal distributed network incorporating piezoceramic transducers", *International Journal of Solids and Structures*, vol. 42 (11-12), 2005, pp. 3115-3132.
- [84] S. Alessandroni, U. Andreaus, F. dell'Isola, and M. Porfiri, "A passive electric controller for multimodal vibrations of thin plates", *Computers and Structures*, vol. 83 (15-16), 2005, p. 1236–1250.

2004

[83]* C. Maurini, J. Pouget, F. dell'Isola, "On a model of piezoelectric beam including interaction between different layers", *XXI International Congress of Theoretical and Applied Mechanics*, 15-21 August 2004, Warsaw Poland.

[82]* C. Maurini, J. Pouget, F. dell'Isola, "Beam models of piezoelectric laminates", *7th International Conference on Computational Structures Technology*, Lisbon, Portugal 7-9 September 2004.

[81]* M. Porfiri, C. Maurini, F. dell'Isola, J. Pouget, "Different network topologies for distributed electric damping of beam vibrations", *Proceeding of the XXI International Congress of Theoretical and Applied Mechanics*, 15-21 August 2004, Warsaw Poland.

[80] C. Maurini, F. dell'Isola, and D. Del Vescovo, "Comparison of piezoelectronic networks acting as distributed vibration absorbers", *Mechanical Systems and Signal Processing*, vol. 18 (5), 2004, p. 1243–1271.

[79] C. Maurini, J. Pouget, and F. dell'Isola, "On a model of layered piezoelectric beams including transverse stress effect", *International journal of solids and structures*, vol. 41 (16-17), 2004, p. 4473–4502.

[78] C. Maurini, F. dell'Isola and J. Pouget, "On models of layered piezoelectric beams for passive vibration control", *Journal de Physique IV (Proceedings)*, vol. 115, 2004, p. 307–316.

[77] F. dell'Isola, C. Maurini, and M. Porfiri, "Passive damping of beam vibrations through distributed electric networks and piezoelectric transducers: Prototype design and experimental validation", *Smart Materials and Structures*, vol. 13 (2), 2004, pp. 299-308.

[76] M. Porfiri, F. dell'Isola, and F. M. Frattale Mascioli, "Circuit analog of a beam and its application to multimodal vibration damping, using piezoelectric transducers", *International Journal of Circuit Theory and Applications*, vol. 32 (4), 2004, pp. 167-198.

[75] S. Alessandroni, U. Andreaus, F. dell'Isola, and M. Porfiri, "Piezo-ElectroMechanical (PEM) Kirchhoff–Love plates", *European Journal of Mechanics/A Solids*, vol. 23 (4), 2004, p. 689–702.

[74] U. Andreaus, F. dell'Isola, and M. Porfiri, "Piezoelectric Passive Distributed Controllers for Beam Flexural Vibrations", *Journal of Vibration and Control*, vol. 10 (5), 2004, p. 625.

[73] M. Porfiri and F. dell'Isola, "Multimodal beam vibration damping exploiting PZT transducers and passive distributed circuits", *Journal de Physique IV France*, vol. 115 (1), 2004, p. 323–330.

2003

[72]* F. Vestroni, F. dell'Isola, S. Vidoli and M. N. Cerri "Structural health monitoring based on dynamic measurements: A standard and a novel approach", *Proceedings of the Second International Conference on Structural and Construction Engineering, ISEC-02*, September 23-26, 2003, Vol. 1-3 pp. 2023-2028.

[71]* F. dell'Isola and D. Del Vescovo, C. Maurini, M. Porfiri, "Passive electric damping of structural vibrations through distributed piezoelectric coupling: critical analysis", *International Symposium on Applied Electromagnetics and Mechanics*, Versailles, France: 2003.

[70]* F. dell'Isola, D. Del Vescovo, and C. Maurini, "Distributed electric absorbers of beam vibrations", *SPIE proceedings series*, W.K. Agnes G.S., San Diego, CA: SPIE, 2003, p. 230–241.

[69]* F. dell'Isola, E.G. Henneke, and M. Porfiri, "Piezoelectromechanical structures: A survey of basic concepts and methodologies", *Proceedings of SPIE – The International Society for Optical Engineering, San Diego, CA*: 2003, pp. 574-582.

[68]* F. dell'Isola, E.G. Henneke, and M. Porfiri, "Piezoelectromechanical structures: New trends towards the multimodal passive vibration control", *Proceedings of SPIE – The International Society for Optical Engineering, W.K. Agnes G.S., San Diego, CA*: 2003, pp. 392-402.

[67] F. dell'Isola, E. Santini, and D. Vigilante, "Purely electrical damping of vibrations in arbitrary PEM plates: A mixed non-conforming FEM-Runge-Kutta time evolution analysis", *Archive of Applied Mechanics*, vol. 73 (1-2), 2003, pp. 26-48.

[66] F. dell'Isola, G. Sciarra, and R. Batra, "Static Deformations of a Linear Elastic Porous Body Filled with an Inviscid Fluid", *Journal of Elasticity*, vol. 72 (1-2), 2003, p. 99–120.

[65] F. dell'Isola, M. Porfiri, and S. Vidoli, "Piezo-electromechanical (PEM) structures: Passive vibration control using distributed piezoelectric transducers", *Comptes Rendus – Mecanique*, vol. 331 (1), 2003, pp. 69-76.

[64] J. Alibert, P. Seppecher, and F. dell'Isola, "Truss modular beams with deformation energy depending on higher displacement gradients", *Mathematics and Mechanics of Solids*, vol. 8 (1), 2003, pp. 51-73.

[63]* S. Alessandroni, U. Andreaus, and F. dell'Isola, "A novel passive electric network analog to Kirchhoff-Love plate designed to efficiently damp forced vibrations by distributed piezoelectric transducers", *Proceedings of SPIE – The International Society for Optical Engineering, W.K. Agnes G.S., San Diego, CA: 2003*, pp. 380-391.

[62] S. Quiligotti, G. Maugin, and F. dell'Isola, "An Eshelbian approach to the nonlinear mechanics of constrained solid-fluid mixtures", *Acta Mechanica*, vol. 160 (1-2), 2003, pp. 45-60.

[61]* U. Andreaus, F. dell'Isola, and M. Porfiri, "Multimodal vibration control by using piezoelectric transducers and passive circuits", *Symposium on Electro-Magneto-Mechanics*, 2003, pp. 307-317.

2002

[60]* U. Andreaus, F. dell'Isola, and M. Porfiri, "Piezoelectric passive distributed controllers for beam flexural vibrations", *14th U.S. National Congress of Applied Mechanics, Blacksburg, VA: 2002*.

[59] F. dell'Isola, F. Vestroni, and S. Vidoli, "A class of electro-mechanical systems: linear and nonlinear dynamics", *Journal of Theoretical and Applied Mechanics*, vol. 40 (1), 2002, pp. 47-71.

[58] S. Alessandroni, F. dell'Isola, and M. Porfiri, "A revival of electric analogs for vibrating mechanical systems aimed to their efficient control by PZT actuators", *International Journal of Solids and Structures*, vol. 39 (20), 2002, pp. 5295-5324.

[57] S. Quiligotti, G. Maugin, and F. dell'isola, "Wave motions in unbounded poroelastic solids infused with compressible fluids", *Zeitschrift fur Angewandte Mathematik und Physik*, vol. 53 (6), 2002, pp. 1110-1138.

[56] F. dell'Isola, E.G. Henneke, and M. Porfiri, "Synthesis of electrical networks interconnecting PZT actuators to damp mechanical vibrations", *International Journal of Applied Electromagnetics and Mechanics*, vol. 14 (1-4), 2002, pp. 417-424.

[55] S. Alessandroni, F. dell'Isola, and F. Frezza, "Optimal piezo-electro-mechanical coupling to control plate vibrations", *International Journal of Applied Electromagnetics and Mechanics*, vol. 13 (1-4), 2002, pp. 113-120.

2001

[54]* S. Vidoli and F. dell'Isola, "Continuously distributed control of plates by electric networks with PZT actuators", *Conference in honour of K. Hutter in occasion of his 60th birthday*, 2001, pp. 92-110.

[53] G. Sciarra, F. dell'Isola, and K. Hutter, "A solid-fluid mixture model allowing for solid dilatation under external pressure", *Continuum Mechanics and Thermodynamics*, vol. 13 (5), 2001, pp. 287-306.

[52] S. Vidoli and F. dell'Isola, "Vibration control in plates by uniformly distributed PZT actuators interconnected via electric networks", *European Journal of Mechanics, A/Solids*, vol. 20 (3), 2001, pp. 435-456.

[51]* F. dell'Isola, E.G. Henneke, and M. Porfiri, "Synthesis of electrical networks interconnecting PZT actuators to damp mechanical vibrations", *International Symposium on Applied Electromagnetics and Mechanics in honor of Professor K.Miya, Japan*, May 13-16, 2001.

2000

[50] F. dell'Isola, M. Guarascio, and K. Hutter, "A variational approach for the deformation of a saturated porous solid. A second-gradient theory extending Terzaghi's effective stress principle", *Archive of Applied Mechanics*, vol. 70 (5), 2000, pp. 323-337.

[49] S. Vidoli and F. dell'Isola, "Modal coupling in one-dimensional electromechanical structured continua", *Acta Mechanica*, vol. 141 (1-2), 2000, pp. 37-50.

[48] S. Vidoli, R. Batra, and F. dell'Isola, "Saint-Venant's problem for a second-order piezoelectric prismatic bar", *International Journal of Engineering Science*, vol. 38 (1), 2000, pp. 21-45.

1999

[47]* F. dell'Isola and K. Hutter, "A free moving boundary problem for the till layer below large ice sheets", *Free boundary problems: theory and applications. (Crete, 1997)*, Chapman and Hall/CRC Res. Notes Math., 1999, pp. 204-209.

[46] F. dell'Isola and K. Hutter, "Variations of porosity in a sheared pressurized layer of saturated soil induced by vertical drainage of water", *Proceedings of the Royal Society A: Mathematical, Physical and Engineering Sciences*, vol. 455 (1988), 1999, pp. 2841-2860.

[45] R. Dell'Erba, F. dell'Isola, and G. Rotoli, "The influence of the curvature dependence of the surface tension on the geometry of electrically charged menisci", *Continuum Mechanics and Thermodynamics*, vol. 11 (2), 1999, pp. 89-105.

1998

[44] F. dell'Isola and K. Hutter, "A qualitative analysis of the dynamics of a sheared and pressurized layer of saturated soil", *Proceedings of the Royal Society A: Mathematical, Physical and Engineering Sciences*, vol. 454 (1980), 1998, pp. 3105-3120.

[43] F. dell'Isola and K. Hutter, "What are the dominant thermomechanical processes in the basal sediment layer of large ice sheets?", *Proceedings of the Royal Society A: Mathematical, Physical and Engineering Sciences*, vol. 454 (1972), 1998, pp. 1169-1195.

[42] F. dell'Isola and S. Vidoli, "Continuum modelling of piezoelectromechanical truss beams: An application to vibration damping", *Archive of Applied Mechanics*, vol. 68 (1), 1998, pp. 1-19.

[41] F. dell'Isola and S. Vidoli, "Damping of bending waves in truss beams by electrical transmission lines with PZT actuators", *Archive of Applied Mechanics*, vol. 68 (9), 1998, pp. 626-636.

[40] F. dell'Isola, G. Ruta, and R. Batra, "Generalized poynting effects in predeformed prismatic bars", *Journal of Elasticity*, vol. 50 (2), 1998, pp. 181-196.

[39] F. dell'Isola, L. Rosa, and C. Woźniak, "A micro-structured continuum modelling compacting fluid-saturated grounds: The effects of pore-size scale parameter", *Acta Mechanica*, vol. 127 (1-4), 1998, pp. 165-182.

[38] R. Batra, F. dell'Isola, and S. Vidoli, "A Second-Order Solution of Saint-Venant's Problem for a Piezoelectric Circular Bar Using Signorini's Perturbation Method", *Journal of Elasticity*, vol. 52 (1), 1998, pp. 75-90.

1997

[37] F. dell'Isola and G. Ruta, "Outlooks in Saint-Venant Theory III: Torsion and Flexure in Section of variable thickness by formal expansion", *Archives of Mechanics*, vol. 49 (2), 1997, pp. 321-343.

[36] F. dell'Isola and C. Woźniak, "On continuum modelling the interphase layers in certain twophase elastic solids", *ZAMM Zeitschrift fur Angewandte Mathematik und Mechanik*, vol. 77 (7), 1997, pp. 519-526.

[35] F. dell'Isola and C. Woźniak, "On phase transition layers in certain micro-damaged two-phase solids", *International Journal of Fracture*, vol. 83 (2), 1997, pp. 175-189.

- [34] F. dell'Isola and G.C. Ruta, "Generalizing Jouravski formulas by techniques from differential geometry", *Mathematics and Mechanics of Solids*, vol. 2 (3), 1997, pp. 307-319.
- [33] F. dell'Isola and K. Hutter, "Continuum mechanical modelling of the dissipative processes in the sediment-water layer below glaciers [Modélisation en mécanique des milieux continus des phénomènes de dissipation dans la couche sédimentaire saturée d'eau au-dessous des glaciers]", *Comptes Rendus de l'Academie de Sciences – Serie Iib: Mecanique, Physique, Chimie, Astronomie*, vol. 325 (8), 1997, pp. 449-456.
- [32] F. dell'Isola and L. Rosa, "Almansi-type boundary conditions for electric potential inducing flexure in linear piezoelectric beams", *Continuum Mechanics and Thermodynamics*, vol. 9 (2), 1997, pp. 115-125.
- [31] F. dell'Isola and P. Seppacher, "Edge Contact Forces and Quasi-Balanced Power", *Meccanica*, vol. 32 (1), 1997, pp. 33-52.
- [30] F. dell'Isola and R. Batra, "Saint-Venant's Problem for Porous Linear Elastic Materials", *Journal of Elasticity*, vol. 47 (1), 1997, pp. 73-81.
- [29]* F. dell'Isola and S. Vidoli, "Distributed control of beams by electric transmission lines with PZT actuators", *Proceedings of SPIE – The International Society for Optical Engineering, Adelaide, SA*: 1997, pp. 312-321.
- [28] F. dell'Isola, G. Ruta, and R. Batra, "A second-order solution of Saint-Venant's problem for an elastic pretwisted bar using Signorini's perturbation method", *Journal of Elasticity*, vol. 49 (2), 1997, pp. 113-127.
- [27] F. dell'Isola, L. Rosa, and C. Woźniak, "Dynamics of solids with micro periodic nonconnected fluid inclusions", *Archive of Applied Mechanics*, vol. 67, 1997, pp. 215-228.

1996

[26] F. dell'Isola and L. Rosa, "Outlooks in Saint-Venant Theory Part II: Torsional rigidity, shear stress "and all that" in the torsion of cylinders with sections of variable thickness", *Arch. Mech. Stos.*, vol. 48, 1996, pp. 753-763.

[25] F. dell'Isola and G. Ruta, "Perturbation series for shear stress in flexure of Saint-Venant cylinders with Bredt-like sections", *Mechanics Research Communications*, vol. 23 (5), 1996, pp. 557-564.

[24] F. dell'Isola and L. Rosa, "An extension of Kelvin and Bredt formulas", *Mathematics and Mechanics of Solids*, vol. 1 (2), 1996, pp. 243-250.

[23] F. dell'Isola and L. Rosa, "Perturbation methods in torsion of thin hollow Saint-Venant cylinders", *Mechanics Research Communications*, vol. 23 (2), 1996, pp. 145-150.

[22]* F. dell'Isola and L. Rosa, "St. Venant problem in linear piezoelectricity", *Proceedings of SPIE – The International Society for Optical Engineering, C.J. Varadan Vasundara V., San Diego, CA, USA*: 1996, pp. 399-409.

[21] F. dell'Isola, H. Gouin, and G. Rotoli, "Nucleation of spherical shell-like interfaces by second gradient theory: Numerical simulations", *European Journal of Mechanics, B/Fluids*, vol. 15 (4), 1996, pp. 545-568.

[20] U. Andreaus and F. dell'Isola, "On thermokinematic analysis of pipe shaping in cast ingots: A numerical simulation via FDM", *International Journal of Engineering Science*, vol. 34 (12), 1996, pp. 1349-1367.

1995

[19] K. Frischmuth, M. Hänler and F. dell'Isola, "Numerical methods versus asymptotic expansion for torsion of hollow elastic beams", *Technische Mechanik*, 1995, 169-177.

[18] F. dell'Isola and A. del Monte, "Dynamic Flexibility, optimal organisation modes and price instability", *Studi economici*, 1995.

[17] F. dell'Isola and P. Seppecher, "The relationship between edge contact forces, double forces and interstitial working allowed by the principle of virtual power", *Comptes Rendus de l'Academie de Sciences – Serie IIb: Mecanique, Physique, Chimie, Astronomie*, vol. 321, 1995, pp. 303-308.

[16] F. dell'Isola, H. Gouin, and P. Seppecher, "Radius and surface tension of microscopic bubbles by second gradient theory", *Comptes Rendus de l'Academie de Sciences – Serie IIb: Mecanique, Physique, Chimie, Astronomie*, vol. 320 (5), 1995, pp. 211-216.

[15] F. dell'Isola and G. Rotoli, "Validity of Laplace formula and dependence of surface tension on curvature in second gradient fluids", *Mechanics Research Communications*, vol. 22 (5), 1995, pp. 485-490.

1994

[14] F. dell'Isola and G. Ruta, "Outlooks in Saint-Venant Theory I: Formal Expansions for Torsion of Bredt-like sections", *Arch. Mech. Stos.*, vol. 46 (6), 1994, pp. 1005-1027.

[13]* F. dell'Isola and G. Rotoli, "On the problem of generalizing Tolman formula", *Atti del XII Congresso Nazionale sulla trasmissione del calore 23-24 Giugno 1994*.

[12] F. dell'Isola, "On the lack of Structure of Defay-Prigogine 2D-Continua", *Archives of Mechanics*, vol. 46 (3), 1994, pp. 329-341.

1993

[11] V.A. Cimmelli and F. dell'Isola, "A moving boundary problem describing the growth of a droplet in its vapour", *Archives of Mechanics*, vol. 45 (5), 1993, pp. 615-634.

[10] F. dell'Isola and W. Kosinski, "Deduction of thermodynamic balance laws for bidimensional nonmaterial directed continua modelling interphase layers", *Archives of Mechanics*, vol. 45 (3), 1993, pp. 333-359.

1992

[9]* F. dell'Isola, "TACTICS AND STIGLER FLEXIBILITY. PART I: linear differential models for a single-product firm", *Atti del XVI Convegno A.M.A.S.E.S.*, Treviso 10 -13 settembre 1992.

1991

[8]* F. dell'Isola and W. Kosinski, "The interfaces between phases as a layer Part II. A H-order model for two-dimensional nonmaterial continua. Waves and stability in continuous media", *Proceedings of Vth International Meeting Waves and Stability in Continuous Media*, 1991.

1990

[7]* F. dell'Isola and W. Kosinski, "The curved Interface with variable thickness", *Proceedings of the 5th bilateral Polish-Italian Meeting Thermodynamics and Kinetic Theory, Kosinski-Larecki-Morro-Zorski*, 1990.

1989

[6] F. dell'Isola and D. Iannece, "On phase transition in classical fluid mixtures with surface adsorption", *International Journal of Engineering Science*, vol. 27 (9), 1989, pp. 1069-1078.

[5] F. dell'Isola, "Linear growth of a liquid droplet divided from its vapour by a "soap bubble"-like fluid interface", *International Journal of Engineering Science*, vol. 27 (9), 1989, pp. 1053-1067.

1987

[4] A. Capuano and F. dell'Isola, "Deduction of generalized Stefan-problem and its solution by means of an iterative method", *Archives of Mechanics*, vol. 39 (3), 1987, pp. 227-246.

[3] F. dell'Isola and A. Romano, "A phenomenological approach to phase transition in classical field theory", *International Journal of Engineering Science*, vol. 25 (11-12), 1987, pp. 1469-1475.

[2] F. dell'Isola and A. Romano, "On the derivation of thermomechanical balance equations for continuous systems with a nonmaterial interface", *International Journal of Engineering Science*, vol. 25 (11-12), 1987, pp. 1459-1468.

1986

[1] F. dell'Isola and A. Romano, "On a general balance law for continua with an interface", *Ricerche Mat.*, vol. 35, 1986, pp. 325-337.