

## 11 Referências Bibliográficas

- [1] K.G TSEPOURA, S. PAPARGYRI, D. POLYZOS, D.E. BESKOS, **Static an dynamic anaysis of a gradient-elastic bar in tension**. Archive of Applied Mechanics 72. 483-497 Springer Verlag, 2002.
- [2] R. D. MINDLIN, **Micro-structure in Linear Elasticity**, Arch Rational Mech Anal 16,51-78, 1964.
- [3] TOUPIN, R. A. **Elastic Materials with couple stresses**. Arch Rational Mech. Anal. 11, 385-414 (1962).
- [4] ERICKSEN & TRUSDEL, **Exact Theory of Stress and Strain in Rods and Shells**, Arch Rational Mech. Anal. 1, 295-323 (1958).
- [5] E. ET F. COSSERAT, **Théorie des Corps Déformables**. Paris: A. Hermann & Filss 1909
- [6] E.C. AIFANTIS, **On the role of gradients in the localization of deformation and fracture**, Int. J. Engrg. Sci. 30 (1992) 1279–1299.
- [7] B. S.ALTAN, H. A.EVENSEN AND E. C. AIFANTIS, **Longitudinal Vibrations Of A Beam: A Gradient Elasticity Approach**. Mechanics Research Communications, Vol. 23, No. 1, pp. 35-40, 1996
- [8] C.Q. RU, E.C. AIFANTIS, **A simple approach to solve boundary value problems in gradient elasticity**, Acta Mech. 101 (1993) 59–68.
- [9] A.E. GIANNAKOPOULOS, E. AMANATIDOU, N. ARAVAS, **A reciprocity theorem in linear gradient elasticity and the corresponding Saint-Venant principle**. International Journal of Solids and Structures 43 (2006) 3875–3894
- [10] E. R. DE ARANTE E OLIVEIRA, **Elementos da Teoría da Elasticidade**, Instituto Superior Tecnico, Lisboa,
- [11] VARDOULAKIS, I.; SULEM, J.: **Bifurcation Analysis in Geomechanics**. London, Blackie/Chapman and Hall 1995.
- [12] P.G PRAZERES. **Desenvolvimento dos elemento finitos híbridos para a análise de problemas dinâmicos usando superposição modal avançada**. Dissertação de Mestrado, Pontifícia Universidade Católica de Rio de Janeiro.
- [13] D. POLYZOS K.G. TSEPOURA S.V. TSINOPOULOS, D.E. BESKOS. **A boundary element method for solving 2-D and 3-D static gradient elastic problems Part I: Integral formulation**. Comput. Methods Appl. Mech. Engrg. 192 (2003) 2845–2873.
- [14] D. POLYZOS K.G. TSEPOURA S.V. TSINOPOULOS, D.E. BESKOS. *A boundary element method for solving 2-D and 3-D static gradient elastic problems Part II: Numerical*

- implementation*. Comput. Methods Appl. Mech. Engrg. 192 (2003) 2845–2873.
- [15] DUMONT, N. A. **The hybrid boundary element method**. In: BREBBIA, C.A.; WENDLAND, W.; KUHN, G, editor, BOUNDARY ELEMENTS IX, v. 1, Mathematical and Computational Aspects, p. 125{138, Southampton, 1987. Computational Mechanics Publications, Springer-Verlag. 3
- [16] CHAVES, R. A. P.. **O Método Híbrido Simplificado dos elementos de contorno aplicado a problemas dependentes do tempo**. 182 f. Tese de Doutorado - Programa de Pós-graduação em Engenharia Civil, Pontifícia Universidade Católica do Rio de Janeiro, Rio de Janeiro, 2003
- [17] DUMONT, N. A.; CHAVES, R. A. P.. **General time-dependent analysis with the frequency-domain hybrid boundary element method**. Computer Assisted Mechanics and Engineering Sciences, n. 10, p. 431-452 2003
- [18] E. AMANATIDOU, N. ARAVAS, **Mixed finite element formulations of strain-gradient elasticity problems**. Comput. Methods Appl. Mech. Engrg. 191 (2002) 1723–1751.
- [19] N. A. FLECK AND J. W. HUTCHINSON. **A Phenomenological Theory for Strain Gradient Effects in Plasticity**. Adv.Appl. Mech. 33 (1997) 295-361.
- [20] G.F. KARLIS, S.V.TSINOPOULOS, D. PLOLYZOS, D. E. BESKOS. **Boundary Element analisys of mode I and mixed mode (I and II ) crack problems of 2D gradiente elasticity..** Methods Appl. Mech. Engrg. 196 (2007) 5092–5103
- [21] K. G. TSEPOURA, D PLOLYZOS. **Static and harmonic BEM sollutions of gradient elasticity problems with axisymmetry**. Methods Appl. Mech. Engrg. 196 (2007) 5092–5103
- [22] K. G. TSEPOURA, D PLOLYZOS. **Static and harmonic BEM sollutions of gradient elasticity problems with axisymmetry**. Methods Appl. Mech. Engrg. 196 (2007) 5092–5103
- [23] E. C. AIFANTIS. **Update on a class of gradient theories**. Mechanis of Materials. 35 (2003) 259–280.
- [24] M. GIUGGIANI. A. GIGANTE. **A general Algorithm for Multidimensional Cauchy Principal Value Integrals in the Boundary Element Method**. Dipartimento di Costrzioni Meccaniche e Nucleari. Universita degli Studi di Pisa, J. Appl. Mech. ASME 57 (1990) 906–915.
- [25] M. GUIGGIANI. **Hypersingular boundary integral equations have an additional free term**. Computational Mechanics 16 (1995) 245 – 248.
- [26] C. O. ADENILSON. **Um modelo de interação dinâmica entre os elementos estruturais de uma via férrea**. Dissertação de Mestrado Puc-Rio (2006).
- [27] R. D. MINDLIN, N. N. ESHEL. **On First Strain Gradient Theories in Linear Elasticity**. **Int. J. Solids Structure**. 4 (1968) 109-124
- [28] S. PAPARGYRI BESKOU, K. G. TSEPOURA, D. POLYZOS, D.E. BESKOS. **Bending and**

- stability analysis of gradient elastic beams.** International Journal of Solids and structures 40 (2003) 385-400.
- [29] N.A. DUMONT, C. ADENILSON. **A Dynamic interaction model of railway track structural elements.** CILAMCE 2006, Paper CIL21-511.
- [30] N.A. DUMONT, PLÍNIO G.C. DOS PRAZERES. **A Family fo Advanced Hibrid Finite Element for the General Analysis of Time Dependent Problems.**
- [31] N.A. AUGUSTO DUMONT. **Variationally-based hybrid boundary element methods.** Computer Assisted Mechanics and Engineering Sciences, 10: 375, 2003
- [32] P. CASAL, **La thoeirie du second gradient et la capillarite.** C.R. Acad Sci. A(274) 1571-1574
- [33] MARCOS AURÉLIO MARQUES NORONHA (bolsista CNPq): **“Uma Sistemática para a Avaliação de Integrais Impróprias, Singulares e quase Singulares dos Métodos de Elementos de Contorno”** - Abr 1994.
- [34] DUMONT, N. A., DE SOUZA, R. M.: **"On the Efficient Numerical Evaluation of Singular Integrals: Back to Gauss-Legendre Quadrature"**, PACAM III - Third Panamerican Congress of Applied Mechanics, pp 93-96, São Paulo, 4 a 8 de janeiro de 1993
- [35] DUMONT, N. A., DE SOUZA, R. M.: **"A Simple Unified Technique for the Evaluation of Quasi-singular Singular and Strongly Singular Integrals"**, in Boundary Elements XIV, Vol 1: Fiel Problems and Applications, Eds. C. A. Brebbia, J. Dominguez, F. Paris, Computational Mechanics Publications, Elsevier Applied Science, ISBN 1-85166-793-8, pp 619-632, 1992
- [36] DUMONT, N. A.: **"On the Efficient Numerical Evaluation of Integrals with Complex Singularity Poles"**, Engineering Analysis with Boundary Elements, Vol 13, pp 155-168, 1994
- [37] DUMONT, N. A.: **"A Procedure for the Semi-Analytical Evaluation of Generally Singular Integrals that Occur in the Three-Dimensional Boundary Element Analysis"**, Boundary Elements XVII, Eds. C. A. Brebbia, S. Kim, T. A. Osswald, H. Power, Computational Mechanics Publications, Southampton, ISBN 1 85312 324 2, pp 83-90, 1995
- [38] NORONHA, M. A. M. E DUMONT, N. A.: **"A Procedure for the Semi-Analytical Evaluation of Generally Singular Integrals that Occur in the Boundary Element Analysis of Thick Plates"**, Computational Mechanics'95, Eds.: S. N. Atluri, G. Yagawa, T. A. Cruse, Springer-Verlag, Berlin, ISBN 3-540-59114-1, Vol. 2, pp 2812-2817, 1995
- [39] DUMONT, N. A.: **"Cauchy Principal Values, Finite-Part Integrals and Interval Normalization: Some Basic Considerations"**, Computational Mechanics'95, Eds.: S. N. Atluri, G. Yagawa, T. A. Cruse, Springer-Verlag, Berlin, ISBN 3-540-59114-1, Vol. 2, pp 2830-2835, 1995
- [40] DUMONT, N. A. NORONHA, M.: **"A Simple, Accurate Scheme for the Numerical Evaluation of Integrals with Complex Singularity Poles"**, Computational Mechanics Vol 22, Nr. 1, pp 42-49, 1998.