

#### TEXTBOOKS AND MONOGRAPHS

LINEAR AND NONLINEAR STRUCTURAL MECHANICS, with P. F. Pai, John Wiley Interscience, New York, 2004.

NONLINEAR ANALYSIS OF SWITCHING POWER CONVERTERS, with S.K. Mazumder, Springer, in press, 2007.

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A. H. Nayfeh, Z. N. Masoud, and N. A. Nayfeh, "A Delayed-Position Feedback Controller for Cranes," in Proceedings of IUTAM Symposium on Chaotic Dynamics and Control of Systems and Processes in Mechanics, (G. Rega and F. Vestroni, eds.), Springer, 2005, pp. 385-395.

A. H. Nayfeh, Z. N. Masoud, N. A. Nayfeh, and E. Abdel-Rahman, "Control of Ship-Mounted Cranes," in Proceedings of IUTAM Symposium on Vibration Control of Nonlinear Mechanisms and Structures, (H. Ulbrich and W. Gunthner, eds.), Springer, 2005, pp. 21-35.

#### JOURNAL PAPERS

1. A.H. Nayfeh and H. N. Arafat, "Axisymmetric Vibrations of Closed Spherical Shells: Equations of Motion and Bifurcation Analysis," Structural Control and Health Monitoring, Vol. 13, No. 1, 2006, pp. 388-416, Thomas K. Caughey Memorial Issue, G. W. Housner, J. K. Knowles, T. Kobori, and S. F. Masri, eds.
2. M. Baccouch, S. Choura, S. El-Borgi, and A. H. Nayfeh, "Selection of Physical and Geometrical Properties for the Confinement of Vibrations in Nonhomogeneous Beams," Journal of Aerospace Engineering, Vol. 19, No. 3, July 2006, pp. 158-168.
3. F. Najjar, S. Choura, E. M. Abdel-Rahman, S. El-Borgi, and A. Nayfeh, "Dynamic Analysis of Variable-Geometry Electrostatic Microactuators," Journal of Micromechanics and Microengineering, Vol. 16, 2006, pp. 2449-2457.
4. P. Malatkar and A. H. Nayfeh, "Steady-State Dynamics of a Linear Structure Weakly Coupled to an Essentially Nonlinear Oscillator," Nonlinear Dynamics Special Issue in Honor of the 60th Birthday of Professor G. Rega, Vol. 47, 2007, pp. 167-179.
5. G. W. Vogl and A. H. Nayfeh, "Primary Resonance Excitation of Electrically Actuated Clamped Circular Plates," Nonlinear Dynamics, Vol. 47, 2007, pp. 181-192.
6. A.H. Nayfeh, M. I. Younis, E. M. Abdel-Rahman, "Dynamic Pull-In Phenomenon in MEMS Resonators," Nonlinear Dynamics, Vol. 48, 2007, pp. 153-163.
7. M. Ouled Chtiba, S. Choura, S. El-Borgi, and A. H. Nayfeh, "Passive Control of Flexible Structures by Confinement of Vibrations," Shock and Vibration, Vol. 14, No. 5, 2007.

8. O. Marzouk, A. H. Nayfeh, H. N. Arafat, and I. Akhtar, "Modeling Steady-State and Transient Forces on a Cylinder," accepted for publication, *Journal of Vibration and Control Special Issue in Honor of the 60th Birthday of Professor A. Baz*, Vol. 13, No. 7, 2007, pp. 1065-1091.
9. A. H. Nayfeh, "Order Reduction of Retarded Nonlinear Systems - The Method of Multiple Scales vs. Center-Manifold Reduction," *Nonlinear Dynamics*, Vol. 51, No. 4, March 2008, pp. 483-500.
10. M. F. Daqaq, E. M. Abdel-Rahman, and A. H. Nayfeh, "Towards a Stable Low-Voltage Torsional Microscanner," 2008, published online 10.1007/s00542-007-0500-4, *Microsystem Technologies*.

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1. B. K. Hammad, E. M. Abdel-Rahman, and A. H. Nayfeh, "Tuning of a MEMS RF Filter," *NSTI Nanotechnology Conference and Trade Show*, Vol. 3, pp. 345-348, Boston, MA, May 7-11, 2006.
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3. F. Najar, E. M. Abdel-Rahman, A. H. Nayfeh, S. Choura, and S. El-Borgi, "Resolving the Dynamics of Electrostatic Microactuators Using a Novel Discretization Technique," *Eleventh Nonlinear Vibrations, Stability, and Dynamics of Structures Conference*, Blacksburg, VA, August 13-17, 2006.
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5. O. Marzouk, A. H. Nayfeh, H. Arafat, and I. Akhtar, "Modeling Vortex Shedding over a Stationary Circular Cylinder," *ASME International Mechanical Engineering Congress & Exposition, IMECE2006-14952*, Chicago, IL, November 5-10, 2006.
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10. M. F. Daqaq, E. M. Abdel-Rahman, and A. H. Nayfeh, "Modal Interactions in Resonant Microscanners," ASME International Mechanical Engineering Congress & Exposition, IMECE2006-13844, Chicago, IL, November 5-10, 2006.
  11. "Nonlinear Phenomena in MEMS and NEMS," US-Tunisia Workshop: Research and Educational Advances in Design and Fabrication of Microelectromechanical Systems, Hammamet, Tunisia, December 14-16, 2006.
  12. Key Note Speaker "A Smart Sway Controller for Cranes-From Theory to Laboratory to Industry," The Third International Conference on Advances in Mechanical Engineering and Mechanics, Hammamet, Tunisia, December 17-19, 2006.
  13. M. F. Daqaq, K. C. Reddy, and A. H. Nayfeh, "Input-Shaping Control of Nonlinear MEMS," IMAC XXV Conference on Structural Dynamics, Orlando, FL, February 19-22, 2007.
  14. B. Hammad, E. Abdel-Rahman, A. H. Nayfeh, "A Novel MEMS RF Filter," IMAC XXV Conference on Structural Dynamics, Orlando, FL, February 19-22, 2007.
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  16. B. K. Hammad and A. H. Nayfeh, "Linear Vibrations of MEMS Filters," The Third International Conference on Advances in Mechanical Engineering and Mechanics, 18th Engineering Mechanics Division Conference of the American Society of Civil Engineers, Blacksburg, VA, June 3-6, 2007.
  17. I. Akhtar, O. Marzouk, and A. H. Nayfeh, "Reduced Order Model for Aerodynamic Forces on Elliptic Cylinders," The Third International Conference on Advances in Mechanical Engineering and Mechanics, 18th Engineering Mechanics Division Conference of the American Society of Civil Engineers, Blacksburg, VA, June 3-6, 2007.
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  20. O. A. Marzouk and A. H. Nayfeh, "A Study of the Frequency-Response of the Forces on an Oscillating Cylinder," 2007 26th International Conference on

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