

Mini Symposium MS1

Smart materials and structures

Chair: N. Sottos (USA)
Co-Chair(s): J. Holnicki-Szulc (Poland)

Introductory Lectures

Paper ID	Title	Authors
MS1I_10680	Elastic Wave Propagation Development for Structural Health Monitoring	Wieslaw M. Ostachowicz
MS1I_10722	A Way to Search for Smart Materials with Unprecedented Physical Properties	Richard D. James
MS1I_13010	Autonomic Healing of Polymers and Composites	Scott R. White, Nancy R. Sottos, Jeffrey S. Moore, Eric N. Brown, Alan Jones, Joseph Rule

Contributed Papers

Paper ID	Title	Authors
MS1S_10136	Composite Plates with Active Fibres	Mieczyslaw S. Kuczma
MS1L_10784	Transient Eigenstrains Without Incremental Displacements in a Hyperelastic Body	Hans Irschik, Uwe Pichler
MS1S_10821	Shape Fixity and Shape Recovery of Shape Memory Polymer and their Applications	Hisaaki Tobushi, Ryosuke Matsui, Tsuyoshi Takada, Shunichi Hayashi
MS1S_10985	Vibration Control of Stiffened Plates with Integrated Piezoelectrics	Jin-Young Jung, Ji-Hwan Kim
MS1L_11685	Stress Effects on Ferroelectric Thin Film Patterning, Properties and Performance	N. R. Sottos, T. Berfield, R. Ong, D. A. Payne
MS1L_11731	A Novel Approach to the Application of Ferroelectric Thin Films to Micro - actuation	Kaushik Bhattacharya
MS1S_11752	A Geometrically Non-Linear Finite Shell Element with Piezoelectric Layers	Sven Lentzen, Ruediger Schmidt

MS1S_11810	Piezodiagnositics a New SHM Method and its Potential Engineering Applications	Jan Holnicki-Szulc, Przemyslaw Kolakowski, Anita Orłowska, Andrzej Swiercz, Dariusz Wiacek, Tomasz G. Zielinski
MS1S_11857	Thermal - Induced Fracture of Electroded Piezoelectric Composites	Cun-Fa Gao, Masayuki Ishihara, Naotake Noda
MS1S_12011	Thermal Buckling of Active Composite Plates with Shape Memory Alloy Fibers	Rivka Gilat, Jacob Aboudi
MS1S_12016	Study of Non - Linear Magnetomechanical Constitutive Relations of Ferromagnetic Materials	Daining Fang, Xue Feng, Yongping, Keh-Chih Hwang
MS1S_12018	Optimum Control of Thermoelastic Deformation in a Smart Composite Disk	Fumihiro Ashida, Theodore R. Tauchert
MS1L_12027	SMA Hybrid Composites: Self - healing, Self - Stiffening and Shape Control Simulations	Catherine L. Brinson, Deborah Burton, Xiujie Gao
MS1S_12147	Active Control of FGM Plates Using Distributed Piezoelectric Sensors and Actuators	V. Balamurugan, S. Narayanan
MS1S_12552	On a Model of Layered Piezoelectric Beams Including Transverse Interactions Between Different Layers	Corrado Maurini, J. Pouget, F. dell'Isola
MS1L_12637	Ultrasonic Characterization of Phase Transformation in NiTi Wire During Thermomechanical Loading	Michal Landa, Petr Sedlak, Frantisek Marsik, Petr Sittner, Vaclav Novak
MS1L_12786	Upper and Lower Bounds of Electric Induction Intensity Factors for Multiple Piezoelectric Cracks by the BEM	Mitsunori Denda, Mayur Mansukh
MS1L_13007	Direct Identification of the State Equation in Complex Nonlinear Systems	Sami F. Masri, John P. Caffrey, Thomas K. Caughey, Andrew W. Smyth, Anastasios G. Chassiakos
MS1L_13011	Self-Healing Polymer Composites for Extended Fatigue Life	Eric N. Brown, Alan S. Jones, Scott R. White, Nancy R. Sottos

