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A. Journal Articles

2003

1. Mital, S.K., Murthy, P.L.N. and DiCarlo, J.A.: Characterizing the Properties of a Woven SiC/SiC Composite. *Journal of Advanced Materials*, Vol. 35, No. 1, pp. 52-60, Jan. 2003.

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3. Shah, A.R., Murthy, P.L.N., Mital, S.K. and Bhatt, R.T.: Probabilistic Modeling of Ceramic Matrix Composite Strength. *Journal of Composite Materials*, Vol. 34, No. 8, pp. 670-688, 2000.
4. Mital, S.K. and Murthy, P.L.N.: Quantifying Uncertainties in the Thermo-Mechanical Properties of Particulate Reinforced Composites. *Journal of Reinforced Plastics and Composites*, Vol. 19, No. 8, pp. 657-678, 2000.
5. Mital, S.K.; Murthy, P.L.N. and Chamis, C.C.: Computational Simulation of Continuous Fiber-Reinforced Ceramic Matrix Composite Behavior. *Journal of Advanced Materials*, Vol. 32, No. 1, pp. 46-59, 2000.

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6. Murthy, P.L.N., Mital, S.K. and Shah, A.R.: Probabilistic Micromechanics/ Macromechanics for Ceramic Matrix Composites. *Journal of Composite Materials*, Vol. 32, No. 7, pp. 679-699, 1998.
7. Mital, S.K., Murthy, P.L.N. and Chamis, C.C.: Concrete Thermomechanical Behavior via Telescoping Scale Mechanics. Submitted to *International Journal of Solids and Structures* for possible publication.
8. Chamis, C.C., Gotsis, P.K. and Mital, S.K.: Meso-Mechanics and Meso-Structures: A Matter of Scale. *Journal of Thermoplastic Composite Materials*, Vol. 11, No. 5, pp. 478-490, 1998.

9. Chamis, C.C., Murthy, P.L.N., Gotsis, P.K. and Mital, S.K.: Telescoping Scale Mechanics for Composite Behavior Simulation. Submitted to the Journal of Computer Methods in Applied Mechanics and Engineering for possible publication.

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10. Mital, S.K., Murthy, P.L.N. and Goldberg, R.K.: Micromechanics for Particulate Reinforced Composites. Journal of Mechanics of Composite Materials and Structures, Vol. 4, No. 3, pp. 251-266, 1997.

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11. Mital, S.K., Lee, H.-J., Murthy, P.L.N. and Chamis, C.C. : Computational Simulation of Micro-Slip Bands in SiC/Ti-15 Composite. International Journal of Damage Mechanics, Vol. 5, No. 2, pp. 138-149, 1996.
12. Mital, S.K., Murthy, P.L.N. and Chamis, C.C.: Computational Simulation of Microfracture in High Temperature Composites. Journal of Theoretical and Applied Fracture Mechanics, Vol. 25, pp. 203-209, 1996.

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13. Mital, S.K., Murthy, P.L.N. and Chamis, C.C.: Micromechanics for Ceramic Matrix Composites Via Fiber Sub-Structuring. Journal of Composite Materials, Vol. 29, No. 5, pp. 614-633, 1995.

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14. Mital, S.K., Chamis, C.C. and Gotsis, P.K.: Microfracture in High Temperature Metal Matrix Laminates. Journal of Composite Science and Technology, Vol. 50, No. 1, pp. 59-70, 1994.

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15. Mital, S.K., Murthy, P.L.N. and Chamis, C.C.: Interfacial Microfracture in High Temperature Metal Matrix Composites. Journal of Composite Materials, Vol. 27, No. 17, pp. 1678-1694, 1993.

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16. Mital, S.K. and Chamis, C.C.: Fiber Pushout Test: A Three-Dimensional Finite Element Computational Simulation. ASTM Journal of Composites Technology & Research, Vol. 13, No. 1, pp. 14-21, Spring 1991.

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17. Mital, S.K. and Chamis, C.C.: Metal Matrix Composites Microfracture: Computational Simulation. Journal of Computers & Structures. Vol. 37, No. 2, pp. 141-150, 1990.

A. NASA Technical Memorandums:

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1. Sullivan, R.M., Mital, S.K. et. al. : Development of Design/ Analysis Methods for C/SiC Composite Structures, NASA Technical Publication (TP) under prepration.
2. Gyekenyesi, John Z., Murthy, P. L. N., and Mital, S. K.,” NASALife – Material Life Prediction: User’s and Theoretical Manual”, NASA TM under prepration.

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3. Chamis, C.C., Murthy, P.L.N., Gotsis, P.K. and Mital, S.K.: Telescoping Mechanics: A New Paradigm for Composite Behavior Simulation. NASA/TM-2004-209317, April 2004.
4. Reddy, T.S.R., Mital, S.K. and Stefko, G.L.: Probabilistic Aeroelastic Analysis of Turbomachinery Components. NASA/TM-2004-213063, May 2004.
5. Murthy, P.L.N., Nemeth, N.N., Brewer, D.N. and Mital, S.K.: Probabilistic Analysis of a SiC/SiC Ceramic Matrix Composite Turbine Vane. NASA/TM-2004-213331, November 2004.

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13. Nagpal, V.K., Tong, M.T., Murthy, P.L.N. and Mital, S.K.: Probabilistic Modeling of High Temperature Material Properties of a 5-Harness 0/90 Sylramic Fiber/CVI-SiC/MI-SiC Woven Composite. NASA TM-208497, 1998.

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14. Murthy, P.L.N., Mital, S.K. and Shah, A.R.: Probabilistic Micromechanics and Macromechanics of Ceramic Matrix Composites. NASA TM-4766, 1997.
15. Mital, S.K., Tong, M.T., Murthy, P.L.N. and DiCarlo, J.A.: Micromechanics-Based Modeling of Thermal and Mechanical Properties of an Advanced SiC/SiC Composite. NASA TM-97-206295, 1997.

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