

Publications

Highlights

Hurley, DC, Kopycinska-Mueller M, Kos, TB, Mapping mechanical properties on the nanoscale with Atomic Force Acoustic Microscopy, *JOM* 59: 23 (2007)

Keller RR, Barbosa N, Geiss R, Read DT, An electrical method for measuring fatigue and tensile properties of thin films on substrates, *Key Engineering Materials* 345-346: 1115 (2007)

Read DT and Tewary VK, Multiscale model of near-spherical germanium quantum dots in silicon, *Nanotechnology* 18: 105402 (2007)

Utegulov ZN, Shaw JM, Draine BT, Kim SA, Johnson WL, Surface-plasmon enhancement of Brillouin light scattering from gold-nanodisk arrays on glass, in *Plasmonics: Metallic Nanostructures and Their Optical Properties V*, MI Stockman ed., *Proc. SPIE* 6641: 66411M (2007)

Publication List

Journal Articles

Yang B, Tewary VK, Green's function for multilayers with interfacial membrane and flexural rigidities, *Eng. Anal. with Boundary Elements*, submitted

Yang B, Tewary VK, Multiscale Green's function for deflection of graphene lattice, *Phys. Rev.* submitted

Park I, Lin J, Moerbe WC, Mishra B, Moore JJ, Anton J, Sproul WD, Kim KH, Vooevodin AA, Levashov EA, Nanostructured multifunctional tribological coatings, *Intl. J. Nanomanuf.*, submitted

Heyliger PR, Flannery C, Johnson WL, Vibrational modes of nanolines, *Nanotechnology*, submitted

Slifka AJ, Lauria D, Makepeace L, Thermal conductivity of carbon-nanotube-filled greases for thermal interface applications, *J. Res. NIST*, in press (2008)

Barbosa N, Slifka AJ, Spatially- and temporally-resolved thermal imaging of cyclically heated interconnects by use of scanning thermal microscopy (SThM), *Micros. Res. Tech.*, in press (2008)

Geiss R, Read DT, Defect behavior in aluminum interconnect lines deformed thermo-mechanically by cyclic joule heating, *Acta Materialia* 56: 274 (2008)

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Read DT, Keller RR, Barbosa N, Geiss R, Results of a nanoindentation round robin on thin film copper on silicon, *Metall. Mater. Trans.* 38A: 2242 (2007)

Keller RR, Barbosa N, Geiss R, Read DT, An electrical method for measuring fatigue and tensile properties of thin films on substrates, *Key Engineering Materials* 345-346: 1115 (2007)

Rice P, Wallis TM, Russek SE, Kabos P, Broadband electrical characterization of multiwalled carbon nanotubes and contacts, *Nano Letters* 7: 1086 (2007)

Tewary VK, Theory of nuclear resonant inelastic scat-

tering from ^{57}Fe in a single-walled carbon nanotube, Phys. Rev. B 75: 235425 (2007)

Yang B, Tewary VK, Multiscale model of point defects in Si-Ge (0010 quantum wells, Phys. Rev. B 75: 144103 (2007)

Langlois E, Shaw GA, Kramar JA, Pratt JR, Hurley DC, Spring constant calibration of AFM cantilevers with a piezoresistive cantilever transfer standard, Rev. Sci. Instrum. 78: 093705-1 (2007)

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Utegulov ZN, Shaw JM, Draine BT, Kim SA, Johnson WL, Surface-plasmon enhancement of Brillouin light scattering from gold-nanodisk arrays on glass, in Plasmonics: Metallic Nanostructures and Their Optical Properties V, MI Stockman ed., Proc. SPIE 6641: 66411M (2007)

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Keller RR, Hurley DC, Read DT, Rice P, Metrologies for Mechanical Response of Micro- and Nanoscale Systems, in Micro and Nano Mechanical Testing of Materials and Devices, Springer-Verlag, in press (2008)

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Arepalli S, Freiman SW, Hooker, SA, Migler K, Measurement Issues in Single-Wall Carbon Nanotubes, NIST SP 1071 (2008)