

**Publications of the Hawaii Institute of Geophysics and Planetology
University of Hawaii
2002**

1. Aléon J., **Krot A. N.**, and McKeegan K. D. (2002) Ca-Al-rich inclusions and amoeboid olivine aggregates from the CR carbonaceous chondrites. *Meteorit. Planet. Sci.* **37**, 1729-1755.
2. Amelin Y., **Krot A. N.**, Hutcheon I. D., and Ulyanov A. A. (2002) Pb isotopic ages of chondrules and Ca,Al-rich inclusions. *Science* **297**, 1678-1683.
3. Baker, E.T., **R.N. Hey**, J.E. Lupton, R.A. Feely, J.J. Gharib, G.J. Massoth, J.A. Resing, F.J. Sansone, M. Kleinrock, **F. Martinez**, D. Naar, C. Rodrigo, D. Bohnenstiehl, and D. Pardee, Hydrothermal venting along Earth's fastest spreading center: East Pacific Rise, 27.5°-32.3°S, *J. Geophys. Res.*, v. 107, No. B7, EPM2, 1-14, 10.1029/2001JB000651, 2002.
4. Barber D.J. and **Scott E.R.D.**, 2002, Transmission electron microscopy of minerals in the Martian meteorite Allan Hills 84001, *Meteorit. Planet. Sci.*, **38**, 831 – 848.
5. Barber, D. J., and **E. R. D. Scott**, 2002, Origin of supposedly biogenic magnetite in the Martian meteorite Allan Hills 84001, *P. Natl. Acad. Sci.*, **99**, 6556-6561.
6. Bell J.F. III, B.E. Clark, N. Izenberg, C. Dodd, R. Clinite, C. Peterson, P. Martin, S. Murchie, L. McFadden, D. Wellnitz, M.J. Gaffey, **P. Lucey**, M. Winter, C. Chapman, and the NEAR MSI/NIS Science Team, Near-IR Reflectance Spectroscopy of 433 Eros from the NIS Instrument on the NEAR Mission. 1. Low Phase Angle Observations, *Icarus*, Vol. 155, No. 1, Jan 2002, pp. 119-144, 2002.
7. Blewett, D. T., **B. R. Hawke**, and **P. G. Lucey**, 2002, Lunar pure anorthosite as a spectral analog for Mercury, *Meteorit. Planet. Sci.*, **37**, 1245-1254.
8. Cervelli, P., P. Segal, **F. Amelung**, **H. Garbeil**, C. Meertens, and S. Owens, 2002, The September 12, 1999 upper east rift zone dike intrusion at Kilauea Volcano, Hawaii, *J. Geophys. Res.* **107**, B7, 10.1029/2001JB000602.
9. Chevrel,, S.D., P. C. Pinet, Y. Daydou, S. Maurice, D. J. Lawrence, W. C. Feldman, **P. G. Lucey**, Integration of the Clementine UV-VIS spectral reflectance data and the Lunar Prospector gamma-ray spectrometer data: A global-scale multielement analysis of the lunar surface using iron, titanium, and thorium abundances, *Journal of Geophysical Research*, VOL. 107, NO. E12, 5132, doi:10.1029/2000JE001419, 2002.
10. Clarke, A., V. Kapustin, S. Howell, K. Moore, **B. Lienert**, et al., 2002, Sea-salt size distributions from breaking waves: Implications for marine aerosol production and optical extinction measurements during SEAS, *J. Atmos. Ocean. Tech.*, (in press).
11. DiMarco, S.F., et al. [**P. Hacker** and K. Donohue], 2002, Volume transport and property distributions of the Mozambique Channel, *Deep-Sea Res. II*, **49**, 1481-1511.
12. Elphic, R. C., et al. [**P. G. Lucey**, D. T. Blewett], 2002, Lunar Prospector neutron spectrometer constraints on TiO₂, *J. Geophys. Res.*, **107**, E4, 10.1029/2000JE001460, 8-1 - 8-9.
13. Fagan, T. J., **G. J. Taylor**, **K. Keil**, **T. L. Hicks**, M. Killgore, T. E. Bunch, J. H.

- Wittke, D. W. Mittlefehldt, R. N. Clayton, T. K. Mayeda, O. Ugster, and S. Lorenzetti, 2002, Northwest Africa 032: Product of lunar volcanism, *Meteorit. Planet. Sci.*, 37, 371-394.
14. Feldman, W.C, O. Gasnault, S. Maurice, D. J. Lawrence, R. C. Elphic, **P. G. Lucey**, A. B. Binder, Global distribution of lunar composition: New results from Lunar Prospector *Journal of Geophysical Research*, VOL. 107, NO. E3, 10.1029/2001JE001506, 2002.
 15. **Felton, E. A.**, and K. A. W. Crook, 2002, Evaluating the impacts of huge waves on rocky shorelines: An essay review of the book "Tsunami, the Underrated Hazard", *Mar. Geol.*, 197, 1-4, 1-12.
 16. **Flynn, L., Wright, R., Garbeil, H., Harris, A. and Pilger, E.**, 2002, Global Thermal Alert System Using MODIS: Initial Results from 2000-2001 Advances in Environmental Monitoring and Modeling, (<http://www.kcl.ac.uk/kis/schools/hums/geog/advemm/vol1no3.html>) 1(3), 37-69.
 17. Frouin, R., B. Holben, M. Miller, C. Pietras, E. Ainsworth, **J. Porter** and K. Voss, Sun and Sky Radiance Measurements and Data Analysis Protocols, chapter 14 in Ocean Optics Protocols for Satellite Ocean Color Sensor Validation, Revision 3, Volume 2, NASA/TM-2002-210004/Rev3-Vol2, pg 211-230, 2002.
 18. **Fryer, G. J.**, P. Watts, and L. F. Pratson, 2002, Source of the great tsunami of 1 April 1946: A landslide in the upper Aleutian forearc, *Mar. Geol.*, 203, 201-218.
 19. **Fryer, P.**, 2002, Recent studies of Serpentinite occurrences in the oceans: Mantle-ocean interactions in the plate tectonic cycle, *Chem. Erde-Geochem.*, 62, 257-302.
 20. **Garcés, M.**, and C. Hetzer, 2002, Infrasonic signals detected by the KONA array, Hawaii, *Appl. Acoust.*, (in press).
 21. **Garcés, M.**, D. Drob, and M. Picone, 2002, A theoretical study of the effect of geomagnetic fluctuations and solar tides on the propagation of infrasonic waves in the atmosphere, *Geophys. J. Int.*, (in press).
 22. Golombek, **F.S. Anderson**, and M.T. Zuber, Martian wrinkle ridge topography: evidence for subsurface faults from MOLA, *J. Geophys. Res.*, 2002.
 23. **Goodrich, C. A.**, 2002, Olivine-phyric Martian basalts: A new type of shergottite, *Meteorit. Planet. Sci.*, 37, B31-B34.
 24. Greshake A., **Krot A. N., Meibom A.**, Weisberg M. K., and **Keil K.** (2002) Heavily-hydrated matrix lumps in the CH and metal-rich chondrites QUE 94411 and Hammadah al Hamra 237. *Meteorit. Planet. Sci.* 37, 281-294.
 25. **Harris, A. J. L.**, and **L. P. Flynn**, 2002, Temporal trends in lava dome extrusion at Santiaguito 1922-2000, *B. Volcanol.*, 65, 77-89.
 26. **Harris, A.J.L.** and Neri, M., 2002. Volumetric observations during paroxysmal eruptions at Mount Etna: pressurized drainage of a shallow chamber or pulsed supply? *J. Volcanol. Geotherm. Res.*, 116, 79-95.
 27. **Harris, A.J.L., Flynn' L.P.**, Matías, O. and Rose, W. I., 2002, The thermal stealth flows of Santiaguito: implications for the cooling and emplacement of dacitic block lava flows, *Geol. Soc. Am. Bull.*, 114(5), 533-546.
 28. **Harris, A.J.L., Pilger, E., and Flynn, L.P.**, 2002. Web-based hot spot monitoring using GOES: what it is and how it works. Advances in Environmental Monitoring and Modeling, (<http://www.kcl.ac.uk/kis/schools/hums/geog/advemm/vol1no3.html>) 1(3), 5-36.

29. **Harris, A.J.L., Pilger, E., Flynn, L.P.,** and Rowland, S.K., 2002. Real-Time Hot Spot Monitoring using GOES: Case Studies from 1997-2000. *Advances in Environmental Monitoring and Modeling*, (<http://www.kcl.ac.uk/kis/schools/hums/geog/advemm/vol1no3.html>) 1(3), 134-151.
30. **Hawke, B. R., C. A. Peterson,** D. T. Blewett, D. B. J. Bussey, **P. G. Lucey, G. J. Taylor,** and P. D. Spudis, 2002, The distribution and modes of occurrence of lunar anorthosite, *J. Geophys. Res.*, 108, E6, doi: 10.1029/2002JE001890.
31. **Hawke, B. R., T. A. Giguere,** D. T. Blewett, P. G. Lucey, **G. A. Smith, and G. J. Taylor,** 2002, Igneous activity in the southern highlands of the Moon, *J. Geophys. Res.*, 107, E12, 5122.
32. **Herrero-Bervera, E.,** and J.-P. Valet, 2002, Paleomagnetic secular variation of the Honolulu volcanic series (33-700 ka), O'ahu (Hawaii), *Phys. Earth Planet. In.*, 133, 1-4, 88-97.
33. **Herrero-Brevera, E.,** E. Cañon-Tapia, G. P. L. Walker, and H. Tanaka, 2002, Magnetic fabrics study and inferred flow directions of lavas of the Old Pali Road, O'ahu, Hawaii, *J. Volcanol. Geoth. Res.*, 118, 1-118, 1-2, 161-171.
34. **Hey, R.N., F. Martinez,** S. Diniega, D.F. Naar, J. Francheteau, and the Pito93 Scientific Team (R. Armijo, M. Constantin, J.P. Cogne, J. Girardeau, R. Hekinian, and R. Searle), Preliminary attempt to characterize the rotation of seafloor in the Pito Deep area of the Easter Microplate using a submersible magnetometer, *Mar. Geophys. Res.*, 23, 1-12, 2002.
35. **Hibbitts, C.,** 2002, CO-rich impact craters on Callisto, *J. Geophys. Res.-Planet.*, 10.1029/2000JE001412.
36. **Hinrichs, J. L.,** and **P. G. Lucey,** 2002, Temperature dependent near-infrared spectral properties of minerals, meteorites and lunar soils, *Icarus*, 155, 169-180.
37. Johnson, J.R., P. R. Christensen, and **P. G. Lucey,** 2002, Dust coatings on basaltic rocks and implications for thermal infrared spectroscopy of Mars, *J. Geophys. Res.* 107, E6, 10.1029/2000JE001405, 1-1 to 2-20.
38. Johnson, J.R., W. C. Feldman, D.J. Lawrence, S. Maurice, T.D. Swindle, and **P.G. Lucey,** Lunar Prospector epithermal neutrons from impact craters and landing sites: Implications for surface maturity and hydrogen distribution, *J. Geophys. Res.*, v 107, E2, doi:10.1029/2000JE001430, 2002.
39. Johnson, J.R., F. Horz, **P.G. Lucey,** P.R. Christensen, thermal infrared spectroscopy of experimentally shocked anorthosite and pyroxenite: Implications remote sensing of Mars, *J. Geophys. Res.*, v 107, E10, 5073, doi:10.1029/2001JE001517, 2002.
40. Jónsson, S., H. Zebker, P. Segall, and **F. Amelung,** 2002, Fault slip distribution of the 1999 Mw7.2 Hector mine earthquake, California, estimated from satellite radar and GPS measurements, *B. Seismol. Soc. Am.*, 92, 1377-1389.
41. Kanamatsu, T., **E. Herrero-Bervera,** and G. M. McMurtry, 2002, Magnetostratigraphy of deep-sea sediments from piston cores adjacent to the Hawaiian Islands: Implications for ages of turbidites derived from submarine landslides, in *Hawaiian Volcanoes: Deep Underwater Perspectives*, Am. Geophys. Un. Monogr., 128, 51-63.
42. **Keating, B. H.,** and C. E. Helsley, 2002, The ancient shorelines of Lanai, Hawaii, revisited, *Sediment. Geol.*, 50, 3-15.

43. **Keil, K.**, 2002, Geological history of asteroid 4 vesta: The “smallest terrestrial planet.”, in *Asteroids 3*, University of Arizona Press.
44. Kendrick, E., **M. Bevis**, R. Smalley, **B. Brooks**, R. B. Vargas, E. Lauria, and L. P. S. Fortes, 2002, The Nazca - South America Euler Vector and its rate of change, *J. S. Am. Earth Sci.*, (in press).
45. Kobayshi, Y., S. Endo, **L.C. Ming**, and T. Kikegawa, Phase transition in DKDP and amorphization in KDP under high pressure, *Phys. Rev. B.*, 65, 132105-1-132105-4, 2002.
46. **Krot A. N.**, Hutcheon I. D., and **Keil K.** (2002) Anorthite-rich chondrules in the reduced CV chondrites: evidence for complex formation history and genetic links between CAIs and ferromagnesian chondrules. *Meteorit. Planet. Sci.* 37, 155-182.
47. **Krot A. N.**, McKeegan K. D., Leshin L. A., MacPherson G. J., and **Scott E. R. D.** (2002) Existence of an ¹⁶O-rich gaseous reservoir in the solar nebula. *Science* 295, 1051-1054.
48. **Krot A.N.**, Meibom A., Weisberg M.K., and **Keil K.**, 2002, The CR chondrite clan: Implications for early solar system processes, *Meteorit. & Planet. Sci.*, 37, 1451-1490.
49. **Krot, A. N.**, and **K. Kiel**, 2002, Anorthite-rich chondrules in CR and CH carbonaceous chondrites: Genetic link between calcium-aluminum-rich inclusions and ferromagnesian chondrules, *Meteorit. Planet. Sci.*, 37, 91-111.
50. **Krot, A. N.**, I. D. Hutcheon, and **K. Keil**, 2002, Plagioclase-rich chondrules in the reduced CV chondrites: Evidence for complex formation history and genetic links between calcium-aluminum-rich inclusions and ferromagnesian chondrules, *Meteorit. Planet. Sci.*, 37, 155-182.
51. **Krot, A. N.**, K. D. McKeegan, L. A. Leshin, G. J. MacPherson, and **E. R. D. Scott**, 2002, Existence of an ¹⁶O-rich gaseous reservoir in the solar nebula, *Science*, 295, 1051-1054.
52. Lawrence, D. J., W.C. Feldman, R.C. Elphic, R.C. Little, T.H. Prettyman, S. Maurice, **P.G. Lucey**, A. B. Binder, Iron abundances on the lunar surface as measured by the Lunar Prospector gamma-ray and neutron spectrometers *Journal of Geophysical Research*, VOL. 107, NO. E12, 5130, doi:10.1029/2001JE001530, 2002.
53. Le Mouélic, **Lucey P.G.**, Langevin Yves, and Hawke B.R., 2002, Calculating iron contents of lunar highland materials surrounding Tycho crater from integrate Clementine UV-visible and near-infrared data, *J. Geophys. Res.* 107, E10, 5074, 4-1 - 4-9.
54. LePichon, A., J. Guilbert, A. Vega, and **M. Garcés**, 2002, Ground-coupled air-waves and diffracted infrasound from the Arequipa earthquake of June 23, 2001, *Geophys. Res. Lett.*, (in press).
55. LePichon, A., **M. Garcés**, E. Blanc, M. Barthélémy, and D. Drob, 2002, Acoustic propagation and atmosphere characteristics derived from infrasonic waves generated by the Concorde, *J. Acoust. Soc. Am.*, (in press).
56. Liszka, L., and **M. Garcés**, 2002, Infrasonic observations of the Hekla Eruption of February 26, 2000, *J. Low Freq. Sound*, (in press).
57. Lucey, P. G., 2002, Radiative transfer model constraints on the shock state of remotely sensed lunar anorthosites, *Geophys. Res. Lett.*, 29, 10, 124-1 to 124-3,

doi:10.1029/2001GL014655.

58. **Lucey, P. G. , J. L. Hinrichs**, M.L. Urquhart, D. Wellnitz, N. R. Izenberg, S. Murchie, M. Robinson, B. E. Clark, and J.F. Bell III, Detection of temperature-dependent spectral variation on the asteroid Eros and new evidence for the presence of an olivine-rich silicate assemblage, *Icarus*, Vol. 155, pp. 181-188, 2002.
59. **Lucey, P.G.** New constraints on the shock state of remotely sensed anorthosites on the Moon, *Geophys. Res Lett* v29, no,10, 2001GL014655, 2002.
60. **Lucey, P. G., J. Hinrichs**, M. Urquhart-Kelly, D. Wellnitz, N. Izenberg, S. Murchie, M. Robinson, B. E. Clark, and J. F. Bell III, 2002, Detection of temperature-dependent spectral variation on the asteroid Eros and new evidence for the presence of an olivine-rich silicate assemblage, *Icarus*, 155, 181-188.
61. **Martinez, F.**, and B. Taylor, 2002, Mantle wedge control on back-arc crustal accretion, *Nature*, 416, 417-420.
62. **McCord, T. B.**, G. Teeter, **G. B. Hansen**, M. T. Sieger, and T. M. Orlando, 2002, Brines exposed to Europa surface conditions, *J. Geophys. Res.*, 107 E1 10.1029/2000JE1453.
63. **Ming, L. C.**, T. Eto, K. Takeda, Y. Kobayashi, E. Suzuki, S. Endo S, **S. K. Sharma**, A. Jayaraman and T. Kikegawa, X-ray diffraction measurements on CuGeO₃ under high pressures to 81 GPa using synchrotron radiation and imaging plates, *J. Physics-Condensed Matter*, 14, 10475-10478, 2002.
64. Motell, C., **J. Porter, J. Foster, M. Bevis**, and S. Businger, 2002, Comparison of precipitable water over Hawaii using AVHRR-based split-window techniques, GPS and radiosondes, *Int. J. Remote Sens.*, 23, 2335-2339.
65. Mottl, M.J., S.C. Komor, **P. Fryer**, and the Shipboard Scientific Party of Ocean Drilling Program Leg195 (2002) Deep fluids from the subducting Pacific plate and associated extremophilic microbial activity on a Mariana forearc serpentine seamount, ODP Leg 195. *Geochim. Cosmochim. Acta* 66:A528.
66. **Mouginis-Mark, P. J.**, 2002, Prodigious ash deposits near the summit of Arsia Mons Volcano, Mars, *Geophys. Res. Lett.*, 29, doi: 10.1029/2002GL015296.
67. Okal, E. A., C. E. Synolakis, **G. J. Fryer**, P. Heinrich, J. C. Borrero, C. Ruscher, D. Arcas, G. Guille, and D. Rousseau, 2002, A field survey of the 1946 Aleutian tsunami in the far field, *Seismological Res. Lett.*, 73, 490-503.
68. Okal, E. A., **G. J. Fryer**, J. C. Borrero, and C. Ruscher, 2002, The landslide and local tsunami of 13 September 1999 at Fatu Hiva (Marquesas Islands, French Polynesia), *B. Soc. Geol. Fr.*, 173, 359-367.
69. Olsen, E. J., and **K. Keil**, 2002, Memorial: Kurt Fredriksson (1926-2001), *Meteorit. Planet. Sci.*, 37, 301-302.
70. **Porter, J. N., B. R. Lienert, S. K. Sharma**, and **H. W. Hubble**, 2002, A small portable Mie-Rayleigh lidar system to measure aerosol optical and spatial properties, *J. Atmos. Ocean. Tech.*, 19, 11, 1873-1877.
71. **Porter, J. N., B. R. Lienert, S. K. Sharma**, E. Lau, and **K. Horton**, 2002, Vertical and horizontal aerosol scattering fields over Bellows Beach, Oahu during the SEAS experiment, *J. Atmos. Ocean. Tech.*, (in press).
72. **Porter, J. N., K. A. Horton, P. J. Mouginis-Mark, B. Linert**, E. Lau, J. Sutton, T. Elias, and C. Oppenheimer (2002). Sun photometer and lidar measurements of

- the plume from the Hawaii Kilauea Volcano Pu‘u ‘O‘o vent: Estimates of aerosol flux rates and SO₂ lifetime. *Geophys. Res. Lett.* 29: 10.1029/2002GL014744.
73. Ripepe, M., **Harris, A.J.L.**, and Carniel, R., 2002, Thermal, seismic and infrasonic evidences of variable degassing rates at Stromboli volcano, J. Volcanol. & Geotherm. Res., 118, 285-207.
 74. Savov, I.P., J.G. Ryan, L. Chan, M. D. Antonio, M. Mottl, **P. Fryer**, and ODP Leg 195 Scientific Party (2002) Geochemistry of serpentinites from the S. Chamorro seamount, ODP Leg 195, Site 1200, Mariana forearc—implications for recycling at subduction zones. *Geochim. Cosmochim. Acta* 66:A670.
 75. **Scott, E. R. D.**, 2002, Meteorite evidence for the accretion and collisional evolution of asteroids in *Asteroids II*, Bottke, W. F., Jr., et al. (eds.), (in press).
 76. **Sharma, S. K., B. R. Lienert, and J. N. Porter**, 2002, Multi-wavelength scanning lidar measurements of the effect of wind speed on marine aerosol fields generated by breaking waves, *J. Atmos. Ocean. Tech.*, (in press).
 77. **Sharma, S. K.**, S. M Angel, M. Ghosh, H. W. Hubble, and **P. G. Lucey**, 2002, A remote pulsed laser raman spectroscopy system for mineral analysis on planetary surfaces to 66 meters, *Appl. Spectrosc.*, 56 (6), 699-705.
 78. Shepard, A., **Fryer, P.**, Bellingham, J, Moore, B., Kelley, M., Zande, J., McCurdy, A., Carless, J., Ward, M., Lemmerman, L., 2002, Link 2002 Symposium “Sea and Space Experts Join to Develop Undersea Technologies” Held 20-22 May 2002 at NASA Kennedy Space Center, Cape Canaveral Florida, *Marine Tech. Soc. J.*, 36(2), 70-77.
 79. Thomas, P., B. Carcich, Joseph J Veverka, J, B E Clark, , J. F. Bell III A W Byrd, R. Chompko, M. Robinson, S. Murchie, L. Prockter A. Cheng N. Izenberg, M. Malin C. Chapman, L. McFadden R. Kirk M. J. Gaffey, **P. Lucey**, Eros: Shape, topography, slope processes, *Icarus*, Vol. 155, , pp. 18-37, 2002.
 80. Webster, P.J., et al. [**P. Hacker**, R. Lukas, and J.M. Hummon], 2002, The Joint Air-Sea Monsoon Interaction Experiment (JASMINE) Pilot Study. *Bull. Amer. Meteor. Soc.*, 83, 1603-1630.
 81. Windisch, C. F., Jr., K. F. Ferris, G. J. Exarhos, and **S. K. Sharma**, Conducting spinel oxide films with infrared transparency, *Thin Solid Films*, 420: 89-99, 2002.
 82. Windisch, C. F., Jr., K. F. Ferris, G. J. Exarhos, and **S. K. Sharma**, Influence of Temperature and electronic disorder on the Raman spectra of nickel cobalt oxides. *J. Applied Phys.*, 92, 5572-5574, 2002.
 83. **Wolfe, C. J.**, I. Th. Bjarnason, J. C. VanDecar, and S. C. Solomon, Assessing the depth resolution of tomographic models of upper mantle structure beneath Iceland, *Geophys. Res. Lett.*, 29/, 10.1029/20001GL013657, 2002.
 84. **Wolfe, C. J.**, S. C. Solomon, P. G. Silver, R. M. Russo, and J. C. VanDecar, Inversion of body wave delay times for mantle structure beneath the Hawaiian islands: Results from the PELENET experiment, *Earth Planet. Sci. Lett.*, 198,/ 129-145, 2002.
 85. **Wolfe, C.**, 2002, On the mathematics of using difference operators to relocate earthquakes, *B. Seismol. Soc. Am.*, 92, 2879-2892.
 86. **Wright, R., L. Flynn, H. Garbiel, A. Harris, and E. Pilger**, 2002, Automated volcanic eruption detection using MODIS, *Remote Sens. Environ.*, 82, 135-155.
 87. **Wright, R.**, S. de la Cruz-Reyna, **L. P. Flynn, A. J. L. Harris**, and J. Gomez-

- Palacios, 2002, Infrared satellite monitoring of Popocatepetl: Explosions, exhalations, and cycles of dome growth, *J. Geophys. Res.*, 107, doi: 10.1029/2000JB000125.
88. Zimmerman, W., **F. S. Anderson**, F. Carsey, P. Conrad, H. Englehardt, **L. French**, M. Hecht. The Mars '07 North Polar Cap Deep Penetration Cryo- Scout Mission. CD-ROM Proceedings, 2002 IEEE Aerospace Conference, 11 pages, Big Sky, MT, March 9-16, 2002.
89. **Zinin, P. V., M. H. Manghnani**, S. Tkachev, X. Zhang, A. G. Lyapin, V. V. Brazhkin, I. A. Trojan, 2002, Acoustic microscopy and surface Brillouin scattering of amorphous carbon pressure-synthesized from C₆₀, in J. Robertson, T.A. Friedman, D.B. Geohegan, D.E. Luzzi, R.S. Ruoff, (eds.), Nanotubes, fullerenes, nanostructured and disordered carbon, MRS Vol. 675, MRS (2002) 91-96.
90. **Zinin, P., M.H. Manghnani**, X. Zhang, H. Feldermann, C. Ronning, H. Hofsass, 2002, Surface Brillouin Scattering of cBN Films, in T. Kundu, (ed.), Smart nondestructive evaluation for health monitoring of structural and biological systems, Proceedings of SPIE, 4702, SPIE, Bellingham, USA, 389-396.
91. **Zinin, P.V., M.H. Manghanani**, C. Newton, and R.A. Livingston, 2002, Acoustic microscopy of steel reinforcement of concrete, *Journal of Nondestructive Evaluation*, 21, 4, 283-287.
92. **Zinin, P. V., M.H. Manghnani, S. Tkachev**, X. Zhang, A.G. Lyapin, V.V. Brazhkin, I. A. Trojan. Acoustic microscopy and surface Brillouin scattering of amorphous carbon pressure-synthesized from C₆₀. in J. Robertson, T.A. Friedmann, D.B. Geohegan, D.E. Luzzi, R.S. Ruoff eds, Nanotubes, *Fullerenes, Nanostructured and Disordered Carbon*, MRS Vol. **675**, MRS (2002) W9.1-6.