

Shock Physics Papers 1994

- 1994, Abramova, K.B. and Shcherbakov, I.P. "Luminescence excited in metals under mechanical loads" Tech. Phys. 39 901-907
- 1994, Afsahard, T., Desselberger, M., Dunne, M., Edwards, J., Foster, J.M., Hoarty, D., Jones, M.W., Rose, S.J., Rosen, P.A., Taylor, R. and Willi, O. "Supersonic propagation of an ionization front in low-density foam targets driven by thermal-radiation" Phys. Rev. Letts 73 74-77
- 1994, Aidun, J.B. "Shear wave measurements in shock-induced, high-pressure phases" AIP Conf. Proc. 309 387-390
- 1994, Aidun, J.B. "Discussion of stress tensor nonuniqueness with application to nonuniform, particulate systems" AIP Conf. Proc. 309 985-988
- 1994, Akhmadeev, N.K. and Bolotnova, R.K. "Features of shock wave formation in soft materials generated by impact of a plate" J. Appl. Mech. Tech. Phys. 35 658-664
- 1994, Aksenonkov, V.V., Blank, V.D., Borovikov, N.F., Danilov, V.G. and Kozoreov, K.I. "Production of diamond single crystals in graphite under plastic deformation" Phys. Doklady 39 700-703
- 1994, Albert, D.E. and Gray III, G.T. "A description of deformation twinning in dynamically deformed and shock-loaded polycrystalline Ni₃Al" Philos. Mag. A 70 145-158
- 1994, Alloncle, A.P., Dufresne, D. and Autric, M. "Visualisation of laser-induced vapor bubbles and pressure waves", in "Bubble Dynamics and Interface Phenomena", ed. J.R. Blake, J.M. Boulton-Stone and N.H. Thomas, pp. 365-371, publ. Dordrecht, The Netherlands, Kluwer
- 1994, Altshuler, L.V., Pavlovskii, M.N. and Komissarov, V.V. "Hysteresis in polymorphic transitions of potassium chloride in shock waves" J. Exper. Theor. Phys. 79 616-621
- 1994, Anderson, R.R., Hartung, J.B., Witzke, B.J., Shoemaker, E.M. and Roddy, D.J. "Preliminary results of the US Geological Survey - Iowa Department of Natural Resources Geological Survey Bureau Manson core drilling projects", in "Large Meteorite Impacts and Planetary Evolution", ed. B.O. Dressler, R.A.F. Grieve and V.L. Sharpton, pp. 237-247, publ. Boulder, CO, The Geological Society of America
- 1994, Anderson, M.U., Graham, R.A. and Holman, G.T. "Time-resolved shock compression of porous rutile: Wave dispersion in porous solids" AIP Conf. Proc. 309 1111-1114
- 1994, Anderson Jr., C.E., Cox, P.A., Johnson, G.R. and Maudlin, P.J. "A constitutive formulation for anisotropic materials suitable for wave propagation computer programs. 2" Comput. Mech. 15 201-223

- 1994, Andrade, U.R., Meyers, M.A. and Chokshi, A.H. "Constitutive description of work- and shock-hardened copper" *Scripta metall. mater.* 30 933-938
- 1994, Andrade, U., Meyers, M.A., Vecchio, K.S. and Chokshi, A.H. "Dynamic recrystallization in high-strain, high-strain-rate plastic deformation of copper" *Acta metall. mater.* 42 3183-3195
- 1994, Andriot, P., Lalle, P. and Dejean, J.P. "Quasi-elastic behavior of pure titanium and TA6V4 titanium alloy at high pressure" *AIP Conf. Proc.* 309 1009-1012
- 1994, Anisichkin, V.F. "The phenomenon of resonance solid-state coalescence of fine diamond particles in explosion products" *Sov. J. Chem. Phys.* 12 872-876
- 1994, Antoun, T.H. and DeCarli, P.S. "Wave propagation in intact and jointed calcite rock" *AIP Conf. Proc.* 309 831-834
- 1994, Aoki, T. and Meyertervehn, J. "Dynamic compression of hydrogen for probing the molecular atomic phase transition" *Phys. Plasmas* 1 1962-1970
- 1994, Arnold, W. "High strain rate failure of Armco iron" *AIP Conf. Proc.* 309 1035-1038
- 1994, Asay, B.W., Ramsay, J.B., Anderson, M.U. and Graham, R.A. "Erratum: Shock response of the commercial high explosive Detasheet" *Shock Waves* 4 117
- 1994, Assink, R.A., Boslough, M.B. and Cygan, R.T. "Characterization of amorphous material in shocked quartz by NMR spectroscopy" *AIP Conf. Proc.* 309 383-386
- 1994, Atou, T., Kikuchi, M., Fukuoka, K. and Syona, Y. "Shock induced phase transition of scandium sesquioxide: Geometric factor governing high pressure transitions on rare earth sesquioxides" *AIP Conf. Proc.* 309 331-334
- 1994, Attaway, S.W., Heinstejn, M.W. and Swegle, J.W. "Coupling of smooth particle hydrodynamics with the finite element method" *Nuclear Engng Des.* 150 199-205
- 1994, Attetkov, A.V., Boiko, M.M., Voldaev, N.A. and Levantovskii, A.V. "The dynamic compressibility of powdered NTPA subjected to low-amplitude wave effects" *Combust. Explos. Shock Waves* 30 531-533
- 1994, Attetkov, A.V., Boiko, M.M., Voldaev, N.A. and Levantovskii, A.V. "Dynamic compressibility of powder-like octogen due to low amplitude effect" *Khim. Fiz.* 13 132-135
- 1994, Bada, J.L., Bigham, C. and Miller, S.L. "Impact melting of frozen oceans on the early Earth: Implications for the origin of life" *Proc. Nat. Acad. Sci. US* 91 1248-1250
- 1994, Baer, M.R. "A mixture model for shock compression of porous multi-component reactive materials" *AIP Conf. Proc.* 309 1247-1250
- 1994, Baryshnikov, A.S., Kostantinov, V.B. and Gorodinskii, M.G. "The effect of shock waves produced by underwater explosion" *Sov. J. Chem. Phys.* 12 1130-1134
- 1994, Batsanov, S.S. "Effects of Explosions on Materials: Modification and Synthesis under High-Pressure Shock Compression", publ. New York, Springer-Verlag

- 1994, Batsanov, S.S., Maksimov, I.I., Simakov, G.V. and Fedorov, A.S. "Shock compressibility of CuI and TlCl" *Combust. Explos. Shock Waves* 30 122-125
- 1994, Batsanov, S.S. "Dynamic-static compression: Controlling the conditions in containment systems after explosion" *Combust. Explos. Shock Waves* 30 126-130
- 1994, Bauer, F. "High pressure applications of ferroelectric polymers" *AIP Conf. Proc.* 309 1727-1730
- 1994, Baumung, K., Karow, H.U., Rusch, D., Bluhm, H.J., Hoppé, P., Kanel, G.I., Utkin, A.V. and Licht, V. "High-power proton beam-matter interaction diagnostics by analysis of the hydrodynamic response of solid targets" *J. Appl. Phys.* 75 7633-7638
- 1994, Bean, V.E., Bowers, W.J., Hurst, W.S. and Rosasco, G.J. "Development of a primary standard for the measurement of dynamic pressure and temperature" *Metrologia* 30 747-750
- 1994, Belak, J. "Computer simulation of molecular response at a shock front" *AIP Conf. Proc.* 309 1063-1066
- 1994, Belyakov, V.Y., Moroz, L.M., Otpushchennikov, E.N., Sipachev, G.F., Tarasov, V.V. and Khlebnikov, A.G. "Investigation of the mechanical impact of pulsed coherent radiation of a nanosecond duration on materials" *Sov. J. Chem. Phys.* 12 215-219
- 1994, Ben-Dor, G. and Zaretsky, E. "Head-on interaction of planar shock waves with polyurethane foams: A semiempirical model" *Arch. Appl. Mech.* 64 365-372
- 1994, Bengisu, M. and Inal, O.T. "Densification and mechanical properties of shock-treated alumina and its composites" *J. Mater. Sci.* 29 4824-4833
- 1994, Bennett, L.S., Horie, Y. and Hwang, M.M. "Constitutive model of shock-induced chemical reactions in inorganic powder mixtures" *J. Appl. Phys.* 76 3394-3402
- 1994, Bennett, L.S. and Horie, Y. "Shock-induced inorganic reactions and condensed phase detonations" *Shock Waves* 4 127-136
- 1994, Benson, D.J. and Nellis, W.J. "Dynamic compaction of copper powder: Computation and experiment" *Appl. Phys. Letts* 65 418-420
- 1994, Benson, D.J. "An analysis by direct numerical simulation of the effects of particle morphology on the shock compaction of copper powder" *Model. Simul. Mater. Sci. Engng* 2 535-550
- 1994, Benson, D.J. and Nellis, W.J. "Numerical simulation of the shock compaction of copper powder" *AIP Conf. Proc.* 309 1243-1246
- 1994, Besov, A. and Kedrinskii, V. "Dynamics of bubbly clusters and free surfaces at shock wave reflection", in "Bubble Dynamics and Interface Phenomena", ed. J.R. Blake, J.M. Boulton-Stone and N.H. Thomas, pp. 93-103, publ. Dordrecht, The Netherlands, Kluwer

- 1994, Bessaposhnikov, Y., Chernukhin, V., Kozhevnikov, V. and Pai, V. "Definition of lower boundary in region of strength joints at high rate of strain of metals" J. Phys. IV France 4(C8) 539-545
- 1994, Billingsley, J.P. and Adams, C.L. "Application of crystal lattice disintegration criteria to compute minimum shock induced reactive conditions in solid explosives and inert materials" Propell. Explos. Pyrotech. 19 118-126
- 1994, Billingsley, J.P. "Possible V_i and V_f effects in shock loaded materials from polymers to diamond", Tech. Rep. RD-SS-94-4, US Army AMCOM
- 1994, Blumenthal, W.R., Gray III, G.T. and Claytor, T.N. "Response of aluminium-infiltrated boron carbide cermets to shock wave loading" J. Mater. Sci. 29 4567-4576
- 1994, Bock, W.J. and Wisniewski, R. "Fibre-optic pressure sensor using an electronically scanned white-light interferometer" AIP Conf. Proc. 309 1687-1690
- 1994, Bolton, J.M., Durnford, D.S. and Charlie, W.A. "One-dimensional shock and quasistatic liquefaction of silt and sand" ASCE J. Geotech. Engng 120 1874-1889
- 1994, Bombaci, I., Kuo, T.T.S. and Lombardo, U. "Temperature and asymmetry dependence of nuclear incompressibility and supernova explosions" Phys. Rep. 242 165-180
- 1994, Bondar, V.D. "Planar deformation in geometrically nonlinear elasticity" J. Appl. Mech. Tech. Phys. 35 100-116
- 1994, Bondar, V.D. "Boundary-value problem of dynamic geometrically nonlinear elasticity" J. Appl. Mech. Tech. Phys. 35 942-948
- 1994, Bordzilovsky, S.A., Karakhanov, S.A., Merzhievsky, L.A. and Resnyansky, A.D. "Shock wave propagation in unidirectional composites" DYMAT Journal 1 333-340
- 1994, Borzilovsky, S.A., Karakhanov, S.A., Merzhievsky, L.A. and Resnyansky, A.D. "Shock wave propagation in unidirectional composites" DYMAT Journal 1 333-340
- 1994, Bourne, N.K., Rosenberg, Z., Crouch, I.G. and Field, J.E. "The effect of microstructural variation upon the dynamic compressive and tensile strengths of aluminas" Proc. R. Soc. Lond. A 446 309-318
- 1994, Bourne, N.K., Rosenberg, Z., Field, J.E. and Crouch, I.G. "Wave steadiness in aluminas" J. Phys. IV France 4(C8) 269-274
- 1994, Bourne, N.K., Rosenberg, Z., Mebar, Y., Obara, T. and Field, J.E. "A high-speed photographic study of fracture wave propagation in glasses" J. Phys. IV France Colloq. C8 (DYMAT 94) 4 635-640
- 1994, Bourne, N.K. and Field, J.E. "Cavity collapse in a liquid with solid particles" J. Fluid Mech. 259 149-165

- 1994, Bourne, N.K., Rosenberg, Z., Crouch, I.G. and Field, J.E. "Microstructural variations in seven aluminas and their effect on impact response" AIP Conf. Proc. 309 769-772
- 1994, Brar, N.S. and Rosenberg, Z. "On the possibility of fracto-emission in ceramics during shock compression" AIP Conf. Proc. 309 1759-1762
- 1994, Brebbia, C.A. and Sánchez-Gálvez, V., Eds. "Shock and Impact on Structures", publ. Southampton, Computational Mechanics Publications
- 1994, Brill, B., Wald, S., Kimchi, D. and Kaplan, Z. "Experimental demonstration and simulation of a dual-stage solid-propellant gun concept" J. Propulsion Power 10 279-285
- 1994, Briman, A.B., Vasilev, E.I. and Kulikovskii, V.A. "Modeling the process of shock-wave attenuation by a foam system" Combust. Explos. Shock Waves 30 389-396
- 1994, Britan, A.B., Zinovik, I.N. and Levin, V.A. "Shock wave interaction with foam layers" Sov. J. Chem. Phys. 12 964-969
- 1994, Britan, A.B. and Zinovik, I.N. "Interaction of pressure waves with a wet foam" J. Appl. Mech. Tech. Phys. 35 712-717
- 1994, Britun, V.F., Kovtun, V.I. and Trefilov, V.I. "Special features of intergranular boundaries formed in shockwave sintering powders of sphaleritic boron nitride" Powder Metall. Met. Ceram. 33 366-370
- 1994, Buchar, J. and Krejci, J. "Spall behaviour of the low alloyed high strength steel" J. Phys. IV France Colloq. C8 (DYMAT 94) 4 713-716
- 1994, Budin, A.V., Kolikov, V.A., Levchenko, B.P. and Leontev, V.V. "Coefficient of conversion of the electrical energy of an arc into internal energy of the working gas and their shares in the energy balance of an electrical-discharge light-gas accelerator" Tech. Phys. 39 969-971
- 1994, Budzinski, J.M., Benjamin, R.F. and Jacobs, J.W. "Influence of initial conditions on the flow patterns of a shock-accelerated thin fluid layer" Phys. Fluids 6 3510-3512
- 1994, Bugrov, N.V. and Zakharov, N.S. "Numerical modelling of impact phenomena associated with the fall of meteorites" Solar Syst. Res. 28 44-48
- 1994, Burkhard, G., Dan, K., Tanabei, Y., Sawaoka, A.B. and Yamada, K. "Carbon phase transition by dynamic shock compression of a copper/graphite powder mixture" Jpn. J. Appl. Phys. Letts 33 876-879
- 1994, Burkhard, G., Dan, K., Tanabe, Y., Sawaoka, A.B. and Yamada, K. "Formation of cubic carbon by dynamic shock compression of a diamond amorphous-carbon powder mixture" Jpn J. Appl. Phys. 33 5875-5885
- 1994, Bushman, A.V., Lomonosov, I.V., Fortov, V.E. and Khishchenko, K.V. "Equations of polymer material states at high pressures" Khim. Fiz. 13 64-81

- 1994, Bushman, A.V., Lomonosov, I.V., Fortov, V.E. and Khishchenko, K.V. "High-pressure equations of state of saturated organic compounds" *Khim. Fiz.* 13 97-106
- 1994, Byers Brown, W. and Braithwaite, M. "Williamsburg equation of state for detonation product fluid" *AIP Conf. Proc.* 309 73-76
- 1994, Bystrzycki, J., Paszula, A. and Trebinski, R. "The microstructure and interface behavior of Ni/NiAl composites produced by the explosive compaction of powders" *J. Mater. Sci.* 29 6221-6226
- 1994, Cagnoux, J. "Analyse d'échantillons d' Al_2O_3 , TiB_2 et SiC récupérés après des chocs allant jusqu'à 20 GPa" *J. Phys. IV France Colloq. C8 (DYMAT 94)* 4 257-262
- 1994, Cai, H., Tang, Z.P. and Yang, B. "Inverse method and consistency examination for Lagrangian analysis" *AIP Conf. Proc.* 309 973-976
- 1994, Charakhchyan, A.A. "Numerical investigation of deuterium implosion in a conical target" *J. Appl. Mech. Tech. Phys.* 35 506-514
- 1994, Charest, J.A. and Lilly, M.D. "PFV₂ stress gauges for non-planar wave applications. 1" *AIP Conf. Proc.* 309 1731-1734
- 1994, Chen, G., Tyburczy, J.A. and Ahrens, T.J. "Shock induced devolatilization of calcium sulfate and implications for K-T extinctions" *Earth Planet. Sci. Letts* 128 615-628
- 1994, Chen, S.-H. "Component Hugoniot in mixture material" *AIP Conf. Proc.* 309 69-72
- 1994, Cheng, J.-Y., Zhou, G.-Q., Tang, Z.P. and Li, X.Z. "A unified theory of collective dislocation motion including both thermal activation and viscous drag effects" *AIP Conf. Proc.* 309 1153-1156
- 1994, Chengwei, S., Shuping, F., Xinping, L. and Zhuping, H. "Dynamic micro-fracture of metals under shock loading by electric gun" *J. Phys. IV France Colloq. C8 (DYMAT 94)* 4 355-360
- 1994, Chernai, A.V., Sobolev, V.V., Ilyushin, M.A. and Zhitnik, N.E. "Generating mechanical pulses by the laser blasting of explosive coatings" *Combust. Explos. Shock Waves* 30 239-242
- 1994, Chhabildas, L.C., Trucano, T.G., Reinhart, W.D. and Hall, C.A. "Chunk projectile launch using the Sandia hypervelocity launcher facility", SAND94-1273, Sandia National Laboratory
- 1994, Chiba, A., Hokamoto, K., Nishida, M. and Fujita, M. "Fabrication of maraging steel base multilayered composites using single shot explosive welding technique" *Trans. Mater. Res. Soc. Jpn* 14 701-704
- 1994, Cockburn, B. and Shu, C.W. "Nonlinearly stable compact schemes for shock calculations" *SIAM J. Numer. Anal.* 31 607-627

- 1994, Coffey, C.S. "Quantum-mechanical aspects of dislocation motion and plastic flow" *Phys. Rev. B* 49 208-214
- 1994, Coffey, C.S. "Microscopic processes of plastic deformation during shock or impact" *AIP Conf. Proc.* 309 1181-1184
- 1994, Collombet, F. and Tranchet, J.Y. "Damage behaviour of alumina submitted to a divergent spherical wave" *J. Phys. IV France Colloq. C8 (DYMAT 94)* 4 641-646
- 1994, Constantinou, C.P., Winey, J.M. and Gupta, Y.M. "UV/Visible absorption spectra of shocked nitromethane-amine mixtures up to a pressure of 14 GPa" *J. Phys. Chem.* 98 7767-7776
- 1994, Constantinou, C.P. and Gupta, Y.M. "The UV/visible absorption spectra of shocked nitromethane-amine mixtures" *AIP Conf. Proc.* 309 1559-1562
- 1994, Cooke, C.H. "On estimating pressure build-up in severely accelerated shocked flows" *Int. J. Numer. Meth. Fluids* 18 545-553
- 1994, Cordier, P., Gratz, A.J., Doukhan, J.C. and Nellis, W.J. "Microstructures of AlPO_4 subjected to high shock pressures" *Phys. Chem. Minerals* 21 133-139
- 1994, Cordier, P., Vrana, S. and Doukhan, J.C. "Shock metamorphism in quartz at Sevetin and Susice (Bohemia)? A TEM investigation" *Meteoritics* 29 98-99
- 1994, Cornille, H. and Platkowski, T. "Two multispeed discrete Boltzmann models including multiple collisions. 1: Similarity solutions" *Arch. Mech.* 46 685-709
- 1994, Cornille, H. and Platkowski, T. "Two multispeed discrete Boltzmann models including multiple collisions. 2: Stability properties" *Arch. Mech.* 46 711-734
- 1994, Courchinoux, R. and Lalle, P. "Unreacted Hugoniot of ammonium nitrate" *AIP Conf. Proc.* 309 1397-1400
- 1994, Cudzilo, S., Michalski, E., Trebinski, R. and Wlodarczyk, E. "Investigations of the synthesis of borides in shock waves" *J. Tech. Phys.* 35 371-392
- 1994, Cudzilo, S., Maranda, A., Nowaczewski, J. and Trzcinski, W. "Shock initiation of ammonium nitrate explosives", in "Proc. 25th Int. Ann. Conf. of Institut für Chemische Technologie", paper 99, publ. Karlsruhe, Germany, Fraunhofer-Institut für Chemische Technologie
- 1994, Cudzilo, S., Maranda, A., Nowaczewski, J. and Trzcinski, W. "The influence of aluminized detonator parameters on the propagation of shock waves in an inert medium", in "Proc. 25th Int. Ann. Conf. of Institut für Chemische Technologie", paper 100, publ. Karlsruhe, Germany, Fraunhofer-Institut für Chemische Technologie
- 1994, Curran, D.R. "A pressure-induced strength transition in water-saturated geologic materials" *J. Phys. IV France Colloq. C8 (DYMAT 94)* 4 243-248
- 1994, Cygan, R.T., Boslough, M.B. and Kirkpatrick, R.J. "NMR spectroscopic examination of shocked sandstone from Meteor Crater, Arizona" *AIP Conf. Proc.* 309 807-810

- 1994, Damion, J.P. "Means of dynamic calibration for pressure transducers" *Metrologia* 30 743-746
- 1994, Dan, K., Tamura, H., Sawaoka, A.B., Mori, T., Hwang, M.-D. and Horie, Y. "Unique fine microstructures of iron caused by intense shearing under shock compression" *Jpn. J. Appl. Phys.* 33 2667-2672
- 1994, Dan, K., Tamura, H., Sawaoka, A.B., Mori, T., Hwang, M.D. and Horie, Y. "Microstructures of single-crystal copper rods shock-treated by a rod-in-cylinder technique" *AIP Conf. Proc.* 309 1225-1228
- 1994, Dandekar, D.P., Abbate, A. and Frankel, J. "Equation of state of aluminum nitride and its shock response" *J. Appl. Phys.* 76 4077-4085
- 1994, Dandekar, D.P. "Shear strengths of aluminum nitride and titanium diboride under plane shock wave compression" *J. Phys. IV France Colloq. C8 (DYMAT 94)* 4 379-384
- 1994, Dandekar, D.P. "Response of protective ceramics under single and multiple impacts", in "Wave Propagation and Emerging Technologies (AMD vol. 188)", ed. V.K. Kinra, R.J. Clifton and G.C. Johnson, pp. 133-141, publ. New York, American Society of Mechanical Engineers
- 1994, Dandekar, D.P. "Response of ceramics under single and repeated plane shock wave loading: A case history of titanium diboride", in "Proc. IUTAM Symp. on Impact Dynamics", ed. Z. Zheng and Q. Tan, pp. 242-253, publ. Beijing, China, Peking University Press
- 1994, Dandekar, D.P. "Response of ceramics under shock wave loading" *AIP Conf. Proc.* 309 729-732
- 1994, Dandekar, D.P. and Bartkowski, P. "Shock response of AD995 alumina" *AIP Conf. Proc.* 309 733-736
- 1994, Davies, F.W., Smith, E.A., Martinez, A.A. and Gaffney, E.S. "Wave propagation in jointed rock" *AIP Conf. Proc.* 309 827-830
- 1994, de Andrade, U.R., Meyers, M.A., Chokshi, A.H. and Vecchio, K.S. "Dynamic recrystallization and grain size effects in shock hardened copper" *J. Phys. IV France Colloq. C8 (DYMAT 94)* 4 361-366
- 1994, de Resseguier, T., Cottet, F. and Migault, A. "A 1D model for glass dynamic behaviour under explosive loading" *AIP Conf. Proc.* 309 1071-1074
- 1994, de Ressaiguier, T., Cottet, F. and Migault, A. "A 1-D model for glass dynamic behaviour" *DYMAT Journal* 1 31-46
- 1994, de Ressaiguier, T. and Cottet, F. "Spallation of glass materials under laser induced shocks" *J. Phys. IV France Colloq. C8 (DYMAT 94)* 4 629-634
- 1994, Delettrez, J., Bradley, D.K. and Verdon, C.P. "The role of the Rayleigh-Taylor instability in laser-driven burnthrough experiments" *Phys. Plasmas* 1 2342-2349
- 1994, Delius, M. "Medical applications and bioeffects of extracorporeal shock waves" *Shock Waves* 4 55-72

- 1994, Delius, M., Ueberle, F. and Gambihler, S. "Destruction of gallstones and model stones by extracorporeal shock-waves" *Ultrasound Med. Biol.* 20 251-258
- 1994, Deutsch, A. and Schäfer, U. "Dating terrestrial impact events" *Meteoritics* 29 301-322
- 1994, Dick, J.J. and Ritchie, J.P. "Molecular mechanics modeling of shear and the crystal orientation dependence of the elastic precursor shock strength in pentaerythritol tetranitrate" *J. Appl. Phys.* 76 2726-2737
- 1994, Dick, J.J. and Ritchie, J.P. "The crystal orientation dependence of the elastic precursor shock strength in the PETN molecular explosive and the modeling of the steric hindrance to shear by molecular mechanics" *J. Phys. IV France Colloq. C8 (DYMAT 94) 4* 393-398
- 1994, Dick, J.J., Whitehead, M.C. and Martinez, A.R. "Crystal orientation dependence of elastic precursor strength in pentaerythritol tetranitrate" *AIP Conf. Proc.* 309 1373-1376
- 1994, Didyk, R.P., Vyunnik, A.N., Zil, V.V. and Masakovskii, E.A. "Explosive treatment as a means of redistribution of residual stresses in machine parts" *Strength Mater.* 26 825-828
- 1994, Dijken, D.K. and De Hosson, J.T.M. "Thermodynamic model of the compaction of powder materials by shock waves" *J. Appl. Phys.* 75 203-209
- 1994, Dijken, D.K. and De Hosson, J.T.M. "Shock wave equation of state of powder material" *J. Appl. Phys.* 75 809-813
- 1994, Dijken, D.K. and De Hosson, J.T.M. "Shock wave velocity and shock pressure for low density powders: A novel approach" *Appl. Phys. Letts* 64 933-935
- 1994, Ding, Z. and Gracewski, S.M. "Response of constrained and unconstrained bubbles to lithotripter shock-wave pulses" *J. Acoust. Soc. Amer.* 96 3636-3644
- 1994, Dobrodeev, V.P. and Mochalova, N.A. "The equation of state for liquid and gaseous nitrogen" *Russ. J. Phys. Chem.* 68 1761-1763
- 1994, Don, W.S. "Numerical study of pseudospectral methods in shock-wave applications" *J. Comput. Phys.* 110 103-111
- 1994, Dontsov, V.E. and Maslov, V.A. "Structure and dynamics of the slow pressure wave in a porous medium saturated with a liquid containing gas bubbles" *J. Appl. Mech. Tech. Phys.* 35 97-99
- 1994, Dornseifer, T. and Schmidt, W. "Computation of one-dimensional shock fronts using the method of characteristics" *Z. angew. Math. Mech.* 74 T378-T380
- 1994, Dreminev, A.N., Orlov, A.V. and Molodets, A.M. "Influence of temperature on the electrical conductivity of glass under shock effect" *AIP Conf. Proc.* 309 1445-1448
- 1994, Dressler, B.O., Grieve, R.A.F. and Sharpton, V.L., Eds. "Large Meteorite Impacts and Planetary Evolution", publ. Boulder, CO, Geological Society of America
- 1994, Duba, A.G. "Iron: What is melt?" *AIP Conf. Proc.* 309 923-926

- 1994, Dubrujeaud, B. and Jeandin, M. "Cladding by laser shock processing" *J. Mater. Sci. Letts* 13 773-775
- 1994, Dubrujeaud, B., Vardavoulias, M. and Jeandin, M. "Dry sliding wear behaviour of a P/M ferrous alloy superficially densified by laser shock processing" *Surf. Coat. Technol.* 67 125-132
- 1994, Duffy, T.S. and Ahrens, T.J. "Dynamic response of molybdenum shock compressed at 1400 °C" *J. Appl. Phys.* 76 835-842
- 1994, Duffy, T.S. and Ahrens, T.J. "The temperature sensitivity of elastic wave velocity at high pressure: New results for molybdenum" *Geophys. Res. Letts* 21 473-476
- 1994, Duffy, T.S. and Ahrens, T.J. "Free surface velocity profiles in molybdenum shock compressed at 1400 °C" *AIP Conf. Proc.* 309 1079-1082
- 1994, Duffy, T.S. and Ahrens, T.J. "Shock compression and release of polycrystalline magnesium oxide" *AIP Conf. Proc.* 309 1107-1110
- 1994, Dunbar, E., Graham, R.A., Holman, G.T., Anderson, M.U. and Thadhani, N.N. "Time-resolved pressure measurements in chemically reacting powder mixtures" *AIP Conf. Proc.* 309 1303-1306
- 1994, Durand, M., Lalle, P. and Andriot, P. "Eight beam Perot-Fabry velocimeter" *AIP Conf. Proc.* 309 1751-1754
- 1994, Emanuel, G. and Argrow, B.M. "Linear dependence of the bulk viscosity on shock wave thickness" *Phys. Fluids* 6 3203-3205
- 1994, Emelyanov, Y.A., Kozachuk, A.I. and Pugachev, G.S. "Nonstationary effects upon plane impact of a deformable body" *Tech. Phys.* 39 1232-1235
- 1994, Epanchintsev, O.G. and Dityatev, A.A. "Fullerene stability under shock-wave and static loading" *Combust. Explos. Shock Waves* 30 259-260
- 1994, Eremchenko, E.N., Jakusheva, T.I. and Molodets, A.M. "Spall fracture of Armco iron under complicated dimensional shock wave loading" *DYMAT Journal* 1 307-313
- 1994, Erlich, D.C. and Curran, D.R. "An experimental technique for studying shock propagation in large-scale samples of snow and other highly porous materials" *AIP Conf. Proc.* 309 1135-1138
- 1994, Erskine, D., Nellis, W.J. and Weir, S.T. "Shock wave profile study of tuff from the Nevada test site" *J. Geophys. Res.* 99 15529-15537
- 1994, Erskine, D. "Opacity measurements in shock-generated argon plasmas" *AIP Conf. Proc.* 309 125-128
- 1994, Erskine, D. "High pressure Hugoniot of sapphire" *AIP Conf. Proc.* 309 141-144
- 1994, Espinosa, H.D. "High strain rate modeling of ceramics and ceramic composites" *AIP Conf. Proc.* 309 721-724

- 1994, Ewart, L. and Dandekar, D.P. "Relationship between the shock response and microstructural features of titanium diboride (TiB₂)" AIP Conf. Proc. 309 1201-1204
- 1994, Fanget, A., Hereil, P.L. and Sibeaud, J.M. "The influence of shock induced polymorphic transition in steel on 2D waves propagation" AIP Conf. Proc. 309 1087-1090
- 1994, Fedorov, V.M., Tsenev, N.K., Gordopolov, Y.A., Merzhanov, A.G., Aleshin, G.N., Kaibyshev, O.A. and Efimov, O.Y. "Formation of submicrograin structures in metals and alloys on exposure to shock waves" Phys. Doklady 39 710-712
- 1994, Feldman, V.I. "The conditions of shock metamorphism", in "Large Meteorite Impacts and Planetary Evolution", ed. B.O. Dressler, R.A.F. Grieve and V.L. Sharpton, pp. 121-132, publ. Boulder, CO, The Geological Society of America
- 1994, Feng, R. and Gupta, Y.M. "Effect of epoxy bond response on combined compression-shear wave propagation in solids" AIP Conf. Proc. 309 1127-1130
- 1994, Field, J.E., Walley, S.M., Bourne, N.K. and Huntley, J.M. "Experimental methods at high rates of strain" J. Phys. IV France Colloq. C8 (DYMAT 94) 4 3-22
- 1994, Fiske, P.S., Hargraves, R.B., Onstott, T.C., Koeberl, C. and Hougen, S.B. "Pseudotachylites of the Beaverhead impact structure: Geochemical, geochronological, petrographic, and field investigations", in "Large Meteorite Impacts and Planetary Evolution", ed. B.O. Dressler, R.A.F. Grieve and V.L. Sharpton, pp. 163-176, publ. Boulder, CO, The Geological Society of America
- 1994, Fleming, K.J. "Portable Doppler interferometer system for shock diagnostics and high speed motion", SAND94-1189C, Sandia National Laboratory
- 1994, Fortov, V.E., Kostin, V.V. and Vorobev, O.Y. "Generation of extreme states in condensed matter with high energy particle beams" AIP Conf. Proc. 309 1883-1886
- 1994, Frank, A.M. and Trott, W.M. "Stop-motion microphotography of laser-driven plates" Proc. SPIE 2273 196-206
- 1994, Frank, A.M. and Chau, H.H. "Six-mm, plane wave shock driver" AIP Conf. Proc. 309 1651-1654
- 1994, Freidin, A.M., Shalaurov, V.A. and Kochetov, V.V. "Development of ore-deposits under reservoirs in regions of high shock sensitivity" J. Mining Sci. 30 187-194
- 1994, Freim, J., McKittrick, J. and Nellis, W.J. "Shock compaction of alumina/zirconia ceramics" AIP Conf. Proc. 309 1263-1266
- 1994, Fritz, J.N., Morris, C.E., Hixson, R.S. and McQueen, R.G. "Liquid sound speeds at pressure from the optical analyzer technique" AIP Conf. Proc. 309 149-152
- 1994, Fu, Y.B. and Scott, N.H. "Propagation of simple waves and shock waves in a rod of slowly varying cross-sectional area" Int. J. Engng Sci. 32 35-44

- 1994, Furnish, M.D. "Dynamic properties of Indiana, Fort Knox and Utah test range limsetones and Danby marble over the stress range 1 to 20 GPa", SAND92-0983, Albuquerque, New Mexico, Sandia National Lab.
- 1994, Furnish, M.D., Chhabildas, L.C. and Steinberg, D.J. "Dynamical behavior of tantalum" AIP Conf. Proc. 309 1099-1102
- 1994, Furnish, M.D., Gray III, G.T. and Remo, J.L. "Dynamical behavior of octahedrite from the Henbury meteorite" AIP Conf. Proc. 309 819-822
- 1994, Gallagher, K.G., Bass, J.D., Ahrens, T.J., Fitzner, M. and Abelson, J.R. "Shock temperature of stainless steel and a high pressure-high temperature constraint on thermal diffusivity of Al_2O_3 " AIP Conf. Proc. 309 963-966
- 1994, Gallagher, K.G., Yang, W. and Ahrens, T.J. "Free-surface light emission from shocked Teflon" AIP Conf. Proc. 309 1551-1554
- 1994, Gao, X.-Z. and Ding, J. "Shock Hugoniot of porous materials in the completely and incompletely compacted regions" AIP Conf. Proc. 309 137-140
- 1994, Gathers, G.R. "Selected Topics in Shock Wave Physics and Equation of State Modeling", publ. Singapore, World Scientific
- 1994, Gerland, M. and Hallouin, M. "Effect of pressure on the microstructure of an austenitic stainless steel shock loaded by very short laser pulses" J. Mater. Sci. 29 345-351
- 1994, Gilath, I. and Eliezer, S. "Impulsive loading of materials using laser induced shock waves", in "Proc. IUTAM Symp. on Impact Dynamics", ed. Z. Zheng and Q. Tan, pp. 254-269, publ. Beijing, China, Peking University Press
- 1994, Gilev, S.D. "Electromagnetic effects in a measurement cell for investigating the electrical properties of shock-compressed substances" Combust. Explos. Shock Waves 30 204-208
- 1994, Gilev, S.D. "Using liquid explosives for welding" Combust. Explos. Shock Waves 30 682-684
- 1994, Gilman, J.J. and Armstrong, R.W. "Shear-induced polymerization of benzene" AIP Conf. Proc. 309 199-202
- 1994, Glinskii, G.Y., Tikhonenko, V.V., Polyakovskii, V.A. and Yushchuk, O.N. "Energy balance in underwater contact explosion in a water-saturated ground" Sov. J. Chem. Phys. 12 1135-1136
- 1994, Gogulya, M.F. and Dolgoborodov, A.Y. "Indicator method for the study of shock and detonation waves (in Russian)" Khim. Fiz. 13 118-127
- 1994, Golubev, V.K., Rabinovich, K.G., Belova, V.P. and Morozova, L.M. "Determining the characteristics of the damage to copper-coated specimens loaded by the explosion of a lamellar charge" Combust. Explos. Shock Waves 30 557-562
- 1994, Grabovskii, E.V., Smirnov, V.P., Vorobev, O.Y., Dyabilin, K.S., Lebedev, M.E., Ostriuk, A.V. and Fortov, V.E. "Excitation of intense shock waves by soft X-radiation from a Z-pinch plasma" JETP Letts 60 1-4

- 1994, Grady, D.E. "Hydrodynamic compressibility of silicon carbide through shock compression of metal-ceramic mixtures" J. Appl. Phys. 75 197-202
- 1994, Grady, D.E. "Shock compression and release properties of metal-ceramic mixtures" DYMAT Journal 1 1-14
- 1994, Grady, D.E. "Shock-wave strength properties of boron carbide and silicon carbide" J. Phys. IV France Colloq. C8 (DYMAT 94) 4 385-391
- 1994, Grady, D.E. "Velocity interferometry shock-compression and spall measurements on tungsten carbide", TMDG0594, Albuquerque, NM, Sandia National Laboratories
- 1994, Grady, D.E. "Precursor attenuation in ceramics", TMDG0694, Albuquerque, NM, Sandia National Laboratories
- 1994, Grady, D.E. and Trucano, T.G. "Entry shock and penetration fragmentation in underdense media", SAND93-2620, Sandia National Laboratories
- 1994, Graham, R.A. "Bridgman's concern" AIP Conf. Proc. 309 3-12
- 1994, Granik, Y.V. and Kononov, A.V. "Sur l'analyse de l'évolution et de la stabilité de l'onde de choc dans la classe de perturbations exponentielles" J. Appl. Math. Phys. 45 658-669
- 1994, Gray III, G.T. "Influence of shock loading on the structure/property response of Ti-48Al-2Cr-2Nb and Ti-24Al-11Nb" J. Phys. IV France Colloq. C8 (DYMAT 94) 4 373-378
- 1994, Gray III, G.T. "Deformation twinning: Influence of strain rate", in "Twinning in Advanced Materials", ed. M.H. Yoo and M. Wuttig, pp. 337-349, publ. Warrendale, Pennsylvania, The Minerals, Metals and Materials Society
- 1994, Gray III, G.T. "Influence of peak pressure and temperature on the shock-loading response of tantalum" AIP Conf. Proc. 309 1103-1106
- 1994, Gray III, G.T. "Shock-loading response of advanced materials" AIP Conf. Proc. 309 1161-1164
- 1994, Grieve, R.A.F. and Ber, T.J. "Shocked lithologies at the Wanapitei impact structure, Ontario, Canada" Meteoritics 29 621-631
- 1994, Grishin, A.M., Davydov, V.Y. and Golovlev, I.C. "Investigation of the process of conversion of the energy of combustion explosive charges into useful forms of explosive work" Combust. Explos. Shock Waves 30 821-824
- 1994, Grove, D.J. and Rajendran, A.M. "Modeling of Kipp-Grady plate impact experiments on ceramics using the Rajendran-Grove ceramic model" AIP Conf. Proc. 309 749-752
- 1994, Gryadunov, A.N., Shteinberg, A.S., Dobler, E.A., Gorelskii, V.A. and Zelepugin, S. "Ignition and development of a chemical reaction of titanium and carbon under shock loading" Int. J. Self-Propag. High-Temp. Synth. 3 253-260
- 1994, Guéry, J.F. "Damage models with intermediate configuration large strain formulation and results" AIP Conf. Proc. 309 1157-1160

- 1994, Gupta, Y.M., Horn, P.D. and Burt, J.A. "Effect of tension on R lines in ruby crystals shocked along c axis" J. Appl. Phys. 76 1784-1788
- 1994, Gupta, V., Pronin, A., Anand, K. and Yuan, J. "Characterization of thin film interfaces and spalling damage in composite laminates using nanosecond rise-time stress pulses", in "Wave Propagation and Emerging Technologies (AMD vol. 188)", ed. V.K. Kinra, R.J. Clifton and G.C. Johnson, pp. 201-213, publ. New York, American Society of Mechanical Engineers
- 1994, Gupta, Y.M., Pangilinan, G.I., Winey, J.M. and Constantinou, C.P. "Time-resolved molecular changes in a chemically reacting shocked energetic liquid" Chem. Phys. Letts 232 341-345
- 1994, Gupta, V. and Tian, X. "Measurement of cleavage strength in ice crystals by a laser spallation technique" Trans. ASME: J. Offshore Mech. Arctic Engng 116 35-42
- 1994, Gupta, S.C., Suresh, N. and Sikka, S.K. "On 5f band occupation in shock-compressed thorium" AIP Conf. Proc. 309 183-186
- 1994, Gustavsen, R.L. and Gupta, Y.M. "Time resolved Raman measurements in a quartz shocked to 60 kbar" J. Appl. Phys. 75 2837-2844
- 1994, Gustavsen, R.L. and Sheffield, S.A. "Unreacted Hugoniot for porous and liquid explosives" AIP Conf. Proc. 309 1393-1396
- 1994, Gustavsen, R.L., Sheffield, S.A. and Alcon, R.R. "Response of inclined electromagnetic particle velocity gauges in shocked liquids" AIP Conf. Proc. 309 1703-1706
- 1994, Gustov, V.W. "Polymerization and modification of polymers under shock compression", in "High-Pressure Chemistry and Physics of Polymers", ed. A.L. Kovarskii, pp. 303-340, publ. Boca Raton, Florida, CRC Press
- 1994, Gutkin, M.Y. and Ovidko, I.A. "Rotational effect and amorphization in shock-loaded crystals" AIP Conf. Proc. 309 401-404
- 1994, Haas, Y., Ben Eliahu, Y. and Welner, S. "Characterizations of shock waves in the decomposition of GAP by pulsed laser radiation", in "Proc. 25th Int. Ann. Conf. of Institut für Chemische Technologie", paper 24, publ. Karlsruhe, Germany, Fraunhofer-Institut für Chemische Technologie
- 1994, Hammel, B.A., Kilkenny, J.D., Munro, D., Remington, B.A., Kornblum, H.N., Perry, T.S., Phillion, D.W. and Wallace, R.J. "X-ray radiographic imaging of hydrodynamic phenomena in radiation-driven materials: Shock propagation, material compression, and shear-flow" Phys. Plasmas 1 1662-1668
- 1994, Hanson, D.L., Struve, K.W., Spielman, R.B. and Seaman, J.F. "Application of piezoelectric stress gauges to the measurement of fast rise time multimegampere electric currents" AIP Conf. Proc. 309 1719-1722

- 1994, Hare, D.E., Franken, J., Dlott, D.D., Chronister, E.L. and Flores, J.J. "Dynamics of a polymer shock optical microgauge studied by picosecond coherent Raman spectroscopy" *Appl. Phys. Letts* 65 3051-3053
- 1994, Hare, D.E. and Dlott, D.D. "Picosecond coherent Raman study of solid-state chemical reactions during laser polymer ablation" *Appl. Phys. Letts* 64 715-717
- 1994, Hargraves, R.B., Kellogg, K.S., Fiske, P.S. and Hougen, S.B. "Allochthonous impact-shocked rocks and superimposed deformations at the Beaverhead site in southwestern Montana", in "Large Meteorite Impacts and Planetary Evolution", ed. B.O. Dressler, R.A.F. Grieve and V.L. Sharpton, pp. 225-235, publ. Boulder, CO, The Geological Society of America
- 1994, Haskins, P.J. and Cook, M.D. "Molecular dynamics studies of shock initiation in a model energetic material" *AIP Conf. Proc.* 309 1341-1344
- 1994, He, H. and Ahrens, T.J. "Mechanical properties of shock-damaged rocks" *Int. J. Rock Mech. Min. Sci. & Geomech. Abstr.* 31 525-533
- 1994, He, Y.-H. and Ding, J. "The shape of detonation front and the detonation velocity" *AIP Conf. Proc.* 309 1365-1368
- 1994, Heimann, R.B. "Linear finite carbon chains (carbynes): Their role during dynamic transformation of graphite to diamond and their geometric and electronic structure" *Diamond Related Mater.* 3 1151-1157
- 1994, Henninger, R.J., Maudlin, P.J. and Harstad, E.N. "Differential sensitivity theory applied to the MESA code" *AIP Conf. Proc.* 309 1781-1784
- 1994, Hereil, P.-L. and Fanget, A. "Influence of shock induced polymorphic transition on penetration in steel" *J. Phys. IV France Colloq. C8 (DYMAT 94)* 4 263-268
- 1994, Hickling, R. "Transient, high-pressure solidification associated with cavitation in water" *Phys. Rev. Letts* 73 2853-2856
- 1994, Hirai, H. and Kondo, K. "Shock-compacted silicon nitride nanocrystalline ceramics: Mechanisms of consolidation and of transition from alpha- to beta-form" *J. Amer. Ceram. Soc.* 77 487-492
- 1994, Hirai, H., Kondo, K., Yoshizawa, N. and Shiraishi, M. "Transition process to diamond from C-60 fullerene" *Chem. Phys. Letts* 226 595-599
- 1994, Hirai, H. and Kondo, K.-I. "Amorphous diamond from C₆₀ fullerene by shock compression and rapid quenching" *AIP Conf. Proc.* 309 659-662
- 1994, Hiroe, T., Matsuo, H., Fujiwara, K., Tanoue, T., Yoshida, M. and Fujiwara, S. "A production of cylindrical imploding shocks in solid by exploding wire rows" *AIP Conf. Proc.* 309 1667-1670
- 1994, Hixson, R.S., McQueen, R.G. and Fritz, J.N. "The shock Hugoniot of 316 stainless steel and sound velocity measurements" *AIP Conf. Proc.* 309 105-108
- 1994, Hokamoto, K., Itoh, S., Fujita, M. and Chiba, A. "Explosive shock consolidation of high speed steel powders" *Iron & Steel* 80 126-130

- 1994, Holman Jr., G.T., Graham, R.A. and Anderson, M.U. "Shock response of porous $2\text{Al}+\text{Fe}_2\text{O}_3$ powder mixtures" AIP Conf. Proc. 309 1119-1122
- 1994, Holmes, N.C. "Shock compression of low-density foams" AIP Conf. Proc. 309 153-156
- 1994, Horie, Y. "Computational modeling of shock-induced chemical reactions in powder mixtures" AIP Conf. Proc. 309 1235-1238
- 1994, Hornung, K. and Kissel, J. "On shock-wave impact ionization of dust particles" Astronomy Astrophys. 291 324-336
- 1994, Huang, S., Zhang, M., Jin, X., Dong, Y. and Li, Z. "The elastic-plastic wave measurements of 2169 stainless steel under high strain rate", in "Proc. IUTAM Symp. on Impact Dynamics", ed. Z. Zheng and Q. Tan, pp. 434-439, publ. Beijing, China, Peking University Press
- 1994, Huang, S., Jin, X., Li, Z., Wang, X. and Guan, K. "Experimental measurements of 2169 stainless steel under dynamic loading" AIP Conf. Proc. 309 1083-1086
- 1994, Huvier, C. and Grosbras, M. "Laser-driven shock effects on copper alloy powder green compacts" Powder Technol. 80 111-117
- 1994, Irfan, M.A. and Prakash, V. "Contact temperature during sliding in pressure-shear impact", in "Proc. 1994 SEM Spring Conference on Experimental Mechanics", pp. 173-182, publ. Bethel CT, Society for Experimental Mechanics
- 1994, Isakov, A.L. and Beloborodov, V.N. "Problem of predicting the blast-induced damage sustained by crystals in dense media" J. Mining Sci. 30 157-163
- 1994, Ivanov, A.G. "Dynamic fracture and scale effects" J. Appl. Mech. Tech. Phys. 35 430-442
- 1994, Ivanov, V.V., Egorov, P.V., Klimov, V.I. and Kolpakova, L.A. "Determination of the kinetic strength constants and of the critical size of destruction of composite materials on the basis of recording of pulse electromagnetic radiation during their destruction" J. Appl. Mech. Tech. Phys. 35 628-633
- 1994, Ivanov, A.G., Ogorodnikov, V.A., Karpenko, G.Y. and Kovtun, A.D. "Effect of shear strength on the development of instability during the deceleration of imploding casings" J. Appl. Mech. Tech. Phys. 35 639-642
- 1994, Ivanova, L.A., Litvinov, B.V., Kozlov, E.A., Zhugin, Y.N., Abakshin, E.V. and Ushchapovskaya, Z.F. "Results of hyperbaric action upon quartz sand" Phys. Doklady 39 232-236
- 1994, Iyer, K.R., Bennett, L.S., Sorrell, F.Y. and Horie, Y. "Solid state chemical reactions at the shock front" AIP Conf. Proc. 309 1337-1340
- 1994, Johnson, J.N., Hixson, R.S. and Gray III, G.T. "Shock wave compression and release of aluminum/ceramic composites" J. Appl. Phys. 76 5706-5718
- 1994, Johnson, J.N., Hixson, R.S. and Gray III, G.T. "Impact loading of an aluminum/alumina composite" J. Phys. IV France Colloq. C8 (DYMAT 94) 4 325-330

- 1994, Johnson, J.B., Solie, D.J. and Barrett, S.A. "The response of a seasonal snow cover to explosive loading" *Ann. Glaciology* 19 49-54
- 1994, Johnson, D.E., Lee, L.M., Hedemann, M.A. and Bauer, F. "PVDF measurement of soft X-ray induced shock and filter debris impulse" *AIP Conf. Proc.* 309 1911-1914
- 1994, Johnson, J.N. "Micromechanical strength effects in shock compression of solids" *AIP Conf. Proc.* 309 1145-1148
- 1994, Johnson, J.N., Hixson, R.S., Tonks, D.L. and Gray III, G.T. "Shock compression and quasielastic release in tantalum" *AIP Conf. Proc.* 309 1095-1098
- 1994, Joshi, V.S., Grebe, H.A., Thadhani, N.N. and Iqbal, Z. "Effect of packing density on shock consolidation of diamond powders" *AIP Conf. Proc.* 309 1251-1253
- 1994, Joshi, V.S., Thadhani, N.N. and Graham, R.A. "Mechanistic study of shock-induced solid-state chemistry in titanium- and tantalum-based carbide and boride systems" *AIP Conf. Proc.* 309 1299-1302
- 1994, Kanel, G.I. "The spalling phenomenon in solids: Methodology of measurements and key factors" *Sov. J. Chem. Phys.* 12 205-208
- 1994, Kanel, G.I., Razorenov, S.V. and Yalovets, T.N. "Dynamical strength of ruby" *Sov. J. Chem. Phys.* 12 236-240
- 1994, Kanel, G.I., Razorenov, S.V., Utkin, A.V., Baumung, K., Karow, H.U. and Licht, V. "Spallations near the ultimate strength of solids" *AIP Conf. Proc.* 309 1043-1046
- 1994, Kanel, G.I., Utkin, A.V. and Tolstikova, Z.G. "Response of the high-filled elastomers to shock-wave loading" *AIP Conf. Proc.* 309 1123-1126
- 1994, Kerley, G.I. "A new multiphase equation of state for iron" *AIP Conf. Proc.* 309 903-906
- 1994, Kesler, G., Karow, H.U., Baumung, K., Fortov, V.E., Kanel, G.I. and Licht, V. "High-power light ion beams and intense shock waves" *AIP Conf. Proc.* 309 1887-1890
- 1994, Khasainov, B.A., Attetkov, A.V., Borisov, A.A., Dubovik, A.A., Soloviev, V.S., Andreev, S.G., Imkhovik, N.A. and Kedrinskii, V.K. "On the predictive ability of the viscoplastic model of hot spots in shocked energetic materials", Lawrence Livermore National Laboratory
- 1994, Kiiski, A.A. and Ruuskanen, P.R. "Wear resistance coatings of steel made with shock wave technique" *AIP Conf. Proc.* 309 1659-1662
- 1994, Kikuchi, M., Atou, T., Hikosaka, H., Fukuoka, K., Syono, Y., Kobayashi, N., Kawamata, S. and Okuda, K. "Oriented bulk consolidation of Bi-Sr-Ca-Cu-O by shock loading method" *Jpn. J. Appl. Phys.* 33 6525-6529
- 1994, Kipp, M.E. and Grady, D.E. "Shock phase transformation and release properties of aluminum nitride" *J. Phys. IV France Colloq. C8 (DYMAT 94)* 4 249-256
- 1994, Kivity, Y., "Projectile propelling system", United States, patent no. 5,303,632

- 1994, Klopp, R.W., Florence, A.L., Simons, J.W. and Gran, J.K. "Spherical wave interaction with cylindrical holes in large limestone" *J. Phys. IV France Colloq. C8 (DYMAT 94)* 4 735-740
- 1994, Klopp, R.W., Shockey, D.A., Seaman, L., Curran, D.R., McGinn, J.T. and de Resseguier, T. "A spherical cavity expansion experiment for characterizing penetration resistance of armor ceramics", in "Mechanical Testing of Ceramics and Ceramic Composites (AMD-Vol. 197)", ed. A. Gilat, pp. 41-60, publ. New York, American Society of Mechanical Engineers
- 1994, Koeberl, C., Reimold, W.U. and Shirey, S.B. "Saltpan impact crater, South Africa: Geochemistry of target rocks, breccias, and impact glasses, and osmium isotope systematics" *Geochim. Cosmochim. Acta* 58 2893-2910
- 1994, Koeberl, C., Sharpton, V.L., Schuraytz, B.C., Shirey, S.B., Blum, J.D. and Marin, L.E. "Evidence for a meteoritic component in impact melt rock from the Chicxulub structure" *Geochim. Cosmochim. Acta* 58 1679-1684
- 1994, Koeberl, C. "Tektite origin by hypervelocity asteroidal or cometary impact: Target rocks, source craters, and mechanisms", in "Large Meteorite Impacts and Planetary Evolution", ed. B.O. Dressler, R.A.F. Grieve and V.L. Sharpton, pp. 133-151, publ. Boulder, CO, The Geological Society of America
- 1994, Koenig, M., Faral, B., Boudenne, J.M., Batani, D., Benuzzi, A. and Bossi, S. "Optical smoothing techniques for shock wave generation in laser-produced plasmas" *Phys. Rev. E* 50 3314-3317
- 1994, Kolymbas, D. "Compaction waves as phase transitions" *Acta Mech.* 107 171-181
- 1994, Kondo, K.-I., Hirai, H. and Oda, H. "Shock compaction of an acicular iron-alloy powder to produce a nanocrystalline magnet" *Jpn J. Appl. Phys.* 33 2079-2086
- 1994, Kondo, K.-I. "Window problem and complementary method for shock-temperature measurements of iron" *AIP Conf. Proc.* 309 1555-1558
- 1994, Kondo, K. "Shock compression of carbons and diamond" *AIP Conf. Proc.* 309 519-522
- 1994, Korobkin, A. "Blunt-body impact on the free surface of a compressible liquid" *J. Fluid Mech.* 263 319-342
- 1994, Korobkin, A.A. "Low-pressure zones under a liquid-solid impact", in "Bubble Dynamics and Interface Phenomena", ed. J.R. Blake, J.M. Boulton-Stone and N.H. Thomas, pp. 375-381, publ. Dordrecht, The Netherlands, Kluwer
- 1994, Kostyukov, N.A., Kuzmin, G.E. and Shatalin, V.M. "Powdered material flow in the shock wave branching region" *Combust. Explos. Shock Waves* 30 685-689
- 1994, Kotousov, A.G. "Energy-wave approach in the mechanics and brittle dynamic fracture" *J. Appl. Mech. Tech. Phys.* 35 274-278

- 1994, Kotulski, J.D., Anderson, M.U., Brock, B.C., Gomez, J., Graham, R.A. and Vittitoe, C.N. "Determination of equivalent circuit for PVDF shock-pressure gauges" AIP Conf. Proc. 309 1739-1742
- 1994, Kovalev, V.L., Krupnov, A.A. and Tirkii, G.A. "Solving of viscous shock layer equations by the method of simple global iteration on pressure gradient and shock form (in Russian)" Dokl. Akad. Nauk. 338 333-336
- 1994, Kovarskii, A.L., Ed. "High-Pressure Chemistry and Physics of Polymers", publ. Boca Raton, Florida, CRC Press
- 1994, Kozlov, E.A. and Zhukov, A.V. "Phase transitions in spherical stress waves" AIP Conf. Proc. 309 977-980
- 1994, Krainyukov, N.I., Kuzmin, G.P., Khramov, A.G., Toker, G.R. and Chanturiya, T.G. "Laser generation of a conic shock wave in plexiglas" Laser Phys. 4 1139-1141
- 1994, Kramer, M.J., McCallum, R.W., Nellis, W.J. and Balachandran, U. "Effects of shock-induced defects and subsequent heat-treatment on flux pinning in melt-textured $\text{YBa}_2\text{Cu}_3\text{O}_{(7-d)}$ " Physica C 228 265-278
- 1994, Kramer, M.J., McCallum, R.W., Nellis, W.J. and Balachandran, U. "Effects of shock-induced defect density on flux pinning in melt-textured $\text{YBa}_2\text{Cu}_3\text{O}_{7-\delta}$ " J. Electronic Mater. 23 1111-1115
- 1994, Krehl, P., Engemann, S. and Neuwald, P. "Flash lighting instrumentation for color Schlieren shock wave photography" Shock Waves 4 195-207
- 1994, Kulakov, G.I. and Yakovitskaya, G.E. "Features of the change in the frequency spectrum of electromagnetic radiation during the fracture of rock" J. Appl. Mech. Tech. Phys. 35 793-797
- 1994, Kulkov, S.N., Gnyusov, S.F. and Molchunova, L.M. "Formation of the microstructure of a composite during its dynamic loading" J. Appl. Mech. Tech. Phys. 35 735-738
- 1994, Kumar, M. and Upadhyay, S.P. "Analysis of thermodynamic parameters for alkali halides at high pressure and high temperature" J. Phys. Chem. Solids 55 207-210
- 1994, Kuzmin, S.V., Lysak, V.I. and Starikov, D.V. "Kinetics of the collision of metallic plates in a multilayer packet during explosion welding" J. Appl. Mech. Tech. Phys. 35 805-808
- 1994, Kuznetsov, N.M. "Structural stability of shock and detonation waves" Sov. J. Chem. Phys. 12 391-403
- 1994, Kuznetsov, V.L., Chuvilin, A.L., Moroz, E.M., Kolomilchuk, V.N., Shaikhutdinov, S.K., Butenko, Y.V. and Malkov, I.Y. "Effect of explosion conditions on the structure of detonation soots: Ultradisperse diamond and onion carbon" Carbon 32 873-882

- 1994, Lacomme, M., Cazalis, B., David, J., Nierat, G., Salères, A. and Sibille, G. "Endommagement et écaillage par laser" J. Phys. IV France Colloq. C8 (DYMAT 94) 4 77-82
- 1994, Lalle, P. " U_s - U_p relation from isothermal equations of state" AIP Conf. Proc. 309 109-112
- 1994, Langenhorst, F. and Deutsch, A. "Shock experiments on pre-heated α - and β -quartz. 1: Optical and density data" Earth Planet. Sci. Letts 125 407-420
- 1994, Langenhorst, F. "Shock experiments on pre-heated α - and β -quartz. 2: X-ray and TEM investigations" Earth Planet. Sci. Letts 128 683-698
- 1994, Langenhorst, F. and Deutsch, A. "Erratum: Shock experiments on pre-heated α - and β -quartz. I: Optical and density data" Earth Planet. Sci. Letts 128 699
- 1994, Lassila, D.H. and Gray III, G.T. "Ductile-brittle transition behavior of tungsten under shock loading" J. Phys. IV France Colloq. C8 (DYMAT 94) 4 349-354
- 1994, Lebedev, A.V., Kulbachevskii, A.V. and Nabatov, S.S. "Measurement of semiconducting matter electroconductivity in shock wave experiments on conservation" Khim. Fiz. 13 128-130
- 1994, Lee, I.-Y.S., Hill, J.R. and Dlott, D.D. "Ultrafast microscopy of shock waves using a shock target array with an optical nanogauge" J. Appl. Phys. 75 4975-4983
- 1994, Lee, I.-Y.S., Wen, X. and Dlott, D.D. "Ultrafast spectroscopy of temperature and pressure jump and shock waves in molecular materials" AIP Conf. Proc. 309 1543-1546
- 1994, Lemar, E.R. and Forbes, J.W. "Detonation wave curvature of cast Comp B and PBXN-111" AIP Conf. Proc. 309 1385-1388
- 1994, Leroux, H., Reimold, W.U. and Doukhan, J.-C. "A TEM investigation of shock metamorphism in quartz from the Vredefort Dome, South Africa" Tectonophysics 230 223-239
- 1994, Leroux, H., Doukhan, J.C. and Langenhorst, F. "Microstructural defects in experimentally shocked diopside: A TEM characterization" Phys. Chem. Minerals 20 521-530
- 1994, Lewicki, P. and Burrige, R. "Pulse stabilization in a strongly heterogeneous layered medium" Wave Motion 20 177-195
- 1994, Li, X.-Z., Tang, Z.-P., Zhou, G.-Q. and Lin, S.-B. "Thermal effects in laser-induced strong shock waves" AIP Conf. Proc. 309 1907-1910
- 1994, Lin, E.E. "Aggregation of crystalline clusters in the shock wave front propagating through condensed substances" Sov. J. Chem. Phys. 12 404-409
- 1994, Lin, C.-P., Goodings, D.J., Bernold, L.E., Dick, R.D. and Fourney, W.L. "Model studies of effects on Lunar soil of chemical explosions" ASCE J. Geotech. Engng 120 1684-1703

- 1994, Litvinov, B.V., Zeldovich, V.I., Rinkevich, O.S., Buzanov, V.I. and Purygin, N.P. "Microstructural effects in steel under the action of the quasispherically converging shock wave" J. Phys. IV France Colloq. C8 (DYMAT 94) 4 399-402
- 1994, Litvinov, B.V., Ptitsyna, N.V., Chitaikin, V.I. and Shibarshov, L.I. "On certain conditions for the ignition of thermonuclear fuel" Phys. Doklady 39 354-356
- 1994, Longuet-Higgins, M.S. "Inertial shocks in surface waves and collapsing bubbles", in "Bubble Dynamics and Interface Phenomena", ed. J.R. Blake, J.M. Boulton-Stone and N.H. Thomas, pp. 383-396, publ. Dordrecht, The Netherlands, Kluwer
- 1994, Löwer, T., Sigel, R., Eidmann, K., Földes, I.B., Hüller, S., Massen, J., Tsakiris, G.F., Witkowski, S., Preuss, W., Nishimura, H., Shiraga, H., Kato, Y., Nakai, S. and Endo, T. "Uniform multimegabar shock waves in solid driven by laser-generated thermal radiation" Phys. Rev. Letts 72 3186-3189
- 1994, Lu, G., Xu, K. and Li, S. "Alteration of the catalytic properties of anatase by shock-wave loading" Mater. Letts 21 251-253
- 1994, Lu, C. and Bai, Y.L. "Numerical simulation of microscopic evolution of spallation in an aluminium alloy", in "Proc. IUTAM Symp. on Impact Dynamics", ed. Z. Zheng and Q. Tan, pp. 466-470, publ. Beijing, China, Peking University Press
- 1994, Lu, F., Huan, S. and Ding, J. "Viscoplasticity and porosity effects on the shock propagation in PMMA and porous aluminum oxide" AIP Conf. Proc. 309 1013-1016
- 1994, Lukyanov, Y.L. "Characteristics of mass velocity profile on power-monolith contact in loading by a plane shock wave" Combust. Explos. Shock Waves 30 133-134
- 1994, Luther, G.G. and Warthen, B.J. "Microwave interferometry to elucidate shock properties" AIP Conf. Proc. 309 1755-1758
- 1994, Machcha, A.R. and Nemat-Nasser, S. "Pressure-shear recovery experiments" Mech. Mater. 18 49-54
- 1994, Maffre, P. and Peyrard, M. "A microscopic model for the propagation of detonations in solids" J. Phys.: Condens. Matter 6 4869-4878
- 1994, Malkov, I.Y., Titov, V.M., Kuznetsov, V.L. and Chuvilin, A.L. "Formation of carbon particles of onion structure from ultradisperse diamond" Combust. Explos. Shock Waves 30 131-132
- 1994, Mamalis, A.G., Szalay, A., Vaxevanidis, N.M. and Pantelis, D.I. "Macroscopic and microscopic phenomena in nickel/titanium 'shape-memory' bimetallic strips fabricated by explosive cladding and rolling" Mater. Sci. Engng A 188 267-275
- 1994, Mamalis, A.G., Vaxevanidis, N.M. and Szalay, A. "Fabrication of trimetallic strips by explosive cladding and rolling" J. Mater. Process. Technol. 45 407-414
- 1994, Mariotti, C. and Thomas, F. "Loi de comportement ARMOR pour géomatériaux sous chargement dynamique" J. Phys. IV France Colloq. C8 (DYMAT 94) 4 577-582

- 1994, Martinez, I., Agrinier, P., Scharer, U. and Javoy, M. "A SEM ATEM and stable-isotope study of carbonates from the Haughton impact crater, Canada" *Earth Planet. Sci. Letts* 121 559-574
- 1994, Martinez, A.R., Sheffield, S.A., Whitehead, M.C., Olivas, H.D. and Dick, J.J. "New LANL gas-driven two-stage gun" *AIP Conf. Proc.* 309 1643-1646
- 1994, Marton, F.C. and Cohen, R.E. "Prediction of a high pressure phase transition in alumina" *Amer. Mineralogist* 79 789-792
- 1994, Masaitis, V.L. "Impactites from Popigai Crater", in "Large Meteorite Impacts and Planetary Evolution", ed. B.O. Dressler, R.A.F. Grieve and V.L. Sharpton, pp. 153-162, publ. Boulder, CO, The Geological Society of America
- 1994, Mashimo, T. "Shock compression of ceramic materials: Yielding property" *AIP Conf. Proc.* 309 757-760
- 1994, Masse, J.-E. and Barreau, G. "Laser generation of stress waves in metal" *Surf. Coat. Technol.* 70 231-234
- 1994, McCall, K.R. and Guyer, R.A. "Equation of state and wave propagation in hysteretic nonlinear elastic materials" *J. Geophys. Res.* 99 23887-23897
- 1994, Mei, L., Xia, Y., Wang, Q., Xu, B., Tan, C., Zhao, S., Wang, X. and Wang, G. "Impulse-coupling coefficient of laser-surface interaction in air" *Chinese Phys. Letts* 11 250-252
- 1994, Mendes, R., Campos, J., Gois, J., Moutinho, C., Ribeiro, J. and Cortez, P. "Flyer plate impact initiation of industrial explosives", in "Proc. 25th Int. Ann. Conf. of Institut für Chemische Technologie", paper 85, publ. Karlsruhe, Germany, Fraunhofer-Institut für Chemische Technologie
- 1994, Menikoff, R. "Errors when shock waves interact due to numerical shock width" *SIAM J. Sci. Comput.* 15 1227-1242
- 1994, Merzhievskii, L.A. and Tyagelskii, A.V. "Modeling of dynamic compression of porous iron" *Combust. Explos. Shock waves* 30 522-530
- 1994, Meshcheryakov, Y.I. and Divakov, A.K. "Multiscale kinetics of microstructure and strain rate dependence of materials" *DYMAT Journal* 1 271-287
- 1994, Meshcheryakov, Y.I. and Vasilkov, V.B. "Kinetics of the structural levels and dynamic strength of metals" *Tech. Phys.* 39 893-900
- 1994, Meshcheryakov, Y.I., Vasilkov, V.B., Chernyshenko, A.I. and Atroshchenko, S.A. "Dynamic failure micromechanisms for ductile high-tensile steel" *Strength Mater.* 26 23-32
- 1994, Meshcheryakov, Y.I., Mahutov, N.A. and Atroshenko, S.A. "Micromechanisms of dynamic fracture of ductile high strength steel" *J. Mech. Phys. Solids* 42 1435-1457
- 1994, Meyers, M.A. "Dynamic failure: mechanical and microstructural aspects" *J. Phys. IV France Colloq. C8 (DYMAT 94)* 4 597-621

- 1994, Meyers, M.A. "Dynamic Behavior of Materials", publ. New York, Wiley Interscience
- 1994, Meyers, M.A., Yu, L.-H. and Vecchio, K.S. "Shock synthesis of silicides. 2: Thermodynamics and kinetics" *Acta metall. mater.* 42 715-729
- 1994, Meyers, M.A., Benson, D.J. and Shang, S.S. "Energy expenditure and limitations in shock consolidation" *AIP Conf. Proc.* 309 1239-1242
- 1994, Michaelis, M.M. "Shock simulation with magnetic pucks" *Amer. J. Phys.* 62 718-722
- 1994, Mikaelian, K.O. "Oblique shocks and the combined Rayleigh-Taylor, Kelvin-Helmholtz, and Richtmyer-Meshkov instabilities" *Phys. Fluids* 6 1943-1945
- 1994, Mikhailov, A. "Formation of shocks and breakup of wave patterns in anisotropic excitable media" *Phys. Rev. E* 49 5875-5877
- 1994, Miller, G.H. and Puckett, E.G. "Edge effects in molybdenum-encapsulated molten silicate shock wave targets" *J. Appl. Phys.* 75 1426-1434
- 1994, Mintmire, J.W., Robertson, D.H. and White, C.T. "Molecular dynamics simulations of void collapse in shocked model-molecular solids" *Phys. Rev. B* 49 14859-14864
- 1994, Mintmire, J.W., Robertson, D.H., Elert, M.L., Brenner, D.W. and White, C.T. "Molecular dynamics of void collapse mechanisms in shocked media" *AIP Conf. Proc.* 309 969-972
- 1994, Mogilevskii, M.A., Bulgakov, V.V. and Kormachev, A.D. "Deformation of armco iron and copper at strain rates of $10^4 - 10^5 \text{ s}^{-1}$ " *Combust. Explos. Shock Waves* 30 350-353
- 1994, Mohanty, B. "Characteristics of shock wave transmission in porous viscoelastic explosive matrix", in "Proc. 15th Symp. on Explosives and Pyrotechnics", paper 5, publ. Oaks, PA, Franklin Applied Physics
- 1994, Molodets, A.M. and Eremchenko, E.N. "A spall fracture kinetic model founded on direct measurement characteristics" *DYMAT Journal* 1 315-321
- 1994, Molodets, A.M. and Eremchenko, E.N. "Electrical response of a piezoelectric polymer film to shock compression" *Combust. Explos. Shock waves* 30 715-719
- 1994, Mond, M. and Rutkevich, I. "Spontaneous acoustic emission from strong ionizing shocks" *J. Fluid Mech.* 275 121-146
- 1994, Moulin, N., Bontaz, J., Martinez, E. and Perraud, J. "Etude du comportement dynamique des matériaux: prise en compte de l'élastoplasticité et de l'endommagement" *J. Phys. IV France Colloq. C8 (DYMAT 94)* 4 571-576
- 1994, Mouritz, A.P., Saunders, D.S. and Buckley, S. "The damage and failure of GRP laminates by underwater explosion shock loading" *Composites* 25 431-437
- 1994, Mulford, R.N., Sheffield, S.A. and Alcon, R.R. "Preshock desensitization of PBX explosives" *AIP Conf. Proc.* 309 1405-1408

- 1994, Myagkov, N.N. "Nonlinear waves in shock-loaded condensed matter" J. Phys. D: Appl. Phys. 27 1678-1686
- 1994, Myagkov, N.N. "Interaction of nonlinear waves in materials with elastoplastic behavior" J. Appl. Mech. Tech. Phys. 35 246-256
- 1994, Nabatov, S.S. and Yakushev, V.V. "Analysis of the response of piezopolymer pressure gauges to a plane shock-wave" Combust. Explos. Shock Waves 30 383-388
- 1994, Nabatov, S.S. and Lebedev, A.V. "Use of electrical response of semiconducting coupling for the registration of chemical transform behind the shock wave front" Khim. Fiz. 13 175-176
- 1994, Nabatov, S.S. and Lebedev, A.V. "Thermoelectric signals generated by shock pressurization of a semiconductor sample in a recovery ampule" Sov. J. Chem. Phys. 12 225-228
- 1994, Nagayama, K. and Mori, Y. "Simple method of calculating Grüneisen parameter based on the shock Hugoniot data for solids" J. Phys. Soc. Jpn 63 4070-4077
- 1994, Nagayama, K. "New method of calculating shock temperature and entropy of solids based on the Hugoniot data" J. Phys. Soc. Jpn 63 3737-3743
- 1994, Nagayama, K. "New thermal variables of condensed matter at high pressure and temperatures" J. Phys. Soc. Jpn. 63 3729-3736
- 1994, Nagayama, K. "Approximate solution of converging shock growth in condensed media" Jpn. J. Appl. Phys. Letts 33 1044-1045
- 1994, Nahme, H., Hohler, V. and Stilp, A. "Dynamic material properties and terminal ballistic behaviour of shock-loaded silicon-nitride ceramics" J. Phys. IV France Colloq. C8 (DYMAT 94) 4 237-242
- 1994, Nahme, H. and Worswick, M.J. "Dynamic properties and spall plane formation of brass" J. Phys. IV France Colloq. C8 (DYMAT 94) 4 707-712
- 1994, Nahme, H., Hohler, V. and Stilp, A. "Determination of the dynamic material properties of shock-loaded silicon-nitride" AIP Conf. Proc. 309 765-768
- 1994, Nakamura, A. and Mashimo, T. "Shock-induced phase transition of AlN" AIP Conf. Proc. 309 303-306
- 1994, Nancheva, N., Popov, G. and Misheva, M. "Positron annihilation in shock loaded low-alloyed Mn-Si steel" Scripta metall. mater. 30 1219-1222
- 1994, Nebogatov, V.E., Shunin, V.M. and Yakushev, V.V. "The effect of heat treatment of polyvinylidene fluoride piezoelectric films on their electric response to shock compression" Sov. J. Chem. Phys. 12 220-224
- 1994, Nellis, W.J. "Fluids at high shock pressures and temperatures and some thoughts about future possibilities" AIP Conf. Proc. 309 61-64
- 1994, Nellis, W.J., Weir, S.T., Hinsey, N.A., Balachandran, U., Kramer, M.J. and Raman, R. "Disks of $\text{YBa}_2\text{Cu}_3\text{O}_7$ shocked to 10 GPa pressures" AIP Conf. Proc. 309 695-698

- 1994, Nemes, J.A. and Randles, P.W. "Constitutive modeling of high strain rate deformation and spall fracture of graphite/PEEK composites" *Mech. Mater.* 19 1-14
- 1994, Nemish, Y.N. "On the solution of three-dimensional boundary value problems for layered bodies with nonplanar interfaces" *Int. Appl. Mech.* 30 101-109
- 1994, Nesterenko, V.F. "Solitary waves in discrete media with anomalous compressibility and similar to "sonic vacuum"" *J. Phys. IV France Colloq. C8 (DYMAT 94)* 4 729-734
- 1994, Nesterenko, V.F., Meyers, M.A., Chen, H.C. and LaSilvia, J.C. "Controlled high-rate localized shear in porous reactive media" *Appl. Phys. Letts* 65 3069-3071
- 1994, Nesterenko, V.F., Lukyanov, Y.L. and Bondar, M.P. "Deformation of the contact zone in the formation of a 'cold' boundary layer" *Combust. Explos. Shock Waves* 30 693-695
- 1994, Nesterenko, V.F., Bondar, M.P. and Ershov, I.V. "Instability of plastic flow at dynamic pore collapse" *AIP Conf. Proc.* 309 1173-1176
- 1994, Norman, M.D. "Sudbury igneous complex: Impact melt of endogenous magma? Implications for lunar crustal evolution", in "Large Meteorite Impacts and Planetary Evolution", ed. B.O. Dressler, R.A.F. Grieve and V.L. Sharpton, pp. 331-341, publ. Boulder, CO, The Geological Society of America
- 1994, Novikov, S.A., Pogorelov, A.P. and Sinitsyna, L.M. "The formation of smooth spalls in steel during the interaction of glancing detonation waves" *Combust. Explos. Shock Waves* 30 537-539
- 1994, Novikov, S.A., Ruzanov, A.I., Trunin, I.R. and Uchaev, A.Y. "Stress wave propagation and fracture processes in metals during rapid bulk heating" *Strength Mater.* 26 137-140
- 1994, Oda, H., Hirai, H., Kondo, K. and Sato, T. "Magnetic properties of shock-compacted high-coercivity magnets with a nanometer-sized microstructure" *J. Appl. Phys.* 76 3381-3386
- 1994, Ogorodnikov, V.A., Luchinin, V.I., Tyunkin, E.S., Grigorev, V.A., Tsoi, A.P. and Khokhlov, A.A. "On the behavior of composites during high velocity stretching (spalling)" *Sov. J. Chem. Phys.* 12 241-243
- 1994, Oh, K.-H., Yang, Y.-J., Kim, H.-J. and Kim, H.W. "A simple model for multiple shock Hugoniot state" *AIP Conf. Proc.* 309 85-88
- 1994, Olim, M., van Dongen, M.E.H., Kitamura, T. and Takayama, K. "Numerical simulation of the propagation of shock waves in compressible open-cell porous foams" *Int. J. Multiphase Flow* 20 557-568
- 1994, Onodera, H. and Takayama, K. "Shock wave structure in polyurethane foam" *JSME Int. J. B* 37 268-274
- 1994, Oran, E.S. and DeVore, C.R. "The stability of imploding detonations: Results of numerical simulations" *Phys. Fluids* 6 369-380

- 1994, Oyanagi, M., Kudo, N., Yanagida, Y., Iwama, N. and Okazaki, K. "Measurement of shock-wave pressure distribution of extracorporeal shock-wave lithotripter using pressure-sensitive paper: Practical usefulness and limitations" *Jpn J. Appl. Phys.* 33 3155-3158
- 1994, Page, N.W. "Particle morphology and packing effects on the shock loading of powders" *Shock Waves* 4 73-80
- 1994, Paillé, L., Gerland, M., Villain, J.P., Badawi, K.F., Presles, H.M. and Bouchet, B. "Propriétés mécaniques de surface d'un acier inoxydable traité par explosif" *J. Phys. III France* 4 305-319
- 1994, Paisley, D.L., Warnes, R.H. and Stahl, D.B. "Experimental techniques for subnanosecond resolution of laser-launched plates and impact studies" *Proc. SPIE* 2273 167-172
- 1994, Pangilinan, G.I. and Gupta, Y.M. "Time-resolved Raman measurements in nitromethane shocked to 140 kbar." *J. Phys. Chem.* 98 4522-4529
- 1994, Partom, Y. "Calibrating a material model for AD995 alumina from plate impact VISAR profiles" *J. Phys. IV France Colloq. C8 (DYMAT 94)* 4 495-500
- 1994, Pavlovskii, A.I., Dolotenko, M.I., Bykov, A.I., Kolokolchikov, N.P. and Tatsenko, O.M. "Generation of reproducible pulse magnetic fields up to 20 MGs" *Phys. Doklady* 39 42-44
- 1994, Pershin, S.V., Petrov, E.A. and Tsaplin, D.I. "Influence of the molecular structure of explosives on the rate of formation, yield, and properties of ultradisperse diamond" *Combust. Explos. Shock Waves* 30 235-238
- 1994, Persson, P.-A., Helmberg, R. and Lee, J. "Rock Blasting and Explosives Engineering", publ. Boca Raton, Florida, CRC Press
- 1994, Podlesak, M. "Electrical performance of explosive-driven switches for slapper detonator applications" *Propell. Explos. Pyrotech.* 19 257-265
- 1994, Podurets, M.A., Ktitorov, V.M., Trunin, R.F., Popov, L.V., Matveev, A.Y., Pechenkin, B.V. and Sevastyanov, A.G. "Shock wave compression of aluminum at pressures of 1.7 TPa" *High Temp.* 32 890-892
- 1994, Polanskey, C.A. and Ahrens, T.J. "Scaling craters in carbonates: Electron paramagnetic resonance analysis of shock damage" *J. Geophys. Res.* 99 5621-5638
- 1994, Polishchuk, A.Y. "Kinetic and optical properties of condensed matter in ultra strong laser field" *AIP Conf. Proc.* 309 1895-1987
- 1994, Popov, V.L. "Dynamics of plastic rotations in a medium with dislocations and disclinations" *Tech. Phys. Letts* 20 576-577
- 1994, Potter, D.K. and Ahrens, T.J. "Shock induced formation of $MgAl_2O_4$ spinel from oxides" *Geophys. Res. Letts* 21 721-724
- 1994, Prieto, F.E. and Renero, C. "Critical analysis of universality at shock pressures" *Phys. Rev. B* 49 15498-15504

- 1994, Prieto, F.E., Loske, A.M. and Yarger, F.L. "Study of pressure transducers and electrodes for underwater shock wave generators" AIP Conf. Proc. 309 1723-1726
- 1994, Priou, P., Dommanget, M. and Clerc, R. "Etude de l'écaillage du tantale aux très grandes vitesses de déformation" J. Phys. IV France Colloq. C8 (DYMAT 94) 4 295-300
- 1994, Psakhe, S.G., Saraev, D.Y. and Korostelev, S.Y. "Fine structure of a perturbation propagation front during pulsed local heating in a one-dimensional lattice" Tech. Phys. Letts 20 64-65
- 1994, Psakhe, S.G. and Dmietriev, A.I. "Appearance of dynamic vortex structure during high-velocity deformation of material containing a system of micropores" Tech. Phys. 39 850-852
- 1994, Raiser, G.F., Wise, J.L., Clifton, R.J., Grady, D.E. and Cox, D.E. "Plate impact response of ceramics and glasses" J. Appl. Phys. 75 3862-3869
- 1994, Raiser, G. and Clifton, R.J. "Failure waves in uniaxial compression of an aluminosilicate glass" AIP Conf. Proc. 309 1039-1042
- 1994, Rajendran, A.M. "Modeling the impact behavior of AD85 ceramic under multiaxial loading" Int. J. Impact Engng 15 749-768
- 1994, Rajendran, A.M. "Modeling the shock response of AD995 alumina" AIP Conf. Proc. 309 725-728
- 1994, Ramakrishnan, N. "Speed of sound in porous materials" Bull. Mater. Sci. 17 499-504
- 1994, Ree, F.H. "One- and multi-component theories of mixtures" AIP Conf. Proc. 309 77-80
- 1994, Reed, R.P. and Greenwoll, J.I. "Characteristics and pulsed radiation response of non-ideal quartz shock stress gauges" AIP Conf. Proc. 309 1711-1714
- 1994, Reed, R.P., Greenwoll, J.I., Bauer, F., Lee, L.M., Davies, F.W. and Johnson, D.J. "Pulsed radiation response of stressed PVDF shock stress gauges" AIP Conf. Proc. 309 1743-1746
- 1994, Reimold, W.U. and Colliston, W.P. "Pseudotachylites of the Vredefort Dome and the surrounding Witwatersrand Basin, South Africa", in "Large Meteorite Impacts and Planetary Evolution", ed. B.O. Dressler, R.A.F. Grieve and V.L. Sharpton, pp. 177-196, publ. Boulder, CO, The Geological Society of America
- 1994, Remiot, C., Chapron, P. and Demay, B. "A flash X-ray radiography diagnostic for studying surface phenomena under shock loading" AIP Conf. Proc. 309 1763-1766
- 1994, Reynard, B., Petit, P.E., Guyot, F. and Gillet, P. "Pressure-induced structural modifications in olivine: A Raman spectroscopic study" Phys. Chem. Minerals 20 556-562

- 1994, Rink, K., Delacrétaz, G., Pittomvils, G., Boving, R. and Lafaut, J.P. "Incidence of cavitation in the fragmentation process of extracorporeal shock wave lithotriptors" *Appl. Phys. Letts* 64 2596-2598
- 1994, Robertson, D.H., Brenner, D.W. and White, C.T. "Effects of crystal orientation on the properties of a chemically-sustained shock wave in a model energetic material" *AIP Conf. Proc.* 309 1369-1372
- 1994, Robertson, D.H. "Molecular dynamics simulations of shock processes" *AIP Conf. Proc.* 309 1345-1348
- 1994, Romain, J.P., Bauer, F., Zagouri, D. and Boustie, M. "Measurements of laser-induced shock pressures using PVDF gauges" *AIP Conf. Proc.* 309 1915-1918
- 1994, Rosenberg, Z. and Partom, Y. "Accounting for the Hugoniot elastic limits of polymers by using pressure-dependent yield criterion" *J. Appl. Phys.* 76 1935-1936
- 1994, Rosenberg, Z. "On the shear strength of shock loaded brittle solids" *J. Appl. Phys.* 76 1543-1546
- 1994, Rosenberg, Z. "The dynamic response of ceramics to shock wave loading", in "Shock and Impact on Structures", ed. C.A. Brebbia and V. Sánchez-Gálvez, pp. 73-105, publ. Southampton, Computational Mechanics Publications
- 1994, Rosenberg, Z. and Brar, N.S. "The elasto-plastic response of lateral piezoresistance gauges in shock wave studies" *Appl. Acoustics* 41 377-386
- 1994, Rosenberg, Z. and Brar, N.S. "Hysteresis of lateral piezoresistive gauges" *AIP Conf. Proc.* 309 1707-1710
- 1994, Rosenberger, T.E. "Workshop report: Measurement techniques in highly transient, spectrally rich combustion environments", in "Proc. 31st JANNAF Combustion Subcommittee Meeting. Vol. 1", ed. M.T. Greenaway, pp. 345-354, publ. Columbia, MD, Chemical Propulsion Information Agency
- 1994, Rosenberger, T.E., Colburn, J.W., Ruth, C.R., Hewitt, J.R., Ridgley, M.B., Tuerk, J.F. and Koszoru, A.A. "Pressure transducer performance and measurement trade-offs in a transient, high temperature, combustion environment", in "Proc. 31st JANNAF Combustion Subcommittee Meeting. Vol. 1", ed. M.T. Greenaway, pp. 355-373, publ. Columbia, MD, Chemical Propulsion Information Agency
- 1994, Rossi, P. "Dynamic behaviour of concrete: from the material to the structure" *Mater. Struct.* 27 319-323
- 1994, Rowan, L.R. and Ahrens, T.J. "Observations on impact-induced molten metal silicate partitioning" *Earth Planet. Sci. Letts* 122 71-88
- 1994, Rozanov, V.V., Saletskii, A.M., Sysoev, N.N. and Urazbaev, A.V. "Luminescent probe study of shock waves in condensed media" *Sov. J. Chem. Phys.* 12 210-214

- 1994, Ruggeri, T., Muracchini, K. and Seccia, L. "Continuum approach to phonon gas and shape changes of second sound via shock wave theory" *Nuovo Cimento D* 16 15-44
- 1994, Ruoff, A.L. "Implications of experiments on hydrogen" *AIP Conf. Proc.* 309 849-852
- 1994, Rusak, V.N., Ryzhanskii, V.A., Ivanov, A.G. and Zaikin, S.N. "Explosion resistance of welded cylindrical titanium shells" *Combust. Explos. Shock Waves* 30 549-556
- 1994, Rutkevich, I., Zaretsky, E. and Mond, M. "Resonant reflection of two-dimensional acoustic waves from shocks in solids" *J. Phys. IV France Colloq. C8 (DYMAT 94)* 4 723-728
- 1994, Ruuskanen, P.R., Kiiski, A.A. and Heczko, O. "Microstructure of dynamically compacted amorphous materials" *AIP Conf. Proc.* 309 1189-1192
- 1994, Rybakov, A.P. "Experimental diagnostics of shocked substances: Method and results" *Meas. Sci. Technol.* 5 1560-1565
- 1994, Ryder, G. "Coincidence in time of the Imbrium basin impact and Apollo 15 KREEP volcanic flows: The case for impact-induced melting", in "Large Meteorite Impacts and Planetary Evolution", ed. B.O. Dressler, R.A.F. Grieve and V.L. Sharpton, pp. 11-18, publ. Boulder, CO, The Geological Society of America
- 1994, Saccomandi, G. "Acceleration waves in a thermo-microstretch fluid" *Int. J. Non-Linear Mech.* 29 809-817
- 1994, Sack, R.O., Ghiorso, M.S., Wang, M.S. and Lipschutz, M.E. "Igneous inclusions from ordinary chondrites: High temperature cumulates and a shock melt" *J. Geophys. Res.* 99 26029-26044
- 1994, Sadovskii, V.M. "Toward a theory of the propagation of elastoplastic waves in strain-hardening media" *J. Appl. Mech. Tech. Phys.* 35 798-804
- 1994, Sadovskii, M.A., Rodionov, V.N. and Goncharov, A.I. "On a kinetics of origin of defects in metal under dynamic load" *Phys. Doklady* 39 121-122
- 1994, Sairam, S. and Clifton, R.J. "Pressure-shear impact investigation of dynamic fragmentation and flow of ceramics", in "Mechanical Testing of Ceramics and Ceramic Composites (AMD-Vol. 197)", ed. A. Gilat, pp. 23-40, publ. New York, American Society of Mechanical Engineers
- 1994, Saka, M., Ohba, S., Aizawa, N. and Abe, H. "Analysis of nonlinear wave propagation and shock wave formation in quasi-brittle material" *JSME Int. J. A* 37 421-427
- 1994, Sandstrom, F.W., Persson, P.A. and Olinger, B. "Isothermal and shock compression of high density ammonium nitrate and ammonium perchlorate" *AIP Conf. Proc.* 309 1409-1412
- 1994, Sandstrom, F.W. "Equation of state of ammonium nitrate and ammonium perchlorate", MSc thesis, Research Center for Energetic Materials

- 1994, Satoh, A. "Rankine-Hugoniot relations for Lennard-Jones liquids" *Trans. ASME: J. Fluids Engng* 116 625-630
- 1994, Sawaoka, A.B., Takamatsu, M. and Akashi, T. "Shock compression synthesis of diamond" *Adv. Mater.* 6 346-354
- 1994, Sawaoka, A.B., Dan, K., Tamura, H., Horie, Y. and Yamada, K. "Local rapid quenching in a powder mixture and its utilization to synthesize novel compounds in the B-C-N system" *AIP Conf. Proc.* 309 1209-1212
- 1994, Scalia, A. "Shock waves in viscoelastic materials with voids" *Wave Motion* 19 125-133
- 1994, Schultz, P.H., Koeberl, C., Bunch, T., Grant, J. and Collins, W. "Ground truth for oblique impact processes: New insight from the Rio Cuarto, Argentina, crater field" *Geology* 22 889-892
- 1994, Segletes, S.B. "Further examinations on the thermodynamic stability of the Mie-Grüneisen equation of state" *J. Appl. Phys.* 76 4560-4566
- 1994, Seitz, M.W., Seitz, P.A. and Skews, B.W. "Three-color common-axis light source suitable for shock wave studies" *Opt. Engng* 33 2903-2906
- 1994, Seitz, M.W., Scott, D.M. and Skews, B.W. "Color schlieren photographic system" *Opt. Engng* 33 2907-2910
- 1994, Sekine, T., Maruyama, Y., Nagata, M., Mizutani, N., Kitagawa, H. and Inoguchi, H. "Shock-induced phase transformation of fullerenes" *AIP Conf. Proc.* 309 655-658
- 1994, Semenenko, V.P. and Golovko, N.V. "Shock-induced black veins and organic compounds in ordinary chondrites" *Geochim. Cosmochim. Acta* 58 1525-1535
- 1994, Senf, H., Strassburger, E. and Rothenhäusler, H. "Stress wave induced damage and fracture in impacted glasses" *J. Phys. IV France Colloq. C8 (DYMAT 94)* 4 741-746
- 1994, Seward, C.R., Field, J.E. and Coad, E.J. "Liquid impact erosion of bulk diamond, diamond composites and diamond coatings" *J. Hard Mater.* 5 49-62
- 1994, Shang, S.S., Benson, D.J. and Meyers, M.A. "Microstructurally-based analysis and computational modeling of shock consolidation" *J. Phys. IV France Colloq. C8 (DYMAT 94)* 4 521-526
- 1994, Shaw, M.S. "Chemical equilibrium in high pressure molecular fluid mixtures" *AIP Conf. Proc.* 309 65-68
- 1994, Sheffield, S.A., Gustavsen, R.L., Alcon, R.R., Graham, R.A. and Anderson, M.U. "Particle velocity and stress measurements in low density HMX" *AIP Conf. Proc.* 309 1377-1380
- 1994, Shen, L., Xu, S., Song, L. and Chen, S. "Experimental study of dynamic response for epoxy/SiO₂ microballoon composite material", in "Proc. IUTAM Symp. on Impact Dynamics", ed. Z. Zheng and Q. Tan, pp. 407-416, publ. Beijing, China, Peking University Press

- 1994, Sherief, H.H. "A thermo-mechanical shock problem for thermoelasticity with two relaxation times" *Int. J. Engng Sci.* 32 313-325
- 1994, Shimamura, S. "A computer model for the evolution of impact damage in brittle materials" *AIP Conf. Proc.* 309 1169-1172
- 1994, Shorokhov, E.V., Gornovoi, A.A. and Denisenko, A.A. "Elastic precursor attenuation in iron and steels" *J. Phys. IV France Colloq. C8 (DYMAT 94)* 4 409-414
- 1994, Shorokhov, E.V. and Litvinov, B.V. "Shock compressibility of TATB based explosive compositions in the pressure range 0.1 to 40 GPa" *Sov. J. Chem. Phys.* 12 1070-1072
- 1994, Simon, S.B., Yoneda, S., Grossman, L. and Davis, A.M. "A CaAl_4O_7 -bearing refractory spherule from Murchison: Evidence for very high temperature melting in the Solar nebula" *Geochim. Cosmochim. Acta* 58 1937-1949
- 1994, Skews, B.W. "Oblique reflection of shock waves from rigid porous materials" *Shock Waves* 4 145-154
- 1994, Solie, D.J., Johnson, J.B. and Barrett, S.A. "The response of natural snow to explosive shock waves" *AIP Conf. Proc.* 309 1139-1142
- 1994, Somayazulu, M.S., Sharma, S.M. and Sikka, S.K. "Molecular dynamical calculations of α -quartz: Implications for shock results" *AIP Conf. Proc.* 309 815-818
- 1994, Song, H., Bless, S.J., Brar, N.S., Simha, C.H. and Jang, S.D. "Shock properties of Al_2O_3 and ZrO_2 ceramics" *AIP Conf. Proc.* 309 737-740
- 1994, Song, S. and Gray III, G.T. "Omega-phase formation in shock-loaded zirconium" *AIP Conf. Proc.* 309 251-254
- 1994, Staehler, J.M., Predebon, W.W. and Pletka, B.J. "The response of a high purity alumina to plate impact testing" *AIP Conf. Proc.* 309 745-748
- 1994, Stankevich, S.V. and Shvetsov, G.A. "Ultimate velocities of plates accelerated by magnetic fields" *J. Appl. Mech. Tech. Phys.* 35 336-344
- 1994, Steinberg, D.J. "A rate-dependent constitutive model for molybdenum" *AIP Conf. Proc.* 309 993-996
- 1994, Stepanov, G.V. and Maslakov, A.V. "Variation of the mechanical characteristics of thin sheet metal with a stress raiser caused by the effect of pulsed pressure with an amplitude of up to 2 GPa" *Strength Mater.* 26 503-509
- 1994, Stöffler, D. and Langenhorst, F. "Shock metamorphism of quartz in nature and experiment. 1: Basic observations and theory" *Meteoritics* 29 155-181
- 1994, Stronge, W.J. "Planar impact of rough compliant bodies" *Int. J. Impact Engng* 15 435-450

- 1994, Strutt, A.J., Meyers, M.A. and Vecchio, K.S. "Analytical electron microscopy of shock-synthesized niobium silicide composites", in "Proc. 52nd Annual Meeting of the Microscopy Society of America", pp. 704-705, publ. San Francisco, CA, San Francisco Press
- 1994, Strutt, A.J., Vecchio, K.S., Yu, L.-H., Meyers, M.A. and Graham, R.A. "Shock synthesis of nickel aluminides" AIP Conf. Proc. 309 1259-1262
- 1994, Sugiyama, M., Kikkawa, H. and Mizuno, K. "Microscopic approach to shock waves in crystal solids: 1" Jpn. J. Appl. Phys. 33 1450-1467
- 1994, Sun, C., Zhuang, S., Wang, Y. and Liu, C. "Dynamic failure and fracture in metals at high strain rate", in "Proc. IUTAM Symp. on Impact Dynamics", ed. Z. Zheng and Q. Tan, pp. 335-346, publ. Beijing, China, Peking University Press
- 1994, Suresh, N., Jyoti, G., Gupta, S.C., Sangeeta, S.K.S. and Sabharwal, S.C. "Shock-induced amorphization of q-GeO₂" J. Appl. Phys. 76 1530-1534
- 1994, Sutherland, G.T., Forbes, J.W., Lemar, E.R., Ashwell, K.D. and Baker, R.N. "Multiple stress-time profiles in a RDX/AP/Al/HTPB plastic bonded explosive" AIP Conf. Proc. 309 1381-1384
- 1994, Sutherland, G.T., Lemar, E.R., Forbes, J.W., Anderson, E., Miller, P., Ashwell, K.D., Baker, R.N. and Liddiard, T.P. "Shock wave and detonation wave response of selected HMX-based research explosives with HTPB binder systems" AIP Conf. Proc. 309 1413-1416
- 1994, Sveshnikova, Y.I. "Shock waves in a weakly anisotropic elastic incompressible material" J. Appl. Math. Mech. 58 521-530
- 1994, Swift, R.P. and Snell, C.M. "Source conditions for exploding wire stress wave impact experiments" AIP Conf. Proc. 309 1671-1674
- 1994, Syono, Y., Taguchi, H., Fukai, Y., Atou, T., Kusaba, K. and Fukuoka, K. "Shock compression of VH_{0.50}, NbH_{0.75}, and TaH_{0.50}: A comparative study" AIP Conf. Proc. 309 861-864
- 1994, Szulc, W., Pietrzyk, M., Dyja, H. and Pilarczyk, J.W. "Theoretical and experimental analysis of drawing of steel rods covered with copper" J. Mater. Process. Technol. 45 401-406
- 1994, Taguchi, H., Fukai, Y., Atou, T., Fukuoka, K. and Syono, Y. "Shock compression of NbH_{0.75} and TaH_{0.50}: Universal compression behavior of hydrogen in metallic environments" Phys. Rev. B 49 3025-3029
- 1994, Takao, Y., Wang, W.-X., Matsubara, T., Fukuda, S., Wu, Q. and Koga, Y. "Characteristic damage of SUS304 stainless steel subjected to repeated laser heating shocks (in Japanese)" J. Soc. Mater. Sci. Jpn 43 853-859
- 1994, Tang, W.H., Jing, F.Q., Hu, J.B. and Zhang, R.Q. "New method for determining the shock temperature of metals" Chinese Phys. Letts 11 569-572

- 1994, Tang, Z.P., Li, X.Z., Zhou, G.Q., Lin, S.B., Li, D.H. and Wang, W.Q. "Experimental investigation of shear stress effects on shock-induced phase transition in InSb single crystal" AIP Conf. Proc. 309 327-330
- 1994, Tashiro, S., Mashimo, T. and Nishida, M. "Consolidation of tantalum nitride system powders by shock compression" AIP Conf. Proc. 309 1295-1298
- 1994, Teplov, V.A., Stepanov, G.V., Zubov, V.I. and Tupitsa, D.I. "Phase transitions and formation of defects under dynamic loading of iron-nickel alloy" Strength Mater. 26 33-39
- 1994, Terao, K. and Furushoh, T. "Shock tube using free piston driven by detonation waves" Jpn. J. Appl. Phys. 33 2811-2816
- 1994, Teslenko, T.S. "X-ray investigation of transformations in zirconium dioxide after explosive loading" Combust. Explos. Shock Waves 30 217-221
- 1994, Thadhani, N.N. "Shock-induced and shock-assisted solid-state chemical reactions in powder mixtures" J. Appl. Phys. 76 2129-2138
- 1994, Thadhani, N.N., Dunbar, E. and Graham, R.A. "Characteristics of shock-compressed configuration of titanium and silicon powder mixtures" AIP Conf. Proc. 309 1307-1310
- 1994, Theofanous, T.G., Chen, X., Di Piazza, P., Epstein, M. and Fauske, H.K. "Ignition of aluminum droplets behind shock waves in water" Phys. Fluids 6 3513-3515
- 1994, Thomas, L.M. and Shanker, J. "Birch equation of state for alkali halide crystals" Phys. Status Solidi B 181 387-395
- 1994, Tokheim, R.E. "Interpretation of quartz-gage response in radiation problems" AIP Conf. Proc. 309 1715-1718
- 1994, Tollier, L., Cottet, F., Boustie, M. and Ansart, J.P. "Experimental and numerical studies of Ti6Al4V spallation by laser and impact loadings" AIP Conf. Proc. 309 1047-1050
- 1994, Tong, W., Ravichandran, G., Christman, T. and Vreeland Jr., T. "Processing and properties of SiC-particulate reinforced titanium matrix composites by shock wave consolidation" J. Phys. IV France Colloq. C8 (DYMAT 94) 4 331-336
- 1994, Tong, W. and Ravichandran, G. "Rise time in shock consolidation of materials" Appl. Phys. Letts 65 2783-2785
- 1994, Tong, W. and Ravichandran, G. "Shock consolidation of novel materials", in "Wave Propagation and Emerging Technologies (AMD vol. 188)", ed. V.K. Kinra, R.J. Clifton and G.C. Johnson, pp. 121-132, publ. New York, American Society of Mechanical Engineers
- 1994, Tonks, D.L. "Plastic flow in weak shock waves in uranium" Sov. J. Chem. Phys. 12 866-871
- 1994, Tonks, D.L., Hixson, R.S., Johnson, J.N. and Gray III, G.T. "Dislocation drag contribution to high-rate plastic deformation in shock-loaded tantalum" AIP Conf. Proc. 309 997-1000

- 1994, Towler, M.D., Hines, R.I., Allan, N.L., Braithwaite, M. and Mackrodt, W.C. "Equations of state for polar solids at high pressures and elevated temperatures" AIP Conf. Proc. 309 129-132
- 1994, Tranchet, J.-Y. "A plasticity model for the shock-wave behaviour of pure alumina" J. Phys. IV France Colloq. C8 (DYMAT 94) 4 289-294
- 1994, Tranchet, J.-Y. "Comportement de deux matériaux fragiles polycristallins sous l'effet de la propagation d'une onde sphérique divergente", PhD thesis, Univ. of Bordeaux I
- 1994, Tranchet, J.Y. and Cagnoux, J. "A model of plasticity with strain-hardening for shock-wave behavior of non-porous and porous alumina" AIP Conf. Proc. 309 1017-1020
- 1994, Trebinski, R., Wlodarczyk, E., Cudzilo, S., Paszula, J. and Trzcinski, W. "Investigations into the detonative synthesis of β -BN" AIP Conf. Proc. 309 1283-1286
- 1994, Trott, W.M. "Investigation of the dynamic behavior of laser-driven flyers" AIP Conf. Proc. 309 1655-1658
- 1994, Trucano, T.G. and Chhabildas, L.C. "Calculations supporting hypervelocity launcher development" AIP Conf. Proc. 309 1639-1642
- 1994, Trunin, R.F. "Shock compressibility of condensed materials in strong shock waves generated by underground nuclear explosions" Physics Uspekhi 37 1123-1145
- 1994, Trunin, R.F., Podurets, M.A., Simakov, G.V., Popov, L.V. and Sevastyanov, A.G. "Shock compression of molybdenum under pressures of 1.4 TPa" High Temp. 32 736-737
- 1994, Trunin, R.F., Ilkaeva, L.A., Podurets, M.A., Popov, L.V., Pechenkin, B.V., Prokhorov, L.V., Sevastyanov, A.G. and Khrustalev, V.V. "Shock compressibility measurements for iron, copper, lead and titanium under pressures of 20 TPa" High Temp. 32 646-649
- 1994, Truskinovsky, L. "Transition to detonation in dynamic phase changes" Arch. Ration. Mech. Anal. 125 375-397
- 1994, Tsai, D.H. and Armstrong, R.W. "Defect-enhanced structural relaxation mechanism for the evolution of hot spots in rapidly compressed crystals" J. Phys. Chem. 98 10997-11000
- 1994, Tse, J.S. and Klug, D.D. "Molecular dynamics studies of high pressure phase transitions and structures" AIP Conf. Proc. 309 209-212
- 1994, Tunaboylu, B., McKittrick, J., Nellis, W.J. and Nutt, S.R. "Dynamic compaction of Al_2O_3 - ArO_2 compositions" J. Amer. Ceram. Soc. 77 1605-1612
- 1994, Urtiew, P.A. "Diagnostic of shock wave processes" Sov. J. Chem. Phys. 12 831-865

- 1994, Usherenko, S.M., Nozdrin, V.F., Gubenko, S.I. and Romanov, G.S. "Motion and deceleration of explosively-accelerated solid particles in a metallic target" *Int. J. Heat Mass Transfer* 37 2367-2375
- 1994, Utkin, A.V., Kanel, G.I., Baumung, K., Karow, H.U., Rusch, D. and Licht, V. "Ion beam diagnostics by methods of shock-wave physics" *AIP Conf. Proc.* 309 1891-1894
- 1994, Vakhnenko, V.A., Danilenko, V.A. and Kulich, V.V. "Averaged description of shock wave processes in periodic media" *Sov. J. Chem. Phys.* 12 536-546
- 1994, van Thiel, M. and Ree, F.H. "Unlike pair interactions in N₂-H₂O mixtures" *AIP Conf. Proc.* 309 81-84
- 1994, Varentsov, E.A., Sokolov, M.F. and Khrustalev, Y.A. "Fast exothermic decomposition of crystalline materials during pulse depressurization" *Russ. J. Phys. Chem.* 68 319-321
- 1994, Vecchio, K.S. and Gray III, G.T. "Shock-loading response of 6061-T6 aluminum-alumina metal-matrix composites" *J. Phys. IV France Colloq. C8 (DYMAT 94)* 4 231-236
- 1994, Vecchio, K.S. and Thakar, A.M. "Effects of shock loading on cobalt-based solid-solution strengthened superalloys" *J. Phys. IV France Colloq. C8 (DYMAT 94)* 4 367-372
- 1994, Vecchio, K.S., Yu, L.-H. and Meyers, M.A. "Shock synthesis of silicides. 1: Experimentation and microstructural evolution" *Acta metall. mater.* 42 701-714
- 1994, Vecchio, K.S. "Electron microscopy of shock synthesized silicides and aluminides" *AIP Conf. Proc.* 309 1221-1224
- 1994, Vereshchagin, A.L., Sakovich, G.V., Komarov, V.F. and Petrov, E.A. "Properties of ultrafine diamond clusters from detonation synthesis" *Diamond Related Mater.* 3 160-162
- 1994, Verma, M.L. and Rathore, R.P.S. "Interatomic potential, elastic and dynamical behavior of fcc metals: A unified model" *Indian J. Pure Appl. Phys.* 32 308-314
- 1994, Vogel, A. and Busch, S. "Time-resolved measurements of shock-wave emission and cavitation-bubble generation in intraocular laser surgery with ps- and ns-pulses", in "Bubble Dynamics and Interface Phenomena", ed. J.R. Blake, J.M. Boulton-Stone and N.H. Thomas, pp. 105-117, publ. Dordrecht, The Netherlands, Kluwer
- 1994, von Engelhardt, W., Arndt, J., Fecker, B. and Pankau, H.G. "Ries Impact Crater, Germany" *Meteoritics* 29 463-464
- 1994, Vorobiev, O.Y. "Numerical simulation of thin-foil acceleration with light-ion beam" *Model. Simul. Mater. Sci. Engng* 2 353-361
- 1994, Voskoboinikov, I.M., Tolstov, I.K. and Malkin, A.I. "Velocities of wave disturbances behind the shock waves in porous aluminum samples" *Khim. Fiz.* 13 116-120

- 1994, Walker, F.W. "The initiation and detonation of explosives: An alternative concept" *Sov. J. Chem. Phys.* 12 1021-1028
- 1994, Walton, G.L., "Rupture disc gas launcher", United States, patent no. 5,365,913
- 1994, Wang, Z.P., Lu, C. and Yien, S.R. "The influence of inertial effects on dynamic growth of voids in ductile solids under intense dynamic loading" *Int. J. Impact Engng* 15 79-90
- 1994, Wang, Z.-P. "Void growth and compaction relation for ductile porous materials under intense dynamic general loading conditions" *Int. J. Solids Structures* 31 2139-2150
- 1994, Wang, Z.-P. and Zheng, J. "Dynamic failure in ductile porous materials" *Engng Fract. Mech.* 49 61-74
- 1994, Wang, Y., Liu, C., Han, J. and Su, L. "The deformation localization phenomenon in the spallation of Ti6Al4V", in "Proc. IUTAM Symp. on Impact Dynamics", ed. Z. Zheng and Q. Tan, pp. 298-303, publ. Beijing, China, Peking University Press
- 1994, Wang, Y., Liu, C., Han, J. and Su, L. "Deformation and damage characteristics of Ti6Al4V under high rate shear loading", in "Proc. IUTAM Symp. on Impact Dynamics", ed. Z. Zheng and Q. Tan, pp. 365-371, publ. Beijing, China, Peking University Press
- 1994, Wang, J. and Zhang, J. "Molecular dynamics investigation of dynamic problems", in "Proc. IUTAM Symp. on Impact Dynamics", ed. Z. Zheng and Q. Tan, pp. 456-465, publ. Beijing, China, Peking University Press
- 1994, Wang, L., Wixom, M.R. and Thompson, L.T. "Structural and mechanical properties of TiB₂ and TiC prepared by self-propagating high-temperature synthesis/dynamic compaction" *J. Mater. Sci.* 29 534-543
- 1994, Wang, J.-H., Duan, W.-S. and Pan, Y.-S. "Molecular dynamics investigation of shock wave in one dimension" *AIP Conf. Proc.* 309 1067-1070
- 1994, Warnes, R.H. and Tonks, D.L. "Measurement and analysis of three 1.5 GPa shock-wave profiles in copper" *AIP Conf. Proc.* 309 1075-1078
- 1994, Watanabe, M. and Prosperetti, A. "Shock waves in dilute bubbly liquids" *J. Fluid Mech.* 274 349-381
- 1994, Weidner, D.J., Wang, Y., Meng, Y. and Vaughan, M.T. "Deviatoric stress measurements at high pressure and temperature" *AIP Conf. Proc.* 309 1025-1028
- 1994, Weir, S.T., Nellis, W.J. and Mitchell, A.C. "Electrical conductivity of hydrogen shocked to megabar pressures" *AIP Conf. Proc.* 309 881-883
- 1994, Weiss, J.D. "Impurity-doped fiber optic shock position sensor" *J. Lightwave Technol.* 12 1891-1896
- 1994, White, C.T., Sinnott, S.B., Mintmire, J.W. and Brenner, D.W. "Chemistry and phase transitions from hypervelocity impacts" *Int. J. Quantum Chem.: Quantum Chem. Symp.* 28 129-137

- 1994, Williams, G.E. "Acraman, South Australia: Australia's largest meteorite impact structure" Proc. R. Soc. Victoria 106 105-127
- 1994, Williams, G.E. "Acraman: A major impact structure from the Neoproterozoic of Australia", in "Large Meteorite Impacts and Planetary Evolution", ed. B.O. Dressler, R.A.F. Grieve and V.L. Sharpton, pp. 209-224, publ. Boulder, CO, The Geological Society of America
- 1994, Winey, J.M., Gupta, Y.M. and Casey, K.G. "Shock-induced changes in the absorption spectrum of nitromethane" AIP Conf. Proc. 309 1563-1566
- 1994, Winkler, W.-D. and Nahme, H. "A simple recovery technique for shock wave studies of brittle materials" AIP Conf. Proc. 309 1663-1666
- 1994, Wise, J.L. and Grady, D.E. "Dynamic, multiaxial impact response of confined and unconfined ceramic rods" AIP Conf. Proc. 309 777-780
- 1994, Wisniewski, R. and Molinar, G.F. "High pressure transducer with ceramic free rod as active element", in "Shock Compression of Condensed Matter - 1993", pp. 1685-1686, publ.
- 1994, Wong, M.K.W. "Experiments and analysis of lateral piezoresistance gauges" AIP Conf. Proc. 309 1735-1738
- 1994, Wood, S.M., Gupta, Y.M. and Pangilinan, G.I. "Time-resolved Raman measurements in shocked Z-cut, α -quartz subjected to tension" AIP Conf. Proc. 309 1571-1574
- 1994, Woodward, R.L., Gooch Jr., W.A., O'Donnell, R.G., Perciballi, W.J., Baxter, B.J. and Pattie, S.D. "A study of fragmentation in the ballistic impact of ceramics" Int. J. Impact Engng 15 605-618
- 1994, Woolsey, N.C. and Wark, J.S. "Simulated X-ray streak camera data of in situ diffraction from laser-shocked single crystals" AIP Conf. Proc. 309 1919-1922
- 1994, Worswick, M.J., Nahme, H., Clarke, J. and Fowler, J. "Ductile fracture at high rates of strain" DYMAT Journal 1 229-244
- 1994, Worswick, M.J., Nahme, H. and Fowler, J. "Spall through void nucleation, growth and coalescence" J. Phys. IV France Colloq. C8 (DYMAT 94) 4 623-628
- 1994, Wright, S.I., Gray III, G.T. and Rollett, A.D. "Textural and microstructural gradient effects on the mechanical behaviour of a tantalum plate" Metall. mater. Trans. A 25 1025-1031
- 1994, Yadav, H.S., Nath, T., Sundaram, S.G., Kamath, P.V. and Kulkarni, M.W. "Shock initiation of sheet explosive" Propell. Explos. Pyrotech. 19 26-31
- 1994, Yakovlev, O.I. and Basilevsky, A.T. "Experimental studies of geochemical aspects of impact cratering", in "Large Meteorite Impacts and Planetary Evolution", ed. B.O. Dressler, R.A.F. Grieve and V.L. Sharpton, pp. 73-80, publ. Boulder, CO, The Geological Society of America

- 1994, Yamada, K., Burkhard, G., Dan, K., Tanabe, Y. and Sawaoka, A.B.
"Microstructures of carbon polymorphs formed in shocked compressed diamond powder utilizing an interaction of oblique shock waves" Carbon 32 1197-1213
- 1994, Yamada, K. and Sawaoka, A.B. "Very small spherical crystals of distorted diamond found in a detonation product of explosive graphite mixtures and their formation mechanism" Carbon 32 665-673
- 1994, Yamada, K. and Sawaoka, A.B. "Nucleation and growth of diamond in detonation products" J. Amer. Ceram. Soc. 77 1104-1106
- 1994, Yamanaka, C. and Ikeya, M. "The effects of hypervelocity impact phenomena on radiation induced defects" Nuclear Instrum. Methods Phys. Res. B 91 370-373
- 1994, Yamasaki, T., Ogino, Y., Morishita, K., Fukuoka, K., Atou, T. and Syono, Y.
"Formation of amorphous Ti-Si powdered alloys and their shock consolidation" Mater. Sci. Engng A 179 220-223
- 1994, Yanagida, Y., Iwama, N., Kosaku, H. and Okazaki, K. "Effect of controlled sound pressure field on fragmentation in piezoelectric extracorporeal shock-wave lithotripsy" Jpn. J. Appl. Phys. 33 3151-3154
- 1994, Yang, W., Chen, G., Anderson, W.W. and Ahrens, T.J. "Shock compression and isentropic release of rhyolite" AIP Conf. Proc. 309 1115-1118
- 1994, Yoo, C.S. and Holmes, N.C. "Shock initiation of nitromethane" AIP Conf. Proc. 309 1567-1570
- 1994, Yoo, C.S., Holmes, N.C., Ross, M. and See, E. "Shock temperature measurements of iron to 350 GPa" AIP Conf. Proc. 309 959-962
- 1994, Yu, L.H., Nellis, W.J., Meyers, M.A. and Vecchio, K.S. "Shock synthesis of niobium silicides" AIP Conf. Proc. 309 1291-1294
- 1994, Yuan, G., Zhou, G.-Q., Tang, Z.P. and Wang, L.L. "An analytical model for laser-supported detonation waves on a target" AIP Conf. Proc. 309 1899-1902
- 1994, Zaretsky, E. "Dislocation dynamics behind shock front" AIP Conf. Proc. 309 1177-1180
- 1994, Zerilli, F.J. and Jones, H.D. "High pressure equation of state for HF, CF₄, and F₂" AIP Conf. Proc. 309 113-116
- 1994, Zerwekh, W.D., Marsh, S.P. and Tan, T.-H. "Phase detonated shock tube (PFST)" AIP Conf. Proc. 309 1877-1880
- 1994, Zetser, Y.I. and Pushtarik, V.A. "Destruction of metal foils by intense microwave radiation" Tech. Phys. 39 433-440
- 1994, Zhang, B., Yang, C., Xiong, Y., Jiang, C., Zhou, S., Sun, Y. and Yao, J.
"Responsive behaviour of 93wt.% tungsten alloy under intense shock loading", in "Proc. IUTAM Symp. on Impact Dynamics", ed. Z. Zheng and Q. Tan, pp. 283-297, publ. Beijing, China, Peking University Press

- 1994, Zhao, T., Chen, L., Si, Z., Tan, S. and Cui, G. "Effect of explosion shock wave intensity in dislocation structure in ferrite of steel 16Mn weld (in Chinese)" *Acta Metall. Sinica* 30 130-135
- 1994, Zheng, J., Bai, Y.L. and Wang, Z.P. "Influence of inertial and thermal effects on the dynamic growth of voids in porous ductile materials" *J. Phys. IV France Colloq. C8 (DYMAT 94)* 4 765-770
- 1994, Zheng, Z. and Tan, Q., Eds. "Proceedings of IUTAM Symposium on Impact Dynamics", publ. Beijing, Peking University Press
- 1994, Zhou, M., Needleman, A. and Clifton, R.J. "Finite element simulations of shear localization in plate impact" *J. Mech. Phys. Solids* 42 423-458
- 1994, Zhou, M., Clifton, R.J. and Needleman, A. "The role of material inhomogeneities in the localization of strains" *AIP Conf. Proc.* 309 1185-1188
- 1994, Zhu, Y.L., Li, T.C., Liu, J.T., Han, X.D. and Yang, D.Z. "Shock synthesis of NiTi intermetallic compounds from a mixture of titanium and nickel elemental powders" *Scripta metall. mater.* 30 775-780
- 1994, Zhu, Y.L., Ma, X.L., Li, T.C. and Yang, D.Z. "Structural variants of fcc Ti_2Ni phase by shock synthesis" *Scripta metall. mater.* 31 1197-1202
- 1994, Zhuang, S.-M., Liu, C.-L., Wang, C.-Y. and Sun, C.-W. "Dynamic fracture of aluminium at ultrahigh strain rate over $10^7 s^{-1}$ " *J. Mater. Sci. Letts* 13 1740-1741
- 1994, Zhuang, S., Liu, C., Wang, C., Sun, C. and Long, X. "Dynamic fracture of metallic targets under shock loading induced by laser beams", in "Proc. IUTAM Symp. on Impact Dynamics", ed. Z. Zheng and Q. Tan, pp. 304-309, publ. Beijing, China, Peking University Press
- 1994, Zhuang, S., Liu, C., Wang, C. and Sun, C. "Dynamic fracture of iron under shock loading induced by pulsed laser beam" *AIP Conf. Proc.* 309 1903-1906
- 1994, Zhugin, Y.N., Krupnikov, K.K., Ovechkin, N.A., Abakshin, E.V., Gorshkov, M.M., Zaikin, V.T. and Slobodenyukov, V.M. "On some peculiarities of dynamic compressibility of quartz" *Fiz. Zemli* (10) 16-22
- 1994, Zhuk, A.Z., Kanel, G.I. and Lash, A.A. "Glass-epoxy composite behaviour under shock loading" *J. Phys. IV France Colloq. C8 (DYMAT 94)* 4 403-407
- 1994, Zilberbrand, E.L., Pugachev, G.S. and Sinani, A.B. "Microcumulative phenomena in solids acted on by weak compression waves" *Tech. Phys. Letts* 20 236-237
- 1994, Zimmerly, C.A., Inal, O.T. and Richman, R.H. "Explosive welding of a near-equiatomic nickel-titanium alloy to low-carbon steel" *Mater. Sci. Engng A* 188 251-254
- 1994, Zukas, J.A. "Numerical simulation of high rate behavior", in "Shock and Impact on Structures", ed. C.A. Brebbia and V. Sánchez-Gálvez, pp. 1-26, publ. Southampton, Computational Mechanics Publications

- 1994, Zurek, A.K. "Spall experiments and microscopy of depleted U-0.75%Ti alloy. A Romanchenko correction to spall strength calculation" J. Nuclear Mater. 211 52-56
- 1994, Zurek, A.K. and Hunter, D.A. "Dynamic testing and characterization of pre-fractured ceramic" AIP Conf. Proc. 309 761-764