

Shock Physics Papers 1984-1985

- 1984, Adair, J.H., Wills, R.R. and Linse, V.D. "Dynamic compaction of ceramic powders", in "Emergent Process Methods for High-Technology Ceramics", ed. R.F. Davis, H.P. III and R.L. Porter, pp. 639-655, publ. New York, Plenum
- 1984, Ahlborn, B., Kwan, J., Ng, A. and Barnard, A.J. "Constant density acceleration of laser targets" *Phys. Fluids* 27 2586-2588
- 1984, Ahrens, T.J., Kostka, D., Vreeland Jr., T., Schwarz, R.B. and Kasiraj, P. "Shock compaction of molybdenum powder", in "Shock Waves in Condensed Matter 1983", ed. J.R. Asay, R.A. Graham and G.K. Straub, pp. 443-446, publ. Amsterdam, Elsevier
- 1984, Ahrens, T.J. and Shampine, D.J. "Hugoniot data for pyrrhotite and the Earth's core" *J. Geophys. Res.* 89 6041-6048
- 1984, Akaishi, M., Fukunaga, O., Horie, Y., Hoy, D., Kanda, H., Palmour III, H. and Whitfield, J.K. "Effects of dynamic and isostatic compaction on the microstructure and mechanical behavior of AlN, TiB₂, and TiC" *Mater. Res. Soc. Symp. Proc.* 22(3) 159-162
- 1984, Akhmadeev, N.K., Akhmetova, N.A. and Nigmatulin, R.I. "Structure of shock wave flows with phase transitions in iron near a free surface" *J. Appl. Mech. Tech. Phys.* 25 908-914
- 1984, Altshuler, L.V. and Grigorev, N.A. "Numerical simulation of the flow behind the front in a two-stage reaction" *Combust. Explos. Shock Waves* 20 43-45
- 1984, Altshuler, L.V. and Kruglikov, B.S. "Attenuation of strong shock waves in two phase and heterogeneous media" *J. Appl. Mech. Tech. Phys.* 25 672-676
- 1984, Andersen, W.H. "Approximate method of calculating critical shock initiation conditions and run distance to detonation" *Propell. Explos. Pyrotech.* 9 39-44
- 1984, Andreev, V.D., Voloshin, M.N., Lukash, V.A., Sozin, Y.I. and Ryzhikov, A.A. "Some special features of diamonds obtained on shock loading of cast iron" *Sov. J. Superhard Mater.* 6(5) 31-36
- 1984, Andriot, P., Chapron, P., Lambert, V. and Olive, F. "Influence of melting on shocked free surface behavior using Doppler laser interferometry and X-ray densitometry", in "Shock Waves in Condensed Matter - 1983", ed. J.R. Asay, R.A. Graham and G.K. Straub, pp. 277-281, publ. Amsterdam, North-Holland
- 1984, Anile, A.M. "Propagation of weak shock waves" *Wave Motion* 6 571-578
- 1984, Anisichkin, V.F. "Anomalous shock compressibility and specific heat of diamond" *Combust. Explos. Shock Waves* 20 70-72
- 1984, Anisichkin, V.A. "Estimating the potential part of the pressure behind a shock-wave front" *Combust. Explos. Shock Waves* 20 116-118
- 1984, Anisichkin, V.F. "Analytical representation of the molecular-interaction potentials and shock adiabats of condensed matter" *Combust. Explos. Shock Waves* 20 237-239

- 1984, Antipenko, A.G., Dremin, A.N., Kurto, A.P., Loginova, N.N., Madorskaya, L.Y. and Yakushev, V.V. "Shock polarization of copolymer of vinylidene fluoride with tetrafluoroethylene" Dokl. Phys. Chem. 276 405-407
- 1984, Arndt, J. "Shock isotropization of minerals", in "Shock Waves in Condensed Matter – 1983", ed. J.R. Asay, R.A. Graham and G.K. Straub, pp. 473-480, publ. Amsterdam, North-Holland
- 1984, Arutyunyan, G.M. and Ovsepyan, S.T. "Analytical investigation of some features of the shock compression of wet vapor" High Temp. 22 244-250
- 1984, Asay, J.R., Graham, R.A. and Straub, G.K., Eds. "Shock Waves in Condensed Matter - 1983", publ. Amsterdam, North-Holland
- 1984, Attetkov, A.V., Vlasova, L.N., Selivanov, V.V. and Solovev, V.S. "Local heating of a material in the vicinity of a pore upon its collapse" J. Appl. Mech. Tech. Phys. 25 286-291
- 1984, Attetkov, A.V., Vlasova, L.N., Selivanov, V.V. and Solovev, V.S. "Effect of nonequilibrium heating on the behavior of a porous material in shock compression" J. Appl. Mech. Tech. Phys. 25 914-921
- 1984, Baer, M.R., Nunziato, J.W. and Gross, R.J. "A thermal-mechanical model of deflagration-to-detonation in granular energetic materials", in "Proc. 1984 JANNAF Propulsion Systems Hazards Subcommittee Meeting. Vol. 1", ed. D.S. Eggleston, pp. 71-79, publ. Laurel, MD, Chemical Propulsion Information Agency
- 1984, Baikov, I.R., Bergardt, A.R., Kedrinskii, V.K. and Palchikov, E.I. "Methods of examining the dynamics of cavitation clusters" J. Appl. Mech. Tech. Phys. 25 677-681
- 1984, Bailey, P.B. and Chen, P.J. "An accurate explicit finite difference algorithm for shocks in non-linear wave propagation: One dimension" Wave Motion 6 279-287
- 1984, Balaev, A.D., Kirko, V.I., Kuzovnikov, A.A., Ovcharov, V.P. and Khrustalev, B.P. "Bulk amorphous ferromagnets produced by explosive compression of an amorphous metallic powder and an insulator" Sov. Tech. Phys. Letts 10 562-563
- 1984, Bardo, R.D. and Jones, W.H. "A theoretical calculation of the 0 K isotherm for shocked nitromethane", in "Shock Waves in Condensed Matter – 1983", ed. J.R. Asay, R.A. Graham and G.K. Straub, pp. 621-624, publ. Amsterdam, North-Holland
- 1984, Bardwell, S. and Parpart-Henke, U. "The use of strong shock waves for isentropic compression of inertial confinement targets", in "Shock Waves in Condensed Matter – 1983", ed. J.R. Asay, R.A. Graham and G.K. Straub, pp. 331-333, publ. Amsterdam, North-Holland
- 1984, Barker, L.M. "High-pressure quasi-isentropic impact experiments", in "Shock Waves in Condensed Matter – 1983", ed. J.R. Asay, R.A. Graham and G.K. Straub, pp. 217-224, publ. Amsterdam, North-Holland

- 1984, Basov, N.G., Danilov, A.E., Kalashnikov, M.P., Kruglov, B.V., Mikhailov, Y.A., Rode, A.V., Sklizkov, G.V. and Fedotov, S.I. "The investigation of heating and compression of high aspect ratio targets with 'Delfin-1'" Laser Particle Beams 2 103-119
- 1984, Bauer, F. "Piezoelectric and electric properties of PVF₂ polymers under shock wave action: Application to shock transducers", in "Shock Waves in Condensed Matter - 1983", ed. J.R. Asay, R.A. Graham and G.K. Straub, pp. 225-228, publ. Amsterdam, North-Holland
- 1984, Bauer, P., Presles, H.N., Heuze, O. and Brochet, C. "Generation of high dynamic pressures by means of gaseous explosive mixtures" J. Phys. France 45(C8) 297-299
- 1984, Beauchamp, E.K., Loehman, R.E., Graham, R.A., Morosin, B. and Venturini, E.L. "Densification kinetics of shock-activated nitrides", in "Emergent Process Methods for High-Technology Ceramics", ed. R.F. Davis, H. Palmour III and R. Porter, pp. 735-748, publ. New York, Plenum
- 1984, Beauchamp, E.K., Graham, R.A. and Carr, M.J. "Densification of shock-treated aluminum nitride and aluminum oxide", in "Defect Properties and Processing of High-Technology Nonmetallic Materials", ed. J.H. Crawford Jr., Y. Chen and W.A. Sibley, pp. 281-289, publ. New York, North-Holland
- 1984, Benjamin, R.F., McQueen, R.G., Marsh, S.P. and Shaner, J.W. "Results on Richtmyer-Meshkov instabilities in condensed fluids", in "Shock Waves in Condensed Matter - 1983", ed. J.R. Asay, R.A. Graham and G.K. Straub, pp. 259-260, publ. Amsterdam, North-Holland
- 1984, Benjamin, R.F., Mayer, F.J. and Maynard, R.L. "Micro-shell tipped optical fibres as sensors of high pressure pulses in adverse environments" Proc. SPIE 506 116-121
- 1984, Benjamin, R.J., Trease, H.E. and Shaner, J.W. "Coherent density gradients in water compressed by a modulated shock wave" Phys. Fluids 27 2390-2393
- 1984, Bergmann, O.R. "Industrial uses of explosive pressure: From rock blasting to metal bonding and synthetic diamond", in "Shock Waves in Condensed Matter - 1983", ed. J.R. Asay, R.A. Graham and G.K. Straub, pp. 429-433, publ. Amsterdam, North-Holland
- 1984, Bernier, H., Valadon, M. and Lezard, J.M. "Comparison between Hugoniot and some isentropic release curves of copper in the pressure range 70-150 GPa" J. Phys. France 45(C8) 257-261
- 1984, Bernier, H. and Lalle, P. "Elastic-plastic waves in U_{V0,2} uranium alloy" J. Phys. France 45(C8) 273-277
- 1984, Berthault, A. and Arles, L. "A technique for equation of state determination of liquid metals at high temperatures and pressures" J. Phys. France 45(C8) 301-303

- 1984, Bepalov, V.E., Bubnov, M.M., Vovchenko, V.I., Demidov, B.A., Dianov, E.M., Ivkin, M.V., Krasnyuk, I.K., Pashinin, P.P., Prokhorov, A.M., Nefedov, S.M., Rudakov, L.I., Sklyarov, S.N. and Fortov, V.E. "Use of fiber lightguides in the diagnostics of intense shock waves" *Sov. Tech. Phys. Letts* 10 24-26
- 1984, Bizeuil, C., Chapron, P., Elias, P. and Laurent, B. "Experimental study of shock waves driven matter ejection on the free surface of a metal" *Proc. SPIE* 491 1030-1034
- 1984, Bjorkman, M.D. and Holsapple, K.A. "Plane hypervelocity impact and source similitude dependence on a Tillotson EOS", in "Shock Waves in Condensed Matter - 1983", ed. J.R. Asay, R.A. Graham and G.K. Straub, pp. 195-198, publ. Amsterdam, North-Holland
- 1984, Bless, S.J. and Paisley, D.L. "Dynamic tensile fracture of OFHC copper", in "Shock Waves in Condensed Matter - 1983", ed. J.R. Asay, R.A. Graham and G.K. Straub, pp. 163-166, publ. Amsterdam, North-Holland
- 1984, Blinot, P., Chiem, C.Y., Kumar, P. and Clifton, R.J. "Dislocation configurations and velocities in 3% Si-Fe single crystals under uniaxial strain impact" *Inst. Phys. Conf. Ser.* 70 97-104
- 1984, Bloom, G., Chau, H., Glaser, R., Honodel, C., Lee, R.S. and Weingart, R.C. "Improvements in thin-pulse shock initiation threshold measurements", in "Shock Waves in Condensed Matter - 1983", ed. J.R. Asay, R.A. Graham and G.K. Straub, pp. 535-538, publ. Amsterdam, North-Holland
- 1984, Bokarev, V.P., Bokareva, O.M., Semin, V.P. and Temnitskii, I.N. "The modelling of the effect of the shock wave on matter by means of a static pressure in the presence of shear deformations. 2: The effect on the real structure of crystals" *Russ. J. Phys. Chem.* 58 1268-1269
- 1984, Bolkhovitinov, L.G. and Khvostov, Y.B. "Polystyrene and copper isentropes obtained on the data of shock compressed materials of high porosity" *Int. J. Engng Sci.* 22 491-502
- 1984, Boslough, M.B. and Ahrens, T.J. "Particle velocity experiments in anorthosite and gabbro", in "Shock Waves in Condensed Matter 1983", ed. J.R. Asay, R.A. Graham and G.K. Straub, pp. 525-528, publ. Amsterdam, Elsevier
- 1984, Boslough, M.B., Ahrens, T.J. and Mitchell, A.C. "Shock temperatures in CaO" *J. Geophys. Res.* 89 7845-7851
- 1984, Bourne, B., Jones, P.N. and Markham, J.A. "Microstructural features of shock-loaded metals" *Inst. Phys. Conf. Ser.* 70 111-118
- 1984, Brandon, D.G., Boas, M. and Rosenberg, Z. "Effect of grain boundaries on ductile fracture under planar impact" *Inst. Phys. Conf. Ser.* 70 261-268

- 1984, Brannon, P.J., Morris, R.W., Konrad, C.H. and Asay, J.R. "Shock-induced luminescence from X-cut quartz and Z-cut lithium niobate", in "Shock Waves in Condensed Matter – 1983", ed. J.R. Asay, R.A. Graham and G.K. Straub, pp. 303-306, publ. Amsterdam, North-Holland
- 1984, Brown, J.M. and Shaner, J.W. "Rarefaction velocities in shocked tantalum and the high pressure melting point", in "Shock Waves in Condensed Matter – 1983", ed. J.R. Asay, R.A. Graham and G.K. Straub, pp. 91-94, publ. Amsterdam, North-Holland
- 1984, Brown, J.M., Ahrens, T.J. and Shampine, D.L. "Hugoniot data for pyrrhotite and the Earth's core" *J. Geophys. Res.* 89 6041-6048
- 1984, Buevich, Y.A. and Mansurov, V.V. "Toward a theory of shock boiling" *J. Engng Phys.* 47 1407-1412
- 1984, Burdonskii, I.N., Gromov, B.I., Erofeev, M.V., Zhuzhukalo, E.V., Kalin, A.A. and Nikolaevskii, V.G. "Spallation of austenite steel under loading by single laser pulses" *Sov. Tech. Phys. Letts* 10 121-122
- 1984, Burnett, N.H., Enright, G.D., Avery, A., Loen, A. and Kieffer, J.C. "Time-resolved $K\alpha$ spectra in high-intensity laser-target interaction" *Phys. Rev. A* 29 2294-2297
- 1984, Bushman, A.V., Krasnyuk, I.K., Pashinin, A.M., Ternovoi, V.Y. and Fortov, V.E. "Dynamic compressibility and thermodynamics of a dense aluminum plasma at megabar pressures" *JETP Letts* 39 411-413
- 1984, Butkovich, T.R. and Burton, D.E. "Underground explosive fracture and permeability enhancement", in "Shock Waves in Condensed Matter – 1983", ed. J.R. Asay, R.A. Graham and G.K. Straub, pp. 497-500, publ. Amsterdam, North-Holland
- 1984, Campillo, A.J. and Schoen, P.E. "Reflective probing of laser generated kbar shocks in water", in "Shock Waves in Condensed Matter – 1983", ed. J.R. Asay, R.A. Graham and G.K. Straub, pp. 347-350, publ. Amsterdam, North-Holland
- 1984, Campillo, A.J., Goldberg, L.S., Griffin, R.D., Justus, B.L. and Schoen, P.E. "Simultaneous multikilobar compressional shock wave generation and probing using short-pulse lasers" *J. Opt. Soc. Amer. B* 1 444
- 1984, Carr, M.J. and Beauchamp, E.K. "Transmission electron microscopical characterization of hot pressed shocked and unshocked aluminum nitride powder", in "Shock Waves in Condensed Matter – 1983", ed. J.R. Asay, R.A. Graham and G.K. Straub, pp. 403-406, publ. Amsterdam, North-Holland
- 1984, Cerroni, P. and Martelli, G. "On the role of meteoritic impacts in the formation of organic molecules" *Adv. Space Res.* 4(12) 97-102
- 1984, Chartagnac, P. and Jimenez, B. "Gas gun diameter and associated diagnostic facilities (in French)" *Rev. Phys. Appl.* 19 609-618

- 1984, Chen, D.Y., Gupta, Y.M. and Miles, M.H. "Quasistatic experiments to determine material constants for the piezoresistive foils used in shock waves experiments" J. Appl. Phys. 55 3984-3993
- 1984, Chen, P.J. "On induced discontinuities behind shock waves in isotropic linear viscoelastic materials" Nuovo Cimento B 81 113-127
- 1984, Cheng, J.C. "Shock initiation of PETN", in "Proc. 12th Symp. on Explosives and Pyrotechnics", paper I-5, publ. Philadelphia, The Franklin Research Center
- 1984, Chhabildas, L.C. and Grady, D.E. "Shock loading behaviour of fused quartz", in "Shock Waves in Condensed Matter - 1983", ed. J.R. Asay, R.A. Graham and G.K. Straub, pp. 175-179, publ. Amsterdam, North-Holland
- 1984, Chhabildas, L.C. and Grady, D.E. "Dynamic material response of quartz at high strain rates" Mater. Res. Soc. Symp. Proc. 22(3) 147-150
- 1984, Chidambaram, R. "Shocks and high velocity deformation" Bull. Mater. Sci. 6 633-642
- 1984, Clifton, R.J. "Pressure shear impact and the dynamic plastic response of metals", in "Shock Waves in Condensed Matter - 1983", ed. J.R. Asay, R.A. Graham and G.K. Straub, pp. 105-111, publ. Amsterdam, North-Holland
- 1984, Cochran, S.G. and Tarver, C.M. "Modeling particle size and initial temperature events on shock initiation of TATB-based explosives", in "Shock Waves in Condensed Matter - 1983", ed. J.R. Asay, R.A. Graham and G.K. Straub, pp. 593-596, publ. Amsterdam, North-Holland
- 1984, Coffey, C.S. "Compressive waves and shock waves in anharmonic solids", in "Shock Waves in Condensed Matter - 1983", ed. J.R. Asay, R.A. Graham and G.K. Straub, pp. 69-72, publ. Amsterdam, North-Holland
- 1984, Cottet, F., Fabbro, R. and Romain, J.P. "Experiments and simulation of laser-driven shock wave evolution in aluminum targets", in "Shock Waves in Condensed Matter - 1983", ed. J.R. Asay, R.A. Graham and G.K. Straub, pp. 327-330, publ. Amsterdam, North-Holland
- 1984, Cottet, F., Romain, J.P., Fabbro, R. and Faral, B. "Measurements of laser shock pressure and estimate of energy lost at $1.05\mu\text{m}$ wavelength" J. Appl. Phys. 55 4125-4127
- 1984, Cottet, F., Romain, J.P., Fabbro, R. and Faral, B. "Ultrahigh pressure laser driven shock wave experiments at $0.26\mu\text{m}$ wavelength" Phys. Rev. Letts 52 1884-1886
- 1984, Cottet, F., Hallouin, M., Romain, J.P., Fabbro, R. and Faral, B. "UV laser-driven shock-wave experiments at ultrahigh-pressures up to 5 TPa" J. Phys. France 45(C8) 305-308
- 1984, Cowperthwaite, M. "Model similarity solutions for shock initiation containing a realistic constitutive relationship for condensed explosive" Prog. Astronaut. Aeronaut. 94 387-404

- 1984, Cudak, C.A., Krier, H. and Butler, P.B. "Transition to detonation from rapid-compression (ramp waves) generated in a burning porous bed", in "Proc. 1984 JANNAF Propulsion Systems Hazards Subcommittee Meeting. Vol. 1", ed. D.S. Eggleston, pp. 61-69, publ. Laurel, MD, Chemical Propulsion Information Agency
- 1984, Damamme, G. "A new method to simulate shocks, detonations and transitions from shock to detonation", in "Shock Waves in Condensed Matter - 1983", ed. J.R. Asay, R.A. Graham and G.K. Straub, pp. 575-577, publ. Amsterdam, North-Holland
- 1984, Dandekar, D.P. and Lamothe, R.M. "Shock, re-shock, and release behavior of a phenolic resin FF-17", in "Shock Waves in Condensed Matter - 1983", ed. J.R. Asay, R.A. Graham and G.K. Straub, pp. 125-128, publ. Amsterdam, North-Holland
- 1984, Dandrea, R.G. and Ashcroft, N.W. "Aluminum at $T \approx T_F$: Theory of the dynamically compressed metallic state" J. Phys. France 45(C8) 13-18
- 1984, Davison, L. "Numerical modeling of dynamic material response", in "Shock Waves in Condensed Matter - 1983", ed. J.R. Asay, R.A. Graham and G.K. Straub, pp. 181-186, publ. Amsterdam, North-Holland
- 1984, Davison, L. "Wave propagation and cavitation in metals" Int. J. Engng Sci. 22 1109-1112
- 1984, de Glinasty, M. "Metrology and dynamic behaviour of solids" J. Phys. France 45(C8) 245-256
- 1984, de Icaza-Herrera, M. "Shock induced polarization and conductivity" Mater. Res. Soc. Symp. Proc. 22(3) 167-170
- 1984, Dear, J.P., Field, J.E. and Swallowe, G.M. "High speed photographic studies of liquid/solid impact and cavity collapse using two-dimensional gelatine configurations" Proc. SPIE 491 568-575
- 1984, Dehn, J.T. "Models of explosively driven metal", BRL-TR-2626, Aberdeen, MD, US Army Ballistic Research Laboratory
- 1984, Dein, J., Tokheim, R., Curran, D., Chau, H., Weingart, R. and Lee, R. "Aluminum damage simulation in high-velocity impact", in "Shock Waves in Condensed Matter - 1983", ed. J.R. Asay, R.A. Graham and G.K. Straub, pp. 171-174, publ. Amsterdam, North-Holland
- 1984, Delpuech, A. and Menil, A. "Raman scattering temperature measurement behind a shock wave", in "Shock Waves in Condensed Matter - 1983", ed. J.R. Asay, R.A. Graham and G.K. Straub, pp. 309-312, publ. Amsterdam, North-Holland
- 1984, Derentowicz, H., Dybek, W., Wrobel, J., Ziolkowski, Z. and Zygmund, J. "Generation of shock waves in deuterium in the explosive Voitenko generator" J. Phys. France 45(C8) 291-296
- 1984, Deribas, A.A. "Universal dependence of hardening parameters of metals on shock intensity" Mater. Res. Soc. Symp. Proc. 22(3) 185-193

- 1984, Devore, C.R., Gardner, J.H., Boris, J.P. and Mosher, D. "Hydrodynamic simulations of light ion-beam matter interactions: Ablative acceleration of thin foils" *Laser Particle Beams* 2 227-243
- 1984, Dick, J.J. "Effect of crystal orientation on shock initiation sensitivity of PETN explosive" *Appl. Phys. Letts* 44 859-861
- 1984, Dienes, J.K. and Dick, J.J. "Shock and impact response of solid rocket propellants: Experimental and theoretical", in "Hazard Studies for Solid Propellant Rocket Motors (AGARD Conf. Proc. 367)", paper 16, publ. North Atlantic Treaty Organization
- 1984, Dietz, R.S. "Tektites and terrestrial meteorite craters: Possible associations" *J. Non-Cryst. Solids* 67 649-655
- 1984, Divakov, A.K., Meshcheryakov, Y.I. and Fadienko, L.P. "Kinetic effects in the high-speed deformation of aluminum" *J. Appl. Mech. Tech. Phys.* 25 111-114
- 1984, Dodson, B.W. and Taylor, P.A. "Monte Carlo simulation of shock-induced lattice damage", in "Shock Waves in Condensed Matter – 1983", ed. J.R. Asay, R.A. Graham and G.K. Straub, pp. 395-396, publ. Amsterdam, North-Holland
- 1984, Dodson, B.W., Arnold Jr., C., Venturini, E.L. and Lenahan, P.M. "Post-shock chemical and ESR analysis of acrylamide and selected anthracene derivatives", in "Shock Waves in Condensed Matter – 1983", ed. J.R. Asay, R.A. Graham and G.K. Straub, pp. 423-425, publ. Amsterdam, North-Holland
- 1984, Dodson, B.W. and Taylor, P.A. "Monte Carlo simulation of dynamic uniaxial strain in two-dimensional Lennard-Jones lattices" *Phys. Rev. B* 30 1679-1685
- 1984, Dremin, A.N. "Dynamic high pressure work" *Mater. Res. Soc. Symp. Proc.* 22(3) 151-158
- 1984, Dremin, A.N. and Babaré, L.V. "On the shock polymerization process" *J. Phys. France* 45(C8) 177-186
- 1984, Durand, M. "Use of optical fibers for velocity measurement by laser Doppler interferometry with a Fabry-Perot interferometer" *Proc. SPIE* 491 650-656
- 1984, Duszczyk, B., Wesolowski, Z. and Kosinski, S. "Shock reflection patterns in rubber-like materials" *Arch. Mech.* 36 587-602
- 1984, Duvall, G.E. "Shock compression chemistry in materials synthesis and processing", NMAB-414, Alexandria, VA, Defense Technical Information Center
- 1984, Eidmann, K., Amiranoff, F., Fedosejevs, R., Maaswinkel, A.G.M., Fetsch, R., Sigel, R., Spindler, G., Teng, Y.-L., Tsakiris, G. and Witkowski, S. "Interaction of 1.3 micron laser radiation with thin foil targets" *Phys. Rev. A* 30 2568-2589
- 1984, Eremenko, L.T. and Nesterenko, D.A. "Analysis of calculation methods of a relative impulse", in "Proc. 9th International Pyrotechnics Seminar", pp. 891-902, publ. Colorado Springs, CO, International Pyrotechnics Society

- 1984, Ewald, A.H. "High temperature, high pressure absorption spectra of uranyl chloride solutions under shock conditions" Mater. Res. Soc. Symp. Proc. 22(2) 161-164
- 1984, Faibish, E. and Maysesless, M. "A double-layered liner manufactured by explosive welding", in "Proc. 8th Int. Symp. on Ballistics", pp. W:1-5, publ. Wilmington, MA, Avco Systems Division
- 1984, Fickett, W. "Shock initiation of detonation in a dilute explosive" Phys. Fluids 27 94-105
- 1984, Florence, A.L., Cizek, J.C. and Keller, C.E. "Laboratory experiments on explosions in geologic materials", in "Shock Waves in Condensed Matter – 1983", ed. J.R. Asay, R.A. Graham and G.K. Straub, pp. 521-524, publ. Amsterdam, North-Holland
- 1984, Fogel, M.B. "Yield strength modeling of shock damaged materials", in "Shock Waves in Condensed Matter – 1983", ed. J.R. Asay, R.A. Graham and G.K. Straub, pp. 489-492, publ. Amsterdam, North-Holland
- 1984, Fomin, V.M. "Mathematical modelling of problems of high speed collision of bodies" Mater. Res. Soc. Symp. Proc. 22(3) 175-180
- 1984, Fowles, G.R. and Houwing, A.F.P. "Instabilities of shock and detonation waves" Phys. Fluids 27 1982-1990
- 1984, Fritz, J.N. and McQueen, R.G. "Reflected shocks in SiO₂", in "Shock Waves in Condensed Matter – 1983", ed. J.R. Asay, R.A. Graham and G.K. Straub, pp. 73-76, publ. Amsterdam, North-Holland
- 1984, Fritz, J.N. and Olinger, B. "Equation of state of sodium" J. Chem. Phys. 80 2864-2871
- 1984, Froeschner, K.E., Lee, R.S., Chau, H.H. and Weingart, R.C. "Shock Hugoniot measurements on tantalum to 0.78 TPa", in "Shock Waves in Condensed Matter – 1983", ed. J.R. Asay, R.A. Graham and G.K. Straub, pp. 85-88, publ. Amsterdam, North-Holland
- 1984, Fujishiro, I., Senoo, M. and Nomura, Y. "PVT relation in aluminum as pressure and temperature scale under very high pressure" Bull. JSME 27 124-129
- 1984, Gathers, G.R., Mitchell, A.C. and Holmes, N.C. "Hugoniot measurements in vanadium using the LLNL two-stage light-gas gun", in "Shock Waves in Condensed Matter – 1983", ed. J.R. Asay, R.A. Graham and G.K. Straub, pp. 89-90, publ. Amsterdam, North-Holland
- 1984, Glenn, H.D., Rambo, J.T. and Terhune, R.W. "Calculational study of Baneberry", in "Shock Waves in Condensed Matter – 1983", ed. J.R. Asay, R.A. Graham and G.K. Straub, pp. 509-512, publ. Amsterdam, North-Holland
- 1984, Glushak, B.L., Novikov, S.A. and Pogorelov, A.P. "Shock-wave initiation of solid heterogeneous explosives" Combust. Explos. Shock Waves 20 429-436

- 1984, Golubev, V.K., Novikov, S.A., Sobolev, Y.S. and Yukina, E.A. "Influence of heat treatment on the impact strength of 40Kh steel" *Strength Mater.* 16 496-499
- 1984, González, A.C., Cuyás, J.C. and Cusminsky, G. "Analysis of direct explosive powder compaction parameters" *Powder Metall.* 27 212-216
- 1984, Gourdin, W.H. and Weinland, S.L. "Hugoniot measurements on unsintered metal powders", in "Shock Waves in Condensed Matter – 1983", ed. J.R. Asay, R.A. Graham and G.K. Straub, pp. 99-104, publ. Amsterdam, North-Holland
- 1984, Gourdin, W.H. "Prediction of microstructural modification in dynamically consolidated metal powders", in "Shock Waves in Condensed Matter – 1983", ed. J.R. Asay, R.A. Graham and G.K. Straub, pp. 379-382, publ. Amsterdam, North-Holland
- 1984, Gourdin, W.H. "Energy deposition and microstructural modification in dynamically consolidated metal powders" *J. Appl. Phys.* 55 172-181
- 1984, Gourdin, W.H. "Microstructure and deformation in a dynamically compacted copper powder" *Mater. Sci. Engng* 67 179-184
- 1984, Gourdin, W.H. "Dynamic consolidation of ceramic powders: Practicalities, problems and prospects" *Mater. Res. Soc. Symp. Proc.* 24 307-318
- 1984, Gourdin, W.H. "Local microstructural modification in dynamically consolidated metal powders" *Metall. Trans. A* 15 1653-1664
- 1984, Grady, D.E. "Nonhydrostatic effects in stress-wave induced phase transformation of calcite", in "Shock Waves in Condensed Matter - 1983", ed. J.R. Asay, R.A. Graham and G.K. Straub, pp. 113-116, publ. Amsterdam, North-Holland
- 1984, Grady, D.E. "Temperature and deformation microstructure in the shock transition", in "Shock Waves in Condensed Matter – 1983", ed. J.R. Asay, R.A. Graham and G.K. Straub, pp. 363-367, publ. Amsterdam, North-Holland
- 1984, Grady, D.E. "Microstructural effects on wave propagation in solids" *Int. J. Engng Sci.* 22 1181-1186
- 1984, Graham, R.A. and Webb, D.M. "Fixtures for controlled explosive loading and preservation of powder samples", in "Shock Waves in Condensed Matter – 1983", ed. J.R. Asay, R.A. Graham and G.K. Straub, pp. 211-214, publ. Amsterdam, North-Holland
- 1984, Gratz, A. "Deformation in laboratory shocked quartz" *J. Non-Cryst. Solids* 67 543-548
- 1984, Green, L., Lee, E.L., Mitchell, A.C., Ree, F., Tipton, R. and van Thiel, M. "Detonation EOS patterns for several explosives" *Mater. Res. Soc. Symp. Proc.* 22(3) 293-297

- 1984, Green Jr., R.E. and Rabinovich, D. "Exploration of structural phase transformations by flash X-ray diffraction", in "Proc 1984 Flash Radiography Symposium", ed. E.A. Webster Jr. and A.M. Kennedy, pp. 157-170, publ. Columbus, OH, American Society for Nondestructive Testing
- 1984, Groessler, P. and Nissl, N. "High shock records for penetrators", in "Proc. 8th Int. Symp. on Ballistics", pp. TB:7-12, publ. Wilmington, MA, Avco Systems Division
- 1984, Guelin, P. and Nowacki, W.K. "Remarques sur les ondes d'accélération dans un continu élastoplastique avec hystérésis" Arch. Mech. 36 49-66
- 1984, Guirguis, R.H. and Oran, E.S. "Numerical studies of laser-induced shock structure in condensed materials", in "Shock Waves in Condensed Matter – 1983", ed. J.R. Asay, R.A. Graham and G.K. Straub, pp. 351-352, publ. Amsterdam, North-Holland
- 1984, Gupta, S.C. and Gupta, Y.M. "Response of ytterbium foils oriented parallel and perpendicular to the shock front", in "Shock Waves in Condensed Matter – 1983", ed. J.R. Asay, R.A. Graham and G.K. Straub, pp. 237-238, publ. Amsterdam, North-Holland
- 1984, Gupta, Y.M. "High strain-rate shear deformation of a polyurethane elastomer subjected to impact loading" Polym. Engng Sci. 24 851-861
- 1984, Gurevich, A.V. and Meshcherkin, A.P. "Expanding self-similar discontinuities and shock waves in dispersive hydrodynamics" Sov. Phys. JETP 60 732-740
- 1984, Gvozdeva, L.G. and Faresov, Y.M. "Interaction of a shock wave in air with a wall covered by a compressible porous material" Sov. Tech. Phys. Letts 10 487-488
- 1984, Hallouin, M., Cottet, F. and Romain, J.P. "Laser simulation of hypervelocity impacts" Mater. Res. Soc. Symp. Proc. 22(3) 181-184
- 1984, Hamada, L., Presles, H.N., Brochet, C., Bourianne, R. and Cheret, R. "Characterization of an overdriven detonation state in nitromethane" Prog. Astronaut. Aeronaut. 94 343-349
- 1984, Hammett, W.P., Hellman, J.R., Graham, R.A. and Morosin, B. "Energy release and transformation of shock-modified zirconia upon annealing to 1550 °C", in "Shock Waves in Condensed Matter – 1983", ed. J.R. Asay, R.A. Graham and G.K. Straub, pp. 391-394, publ. Amsterdam, North-Holland
- 1984, Harrach, R.J., Szöke, A. and Howard, W.M. "Inertial effects in laser-driven ablation", in "Shock Waves in Condensed Matter – 1983", ed. J.R. Asay, R.A. Graham and G.K. Straub, pp. 335-337, publ. Amsterdam, North-Holland
- 1984, Harris, P. and Presles, H.-N. "Reflectivity of a shock front in water and nitromethane" J. Chem. Phys. 80 524-527
- 1984, Hasegawa, M., Kondo, K. and Sawaoka, A. "Shock compression and shock-induced radiation measurements on calcium fluoride" Jpn J. Appl. Phys. 23 20-26

- 1984, Hattori, K., Fukatsu, Y., Mori, N. and Sakai, H. "Effect of particle size on detonation velocity and sensitivity of emulsion explosives", in "Proc. 12th Symp. on Explosives and Pyrotechnics", paper V-2, publ. Philadelphia, The Franklin Research Center
- 1984, Hawke, R.S., Nellis, W.J., Rego, J., Susoeff, S.R. and Newman, G.H. "Rail accelerator development for ultrahigh pressure research" IEEE Trans. Magnetics 20 291-293
- 1984, Hayes, D.B., Kipp, M.E. and Nunziato, J.W. "Application of mixture theory to shock initiation of porous HNS explosive", in "Shock Waves in Condensed Matter – 1983", ed. J.R. Asay, R.A. Graham and G.K. Straub, pp. 589-592, publ. Amsterdam, North-Holland
- 1984, Heimann, R.B., Kleiman, J. and Salansky, N.M. "Ultrafast chemical reaction triggered by a shock wave" J. Crystal Growth 67 213-216
- 1984, Hellman, J.R., Kuroda, K., Heuer, A.H. and Graham, R.A. "Microstructural characterization of shock-modified zirconia powders", in "Shock Waves in Condensed Matter – 1983", ed. J.R. Asay, R.A. Graham and G.K. Straub, pp. 387-390, publ. Amsterdam, North-Holland
- 1984, Holmes, N.C., Mitchell, A.C., Nellis, W.J., Graham, W.B. and Walrafen, G.E. "Raman spectroscopy of shocked water", in "Shock Waves in Condensed Matter – 1983", ed. J.R. Asay, R.A. Graham and G.K. Straub, pp. 307-308, publ. Amsterdam, North-Holland
- 1984, Holmes, B.S. "Measuring pressure from short laser pulses", in "Shock Waves in Condensed Matter – 1983", ed. J.R. Asay, R.A. Graham and G.K. Straub, pp. 339-342, publ. Amsterdam, North-Holland
- 1984, Holt, M. and Djomehri, M.J. "Collapse of gas-filled cavities in water" Prog. Astronaut. Aeronaut. 94 569-574
- 1984, Holzlöhner, U. and Auersch, L. "Propagation of shock waves at the surface of heterogeneous soil grounds" Int. J. Numer. Anal. Meth. Geomech. 8 57-70
- 1984, Hong, S.I. and Gray III, G.T. "Dynamic mechanical response of a 1060 Al/Al₂O₃ composite" J. Mater. Sci. 29 2987-2992
- 1984, Honig, J. and Kim, K. "Pellet acceleration study with a railgun for magnetic fusion reaction refuelling" J. Vacuum Sci. Technol. A 2 641-644
- 1984, Horie, Y. "Some thermodynamical influences of defects in shock-loaded solids", in "Shock Waves in Condensed Matter – 1983", ed. J.R. Asay, R.A. Graham and G.K. Straub, pp. 369-373, publ. Amsterdam, North-Holland
- 1984, Hoy, D.E.P., Akaishi, M., Park, J.K., Horie, Y. and Whitfield, J.K. "Shock compression of aluminum nitride powder", in "Shock Waves in Condensed Matter – 1983", ed. J.R. Asay, R.A. Graham and G.K. Straub, pp. 451-454, publ. Amsterdam, North-Holland

- 1984, Huang, Z.-P. and Zhang, H.-P. "A study of electromagnetic stress gage", in "Shock Waves in Condensed Matter – 1983", ed. J.R. Asay, R.A. Graham and G.K. Straub, pp. 233-236, publ. Amsterdam, North-Holland
- 1984, Hunter, J.K. and Keller, J.B. "Weak shock diffraction" 6
- 1984, IJsselstein, R.R. "A simple shock pressure transducer for measuring the performance of explosives and explosive devices", in "Proc. 12th Symp. on Explosives and Pyrotechnics", paper III-9, publ. Philadelphia, The Franklin Research Center
- 1984, Isakov, I.M., Likalter, A.A., Lomakin, B.N., Lopatin, A.D. and Fortov, V.E. "Electrical conductivity of adiabatically compressed alkali metal vapor" Sov. Phys. JETP 60 473-477
- 1984, Johnson, J.D., Shaw, M.S. and Holian, B.L. "Dense molecular thermodynamics", in "Shock Waves in Condensed Matter - 1983", ed. J.R. Asay, R.A. Graham and G.K. Straub, pp. 27-30, publ. Amsterdam, North-Holland
- 1984, Jones, R.S. and Ashcroft, N.W. "Liquid state thermodynamics and the dynamic compression of solids" J. Chem. Phys. 80 3328-3335
- 1984, Jones, R.S. and Ashcroft, N.W. "Liquid state thermodynamics: Application to highly compressed solids" Mater. Res. Soc. Symp. Proc. 22(2) 183-187
- 1984, Kanel, G.I., Razorenov, S.V. and Fortov, V.E. "Cleavage strength of metals over a wide range of loading durations" Sov. Phys. Dokl. 29 241-242
- 1984, Kanel, G.I. and Pityulin, A.N. "Shock-wave deformation of titanium carbide-based ceramics" Combust. Explos. Shock Waves 20 436-438
- 1984, Kanel, G.I., Razorenov, S.V. and Fortov, V.E. "Kinetics of spallation rupture in the aluminum alloy AMg6M" J. Appl. Mech. Tech. Phys. 25 707-711
- 1984, Karo, A.M., Walker, F.E., DeBoni, T.M. and Hardy, J.R. "The simulation of shock-induced energy flux in molecular solids" Prog. Astronaut. Aeronaut. 94 405-415
- 1984, Kasiraj, P., Vreeland Jr., T., Schwarz, R.B. and Ahrens, T.J. "Shock wave consolidation of an amorphous alloy" J. Non-Cryst. Solids 61 967-971
- 1984, Kasiraj, P., Vreeland Jr., T., Schwarz, R.B. and Ahrens, T.J. "Shock consolidation of a rapidly solidified steel powder" Acta metall. 32 1235-1241
- 1984, Kasiraj, P., Vreeland Jr., T., Schwarz, R.B. and Ahrens, T.J. "Mechanical properties of a shock consolidated steel powder", in "Shock Waves in Condensed Matter – 1983", ed. J.R. Asay, R.A. Graham and G.K. Straub, pp. 439-442, publ. Amsterdam, North-Holland
- 1984, Kato, Y., Mima, K., Miyanaga, N., Arinaga, S., Kitagawa, Y., Naktsuka, M. and Yamanaka, C. "Random phasing of high power lasers for uniform target acceleration and plasma instability suppression" Phys. Rev. Letts 53 1057-1061
- 1984, Kaunov, A.M., Bukin, V.M. and Shamrei, A.V. "Effect of substrate surface roughness in the cohesive strength of powder coatings formed by explosion" Strength Mater. 16 441-443

- 1984, Keller, C.E. "Utility of shock models for underground nuclear tests", in "Shock Waves in Condensed Matter – 1983", ed. J.R. Asay, R.A. Graham and G.K. Straub, pp. 485-487, publ. Amsterdam, North-Holland
- 1984, Khanukaev, A.N., Virchenko, V.A., Egorov, A.P., Krasavin, S.V. and Tsirel, S.V. "Recording in the near zone of an explosion with manganin transducers" Combust. Explos. Shock Waves 20 262-264
- 1984, Khanukaev, A.N. and Tsirel, S.V. "Methods of pressure determination at the charge-rock boundary" Sov. Mining Sci. 20 108-110
- 1984, Kharchenko, V.V. "Modeling processes of high-rate deformation of materials" Strength Mater. 16 1768-1774
- 1984, Killian, B.G. "Numerical methods developed for the simulation of coupled high-energy gas flows and stress wave propagation in geologic materials", in "Shock Waves in Condensed Matter – 1983", ed. J.R. Asay, R.A. Graham and G.K. Straub, pp. 505-508, publ. Amsterdam, North-Holland
- 1984, Kim, K.Y., Palmour III, H., Batchelor, A.D., Kanda, H., Akaishi, M. and Fukunaga, O. "Effects of dynamic vs. static compaction on the sinterability of alumina powder", in "Shock Waves in Condensed Matter – 1983", ed. J.R. Asay, R.A. Graham and G.K. Straub, pp. 455-458, publ. Amsterdam, North-Holland
- 1984, Kim, G.K. "Viscosity measurement for shock compressed water" J. Appl. Mech. Tech. Phys. 25 692-695
- 1984, Kim, K.S. and Clifton, R.J. "Dislocation motion in MgO crystals under plate impact" J. Mater. Sci. 19 1428-1438
- 1984, Kim, K. and Honig, J. "Application of railgun principle to high velocity hydrogen pellet injection for magnetic fusion reactor refueling" Fusion Technol. 6 372-377
- 1984, Kinelovskii, S.A. and Trishin, Y.A. "Calculation of the breakdown of a discontinuity at an explosive-condensed medium boundary" Combust. Explos. Shock Waves 20 119-125
- 1984, Kleiman, J., Heimann, R.B., Hawken, D. and Salansky, N.M. "Shock compression and flash heating of graphite/metal mixtures at temperatures up to 3200 K and pressures up to 25 GPa" J. Appl. Phys. 56 1440-1454
- 1984, Kleiman, J., Salansky, N.M. and Heimann, R.B. "On phase changes of carbon under dynamic conditions as observed by STEM" J. Mater. Sci. Letts 3 117-120
- 1984, Kolgatin, S.N., Stepanov, A.M. and Khachataryants, A.V. "Spall damage to a liquid metal accompanying pulsed action of radiation" J. Appl. Mech. Tech. Phys. 25 702-707
- 1984, Kolkert, W.J. and van Bree, J.L.M.J. "Experimental analysis of shock wave propagation, expansion and fracture behaviour of explosively loaded metal cylinders", in "Proc. Eighth Int. Symp. on Ballistics", pp. V:17-25, publ. Wilmington, MA, Avco Systems Division

- 1984, Komkov, V. "A note on the behavior of solids under very high pressure" J. Appl. Math. Phys. 35 906-911
- 1984, Kopotev, V.A. and Kuznetsov, N.M. "The structure of a shock wave front in a polymer" Sov. J. Chem. Phys. 1 1414-1425
- 1984, Kornev, V.M. and Yakovlev, I.V. "Model of undulation in explosive welding" Combust. Explos. Shock Waves 20 204-207
- 1984, Korolev, K.D. "Shock compaction of soils and granular media" Sov. Mining Sci. 20 18-23
- 1984, Kotulski, Z. "One-dimensional thermoelastic wave in solid with randomly fluctuating coefficient of linear expansion" Arch. Mech. 36 499-514
- 1984, Kovalenko, S.N., Ivanov, G.V. and Usov, V.F. "Decomposition of potassium perchlorate in the presence of metals under shock-wave action" Combust. Explos. Shock Waves 20 335-339
- 1984, Kovalev, Y.M. "Equation of state and shock compression temperature of crystalline explosives" Combust. Explos. Shock Waves 20 219-223
- 1984, Kozlov, E.A., Muzyrya, A.K., Chinkova, R.K. and Shorokhov, E.V. "A cleavage in the process of forming in copper" Combust. Explos. Shock Waves 20 471-474
- 1984, Krasovskii, A.Y., Kashtalyan, Y.A. and Krasiko, V.N. "Temperature dependencies of the fracture-toughness of boiler steel under static and shock loading with allowance for the scale factor" Strength Mater. 16 925-930
- 1984, Kroh, M. "Detonation properties of some plastic bonded aluminum containing high explosives", in "Proc. 12th Symp. on Explosives and Pyrotechnics", paper I-3, publ. Philadelphia, The Franklin Research Center
- 1984, Krymskii, A.V. and Lyakhov, G.M. "Waves from an underground explosion" J. Appl. Mech. Tech. Phys. 25 361-367
- 1984, Kulikovskii, A.G. and Sveshnikova, E.I. "Some properties of the shock adiabat of quasitransverse elastic waves" J. Appl. Math. Mech. 48 575-578
- 1984, Kurashige, M. "On elastostatic shocks in an ideal fiber-reinforced composite: Case of plane deformation" Technol. Rep. Tohoku Univ. 49 115-128
- 1984, Kutsar, A.R., Pavlovskii, M.N. and Kamissarov, V.V. "Observation of a two-wave shock configuration in zirconium" JETP Letts 39 480-483
- 1984, Kuznetsov, N.M. "Criterion for instability of a shock wave maintained by a piston" Sov. Phys. Dokl. 29 532-534
- 1984, Lambert, P. and Lange, M.A. "Glasses produced by shock melting and devolatilization of hydrous silicates" J. Non-Cryst. Solids 67 521-542
- 1984, Lambert, P. and Grieve, R.A.F. "Shock experiments on maskelynite-bearing anorthosite" Earth Planet. Sci. Letts 68 159-171
- 1984, Lambert, P., Lewis, C. and Moore, C.B. "Repeated shock and thermal metamorphism of the Abernathy meteorite" Meteoritics 19 29-48

- 1984, Lange, M.A., Ahrens, T.J. and Boslough, M.B. "Cratering and spall fracture in gabbro", in "Shock Waves in Condensed Matter – 1983", ed. J.R. Asay, R.A. Graham and G.K. Straub, pp. 501-504, publ. Amsterdam, North-Holland
- 1984, Lange, M.A., Ahrens, T.J. and Boslough, M.B. "Impact cratering and spall failure of gabbro" *Icarus* 58 383-395
- 1984, Lange, M.A. and Ahrens, T.J. "FeO and H₂O and the homogeneous accretion of the Earth" *Earth Planet. Sci. Letts* 71 111-119
- 1984, Laptev, V.I., Rubtsov, M.V. and Trishin, Y.A. "Use of a viscous fluid model for describing high-velocity metal jet flows" *Combust. Explos. Shock Waves* 20 72-78
- 1984, Larson, D.B. "Explosive-induced wave propagation in nugget sandstone" *J. Geophys. Res.* 89 9415-9424
- 1984, Larson, D.B. "Shock wave studies of ice under uniaxial strain conditions" *J. Glaciology* 30 235-240
- 1984, Lee, L.M., Fogelson, D.J. and Williams, W.D. "Dynamic stress transducer qualification", in "Shock Waves in Condensed Matter – 1983", ed. J.R. Asay, R.A. Graham and G.K. Straub, pp. 229-232, publ. Amsterdam, North-Holland
- 1984, Lee, C.K.B., Baker, J. and Peyton, S. "The effect of equilibrium modeling of saturated quartz in energy coupling calculations", in "Shock Waves in Condensed Matter – 1983", ed. J.R. Asay, R.A. Graham and G.K. Straub, pp. 493-496, publ. Amsterdam, North-Holland
- 1984, Lee, Y.K., Williams, F.L., Graham, R.A. and Morosin, B. "Specific surface measurements of shock modified powders", in "Shock Waves in Condensed Matter – 1983", ed. J.R. Asay, R.A. Graham and G.K. Straub, pp. 399-402, publ. Amsterdam, North-Holland
- 1984, Lee, E.L., van Thiel, M., Green, L.G. and Mitchell, A. "Detonation product EOS: The region above the Chapman-Jouguet pressure", in "Shock Waves in Condensed Matter - 1983", ed. J.R. Asay, R.A. Graham and G.K. Straub, pp. 617-620, publ. Amsterdam, Elsevier
- 1984, Lee, E.L., James, E., Green, L., von Holle, W., Tarver, C., Curran, D., Murri, W. and Seaman, D. "Response of propellants to high dynamic stresses", in "Hazard Studies for Solid Propellant Rocket Motors (AGARD Conf. Proc. 367)", paper 10, publ. North Atlantic Treaty Organization
- 1984, Lemar, E.R., Forbes, J.W. and Watt, J.W. "Unreacted Hugoniot and shock initiation studies of composition B-3 and PBXW-109(I)", in "Shock Waves in Condensed Matter – 1983", ed. J.R. Asay, R.A. Graham and G.K. Straub, pp. 539-541, publ. Amsterdam, North-Holland

- 1984, Leung, K.P., Yao, S.S. and Alfano, R.R. "Picosecond laser-induced shock wave pressure measurements in aluminum, carbon-silicon, and gallium arsenide", in "Shock Waves in Condensed Matter – 1983", ed. J.R. Asay, R.A. Graham and G.K. Straub, pp. 343-345, publ. Amsterdam, North-Holland
- 1984, Li, Y.-C. and Ting, T.C.T. "Simple waves and shock waves generated by an incident shock wave in two-dimensional hyperelastic materials" Trans. ASME: J. Appl. Mech. 51 586-594
- 1984, Liang, Y.-M. and Zhao, H.-Y. "Two methods for measuring shock relations with improved EMV gauge", in "Shock Waves in Condensed Matter – 1983", ed. J.R. Asay, R.A. Graham and G.K. Straub, pp. 239-242, publ. Amsterdam, North-Holland
- 1984, Lieberman, P. and Rehard, J. "Pyrotechnic plate analysis and test results", in "Proc. 12th Symp. on Explosives and Pyrotechnics", paper III-14, publ. Philadelphia, The Franklin Research Center
- 1984, Linse, V.D. and Lalwaney, N.S. "Explosive welding" J. Metals 36(5) 62-65
- 1984, Litwiniszyn, J. "The phenomenon of rockbursts and resulting shock waves" Mining Sci. Technol. 1 243-251
- 1984, Lorenz, J. "Analysis of difference schemes for a stationary shock problem" SIAM J. Numer. Anal. 21 1038-1053
- 1984, Madon, M., Peyronneau, J. and Poirier, J.P. "Diamond anvil cell equivalent to shock wave gun?" J. Phys. France 45(C8) 117-120
- 1984, Marchenko, A.I. and Romanov, G.S. "Analysis of elastic wave dynamics in walls of a spherical explosion chamber" J. Engng Phys. 47 1365-1369
- 1984, Markenscoff, X. and Ni, L. "On the effect of dislocation loop curvature on elastic precursor decay" Trans. ASME: J. Appl. Mech. 51 753-758
- 1984, Markenscoff, X. "A dynamic plasticity analysis based on superposition of effects of moving dislocations" Int. J. Engng Sci. 22 1167-1169
- 1984, Mashimo, T. and Nagayama, K. "Shock compression and shear properties of sapphire" Mater. Res. Soc. Symp. Proc. 22(3) 143-146
- 1984, Mashimo, T., Ozaki, S. and Nagayama, K. "Keyed powder gun for the oblique impact shock study of solids in several 10s of GPa region" Rev. Sci. Instrum. 55 226-230
- 1984, Matveev, V.V., Medvedeva, I.V., Prut, V.V., Suslov, P.A. and Shibaev, S.A. "Adiabatic equation of state for hydrogen up to 150 kbar" JETP Letts 39 261-265
- 1984, Mazur, V.A., Pochkin, Y.A. and Tereshchenko, E.N. "Equation of state and shock adiabat of argon on the basis of an optimal model of the interaction potential" High Temp. USSR 22 837-842
- 1984, McCarthy, M.F. "One dimensional shock waves in deformable dielectrics with internal state variables" Arch. Mech. 36 97-107

- 1984, McQueen, R.G., Fritz, J.N. and Morris, C.E. "The velocity of sound behind strong shock waves in 2024 aluminum", in "Shock Waves in Condensed Matter – 1983", ed. J.R. Asay, R.A. Graham and G.K. Straub, pp. 95-98, publ. Amsterdam, North-Holland
- 1984, Meeks, S.W. and Ting, R.Y. "The evaluation of PVDF for underwater shock-wave sensor" J. Acoust. Soc. Amer. 75 1010-1012
- 1984, Mehrotra, V.B.L., Misra, R.M., Singh, R., Shukla, D.D., Sharma, M.N. and Madan, M.P. "Thermoelastic parameters of crystals" Canad. J. Phys. 62 109-114
- 1984, Melosh, H.J. "Impact ejection, spallation, and the origin of meteorites" Icarus 59 234-260
- 1984, Merzhievskii, L.A. and Resnyanskii, A.D. "Shock wave processes in metals" Combust. Explos. Shock Waves 20 580-587
- 1984, Meyers, M.A., Thadhani, N.H., Erlich, D.C. and DeCarli, P.S. "Martensitic transformation induced by tensile stress waves", in "Shock Waves in Condensed Matter – 1983", ed. J.R. Asay, R.A. Graham and G.K. Straub, pp. 411-414, publ. Amsterdam, North-Holland
- 1984, Meyers, M.A., Wang, S.L. and Gupta, B.B. "Mechanical and thermal response of shock-consolidated Mar-M 200", in "Shock Waves in Condensed Matter – 1983", ed. J.R. Asay, R.A. Graham and G.K. Straub, pp. 447-450, publ. Amsterdam, North-Holland
- 1984, Mikkola, D.E. and Wright, R.N. "Dislocation generation and its relation to the dynamic plastic response of shock loaded metals", in "Shock Waves in Condensed Matter – 1983", ed. J.R. Asay, R.A. Graham and G.K. Straub, pp. 415-418, publ. Amsterdam, North-Holland
- 1984, Miller, C.W., Ting, C.S. and Ytterhus, J.A. "Explosively-induced cavity collapse as a high strain rate test for metals", in "Proc. Eighth Int. Symp. on Ballistics", pp. V:7-15, publ. Wilmington, MA, Avco Systems Division
- 1984, Ming, L.C., Manghnani, M.H., Balogh, J., Qadri, S.B., Skelton, E.F., Webb, A.W. and Jamieson, J.C. "Static P-T-V measurements on MgO: Comparison with shock wave data", in "Shock Waves in Condensed Matter – 1983", ed. J.R. Asay, R.A. Graham and G.K. Straub, pp. 57-60, publ. Amsterdam, North-Holland
- 1984, Mirzadzhanzade, A.K., Nigmatulin, R.I. and Pyzh, V.A. "Anomalous increase in pressure accompanying shock loading of a water suspension of bentonite clay" Sov. Phys. Dokl. 29 788-790
- 1984, Mishkin, E.A. and Alejaldre, C. "On the analysis of shock implosion" Physica B&C 124 399-415

- 1984, Mitchell, A.C., Nellis, W.J., Holmes, N.C., Ross, M., Repp, G.W., Heinle, R.A., Valk, T.C., Rego, J., Graham, W.B. and Olness, R.J. "Shock impedance match experiments in aluminum and molybdenum between 0.1 – 2.5 TPa (1-25 Mbar)", in "Shock Waves in Condensed Matter – 1983", ed. J.R. Asay, R.A. Graham and G.K. Straub, pp. 81-84, publ. Amsterdam, North-Holland
- 1984, Mogilevsky, M.A. and Mynkin, I.O. "Computer modelling of the shear nucleation and development under plane shock wave loading" Inst. Phys. Conf. Ser. 70 119-126
- 1984, Molodets, A.M. and Dremin, A.N. "Mechanical energy dissipation and damping factor in spall-damaged material" Combust. Explos. Shock Waves 20 197-204
- 1984, Moore, D.S., Schmidt, S.C., Schiferl, D. and Shaner, J.W. "Single pulse coherent Raman spectroscopy in shock compressed benzene" Mater. Res. Soc. Symp. Proc. 22(2) 87-94
- 1984, Morosin, B. and Graham, R.A. "X-ray diffraction line broadening studies on shock-loaded TiO_2 and Al_2O_3 ", in "Shock Waves in Condensed Matter – 1983", ed. J.R. Asay, R.A. Graham and G.K. Straub, pp. 355-362, publ. Amsterdam, North-Holland
- 1984, Morosin, B., Graham, R.A. and Hellman, J.R. "Monoclinic to tetragonal conversion of zirconia under shock compression", in "Shock Waves in Condensed Matter – 1983", ed. J.R. Asay, R.A. Graham and G.K. Straub, pp. 383-386, publ. Amsterdam, North-Holland
- 1984, Morosin, B. and Graham, R.A. "X-ray diffraction line broadening studies on shock modified rutile and alumina" Mater. Sci. Engng 66 73-87
- 1984, Morosin, B., Graham, R.A., White, J.M. and Beck, D.D. "Shock induced irreversible transformation of titania" Chem. Phys. Letts 112 555-558
- 1984, Morosin, B. and Graham, R.A. "X-ray line broadening studies on aluminum nitride, titanium carbide, and titanium boride modified by high pressure shock loading" Mater. Res. Soc. Symp. Proc. 24 335-???
- 1984, Morris, C.E., McQueen, R.G. and Marsh, S.P. "Mach disc formation in cylindrical recovery systems", in "Shock Waves in Condensed Matter – 1983", ed. J.R. Asay, R.A. Graham and G.K. Straub, pp. 207-210, publ. Amsterdam, North-Holland
- 1984, Moss, W.C. and Glenn, L.A. "A Bauschinger effect model suitable for use in large computer codes", in "Shock Waves in Condensed Matter - 1983", ed. J.R. Asay, R.A. Graham and G.K. Straub, pp. 133-136, publ. Amsterdam, North-Holland
- 1984, Moss, W.C. "The effect of material strength on determining pressure 'on' and 'off' the Hugoniot" J. Appl. Phys. 55 2741-2746

- 1984, Moss, W.C. "The effect of material strength on the relationship between the principal Hugoniot and quasi-isentrope of beryllium and 6061-T6 aluminum below 35 GPa" J. Phys. France 45(C8) 263-266
- 1984, Mukuk, K.V. "Relaxation effects in the propagation of shock waves in anomalous oils" J. Engng Phys. 46 27-29
- 1984, Nagayama, K. and Mashimo, T. "Magnetohydrodynamic study of flux cumulation by the propagation of shock-compressed conductive region in semiconductors", in "Ultrahigh Magnetic Fields", ed. V.M. Titov and G.A. Shvetsov, pp. 270-277, publ. Moscow, Russia, Nauka
- 1984, Nakoryakov, V.E., Pokusaev, B.G., Pribaturin, N.A. and Shreiber, I.R. "Shock waves in boiling liquids" Int. Commun. Heat Mass Transfer 11 55-62
- 1984, Nellis, W.J. "Shocked fluids at high densities and temperatures", in "Shock Waves in Condensed Matter – 1983", ed. J.R. Asay, R.A. Graham and G.K. Straub, pp. 31-40, publ. Amsterdam, North-Holland
- 1984, Nellis, W.J., Ree, F.H., Trainor, R.J., Mitchell, A.C. and Boslough, M.B. "Equation of state and optical luminosity of benzene, polybutene, and polyethylene shocked to 210 GPa (2.1 Mbar)" J. Chem. Phys. 80 2789-2799
- 1984, Nellis, W.J., Holmes, N.C., Mitchell, A.C. and van Thiel, M. "Phase transition in fluid nitrogen at high densities and temperatures" Phys. Rev. Letts 53 1661-1664
- 1984, Nellis, W.J., Holmes, N.C., Mitchell, A.C., Trainor, R.J., Governo, G.K., Ross, M. and Young, D.A. "Shock compression of liquid helium to 56 GPa" Phys. Rev. Letts 53 1248-1251
- 1984, Nellis, W.F., Holmes, N.C., Mitchell, A.C., Trainor, R.J., Boslough, M.B., Ree, F.H. and Walrafen, G.E. "Equation of state of helium and polybutene and Raman spectrum of water at high shock pressures and temperatures" Mater. Res. Soc. Symp. Proc. 22(2) 55
- 1984, Nellis, W.J., Holmes, N.C., Mitchell, A.C., van Thiel, M., Radousky, H.B., Hamilton, D.C. and Henning, S. "Properties of the planetary materials He, SiO₂, and N₂ at dynamic high pressures and temperatures" J. Phys. France 45(C8) 105-107
- 1984, Nesterenko, V.F. "Thermodynamics of shock compression of porous materials" Mater. Res. Soc. Symp. Proc. 22(3) 195-198
- 1984, Nicholson, D.W. "Shock induced temperature rise in a titanium plate", in "Shock Waves in Condensed Matter - 1983", ed. J.R. Asay, R.A. Graham and G.K. Straub, pp. 141-144, publ. Amsterdam, North-Holland
- 1984, Nomura, Y. and Kawamura, K. "Soot derived from the detonation of a TNT charge" Carbon 22 189-191
- 1984, Novitskii, E.Z. and Sadunov, V.D. "Development of breakdown in a shock-compressed ferroelectric" Combust. Explos. Shock Waves 20 439-441

- 1984, Nunziato, J.W. "Initiation and growth-to-detonation in reactive mixtures", in "Shock Waves in Condensed Matter – 1983", ed. J.R. Asay, R.A. Graham and G.K. Straub, pp. 581-588, publ. Amsterdam, North-Holland
- 1984, Nutt, G.L. and Erickson, L.M. "Reactive flow Lagrange analysis in plastic bonded explosives" J. Energ. Mater. 2 263-292
- 1984, Nutt, G.L. and Erickson, L.M. "Reactive flow Lagrange analysis in RX-26-AF", in "Shock Waves in Condensed Matter – 1983", ed. J.R. Asay, R.A. Graham and G.K. Straub, pp. 605-608, publ. Amsterdam, North-Holland
- 1984, Oberg, A., Schweitz, J.A. and Olofsson, H. "Computer modelling of the explosive welding process", in "High Energy Rate Fabrication – 1984", ed. I. Berman and J.W. Schroeder, pp. 75-84, publ. New York, American Society of Mechanical Engineers
- 1984, Ogorodnikov, V.A. and Ivanov, A.G. "Singularities of spalling fracture of plates during synchronized initiation of a high explosive charge at several points" Combust. Explos. Shock Waves 20 309-311
- 1984, Owens, F.J. "Electron paramagnetic resonance study of shock-induced reactions of some small molecules in the solid state", in "Shock Waves in Condensed Matter – 1983", ed. J.R. Asay, R.A. Graham and G.K. Straub, pp. 547-550, publ. Amsterdam, North-Holland
- 1984, Palmour III, H., Kim, K.Y., Batchelor, A.D., Hare, T.M., Goudey, G.T., More, K.L., Linse, V.D. and Adair, J.H. "Influence of dynamic pressure on sinterability of shock-consolidated TiC powders", in "Shock Waves in Condensed Matter – 1983", ed. J.R. Asay, R.A. Graham and G.K. Straub, pp. 459-462, publ. Amsterdam, North-Holland
- 1984, Partom, Y., Rosenberg, Z. and Keren, B. "Gauge factor of manganin under uniaxial stress conditions" J. Appl. Phys. 56 552-553
- 1984, Partom, Y. and Rosenberg, Z. "More on the precursor decay anomaly", in "Shock Waves in Condensed Matter - 1983", ed. J.R. Asay, R.A. Graham and G.K. Straub, pp. 137-140, publ. Amsterdam, North-Holland
- 1984, Pashkov, P.O., Arisova, V.N., Gelunova, Z.M. and Ryadinskaya, I.M. "Variation of texture of certain metals during shock-wave treatment" Phys. Metals Metallog. 57(6) 126-130
- 1984, Pavlov, Y.A., Staver, A.M. and Shtertser, A.A. "Hurling of plane porous layers by a grazing detonation wave" Combust. Explos. Shock Waves 20 726-729
- 1984, Perry, F.C. "Dynamic heterogeneous response of aluminum and copper to stress waves", in "Shock Waves in Condensed Matter – 1983", ed. J.R. Asay, R.A. Graham and G.K. Straub, pp. 255-258, publ. Amsterdam, North-Holland

- 1984, Petrovic, J.J., Olinger, B.W. and Roof, R.B. "Behavior of Si_3N_4 powder subjected to explosive shock loading", in "Shock Waves in Condensed Matter – 1983", ed. J.R. Asay, R.A. Graham and G.K. Straub, pp. 463-466, publ. Amsterdam, North-Holland
- 1984, Peyrard, M., Odier, S. and Lavenir, E. "Microscopic interpretation of shock-initiated detonations in molecular crystals by a cooperative mechanism: Application to nitromethane (in French)" C.R. Acad. Sci. Ser. II 299 917-???
- 1984, Prümmer, R. "Explosive welding of tin, uranium and thorium copper", in "Shock Waves in Condensed Matter – 1983", ed. J.R. Asay, R.A. Graham and G.K. Straub, pp. 467-469, publ. Amsterdam, North-Holland
- 1984, Rabie, R.L., Vorthman, J.E. and Dienes, J.K. "Three-dimensional computer modeling of a shock recovery experiment", in "Shock Waves in Condensed Matter – 1983", ed. J.R. Asay, R.A. Graham and G.K. Straub, pp. 199-202, publ. Amsterdam, North-Holland
- 1984, Ragan, C.E., Diven, B.C., Rich, M., Teasdale, W.A. and Robinson, E.E. "Precise ultrahigh-pressure experiments", in "Shock Waves in Condensed Matter – 1983", ed. J.R. Asay, R.A. Graham and G.K. Straub, pp. 77-80, publ. Amsterdam, North-Holland
- 1984, Ragan III, C.E. "Shock-wave experiments at threefold compression" Phys. Rev. A 29 1391-1402
- 1984, Ramanathan, T.M., Prasad, P. and Ravindran, R. "On the propagation of a weak shock front: Theory and application" Acta Mech. 51 167-177
- 1984, Reddy, B.D. "The propagation and growth of acceleration waves in constrained thermoelastic materials" J. Elasticity 14 387-402
- 1984, Ree, F.H., Nellis, W.J., Trainor, R.J., Mitchell, A.C. and Boslough, M.B. "Theoretical and experimental studies of shock-compressed benzene and polybutene", in "Shock Waves in Condensed Matter – 1983", ed. J.R. Asay, R.A. Graham and G.K. Straub, pp. 41-44, publ. Amsterdam, North-Holland
- 1984, Ree, F.H. "An improved model of mixtures and its application to predict postdetonation behavior of PETN" Mater. Res. Soc. Symp. Proc. 22(3) 163-166
- 1984, Repin, N.Y., Zraichenko, V.A. and Potapov, A.I. "Effects of explosive charge loading regimes on the mechanical characteristics of rock-forming minerals of iron quartzites" Sov. Mining Sci. 20 270-272
- 1984, Rigden, S.M., Ahrens, T.J. and Stolper, E.M. "Densities of liquid silicates at high pressures" Science 226 1071-1074
- 1984, Rimer, N., Cherry, J.T. and Lie, K. "Simulation of particle velocity records from small scale explosive tests", in "Shock Waves in Condensed Matter – 1983", ed. J.R. Asay, R.A. Graham and G.K. Straub, pp. 517-520, publ. Amsterdam, North-Holland

- 1984, Rohde, R.W., Wise, J.L., Byrne, J.G. and Pachanadeeswaran, S. "Microstructural-hardness correlations in shock-loaded and quasi-statically deformed 6061-T6 aluminum", in "Shock Waves in Condensed Matter – 1983", ed. J.R. Asay, R.A. Graham and G.K. Straub, pp. 407-410, publ. Amsterdam, North-Holland
- 1984, Romain, J.P. "Generation of high shock pressures by laser pulses" J. Phys. France 45(C8) 281-289
- 1984, Roman, O.V., Adadurov, G.A., Baldokhin, Y.V., Bogdanov, A.P., Voloshin, Y.N., Gorobtsov, V.G., Kaplan, A.M., Messinev, M.Y. and Pikus, I.M. "Pressing of amorphous alloy powders under dynamic conditions" Sov. Powder Metall. Met. Ceram. 23 345-350
- 1984, Romanchenko, V.I., Marusii, O.I., Kramarenko, I.V. and Pokrovskii, M.A. "Kinetics of spall fracture of two steels" Strength Mater. 16 824-830
- 1984, Romanchenko, V.I. and Astinin, V.V. "Lifetime of steel in cleavage" Strength Mater. 16 1261-1263
- 1984, Rose, J.H., Smith, J.R., Guinea, F. and Ferrante, J. "Universal features of the equation of state of metals" Phys. Rev. B 29 2963-2969
- 1984, Rose, J.H., Vary, J.P. and Smith, J.R. "Nuclear equation of state from scaling relations for solids" Phys. Rev. Letts 53 344-347
- 1984, Rosen, M.D., Phillion, D.W., Price, R.H., Campbell, E.M., Obenschain, S.P., Whitlock, R.R., McLean, E.A. and Ripin, B.H. "Creation of ultra high pressure shocks by the collision of laser accelerated disks: Experiment and theory", in "Shock Waves in Condensed Matter – 1983", ed. J.R. Asay, R.A. Graham and G.K. Straub, pp. 323-326, publ. Amsterdam, North-Holland
- 1984, Rosenberg, Z., Mayselless, M. and Partom, Y. "The use of manganin stress transducers in impulsively loaded long rod experiments" Trans. ASME: J. Appl. Mech. 51 202-204
- 1984, Rosenberg, Z., Partom, Y. and Yaziv, D. "The use of in-material stress gauges for estimating the dynamic strength of shock-loaded solids" J. Appl. Phys. 56 143-146
- 1984, Rosenberg, Z., Partom, Y., Mayselless, M. and Falcovitz, J. "Determination of stress-time histories in axially symmetric impacts with the two-gauge technique" J. Appl. Phys. 56 1434-1439
- 1984, Rosenberg, Z., Mayselless, M. and Rosenberg, G. "Measurement of the radial displacement in 2D flow by embedded constantan wires", in "Shock Waves in Condensed Matter – 1983", ed. J.R. Asay, R.A. Graham and G.K. Straub, pp. 247-250, publ. Amsterdam, North-Holland
- 1984, Rosenberg, Z. and Partom, Y. "Direct measurement of temperature in shock-loaded polymethylmethacrylate with very thin copper thermistors", in "Shock Waves in Condensed Matter – 1983", ed. J.R. Asay, R.A. Graham and G.K. Straub, pp. 251-254, publ. Amsterdam, North-Holland

- 1984, Rosenberg, Z. and Partom, Y. "Measurement of shock temperatures in metals by the thick foil technique" J. Appl. Phys. 55 3999-4004
- 1984, Rosenberg, Z. and Partom, Y. "Direct measurement of temperature in shock-loaded polymethylmethacrylate with very thin copper thermistors" J. Appl. Phys. 56 1921-1926
- 1984, Rosenberg, Z. "Determination of the dynamic phase transitions in bismuth with in-material manganin gauges" J. Appl. Phys. 56 3328-3329
- 1984, Ross, M. "A review of some recent theoretical calculations of phase transitions and comparisons with experimental results", in "Shock Waves in Condensed Matter - 1983", ed. J.R. Asay, R.A. Graham and G.K. Straub, pp. 19-26, publ. Amsterdam, North-Holland
- 1984, Salem, S.A.L., Lazari, L.G. and Al-Hassani, S.T.S. "Explosive welding of flat plates in free flight" Int. J. Impact Engng 2 85-102
- 1984, Sandusky, H.W., Elban, W.L. and Liddiard, T.P. "Compaction of porous beds", in "Shock Waves in Condensed Matter - 1983", ed. J.R. Asay, R.A. Graham and G.K. Straub, pp. 567-570, publ. Amsterdam, North-Holland
- 1984, Savitt, J. "Geometrical factors affecting detonation between HNS-loaded stainless steel cups", in "Proc. 9th International Pyrotechnics Seminar", pp. 483-552, publ. Colorado Springs, CO, International Pyrotechnics Society
- 1984, Sawaoka, A. and Akashi, T. "Formation mechanism of high dense form boron nitride under shock compression", in "Defect Properties and Processing of High-Technology Nonmetallic Materials", ed. J.H. Crawford, Y. Chen and W.A. Sibley, pp. 365-371, publ. New York, North-Holland
- 1984, Schafer, H., Muller, W.F. and Hornemann, U. "Shock effects in melilite" Phys. Chem. Minerals 10 121-124
- 1984, Scheider, H., Vasudevan, R. and Hornemann, U. "Deformation of experimentally shock-loaded quartz powders: X-ray line-broadening studies" Phys. Chem. Minerals 10(3) 142-147
- 1984, Schmidt, S.C., Moore, D.S. and Shaner, J.W. "Raman spectroscopies in shock-compressed materials", in "Shock Waves in Condensed Matter - 1983", ed. J.R. Asay, R.A. Graham and G.K. Straub, pp. 293-302, publ. Amsterdam, North-Holland
- 1984, Schmidt-Kloiber, H. and Reichel, E. "The correlation between the amplitude of the pressure of a shock wave and the field strength of laser-induced breakdown in liquids" Acustica 54 284-288
- 1984, Schmitt, D.R. and Ahrens, T.J. "Emission spectra of shock compressed solids", in "Shock Waves in Condensed Matter - 1983", ed. J.R. Asay, R.A. Graham and G.K. Straub, pp. 313-316, publ. Amsterdam, North-Holland

- 1984, Schneider, H., Vasudevan, R. and Hornemann, U. "Deformation of experimentally shock-loaded quartz powders: X-ray line broadening studies" *Phys. Chem. Minerals* 10 142-147
- 1984, Schoen, P.E. and Campillo, A.J. "Characteristics of compressional shocks resulting from picosecond heating of confined foils" *Appl. Phys. Letts* 45 1049-1051
- 1984, Schott, G.L. "Measured Hugoniot states of a two-element fluid, O₂ + N₂ near 2 Mg/m³", in "Shock Waves in Condensed Matter - 1983", ed. J.R. Asay, R.A. Graham and G.K. Straub, pp. 49-52, publ. Amsterdam, North-Holland
- 1984, Schuster, S.H., England, R., Koik, V. and Wagner, M.H. "1- and 2-dimensional calculations of the effect of high pressure EOS models on the energy partitioning in cratering events", in "Shock Waves in Condensed Matter - 1983", ed. J.R. Asay, R.A. Graham and G.K. Straub, pp. 513-516, publ. Amsterdam, North-Holland
- 1984, Schwartz, L., Piwinskii, A., Ryerson, F., Tewes, H. and Beiriger, W. "Glass produced by underground nuclear explosions" *J. Non-Cryst. Solids* 67 559-591
- 1984, Schwarz, R.B., Kasiraj, P., Vreeland Jr., T. and Ahrens, T.J. "A theory for the shock wave consolidation of powders" *Acta metall.* 32 1243-1252
- 1984, Schwarz, R.B., Kasiraj, P., Vreeland Jr., T. and Ahrens, T.J. "The effect of shock duration on the dynamic consolidation of powders", in "Shock Waves in Condensed Matter - 1983", ed. J.R. Asay, R.A. Graham and G.K. Straub, pp. 435-438, publ. Amsterdam, North-Holland
- 1984, Seaman, L. and Keough, D.D. "Lagrangian analysis with an emphasis on unloading processes", in "Shock Waves in Condensed Matter - 1983", ed. J.R. Asay, R.A. Graham and G.K. Straub, pp. 117-120, publ. Amsterdam, North-Holland
- 1984, Sears, D.W.G., Bakhtiar, N., Keck, B.D. and Weeks, K.S. "Thermoluminescence and the shock and reheating history of meteorites. 2: Annealing studies of the Kernouve meteorite" *Geochim. Cosmochim. Acta* 48 2265-2272
- 1984, Sears, D.W., Ashworth, J.R., Broadbent, C.P. and Bevan, A.W.R. "Studies of an artificially shock-loaded H-group chondrite" *Geochim. Cosmochim. Acta* 48 343-360
- 1984, Seitz, W.L. "Short-duration shock initiation of TATB", in "Shock Waves in Condensed Matter - 1983", ed. J.R. Asay, R.A. Graham and G.K. Straub, pp. 531-534, publ. Amsterdam, North-Holland
- 1984, Setchell, R.E. "Grain-size effects on the shock sensitivity of hexanitrostilbene (HNS) explosive" *Combustion & Flame* 56 343-345
- 1984, Setchell, R.E. and Taylor, P.A. "The effects of grain size on shock initiation mechanisms in hexanitrostilbene (HNS) explosive" *Prog. Astronaut. Aeronaut.* 94 350-368

- 1984, Shaner, J.W., Brown, J.M. and McQueen, R.G. "Melting of metals above 100 GPa" *Mater. Res. Soc. Symp. Proc.* 22(3) 137-141
- 1984, Shaner, J.W., Brown, J.M., Swenson, C.A. and McQueen, R.G. "Sound velocity of carbon at high pressures" *J. Phys. France Colloq.* C8 45 235-237
- 1984, Shaner, J.W. "Pattern formation by shock processes" *Physica D* 12 154-162
- 1984, Shankar, S. and Murr, L.E. "Heat treatment of explosively consolidated molybdenum: TEM studies" *J. Mater. Sci. Letts* 3 15-17
- 1984, Sheffield, S.A. and Fisk, G.A. "Particle velocity measurements in laser irradiated foils using ORVIS", in "Shock Waves in Condensed Matter – 1983", ed. J.R. Asay, R.A. Graham and G.K. Straub, pp. 243-246, publ. Amsterdam, North-Holland
- 1984, Sheffield, S.A., Bloomquist, D.D. and Tarver, C.M. "Subnanosecond measurements of detonation fronts in solid high explosives" *J. Chem. Phys.* 80 3831-3844
- 1984, Shen, L.-T., Zhao, S.-D. and Bai, Y.-L. "Threshold and some microscopic observations of spallation of phenolic-resin based woven roving glass fiber reinforced composite material" *Int. J. Impact Engng* 2 169-178
- 1984, Slepian, L.I. and Troyankina, L.V. "Fracture wave in a chain structure" *J. Appl. Mech. Tech. Phys.* 25 921-927
- 1984, Smirnova, L.P. and Shreiber, I.R. "Resonance interaction of shock waves and hydraulic waves" *Sov. Phys. Acoust.* 30 245
- 1984, Soga, S., Kondo, K. and Sawaoka, A. "Shock compaction of TiN/TiC solid solution powders", in "Shock Waves in Condensed Matter – 1983", ed. J.R. Asay, R.A. Graham and G.K. Straub, pp. 375-378, publ. Amsterdam, North-Holland
- 1984, Solovev, V.S., Andreev, S.G., Attetkov, A.V., Bosko, M.M. and Kramarenko, V.N. "Hurling and loading of plates by products of an explosion" *Combust. Explos. Shock Waves* 20 230-233
- 1984, Solymar, Z.V. "Compaction of alluvial sands by deep blasting" *Canad. Geotech. J.* 21 305-321
- 1984, Somiya, S., Yoshimura, M., Fujiwara, S., Kondo, K.-I., Sawaoka, A., Hattori, T., Mohri, J.-I. and Araki, M. "Hot isostatic processing of shocked Si₃N₄ powder" *J. Amer. Ceram. Soc.* 67 C51-C52
- 1984, Starritt, H.C., Aindow, A.D. and Duck, F.A. "Ultrasonic shockwaves generated by diagnostic imaging equipment" *Phys. Med. Biol.* 29 167
- 1984, Staudhammer, K.P., Johnson, K.A. and Olinger, B. "1.2 Mbar shock loaded 304 stainless steel: Residual structure and properties", in "Shock Waves in Condensed Matter – 1983", ed. J.R. Asay, R.A. Graham and G.K. Straub, pp. 419-422, publ. Amsterdam, North-Holland

- 1984, Staver, A.M., Gubareva, N.V., Lyamkin, A.I. and Petrov, E.A. "Ultrafine diamond powders made by the use of explosion energy" *Combust. Explos. Shock Waves* 20 567-570
- 1984, Staver, A.M., Derispasko, V.T., Savelev, A.A. and Khudiakov, A.V. "Influence of explosion in some ceramic materials" *Mater. Res. Soc. Symp. Proc.* 22(3) 171-173
- 1984, Stepanov, G.V. and Kharchenko, V.V. "Relationship between stresses and strains in metals under an impulsive load" *Strength Mater.* 1535-1542
- 1984, Stöffler, D. "Glasses formed by hypervelocity impact" *J. Non-Cryst. Solids* 67 465-502
- 1984, Sudenkov, Y.V. "Measurement of transverse stress in aluminum deformed uniaxially by a force of submicrosecond duration" *Sov. Phys. Tech. Phys.* 29 1193-1194
- 1984, Sugimoto, N., Yamane, Y. and Kakutani, T. "Torsional shock waves in a viscoelastic rod" *Trans. ASME: J. Appl. Mech.* 51 595-601
- 1984, Sugimura, T., Tokita, K. and Fujiwara, T. "Nonsteady shock wave propagating in a bubble-liquid system" *Prog. Astronaut. Aeronaut.* 94 320-331
- 1984, Suliciu, I. "On the disappearance of shear waves and longitudinal waves in a solid body subject to high stresses and large strains" *Meccanica* 19 36-42
- 1984, Syono, Y., Kusaba, K., Fukuoka, K., Fukai, Y. and Watanabe, K. "Shock compression of V_2H and V_2D to 135 GPa and anomalous decompression behavior" *Phys. Rev. B* 29 6520-6524
- 1984, Syono, Y., Ito, A., Morimoto, S., Suzuki, T., Yagi, T. and Akimoto, S. "Mössbauer study on the high pressure phase of Fe_2O_3 " *Solid State Commun.* 59 97-100
- 1984, Tan, M.J. and Bankoff, S.G. "Strong shock waves propagating through a bubbly mixture" *Exper. Fluids* 2 159-165
- 1984, Tanaka, K., Fujiwara, S. and Kusakabe, M. "2-D simulations of shock recovery fixtures", in "Shock Waves in Condensed Matter – 1983", ed. J.R. Asay, R.A. Graham and G.K. Straub, pp. 203-206, publ. Amsterdam, North-Holland
- 1984, Tarver, C.M., Erickson, L.M. and Parker, N.L. "Shock initiation, detonation wave propagation and metal acceleration measurements and calculations for RX-26-AF", in "Shock Waves in Condensed Matter – 1983", ed. J.R. Asay, R.A. Graham and G.K. Straub, pp. 609-612, publ. Amsterdam, North-Holland
- 1984, Tarver, C.M. and Urtiew, P.A. "Theoretical modeling of converging and diverging detonation waves in solid and gaseous explosives" *Prog. Astronaut. Aeronaut.* 94 369-386
- 1984, Taya, M., Hall, I.W. and Yoon, H.S. "Void growth in a single crystal Cu-SiO₂ plate subjected to high strain rate impact" *Inst. Phys. Conf. Ser.* 70 269-276
- 1984, Taylor, P.A. "Shock wave evolution in a chemically reacting mixture with microstructure" *Int. J. Engng Sci.* 22 1199-1207

- 1984, Taylor, J.W. "Thunder in the mountains", in "Shock Waves in Condensed Matter - 1983", ed. J.R. Asay, R.A. Graham and G.K. Straub, pp. 3-15, publ. Amsterdam, North-Holland
- 1984, Taylor, P.A. "The effects of grain size on the shock sensitivity of porous granular explosives", in "Shock Waves in Condensed Matter - 1983", ed. J.R. Asay, R.A. Graham and G.K. Straub, pp. 597-600, publ. Amsterdam, North-Holland
- 1984, Taylor, P.A. "Growth and decay of one-dimensional shock waves in multiphase mixtures" *Acta Mech.* 52 239-267
- 1984, Thompson, P.C. and Roberts, P.D. "Shock wave generation in thin foils using lasers and ion beams. II: 2-D expansion effects and planarity considerations" *Laser Particle Beams* 2 13-26
- 1984, Tobe, T., Kato, M. and Obarta, H. "Metal forming by underwater wire explosion. 2: Experiments on bulging of circular aluminum sheets by copper wire explosions" *Bull. JSME* 27 130-135
- 1984, Tomita, Y., Shima, A. and Ohno, T. "Collapse of multiple gas bubbles by a shock wave and induced impulsive pressure" *J. Appl. Phys.* 56 125-131
- 1984, Trimble, J.J. and Bines, A. "Flash X-ray cineradiography of explosively driven events", in "Proc 1984 Flash Radiography Symposium", ed. E.A. Webster Jr. and A.M. Kennedy, pp. 79-87, publ. Columbus, OH, American Society for Nondestructive Testing
- 1984, Tsai, D.H. and Trevino, S.F. "Simulation of the initiation of detonation in an energetic molecular crystal" *J. Chem. Phys.* 81 5636-5637
- 1984, Tyburczy, J.A., Blayney, J.L., Miller, W.F. and Ahrens, T.J. "Streak camera recording of shock wave transit times at large distances using laser illumination" *Rev. Sci. Instrum.* 55 1452-1454
- 1984, Tyl, J. "A study of the possibility of reducing the tensile stress produced in an explosion driven liner" *J. Tech. Phys.* 25 89-100
- 1984, Tyl, J. and Wlodarczyk, E. "Analysis of imploding shock waves by the Chester-Chisnell-Whitham method" *J. Phys. France* 45(C8) 267-272
- 1984, Usuba, S., Kondo, K. and Sawaoka, A. "Status of electromagnetic mass-accelerator development and prospect of application to high-pressure research", in "Shock Waves in Condensed Matter - 1983", ed. J.R. Asay, R.A. Graham and G.K. Straub, pp. 261-264, publ. Amsterdam, North-Holland
- 1984, Usuba, S., Kondo, K. and Sawaoka, A. "Development of railgun accelerator combined with two-stage light gas gun" *IEEE Trans. Magnetics* 20 260-263
- 1984, Vakhnenko, V.A., Kudinov, V.M. and Palamarchuk, B.I. "Damping of strong shocks in relaxing media" *Combust. Explos. Shock Waves* 20 97-103

- 1984, Vakhnenko, V.A. and Palamarchuk, B.I. "Description of shock wave processes in a two phase medium containing an incompressible phase" J. Appl. Mech. Tech. Phys. 25 101-107
- 1984, Vermorel, J. "A new detonation wave generator design", in "Proc. 8th Int. Symp. on Ballistics", pp. VI:1-7, publ. Wilmington, MA, Avco Systems Division
- 1984, Villaggio, P. "The motion of a detaching elastic body" Arch. Ration. Mech. Anal. 85 161-170
- 1984, Vineyard, G.H. "Erratum: Simple model to explain inhomogeneous structures in shocked solids" J. Appl. Phys. 55 4137
- 1984, Virchenko, V.A., Egorov, A.P. and Krasavin, S.V. "Measurement of the normal component of compressive wave pressure in a rock with manganin gauges" Sov. Mining Sci. 20 230-231
- 1984, Vladimirov, A.S., Voloshin, N.P., Nogin, V.N., Petrovtsev, A.V. and Simonenko, V.A. "Shock compressibility of aluminum at $p > 1 \text{ Gbar}$ " JETP Letts 39 82-85
- 1984, von Holle, W.G. "Shock wave diagnostics by time-resolved infrared radiometry and non-linear Raman spectroscopy", in "Shock Waves in Condensed Matter – 1983", ed. J.R. Asay, R.A. Graham and G.K. Straub, pp. 283-291, publ. Amsterdam, North-Holland
- 1984, Von Holle, W.G., Kury, J., James, E. and Scribner, K. "Measurement of shock induced reaction in rocket propellants by nanosecond infrared radiometry and photography", in "Proc. 1984 JANNAF Propulsion Systems Hazards Subcommittee Meeting. Vol. 1", ed. D.S. Eggleston, pp. 117-125, publ. Laurel, MD, Chemical Propulsion Information Agency
- 1984, Vorobeva, I.V., Geguzin, Y.E., Monastryenko, V.E. and Pereygin, V.P. "Formation of surface tracks of heavy ions in solids by the shock wave mechanism" Sov. Phys. Solid State 26 1191-1193
- 1984, Vorthman, J. and Wackerle, J. "Multiple-wave effects on explosives decomposition rates", in "Shock Waves in Condensed Matter – 1983", ed. J.R. Asay, R.A. Graham and G.K. Straub, pp. 613-616, publ. Amsterdam, North-Holland
- 1984, Vreeland Jr., T., Kasiraj, P., Ahrens, T.J. and Schwarz, R.B. "Shock consolidation of powders: Theory and experiment" Mater. Res. Soc. Symp. 28 139-143
- 1984, Wackerle, J. and Anderson, A.D. "Burning topology in the shock-induced reaction of heterogeneous explosives", in "Shock Waves in Condensed Matter – 1983", ed. J.R. Asay, R.A. Graham and G.K. Straub, pp. 601-604, publ. Amsterdam, North-Holland
- 1984, Walker, F.E., Karo, A.M. and Hardy, J.R. "Non-equilibrium effects seen in molecular dynamics calculations of shock waves in solids", in "Proc. NATO Advanced Study Institute on Nonequilibrium Phenomena in Physics and Related Fields", ed. M.S. Velarde, pp. 363-370, publ. London, Plenum

- 1984, Wallace, D.C. "Thermoelastic-plastic flow in solids", LA-10119, Los Alamos National Laboratory
- 1984, Watt, J.P. and Ahrens, T.J. "Shock wave equations of state using mixed-phase regime data" J. Geophys. Res. 89 7836-7844
- 1984, Wilkins, M.L. and Cline, C.F. "Computer simulation of dynamic compaction", in "Emergent Process Methods for High-Technology Ceramics", ed. R.F. Davis, H. Palmour III and R.L. Porter, pp. 673-694, publ. New York, Plenum
- 1984, Wilkins, M.L. "Dynamic powder compaction", in "High Energy Rate Fabrication – 1984", ed. I. Berman and J.W. Schroeder, pp. 63-69, publ. New York, American Society of Mechanical Engineers
- 1984, Williams, W.D., Fogelson, D.J. and Lee, L.M. "Carbon piezoresistive stress gauges", in "Shock Waves in Condensed Matter - 1983", ed. J.R. Asay, R.A. Graham and G.K. Straub, pp. 121-124, publ. Amsterdam, North-Holland
- 1984, Wise, J.L. "Refractive index and equation of state of a shock-compressed aqueous solution of zinc chloride", in "Shock Waves in Condensed Matter – 1983", ed. J.R. Asay, R.A. Graham and G.K. Straub, pp. 317-320, publ. Amsterdam, North-Holland
- 1984, Wlodarczyk, E. "Plane expansion of real detonation products: Closed form solutions" J. Tech. Phys. 25 367-392
- 1984, Wlodarczyk, E. "Closed form solution to the propagation problem of a non-stationary plane shock wave in a dry sandy soil (in Polish)" Mech. Teor. Stos. 22 343-354
- 1984, Wright, T.W. "Weak shocks and steady waves in a nonlinear elastic rod or granular material" Int. J. Solids Structures 20 911-919
- 1984, Yakushev, V.V. "Shock induced electrical polarization of organic materials" Mater. Res. Soc. Symp. Proc. 22(3) 199-202
- 1984, Yaziv, D., Rosenberg, Z. and Partom, Y. "Determination of the pressure dependence of yield strength in 2024 Al under dynamic loading with in-material manganin gauges" Inst. Phys. Conf. Ser. 70 105-109
- 1984, Yellup, J.M. "The computer simulation of an explosive test rig to determine the spall strength of metals" Int. J. Impact Engng 2 151-168
- 1984, Yoon, H.S. and Taya, M. "Prediction of the void growth at its early stage in a viscous two-phase materials" Int. J. Engng Sci. 22 1035-1040
- 1984, Zakharenko, I.D., Milevskii, K.E. and Moskvina, V.N. "Electromagnetic forecasting of the mechanical properties of explosion-hardened steel" Combust. Explos. Shock Waves 20 587-589
- 1984, Zerilli, F.J. and Toton, E.T. "Shock induced molecular excitation in solids" Phys. Rev. B 29 5891-5902

- 1984, Zerilli, F.J. "Shock induced molecular excitation in solids", in "Shock Waves in Condensed Matter – 1983", ed. J.R. Asay, R.A. Graham and G.K. Straub, pp. 625-628, publ. Amsterdam, North-Holland
- 1984, Zhang, B.-P. and Müller, F. "The dynamic behaviour of poly(methyl methacrylate) in the low-pressure range" High Temp. High Press. 16 475-483
- 1984, Zhernokletov, M.V., Zubarev, V.N. and Sutulov, Y.N. "Porous specimen adiabats and solid copper expansion isentropes" J. Appl. Mech. Tech. Phys. 25 107-110
- 1984, Zhukov, V.P., Demidov, A.V. and Ryabenko, A.V. "A simple semi-empirical equation of state for metals over a wide range of pressures and temperatures" Phys. Metals Metallog. 57(2) 10-16
- 1984, Ziv, M. "Converging uniaxial strain shock waves in nonlinearly locking solids under loading unloading blasts. 1: Wave characteristics formulation and permanent strain boundary formation" J. Acoust. Soc. Amer. 76 560-565
- 1984, Ziv, M. "Converging uniaxial strain shock waves in nonlinearly locking solids under loading unloading blasts. 2: All-events method of integration along with the existing waves" J. Acoust. Soc. Amer. 76 566-573
- 1984, Ziv, M. "Converging uniaxial strain shock waves in nonlinearly locking solids under loading unloading blasts. 3: Resultant deformation" J. Acoust. Soc. Amer. 76 574-587
- 1984, Zlatin, N.A., Pugachev, G.S., Bellendir, E.N. and Zil'Berbrand, E.L. "Tensile strength of PMMA rods subjected to 10^{-5} s uniaxial dilatation pulses" Sov. Phys. Tech. Phys 29 469-472
- 1984, Zlatin, N.A., Pugachev, G.S. and Leontev, S.A. "Recording the parameters of an elastic-plastic stress pulse in a solid" Sov. Phys. Tech. Phys. 29 363-365
- 1984, Zubarev, V.N. "Structure of self-similar rarefaction waves and expansion adiabats of substances" Combust. Explos. Shock Waves 20 307-308
- 1984, Zuev, A.P., Negodyaev, S.S. and Tkachenko, B.K. "Laser schlieren measurement of vibrational relaxation times for N_2O in mixtures containing CO , N_2 , and Ar behind a shock wave" Sov. Phys. J. 27 911-914
- 1985, Aberg, G. and Bollmark, B. "Retention of U and Pb in zircons from shocked granite in the Siljan Impact Structure, Sweden" Earth Planet. Sci. Letts 74 347-349
- 1985, Adadurov, G.A., Alekseev, N.I., Groznov, I.N. and Kuznetsov, V.D. "Initial stage in the transformation of pyrolitic graphitelike boron nitride as a result of shock compression" Combust. Explos. Shock Waves 21 577-582
- 1985, Aeberli, K.E. and Pratt, P.L. "The effect of explosive loading on the microstructure of some metals and alloys" J. Mater. Sci. 20 316-320
- 1985, Afanasenkov, A.N. and Voskoboynikov, I.M. "Decomposition of porous condensed substances in shock waves" Sov. J. Chem. Phys. 3 413-416

- 1985, Ahrens, T.J. and O'Keefe, J.D. "Shock vaporization and the accretion of the icy satellites of Jupiter and Saturn", in "Ices in the Solar System", ed. J. Klinger, pp. 631-654, publ. New York, D. Reidel
- 1985, Akashi, T., Lotrich, V., Sawaoka, A. and Beauchamp, E.K. "Shock consolidation of coarse SiC powder" J. Amer. Ceram. Soc. 68 C322-C324
- 1985, Akhmadeev, N.K. and Bolotnova, R.K. "Propagation of stress waves in layered media under impact loading (acoustical approximation)" J. Appl. Mech. Tech. Phys. 26 114-122
- 1985, Akhmadeev, N.K., Akhmadeev, R.K. and Bolotnova, R.K. "Damping properties of porous facings in shock loading and splitting off" Sov. Tech. Phys. Letts 11 295-296
- 1985, Akhmadeev, N.K. and Gainatulina, G.M. "Development of multiple scabbing in explosion-deformed samples" Sov. Tech. Phys. Letts 11 371-372
- 1985, Akkerman, A.F., Bushman, A.V., Demidov, B.A., Ivkin, M.V., Ni, A.L., Petrov, V.A., Rudakov, L.I. and Fortov, V.E. "Dynamics of shock waves excited by a high current relativistic electron beam in aluminum targets" Sov. Phys. JETP 62 489-493
- 1985, Al-Hassani, S.T.S. "Fracturing of explosively loaded solids", in "Metal Forming and Impact Mechanics", ed. S.R. Reid, pp. 325-345, publ. Oxford, Pergamon
- 1985, Alshits, V.I., Darinskaya, E.V. and Urusovskaya, A.A. "The investigation of the shock deformation kinetics and dislocation dynamics upon pulse loading of CsI, NaCl and LiF crystals" Phys. Stat. Sol. A 91 533-542
- 1985, Altshuler, L.V. "Results of and prospects for experimental studies of extremal states of matter" Sov. Phys. Usp. 28 847-849
- 1985, Altshuler, L.V., Doronin, G.S. and Klochkov, S.V. "Determination of shock adiabat of low density materials" J. Appl. Mech. Tech. Phys. 26 885-889
- 1985, Amiranoff, F., Fedosejevs, R., Schmalz, R.F., Sigel, R. and Teng, Y.-L. "Laser-driven shock-wave studies using optical shadowgraphy" Phys. Rev. A 32 3535-3546
- 1985, Anderson, D.A., Winzer, S.R. and Ritter, A.P. "The relationships between rock structure and delay timing, and fragment size and distribution in explosively-loaded rock", in "Fragmentation by Blasting", ed. W.L. Fournery, R.R. Boade and L.S. Costin, pp. 41-62, publ. Brookfield, Connecticut, Society for Experimental Mechanics
- 1985, Andreev, S.G., Boiko, M.M., Lazarev, V.V., Bolovev, V.S. and Chernov, A.I. "Effect of temperature on the combustion of charges of TNT and hexogen by the action of compression waves with an amplitude of 0.15-1.0 GPa" Combust. Explos. Shock Waves 21 42-45

- 1985, Andreev, S.G., Boiko, M.M., Lazarev, V.V., Solovev, V.S. and Chernov, A.I. "Influence of the rheological properties on the selective sensitivity of explosives to the form of a shock-wave pulse" *Combust. Explos. Shock Waves* 21 344-350
- 1985, Andreev, V.D., Sozin, Y.I., Voloshin, M.N. and Andrusishin, V.M. "Structural changes in diamonds obtained by dynamic synthesis through heating in vacuum and under high pressure" *Sov. J. Superhard Mater.* 7(1) 13-17
- 1985, Andreev, V.D., Voloshin, M.N. and Malik, V.R. "Dynamics of the graphitization of diamond under impact loading of cast iron" *Sov. J. Superhard Mater.* 7(3) 9-14
- 1985, Anisimov, S.I., Kravchenko, V.A. and Sagdeev, R.Z. "Laser modeling of high-velocity impact" *Sov. Tech. Phys. Letts* 11 534-535
- 1985, Aptukov, V.N. "Two stages of spallation" *Combust. Explos. Shock Waves* 21 631-636
- 1985, Aptukov, V.N., Nikolaev, P.K. and Pozdeev, A.A. "Model of damage due to chipping with allowance for thermal effects" *Sov. Phys. Dokl.* 30 705-707
- 1985, Arthur, G. "Applications of explosive welding to heat exchangers" *Mater. Design* 6 37-41
- 1985, Asay, J.R., Chhabildas, L.C. and Barker, L.M. "Projectile and impactor designs for plate impact experiments", SAND85-2009, Sandia National Laboratory
- 1985, Ashworth, J.R. and Schneider, H. "Deformation and transformation in experimentally shock loaded quartz" *Phys. Chem. Minerals* 11 241-249
- 1985, Ashworth, J.R. "TEM of L-group chondrites. 1: Natural shock effects" *Earth Planet. Sci. Letts* 73 17-32
- 1985, Astanin, V.V. "Resistance to deformation of aluminum alloy at high strain rates" *Strength Mater.* 17 945-947
- 1985, Austing, J.L. and Gidaspow, D. "A numerical technique for the solution of two nonlinear simultaneous equations", in "Proc. 10th Int. Pyrotechnics Seminar", ed. F. Volk and A.J. Tulis, paper 43, publ. Karlsruhe, Germany, Fraunhofer-Institut für Treib- und Explosivstoffe
- 1985, Backofen, J.E., Petrousky, J.A., Butz, D.J., Holmes, D.W., Faccini, E.C. and McCree, A.E., "Disintegrating tamper mass", United States, patent no. 4,628,819
- 1985, Bahl, K., Bloom, G., Erickson, L., Lee, R., Tarver, C., von Holle, W. and Weingart, R. "Initiation studies on LX-17 explosive", in "Proc. Eighth Symposium (Int.) on Detonation", ed. J.M. Short, pp. 1045-1056, publ. White Oak, Silver Spring, Maryland, Naval Surface Weapons Center
- 1985, Bailey, P.B. and Chen, P.J. "Evolutionary behavior of induced discontinuities behind one dimensional shock waves in nonlinear elastic materials" *J. Elasticity* 15 257-269

- 1985, Baizakov, O.D. and Sudenkov, Y.V. "Relaxation phenomena in materials near a surface subjected to submicrosecond elastic loading" *Sov. Tech. Phys. Letts* 11 591-593
- 1985, Balankin, S.A., Gorbachev, L.P., Grigorev, E.G. and Dobrovolskii, V.B. "Effect of pore closing dynamics on high-speed densification of powder material" *Combust. Explos. Shock Waves* 21 341-344
- 1985, Ball, J.W. and Coltharp, D.R. "Development and testing of igloo roof retrofit concepts", in "Proc. Second Symp. on The Interactions of Non-Nuclear Munitions with Structures", pp. 137-142, publ. Eglin, FL, US Air Force
- 1985, Bardo, R.D. "Calculated reaction pathways for nitromethane and their role in the shock initiation process", in "Proc. Eighth Symposium (Int.) on Detonation", ed. J.M. Short, pp. 855-863, publ. White Oak, Silver Spring, Maryland, Naval Surface Weapons Center
- 1985, Barrenblatt, G.A., Ivanov, M.Y. and Shapiro, G.I. "On the structure of wave fronts in nonlinear dissipative media" *Arch. Ration. Mech. Anal.* 87 293-303
- 1985, Batkov, Y.V., Ivanov, A.G. and Novikov, S.A. "Study of the unloading of steel shock compressed above the phase transition point" *J. Appl. Mech. Tech. Phys.* 26 890-893
- 1985, Batsanov, S.S. "Limits of applicability of the shock pressing method" *Combust. Explos. Shock Waves* 21 645-647
- 1985, Batsanov, S.S. "Some features of phase transitions under shock compression" *Sov. J. Chem. Phys.* 2 1104-1112
- 1985, Bazanov, O.V., Bepalov, V.E., Zharkov, A.P., Rummyantsev, B.V., Fedotova, T.B., Fortov, V.E. and Misonochnikov, A.L. "Irregular reflection of conically converging shock waves in plexiglas and copper" *High Temp. USSR* 23 781-787
- 1985, Bazdenkov, S.V., Demichev, V.F., Morozov, D.K. and Pogutse, O.P. "Possible mechanism of wave formation in explosive welding" *Combust. Explos. Shock Waves* 21 124-130
- 1985, Beauchamp, E.K., Carr, M.J. and Graham, R.A. "Plastic deformation in alumina by explosive shock loading" *J. Amer. Ceram. Soc.* 68 696-699
- 1985, Bedoch, J.P., Gimenez, P. and de Longueville, Y. "Mesure par interférométrie de la mise en vitesse d'une plaque lors d'un relèvement plan par explosif" *Propell. Explos. Pyrotech.* 10 26
- 1985, Bekrenev, A.N. and Naumov, L.A. "Aging of aluminum alloys after impact loading" *Phys. Metals* 6 707-714
- 1985, Bekrenev, A.N. and Fedorov, B.N. "Diffusion of copper in shock-loaded nickel" *Phys. Metals* 6 1001-1007

- 1985, Bélanger, C., Pelletier, P. and Drolet, J.F. "Shock sensitivity study of the curable plastic bonded explosives", in "Proc. Eighth Symposium (Int.) on Detonation", ed. J.M. Short, pp. 361-371, publ. White Oak, Silver Spring, Maryland, Naval Surface Weapons Center
- 1985, Bizeuil, C., Chapron, P., Elias, P., Frachet, V. and Laurent, B. "Étude expérimentale et théorique des mécanismes d'éjection de matière en surface d'un matériau soumis à un choc" *J. Phys. France* 46(C5) 351-355
- 1985, Bjarnholt, G. and Smedberg, U. "On detonation driven air shocks in the air gap between a charge and its confinement", in "Proc. Eighth Symposium (Int.) on Detonation", ed. J.M. Short, pp. 1069-1079, publ. White Oak, Silver Spring, Maryland, Naval Surface Weapons Center
- 1985, Bogard, D.D., Taylor, G.J., Smith, M.R. and Schmitt, R.A. "Impact melting of the Cachari eucrite 3.0 Gya ago" *Geochim. Cosmochim. Acta* 49 941-946
- 1985, Bondar, M.P. and Ogolikhin, V.M. "Plastic deformation in the joint zone with cladding by explosion" *Combust. Explos. Shock Waves* 21 266-270
- 1985, Bordzilovskii, S.A. and Karakhanov, S.M. "Effects of loading rate on the predetonation length for TG 50/50" *Combust. Explos. Shock Waves* 21 752-755
- 1985, Borrelli, A. and Patria, M.C. "Acceleration waves through a mixture of two non-linear elastic solids" *Acta Mech.* 57 25-40
- 1985, Boslough, M.B. "A model for time dependence in shock-induced thermal radiation of light" *J. Appl. Phys.* 58 3394-3399
- 1985, Boslough, M.B. and Ahrens, T.J. "Shock wave properties of anorthosite and gabbro" *J. Geophys. Res.* 90 7814-7820
- 1985, Boslough, M.B. and Graham, R.A. "Submicrosecond shock induced chemical reactions in solids: First real time observations" *Chem. Phys. Letts* 121 446-452
- 1985, Brannon, P.J., Morris, R.W. and Asay, J.R. "Shock-induced luminescence from Z-cut lithium niobate" *J. Appl. Phys.* 57 1676-1679
- 1985, Brown, J.M., Shaner, J.W. and Swenson, C.A. "Shock determination of the Grüneisen parameter for lanthanum and the 6s-5d transition" *Phys. Rev. B* 32 4507-4512
- 1985, Bur, A.J. and Roth, S.C. "A polymer pressure gage for dynamic pressure measurement", in "Proc. Second Symp. on The Interactions of Non-Nuclear Munitions with Structures", pp. 291-295, publ. Eglin, FL, US Air Force
- 1985, Buravova, S.N. "Formation of a second shock wave in particle collision with a surface in the course of detonational sputtering" *Combust. Explos. Shock Waves* 21 615-620

- 1985, Burkin, V.V. "Characteristics of the explosive action associated with the pulsed electrical breakdown of hard materials" *Combust. Explos. Shock Waves* 21 484-488
- 1985, Bushman, A.V., Korotkova, G.I., Ni, A.L. and Fortov, V.E. "Calculation of the conditions for the generation of a dense metal plasma in an irregular collision of strong shock waves" *Temp. Temp. USSR* 23 941-946
- 1985, Bykovtsev, A.G. "Refraction of plane-polarized waves at the boundary of an elastic and elastoplastic half-space" *J. Appl. Math. Mech.* 49 232-238
- 1985, Cagnoux, J. "Déformation et ruine d'un verre pyrex soumis à un choc intense: Etude expérimentale et modélisation du comportement", PhD thesis, Univ. of Poitiers
- 1985, Cagnoux, J. "Modèle phénoménologique d'écaillage d'un verre pyrex" *J. Phys. France* 46(C5) 343-350
- 1985, Campbell, A.W. and Travis, J.R. "The shock desensitization of PBX-9404 and composition B-3", in "Proc. Eighth Symposium (Int.) on Detonation", ed. J.M. Short, pp. 1057-1068, publ. White Oak, Silver Spring, Maryland, Naval Surface Weapons Center
- 1985, Capek, V. "Energy transfer by shock waves" *Chem. Phys. Letts* 113 275-277
- 1985, Charlie, W.A., Abt, S.R. and Veyera, G.E. "Dynamic pore pressure response of saturated soil under shock loading", in "Proc. Second Symp. on The Interactions of Non-Nuclear Munitions with Structures", pp. 371-376, publ. Eglin, FL, US Air Force
- 1985, Chartagnac, P.F. "Rigidification sous choc d'une solution aqueuse de glycérol" *J. Phys. France* 46(C5) 475-480
- 1985, Chartagnac, P.F. "Comportement sous choc d'un pseudo alliage de tungstène" *J. Phys. France* 46(C5) 481-486
- 1985, Chen, P.J. "The behavior of induced discontinuities behind curved shocks in isotropic linear elastic materials" *J. Elasticity* 15 43-52
- 1985, Chew, J. "Explosives used to fabricated exotic laminates, cermets" *J. Metals* 37(6) 39-40
- 1985, Chhabildas, L.C. and Kipp, M.E. "Pressure-shear loading of PBX-9404", in "Proc. Eighth Symposium (Int.) on Detonation", ed. J.M. Short, pp. 274-283, publ. White Oak, Silver Spring, Maryland, Naval Surface Weapons Center
- 1985, Chirat, R. and Baute, J. "An extensive application of WCA4 equation of state for explosives", in "Proc. Eighth Symposium (Int.) on Detonation", ed. J.M. Short, pp. 751-761, publ. White Oak, Silver Spring, Maryland, Naval Surface Weapons Center
- 1985, Clifton, R.J. "Stress wave experiments in plasticity" *Int. J. Plast.* 1 289-302

- 1985, Clifton, R.J. and Klopp, R.W. "Pressure-shear plate impact testing", in "Metals Handbook (Ninth Edition). Vol. 8", pp. 230-238, publ. Metals Park, Ohio, American Society of Metals
- 1985, Coffey, C.S. "Energy localization in rapidly deforming crystalline solids" Phys. Rev. B 32 5335-5341
- 1985, Coltharp, D.R., Kiger, S.A., Vitayaudom, K.P. and Hilferty, T.J. "Blast response tests of reinforced concrete box structures: Methods for reducing spall", in "Proc. Second Symp. on The Interactions of Non-Nuclear Munitions with Structures", pp. 95-100, publ. Eglin, FL, US Air Force
- 1985, Cottet, F., Hallouin, M., Romain, J.P., Fabbro, R., Faral, B. and Pepin, H. "Enhancement of a laser-driven shock wave up to 10 TPa by the impedance match technique" Appl. Phys. Letts 47 678-680
- 1985, Cottet, F. and Migault, A. "A simple model for the theoretical evaluation of the temperature behind a very strong shock" High Temp. High Press. 16 665-668
- 1985, Couch, R., Shaw, L., Barlett, R., Steinmetz, L., Bahrendt, W. and Firpo, C. "Surface properties of shocked lead" J. Phys. France 46(C5) 385-393
- 1985, Cowperthwaite, M. and Rosenberg, J.T. "Lagrange gage studies of detonation in some intermolecular EA based explosives", in "Proc. Eighth Symposium (Int.) on Detonation", ed. J.M. Short, pp. 111-122, publ. White Oak, Silver Spring, Maryland, Naval Surface Weapons Center
- 1985, DaSilva, L., Ng, A. and Parfenuik, D. "Simulations of temperature measurements of shock heated solids" J. Appl. Phys. 58 3634-3637
- 1985, Dear, J.P. "The fluid-mechanics of high-speed liquid/solid impact", PhD thesis, Univ. of Cambridge
- 1985, Delamater, N.D., Hooper Jr., C.F., Joyce, R.F., Woltz, L.A., Ceglio, N.M., Kauffman, R.L., Lee, R.W. and Richardson, M.C. "Opacity effects on hydrogen-like X-ray lines emitted from laser-driven implosions" Phys. Rev. A 31 2460-2463
- 1985, Demchenko, V.V. and Kholodov, A.S. "Numerical study of compression and heating of conical targets" J. Appl. Mech. Tech. Phys. 26 877-884
- 1985, Demirskii, V.V. and Komnik, S.N. "Temperature dependence for the sensitivity of crystals to shock loading" Strength Mater. 17 770-774
- 1985, Dodd, R.T., Olsen, E.J. and Clarke Jr., R.S. "The Bloomington (LL6) chondrite and its shock melt classes" Meteoritics 20 575-582
- 1985, Dodson, B.W. "Subthreshold generation of free radicals in shock-loaded organic compounds" J. Phys. Chem. 89 2744-2745
- 1985, Dorokhin, V.V., Zubarev, V.N., Oerkin, Y.K., Panov, N.V. and Shaboldina, N.L. "Motion of explosion products behind a detonation wave front" Combust. Explos. Shock Waves 21 471-474

- 1985, Dost, S. and Gözde, S. "On thermoelastic dielectrics with polarization effects" Arch. Mech. 37 157-176
- 1985, Dufort, S. and Delpuech, A. "A molecular mechanism for the initiation of secondary explosives. Influence of a shock light-coupling", in "Proc. Eighth Symposium (Int.) on Detonation", ed. J.M. Short, pp. 847-854, publ. White Oak, Silver Spring, Maryland, Naval Surface Weapons Center
- 1985, Duszczuk, B., Kosinski, S. and Wesolowski, Z. "Reflection of oblique shock waves in incompressible elastic solids" J. Austral. Math. Soc. B 27 31-47
- 1985, Egorova, N.V., Chernyi, V.G. and Chernyi, G.I. "Viscosity of soils under shock loadings" J. Appl. Mech. Tech. Phys. 26 147-149
- 1985, El Bounia, N.E., Skhiri, N. and Gillaizeau, F. "Etudes rhéologiques préliminaires de céramiques techniques à grande vitesses de déformation" J. Phys. France Colloq. C5 (DYMAT '85) 46 551-556
- 1985, Elzanowski, M. and Epstein, M. "Decay of strong shocks in non-linear elasticity" J. Sound Vibration 103 371-378
- 1985, Evans, R.G. "Non-uniform illumination of laser targets" Laser Particle Beams 3 273-281
- 1985, Fabbro, R., Faral, B., Virmont, J., Cottet, F., Romain, J.P. and Pepin, H. "Experimental study of ablation pressures and target velocities obtained in 0.26 μm wavelength experiments in planar geometry" Phys. Fluids 28 3414-3423
- 1985, Field, J.E., Lesser, M.B. and Dear, J.P. "Studies of two-dimensional liquid-wedge impact and their relevance to liquid-drop impact problems" Proc. R. Soc. Lond. A 401 225-249
- 1985, Foster Jr., J.C., Forbes, K.R., Gunger, M.E. and Craig, B.G. "An eight-inch diameter, heavily confined card gap test", in "Proc. Eighth Symposium (Int.) on Detonation", ed. J.M. Short, pp. 228-242, publ. White Oak, Silver Spring, Maryland, Naval Surface Weapons Center
- 1985, Fujimoto, Y., Mishkin, E.A. and Alejaldre, C. "Shock implosion of a small homogeneous pellet" Phys. Fluids 28 3018-3026
- 1985, Gaffney, E.S. "Hugoniot of water ice", in "Ices in the Solar System", ed. J. Klinger, pp. 119-148, publ. New York, D. Reidel
- 1985, Gaffney, E.S., Wohletz, K.H. and McQueen, R.G. "Measurement of ground shock in explosive centrifuge model tests", in "Proc. Second Symp. on The Interactions of Non-Nuclear Munitions with Structures", pp. 413-417, publ. Eglin, FL, US Air Force
- 1985, Gatilov, L.A., Glukhodedov, V.D., Grigorev, F.V., Kormer, S.B., Kuleshova, L.V. and Mochalov, M.A. "Electrical conductivity of shock compressed argon" J. Appl. Mech. Tech. Phys. 26 88-91

- 1985, Gerasimenko, P.V. and Mazarchenkov, V.A. "Determination of the parameters of the nonstationary deformation wave with shock rupture in polymer materials" *Mech. Compos. Mater.* 21 21-24
- 1985, Gilat, A. and Clifton, R.J. "Pressure-shear waves in 6061-T6 aluminum and alpha-titanium" *J. Mech. Phys. Solids* 33 263-284
- 1985, Gilat, A. "A viscoplastic theory with anisotropic hardening and its application to pressure-shear plate impact experiments" *Trans. ASME: J. Appl. Mech.* 52 629-633
- 1985, Glenn, L.A., Ladd, A.J.C., Moran, B. and Wilson, K.A. "Elastic radiation from explosively loaded cavities in an unbounded medium" *Geophys. J. R. Astron. Soc.* 81 231-241
- 1985, Gluzman, V.D., Kanel, G.I., Loskutov, V.F., Fortov, V.E. and Khorev, I.E. "Resistance to deformation and fracture of 35KH3NM steel under conditions of shock loading" *Strength Mater.* 17 1093-1099
- 1985, Gogulya, M.F., Demchenko, N.G. and Voskoboinikov, I.M. "Interaction of convergent shocks in condensed matter" *Combust. Explos. Shock Waves* 21 246-249
- 1985, Gogulya, M.F., Voskoboinikov, I.M. and Prostoserdov, A.I. "Shock compression of porous aluminum" *Combust. Explos. Shock Waves* 21 373-375
- 1985, Golubev, V.K., Novikov, S.A., Sobolev, Y.S. and Yukina, N.A. "Effect of temperature on the strength and fracture of copper and nickel in spalling" *Strength Mater.* 17 76-79
- 1985, Golubev, V.K., Novikov, S.A., Sobolev, Y.S. and Yukina, N.A. "Nature of spallation of molybdenum, nickel, and titanium" *Strength Mater.* 17 515-518
- 1985, Golubev, V.K., Novikov, S.A., Sobolev, Y.S. and Yukina, N.A. "Effect of the temperature and of the loading rate on the strength and fracture of mild steel and steels ST3 and 12KH18N10T in spalling" *Strength Mater.* 17 763-769
- 1985, Goodman, J. and Majda, A. "The validity of the modified equation for nonlinear shock-waves" *J. Comput. Phys.* 58 336-348
- 1985, Goodwin, R.D. "Carbon monoxide thermophysical properties from 68 to 1000 K at pressures to 100 MPa" *J. Phys. Chem. Ref. Data* 14 849-932
- 1985, Goto, T. and Syono, Y. "Shock induced phase transformations in lithium niobate" *J. Appl. Phys.* 58 1819-1827
- 1985, Gourdin, W.H. and Weinland, S.L. "Dynamic compaction of aluminum nitride powder: Hugoniot measurement and comparison with static behavior" *J. Amer. Ceram. Soc.* 68 674-679
- 1985, Grady, D.E. "The mechanics of fracture under high-rate stress loading", in "Mechanics of Geomaterials: Rocks, Concrete, Soils", ed. Z.P. Bazant, pp. 129-156, publ. New York, Wiley

- 1985, Graham, R.A., Venturini, E.L. and Morosin, B. "High pressure shock modification of hematite" Bull. Amer. Phys. Soc. 30 477
- 1985, Green, L., Lee, E., Mitchell, A. and Tarver, C. "The supra-compression of LX-07, LX-17, PBX-9404, and RX-26-AF and the equations of state of the detonation products", in "Proc. Eighth Symposium (Int.) on Detonation", ed. J.M. Short, pp. 587-595, publ. White Oak, Silver Spring, Maryland, Naval Surface Weapons Center
- 1985, Grigorev, F.V., Kormer, S.B., Mikhailova, O.I., Mochalov, M.A. and Urlin, V.D. "Shock compression and brightness temperature of a shock wave front in argon. Electron screening of radiation" Sov. Phys. JETP 61 751-757
- 1985, Gronostajski, J. and Palczewski, W. "The effect of dynamic loading on the structure and properties of 18G2A and 14HNMBCu steels" J. Phys. France Colloq. C5 (DYMAT 85) 46 505-510
- 1985, Gupta, S.C. and Gupta, Y.M. "Piezoresistance response of longitudinally and laterally oriented ytterbium foils subjected to impact and quasi-static loading" J. Appl. Phys. 57 2464-2473
- 1985, Gvozdeva, L.G., Faresov, Y.M. and Fokeev, V.P. "Interaction of air shock waves with porous compressible materials" J. Appl. Mech. Tech. Phys. 26 401-405
- 1985, Haddow, J.B. "Thermodynamic aspects of transverse wave propagation in an incompressible hyperelastic solid" Acta Mech. 54 189-200
- 1985, Hamad, H. "On the structure of shock waves" Proc. Indian Nat. Acad. Sci. A 51 843-847
- 1985, Harris, P. and Karo, A.M. "Computer molecular dynamics of 2-D water (ice) structures under shock" J. Energ. Mater. 3 1-33
- 1985, Hasman, E., Gvishi, M., Segalov, Z., Carmel, Y., Ayalon, D. and Solomonovici, A. "Shock initiation of HNAB by electrically driven flyer plates", in "Proc. Eighth Symposium (Int.) on Detonation", ed. J.M. Short, pp. 1126-1130, publ. White Oak, Silver Spring, Maryland, Naval Surface Weapons Center
- 1985, Held, M. "Superposition of shock waves and reaction waves for the initiation of high explosive charges", in "Proc. Eighth Symposium (Int.) on Detonation", ed. J.M. Short, pp. 330-336, publ. White Oak, Silver Spring, Maryland, Naval Surface Weapons Center
- 1985, Hemsing, W.F. "VISAR: Interferometer quadrature signal recording by electronic streak camera", in "Proc. Eighth Symposium (Int.) on Detonation", ed. J.M. Short, pp. 468-472, publ. White Oak, Silver Spring, Maryland, Naval Surface Weapons Center
- 1985, Hereil, P. "Indice de réfraction sous choc de la silice fondue et du saphir" J. Phys. France 46(C5) 667-672
- 1985, Holm, D.D., Johnson, S.F. and Lonngren, K.E. "Structure of shock implosion in a plasma" Lett. Nuovo Cimento 42 241-247

- 1985, Holmes, B.S. "Pressure measurements in laser-supported plasmas with piezoresistance gages" *Exper. Mech.* 25 32-42
- 1985, Horie, Y., Graham, R.A. and Simonsen, I.K. "Synthesis of nickel aluminides under high pressure shock loading" *Mater. Letts* 3 354-359
- 1985, Huang, Z.-Q. and Liu, J.-H. "Rigid-plastic analysis of beam grillages under blast type loading" *Int. J. Impact Engng* 3 179-190
- 1985, Huang, Y.K. and Arbuckle, A.L. "A semi-analytical approach to shock initiation in heterogeneous explosives", in "Proc. Eighth Symposium (Int.) on Detonation", ed. J.M. Short, pp. 943-950, publ. White Oak, Silver Spring, Maryland, Naval Surface Weapons Center
- 1985, Huilgol, R.R. "On the jump in acceleration across a propagating vortex sheet" *J. Méc. Théor. Appl.* 4 725-739
- 1985, Hurren, P.J. "Plasma-associated oscillations recorded during a hypervelocity impact event" *Annales Geophysicae* 3 721-725
- 1985, Huston, A.L., Justus, B.L. and Campillo, A.J. "Direct measurement of the viscosity of glycerol under laser driven shock compression: Fluorescence lifetime changes in crystal violet" *Chem. Phys. Letts* 122 617-621
- 1985, Huston, A.L., Justus, B.L. and Campillo, A.J. "Spectral shifts in the fluorescence spectrum of anthracene under the influence of laser driven shock compression" *Chem. Phys. Letts* 118 267-271
- 1985, Hutchinson, C.D. "The response of intermediate explosives to thermal and shock stimuli", PhD thesis, Univ. of Cambridge
- 1985, Iskhakov, R.S., Kirko, V.I., Kuzovnikov, A.A., Baleev, A.D., Popov, G.V. and Ovcharov, V.P. "Preparation and investigation of the bulk amorphous ferromagnetic alloy $\text{Co}_{58}\text{Ni}_{10}\text{Fe}_5\text{B}_{16}\text{Si}_{11}$ " *Sov. Phys. Dokl.* 30 877-878
- 1985, Izotov, A.D., Lazarev, V.B. and Zhavoronkov, N.M. "Interatomic interactions and impact stability of solids with high-speed deformations" *Dokl. Phys. Chem.* 285 1244-1247
- 1985, Jackson, T.L. and Kapila, A.K. "Shock-induced thermal runaway" *SIAM J. Appl. Math.* 45 130-137
- 1985, Jacquesson, J., Romain, J.P. and Chomel, P. "Précurseur d'onde de choc et maillage dans l'acier doux" *J. Phys. France* 46(C5) 363-369
- 1985, Jiao, Q., Ding, J. and Liang, Y.-M. "Hugoniot and reaction rates from EMV gauge measurements and Lagrange analysis", in "Proc. Eighth Symposium (Int.) on Detonation", ed. J.M. Short, pp. 83-88, publ. White Oak, Silver Spring, Maryland, Naval Surface Weapons Center
- 1985, Jing, D. "Reactive flow Lagrange analysis of combustion behind shock wave front" *Arch. Combust.* 5 257-???
- 1985, Johnson, J.N., Tang, P.K. and Forrest, C.A. "Shock wave initiation of heterogeneous reactive solids" *J. Appl. Phys.* 57 4323-4334

- 1985, Johnson, K.A., Murr, L.E. and Staudhammer, K.P. "Comparison of residual microstructures for 304 stainless steel shock loaded in plane and cylindrical geometries: Implications for dynamic compaction and forming" *Acta metall.* 33 677-684
- 1985, Johnson, J., Solie, D. and Barrett, S. "The response of a seasonal snow cover to explosive loading" *Ann. Glaciology* 19 49-54
- 1985, Justus, B.L., Huston, A.L. and Campillo, A.J. "Fluorescence thermometry of shocked water" *Appl. Phys. Letts* 47 1159-1161
- 1985, Justus, B.L., Huston, A.L. and Campillo, A.J. "Shock-moderated chemistry: Diffusion-controlled quenching in solutions at kbar pressures" *Chem. Phys. Letts* 128 274-279
- 1985, Kagawa, M., Ono, T., Fukuoka, K., Syono, Y., Ikebe, M. and Muto, Y. "Shock-loading effect on molybdenum nitride prepared in ammonia gas" *Jpn J. Appl. Phys. Letts* 24 747-748
- 1985, Karakhanov, S.M. and Bordzilovskii, S.A. "Dynamics of pressure changes accompanying the initiation of cast TG 50/50 by a diverging shock wave" *Combust. Explos. Shock Waves* 21 604-611
- 1985, Karo, A.M., Mehlman, M.C. and Hardy, J.R. "The dynamics of shock-induced energy flux in molecular bonds", in "Proc. Eighth Symposium (Int.) on Detonation", ed. J.M. Short, pp. 864-869, publ. White Oak, Silver Spring, Maryland, Naval Surface Weapons Center
- 1985, Kaunov, A.M., Burminskaya, L.N., Bukin, V.M. and Ryadinskaya, I.M. "Formation of coatings of a mixture of chromium and graphite powders in shock wave treatment" *Sov. Powder Metall. Met. Ceram.* 24 930-933
- 1985, Keirstead, K.F. and Dekee, D. "Effect of bubble dimensions on shock sensitivity in gelled slurry explosives" *Indust. Engng Chem. Product Res. Dev.* 24 134-140
- 1985, Kerley, G.I. "Theoretical equations of state for the detonation products of explosives", in "Proc. Eighth Symposium (Int.) on Detonation", ed. J.M. Short, pp. 540-547, publ. White Oak, Silver Spring, Maryland, Naval Surface Weapons Center
- 1985, Khanov, A.M. and Yakovlev, I.V. "Influence of thermal effects on the structure and properties of fibrous composites" *Combust. Explos. Shock Waves* 21 760-764
- 1985, Khanukaev, A.N., Virchenko, V.A., Egorov, E.P., Krasavin, S.V. and Tsirel, S.V. "A study of the behavior of marble in the near zone of an explosion" *Sov. Mining Sci.* 21 241-245
- 1985, Kikuchi, M., Kusaba, K., Bannai, E., Fukuoka, F., Syono, Y. and Hiraga, K. "Observation of shock-induced phases of Nb₂O₅ single-crystal under high-resolution electron microscopy" *Jpn J. Appl. Phys.* 24 1600-1606

- 1985, Kim, K. and Sohn, C.-H. "Modeling of reaction buildup processes in shocked porous explosives", in "Proc. Eighth Symposium (Int.) on Detonation", ed. J.M. Short, pp. 926-933, publ. White Oak, Silver Spring, Maryland, Naval Surface Weapons Center
- 1985, Kipp, M.E. "Modeling granular explosive detonations with shear band concepts", in "Proc. Eighth Symposium (Int.) on Detonation", ed. J.M. Short, pp. 35-41, publ. White Oak, Silver Spring, Maryland, Naval Surface Weapons Center
- 1985, Kipp, M.E. and Grady, D.E. "Dynamic fracture growth and interaction in one dimension" *J. Mech. Phys. Solids* 33 399-415
- 1985, Klopp, R.W., Clifton, R.J. and Shawki, T.G. "Pressure-shear impact and the dynamic viscoplastic response of metals" *Mech. Mater.* 4 375-385
- 1985, Kondaurov, V.I. and Petrov, I.B. "Computation of dynamic deformation processes in elastoplastic solids with allowance for continual failure" *Sov. Phys. Dokl.* 30 1036-1038
- 1985, Kondo, K.-I., Soga, S., Sawaoka, A. and Araki, M. "Shock compaction of silicon carbide powder" *J. Mater. Sci.* 20 1033-1048
- 1985, Kostyukov, N.A. and Kuzmin, G.E. "Influence of the initial characteristics of the medium on the parameters of the reflection of shock waves" *J. Appl. Mech. Tech. Phys.* 26 109-114
- 1985, Kretelev, A.I. and Bekrenev, A.N. "Behavior of point defects under impulsive dynamical loading" *Sov. Phys. J.* 28 481-483
- 1985, Krier, H., Cudak, C.A., Stewart, J.R. and Butler, P.B. "A model for shock initiation of porous propellants by ramp-induced compression processes", in "Proc. Eighth Symposium (Int.) on Detonation", ed. J.M. Short, pp. 962-971, publ. White Oak, Silver Spring, Maryland, Naval Surface Weapons Center
- 1985, Kroh, M., Thoma, K., Arnold, W. and Wollenweber, U. "Shock sensitivity and performance of several high explosives", in "Proc. Eighth Symposium (Int.) on Detonation", ed. J.M. Short, pp. 1131-1138, publ. White Oak, Silver Spring, Maryland, Naval Surface Weapons Center
- 1985, Kulikovskii, A.G. and Sveshnikova, E.I. "A self-similar problem on the action of a sudden load on the boundary of an elastic half-space" *J. Appl. Math. Mech.* 49 214-220
- 1985, Kurdyumov, A.V., Oleinik, G.S., Pilyankevich, A.N., Dzhamarov, S.S. and Frantsevich, I.N. "Dynamic recrystallization of the spherulite modification of boron nitride at high pressure and temperatures" *Sov. Phys. Dokl.* 30 319-321
- 1985, Kusaba, K., Syono, Y., Kikuchi, M. and Fukuoka, K. "Shock behavior of zircon: Phase transition to scheelite structure and decomposition" *Earth Planet. Sci. Letts* 72 433-439
- 1985, Kuznetsov, N.M. "Contribution to shock-wave stability theory" *Sov. Phys. JETP* 61 275-284

- 1985, Kuznetsov, N.M. and Timofeev, E.I. "Equation of state, shock adiabats and sound velocity in the ternary system water-vapor gas" High Temp. USSR 23 383-388
- 1985, Kyte, F.T. and Brownlee, D.E. "Unmelted meteoritic debris in the late Pliocene iridium anomaly: Evidence for the ocean impact of a nonchondritic asteroid" Geochim. Cosmochim. Acta 49 1095-1108
- 1985, Landa, L.M., Bolshakov, V.V., Zabolotskii, L.V. and Klyuchnikov, V.A. "Stability of amorphous silicon dioxide after neutron irradiation or compression" Sov. Phys. Tech. Phys. 30 590-591
- 1985, Lange, M.A., Lambert, P. and Ahrens, T.J. "Shock effects on hydrous minerals and implications for carbonaceous meteorites" Geochim. Cosmochim. Acta 49 1715-1726
- 1985, Lardner, R.W. "Waveform distortion and shock development on nonlinear Rayleigh waves" Int. J. Engng Sci. 23 113-118
- 1985, Lardner, R.W. "Nonlinear effects on transverse shear waves in an elastic medium" J. Elasticity 15 53-57
- 1985, Lee, R., Bloom, G., von Holle, W., Weingart, R., Erickson, L., Sanders, S., Slettevold, C. and McGuire, R. "The relationship between the shock sensitivity and the solid pore sizes of TATB powders pressed to various densities", in "Proc. Eighth Symposium (Int.) on Detonation", ed. J.M. Short, pp. 3-14, publ. White Oak, Silver Spring, Maryland, Naval Surface Weapons Center
- 1985, Lee, E., Breithaupt, D., McMillan, C., Parker, N., Kury, J., Tarver, C., Quirk, W. and Walton, J. "The motion of thin metal walls and the equation of state of detonation products", in "Proc. Eighth Symposium (Int.) on Detonation", ed. J.M. Short, pp. 613-624, publ. White Oak, Silver Spring, Maryland, Naval Surface Weapons Center
- 1985, Lee, Y.K., Williams, F.L., Graham, R.A. and Morosin, B. "Specific surface area studies of shock modified inorganic powders" J. Mater. Sci. 20 2488-2496
- 1985, Lemar, E.R., Forbes, J.W., Watt, J.W. and Elban, W.L. "Unreacted Hugoniot of composition B-3 for stresses of 0-16 kbar" J. Appl. Phys. 58 3404-3408
- 1985, Leung, K.P., Doukas, A.G., Jones, P.H., Papadimitriou, D., Alfano, R.R. and Harris, P. "Shock-front-stimulated optical scattering in water" Phys. Rev. B 31 8329-8331
- 1985, Leung, K.P., Yao, S.S., Doukas, A.G., Alfano, R.R. and Harris, P. "Photoluminescence determination of the pressure and temperature of the shock wave induced by a picosecond laser pulse in the layered semiconductor GaSe" Phys. Rev. B 31 942-946
- 1985, Levin, B.V. "A simple model of confined explosion in bedrock" Sov. Mining Sci. 21 235-240

- 1985, Lezaud, J.M., Ledrean, C., Martineau, J. and roux, S. "Experimental methods for studying polystyrene and lithium behaviors under shock loading using a two-stage light gas gun (in French)" Rev. Phys. Appl. 20 51-62
- 1985, Li, H.-L., Huang, Z.-P. and Ding, J. "Displacement gradient method for measuring detonation parameters using flash X-ray photography", in "Proc. Eighth Symposium (Int.) on Detonation", ed. J.M. Short, pp. 440-446, publ. White Oak, Silver Spring, Maryland, Naval Surface Weapons Center
- 1985, Lobanov, V.F. "Dynamics of the basic initiating-wave parameters for TG 50/50" Combust. Explos. Shock Waves 21 756-760
- 1985, Loeb, A. and Eliezer, S. "An analytical model for creation and decay of strong shock waves caused by a trapezoidal laser pulse" Phys. Fluids 28 1196-1201
- 1985, Löhner, R., Morgan, K. and Peraire, J. "A simple extension to multidimensional problems of the artificial viscosity due to Lapidus" Commun. Appl. Numer. Meth. 1 141-148
- 1985, Lokshin, A.A. and Rok, V.E. "Shock waves in linear hereditary media with spatial dispersion" Sov. Phys. Dokl. 30 627-629
- 1985, Mader, C.L. and Kershner, J.D. "Three-dimensional modeling of explosive desensitization by preshocking" J. Energ. Mater. 3 35-55
- 1985, Maiden, D.E., Bianchini, G., Holt, B., Hornig, H. and Kingman, D. "Chemical shock synthesis of TiB_2 ", in "DARPA/Army Symp. on Self-Propagating High-Temperature Synthesis (LLNL Report no. UCRL-93724)", pp.??-??, publ. Lawrence Livermore Laboratory
- 1985, Malakhov, A.T. and Palamarchuk, B.I. "Shock wave reflection in gas-liquid foams" J. Appl. Mech. Tech. Phys. 26 96-103
- 1985, Martelli, G. and Cerroni, P. "On the theory of radio frequency emission from macroscopic hypervelocity impacts and rock fracturing" Phys. Earth Planet Inter. 140 316-319
- 1985, Matsuo, H., Ebihara, K., Ohya, Y. and Sanematsu, H. "Spectroscopic study of cylindrically converging shock waves" J. Appl. Phys. 58 2487-2491
- 1985, Matsuo, K., Kawagoe, S., Sonoda, K. and Sakao, K. "Studies on condensation shock waves. 1: Mechanism of their formation" Bull. JSME 28 1416-1422
- 1985, Mayer, F.J., "Materials processing using chemically driven spherically symmetric implosions", United States, patent no. 4,552,742
- 1985, McCall, G.H., Bongianini, W.L. and Miranda, G.A. "Microwave interferometer for shock-wave, detonation, and material motion measurements" Rev. Sci. Instrum. 56 1612-????
- 1985, McGuire, R.R. and Finger, M. "Composite explosives for metal acceleration: The effect of detonation temperature", in "Proc. Eighth Symposium (Int.) on Detonation", ed. J.M. Short, pp. 1018-1024, publ. White Oak, Silver Spring, Maryland, Naval Surface Weapons Center

- 1985, Melosh, H.J. "Impact cratering mechanics: Relationship between the shock waves and excavation flow" *Icarus* 62 339-343
- 1985, Meshcheryakov, Y.I. and Divakov, A.K. "Particle velocity variations in a shock wave and fracture strength of aluminum" *Sov. Phys. Tech. Phys.* 30 348-350
- 1985, Messinev, M.Y., Onishchuk, V.A. and Shantorovich, V.P. "Reduction of shock-compressed zinc oxide" *Sov. Phys. Tech. Phys.* 30 833-834
- 1985, Meyers, M.A. "Discussion on 'Pressure-shear impact and the dynamic viscoplastic response of metals'" *Mech. Mater.* 4 387-393
- 1985, Meyers, M.A. and Pak, H.-R. "Mechanical and thermal response of shock-consolidated Mar-M 200 rapidly solidified powder" *J. Mater. Sci.* 20 2133-2140
- 1985, Model, I.S., Narozhnyi, A.T., Kharchenko, A.I., Kholin, S.A. and Khrustalev, V.V. "Equations of state for graphite, aluminum, titanium, and iron at pressures > 13 Mbar" *JETP Letts* 41 332-334
- 1985, Mogilevskii, M.A. and Mynkin, I.O. "Role of fluctuations in nucleating shear in uniform lattice distortion" *Combust. Explos. Shock Waves* 21 376-382
- 1985, Mogilevskii, M.A. "Shock-wave loading of specimens with minimum permanent set" *Combust. Explos. Shock Waves* 21 639-640
- 1985, Monaco, R. "Shock wave propagation in gas mixtures by means of a discrete velocity model of the Boltzmann equation" *Acta Mech.* 55 239-251
- 1985, Morosin, B. and Graham, R.A. "X-ray diffraction line broadening of shock modified titanium carbide" *Mater. Letts* 3 119-123
- 1985, Morosin, B., Venturini, E.L., Graham, R.A. and Williamson, D.L. "Shock-synthesized zinc ferrite" *Bull. Amer. Phys. Soc.* 30 477
- 1985, Morris, D.G. "Dynamic powder compaction as a thermomechanical process", in "Rapidly Solidified Materials", ed. P.W. Lee and R.S. Carbonara, pp. 67-75, publ. Metals Park, OH, American Society for Metals
- 1985, Moss, W.C. "Effect of material strength on the relationship between the principal Hugoniot and quasi-isentrope of beryllium and 6061-T6 aluminum" *J. Appl. Phys.* 57 1665-1670
- 1985, Moss, W.C. "Viscosity and steady shocks" *Appl. Phys. Letts* 47 372-373
- 1985, Moulard, H., Kury, J.W. and Delclos, A. "The effect of RDX particle size on the shock sensitivity of cast PBX formulations", in "Proc. Eighth Symposium (Int.) on Detonation", ed. J.M. Short, pp. 902-913, publ. White Oak, Silver Spring, Maryland, Naval Surface Weapons Center
- 1985, Muller, M. and Platte, M. "The use of a broad band piezo-pressure probe based on PVDF: Research on converging shock waves in water" *Acustica* 58 215-222
- 1985, Negishi, T., Ogura, T., Matsumoto, T., Goto, T., Fukuoka, K. and Syono, Y. "Dynamic compaction of amorphous $\text{Ni}_{75}\text{Si}_8\text{B}_{17}$ and $\text{Pd}_{78}\text{Cu}_6\text{Si}_{16}$ alloys" *J. Mater. Sci.* 20 399-406

- 1985, Nesterenko, V.F. and Muzykantov, A.V. "Evaluation of conditions for retaining an amorphous material structure during consolidation by explosion" *Combust. Explos. Shock Waves* 21 240-245
- 1985, Nesterenko, V.F. "Potential of shock-wave methods for preparing and compacting rapidly quenched materials" *Combust. Explos. Shock Waves* 21 730-740
- 1985, Ng, A., Parfeniuk, D. and DaSilva, L. "Hugoniot measurements for laser-generated shock waves in aluminum" *Phys. Rev. Letts* 54 2604-2607
- 1985, Ng, A., Parfenuik, D., DaSilva, L. and Pasini, D. "Radiation heating in laser-irradiated planar targets" *Phys. Fluids* 28 2915-2920
- 1985, Nicholas, T. and Bless, S.J. "High strain-rate tension testing", in "Metals Handbook (Ninth Edition). Vol. 8", pp. 208-214, publ. Metals Park, Ohio, American Society of Metals
- 1985, Novikov, S.A. "Strength with quasistatic and shock-wave loading" *Combust. Explos. Shock Waves* 21 722-729
- 1985, Novikov, S.A. and Chernov, A.V. "Effect of resistance to shear of motion of the free surface of the target in a collision of plates causing cleavage" *Strength Mater.* 17 1554-1558
- 1985, Novitskii, E.Z. and Sadunov, V.D. "Energetic characteristics of a ferroelectric as the working body of a shock-wave energy transducer" *Combust. Explos. Shock Waves* 21 611-615
- 1985, Oberg, A., Martensson, N. and Schweitz, J.A. "Fundamental aspects of formation and stability of explosive welds" *Metall. Trans. A* 16 841-852
- 1985, Ogorodnik, V.V., Pugach, E.A., Ivaskevich, Y.V. and Markov, A.I. "The oxidation of graphite and of diamonds synthesized from it by the dynamic method" *Sov. J. Superhard Mater.* 7(4) 41-44
- 1985, Ogorodnikov, V.A., Ivanova, G.G. and Ivanov, A.G. "Effect of method of charge initiation on scab thickness" *Combust. Explos. Shock Waves* 21 225-226
- 1985, Panin, V.E., Slosman, A.I., Ovechkin, B.B., Bondar, M.P. and Kostyukov, N.A. "Explosive pressing of a TiC-TiNi powder composite" *Sov. Powder Metall. Met. Ceram.* 24 526-529
- 1985, Peng, T.C., Sastry, S.M.L. and Lederich, R.J. "Tensile and microstructural properties of explosively compacted rapidly solidified Al-Li alloy powders", in "Mechanical Behavior of Rapidly Solidified Materials", ed. S.M.L. Sastry and B.A. MacDonald, pp. 181-188, publ. Warrendale, PA, The Metallurgical Society
- 1985, Pépin, H., Fabbro, R., Faral, B., Amiranoff, F., Virmont, J., Cottet, F. and Romain, J.P. "The X-ray emission, ablation pressure, and preheating for foils irradiated at 0.26 μm wavelength" *Phys. Fluids* 28 3393-3396

- 1985, Pereyaslov, V.P. and Malik, V.R. "Study of the behavior of structural materials under shock loading by the method of mathematical modeling" *Strength Mater.* 17 999-1002
- 1985, Pereyaslov, V.P. "Experimental study of lithographic limestone and pyrophyllite properties under shock compression" *Sov. J. Superhard Mater.* 7(1) 5-8
- 1985, Perez, M. and Tougne, D. "Comportement sous choc de jauges PVF₂" *J. Phys. France Colloq. C5 (DYMAT '85)* 46 655-660
- 1985, Pershin, S.V., Pyaternev, S.V. and Rogacheva, A.I. "Dynamic synthesis of diamond from heptadecane" *Combust. Explos. Shock Waves* 21 637-639
- 1985, Petrov, Y.N., Madezhdin, G.N., Svechnikov, V.L. and Astanin, V.V. "Study of structural changes for a two-phase titanium alloy with shock wave loading" *Strength Mater.* 16 1677-1681
- 1985, Petrovic, J.J., Olinger, B.W. and Roof, R.B. "Explosive shock loading of alpha-Si₃N₄ powder" *J. Mater. Sci.* 20 391-398
- 1985, Peyrard, M., Odriot, S., Lavenir, E. and Schnur, J.M. "Molecular model for cooperative propagation of shock induced detonations in energetic solids and its application to nitromethane" *J. Appl. Phys.* 57 2626-2636
- 1985, Pinègre, M., Aveillé, J., Leroy, M., Protat, J.C., Chéret, R. and Camarcat, M. "Expansion isentropes of TATB compositions released into argon", in "Proc. Eighth Symposium (Int.) on Detonation", ed. J.M. Short, pp. 815-824, publ. White Oak, Silver Spring, Maryland, Naval Surface Weapons Center
- 1985, Pogorelov, A.P. and Novikov, S.A. "Time dependence of the pressures for detonation initiation in TNT and TH 50/50 by nonstationary shock waves" *Combust. Explos. Shock Waves* 21 496-497
- 1985, Protasov, I.D. "Sonic speed, compressibility, and shock Hugoniot of cubic crystals" *Sov. J. Chem. Phys.* 2 1078-1084
- 1985, Prümmer, R.A. and Ziegler, G. "Structure and annealing behaviour of explosively compacted aluminium powders" *Powder Metall. Int.* 9 1035-1048
- 1985, Radousky, H.B., Ross, M., Mitchell, A.C. and Nellis, W.J. "Shock temperature and melting in Csl" *Phys. Rev. B* 31 1457-1462
- 1985, Razorenov, S.V., Kanel, G.I. and Fortov, V.E. "Measurement of the width of shock fronts in copper" *Sov. Phys. Tech. Phys.* 30 1061-1062
- 1985, Rodionov, V.N. and Goncharov, A.I. "Possibilities for strain measurement in impact compression processes" *Combust. Explos. Shock Waves* 21 236-239
- 1985, Rosenberg, Z. "Dynamic uniaxial stress experiments on alumina with in-material manganin gauges" *J. Appl. Phys.* 57 5087-5088
- 1985, Rosenberg, Z. and Partom, Y. "Lateral stress measurement in shock-loaded targets with transverse piezoresistance gauges" *J. Appl. Phys.* 58 3072-3076
- 1985, Rosenberg, Z., Yaziv, D. and Bless, S.J. "Spall strength of shock-loaded glass" *J. Appl. Phys.* 58 3249-3251

- 1985, Rosenberg, Z. and Yeshurun, Y. "Determination of the dynamic response of AD-85 alumina with in-material Manganin gauges" J. Appl. Phys. 58 3077-3080
- 1985, Rosenberg, Z., Yeshurun, Y. and Brandon, D.G. "Dynamic response and microstructure of commercial alumina" J. Phys. France 46(C5) 331-342
- 1985, Rosenberg, Z. and Partom, Y. "Longitudinal dynamic stress measurements with in-material piezoresistive gauges" J. Appl. Phys. 58 1814-1818
- 1985, Rosenberg, Z., Maysel, M., Partom, Y. and Betser, A.A. "Spall studies in copper" J. Appl. Phys. 58 1083-1086
- 1985, Rosenberg, Z. and Partom, Y. "The pressure dependence of the yield strength of shock-loaded manganin gauges" J. Appl. Phys. 57 5084-5086
- 1985, Ross, M. "Matter under extreme conditions of temperature and pressure" Rep. Prog. Phys. 48 1-52
- 1985, Ross, M. and Rogers, F.J. "Structure of dense shock-melted alkali halides: Evidence for a continuous pressure-induced structural transition in the melt" Phys. Rev. B 31 1463-1468
- 1985, Rozmus, W. and Offenberger, A.A. "Thermal conductivity for dense, laser-compressed plasmas" Phys. Rev. A 31 1177-1179
- 1985, Rubin, A.E. "Impact melt products of chondritic material" Rev. Geophys. 23 277-300
- 1985, Ruzanov, A.I. "Examination of dynamic spallation in unloading waves" Strength Mater. 17 159-164
- 1985, Sandusky, H.W. and Bernecker, R.R. "Compressive reaction in porous beds of energetic materials", in "Proc. Eighth Symposium (Int.) on Detonation", ed. J.M. Short, pp. 881-891, publ. White Oak, Silver Spring, Maryland, Naval Surface Weapons Center
- 1985, Schmalz, R.F. and Meyer-ter-Vehn, J. "Equation-of-state effects on laser accelerated foils" Phys. Fluids 28 932-940
- 1985, Schmitt, D.R., Bass, J.D. and Ahrens, T.J. "Application of holographic interferometry to in-situ stress measurement", in "Proc. 26th US Symp. on Rock Mechanics", pp. 1055-1056, publ.
- 1985, Schott, G.L., Shaw, M.S. and Johnson, J.D. "Shocked states from initially liquid oxygen-nitrogen systems" J. Chem. Phys. 82 4264-4275
- 1985, Seaman, L., Curran, D.R. and Murri, W.J. "A continuum model for dynamic tensile microfracture and fragmentation" Trans. ASME: J. Appl. Mech. 52 593-600
- 1985, Seitz, W.L., Stacy, H.L. and Wackerle, J. "Detonation reaction zone studies on TATB explosives", in "Proc. Eighth Symposium (Int.) on Detonation", ed. J.M. Short, pp. 123-132, publ. White Oak, Silver Spring, Maryland, Naval Surface Weapons Center

- 1985, Sekhar, J.A., Reddy, G.S. and Venkateswararao, P. "Rapid pressure application for rapid solidification processing", in "Rapidly Solidified Materials", ed. P.W. Lee and R.S. Carbonara, pp. 83-90, publ. Metals Park, OH, American Society for Metals
- 1985, Sellam, M., Presles, H.N., Brochet, C. and Chéret, R. "Characterization of strong detonation waves in nitromethane", in "Proc. Eighth Symposium (Int.) on Detonation", ed. J.M. Short, pp. 425-430, publ. White Oak, Silver Spring, Maryland, Naval Surface Weapons Center
- 1985, Setchell, R.E. "Experimental studies of chemical reactivity during shock initiation of HNB", in "Proc. Eighth Symposium (Int.) on Detonation", ed. J.M. Short, pp. 15-25, publ. White Oak, Silver Spring, Maryland, Naval Surface Weapons Center
- 1985, Sharma, J., Hoffsommer, J.C., Glover, D.J., Coffey, C.S., Forbes, J.W., Liddiard, T.P., Elban, W.L. and Santiago, F. "Sub-ignition reactions at molecular levels in explosives subjected to impact and underwater shock", in "Proc. Eighth Symposium (Int.) on Detonation", ed. J.M. Short, pp. 725-733, publ. White Oak, Silver Spring, Maryland, Naval Surface Weapons Center
- 1985, Shaw, L.L., Steinmetz, L.L., Behrendt, W.C., Sonderman, J.B., Mikkelson, L., Beer, G.K., Seppala, L.G. and Romero, E. "A high-speed, 8-frame electro-optic camera with multipulsed ruby-laser illuminator" Proc. SPIE 491 267-273
- 1985, Shen, L., Zhao, S., Bai, Y.L. and Zhao, S. "An experimental study of spallation criterion in phenolic-resin based woven roving glass fibre reinforced composite material" Acta Mech. Sinica 1 81-93
- 1985, Sierakowski, R.L. and Adeli, H. "The dynamic behavior of concrete materials" J. Phys. France 46(C5) 81-90
- 1985, Sikka, S.K., Godwal, B.K. and Chidambaram, R. "Band theory analysis of shock velocity particle velocity relations for metals" Bull. Mater. Sci. 7 377-386
- 1985, Simonenko, V.A., Voloshin, N.P., Vladimirov, A.S., Nagibin, A.P., Nogin, V.N., Popov, V.A., Vasilenko, V.A. and Shoidin, Y.A. "Absolute measurements of shock compressibility of aluminum at pressures ≥ 1 TPa" Sov. Phys. JETP 61 869-873
- 1985, Skripka, V.A., Fedorko, V.P. and Patushinskaya, I.L. "Study of the effect of an explosion on mica crystals for the purpose of increasing their durability" Sov. Mining Sci. 21 433-437
- 1985, Smith, P.D. and Wright, B.J. "Stress waves and spalling: A demonstration" Int. J. Mech. Engng Educ. 13 273-280
- 1985, Souletis, J. and Groux, J. "Continuous observation of Mach bridge and Mach phenomena", in "Proc. Eighth Symposium (Int.) on Detonation", ed. J.M. Short, pp. 431-439, publ. White Oak, Silver Spring, Maryland, Naval Surface Weapons Center

- 1985, Starckenberg, J., Dorsey, T.M. and Benjamin, K.J. "A computational investigation of the effect of shielding in mitigating shock initiation stimuli produced by impact", in "Proc. Eighth Symposium (Int.) on Detonation", ed. J.M. Short, pp. 1139-1149, publ. White Oak, Silver Spring, Maryland, Naval Surface Weapons Center
- 1985, Stepanov, G.V. and Kharchenko, V.V. "Deformation of metals at strain rates above 10^4 s^{-1} " *Strength Mater.* 17 1102-1107
- 1985, Stewart, G.R., Olinger, B. and Newkirk, L.R. "Degradation of superconductivity in $\text{Al}_5\text{V}_3\text{Si}$ by explosive compression" *Phys. Rev. B* 31 2704-2706
- 1985, Sutton, S.R. "Thermoluminescence measurements on shock metamorphosed sandstone and dolomite from Meteor Crater, Arizona. 1: Shock dependence of thermo-luminescence properties" *J. Geophys. Res.* 90 3683-3689
- 1985, Sutton, S.R. "Thermoluminescence measurements on shock metamorphosed sandstone and dolomite from Meteor Crater, Arizona. 2: Thermo-luminescence age of Meteor Crater" *J. Geophys. Res.* 90 3690-3700
- 1985, Swanson, B.I., Agnew, S.F. and Greiner, N.R. "Static high pressure study of nitric oxide chemistry: Proposed mechanism for nitric oxide detonation", in "Proc. Eighth Symposium (Int.) on Detonation", ed. J.M. Short, pp. 715-724, publ. White Oak, Silver Spring, Maryland, Naval Surface Weapons Center
- 1985, Swegle, J.W. and Grady, D.E. "Shock viscosity and the prediction of shock wave rise times" *J. Appl. Phys.* 58 692-701
- 1985, Swierczynski, R., Tyl, J. and Wlodarczyk, E. "Layered single stage driving system for plane liners" *J. Tech. Phys.* 25 207-224
- 1985, Tarakanov, V.I. "Evaluating the lower bound for the critical forces in the shock loading of a rod" *J. Appl. Mech. Tech. Phys.* 26 415-418
- 1985, Tarver, C.M., Hallquist, J.O. and Erickson, L.M. "Modeling short pulse duration shock initiation of solid explosives", in "Proc. Eighth Symposium (Int.) on Detonation", ed. J.M. Short, pp. 951-961, publ. White Oak, Silver Spring, Maryland, Naval Surface Weapons Center
- 1985, Taya, M., Hall, I.W. and Yoon, H.S. "Void growth in single crystal Cu-SiO_2 during high strain-rate deformation" *Acta metall.* 33 2143-2153
- 1985, Taylor, P.A. "The effects of material microstructure on the shock sensitivity of porous granular explosives", in "Proc. Eighth Symposium (Int.) on Detonation", ed. J.M. Short, pp. 26-34, publ. White Oak, Silver Spring, Maryland, Naval Surface Weapons Center
- 1985, Teymur, M. "On finite amplitude spherical acceleration waves in homogeneously deformed hyperelastic materials" *J. Appl. Math. Phys.* 36 912-920
- 1985, Thadhani, N.N., Meyers, M.A. and Erlich, D.C. "Inhomogeneities of shock wave deformation in Fe-32 wt % Ni-0.035 wt % C alloy" *J. Appl. Phys.* 58 2791-2794

- 1985, Thiell, G. and Meyer, B. "Thermal instabilities as an explanation of jet-like structures observed on laser irradiated thin planar targets at 1.06 μ m and 0.35 μ m wavelengths" *Laser Particle Beams* 3 51-58
- 1985, Thompson, W.B. "Shock heating of chondrules" *Meteoritics* 20 359-366
- 1985, Timofeev, E.I., Gubanov, A.V. and Gelfand, B.E. "Interaction of shock waves in a liquid with vapor liquid screens" *High Temp. USSR* 23 899-903
- 1985, Titov, V.M., Karakhanov, S.M. and Bordzilovsky, S.A. "Pressure variation upon initiation of cast RDX/TNT 50/50 charge by diverging shock wave", in "Proc. Eighth Symposium (Int.) on Detonation", ed. J.M. Short, pp. 143-150, publ. White Oak, Silver Spring, Maryland, Naval Surface Weapons Center
- 1985, Titov, V.M., Lobanov, V.F., Bordzilovsky, S.A. and Karakhanov, S.M. "Determination of transient and kinetic characteristics in simulating RDX/TNT 50/50 charge initiation", in "Proc. Eighth Symposium (Int.) on Detonation", ed. J.M. Short, pp. 196-204, publ. White Oak, Silver Spring, Maryland, Naval Surface Weapons Center
- 1985, Toda, Y., Ogura, T., Masumoto, T., Fukuoka, K. and Syono, Y. "Dynamic compaction of amorphous powders obtained by a cavitation method", in "Proc. 5th Int. Conf. on Rapidly Quenched Metals", ed. S. Steeb and H. Warlimont, pp. 1755-1758, publ. New York, North-Holland
- 1985, Toda, Y., Ogura, T., Masumoto, T., Fukuoka, K. and Syono, Y. "Dynamic compaction of amorphous Co_{70.3}Fe_{4.7}Si₁₅B₁₀ alloy powders obtained by a cavitation method" *Sci. Rep. Res. Inst. Tohoku Univ. A* 32 267-276
- 1985, Tokheim, R.E. "Dynamic uniaxial strain model for plasma-sprayed material" *J. Phys. France Colloq. C5 (DYMAT 85)* 46 127-130
- 1985, Townsend, D. "Liquid impact properties of brittle materials", PhD thesis, Univ. of Cambridge
- 1985, Trefilov, V.I., Nochevkin, S.A., Savvakina, G.I., Melnik, V.M., Oleinik, G.S., Ostrovskaya, N.F. and Karyuk, G.G. "Formation of polycrystalline microstructure during sintering of diamond powders in detonation synthesis" *Sov. Phys. Dokl.* 30 726-727
- 1985, Trefilov, V.I., Nochevkin, S.A., Oleinik, G.S., Melnik, V.M., Karyuk, G.G., Yarosh, V.V. and Borimchuk, N.I. "Formation of the microstructure of polycrystals during sintering of dynamically synthesized diamond powders" *Sov. Phys. Dokl.* 30 880-882
- 1985, Trevino, S.F. and Tsai, D.H. "Simulation of the initiation of detonation in an energetic molecular crystal: The overdriven case", in "Proc. Eighth Symposium (Int.) on Detonation", ed. J.M. Short, pp. 870-877, publ. White Oak, Silver Spring, Maryland, Naval Surface Weapons Center
- 1985, Tsuboi, T. and Kato, M. "On induction periods of shock-heated methane-oxygen-argon mixtures" *Jpn J. Appl. Phys.* 24 1697-1702

- 1985, Ukeje, E. and Chadwick, P. "Energy relations for shock waves in elastic materials" *Quart. J. Mech. Appl. Math.* 38 497-506
- 1985, Vanpoperynghe, J., Soorel, J., Aveillé, J. and Adenis, J.C. "Shock initiation of TATB and HMX explosive compositions", in "Proc. Eighth Symposium (Int.) on Detonation", ed. J.M. Short, pp. 892-901, publ. White Oak, Silver Spring, Maryland, Naval Surface Weapons Center
- 1985, Vanpoperynghe, J., Soorel, J. and Pujois, H.C. "Experiments and numerical simulation of high explosive delayed and lowed detonation", in "Proc. Eighth Symposium (Int.) on Detonation", ed. J.M. Short, pp. 135-143, publ. White Oak, Silver Spring, Maryland, Naval Surface Weapons Center
- 1985, Vasilevskaya, N.I., Polyaninov, A.V., Khvostikova, V.D., Yanishkevich, V.A. and Kuzman, E.I. "Dislocation structure and residual changes in electrical properties of germanium after the action of laser shock waves" *Sov. Phys. Semiconductors* 19 480-483
- 1985, Venturini, E.L., Morosin, B. and Graham, R.A. "Magnetic and structural properties of shock synthesized zinc ferrite" *J. Appl. Phys.* 57 3814-3816
- 1985, Venturini, E.L., Morosin, B. and Graham, R.A. "Synthesis of zinc ferrite under high pressure shock loading" *Mater. Letts* 3 349-353
- 1985, Viem, N.H. "Qualitative analysis of propagation of isothermal and adiabatic acceleration waves in the range of finite deformations" *Arch. Mech.* 37 439-447
- 1985, Vorobev, A.A., Trofimov, V.S., Mikyailyuk, K.M., Korolev, A.N. and Brauer, G.B. "Investigation of detonation initiation in cast trotyl by a dynamic method. I: Formation of the problem and experimental procedure" *Combust. Explos. Shock Waves* 21 227-236
- 1985, Vorthman, J., Andrews, G. and Wackerle, J. "Reaction rates from electromagnetic gauge data", in "Proc. Eighth Symposium (Int.) on Detonation", ed. J.M. Short, pp. 99-110, publ. White Oak, Silver Spring, Maryland, Naval Surface Weapons Center
- 1985, Voskoboinikov, I.M. and Gogulya, M.F. "Luminescence of the shock front in a liquid near the interface with a detonating charge" *Sov. J. Chem. Phys.* 3 1623-1632
- 1985, Weston, A.M. and Lee, E.L. "Modeling 1-D deflagration to detonation transition (DDT) in porous explosives", in "Proc. Eighth Symposium (Int.) on Detonation", ed. J.M. Short, pp. 914-925, publ. White Oak, Silver Spring, Maryland, Naval Surface Weapons Center
- 1985, Winterberg, F. "The electromagnetic rocket gun" *Acta Astronautica* 12 155-161

- 1985, Wolfe, W.E. and Coltharp, D.R. "Predicting concrete spall resulting from dynamic loading", in "Proc. Second Symp. on The Interactions of Non-Nuclear Munitions with Structures", pp. 89-94, publ. Eglin, FL, US Air Force
- 1985, Wright, R.N. and Mikkola, D.E. "High strain rate deformation of molybdenum and Mo-33Re by shock loading. 1: Substructure and development" Metall. Trans. A 16 881-890
- 1985, Wright, R.N. and Mikkola, D.E. "High strain rate deformation of molybdenum and Mo-33Re by shock loading. 2: Rates of defect generation and accumulation of plastic strain" Metall. Trans. A 16 891-895
- 1985, Yadav, H.S. and Gupta, N.K. "Study of collapse of a free surface conical cavity due to a plane or spherical shock wave" Int. J. Impact Engng 3 217-232
- 1985, Yakushev, V.V. "Depolarization of a PVDF piezoelectric film when punctured by a high-velocity spherical projectile" Tech. Phys. 65 1085-1087
- 1985, Yamakoshi, K., Fujiwara, A. and Asada, N. "Changes of chemical compositions of ejecta induced by hypervelocity impacts" J. Geomagnetism Geoelectricity 37 987-997
- 1985, Yanenko, N.N. and Fomin, V.M. "Shock-wave propagation in elastoplastic shells, porous and reacting media" Comput. Meth. Appl. Mech. Engng 52 683-688
- 1985, Yaziv, D., Bless, S.J. and Rosenberg, Z. "Study of spall and recompaction of ceramics using a double-impact technique" J. Appl. Phys. 58 3415-3418
- 1985, Yaziv, D. "Shock fracture and recompaction of ceramics", PhD thesis, Univ. of Dayton, Ohio
- 1985, Yeshurun, Y., Rosenberg, Z., Brandon, D.G. and Travitsky, N.A. "Effect of heat treatment on the dynamic response of commercial 85 wt. % Al₂O₃" Mater. Sci. Engng. 71 71-75
- 1985, Yousaf, M. "Motion of a strong shock wave in an exponential medium" Phys. fluids 28 1659-1664
- 1985, Yushchenkova, N.I., Mishin, G.I. and Roshchin, O.V. "Mechanism of anomalous relaxation in shock waves in inert gases" Sov. Tech. Phys. Letts 11 215-217
- 1985, Zaitsev, S.G., Lazareva, E.V., Chernukha, V.V. and Belyaev, V.M. "Intensification of mixing at the interface between media of different densities upon the passage of a shock wave through it" Sov. Phys. Dokl. 30 579-581
- 1985, Zeldovich, V.I., Khomskaya, I.V., Deribas, A.A. and Kiselev, A.N. "Peculiarities of the a to g transformation in alloy Fe-28.1% Ni during shock loading" Phys. Metals Metallog. 60(1) 92-100
- 1985, Zhao, S.D., Shen, L.T. and Zhao, S.L. "A single-stage light gas gun for impact studies" Acta Armementarii 4 49-54
- 1985, Zhu, Z.C., Cai, H.C., Xie, X.D. and Wang, D.D. "Shock metamorphism of limestone induced by underground nuclear explosion and its experimental study in the laboratory (in Chinese)" Geochimica (4) 304-???

- 1985, Zhurakhovskii, S.V. "Fracture of metals in thermoviscoelastoplastic waves"
Strength Mater. 17 993-999
- 1985, Zvorykin, L.O., Mazanko, V.F., Pashkov, P.O., Porozov, Y.V. and Falchenko, V.M.
"Effect of shock wave amplitude on the mobility of atoms in molybdenum and
copper" Phys. Metals 6 193-195