

Scientific Publications

(a) Books

1. **Ben-Dor, G.**, *Shock-Wave Reflection Phenomena*, Springer Verlag, New York, N.Y., U.S.A. 1991.
2. **Ben-Dor, G.**, Igra, O & Elperin, T. *Handbook on Shock Waves (3 volumes)*, Academic Press, Boston. Massachusetts. U.S.A., 2001.

(b) Chapters in collective volumes

1. **Ben-Dor, G. & Glass, I.I.**, “Domains and Boundaries of Nonstationary Oblique Shock-Wave Reflections in Perfect and Imperfect Monatomic and Diatomic Gases.” in *Shock Tubes and Waves*, Eds. A. Lifshitz and J. Rom, The Magnes Press, The Hebrew University, Jerusalem, Israel, pp. 288-297, 1980.
2. Takayama, K., Gotoh, J. & **Ben-Dor, G.**, “Influence of Surface Roughness on the Shock Transition in Quasi-Stationary and Truly Non-Stationary Flows”, in *Shock Tubes and Waves*, Eds. C.E. Treanor and J.G. Hall, State University of New York Press, Albany, New York, U.S.A., pp. 326-334, 1982.
3. **Ben-Dor, G. & Igra, O.**, “The Relaxation Zone Behind Normal Shock Waves in a Reacting Dusty Gas. Part 1. Monatomic Gases”, in *Shock Tubes and Waves*, Eds. C.E. Treanor and J.G. Hall, State University of New York Press, Albany, New York, U.S.A., pp. 637-645, 1982.
4. Takayama, K. & **Ben-Dor, G.**, “A Reconsideration of the Hysteresis Phenomenon in the Regular \leftrightarrow Mach Reflection Transition in Truly Nonstationary Flows”, in *Shock Tubes and Waves*, Eds. R.D. Archer and B.E. Milton, University of New South Wales Press, Sydney, Australia, pp. 135-143, 1984.
5. Igra, O., **Ben-Dor, G. & Rakib, Z.**, “The Effect of Dust and Water Droplets on the Relaxation Zone Developed Behind Strong Normal Shock Waves”, in *Shock Tubes and Waves*, Eds. R.D. Archer and B.E. Milton, University of New South Wales Press, Sydney, Australia, pp. 478-488, 1984.
6. **Ben-Dor, G.**, Rakib, Z. & Igra, O., “A New Method of Solution of the Shock Induced Boundary Layer Flow of a Partially Ionized Gas over a Flat Plate”, in *Shock Tubes and Waves*, Eds. R.D. Archer and B.E. Milton, University of New South Wales Press, Sydney, Australia, pp. 263-268, 1984.
7. Dewey, J.M., **Ben-Dor, G. & Takayama, K.**, “The Reflection of a Regular Reflection over a Secondary Wedge”, in *Shock Tubes and Waves*, Eds. D. Bershader and R. Hanson, Stanford University Press, Stanford, California, U.S.A., pp. 99-104, 1986.
8. **Ben-Dor, G.**, Dewey, J.M. & Takayama, K., “The Reflection of a Mach Reflection over a Secondary Wedge”, in *Shock Tubes and Waves*, Eds. D. Bershader and R. Hanson, Stanford University Press, Stanford, California, U.S.A., pp. 203-209, 1986.
9. Elperin, I., Igra, O. & **Ben-Dor, G.**, “Two-Phase Oxygen-Carbon Dust Flow Through a Normal Shock Wave”, in *Shock Tubes and Waves*, Eds. D. Bershader and R. Hanson, Stanford University Press, Stanford, California, U.S.A., pp. 705-712, 1986.
10. Olim, M., Igra, O., Mond, M. & **Ben-Dor, G.**, “A General Attenuation Law of Planar Shock Waves Propagating into Dusty Gases”, in *Shock Tubes and Waves*, Ed. H. Gronig, VCH Verlagsgesellschaft mbH, Technische Hochschule, Aachen, West Germany, pp. 217-225, 1988.
11. **Ben-Dor, G.**, “The Three Shock Theory with Viscous Effects”, in *Shock Tubes and Waves*, Ed. H. Gronig, VCH Verlagsgesellschaft mbH, Technische Hochschule, Aachen, West Germany, pp. 527-534, 1988.

12. Mazor, G., **Ben-Dor, G.**, Igra, O., Mond, M. & Reichenbach, H., “The Head-On Reflection of a Normal Shock Wave From a Flat Plate Supported by a Rubber Rod”, in *Current Topics in Shock Waves*, Ed. Y.W. Kim, American Institute of Physics, New York, U.S.A., pp. 240-245, 1990.
13. Olim, M., Igra, O., Mond, M. & **Ben-Dor, G.**, “Numerical Investigation of the Flow Field Behind a Shock Wave Propagating into a Carbon-Oxygen Suspension”, in *Current Topics in Shock Waves*, Ed. Y.W. Kim, American Institute of Physics, New York, U.S.A., pp. 684-689, 1990.
14. **Ben-Dor, G.** & Rayevsky, D., “Shock Wave Interaction with a Dense Layer”, in *Strong Shock Waves*, Eds. H. Honma and K. Maneo, Chiba University Press, Chiba, Japan, pp. 245-264, 1992.
15. Igra, O., **Ben-Dor, G.**, Mond, M., Mazor, G. & Reichenbach, H., “Shock Wave Loading on a Rubber Rod - Experimental Investigation”, in *Shock Waves*, Ed. K. Takayama, Springer Verlag, Heidelberg, Germany, pp. 193-196, 1992.
16. **Ben-Dor, G.**, Mazor, G., Cederbaum, G., Igra, O. & Sorek, S., “The Enhancement of Shock Wave Loads by Means of Porous Media”, in *Shock Waves*, Ed. K. Takayama, Springer Verlag, Heidelberg, Germany, pp. 279-282, 1992.
17. Igra, O., **Ben-Dor, G.**, Mazor, G., Reichenbach, H. & Heilig, W., “On the Interaction of an Incident Shock Wave with a Rubber Rod”, in *Aerothermochemistry of Spacecraft and Associated Hypersonic Flows*, Eds. R. Brun and A.A. Chikhaoui, Marseille, France, 1992.
18. Igra, O., **Ben-Dor, G.**, Aizik, F. & Gelfand, B., “Experimental and Numerical Investigation of Shock Wave Attenuation in Dust Gas Suspensions”, in *Shock Waves @ Marseille III*, Ed. R. Brun & L.Z. Dumitrescu, Springer, Heidelberg, Germany, pp. 49-54, 1993.
19. Levy, A., **Ben-Dor, G.**, Sorek, S. & Bear, J., “Jump Conditions Across Compaction (Shock) Waves in Porous Media”, in *Shock Waves @ Marseille III*, Ed. R. Brun & L.Z. Dumitrescu, Springer, Heidelberg, Germany, pp. 203-208, 1993.
20. **Ben-Dor, G.**, Igra, O., Mazor, G., Onodera, H. & Takayama, K., “Head-On Collision of a Shock Wave with a Porous Material: Experimental and Numerical Investigations”, in *Shock Waves @ Marseille III*, Ed. R. Brun & L.Z. Dumitrescu, Springer, Heidelberg, Germany, pp. 215-220, 1993.
21. Levy, A., Skews, B.W., **Ben-Dor, G.** & Sorek S., “Head-On Collision of Normal Shock Waves with Rigid Porous Materials”, in *Shock Waves @ Marseille III*, Ed. R. Brun & L.Z. Dumitrescu, Springer, Heidelberg, Germany, pp. 221-226, 1993.
22. Li, H., **Ben-Dor, G.** & Han, Z.Y., “A Reconsideration of the Whitham Theory for Analyzing the Reflection of Weak Shock Waves over Small Wedge Angles”, in *Shock Waves @ Marseille IV*, Ed. R. Brun & L.Z. Dumitrescu, Springer, Heidelberg, Germany, pp. 197-202, 1993.
23. Falcovitz, J., **Ben-Dor, G.** & Alfandary, G., “Head-On Collision of a Regular Reflection with a Compressive Corner”, in *Shock Waves @ Marseille IV*, Ed. R. Brun & L.Z. Dumitrescu, Springer, Heidelberg, Germany, pp. 203-208, 1993.
24. Rayevsky, D. & **Ben-Dor, G.**, “Shock Wave Interaction with a Low Speed of Sound Layer - Analytical and Numerical Investigations”, in *Shock Waves @ Marseille IV*, Ed. R. Brun & L.Z. Dumitrescu, Springer, Heidelberg, Germany, pp. 307-312, 1993.
25. Aizik, F., **Ben-Dor, G.**, Elperin, T., Igra, O., Mond, M. & Gronig, H., “Universal Attenuation Law of Planar Shock Waves Propagating in Dust-Gas Suspensions”, in *Shock*

- Waves*, Eds. B. Sturtevant, J.E. Shepherd and H.G. Hornung, World Scientific, pp. 147-152, 1995.
26. Chpoun, A., Passerel, D., Lengrand, J.C., Li, H. & **Ben-Dor, G.**, “Experimental Reconsideration of the State-of-the-Art of Oblique Shock Wave Reflections in Steady Flows”, in *Shock Waves*, Eds. B. Sturtevant, J.E. Shepherd and H.G. Hornung, World Scientific, pp.369-374, 1995.
 27. Li, H., Schotz M. & **Ben-Dor, G.**, “Wave Configuration of Mach Reflection in Steady Flows: Analytical Solution and Dependence on Downstream Influences”, in *Shock Waves*, Eds. B. Sturtevant, J. E. Shepherd and H.G. Hornung, World Scientific, pp. 393-398, 1995.
 28. Chpoun, A. & **Ben-Dor, G.**, “Numerical Confirmation of the Hysteresis Phenomenon in the Regular to Mach Reflection Transition in Steady Flows”, in *Shock Waves*, Eds. B. Sturtevant, J.E. Shepherd and H.G. Hornung, World Scientific, pp. 405-410, 1995.
 29. Li, H. & **Ben-Dor, G.**, “Application of the Principle of Minimum Entropy Production to the Regular-to-Mach Reflection Transition in Steady Flows”, in *Shock Waves*, Eds. B. Sturtevant, J.E. Shepherd and H.G. Hornung, World Scientific, pp. 447-452, 1995.
 30. Vuillon, J., Zeitoun, D. & **Ben-Dor, G.**, “Numerical Investigations of the Prediction of the Mach Stem Height in Steady Flows”, in *Shock Waves*, Eds. B. Sturtevant, J.E. Shepherd and H.G. Hornung, World Scientific, pp. 459-464, 1995.
 31. Elperin, I., Igra, O. & **Ben-Dor, G.**, “Dusty Gas Flow in a Nozzle”, in *Shock Waves*, Eds. B. Sturtevant, J. E. Shepherd and H.G. Hornung, World Scientific, pp. 1303-1308, 1995.
 32. Levy, A., Li, H. & **Ben-Dor, G.**, “Analytical Prediction of Regular Reflection over Porous Surfaces”, in *Shock Wave*, Eds. B. Sturtevant, J.E. Shepherd and H.G. Hornung, World Scientific, pp. 1333-1338, 1995.
 33. Levy, A., Sorek, S., **Ben-Dor, G.** & Skews, B.W., “Experimental and Numerical Investigation of the Head-on Collision of Planar Shock Waves with Rigid Porous Materials”, in *Shock Waves*, Eds. B. Sturtevant, J.E. Shepherd and H.G. Hornung, World Scientific, pp. 1357-1362, 1995.
 34. **Ben-Dor, G.**, Levy, A, and Sorek, S., “Simulations of Waves Propagation in Saturated Rigid Porous Media and Comparison with Experiments” in *Shock & Impact Loads on Structures*, Ed. T.S. Lok, Nanyang Technological University Press, Singapore, pp. 25-32, 1996.
 35. **Ben-Dor, G.** & Li, H., “Phenomenology, Mechanics and Simulation of Cratering”, in *Explosion Effects in Granular Materials*, Eds. A. Jenssen, H. Langberg and C. Madshus, Forsvarets Bygningst Jeneste, Sweden, pp. 37-54, 1996.
 36. **Ben-Dor, G.**, Levy, A. & Sorek, S., “Wave Propagation in Porous Media - Theoretical, Experimental and Numerical Results”, in *Explosion Effects in Granular Materials*, Eds. A. Jenssen, H. Langberg and C. Madshus, Forsvarets Bygningst Jeneste, Sweden, pp. 431-443, 1996.
 37. **Ben-Dor, G.** & Britan, A., “Compaction Waves Propagation In Granular Media-an Experimental Study”, in *Explosion Effects in Granular Materials*, Eds. A. Jenssen, H. Langberg and C. Madshus, Forsvarets Bygningst Jeneste, Sweden, pp. 445-454, 1996.
 38. Sorek, S., Levy, A. & **Ben-Dor, G.**, “Shock Wave in Porous Media”, in *Fluid Mechanics Series: Fluid Transport in Porous Media*, Ed. J.P. Duplessis, Computational Mechanics Publications, England, pp. 215-254, 1997.
 39. Sadot, O., Erez, L., Alon, U., Oron, D., Levin, L.A., Erez, G., **Ben-Dor, G.** & Shvarts, D., “Experimental and Numerical Study of Nonlinear Evolution of Single Mode and Two-

- Bubble Interaction Under Richtmyer-Meshkov Instability”, in *The Physics of Compressible Turbulent Mixing*, Eds. G. Jourdan and L. Houas Imprimerie Caractere, Marseille, France, 1997.
40. Shvarts, D., Sadot, O., Erez, L., Oron, D., Alon, U., Hanoch, G., Erez, G., **Ben-Dor, G.** & Levine, L.A. “Effect of Re-Shock on Richtmyer-Meshkov Mixing: an Experimental, Numerical and Theoretical Study”, in *The Physics of Compressible Turbulent Mixing*, Eds. G. Jourdan and L. Houas Imprimerie Caractere, Marseille, France, 1997.
 41. Jourdan, G., Houas, L., Haas, J.F., **Ben-Dor, G.** & Meshkov, E.E., “Simple Approach for the Richtmyer-Meshkov Mixing Growth Description in Shock Tube Experiments”, in *The Physics of Compressible Turbulent Mixing*, Eds. G. Jourdan and L. Houas Imprimerie Caractere, Marseille, France, 1997.
 42. **Ben-Dor, G.**, Levy, A. & Sorek, S., “Wave Propagation in Saturated Rigid Porous Media: Numerical Simulation and Comparison with Experiments”, in *Numerical Methods for Wave Propagation*, Eds. E.F. Toro & J.F. Clarke, Kluwer Academic Publishers, England, pp. 55-73, 1998.
 43. **Ben-Dor, G.**, “Hysteresis Phenomena in Shock Wave Reflection in Steady Flows”, in the *Proceedings of the International Workshop on Industrial Applications of Explosion, Shock Wave and High Pressure Phenomena (ESHP Workshop)*, Eds. M Fujita and K. Hakamoto, Elsevier, pp. 15-19, 1999.
 44. **Ben-Dor, G.**, “Hysteresis Phenomena in Steady Shock Wave Reflections”, in “Shock Waves”, Eds. G.J. Ball, R. Hillier and G.T. Roberts, Imperial College, London, England, pp. 49-56, 1999.
 45. Li, H., Chpoun, A. & **Ben-Dor, G.**, “Reflection of Asymmetric Shock Waves in Steady Flows: Analytical and Experimental Investigations”, in “Shock Waves”, Eds. G.J. Ball, R. Hillier and G.T. Roberts, Imperial College, London, England, pp. 1143-1148, 1999.
 46. **Ben-Dor, G.**, Elperin, T., Li, H. & Vasilev, E., “Shock Wave Reflection Phenomenon in Steady Flows: The Influence of Downstream-Pressure”, in “Shock Waves”, Eds. G.J. Ball, R. Hillier and G.T. Roberts, Imperial College, London, England, pp. 1149-1154, 1999.
 47. **Ben-Dor, G.**, Elperin, T., Henderson, L.F. & Vasilev, E., “Jetting in Mach Reflection”, in “Shock Waves”, Eds. G.J. Ball, R. Hillier and G.T. Roberts, Imperial College, London, England, pp. 1155-1160, 1999.
 48. Chpoun, A., **Ben-Dor, G.**, Elperin, T., Zorubas, L. & Vasilev, E., “Experimental and Numerical Investigation of Conical Shock Interaction in Supersonic Steady Flow”, in “Shock Waves”, Eds. G.J. Ball, R. Hillier and G.T. Roberts, Imperial College, London, England, pp. 1299-1304, 1999.
 49. Levi-Hevroni, D., Sorek, S., Levy, A. & **Ben-Dor, G.**, “Numerical Investigation of the Interaction of Shock Waves in Flexible Porous Materials”, in “Shock Waves”, Eds. G.J. Ball, R. Hillier and G.T. Roberts, Imperial College, London, England, pp. 1369-1374, 1999.
 50. Britan, A., **Ben-Dor, G.**, Igra, O. & Levy, A., “Shock Wave Interaction with Granular Materials”, in “Shock Waves”, Eds. G.J. Ball, R. Hillier and G.T. Roberts, Imperial College, London, England, pp. 1375-1380, 1999.
 51. Kalman, H., Goder, D., Rivkin, M. & **Ben-Dor, G.**, “Design of Dust Collection Hoppers”, in *The Best of Powder Handling & Processing Bulk Solids Handling, A/2000 Silos, Hoppers, Bins & Domes*, Part II, pp. 161-166, 2000.
 52. Goder, D., Kalman, H., **Ben-Dor, G.** & Rivkin, M., “Experimental Investigation of the Effect of Moisture Content and Particle Size on the Pneumatic Transportability in a Dense

- Phase”, in “The Best of Powder Handling & Processing Bulk Solids Handling, D/2000 Pneumatic Conveying”, Part II, pp. 179-183, 2000.
53. Sadot, O., Yosef-Hai, A., Oron, D., Rikanati, A., Kartoon, D., Arazi, L., Y. Elbaz, Sarid, E., **Ben-Dor, G.** & Shvarts, D., “The Dependence of the Richtmyer-Meshkov Instability on the Atwood Number and the Dimensionality – Theory and Experiments”, in Proceedings of the 24th International Congress on High Speed Photography and Photonics, Eds. K. Takayama, T. Saito, H. Kleine and E. Timofeev, SPIE-The International Society for Optical Engineering, pp. 798-806, 2000.
54. **Ben-Dor, G.**, “Oblique Shock Wave Reflections”, in *Handbook of Shock Waves (3 volumes)*, Eds. **G. Ben-Dor**, O. Igra & T. Elperin, Academic Press, Boston. Massachusetts. U.S.A., Vol. 2, pp. 68-174, 2001.
55. Aizik, F., **Ben-Dor, G.**, Elperin, T. & Igra, O., “General Attenuation Law for Spherical Shock Waves Propagating in Pure Gases”, in *Handbook of Shock Waves (3 volumes)*, Eds. **G. Ben-Dor**, O. Igra & T. Elperin, Academic Press, Boston. Massachusetts. U.S.A., Vol. 2, 483-488, 2001.
56. Anteby, I., Haham, O., Schankar, A., Sadot, O., Nizri, E. & **Ben-Dor, G.**, “Experimental and Numerical Simulation of Aluminum Foam Behavior Under Short Duration Dynamic Loads”, in *Impact Engineering and Application*, Eds. A. Chiba, S. Tanimura & K., Elsevier, 625-631, 2001.

(c) Refereed articles in scientific journals

1. **Ben-Dor, G. & Glass, I.I.**, “A Reconsideration of Oblique Shock Wave Reflections”, Bulletin of the American Physical Society, Vol. 22, No. 10, 1977.
2. **Ben-Dor, G. & Igra, O.**, “Analysis of a Piston-Driven Shock Tube”, The Aeronautical Journal of the Royal Aeronautical Society, Paper No. 559, pp. 178-181, 1978.
3. **Ben-Dor, G. & Glass, I.I.**, “Nonstationary Oblique Shock Wave Reflections: Actual Isopycnics and Numerical Experiments”, AIAA Journal, Vol. 16, No. 11, pp. 1146-1153, 1978.
4. **Ben-Dor, G. & Glass, I.I.**, “Domains and Boundaries of Non-stationary Oblique Shock Wave Reflections. 1. Diatomic Gas”, Journal of Fluid Mechanics, Vol. 92, Pt. 3, pp. 459-496, 1979.
5. **Ben-Dor, G., Whitten, B.T. & Glass, I.I.**, “Evaluation of Perfect and Imperfect-Gas Interferograms by Computer”, International Journal of Heat and Fluid Flow, Vol. 1, No. 2, pp. 77-91, 1979.
6. **Ben-Dor, G. & Glass, I.I.**, “Domains and Boundaries of Non-stationary Oblique Shock-Wave Reflections. 2. Monatomic Gas”, Journal of Fluid Mechanics, Vol. 96, Pt. 4, pp. 735-756, 1980.
7. **Ben-Dor, G., Takayama, K. & Kawauchi, T.**, “The Transition from Regular to Mach Reflection and from Mach to Regular Reflection in Truly Non-stationary Flows”, Journal of Fluid Mechanics, Vol. 100, Pt. 1, pp. 147-160, 1980.
8. **Ben-Dor, G.**, “A Reconsideration of the Shock Polar Solution of a Pseudo-Steady Single Mach Reflection”, Canadian Aerospace and Space Journal, Vol. 26, No.2, pp. 98-104, 1980.
9. **Ben-Dor, G.**, “Analytical Solution of a Double-Mach Reflection”, AIAA Journal, Vol. 18, No. 9, pp. 1036-1043, 1980.
10. **Ben-Dor, G.**, “Steady Oblique Shock Wave Reflections in Perfect and Imperfect Monatomic and Diatomic Gases”, AIAA Journal, Vol. 18, No. 9, pp. 1143-1145, 1980.
11. Igra, O. & **Ben-Dor, G.**, “Parameters Affecting the Relaxation Zone Behind Normal Shock Waves in a Dusty Gas”, Israel Journal of Technology, Vol. 18, Nos. 3/4, pp. 159-168, 1980.
12. Yakhot, A., **Ben-Dor, G., Rakib, Z. & Igra, O.**, “A New Approach to the Solution of the Boundary Layer Equations of an Ideal Compressible Flow over a Flat Plate”, The Aeronautical Journal of the Royal Aeronautical Society, Paper No. 845, pp. 34-35, 1981.
13. **Ben-Dor, G.**, “Relation Between First and Second Triple-Point Trajectory Angles in Double Mach Reflection”, AIAA Journal, Vol. 19, No. 4, pp. 531-533, 1981.
14. Takayama, K., **Ben-Dor, G. & Gotoh, J.**, “Regular to Mach Reflection Transition in Truly Nonstationary Flows - Influence of Surface Roughness”, AIAA Journal, Vol. 19, No. 9, pp. 1238-1240, 1981.
15. **Ben-Dor, G. & Takayama, K.**, “Streak Camera Photography with Curved Slits for the Precise Determination of Shock Wave Transition Phenomena”, Canadian Aeronautics and Space Journal, Vol. 27, No. 2, pp. 128-134, 1981.
16. **Ben-Dor, G. & Igra, O.**, “The Relaxation Zone Behind Normal Shock Waves in a Reacting Dusty Gas. Part 1. Monatomic Gases”, Journal Plasma Physics, Vol. 27, Pt. 3, pp. 377-395, 1982.

17. Igra, O. & **Ben-Dor, G.**, "Parametric Study of the Relaxation Zone Behind Strong Normal Shock Waves in a Dusty Ionized Monatomic Gas", *Journal Plasma Physics*, Vol. 27, Pt. 3, pp. 397-413, 1982.
18. **Ben-Dor, G.**, Rakib, Z. & Igra, O., "A New Method of Solution of the Boundary Layer Equations of a Singly Ionized Frozen Flow over a Flat Plate", *Israel Journal of Technology*, Vol. 21, Nos. 1/2, pp. 62-75, 1983.
19. Takayama, K. & **Ben-Dor, G.**, "A Reconsideration of the Hysteresis Phenomenon in the Regular \leftrightarrow Mach Reflection Transition in Truly Nonstationary Flows", *Israel Journal of Technology*, Vol. 21, Nos. 1/2, pp. 197-204, 1983.
20. **Ben-Dor, G.**, Rakib, Z. & Igra, O., "Frozen-Plasma-Boundary Layer Flows over Isothermal Flat Plates - Parametric Study", *AIAA Journal*, Vol. 22, No. 2, pp. 299-301, 1984.
21. Igra, O. & **Ben-Dor, G.**, "The Relaxation Zone Behind Normal Shock Waves in a Dusty Reacting Gas. Part 2. Diatomic Gas", *Journal Plasma Physics*, Vol. 31, Pt. 1, pp. 115-140, 1984.
22. **Ben-Dor, G.**, Rakib, Z. & Igra, O., "Frozen-Plasma-Boundary Layer Flows over Adiabatic Flat Plates", *AIAA Journal*, Vol. 22, No. 7, pp. 1005-1007, 1984.
23. Rakib, Z., Igra, O. & **Ben-Dor, G.**, "The Effect of Water Droplets on the Relaxation Zone Developed Behind Strong Normal Shock Waves", *ASME Journal of Fluid Engineering*, Vol. 106, No. 2, pp. 154-159, 1984.
24. Mazor, G., **Ben-Dor, G.** & Igra, O., "A Simple and Accurate Expression for the Viscosity of Nonpolar Diatomic Gases up to 10,000 K", *AIAA Journal*, Vol. 23, No. 4, pp. 636-638, 1985.
25. **Ben-Dor, G.** & Dewey, J.M., "The Mach Reflection Phenomenon - A Suggestion for an International Nomenclature", *AIAA Journal*, Vol. 23, No. 10, pp. 1650-1652, 1985.
26. Arjoan, J. & **Ben-Dor, G.**, "Fully Computerized Evaluation of Interferograms from Fluid Flow Investigations", *The International Journal of Heat and Fluid Flow*, Vol. 6, No. 2, pp. 133-136, 1985.
27. Igra, O., **Ben-Dor, G.** & Rakib, Z., "The Effect of Dust and Water Droplets on the Relaxation Zone Developed Behind Strong Normal Shock Waves", *International Journal of Multiphase Flow*, Vol. 11, No. 2, pp. 121-132, 1985.
28. Takayama, K. & **Ben-Dor, G.**, "The Inverse Mach Reflection", *AIAA Journal*, Vol. 23, No. 12, pp. 1853-1859, 1985.
29. **Ben-Dor, G.** & Takayama, K., "Analytical Prediction of the Transition from Mach to Regular Reflection over Cylindrical Concave Wedges", *Journal of Fluid Mechanics*, Vol. 158, pp. 365-380, 1985.
30. **Ben-Dor, G.** & Takayama, K., "Application of Steady Shock Polars to Unsteady Shock Wave Reflections", *AIAA Journal*, Vol. 24, No. 4, pp. 682-684, 1986.
31. Elperin, I., Igra, O. & **Ben-Dor, G.**, "Analysis of Normal Shock Waves in a Carbon Particle-Laden Oxygen Gas", *ASME Journal of Fluid Engineering*, Vol. 108, pp. 354-359, 1986.
32. Igra, O., **Ben-Dor, G.** & Elperin, I., "Parameters Affecting the Postshock Relaxation Zone in an Oxygen Carbon Particle Suspension", *ASME Journal of Fluid Engineering*, Vol. 108, pp. 360-365, 1986.

33. Kaniel, A., Igra, O., **Ben-Dor, G.** & Mond, M., "Ionization Behind Strong Normal Shock Waves in Argon", *Physics Fluids*, Vol. 29, No. 11, pp. 3618-3625, 1986.
34. **Ben-Dor, G.** & Takayama, K., "The Dynamics of the Transition from Mach to Regular Reflection over Concave Cylinders", *Israel Journal of Technology*, Vol. 23, pp. 71-74, 1986/87.
35. **Ben-Dor, G.** & Takayama, K., "The Reflection of a Planar Shock Wave over a Water Wedge", *Israel Journal of Technology*, Vol. 23, pp. 169-173, 1986/7.
36. **Ben-Dor, G.** Mazor, G. Takayama, K. & Igra, O., "Influence of Surface Roughness on the Transition from Regular to Mach Reflection in a Pseudo-Steady Flows", *Journal of Fluid Mechanics*, Vol. 176, pp. 333-356, 1987.
37. **Ben-Dor, G.**, Dewey, J.M. & Takayama, K., "The Reflection of a Planar Shock Wave Over a Double Wedge", *Journal of Fluid Mechanics*, Vol. 176, pp. 483-520, 1987.
38. **Ben-Dor, G.**, Takayama, K. & Needham, C.E., "The Thermal Nature of the Triple Point of a Mach Reflection", *Physics Fluids*, Vol. 30, No. 5, pp. 1287-1293, 1987.
39. **Ben-Dor, G.**, "A Reconsideration of the Three-Shock Theory for a Pseudo-Steady Mach Reflection", *Journal of Fluid Mechanics*, Vol. 181, pp. 467-484, 1987.
40. Elperin, T., **Ben-Dor, G.** & Igra, O., "Head-On Collision of Normal Shock Waves in Dusty Gases", *International Journal of Heat and Fluid Flow*, Vol. 8, No. 4, pp. 303-308, 1987.
41. Igra, O., Elperin, T. & **Ben-Dor, G.**, "Blast Waves in Dusty Gases", *Proceedings of the Royal Society of London*, A414, pp. 197-219, 1987.
42. **Ben-Dor, G.**, Takayama, K. & Dewey, J.M., "Further Analytical Considerations of Weak Shock Wave over a Concave Wedge", *Fluid Dynamics Research*, Vol. 2, pp. 77-85, 1987.
43. Takayama, K. & **Ben-Dor, G.**, "Application of Streak Photography for the Study of Shock Wave Reflections over a Double Wedge", *Experiments in Fluids*, Vol. 6, No. 4, pp. 11-15, 1988.
44. Mazor, G., **Ben-Dor, G.** & Igra, O., "Shock Wave Formation in a Suddenly Compressed Rubber Rod", *AIAA Journal*, Vol. 26, No. 1, pp. 116-119, 1988.
45. **Ben-Dor, G.**, Igra, O. & Elperin, T., "Head-On Collision of Normal Rarefaction Waves in Dusty Gases", *International Journal of Heat and Fluid Flow*, Vol. 9, No. 2, pp. 174-181, 1988.
46. **Ben-Dor, G.**, Dewey, J.M., McMillin, D.J. & Takayama, K., "Experimental Investigation of the Asymptotically Approached Mach Reflection over the Second Surface in a Double Wedge Reflection", *Experiments in Fluids*, Vol. 6, pp. 429-434, 1988.
47. **Ben-Dor, G.**, Mond, M., Igra, O. & Martsiano, Y., "A Nondimensional Analysis of Dusty Shock Waves in Steady Flows", *KSME Journal*, Vol. 2, No. 1, pp. 28-34, 1988.
48. Martsiano, Y., **Ben-Dor, G.** & Igra, O., "Oblique Shock Waves in Dusty Gas Suspensions", *KSME Journal*, Vol. 2, No. 1, pp. 35-43, 1988.
49. Elperin, T., Igra, O. & **Ben-Dor, G.**, "Rarefaction Waves in Dusty Gases", *Fluid Dynamics Research*, Vol. 4, No. 4, pp. 229-238, 1988.
50. Elperin, T., **Ben-Dor, G.** & Igra, O., "A Parametric Study of the Head-On Collision of Normal Shock Waves in Dusty Gases", *Fluid Dynamics Research*, Vol. 4, No. 4, pp. 239-253, 1988.

51. Igra, O. & **Ben-Dor, G.**, “Dusty Shock Waves”, *Applied Mechanics Reviews*, Vol. 41, No. 11, pp. 379-437, 1988.
52. **Ben-Dor, G.**, “Steady, Pseudo-Steady and Unsteady Shock Wave Reflections”, *Progress in Aerospace Sciences*, Vol. 25, pp. 329-412, 1988.
53. Elata, D., **Ben-Dor, G.** & Igra, O., “The Effect of Distributions of Particle Non-Uniformities on the Flow Field Behind Steady Normal Shock Waves”, *International Journal of Heat and Fluid Flow*, Vol. 10, No. 2, pp. 152-159, 1989.
54. Rakib, Z., Mond, M., **Ben-Dor, G.** & Igra, O., “The Flow Field Induced by Spherical Blast Waves Propagating into Perfect and Imperfect Dusty Gases”, *Journal of Plasma Physics*, Vol. 41, Pt. 2, pp. 355-380, 1989.
55. Takayama, K. & **Ben-Dor, G.**, “A Reconsideration of the Transition Criterion from Mach to Regular Reflection over Cylindrical Concave Surfaces”, *KSME Journal*, Vol. 3, No. 1, pp. 6-9, 1989.
56. Takayama, K. & **Ben-Dor, G.**, “Pseudo-Steady Oblique Shock Wave Reflections over Water Wedges”, *Experiments in Fluids*, Vol. 8, pp. 129-136, 1989.
57. **Ben-Dor, G.**, “Structure of the Contact Discontinuity of Nonstationary Mach Reflections”, *AIAA Journal*, Vol. 28, No. 7, pp. 1314-1316, 1990.
58. Olim, M., **Ben-Dor, G.**, Mond, M. & Igra, O., “A General Attenuation Law of Moderate Planar Shock Waves Propagating into Dusty Gases with Relatively High Loading Ratios of Solid Particles”, *Fluid Dynamics Research*, Vol. 6, Nos. 3-4, pp. 185-200, 1990.
59. Olim, M., Igra, O., Mond, M. & **Ben-Dor, G.**, “Numerical Investigation of the Flow Field Behind a Shock Wave Propagating into a Carbon-Oxygen Suspension”, *Physics Fluids A*, Vol. 2, No. 8, pp. 1393-1403, 1990.
60. Olim, M., **Ben-Dor, G.**, Mond, M. & Igra, O., “Investigation of the Flow Field Developed Behind a Planar Shock Wave Propagating into a Reactive Gas Solid Suspension”, *KSME Journal*, Vol. 4, No. 2, pp. 167-171, 1990.
61. **Ben-Dor, G.** & Elperin, T., “Analysis of the Wave Configuration Resulting from the Termination of an Inverse Mach Reflection”, *Shock Waves*, Vol. 1, No. 3, pp. 237-241, 1991.
62. Itoh, K., Takayama, K. & **Ben-Dor, G.**, “Numerical Simulation of the Reflection of a Planar Shock Wave over a Double Wedge”, *International Journal for Numerical Methods in Fluids*, Vol. 13, pp. 1153-1170, 1991.
63. Bar-Ziv, E., de Botton, G., Bar-Ziv, R.H., Martsiano, Y. & **Ben-Dor, G.**, “The Motion of a Charged Particle in an Electromagnetic Chamber”, *Aerosol Science and Technology*, Vol. 14, pp. 127-137, 1991.
64. **Ben-Dor, G.**, “Interaction of a Planar Shock Wave with a Double Wedge-Like Structure”, *AIAA Journal*, Vol. 30, No. 1, pp. 274-278, 1992.
65. Bear, J., Sorek, S., **Ben-Dor, G.** & Mazor, G., “Displacement Waves in Saturated Thermoelastic Porous Media, 1: Basic Equations”, *Fluid Dynamics Research*, Vol. 9, pp. 155-164, 1992.
66. Mazor, G., Igra, O., **Ben-Dor, G.**, Mond, M. & Reichenbach, H., “Head-On Collision of Normal Shock Waves With a Rubber-Supported Rod”, *Transactions of the Royal Society of London*, Ser. A338, pp. 237-269, 1992.

67. Rayevsky, D. & **Ben-Dor, G.**, "Shock Wave Interaction with a Thermal Layer", AIAA Journal, Vol. 30, No. 4, pp. 1135-1139, 1992.
68. Dahan, A., **Ben-Dor, G.** & Bar-Ziv, E., "Optical Flow Visualization by Deflection Mapping Using a Single Ronchi Grating", Experiments in Fluids, Vol. 13, pp. 73-83, 1992.
69. Sorek, S., Bear, J., **Ben-Dor, G.** & Mazor, G., "Shock Waves in Saturated Thermoelastic Porous Media", Transport in Porous Media, Vol. 9, pp. 3-13, 1992.
70. Igra, O., **Ben-Dor, G.**, Mazor, G. & Mond, M., "Head-On Collision Between Normal Shock Waves and a Rubber Supported Plate, A Parametric Study", Shock Waves, Vol. 2, No. 3, pp. 189-200, 1992.
71. **Ben-Dor, G.** & Takayama, K., "The Phenomena of Shock Wave Reflection - A Review of Unsolved Problems and Future Research Needs", Shock Waves, Vol. 2, No. 4, pp. 211-223, 1992.
72. Kalman, H., Goder, D., Rivkin, M. & **Ben-Dor, G.**, "The Effect of the Particle-Surface Friction Coefficient on the Angle of Repose", Bulk Solids Handling, Vol. 13, No. 1, pp. 123-128, 1993.
73. Dahan, A., **Ben-Dor, G.** & Bar-Ziv, E., "Fourier Transform Deflection Mapping", Optical Engineering, Vol. 32, No. 5, pp. 1094-1100, 1993.
74. Weiss, Y., **Ben-Dor, G.**, Karni, Y. & Bar-Ziv, E., "Monte-Carlo Simulations of Heat and Mass Transfer with Chemical Reactions of Heterogeneous Reacting Systems", Chemical Engineering Science, Vol. 48, No. 11, pp. 2083-2092, 1993.
75. Yossefi, D., **Ben-Dor, G.** & Bar-Ziv, E., "Simulation of Combustion Systems of Gaseous Fuels in Laminar Flow Reactors", Fuel, Vol. 72, No. 8, pp. 1131-1137, 1993.
76. Levy, A., **Ben-Dor, G.**, Sorek, S. & Bear, J., "Jump Conditions Across Strong Compaction Waves in Gas Saturated Rigid Porous Media", Shock Waves, Vol. 3, No. 2, pp. 105-111, 1993.
77. Levy, A., **Ben-Dor, G.**, Skews, B.W. & Sorek, S., "Head-On Collision of Normal Shock Waves with Rigid Porous Materials", Experiments in Fluids, Vol. 15, pp. 183-190, 1993.
78. Takayama, K. & **Ben-Dor, G.**, "State-of-the-Art in Research on Mach Reflection of Shock Waves", Sadhana, Vol. 18, Pts. 3 & 4, pp. 695-710, 1993.
79. Falcovitz, J., Alfandary, G. & **Ben-Dor, G.**, "Numerical Simulation of the Head-On Reflection of a Regular Reflection", International Journal of Numerical Methods in Fluids, Vol. 17, No.2, pp. 1055-1078, 1993.
80. **Ben-Dor, G.**, Mazor, G., Mond, M., Igra, O., Heilig, W. & Reichenbach, H., "Reflection of a Planar Shock Waves from Rubber Walls: The Uniaxial Strain Case", AIAA Journal, Vol. 31, No. 11, pp. 2184-2186, 1993.
81. Kaniel, A., Mond, M. & **Ben-Dor, G.**, "An Artificial Dissipation Scheme for the Navier Stokes Equations", International Journal of Numerical Methods in Heat and Fluid Flow, Vol. 3, pp. 517-530, 1993.
82. Mazor, G., **Ben-Dor, G.**, Igra, O and Sorek, S., "Shock Wave Interaction with Cellular Materials. I. Analytical Investigation and Governing Equations", Shock Waves, Vol. 3, No. 3, pp. 159-165, 1994.

83. **Ben-Dor, G.**, Mazor, G., Igra, O., Sorek, S. & Onodera, H., “Shock Wave Interaction with Cellular Materials: II. Open Cell Foams: Experimental and Numerical Results”, *Shock Waves*, Vol. 3, No. 3, pp. 167-179, 1994.
84. **Ben-Dor, G. & Rayevsky, D.**, “Shock Wave Interaction with a High Density Step Like Layer”, *Fluid Dynamics Research*, Vol. 13, No. 5, pp. 261-279, 1994.
85. **Ben-Dor, G. & Zaretsky, E.**, “Head-On Interaction of Planar Shock Waves with Polyurethane Foams - A Semi-Empirical Model”, *Archive of Applied Mechanics*, Vol. 64, pp. 365-372, 1994.
86. Li, H., **Ben-Dor, G. & Han, Z.Y.**, “Modification on the Whitham Theory for Analyzing the Reflection of Weak Shock Waves over Small Wedge Angles”, *Shock Waves*, Vol. 4, No. 1, pp. 41-45, 1994.
87. Li, H., **Ben-Dor, G. & Han, Z.Y.**, “Analytical Prediction of the Reflected-Diffracted Shock Wave Shape in the Interaction of a Regular Reflection with an Expansive Corner”, *Fluid Dynamics Research*, Vol. 14, No. 5, pp. 229-239, 1994.
88. Goder, D., Kalman, H., **Ben-Dor, G. & Rivkin, M.**, “Experimental Investigation of the Effect of Moisture Content and Particle Size on the Pneumatic Transportability in a Dense Phase”, *Powder Handling and Processing*, Vol. 6, No. 3, pp. 295-299, 1994.
89. Chpoun, A., Passerel, D., Lengrand, J.C., Li, H. & **Ben-Dor, G.**, “Mise en Evidence Experimentale et Numerique d'un Phenomane d'Hysteresis lors de la Transition Reflexion de Mach-Reflexion Reguliare”, *Mecanique des Fluides/Fluid Mechanics*, C. R. Acad. Sci. Paris, t. 319, Serie II, pp. 1447-1453, 1994.
90. Li, H., Levy, A. & **Ben-Dor, G.**, “Analytical Prediction of Regular Reflection over Porous Surfaces in Pseudo-Steady Flows”, *Journal of Fluid Mechanics*, Vol. 282, pp. 219-232, 1995.
91. **Ben-Dor, G.**, “Dust Entrainment by Means of a Planar Shock Induced Vortex Over Loose Dust Layers”, *Shock Waves*, Vol. 4, No. 5, pp. 285-288, 1995.
92. Arad, M., Segev, R. & **Ben-Dor, G.**, “Improved Finite Difference Method for Equilibrium Problems Based on Differentiation of the Partial Differential Equations and the Boundary Conditions”, *International Journal for Numerical Methods in Engineering*, Vol. 38, pp. 1831-1853, 1995.
93. Aizik, F., **Ben-Dor, G.**, Elperin, T., Igra, O., Mond, M. & Gronig, H., “Attenuation Law of Planar Shock Waves Propagating Through Dust Gas Suspensions”, *AIAA Journal*, Vol. 33, No. 5, pp. 953-955, 1995.
94. Li, H. & **Ben-Dor, G.**, “Interaction of Regular Reflection with a Compressive Wedge: Analytical Solution”, *AIAA Journal*, Vol. 33, No. 5, pp. 955-958, 1995.
95. Li, H. & **Ben-Dor, G.**, “Reconsideration of Pseudo-Steady Shock Wave Reflections and the Transition Criteria Between Them”, *Shock Waves*, Vol. 5, No. 1/2, pp. 59-73, 1995.
96. Li, H., Levy, A. & **Ben-Dor, G.**, “Head-On Interaction of Planar Shock Waves with Ideal Rigid Open-Cell Porous Materials - Analytical Model”, *Fluid Dynamics Research*, Vol. 16, No. 4, pp. 203-215, 1995.
97. Zaretsky, E. & **Ben-Dor, G.**, “Compressive Stress-Strain Relations and Shock Hugoniot Curves of Flexible Foams”, *ASME Journal of Engineering Materials and Technology*, Vol. 117, pp. 278-284, 1995.

98. **Ben-Dor, G.**, “Reconsideration of the-State-of-the-Art of Shock-Wave-Reflection-Phenomenon in Steady-Flows”, Japan Society of Mechanical Engineers International Journal, Ser. B, Vol. 38, No. 3, pp. 325-334, 1995.
99. Chpoun, A., Passerel, D., Li, H. & **Ben-Dor, G.**, “Reconsideration of Oblique Shock Wave Reflection in Steady Flows. Part I: Experimental Investigation”, Journal of Fluid Mechanics, Vol. 301, pp. 19-35, 1995.
100. Vuillon, J., Zeitoun, D. & **Ben-Dor, G.**, “Reconsideration of Oblique Shock Wave Reflection in Steady Flows. Part II: Numerical Investigation”, Journal of Fluid Mechanics, Vol. 301, pp. 37-50, 1995.
101. Li, H. & **Ben-Dor, G.**, “Head-On Interaction of Weak Planar Shock Waves with Flexible Porous Materials - Analytical Model”, International Journal of Multiphase Flow, Vol. 21, No. 5, pp. 941-947, 1995.
102. Li, H. & **Ben-Dor, G.**, “Reconsideration of the Shock-Shock Relations for the Case of a Nonquiescent Gas Ahead of the Shock and Verification with Experiments”, Proceedings of the Royal Society of London, Ser. A, Vol. 451, pp. 383-397, 1995.
103. Chpoun, A. & **Ben-Dor, G.**, “Numerical Confirmation of the Hysteresis Phenomenon in the Regular to the Mach Reflection Transition in Steady Flows”, Shock Waves, Vol. 5, No. 4, pp. 199-204, 1995.
104. Li, H. & **Ben-Dor, G.**, “A Shock Dynamics Theory Based Analytical Solution of Double Mach Reflections”, Shock Waves, Vol. 5, No. 4, pp. 259-264, 1995.
105. Levy, A., Sorek, S., **Ben-Dor, G.** & Bear, J., “Evolution of the Balance Equations in Saturated Thermoelastic Porous Media Following Abrupt Simultaneous Changes in Pressure and Temperature”, Transport in Porous Media, Vol. 21 pp. 241-268, 1995.
106. Levy, A., Sorek, S., **Ben-Dor, G.** & Skews, B.W., “Wave Propagation in Saturated Rigid Porous Media: Analytical Model and Comparison with Experimental Results”, Fluid Dynamics Research, Vol. 17, p. 49-65, 1996.
107. **Ben-Dor, G.**, Mazor, G., Cederbaum, G. & Igra, O., “Well Tailored Compressive Stress-Strain Relations for Elastomeric Foams”, Journal of Materials Sciences, Vol. 31, pp. 1107-1113, 1996.
108. Li, H. & **Ben-Dor, G.**, “Oblique-Shock/Expansion-Wave Interaction Analytical Solution”, AIAA Journal, Vol. 34, No. 2, pp. 418-421, 1996.
109. Chpoun, A., Passerel, D., Lengrand, J.C., Li, H. & **Ben-Dor, G.**, “Etudes experimentale et numerique de la reflexion d'une onde de choc oblique en Ecoulement Stationnaire Hypersonique”, La Recherche Aerospatiale, Vol. 2, pp. 95-105, 1996.
110. Krylov, A., Sorek, S., Levy, A. & **Ben-Dor, G.**, “Simple Waves in Saturated Porous Media. I. The Isothermal Case”, Japan Society of Mechanical Engineers International Journal, Ser. B, Vol. 39, No. 2, pp. 294-298, 1996.
111. Sorek, S., Krylov, A., Levy, A. & **Ben-Dor, G.**, “Simple Waves in Saturated Porous Media. II. The Non-Isothermal Case”, Japan Society of Mechanical Engineers International Journal, Ser. B, Vol. 39, No. 2, pp. 299-304, 1996.
112. Vuillon, J., Zeitoun, D. & **Ben-Dor, G.**, “Numerical Investigation of Shock Wave Reflections in Steady Flows”, AIAA Journal, Vol. 34, No. 6, pp. 1167-1173, 1996.

113. Arad, A., Yakhot, A. & **Ben-Dor, G.**, “High-Order Accurate Discretization Stencil for an Elliptic Equation”, *International Journal for Numerical Methods in Fluids*, Vol. 23, pp. 367-377, 1996.
114. **Ben-Dor, G.**, Mazor, G., Cederbaum, G and Igra, O., “Stress-Strain Relations for Elastomeric Foams in Uni-, Bi- and Tri-Axial Compression Modes”, *Archive of Applied Mechanics*, Vol. 66, pp. 409-418, 1996.
115. Levy, A., **Ben-Dor, G.** & Sorek, S., “Numerical Investigation of the Propagation of Shock Waves in Rigid Porous Materials: Development of the Computer Code and Comparison with Experimental Results”, *Journal of Fluid Mechanics*, Vol. 324, pp. 163-179, 1996.
116. Li, H. & **Ben-Dor, G.**, “Application of the Principle of Minimum Entropy Production to Shock Wave Reflections. I. Steady Flows”, *Journal of Applied Physics*, Vol. 80, No. 4, pp. 2027-2037, 1996.
117. Li, H. & **Ben-Dor, G.**, “Application of the Principle of Minimum Entropy Production to Shock Wave Reflections. II. Pseudo-Steady Flows”, *Journal of Applied Physics*, Vol. 80, No. 4, pp. 2038-2048, 1996.
118. **Ben-Dor, G.**, “Dusty Shock Waves-Update”, *Applied Mechanics Reviews*, Vol. 49, No. 10, Pt. 2, pp. S141-S146, 1996.
119. Chpoun, A., Passerel, D. & **Ben-Dor, G.**, “Stability of Regular and Mach Reflection Wave Configurations in Steady Flows”, *AIAA Journal*, Vol. 34, No. 10, pp. 2196-2198, 1996.
120. Zaretsky, E. & **Ben-Dor, G.**, “Thermodynamic Law of Corresponding Shock States in Flexible Polymeric Foams”, *ASME Journal of Engineering Materials and Technology*, Vol. 118, pp. 493-502, 1996.
121. Igra, O., Wang, L. **Ben-Dor, G.** Reichenbach, H. & Heilig, W., “Uni-axial Strain Loading of a Rubber Rod by Planar Shock Waves”, *Acta Mechanica*, Vol. 120, No. 1-4, pp. 91-107, 1997.
122. **Ben-Dor, G.**, Britan, A., Elperin, T., Igra, O. & Jiang, J.P., “Experimental Investigation of the Interaction Between Weak Shock Waves and Granular layers”, *Experiments in Fluids*, Vol. 22, pp. 432-443, 1997.
123. Britan, A., Jiang, J.P., Igra, O., Elperin, T. & **Ben-Dor, G.**, “Gas Filtration During the Impact on Weak Shock Waves on Granular Layers”, *International Journal of Multiphase Flow*, Vol. 23, No. 3, pp. 473-491, 1997.
124. Li, H. & **Ben-Dor, G.**, “Analytical Investigation of Two-Dimensional Unsteady Shock-on-Shock Interactions”, *Journal of Fluid Mechanics*, Vol. 340, pp. 101-128, 1997.
125. Li, H. & **Ben-Dor, G.**, “A Parametric Study of Mach Reflection in Steady Flows”, *Journal of Fluid Mechanics*, Vol. 341, pp. 101-125, 1997.
126. Britan, A., **Ben-Dor, G.**, Elperin, T., Igra, O. & Jiang, J.P., “Mechanism of Compressive Stress Formation During Weak Shock Waves Impact with Granular Layer”, *Experiments in Fluids*, Vol. 22, pp. 507-518, 1997.
127. Arad, M., Segev, R. & **Ben-Dor, G.**, “Accuracy Increase of Finite Difference Calculations on Arbitrary Meshes by Means of Differentiation of the Partial Differential Equations and their Boundary Conditions”, *Computers & Structures*, Vol. 64, No. 1-4, pp. 541-552, 1997.
128. **Ben-Dor, G.** Dubinsky, A. & Elperin, T., “Area Rules for Penetrating Bodies”, *Theoretical and Applied Fracture Mechanics*, Vol. 26, pp. 193-198, 1997.

129. Li, H., **Ben-Dor, G.** & Gronig, H., “Analytical Study of the Oblique Reflection of Detonation Waves”, *AIAA Journal*, Vol. 35, No. 11, pp. 1712-1720, 1997.
130. **Ben-Dor, G.**, Elperin, T. & Golshtein, E., “Monte Carlo Analysis of the Hysteresis Phenomenon in Steady Shock Wave Reflections”, *AIAA Journal*, Vol. 35, No. 11, pp. 1777-1779, 1997.
131. **Ben-Dor, G.**, Elperin, T., Li, H., Vasilev, E., Chpoun, A. & Zeitoun, D., “Dependence of Steady Mach Reflections on the Reflecting-Wedge-Trailing-Edge-Angle”, *AIAA Journal*, Vol. 35, No. 1, pp. 1780-1282, 1997.
132. **Ben-Dor, G.**, Elperin, T., Li, H. & Vasilev, E., “Downstream Pressure Induced Hysteresis in the Regular--Mach Reflection Transition in Steady Flows”, *Physics Fluids*, Vol. 9, No. 10, pp. 3096-3098, 1997.
133. Arad, M., Yakhot, A. & **Ben-Dor, G.**, “A Highly Accurate Numerical Solution of a Biharmonic Equation”, *Numerical Methods for Partial Differential Equations*, Vol. 13, No. 4, pp. 375-391, 1997.
134. Jourdan, G., Houas, L., Haas, J.F. & **Ben-Dor, G.**, “Thickness and Volume Measurements of a Richtmyer-Meshkov Instability Induced Mixing Zone in a Square Shock Tube”, *Journal of Fluid Mechanics*, Vol. 349, pp. 67-94, 1997.
135. **Ben-Dor, G.**, Dubinsky, A. & Elperin, T., “Optimal 3D Impactors Penetrating into Layered Targets”, *Theoretical and Applied Fracture Mechanics*, Vol. 27, pp. 161-166, 1997.
136. Schotz, M., Levy, A., **Ben-Dor, G.** & Igra, O., “Analytical Prediction of the Wave Configuration Size in Steady Flow Mach Reflections”, *Shock Waves*, Vol. 7, No. 6, pp. 363-372, 1997.
137. **Ben-Dor, G.**, Levy, A. & Sorek, S., “Numerical Investigation of the Propagation of Shock Waves in Rigid Porous Materials-Solution of the Riemann Problem”, *International Journal of Numerical Methods for Heat & Fluid Flow*, Vol. 7, No. 8, pp. 801-813, 1997.
138. **Ben-Dor, G.**, Dubinsky, A. & Elperin, T., “Shape Optimization of High Velocity Impactors Using Analytical Models”, *International Journal of Fracture*, Vol. 87, Pt. 1, pp. L1-L10, 1997.
139. **Ben-Dor, G.**, Dubinsky, A. & Elperin, T., “New Area Rules for Penetrating Impactors”, *International Journal of Impact Engineering*, Vol. 21, Nos. 1-2, pp. 51-59, 1998.
140. Li, H. & **Ben-Dor, G.**, “A Modified CCW Theory of Detonation Waves”, *Combustion and Flame*, Vol. 113, pp. 1-12, 1998.
141. Sadot, O., Erez, L., Alon, U., Oron, D., Levin, L.A., Erez, G., **Ben-Dor, G.** & Shvarts, D., “Study of Nonlinear Evolution of Single-Mode and Two-Bubble Interaction Under Richtmyer-Meshkov Instability”, *Physics Review Letters*, Vol. 80, No. 8, pp. 1654-1657, 1998.
142. Yakhot, A., Arad, M. & **Ben-Dor, G.**, “Richardson’s Annular Effect in Oscillating Duct Flows”, *ASME Journal of Fluids Engineering*, Vol. 120, No. 1, pp. 209-211, 1998.
143. Li, H. & **Ben-Dor, G.**, “Mach Reflection Wave Configuration in Two-Dimensional Supersonic Jets of Overexpanded Nozzles”, *AIAA Journal*, Vol. 36, No. 3, pp. 488-491, 1998.
144. Yossefi, D., Belmont, M.R., Maskell, S.J. & **Ben-Dor, G.**, “Simulation and Implementation of Laminar Flow Reactors for the Study of Combustion Systems of Ethane, Methane and Deborane”, *Fuel*, Vol. 77, No. 3, pp. 173-181, 1998.

145. Yosibash, Z., Arad, M., Yakhot, A. & **Ben-Dor, G.**, “An Accurate Semi-Analytic Finite Difference Scheme for Two-Dimensional Elliptic Problems with Singularities”, *Numerical Methods for Partial Differential Equations*, Vol. 14, pp. 281-296, 1998.
146. **Ben-Dor, G.**, Dubinsky, A. & Elperin, T., “On the Ballistic Resistance of Multi-Layered Target with Air Gap”, *International Journal of Solids and Structure*, Vol. 35, No. 23, pp. 3097-3103, 1998.
147. Arad, M., **Ben-Dor, G.** & Yakhot, A., “High Order Accurate Discretization of a Second-Order Equation with Discontinuous Coefficients”, *Applied Mathematical Modeling*, Vol. 22, pp. 69-79, 1998.
148. **Ben-Dor, G.**, Dubinsky, A. & Elperin, T., “A Model of High Speed Penetration into Ductile Targets”, *Theoretical & Applied Fracture Mechanics*, Vol. 28, pp. 237-239, 1998.
149. Levy, A., **Ben-Dor, G.** & Sorek, S., “Numerical Investigation of the Propagation of Shock Waves in Rigid Porous Materials. Flow Field Behavior and Parametric Study”, *Shock Waves*, Vol. 8, No. 3, pp. 127-137, 1998.
150. Arad, M., Yosibash, Z., **Ben-Dor, G.** & Yakhot, A., “Computing Flux Intensity Factors by a Boundary Method for Elliptic Equations with Singularities”, *Communications in Numerical Methods in Engineering*, Vol. 14 pp. 657-670, 1998.
151. **Ben-Dor, G.** Dubinsky, A. & Elperin, T., “Effect of Air Gaps on Ballistic Resistance of Targets for Conical Impactors”, *Theoretical & Applied Fracture Mechanics*, Vol. 30, pp. 243-249, 1998.
152. **Ben-Dor, G.** Dubinsky, A. & Elperin, T., “Analysis of Ballistic Properties of Layered Targets Using Cavity Expansion Model”, *International Journal of Fracture*, Vol. 90, No. 4, pp. L63-L67, 1998.
153. **Ben-Dor, G.** Dubinsky, A. & Elperin, T., “Optimization of Layered Shields with a Given Areal Density”, *International Journal of Fracture*, Vol. 91, No. 1, pp. L9-L14, 1998.
154. Chpoun, A., Chauveux, F., Zombas, L. & **Ben-Dor, G.**, “Interaction d’Onde de Choc Coniques de Familles Opposees en Ecoulement Hypersonique Stationnaire”, *Mecanique des Fluides/Fluid Mechanics*, C. R. Acad. Sci. Paris, t. 327, num. 1, Serie Iib, pp. 85-90, 1999.
155. **Ben-Dor, G.**, “Hysteresis Phenomena in Shock Wave Reflection in Steady Flows”, *Materials Processing Technology*, Vol. 85, pp. 15-19, 1999.
156. **Ben-Dor, G.**, Elperin, T., Li, H. & Vasilev, E., “The Influence of Downstream-Pressure on the Shock Wave Reflection Phenomenon in Steady Flows”, *Journal of Fluid Mechanics*, Vol. 386, pp. 213-232, 1999.
157. **Ben-Dor, G.** Dubinsky, A. & Elperin, T., “Some Ballistic Properties of Non-homogeneous Shields”, *Composites*, Pt. 1, Vol. 30, pp. 733-736, 1999.
158. Yakhot, A. Arad, M. & **Ben-Dor, G.**, “Numerical Investigation of a Laminar Pulsating Flow in a Rectangular Duct”, *International Journal for Numerical Methods in Fluids*, Vol. 29, pp. 935-950, 1999.
159. Li, H., Chpoun, A. & **Ben-Dor, G.**, “Analytical and Experimental Investigations of the Reflection of Asymmetric Shock Waves in Steady Flows”, *Journal of Fluid Mechanics*, Vol. 390, pp. 25-43, 1999.

160. Sorek, S., Levy, A., **Ben-Dor, G.** & Smeulders, D., "Contributions to Theoretical/ Experimental Developments in Shock Waves Propagation in Porous Media", *Transport in Porous Media*, Vol. 34, No. 1-3, pp. 63-100, 1999.
161. **Ben-Dor, G.**, Dubinsky, A. & Elperin, T., "Effect of an Air Gap and the Order of Plates on Ballistic Resistance of Two Layered Armor", *Theoretical & Applied Fracture Mechanics*, Vol. 31, pp. 233-241, 1999.
162. **Ben-Dor, G.**, Dubinsky, A. & Elperin, T., "On the Order of Plates Providing the Maximum Ballistic Limit Velocity of a Layered Armor", *International Journal of Impact Engineering*, Vol. 22, No. 8, pp. 741-755, 1999.
163. Li, H. & **Ben-Dor, G.**, "Interaction of Two Mach Reflections over Concave Double Wedges-Analytical Model", *Shock Waves*, Vol. 9, No. 4, pp. 259-268, 1999.
164. Levy, A., Levy-Hevroni, D., Sorek, S. & **Ben-Dor, G.**, "Derivation of Forchheimer Terms: Application to Compaction Waves Propagation in Porous Media", *International Journal of Multiphase flow*, Vol. 25, pp. 683-704, 1999.
165. Igra, O., Elperin, I. & **Ben-Dor, G.**, "Dusty Gas flow in a Converging-Diverging Nozzle", *ASME Journal of Fluid Engineering*, Vol. 121, pp. 908-913, 1999.
166. Li, H. & **Ben-Dor, G.**, "Analysis of Double-Mach-Reflection Wave Configurations with Convexly Curved Mach Stems", *Shock Waves*, Vol. 9, No. 5, pp. 319-326, 1999.
167. **Ben-Dor, G.**, Dubinsky, A. & Elperin, T., "Optimization of Light Weight Armor Using Experimental Data", *International Journal of Fracture*, Vol. 100, pp. 29-33, 1999.
168. Oron, D., Sadot, O., Srebro, Y., Rikanati, A., Yedovab, Y., Alon, U., Erez, L., Erez, G., **Ben-Dor, G.**, Levin, L.A. Ofer, D. & Shvarts, D., "Studies in the Nonlinear Evolution of the Rayleigh-Taylor and Richtmyer-Meshkov Instabilities and Their Role in Internal Confinement Fusion", *Laser and Particle Beams*, Vol. 17, No. 3, pp. 465-473, 1999.
169. **Ben-Dor, G.**, Dubinsky, A. & Elperin, T., "The Optimum Arrangement of the Plates in a Multi-Layered Shield", *International Journal of Solids and Structures*, Vol. 37, pp. 687-696, 2000.
170. **Ben-Dor, G.**, Dubinsky, A. & Elperin, T., "Analytical Solution for Penetration by Rigid Conical Impactors Using Cavity Expansion Model", *Mechanics Research Communications*, Vol. 27, No. 2, pp. 185-189, 2000.
171. **Ben-Dor, G.**, Dubinsky, A., Elperin, T. & Frage, N., "Optimization of Two-Component Ceramic Armor for a Given Impact Velocity", *Theoretical and Applied Fracture Mechanics*, Vol. 33, pp. 185-190, 2000.
172. Erez, L., Sadot, O., Oron, D., Erez, G., Levin, L.A., Shvarts, D. & **Ben-Dor, G.**, "Study of the Membrane Effect on Turbulent Mixing Measurements in Shock Tubes", *Shock Waves*, Vol. 10, No. 4, pp. 241-251, 2000.
173. **Ben-Dor, G.**, Dubinsky, A. & Elperin, T., "Optimization of the Shape of a Penetrator Taking Into Account Plug Formation", *International Journal of Fracture*, Vol. 106, pp. L29-L34, 2000.
174. Sadot, O., Erez, L., Oron, D., Erez, G., **Ben-Dor, G.**, Alon, U., Levin, L.A. & Shvarts, D., "Studies on the Nonlinear Evolution of the Richtmyer-Meshkov Instability", *The Astrophysical Journal, Suppl.* 127, No. , pp. 469-473, 2000.
175. **Ben-Dor, G.**, Igra, O. & Wang, L., "Shock Wave Reflections in Dusty Gases", *ASME Journal of Fluid Engineering*, Vol. 123, pp. 145-153, 2001.

176. Britan, A., **Ben-Dor, G.**, Igra, O. & Shapiro, H., "Shock Wave Attenuation by Granular Filters", *International Journal of Multiphase Flows*, Vol. 27, pp. 617-634, 2001.
177. Burtshell, Y., Zeitoun, D.E. & **Ben-Dor, G.**, "Steady Shock Wave Reflections in Thermochemical Nonequilibrium, Flows", *Shock Waves*, Vol. 11, No. 1, pp. 15-21, 2001.
178. **Ben-Dor, G.**, Dubinsky, A. & Elperin, T., "Shape Optimization Penetrator Nose", *Theoretical and Applied Fracture Mechanics*, Vol. 35, pp. 261-270, 2001.
179. Aizik, F., **Ben-Dor, G.**, Elperin, T. & Igra, O., "General Attenuation Laws for Spherical Shock Waves Propagating in Pure and Particle Laden Gases", *AIAA J.*, Vol. 39, No. 5, pp. 969-972, 2001.
180. Ivanov, M.S., **Ben-Dor, G.**, Elperin, T., Kudryavtsev, A.N. & Khotyanovsky, D.V. "Mach-Number-Variation-Induced Hysteresis in Steady Flow Shock Wave Reflections", *AIAA J.*, Vol. 39, No. 5, pp. 972-974, 2001.
181. **Ben-Dor, G.**, Dubinsky, A. & Elperin, T., "A Class of Models Implying the Lambert-Jonas Relation", *International Journal of Solids and Structures*, Vol. 38, pp. 7113-7119, 2001.
182. **Ben-Dor, G.**, Vasilev, E.I, Elperin, T. & Chpoun, A., "Hysteresis Phenomena in the Interaction Process of Conical Shock Waves: Experimental and Numerical Investigations", *Journal of Fluid Mechanics*, Vol. 448, pp. 147-174, 2001.
183. **Ben-Dor, G.**, Dubinsky, A. & Elperin, T., "Optimal Nose Geometry of the Impactor Against FRP Laminates", *Composite Structures*, Vol. 55, pp. 73-80, 2002.
184. **Ben-Dor, G.**, "Comments on "On Stability of Strong and Weak Reflected Shocks" by S. Molder, E.V. Timofeev, C.G. Dunham, S. McKinley & P.A. Voinovich", *Shock Waves*, Vol. 11, No. 4, pp. 327-328, 2002.
185. **Ben-Dor, G.**, Dubinsky, A. & Elperin, T., "Optimization of the nose shape of an impactor against a semi-infinite FRP laminates", *Journal Composites Science and Technology*, Vol. 62, No. 5, pp. 663-667, 2002.
186. **Ben-Dor, G.**, Dubinsky, A. & Elperin, T., "A Model for Predicting Penetration and Perforation of the FRP Laminates by 3-D Impactors", *Composite Structures*, Vol. 56, No. 3, pp. 243-248, 2002.
187. Levi-Hevroni, D., Levy, A., **Ben-Dor, G.** & Sorek, S., "Numerical Investigation of the Propagation of Planar Shock Waves in Saturated Flexible Porous Materials: Development of the Computer Code and Comparison with Experimental Results", *Journal of Fluid Mechanics*, Vol. 462, pp. 285-306, 2002.
188. **Ben-Dor, G.**, Dubinsky, A. & Elperin, T., "On the Lambert-Jonas Approximation for Ballistic Impact", *Mechanics Research Communications*, Vol. 29, Nos. 2-3, pp. 137-139, 2002.
189. Ivanov, M.S., **Ben-Dor, G.**, Elperin, T., Kudryavtsev, A.N. & Khotyanovsky, D.V., "The reflection of asymmetric shock waves in steady flows: A numerical investigation", *Journal of Fluid Mechanics*, Vol. 469, pp. 71-87, 2002.
190. **Ben-Dor, G.**, Ivanov, M., Vasilev, E.I. & Elperin, T., "Hysteresis Processes in the Regular Reflection \leftrightarrow Mach Reflection Transition in Steady Flows", *Progress in Aerospace Sciences*, Vol. 38, Nos. 4-5, pp. 347-387, 2002.

191. **Ben-Dor, G.**, Dubinsky, A. & Elperin, T., "Numerical Solution for Shape Optimization of an Impactor Penetrating into a Semi-Infinite Target", *Computers & Structures*, Vol. 81, pp. 9-14, 2003.
192. **Ben-Dor, G.**, Elperin, T. & Krasovitov, B., "Numerical Analysis of the Effects of Temperature and Concentration Jumps on Transient Evaporation of Moderately Large ($0.01 \leq K_n \leq 0.3$) Droplets in Non-Isothermal Multicomponent Gaseous Mixtures", *Heat and Mass Transfer*, Vol. 39, pp. 157-166, 2003.
193. Henderson, L.F., Vasilev, E.I., **Ben-Dor, G.** & Elperin, T., "The Wall-Jetting Effect in Mach Reflection: Theoretical Consideration and Numerical Investigation", *Journal of Fluid Mechanics*, Vol. 479, pp. 259-286, 2003.
194. **Ben-Dor, G.**, Elperin, T. & Krasovitov, B., "Effect of Thermo- and Diffusiophoretic Forces on the Motion of Flame-Generated Particles in the Neighborhood of Burning Droplets in Microgravity Conditions", *Proceeding Royal Society of London, Ser. A459*, pp. 677-703, 2003.
195. Sorek, S., Levy, A., Levi-Hevroni, D. & **Ben-Dor, G.**, "Compaction Waves in Porous Media", *Applied Mechanics Review*, Vol. , No. , pp. - , 2003.
196. Sadot, O., Yosef-Hai, A., Rikanati, A., Oron, D., **Ben-Dor, G.** & Shvarts, D., "Effects of High Initial Amplitudes and High Mach Numbers on the Evolution of the RM Instability: II. Experimental Study", *Laser and Particle Beams*, Vol. , pp. , 2003.
197. Levy, K., Sadot, O., Oron, D., Srebro, Y., Elbaz, Y., Josef-Hai, A., **Ben-Dor, G.** & Shvarts, D., "Experimental and Numerical Study of Shock Wave-Bubble Interaction", *Laser and Particle Beams*, Vol. , pp. , 2003.
198. Yosef-Hai, A., Sadot, O., Karton, D., Oron, D., Sarid, E., **Ben-Dor, G.** & Shvarts, D., "The Dependence of the Shock Induced Richtmyer-Meshkov Instability on Dimensionality and Density Ratio", *Laser and Particle Beams*, Vol. , pp. , 2003.
199. **Ben-Dor, G.**, "Pseudo-Steady Shock Wave Reflections Wave Configurations and Transition Criteria: State-of-the Knowledge", *Journal of Computational Fluid Dynamics*, Vol. , pp. - , 2003.