Publications

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Journal and Refereed Symposium Articles

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**Book Chapters**


Books Edited


National Academy Reports


Conference Proceedings


26. M. Kaneshige and J. E. Shepherd 1997 “Hydrocarbon-Air-Nitrous Oxide Detonations” Western States Section/The Combustion Institute, Spring Meeting, April 14 and 15, Sandia National Laboratories, Livermore, CA.


28. U. Pfahl and J. E. Shepherd 1997 “Nitrous Oxide Consumption and Flammability Limits of H2-N2O-Air and CH4-N2O-O2-N2 Mixtures” Western States Section/The Combustion Institute, October 1997 Fall Meeting. Also GALCIT Report FM 97-16.


69. J. M. Austin and J. E. Shepherd “Characterizing the Fluctuations in Gaseous Detonation Fronts” 20th International Colloquium on the Dynamics of Explosions and Reactive Systems, Montreal, CA, August 2, 2005. (extended abstract)

70. J. E. Shepherd “Detonation as a Self-Sustained or ‘Living’ Phenomenon” 20th International Colloquium on the Dynamics of Explosions and Reactive Systems (ICDERS), July 31-August 5, 2005, Montreal Canada. (Extended Abstract)


118. J. Damazo, K. Chow-Yee, J. Karnesky, and J. E. Shepherd “Mitigating Effect of Polymer Coating on Deformation From Non-Ideal Explosions” presented at IMPLAST 2010, SEM Fall Conference, University of Rhode Island, Oct 14-21, 2010, Providence, RI.


140. S. P. M. Bane, S. A. Coronel, P. A. Boettcher, J. E. Shepherd “Statistical Analysis of Spark Ignition of Kerosene-Air Mixtures” Fall Technical Meeting of the Western States Section of the Combustion Institute Hosted by the University of California, Riverside, CA Oct 17 & 18, 2011. Paper # 027IC-0201


Laboratory and University Reports


analysis and detailed chemical kinetics” Explosion Dynamics Laboratory Report FM95-04, California
Institute of Technology, May 1995.


22. M. C. Ross and J. E. Shepherd 1996 “Lean Combustion Characteristics of Hydrogen-Nitrous-Oxide-
Ammonia Mixtures in Air,” Graduate Aeronautical Laboratories Report to Los Alamos National Lab-

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http://www.galcit.caltech.edu/~jeshep/detn_db.html.

24. J. E. Shepherd, J. C. Krok, and J. J. Lee 1997 “Jet A Explosions - Field Test Plan 1/4-scale Ex-
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California Institute of Technology, GALCIT Report FM97-5, June 26, 1997 (Revised November 21,

26. R. Akbar, M. Kaneshige, E. Schultz, and J. E. Shepherd 1996 “Detonations in H2-N2O-CH4-NH3-
pp.

27. U. Pfahl and J. E. Shepherd 1997 “Flammability, Ignition Energy and Flame Speeds in NH3-H2-CH4-
59 pp.


29. U. Pfahl, E. Schultz, and J. E. Shepherd 1998 “Detonation Cell Width Measurements for H2-N2O-N2-


“Results of 1/4-Scale Experiments, Vapor Simulant and Liquid Jet A Tests.” California Institute of

32. W.M. Beltman and J.E. Shepherd. “Structural response of shells to shock and detonation loading.”

33. R. Akbar, P. Svitek, C. Nuyt, J. E. Shepherd “Infrared Imaging and Temperature Measurement under
a Boeing 747 Center Wing Tank” California Institute of Technology, GALCIT Report FM9-3, March


57. GALCIT 75, Program of the 75th Anniversary of the Founding of the Graduate Aeronautical Laboratories, Nov. 14-15, 2003. Joint project with Marianne Epalle and the Communications Office of the EAS Division with contributions by the GALCIT faculty.


Patents