

JOURNAL PUBLICATIONS AND MAJOR CONFERENCE PROCEEDINGS:

1. "A Shock Wave Model of Unstable Rocket Combustors" (with L. Crocco), AIAA Journal 3, pp. 1285-1296, 1964.
2. "A New Concept in Rocket Engine Baffles" (with W.C. Strahle), AIAA Journal 3, pp. 954-956, 1965.
3. "Nonlinear Aspects of Combustion Instability in Liquid Propellant Rocket Motors" (with D.T. Harrje and L. Crocco), Proceedings of 2nd ICRPG Combustion Conference, (Los Angeles, CA, Nov. 1965), CPIA Publication No. 105, May 1966.
4. "Effect of the Transverse Velocity Component on the Non-Linear Behavior of Short Nozzles" (with L. Crocco), AIAA Journal 4, No. 8, August 1966.
5. "Longitudinal Shock Wave Combustion Instability in Liquid Propellant Rocket Engines" (with C.E. Mitchell and L. Crocco), Proceedings of 3rd ICRPG Combustion Conference, Cape Kennedy, FL, Oct., 1966), CPIA Publication No. 138, Vol. 1, 1966.
6. "Acoustic Liner Studies" (with L. Crocco and D.T. Harrje), Proceedings of 3rd ICRPG Combustion Conference, (Cape Kennedy, FL., Oct. 1966), CPIA Publication No. 138, Vol. 1, 1966.
7. "Flow Behavior with Acoustic Liners" (with D.T. Harrje and W.A. Stinger), Proceedings of 4th ICRPG Combustion Conference, (Stanford Research Institute, Palo Alto, Calif., Oct. 1967), CPIA Publication No. 162, Vol. 1, 1967.
8. "Acoustic Liner Studies" (with T. Tonon, G. Zaic and D.T. Harrje), Proceedings of the 5th ICRPG Liquid Combustion Conference, (John Hopkins University, Oct. 1968) CPIA Publication No. 183, pp. 351-357, 1968.
9. "Non-Steady Burning Phenomenon in Solid Propellants: Theory and Experiments" (with M. Summerfield, H. Krier, and J. T'ien), AIAA Journal 6, p. 278, 1968.
10. "Nonlinear Oscillations in Liquid Rocket Combustion Chambers" (with C.E. Mitchell and L. Crocco), Proceedings of the First International Colloquium on Gasdynamics of Explosions, (Brussels, Belgium, Sept. 1967), Astronautica Acta, Vol. 14, pp. 409-410, May 1969.
11. "Nonlinear Longitudinal Instability in Rocket Motors with Concentrated Combustion" (with C.E. Mitchell and L. Crocco), Combustion Science and Technology 1, No. 1, pp. 35-63, July 1969.
12. "Ignition of Stagnation Point Flow by a Hot Body" (with O.P. Sharma), Combustion Science and Technology 1, No. 2, pp. 95-104, Sept. 1969.

13. "A Theory of Axial-Mode Shock Wave Oscillations in a Solid Rocket Combustor" Proceedings of the Twelfth (International) Symposium on Combustion, (University of Poitiers, France, July 14-20, 1968), Combustion Institute, Pittsburgh, PA, pp. 129-137, 1969.
14. "Longitudinal Mode Oscillations in an End-Burning Solid Rocket Motor" (with J.S. T'ien), Proceedings of the 6th ICRPG Solid Propellant Combustion Conference, (Jet Propulsion Laboratory, California Institute of Technology, Oct. 1969) CPIA Publication No. 192, Vol. 1, pp. 467-475. Dec. 1969.
15. "Near-Resonant, Off-Resonant, and Quasi-Steady Theories of Acoustic Liner Operation" (with T.S. Tonon), Proceedings of the 6th ICRPG Combustion Conference, (Illinois Institute of Technology, Chicago, IL, Sept. 9-11, 1969) CPIA Publication 192, Vol. 1, Dec. 1969.
16. "Axisymmetric Jet Diffusion Flame in External Oscillating Stream" (with A.P. Chervinsky, D.T. Harrje and A.K. Varma), Proceedings of the 6th ICRPG Combustion Conference, (Illinois Institute of Technology, Chicago, IL, Sept. 9-11, 1969), CPIA Publication No. 192, Vol. 1, Dec. 1969.
17. "Theory of L-Star Combustion Instability with Temperature Oscillation" (with J.S. T'ien and M. Summerfield), AIAA Journal 8, No. 1, pp. 120-126, Jan. 1970.
18. "Flame Spreading Above Liquid Fuels: Surface-Tension-Driven Flows" (with I. Glassman), pre-printed for Western Section/Combustion Institute Fall Meeting, University of California, San Diego, Oct. 1969, Combustion Science and Technology, Vol. 1, No. 4, pp. 307-312, Feb. 1970.
19. "On the Ignition of a Premixed Fuel by a Hot Projectile" (with O.P. Sharma), Combustion Science and Technology 1, No. 6, pp. 481-494, May 1970.
20. "Unsteady Thermal Response of the Condensed-Phase Fuel Adjacent to a Reacting Gaseous Boundary Layer" (with J.S. T'ien), Proceedings of the Thirteenth (International) Combustion Symposium, (Salt Lake City, UT, August 1970), Combustion Institute, Pittsburgh, pp. 529-539, 1971.
21. "The Effect of High Frequency Periodic Disturbances on Axisymmetric Wake Diffusion Flames" (with A.P. Chervinsky), Combustion Science and Technology 2, pp. 351-64, Jan. 1971.
22. "The Effect of External Periodic Disturbances on Axisymmetric Wake Diffusion Flames" (with A.K. Varma and D.T. Harrje), Proceedings of the 7th JANNAF Liquid Combustion Instability Meeting, (Pasadena, CA, Oct. 27-29, 1970), CPIA Publication No. 204, Vol. 1, pp. 571-590, Feb. 1971.

23. "Quarter Wave Tubes Versus Helmholtz Resonators: Theories, Experiments, and Design Criteria" (with P.K. Tang, T.S. Tonon and D.T. Harrje), Proceedings of the 7th JANNAF Liquid Combustion Instability Meeting (Pasadena, CA, Oct. 27-29, 1970), CPIA Publication No. 204, Vol. 1, pp. 727-742, Feb. 1971.
24. "Interaction of an Axisymmetric Jet with a Coaxial Oscillating Stream" (with A.P. Chervinsky and D.T. Harrje), Presented at the Thirteenth Israel Annual Conference on Aeronautics and Astronautics, March 1971, Israel Journal of Technology 9, No. 1 & 2, pp. 115-122, 1971.
25. "Ignition of Fuels by a Hot Projectile" (with O.P. Sharma), AGARD Conference Proceedings, No. 84, AGARD-CP-84-71, pp. 15-1-15-18, Sept. 1971.
26. "Experimental Flow Effects and Selection Requirements Related to Acoustic Dampers" (with P.K. Tang and D.T. Harrje), Proceedings of the 8th JANNAF Liquid Propellant Combustion Instability Meeting, (Los Angeles, CA, Oct. 5-7, 1971) Chemical Propulsion Information Agency Publication No. 220, Vol. 1, pp. 805-815, Nov. 1971.
27. "Turbulent Mixing as Related to Performance Improvement" (with T.J. Rosfjord and D.T. Harrje), Proceedings of the 8th JANNAF Propellant Combustion Instability Meeting, (Los Angeles, CA, Oct. 5-7, 1971), Chemical Propulsion Information Agency Publication, No. 220, Vol. 1, pp. 611-617, Nov. 1971.
28. "Interaction of Axisymmetric Wake and Jet Flows with a Coaxial Oscillating Stream" (with A.K. Varma and D.T. Harrje), Proceedings of the 8th JANNAF Liquid Propellant Combustion Instability Meeting, (Los Angeles, CA, Oct. 5-7, 1971) Chemical Propulsion Information Agency Publication, No. 220, Vol. 1, pp. 583-593, Nov. 1971.
29. "A Critical Discussion of Theories of Flame Spread Across Solid and Liquid Fuels" Combustion Science and Technology 6, pp. 95-105, No. 1 & 2, 1972.
30. "Non Linearita Dei Risonatori Di Helmholtz" L'Aerotecnica Missili e Spazio 51, No. 4, pp. 256-265, August 1972.
31. "Damping Devices for Various Combustion Environments" (with P.K. Tang, J. Rosentweig Bellan, and D.T. Harrje), Proceedings of the 9th JANNAF Combustion Meeting, Monterey, CA, CPIA Publication 231, Vol. II, pp. 429-446, Dec. 1972.
32. "Interaction of Axisymmetric Wake Diffusion Flames with a Coaxial Oscillating Stream" (with A.K. Varma, D.T. Harrje, and C. Bruno), Proceedings of the 9th JANNAF Combustion Meeting, Monterey, CA, CPIA Publication 231, Vol. II pp. 117-137, Dec. 1972.
33. "Experiments and Predictions in the Rocket Combustion Mixing Zone" (with T.J. Rosfjord and D.T. Harrje), Proceedings of the 9th JANNAF Combustion Meeting, Monterey, CA, CPIA Publication 231, Vol. II, pp. 217-228, Dec. 1972.

34. "Theoretical Analysis of Wankel Engine Combustion" (with F.V. Bracco), Combustion Science and Technology 7 No. 3, pp. 109-123, May 1973. Also appears in preliminary form in Proceedings of the 1972 Intersociety Energy Conversion Engineering Conference, San Diego, CA, Sept. 25-29, pp. 1146-1151, 1972.
35. "Experimental Verification of the Energy Dissipation Mechanism in Acoustic Dampers" (with P.K. Tang and D.T. Harrje), Journal of Sound and Vibration 26, No. 2, pp. 263-267, Jan. 1973.
36. "Theory of a Generalized Helmholtz Resonator" (with P.K. Tang), Journal of Sound and Vibration 26, No. 2, pp. 247-262, Jan. 1973.
37. "One-Dimensional Analysis of Combustion in a Spark-Ignition Engine" Combustion Science and Technology 7, No. 3, pp. 99-108, May 1973. Also appears in preliminary form in Proceedings of the 1971 Intersociety Energy Conversion Engineering Conference, Boston, MA, pp. 52-62, August 1971.
38. "Response of a Two-Dimensional Diffusion Flame to Small Amplitude Wave Disturbances" (with A.K. Varma and C. Bruno), Proceedings of the 10th JANNAF Combustion Meeting, Newport, RI, August 1973, CPIA Publication 243, Vol. 3, December 1973.
39. "Mixing and Recirculation in Rocket Combustors" (with T.J. Rosfjord and D.T. Harrje), Proceedings of 10th JANNAF Combustion Meeting, Newport, RI, August 1973). CPIA Publication 243, Vol. 3, pp. 237-248, December 1973.
40. "A Problem in Fire Safety: Flame Spreading Across Liquid Fuels" (with F.L. Dryer and I. Glassman), NSF/RANN Conference on Fire Research, Georgia Institute of Technology, May 28-29, 1974.
41. "A Theory of Turbulent Flame Development and Nitric Oxide Formation in Stratified Charge Internal Combustion Engines" (with J. Rosentweig Bellan), Combustion Science and Technology 8, No. 1 & 2, pp. 1285-1299, Sept./Oct. 1974.
42. "Theory of Flame Spread Above Solids" Acta Astronautica 1, No.9-10, pp. 1285-1299, Sept./Oct. 1974.
43. "Flame Spreading Across Materials: A Review of Fundamental Processes" AGARD Conference Proceedings No. 166 on Aircraft Fire Safety, Rome, Italy, April 7-11, 1975.
44. "A Problem in Fire Safety: Flame Spreading Across Liquid Fuels" (with F.L. Dryer and I. Glassman), Proceedings of NSF/RANN Conference on Fire Research, Harvard University, pp. 79-83, June 25-27, 1975.
45. "Combustion and NO Formation in a Stratified Charge Engine: A Two-Turbulent Equations Model" (with J.R. Bellan), Combustion Science and Technology 12, pp. 75-104, 1976.

46. "Fundamental Aspects of Flame Spread Across Liquid and Solid Fuels" (with F.L. Dryer and I. Glassman), invited paper, Proceedings of American Chemical Society Symposium on Flammability and Combustion of Non-Metallic Materials, San Francisco, CA, August 30 - September 3, 1976.
47. "Theory of Convective, Transient, Multicomponent Droplet Vaporization" (with C.K. Law and S. Prakash), Proceedings of Sixteenth International Combustion Symposium, pp. 605-617, Combustion Institute, 1977.
48. "Unsteady Droplet Combustion with Droplet Heating II: Conduction Limit" (with C.K. Law), Combustion and Flame 28, pp. 175-186, 1977.
49. "Further Calculations Based Upon a Theory of Flame Spread Across Solid Fuels" (with C.C. Feng), Combustion and Flame 29, pp. 247-263, 1977.
50. "Theory of Multicomponent Fuel Droplet Vaporization" Archives of Thermodynamics and Combustion 9, pp. 235-251, 1979.
51. "Liquid Fuel Droplet Heating with Internal Circulation" (with S. Prakash), International Journal of Heat and Mass Transfer 21, pp. 885-895, 1978.
52. "Numerical Predictions of Conditions for Ignition of a Combustible Gas by a Hot Inert Particle" (with Y.P. Su and H.S. Homan), Combustion Science and Technology 21, pp. 65-74, 1979.
53. "Theory of Convective Droplet Vaporization with Unsteady Heat Transfer in the Circulating Liquid Phase" (with S. Prakash), International Journal of Heat and Mass Transfer 23, pp. 253-268, 1980.
54. "Droplet Combustion in a Reactive Environment" (with P. Botros and C.K. Law), Combustion Science and Technology 21, pp. 123-130, 1980.
55. "Flame Propagation Through an Air Fuel Spray Mixture with Transient Droplet Vaporization" (with B. Seth and S.K. Aggarwal), Combustion and Flame 39, pp.149-168, 1980.
56. "Comparisons Amongst Various Theories for Turbulent, Reacting Planar Mixing Layers" (with S.F. Parker), Progress in Astronautics and Aeronautics 76, pp. 211-245, 1981.
57. "The Calculation of the Pressure in Unsteady Flows Using a Control Volume Approach" (with J.I. Ramos), Journal of Computational Physics 41, No. 1, pp. 211-216, May 1981.
58. "Study of the Turbulence in a Motored Four-Stroke Internal Combustion Engine" (with J.I. Ramos and A. Gany), AIAA Journal 19, No. 5, pp. 595-600, May 1981.

59. "Ignition of a Combustible Mixture by an Inert Hot Particle" (with Y.P. Su), Proceedings of Eighteenth Symposium (International) on Combustion, pp. 1719-1728, 1981.
60. "Minimum Mass of Burning Aluminum Particles for Ignition of Methane/Air and Propane/Air Mixtures" (with H.S. Homan), Proceedings of Eighteenth Symposium (International) on Combustion, pp. 1709-1717, 1981.
61. "Turbulent Flow Field in Homogeneous-Charge Spark-Ignition Engines" (with J.I. Ramos), Proceedings of Eighteenth Symposium (International) on Combustion, pp. 1825-1835, 1981.
62. "Theory of Transient Multicomponent Droplet Vaporization in a Convective Field" (with P. Lara-Urbaneja), Proceedings of Eighteenth Symposium (International) on Combustion, pp. 1365-1374, 1981.
63. "Linear Analysis of Forced Longitudinal Waves in Rocket Motor Chambers" (with M.M. Micci and L.H. Caveny), Journal of American Institute of Aeronautics and Astronautics 19, No. 2, pp. 198-204, Feb. 1981.
64. "Analytical Solution for Diffusion in the Core of a Droplet with Internal Circulation" (with A.Y. Tong), 20th National Heat Transfer Conference, 1981.
65. "Numerical Computation of Fuel Air-Mixing in a Two-Phase Axi-Symmetric Coaxial Free Jet Flow" (with S.K. Aggarwal, G.J. Fix, and D.N. Lee), Proceedings of Fourth IMACS International Symposium on Computer Methods for Partial Differential Equations, Lehigh University, 1981.
66. "Numerical Optimization Studies of Axisymmetric Unsteady Sprays" (with S.K. Aggarwal, G.J. Fix, and D.N. Lee), Journal of Computational Physics 50, No. 1, pp.101-115, 1983.
67. "Numerical Modeling of One-Dimensional Enclosed Homogeneous and Heterogeneous Deflagrations" (with S.K. Aggarwal), Computers and Fluids 12, No. 2, pp. 145-158, 1984.
68. "Cylindrical Cell Model for the Hydrodynamics of Particle Assemblages at Intermediate Reynolds Numbers" (with R. Tal), Journal of the American Institute of Chemical Engineers 28, No. 2, pp. 233-237, March 1982.
69. "Analytical Solution for Diffusion and Circulation in a Vaporizing Droplet" (with A.Y. Tong), Proceedings of Nineteenth Symposium (International) on Combustion, Combustion Institute, pp. 1007-1020, 1982.
70. "Transient Thermal Boundary Layer in Heating of Droplet with Internal Circulation: Evaluation of Assumption" (with A.Y. Tong), Combustion Science and Technology 29, pp. 87-94, 1982.

71. "Heat and Momentum Transfer Around a Pair of Spheres in Viscous Flow" (with R. Tal (Thau), and D.N. Lee), International Journal of Heat and Mass Transfer 27, No. 11, pp. 1953-1962, 1984.
72. "Periodic Solutions of Heat Transfer for a Flow Through a Periodic Assemblage of Spheres" (with R. Tal (Thau) and D.N. Lee), International Journal of Heat and Mass Transfer 27, No. 8, pp. 1414-1417, 1984.
73. "Hydrodynamics and Heat Transfer in Sphere Assemblages - Cylindrical Cell Models" (with R. Tal Thau) and D.N. Lee), International Journal of Heat and Mass Transfer 26, No. 9, pp. 1265-1273, 1983.
74. "Fuel Droplet Vaporization and Spray Combustion" Progress Energy Combustion Science 9, pp. 291-322, 1983.
75. "A Comparison of Vaporization Models in Spray Calculations" AIAA Journal 22, No. 10, pp. 1448-1457, 1984. Also appeared as "A Study of Inter-phase Exchange Laws in Spray Combustion Modeling" (with S.K. Aggarwal and A.Y. Tong), AIAA Preprint 83-0152.
76. "Probability Calculations for Turbulent Jet Flows with Mixing and Reaction of NO and O₃" (with P. Givi and S.B. Pope), Combustion Science and Technology 37, No. 1-2, pp. 59-78, 1984.
77. "Turbulent Reacting Concentric Jets: Comparison Between PDF and Moment Calculations" (with P. Givi and J.I. Ramos), Dynamics of Flames and Reactive Systems, AIAA Progress Series 95, pp. 384-418, 1984.
78. "Multicomponent Droplet Vaporization in a High Temperature Gas" (with A.Y. Tong), Combustion and Flame 66, pp. 221-235, 1986. ASME Preprint 84-WA/HT-17, ASME Winter Annual Meeting, New Orleans, LA, December 1984.
79. "Ignition of Fuel Sprays: Deterministic Calculations for Idealized Droplet Arrays" (with S.K. Aggarwal), Proc. Twentieth Symposium (International) on Combustion/The Combustion Institute, pp. 1773-80, 1984.
80. "Two-Phase Laminar Axisymmetric Jet Flow: Explicit, Implicit, and Split-Operator Approximation" (with G. Fix and S.K. Aggarwal), Numerical Methods in Partial Differential Equations 1, pp. 279-294, 1985.
81. "Probability Density Function Calculations in Turbulent Chemically Reacting Round Jets, Mixing Layers and One-Dimensional Reactors" (with P. Givi and J.I. Ramos), Journal of Non-Equilibrium Thermodynamics 10, p.75, 1985.
82. "Unsteady Spray Flame Propagation in a Closed Volume" (with S.K. Aggarwal), Combustion and Flame 62, No. 1, pp. 69-84, 1985.

83. "Multicomponent Transient Droplet Vaporization with Internal Circulation: Integral Equation Formulation and Approximate Solution" (with A.Y. Tong), Numerical Heat Transfer 10, pp. 253-278, 1986.

84. "A Numerical Technique for the Solution of a Vaporizing Fuel Droplet" (with G. Patnaik, H.A. Dwyer, and B.R. Sanders), Dynamics of Flames and Reactive Systems, Progress in Astronautics and Aeronautics 105, pp. 253-266, 1986.

85. "Molecular Mixing in a Turbulent Flow: Some Fundamental Considerations" Combustion Science and Technology 51, pp. 307-322, 1987. Also see AIAA Preprint 84-0375 22nd Aerospace Sciences Meeting, January 1984.

86. "The Formulation of Spray Combustion Models: Resolution Compared to Droplet Spacing" Journal of Heat Transfer 108, No. 3, pp. 633-639, August 1986. Also see ASME Preprint 84-WA/HT-26, ASME Winter Annual Meeting, New Orleans, LA, December 1984 (invited paper).

87. "Ignition of Polydisperse Sprays: Importance of D_{20} " (with S.K. Aggarwal), Combustion Science and Technology 46, pp. 289-300, 1986. Also see AIAA Preprint 23rd Aerospace Sciences Meeting, Reno, NV, January 1985.

88. "Enclosed Gas and Liquid with Nonuniform Heating from Above" (with S.K. Aggarwal and J. Iyengar), International J. Heat & Mass Transfer 29, No. 10, pp. 1593-1604, 1986.

89. "Rapid Vaporization and Heating of Two Parallel Fuel Droplet Streams" (with R.H. Rangel), Proceedings of Twenty-First Symposium (International) on Combustion/The Combustion Institute, pp. 617-624, 1986. Also see Western States Section Technical Meeting of The Combustion Institute, Banff, Alberta, Canada, April 1986.

90. "Transient, Stratified, Enclosed Gas and Liquid Behavior with Concentrated Heating from Above" (with B. Abramzon and D.K. Edwards), Journal of Thermophysics and Heat Transfer 1, No. 4, pp. 355-364, 1987. Also see AIAA Preprint No. 86-0578, Reno, NV, January 1986.

91. "Spray Computations in a Centerbody Combustor" (with M.S. Raju), Proceedings of the 1987 ASME-JSME Thermal Engineering Joint Conference 1, pp. 61-71, Honolulu, HI, March 1987. Also see Journal of Engineering for Gas Turbines and Power 1, No. 4, pp. 710-718, October 1989.

92. "Combustion of Parallel Fuel Droplet Streams" (with R.H. Rangel), Combustion and Flame 75, Nos. 3&4, pp. 241-254, 1989. Also see "Vaporization, Ignition, and Combustion of Two Parallel Fuel Droplet Streams", Proceedings of the 1987 ASME-JSME Thermal Engineering Joint Conference, Vol. 1, pp. 27-34, Honolulu, HI, March 1987.

93. "Approximate Theory of a Single Droplet Vaporization in a Convective Field: Effects of Variable Properties, Stefan Flow and Transient Liquid Heating" (with B. Abramzon), Proceedings of the 1987 ASME-JSME Thermal Engineering Joint Conference 1, pp. 11-18, Honolulu, HI, March 1987.

94. "Interaction Between Two Vaporizing Droplets in an Intermediate-Reynolds-Number-Flow" (with M.S. Raju), Physics of Fluids 2, No. 10, pp. 1780-1796, 1990. Also see "Unsteady Navier-Stokes Solution for Two Interacting Vaporizing Droplets," AIAA Preprint No. 87-0300, Reno, NV, January 1987.

95. "Non-Linear Growth of Kelvin-Helmholtz Instability: Effect of Surface Tension and Density Ratio" (with R.H. Rangel), Physics of Fluids 31, pp. 1845-1855, 1988. Also see "Atomization of Liquid Fuels: Non-Linear Growth of Disturbances at an Interface," Spring 1987 Western States/Combustion Institute Meeting, Provo, UT, April 1987.

96. "Two-Dimensional Modeling of Flame Propagation in Fuel Stream Arrangements" (with R.H. Rangel), in Dynamics of Reactive Systems, Part II: Heterogeneous Combustion and Applications (A.L. Kuhl, J.R. Bowen, J.C. Leyer & A. Borisov, eds.), Progress in Astronautics & Aeronautics 113, pp. 128-150, 1988. Presented at the Spring 1987 Western States/Combustion Institute Meeting, Provo, UT, April 1987.

97. "An Integrated Approach to Spray Combustion Model Development" Combustion Science and Technology 58, 1-3, pp. 231-251, 1988. Also preprinted for the ASME 107th Winter Annual Meeting, Anaheim, CA, 1986.

98. "Numerical Study of Multicomponent Fuel Spray Flame Propagation in a Spherical Closed Volume" (with G. Continillo), Twenty-Second Symposium (International) on Combustion, pp. 1941-1949, 1988. Also see "Numerical Study of Unsteady Fuel Spray Flame Propagation in a Spherical Closed Volume," Joint Meeting of the Western States Section/Japanese Section of The Combustion Institute, Honolulu, HI, November 1987.

99. "Study of Molecular Mixing and a Finite Rate Chemical Reaction in a Mixing Layer" (with B.M. Cetegen), Twenty-Second Symposium (International) on Combustion, pp. 489-494, 1988. Also see "Analysis of Molecular Mixing and Chemical Reaction in a Mixing Layer," Preprint No. 88-0730, AIAA 26th Aerospace Sciences Meeting, Reno, NV, January 1988.

100. "Unsteady Flame Propagation in a Spray with Transient Droplet Vaporization" (with R.H. Rangel), Twenty-Second Symposium (International) on Combustion, pp. 1931-1939, 1988. Also see "Unsteady Flame Propagation in a Two-Dimensional Spray with Transient Droplet Vaporization," Preprint No. 88-0641, AIAA 26th Aerospace Sciences Meeting, Reno, NV, January 1988.

101. "An Evaluation of the Point-Source Approximation in Spray Calculations" (with R.H. Rangel), Numerical Heat Transfer, Part A, Vol. 16, pp. 37-57, 1989. Also presented at the 1988 Fall Meeting of the Western States Section of the Combustion Institute, Laguna Beach, CA, October 1988.

102. "Oscillatory Vaporization of Fuel Droplets in Unstable Combustor" (with A. Tong), Journal of Propulsion and Power, Vol. 5, No. 3, pp. 257-261, 1989. Also see "Vaporization Response of Fuel Droplet in Oscillatory Field," presented at the National Heat Transfer Conference, Pittsburgh, PA, August 1987.
103. "Multicomponent Spray Computations in a Modified Centerbody Combustor" (with M.S. Raju), Journal of Propulsion and Power 6, No. 2, pp. 97-105, 1990. Also see Preprint No. 88-0638, AIAA 26th Aerospace Sciences Meeting, Reno, NV, January 1988.
104. "Droplet Vaporization Model for Spray Combustion Calculations" (with B. Abramzon), International Journal of Heat and Mass Transfer 32, No. 9, pp. 1605-1618, 1989. Also see Preprint No. 88-0636, AIAA 26th Aerospace Sciences Meeting, Reno, NV, January 1988.
105. "Counterflow Spray Combustion Modelling" (with G. Continillo), Combustion and Flame 81, Nos. 3 & 4, pp. 325-340, 1990. Also see Preprint No. 89-0051, AIAA 27th Aerospace Sciences Meeting, Reno, NV, January 1989.
106. "Study of Mixing and Reaction in the Field of a Vortex" (with B.M. Cetegen), Combustion Science and Technology 72, 4-6, p.157, 1990. Also presented at the Joint Meeting of the Western States Section/Japanese Section of The Combustion Institute, Honolulu, HI, November 1987.
107. "Numerical Analysis of Convecting, Vaporizing Fuel Droplet with Variable Properties" (with C.H. Chiang and M.S. Raju), International Journal of Heat and Mass Transfer 35, No. 5, pp. 1307-1324, 1992. Also see Preprint No. 89-0834, AIAA 27th Aerospace Sciences Meeting, Reno, NV, January 1989.
108. "Liquid-Waste Incineration in a Parallel-Stream Configuration: Effect of Auxiliary Fuel" (with J.P. Delplanque and R.H. Rangel), Progress in Astronautics and Aeronautics, Dynamics of Deflagrations and Reactive Systems: Heterogeneous Combustion 132, pp. 164-186, (A.L. Kuhl, J.C. Leyer, A.A. Borisov, W.A. Sirignano, eds.) 1991. Also presented at the 12th International Colloquium on Dynamics of Explosions and Reactive Systems, Ann Arbor, MI, July 1989.
109. "Liquid-Waste Incineration in a Parallel-Stream Configuration: Parametric Study" (with J.-P. Delplanque, R.H. Rangel), Proceedings of The Twenty-Third Symposium (International) on Combustion, Orleans, France, pp. 887-894, July 1990.
110. "A One-Dimensional Analysis of Liquid-Fueled Combustion Instability" (with R. Bhatia), Journal of Propulsion and Power 7, No. 6, pp. 953-961, 1991. Also see "A One-Dimensional Model of Ramjet Combustion Instability," Preprint No. 90-0271, AIAA 28th Aerospace Sciences Meeting, Reno, NV, January 1990.
111. "Numerical Modeling of a Vaporizing Multicomponent Droplet" (with C.M. Megaridis), Proceedings of the Twenty-Third Symposium (International) on Combustion, Orleans, France, pp. 1413-1421, July 1990. Also presented at the 1989 Fall Meeting of the Western States Section of The Combustion Institute, October 1989.

112. "Interacting, Convecting, Vaporizing Fuel Droplets with Variable Properties" (with C.H. Chiang), International Journal of Heat and Mass Transfer 36, No. 4, pp. 875-886, 1993. Also see Preprint No. 90-0357, AIAA 28th Aerospace Sciences Meeting, Reno, NV, January 1990.
113. "Numerical Modeling of a Slurry Droplet Containing a Spherical Particle" (with C.M. Megaridis), Journal of Thermophysics and Heat Transfer 7, No. 1, pp. 110-119, 1993. Also see "Numerical Modeling of a Vaporizing Slurry Droplet," Preprint No. 90-0362, AIAA 28th Aerospace Sciences Meeting, Reno, NV, January 1990.
114. "Effects of G-jitter on a Thermal Buoyant Flow" (with F.H. Tsau and S.E. Elghobashi), AIAA Journal of Thermophysics and Heat Transfer 6, No. 2, pp. 246-254, April-June 1992. Also see Preprint No. 90-0653, AIAA 28th Aerospace Sciences Meeting, Reno, NV, January 1990.
115. "The Linear and Nonlinear Shear Instability of a Fluid Sheet" (with R. Rangel), Physics of Fluids 3, No. 10, pp. 2392-2400, October 1991.
116. "Buoyant-Thermocapillary Flow With Nonuniform Supra-Heating: I. Liquid-Phase Behavior" (with D. N. Schiller), AIAA Journal of Thermophysics and Heat Transfer 6, No. 1, pp. 105-112, January-March 1992.
117. "Buoyant-Thermocapillary Flow With Nonuniform Supra-Heating: II. Two-Phase Behavior" (with D. N. Schiller), AIAA Journal of Thermophysics and Heat Transfer 6, No. 1, pp. 113-120, January-March 1992.
118. "Multicomponent Droplet Vaporization in a Laminar Convective Environment" (with C.M. Megaridis), Combustion Science and Technology 87, pp. 27-44, 1992. Also see "Multicomponent Droplet Vaporization in a Convecting Environment," preprinted for the ASME Winter Annual Meeting, Dallas, TX, November 1990.
119. "Transient Heating and Burning of a Droplet Containing a Single Metal Particle" (with R. Bhatia), Combustion Science and Technology 84, 1-6, pp. 141-161, 1992. Also see "Combustion of Liquid Fuel in Metal-Slurry Droplets with Unsteady Gas Phase," Western States Section/The Combustion Institute, San Diego, CA, October 1990.
120. "Numerical Study of the Transient Vaporization of an Oxygen Droplet at Sub- and Super-critical Conditions" (with J.-P. Delplanque), The International Journal of Heat and Mass Transfer 36, No. 2, pp. 303-314, 1993. Also see "Transient Vaporization and Burning for an Oxygen Droplet at Sub- and Near-Critical Conditions," Preprint No. 91-0075, AIAA 29th Aerospace Sciences Meeting, Reno, NV, January 1991.
121. "Three-Dimensional Flow Over Two Spheres Placed Side-by-Side" (with I. Kim and S.E. Elghobashi), Journal of Fluid Mechanics 246, pp. 465-488, 1993. Also see "Three-Dimensional Droplet Interactions in Dense Sprays," Preprint No. 91-0073, AIAA 29th Aerospace Sciences Meeting, Reno, NV, January 1991.

122. "Liquid Vaporization from Fine-Metal Slurry Droplets" (with R. Bhatia), AIAA Progress in Astronautics and Aeronautics 152, pp. 235-262, 1993. Also preprinted for the 13th International Colloquium on Dynamics of Explosions and Reactive Systems, Nagoya, Japan, July 1991.
123. "Axisymmetric Calculations of Three-Droplet Interactions" (with C.H. Chiang), Atomization and Sprays 3, No. 1, pp. 91-107, 1993. Also preprinted for the Fifth International ICLASS Conference on Liquid Atomization and Spray Systems, Gaithersburg, MD, July 1991.
124. "Convective Burning of a Droplet Containing a Single Metal Particle" (with R. Bhatia), Combustion and Flame 93, No. 3, pp. 215-229, 1993. Also see "Vaporization and Combustion of Metal Slurry Droplets" presented at the AIAA 29th Aerospace Sciences Meeting, Preprint No. 91-0282, Reno, NV, January 1991.
125. "Metal Particle Combustion with Oxide Condensation" (with R. Bhatia), submitted to Combustion Science and Technology, 1992.
126. "Boundary Layer Stripping Effects on Droplet Transcritical Convective Vaporization" (with J.-P. Delplanque), Atomization and Sprays 4, pp. 325-349, 1994. Also see "Boundary Layer Stripping Effects on Droplet Convective Vaporization" preprinted for the 5th Annual Conference on Liquid Atomization and Spray Systems, San Ramon, CA, May 1992.
127. "Oscillatory Fuel Droplet Vaporization: Driving Mechanism for Combustion Instability" (with A. Duvvur, C.H. Chiang), Journal of Propulsion and Power 12, No. 2, pp. 358-365, 1996.
128. "Fluid Dynamics of Sprays" Journal of Fluids Engineering 115, No. 3, pp. 345-378, September 1993. Freeman Scholar Lecture, ASME Winter Annual Meeting, Anaheim, CA, November 1992.
129. "Multi-Droplet Interaction Effects in Dense Sprays" (with I. Silverman), International Journal of Multiphase Flow 20, No. 1, pp. 99-116, 1994.
130. "Flame Propagation in Metal Slurry Sprays" (with R. Bhatia), Combustion and Flame 100, pp. 605-620, 1995. Also see Preprint No. 93-0693, AIAA 31st Aerospace Sciences Meeting, Reno, NV, January 1993.
131. "Computational Analysis of Flame Spread Over Alcohol Pools" (with D.N. Schiller and H.D. Ross), Combustion Science and Technology 118, 4-6, pp. 205-258, 1996. Also see "Computational Predictions of Flame Spread Over Alcohol Pools," Preprint No. 93-0825, AIAA 31st Aerospace Sciences Meeting, Reno, NV, January 1993.
132. "Unsteady Flow Interactions Between an Advected Cylindrical Vortex Tube and a Spherical Particle" (with I. Kim and S. Elghobashi), Journal of Fluid Mechanics 288, pp. 123-155, 1995.

133. "Transcritical Liquid Oxygen Droplet Vaporization: Effect on Rocket Combustion Instability" (with J.-P. Delplanque), Journal of Propulsion and Power 12, No. 2, pp. 349-357, 1996. Also see "Stability Influence of Trans-Critical LOX Droplet Vaporization in an Idealized Rocket Combustor," Preprint No. 93-0231, AIAA 31st Aerospace Sciences Meeting, Reno, NV, January 1993.
134. "Transcritical Vaporization and Combustion of LOX Droplet Arrays in a Convective Environment" (with J.-P. Delplanque) Combustion Science and Technology 105, Issues 4-6, pp. 327-344, 1995. Also presented at the 14th ICDERS, Coimbra, Portugal, August 1993.
135. "Unsteady Flow Interactions Between A Pair of Advected Vortex Tubes and A Rigid Sphere" (with I. Kim and S.E. Elghobashi), International Journal of Multiphase Flow 23, No. 1, pp. 1-23, 1997. Also see "Unsteady Flow Interactions Between a Pair of Advected Cylindrical Vortex Tubes and a Rigid Sphere," (with I. Kim and S. Elghobashi), Preprint No. 95-0105, AIAA 33rd Aerospace Sciences Meeting, Reno, NV, January 1995.
136. "Energetic Fuel Droplet Gasification with Liquid-Phase Reaction" (with D. Schiller and R. Bhatia), Combustion Science and Technology 113-114, p. 471-491, 1996. Also presented at the 15th ICDERS, Boulder, CO, July/August 1995.
137. "Opposed-Flow Flame Spread Across n-Propanol Pools" (with D.N. Schiller), Proceedings of the Twenty-Sixth International Symposium on Combustion, pp. 1319-1325, 1997. Also see "Opposed-Flow Flame Spread Across Alcohol Pools," Preprint No. 96-0216, AIAA 34th Aerospace Sciences Meeting, Reno, NV, January 1996.
138. "On the Equation for Spherical Particle Motion: Effects of Reynolds and Acceleration Numbers" (with I. Kim and S. Elghobashi), Journal of Fluid Mechanics 367, pp. 221-253, 1998. Also see "The Motion of a Spherical Particle in Unsteady Flows at Moderate Reynolds Numbers," Preprint No. 96-0081, AIAA 34th Aerospace Sciences Meeting, Reno, NV, January 1996.
139. "The Influence of an Advecting Vortex on the Heat Transfer to a Liquid Droplet" (with M. Masoudi), The International Journal of Heat and Mass Transfer 40, No. 15, pp. 3663-3673, 1997. Also see Preprint No. 96-0087, AIAA 34th Aerospace Sciences Meeting, Reno, NV, January 1996.
140. "Counterflow Spray Combustion Modeling with Detailed Transport and Detailed Chemistry" (with E. Gutheil), Combustion and Flame 113, No. 1-2, pp. 92-105, 1998. Also see Spring Technical Meeting of the Western States Section/The Combustion Institute, Arizona State University, AZ, March 1996.
141. "Diffusion Flame in a Two-Dimensional, Accelerating Mixing Layer" (with I. Kim), Physics of Fluids 9, No. 9, pp. 2617-2630, 1997. Also see 1996 Fall Meeting of the Western States Section/The Combustion Institute, University of Southern California, Los Angeles, CA, October 1996.

142. "Transient Heating, Gasification, and Oxidation of an Energetic Liquid Fuel" (with D. Schiller and J. Li), Combustion and Flame 114, pp. 349-358, 1998. Also see 1996 Fall Meeting of the Western States Section/The Combustion Institute, University of Southern California, Los Angeles, CA, October 1996.
143. "Vortex Interaction with a Translating Sphere in a Stratified Temperature Field" (with M. Masoudi), The International Journal of Heat and Mass Transfer 41, No. 17, pp. 2639-2652, 1998.
144. "Performance Increases for Gas Turbine Engines Through Combustion Inside the Turbine" (with F. Liu), Journal of Propulsion and Power 15, No. 1, pp. 111-8, Jan./Feb. 1999.
145. "Axisymmetric Flame Spread Across Propanol Pools in Normal and Zero Gravities" (with I. Kim and D.N. Schiller), Combustion Science and Technology 139, No. 1-6, p.249, 1998. Also see "Axisymmetric Flame Spread Over Alcohol Pools," 16th ICDERS Conference, Cracow, Poland, August 1997.
146. "Nonlinear Capillary Wave Distortion and Disintegration of Thin Planar Liquid Sheets" (with C. Mehring), Journal of Fluid Mechanics 388, pp 69-113, 1999.
147. "Collision of a Vortex with a Vaporizing Droplet" (with M. Masoudi), International Journal of Multiphase Flow 26, pp. 1925-49, 2000.
148. "Transcritical Vaporization of Liquid Fuels and Propellants" (with J.-P. Delplanque), Journal of Propulsion and Power 15, No. 6, pp. 896-902, Nov.- Dec. 1999.
149. "Axisymmetric Capillary Waves On Thin Annular Liquid Sheets. Part I: Temporal Stability" (with C. Mehring), Physics of Fluids 12, pp. 1417-38, 2000.
150. "Axisymmetric Capillary Waves On Thin Annular Liquid Sheets. Part II: Spatial Developments" (with C. Mehring), Physics of Fluids 12, pp. 1440-60, 2000.
151. "Three-dimensional Wave Distortion and Disintegration of Thin Planar Liquid Sheets" (with I. Kim), Journal of Fluid Mechanics, 410, pp. 147-83, May 10, 2000.
152. "Review of Theory of Distortion and Disintegration of Liquid Streams" (with C. Mehring), Progress in Energy and Combustion Science 26, pp. 609-55, 2000. Also see "Review of Theory of Distortion and Disintegration of Liquid Streams" (with C. Mehring), 30th AIAA Fluid Dynamics Conference, Norfolk, VA, June – July, 1999.
153. "Nonlinear Capillary Waves on Swirling, Axisymmetric Free Liquid Films" (with C. Mehring), International Journal of Multiphase Flow 27, No.10, pp. 1707-34, 2001. Also see "Nonlinear Capillary Waves on Swirling, Axisymmetric Liquid Films" (with C. Mehring), AIAA Preprint 2000-0432 January 2000 Aerospace Sciences Meeting, Reno, NV.
154. "Parametric Investigations of Pulsating Flame Spread Across 1-Butanol Pools" (with F.J. Miller, H.D. Ross, I. Kim), Proceedings of The Combustion Institute, Vol. 28, pp. 2827-34, 2000.

155. "Turbojet and Turbofan Engine Performance Increases through Turbine Burners" (with F. Liu), Journal of Propulsion and Power 17, pp. 695-705, 2001. Also see AIAA Preprint 2000-0741 January 2000 Aerospace Sciences Meeting, Reno, NV.
156. "Ignition and Flame Studies for an Accelerating Transonic Mixing Layer" (with X. Fang, F. Liu), Journal of Propulsion and Power 17, pp. 1058-66, 2001. Also see AIAA Preprint 2000-0437 January 2000 Aerospace Sciences Meeting, Reno, NV.
157. "Computational Study of Opposed-Forced-Flow Flame Spread Across Propanol Pools" (with I. Kim), Combustion and Flame 132, pp.611-27, 2003.
158. "Disintegration of Planar Liquid Film Impacted by Two-dimensional Gas Jets" (with C. Mehring), Physics of Fluids 15, pp. 1158-1177, 2003.
159. "Miniature Scale Liquid-Fuel Film Combustor" (with T. Pham and D. Dunn-Rankin), Proceedings of The Combustion Institute 29, 2002, pp. 925-31.
160. "A General Super-Scalar for the Combustion of Liquid Fuels" Proceedings of The Combustion Institute 29, 2002, pp. 535-42.
161. "Three-Dimensional Flame Propagation above Liquid Fuel Pools" (with J. Cai and F. Lui), Combustion Science and Technology 174 (5-6), pp. 5-34, 2002. Also see "Three-Dimensional Ignition and Flame Propagation Above Liquid Fuel Pools: Computational Analysis," (with J. Cai, F. Liu), 18th ICDERS, Seattle, Washington, July 30-August 3, 2001.
162. "Capillary Stability of Modulated Swirling Liquid Sheets" (with C. Mehring), Atomization and Sprays 14, pp. 397-436, 2004.
163. "Three-Dimensional Structures of Flames Over Liquid Fuel Pools" (with J. Cai, F. Liu), Combustion Science and Technology 175, pp. 2113-39, 2003.
164. "Dynamic Stretching of a Planar Liquid Bridge" (with C Mehring and J. Xi), Physics of Fluids 16, pp. 728-47, 2004.
165. "Vaporization and Combustion in Three-Dimensional Droplet Arrays" (with R.T. Imaoka), Proceedings of The Combustion Institute, Vol. 30, 2004, pp. 1981-9.
166. "Reduced Methanol Kinetic Mechanisms for Combustion Applications" (with S. Yalamanchili, R. Seiser, and K. Seshadri), Combustion and Flame 142, 2005, pp. 258-65.
167. "Volume Averaging for the Analysis of Turbulent Spray Flows" International Journal of Multiphase Flow 31, 2005, pp. 675-705. See also "Corrigendum to 'Volume Averaging for the Analysis of Turbulent Spray Flows' [International Journal of Multiphase Flow 31 (2005) 675-705]" International Journal of Multiphase Flow 31, p. 867.

168. "Linear Analysis of Liquid-Film Combustor," (with S. Stanchi and R. Imaoka), Journal of Propulsion and Power 21, 2005, pp. 1075-91.
169. "A Generalized Analysis for Liquid-fuel Vaporization and Burning," (with R. Imaoka), International Journal of Heat and Mass Transfer 48, 2005, pp. 4342-53.
170. "Transient Vaporization and Burning in Dense Droplet Sprays," (with R. Imaoka), International Journal of Heat and Mass Transfer 48, 2005, pp. 4354-66.
171. "Liquid-Fuel Burning with Non-Unitary Lewis Number," Combustion and Flame 148, 2007, pp. 177-86.
172. "Flame Structure in Small-scale Liquid Film Combustors," (with T. K. Pham, D. Dunn-Rankin), Proceedings of the Combustion Institute, Vol. 31, part 2, 2006, pp 3269-3275.
173. "Stress-induced Cavitation for the Streaming Motion of a Viscous Liquid Past a Sphere," (with J.C. Padrino, D. D. Joseph, T. Funada, J. Wang), Journal of Fluid Mechanics 578, 2007, pp. 381-411.
174. "Cavitation in an Orifice Flow," (with S. Dabiri and D. D. Joseph), Physics of Fluids 19, 2007, paper 072112.
175. "Nonpremixed Combustion in an Accelerating Transonic Flow Undergoing Transition," (with F. Cheng and F. Liu), AIAA Journal 45, 2007, pp. 2935-46.
176. "Two-Dimensional and Axisymmetric Viscous Flow in Apertures,"(with S. Dabiri and D. D. Joseph), Journal of Fluid Mechanics 605 2008, pp. 1-18.
177. "Multicomponent-Liquid-Fuel Vaporization with Complex Configuration," (with G. Wu), International Journal of Heat and Mass Transfer 51, 2008, pp. 4759-74.
178. "Nonpremixed Combustion in an Accelerating Turning, Transonic Flow Undergoing Transition," (with F. Cheng and F. Liu), AIAA Journal 46, pp. 1204-15, 2008.
179. "Combustion in a Curving, Contracting Channel with a Cavity Stabilized Flame," (with S. V. Puranam, J. Arici, N. Sarzi-Amade, and D. Dunn-Rankin), Proceedings of The Combustion Institute, Vol. 32, pp. 2973-81, 2008.
180. "Reacting Mixing-Layer Computations in a Simulated Turbine-stator Passage," (with Felix Cheng and Feng Liu), J. of Propulsion & Power 25, No. 2, 2009.
181. "Optimization of Secondary Air Addition to a Continuous One-Dimensional Spray Combustor," (with J. A. Sirignano, L. Rodriguez, and A. Sideris), J. of Propulsion & Power 26, pp.288-94, 2010.

182. "Interaction Between a Cavitation Bubble and Shear Flow," (with S. Dabiri and D. D. Joseph), Journal of Fluid Mechanics 651, pp. 93-116, 2010.
183. "A Numerical Study on the Effects of Cavitation on Orifice Flow," (with S. Dabiri and D. D. Joseph), Physics of Fluids 22, paper 042102, 2010.
184. "Transient Burning of a Convective Fuel Droplet," (with G. Wu), Combustion and Flame 157, pp. 970-81, 2010. See also "Corrigendum to 'Transient Burning of a Convective Fuel Droplet,' [Combustion and Flame 157, pp. 970-981, 2010]," Combustion and Flame 157, page 1620, 2010.
185. "Recent Theoretical Advances for Liquid-Fuel Atomization and Burning" (Invited Paper), International Journal of Energetic Materials and Chemical Propulsion 7, Issue 4, pp. 293-314, 2008
186. "Transient Convective Burning of a Periodic Fuel-Droplet Array," (with G. Wu), Proceedings of The Combustion Institute, Vol. 33, pp. 2109-16, 2011.
187. "Transient Convective Burning of Interactive Fuel Droplets in Single-layer Arrays," (with G. Wu), Combustion Theory and Modelling 15, pp. 227-43., 2011.
188. "Simulation of Transient Convective Burning of an n-Octane Droplet Using a Four-Step Reduced Mechanism," (with G. Wu and F. A. Williams), Combustion and Flame 158, pp. 1171- 1180, 2011.
189. "Pressure-Swirl Atomization of Water-in-Oil Emulsions," (with C. D. Bolszo, A. A. Narvaez, V. G. McDonell, and D. Dunn-Rankin), Atomization & Sprays 20, pp. 1077-99, 2010.
190. "Transient Convective Burning of Interactive Fuel Droplets in Double-Layer Arrays" (with G. Wu), Combustion and Flame 158, pp. 2395-2407, 2011.
191. "Comparison of Water-in-Oil Emulsion Atomization Characteristics for Low- and High-Capacity Pressure-Swirl Nozzles," (with A. A. Narvaez, C. D. Bolszo, V. G. McDonell, and D. Dunn-Rankin), Atomization & Sprays, 21 (5), pp. 391–410, 2011.
192. "Turbine Burners: Performance Improvement and Challenge of Flameholding," (with D. Dunn-Rankin, F. Liu, B. Colcord, and S. Puranam), AIAA Journal 50, No. 8, invited paper, pp. 1645-69, 2012.
193. "Regression Rate Modeling for Hybrid Rocket Combustion," (with F. M. Favaro, M. Manzoni, and L.T. DeLuca), Journal of Propulsion and Power 29 (1), pp. 205-215, 2013. doi: 10.2514/1.B34513
194. "Numerical Analysis of Hybrid Rocket Combustion," (with A. Coronetti), Journal of Propulsion and Power 29 (2), pp. 371-384, 2013.

195. "Flameholding in Converging and Turning Channels over Cavities with Slot Injection," (with B. J. Colcord and F. Liu), Combustion Science and Technology 185, No. 7, pp. 1016-43. 2013, doi:10.1080/00102202.2013.771075
196. "Flameholding in Converging and Turning Channels over Cavities with Periodic Port Injection," (with B. J. Colcord and F. Liu), AIAA Journal 51, No. 7, pp. 1621-30, July 2013. doi: 10.2514/1.J051890
197. "Two-dimensional Model for Liquid-Rocket Transverse Combustion Instability" (with P. Popov), AIAA Journal 51, Issue 12, pp.2919-34, 2013. doi: 10.2514/1.J052512
198. "Advances in Droplet Array Combustion Theory and Modelling," invited paper, Progress in Energy and Combustion Science 42, pp. 54-86, 2014.
199. "Stochastic Modeling of Transverse Wave Instability in a Liquid Propellant Rocket Engine," (with P. Popov and A. Sideris), Journal of Fluid Mechanics 745, pp. 62-91, 2014. doi:10.1017/jfm.2014.96
200. "Triple flame: Inherent Asymmetries and Pentasectional Character," (with A. Jorda Juanos), Combustion Theory and Modelling 18 (3), pp. 454-73, 2014 doi:10.1080/13647830.2014.923116
201. "Vorticity Dynamics for Transient High-Pressure Liquid Injection," (with D. Jarrahbashi), invited paper, Physics of Fluids 26 (10), 101304, 2014. Based on Invited Lecture at the 66th Annual Meeting of the APS Division of Fluid Dynamics, 24–26 November 2013, Pittsburgh.
202. "Propellant Injector Influence on Liquid Propellant Rocket Engine Instability," (with P.P. Popov and A. Sideris), Journal of Propulsion and Power 31 (1), pp. 320-31, 2015.
203. "Driving Mechanisms for Combustion Instability," invited paper, Forman Williams Commemorative Issue, Combustion Science and Technology 187, pp. 162-205, 2015.
204. "Transient Combustion of a Methane-hydrate Sphere," (with T. Bar-Kohany), Combustion and Flame 163, pp. 284-300, 2016.
205. "Early Spray Development at High-Density: Hole, Ligament, and Bridge Formations," (with D. Jarrahbashi, P. P. Popov, and F. Hussain), Journal of Fluid Mechanics 792, pp. 188-231, April, 2016.
206. "Transverse Combustion Instability in a Rectangular Rocket Motor," (with P. P. Popov), Journal of Propulsion and Power 32 (3), pp. pp. 620-27, 2016. 10.2514/1.B35868
207. "Triggering and Re-stabilization of Combustion Instability with Rocket Motor Acceleration," (with P.P. Popov and A. Sideris), AIAA Journal 54, pp. 1652-9, 2016.

208. “Two-Time-Variable Perturbation Theory for Liquid-Rocket Combustion Instability,” (with J. Krieg), Journal of Propulsion and Power 32 (3), pp. 755-76, 2016. doi: 10.2514/1.B35954
209. “Co-axial Jet Flame Subject to Long-wavelength Acoustic Oscillations, (with J. Krieg), Journal of Propulsion and Power 32 (3), pp. 743-54, 2016. doi: 10.2514/1.B35953
210. “Pressure Effects on Real-gas Laminar Counterflow,” (with A. Jordà Juanós), Combustion and Flame 181, pp. 54-70, 2017.
211. “Low-Probability Events Leading to Rocket Engine Combustion Instability,” (with P.P. Popov and A. Sideris), AIAA Journal 55(3), pp. 919-29, 2017.
212. “Extinction Analysis of a Methane-Oxygen Counterflow Flame at High-pressure”, (with Albert Jorda Juanos), Combustion Science and Technology in press, 2017.
213. “Numerical Simulation of Liquid Round Jet Atomization,” (with D. Jarrahbashi, P. P. Popov, and F. Hussain), Physical Review Fluids, invited paper, Physical Review Fluids 2, 090504, 2017.
214. “Longitudinal Combustion Instability in a Rocket Engine with a Single Coaxial Injector,” (with T. Nguyen and P. Popov), J. Propulsion & Power 34(2), pp. 354-373, 2018.
215. “Planar Liquid Jet: Early Deformation and Atomization Cascades,” (with A. Zandian and F. Hussain), Physics of Fluids 29, 062109 (2017); doi: 10.1063/1.4986790.
216. “Compressible Flow at High Pressure with Linear Equation of State,” Journal of Fluid Mechanics 843, pp. 244-292, 2018. preprint arXiv 1710.06018
217. “Engine-type and Propulsion-configuration Selections for Long-duration UAV Flights,” (with D. Cirigliano, A. M. Frisch, and F. Liu), Journal of Propulsion and Power 34(4), pp. 878-92, 2018. <https://arc.aiaa.org/doi/full/10.2514/1.B36547>
218. “Understanding Liquid Jet Atomization Via Vortex Dynamics,” (with A. Zandian and F. Hussain), Journal of Fluid Mechanics 843, pp. 293-354, 2018. <http://arxiv.org/abs/1706.03742>
219. “The Impacts of Three Flamelet Burning Regimes in Nonlinear Combustion Dynamics,” (with Tuan M. Nguyen), invited article, Combustion and Flame 195, pp. 170-182, 2018.
220. “Transient Behavior near Liquid-Gas Interface at Supercritical Pressure,” (with Jordi Poblador-Ibanez), International Journal of Heat and Mass Transfer 126, Part B, pp. 457-73, 2018. <http://arxiv.org/abs/1802.10149>
221. “Normal Shocks with High Upstream pressure,” Physical Review Fluids 3, Paper 093401, 2018.

222. “Length-scale Cascade and Spray Expansion for Planar Liquid Jets,” (with A. Zandian and F. Hussain), International Journal of Multiphase Flow 113, pp.117-41, 2019.
<http://arxiv.org/abs/1706.03150>
223. “Spontaneous and Triggered Longitudinal Combustion Instability in a Single-injector Liquid Rocket Combustor”, (with Tuan M. Nguyen), AIAA Journal 57(12), pp. 5351-64, 2019,
<https://doi.org/10.2514/1.J057743>.
224. “Nonlinear Combustion Instability in a Multi-Injector Rocket Engine”, (with J. Xiong, T. H. Morgan, J. Krieg, and F. Liu), AIAA Journal 58 (1), pp. 219-35, 2020.
<https://doi.org/10.2514/1.J058036>
225. “Vorticity dynamics in a spatially developing coaxial liquid jet inside gas flow,” (with A. Zandian and F. Hussain), Journal of Fluid Mechanics 877, pp. 429-70, 2019.
226. “Counterflow and Wall Stagnation Flow with Three-Dimensional Strain,” Physics of Fluids 31, 053605, 2019. <https://doi.org/10.1063/1.5096472>
227. “Combustion with Multiple Flames Under High Strain Rates,” Combustion Science & Technology 193 (7), 2021, pp. 1173-1202 <https://doi.org/10.1080/00102202.2019.1685507>
228. “Strain Rate and Pressure Effects on Multi-branched Counterflow Flame”, (with C. Lopez-Camara and A. Jorda Juanos), Combustion & Flame 221, p. 256-69. November, 2020.
<http://arxiv.org/abs/2005.14516>
229. “Neural Network Flame Closure for a Turbulent Combustor with Unsteady Pressure”, (with Z. Shadram, T. M. Nguyen, and A. Sideris), AIAA Journal, 59(2), pp. 621-35, 2021.
<https://arc.aiaa.org/doi/pdf/10.2514/1.J059721>
230. “Mixing and Combustion in a Laminar Shear Layer with Imposed Counterflow” Journal of Fluid Mechanics 908 (10), 2020. <https://doi.org/10.1017/jfm.2020.936>
231. “Self-similar Solution of a Supercritical Two-phase Laminar Mixing Layer”, (with J. Poblador-Ibanez and B.W. Davis), International Journal of Multiphase Flow 135, Article 103465, 2021. <https://arxiv.org/abs/2004.00564>
232. “Two-phase Developing Laminar Mixing Layer at Supercritical Pressures” (with B.W. Davis and J. Poblador-Ibanez), International Journal of Heat and Mass Transfer 167, Article 120687, 2021. <https://arxiv.org/abs/1912.01138>
233. “Combustion Dynamics Simulation of a 30-injector Rocket Engine”, (with J. Xiong and F. Liu), Combustion Science and Technology 194, 2020, pp. 1914-42.
<https://www.tandfonline.com/doi/full/10.1080/00102202.2020.1847097>

234. “Diffusion-controlled Premixed Flames,” Combustion Theory and Modelling 25 (6), pp. 1019-38, invited paper for special issue in honor of Professor Moshe Matalon, 2021.
<https://doi.org/10.1080/13647830.2020.1863474>
235. “Volume-of-Fluid Computational Foundation for Variable-density, Two-phase, Supercritical-fluid Flows”, (with J. Poblador-Ibanez), Physics of Fluids, 2022, in press.
<https://arxiv.org/abs/2103.01874>
236. “Liquid-jet Instability at High Pressures with Real-fluid Interface Thermodynamics”, (with Jordi Poblador-Ibanez), Physics of Fluids 33, 083308, 2021.
237. “Physics-Aware Neural Network Flame Closure for Combustion Instability Modeling in a Single-Injector Engine”, (with Z. Shadram, T.M. Nguyen, and A. Sideris), Combustion & Flame 240, 2022, 111973. <https://arxiv.org/abs/2108.05415>
238. “Combustion Simulation of an 82-injector Rocket Engine”, (with J. Xiong and F. Liu), in press, AIAA Journal, 2022. Online <https://doi.org/10.2514/1.J061255>
239. “Three-dimensional, Rotational Flamelet Closure Model with Two-way Coupling”, Journal of Fluid Mechanics 945, 2022. <https://www.doi.org/10.1017/jfm.2022.562>
240. “Temporal Atomization of a Transcritical Liquid n-decane Jet into Oxygen,” (with Jordi-Poblador-Ibanez), International Journal of Multiphase Flow 153, 104130, 2022.
241. “Inward Swirling Flamelet Model”, Combustion Theory and Modelling, online, 2022.
<https://doi.org/10.1080/13647830.2022.2103452>
242. “Stretched Vortex Layer Flamelet,” Combustion & Flame 224, 2022, 112276.
<https://www.sciencedirect.com/science/article/pii/S0010218022002917>
243. “Reacting and Non-reacting, Three-dimensional Shear Layers with Spanwise Stretching,” (with Jonathan L. Palafoutas), Physics of Fluids 34, 123602, 2022.