

Publications in Journals, Peer-Reviewed Proceedings, and Edited Books

1. J.-Y. Chen and J.L. Lumley, "Second-Order Modeling of the Effect of Intermittency on Scalar Mixing," Twentieth Symposium (International) on Combustion, pp. 395-401 (1984).
2. J.-Y. Chen, J.L. Lumley, and F.C. Gouldin, "Modeling of Wrinkled Laminar Flames with Intermittency and Conditional Statistics," Twenty-First Symposium (International) on Combustion, pp. 1483-1491 (1986).
3. J.-Y. Chen, F.C. Gouldin, and J.L. Lumley, "Second-Order Modeling of a Turbulent Nonpremixed H₂-Air Jet Flame with Intermittency and Conditional Averaging," Combustion Science and Technology, vol. **53**, pp. 235-257 (1987).
4. J.-Y. Chen, "Second-Order Conditional Modeling of Turbulent Nonpremixed Flames with a Composite PDF," Combustion and Flame, vol. **69**, pp. 1-36 (1987).
5. Wm. T. Ashurst, J.-Y. Chen, and M.M. Rogers, "Pressure Gradient Alignment with Strain Rate and Scalar Gradient in Simulated Navier-Stokes Turbulence," Physics of Fluids, vol. **30**, pp. 3293-3294 (1987).
6. J.-Y. Chen, "A General Procedure for Constructing Reduced Reaction Mechanisms with Given Independent Relation," Combustion Science and Technology, vol. **57**, pp. 89-94 (1988).
7. J.-Y. Chen and W. Kollmann, "PDF Modeling of Chemical Nonequilibrium Effects in Turbulent Nonpremixed Hydrocarbon Flames," Twenty-Second Symposium (International) on Combustion, pp. 645-653 (1988).
8. F.C. Gouldin, K.N.C. Bray, J.-Y. Chen, "Chemical Closure Model for Fractal Flamelets," Combustion and Flame, vol. **77**, 241-259 (1989).
9. J.-Y. Chen, W. Kollmann, R.W. Dibble, "Pdf Modeling of Turbulent Methane-Air Nonpremixed Jet Flames," Combustion Science and Technology vol. **64**, pp. 315-346 (1989).
10. J.-Y. Chen, W. Kollmann, "Chemical Models for PDF Modeling of Hydrogen-air Nonpremixed Turbulent Flames," Combustion and Flame, vol. **79**, pp. 75-99 (1990).
11. T.H. Shih, J.L. Lumley, J.-Y. Chen, "Second-Order Modeling of a Passive Scalar in a Turbulent Shear Flow," AIAA Journal, vol. **28**, pp. 610-617 (1990).
12. I. Kennedy, W. Kollmann, J.-Y. Chen, "A Model for Soot Formation in a Laminar Diffusion Flame," Combustion and Flame, vol. **81**, 73-85 (1990).
13. R.S. Barlow, R.W. Dibble, J.-Y. Chen, and R.P. Lucht "Effect of Damkohler Number on Superequilibrium OH Concentration in Turbulent Nonpremixed Jet Flames," Combustion and Flame, vol. **82**, 235-251 (1990).
14. J.-Y. Chen, W. Kollmann, "Mixing Models for Turbulent Flows with Exothermic Reactions," Seventh Symposium on Turbulent Shear Flows, pp. 277-292 (1991).
15. J.-Y. Chen and R.W. Dibble, "Application of Reduced Mechanisms for Prediction of Turbulent Nonpremixed Methane Jet Flames," in Lecture Notes in Physics 384 "Reduced Kinetic Mechanisms and Asymptotic Approximations for Methane-Air Flames" Edited by M.D. Smooke , pp. 193-226 (1991).

16. J.-Y. Chen and W. Kollmann, "Segregation Parameters and Pair-Exchange Mixing Models for Turbulent Nonpremixed Flames," Twenty-Third Symposium (International) on Combustion, pp. 751-757 (1991).
17. J.-Y. Chen, R.W. Bilger and R.W. Dibble, "Pdf Modeling of Turbulent Nonpremixed CO/H₂/N₂ Jet Flames with Reduced Mechanisms," Twenty-Third Symposium (International) on Combustion, pp. 775-780 (1991).
18. J.-Y. Chen "Reduced Reaction Mechanisms for Methanol-Air Diffusion Flames," Combustion Sciences and Technology, vol. **78**, pp. 127-145, (1991).
19. I.M. Kennedy, W. Kollmann and J.-Y. Chen "Predictions of Soot in Laminar Diffusion Flames," AIAA Journal, vol. **29**, pp. 1452-1457, (1991).
20. R. Villasenor, J.-Y. Chen, R.W. Pitz, "Modeling Ideally Expanded Supersonic Turbulent Jet Flows with Nonpremixed H₂-Air Combustion", AIAA Journal , vol. **30**, pp. 395-402 (1992).
21. W. Kollmann and J.-Y. Chen, "The Interaction of Turbulence and Chemical Kinetics," Edited book by M.Y. Hussaini, A. Kumar, and R.G. Voigt, Major Research Topics in Combustion, pp. 359-402 (1992).
22. J.-Y. Chen and W. Kollmann, "Pdf Modeling and Analysis of Thermal NO Formation in Turbulent Nonpremixed Hydrogen-Air Jet Flames," Combustion and Flame, vol., **88**, pp. 397-412 (1992).
23. M. Sion and J.-Y. Chen, "Scalar Pdf Modeling of a Turbulent Nonpremixed Methanol-Air Flame," Combustion Sciences and Technology, **88**, pp. 89-114 (1992).
24. J.-Y. Chen and R.W. Dibble, "A Perfectly-Stirred-Reactor Description of Chemistry in Turbulent Nonpremixed Combustion of Methane in Air," Combustion Science and Technology, **84**, pp. 45-50 , (1992).
25. T.-H. Shih, J.-Y. Chen, and J.L. Lumley, "Second-Order Modeling of Boundary-Free Turbulent Shear Flows," AIAA Journal, **30**, NO. 6, pp. 1553-1560 (1992).
26. R. Villasenor, J.-Y. Chen, and R.W. Pitz, "Interaction Between Chemical Reaction and Turbulence in Supersonic Nonpremixed H₂-Air Combustion," in Studies in Turbulence, Edited by T.B. Gatski, S. Sarkar, C.G. Specizale, Springer-Verlag, pp. 357-367, 1992.
27. J.-Y. Chen, Y. Liu, and B. Rogg, "CO-H₂-N₂/Air Diffusion Flames: Thermal Radiation and Transient Effects," in "Reduced Reaction Mechanisms" edited by N. Peters and B. Rogg, Lecture Notes in Physics, **15**, Springer-Verlag, pp.196-223 (1993).
28. C.M. Muller, K. Seshadri, and J.-Y. Chen, "Reduced Kinetic Mechanisms for Counterflow Methanol Diffusion Flames," in "Reduced Reaction Mechanisms" edited by N. Peters and B. Rogg, Lecture Notes in Physics, **15**, Springer-Verlag, pp. 284-307 (1993).
29. N.S. Smith, R.W. Bilger, and J.-Y. Chen, "Modelling of Nonpremixed Hydrogen Jet Flames Using a Conditional Moment Closure Method," 24th Symposium (International) on Combustion/Combustion Institute, pp. 263-269, 1993.
30. R.S. Barlow and J.-Y. Chen, "On Transient Flamelets and Their Relationship to Turbulent Methane-Air Jet Flames," 24th Symposium (International) on Combustion/Combustion Institute, pp. 231-237, 1993.

31. J.-Y. Chen, T. Kaiser, and W. Kollmann, "Transient Behavior of Simplified Mechanisms for Methane Nonpremixed Combustion," Combustion Science and Technology, vol. 92, pp. 313-347 (1993).
32. P.J. Goix, K.R. Leonard, L. Talbot, and J.-Y. Chen, "Direct Measurement of Mixture Fraction in Reacting Flow Using Rayleigh Scattering," Experiments in Fluids, vol. 15, pp. 247-254 (1993).
33. S. Menon, P. McMurtry, A. Kerstein, J.-Y. Chen, "A New Unsteady Mixing Model to Predict NO_x Production During Rapid Mixing in a Dual-Stage Combustor," Journal of Propulsion and Power, vol. 10, No. 2, pp. 161-168, 1994.
34. J.-Y. Chen and W. Kollmann, "Comparison of prediction and measurement in non-premixed turbulent flames," Chapter 5 in Turbulent Reactive Flows, edited by F.A. Williams and P.A. Libby, pp. 214-308, 1994.
35. R.W. Pitz, T.M. Brown, T.-S. Cheng, S. Nandula, J.A. Wehrmeyer, O.Jarrett, G.B. Northam, J.-Y. Chen, "Finite-Rate Chemistry Effects in Subsonic and Supersonic Combustion," in Combustion in High-Speed Flows, J. Buckmaster et al. (eds.), pp. 253-273, 1994.
36. C.-S. Chen, K.-C. Chang, and J.-Y. Chen, "Application of a Robust β -PDF Treatment to Analysis of Thermal NO Formation in Nonpremixed Hydrogen-Air Flame," Combustion and Flame, **98**:375-390 (1994).
37. R. Villasenor and J.-Y. Chen, "Mathematical Modeling of the Coupled Reacting Boundary Layer Equations," International Journal for Numerical Methods in Fluids, vol. **21**: 129-139 (1995).
38. N.S.A. Smith, R.W. Bilger, C.D. Carter, R.S. Barlow, and J.-Y. Chen, "A Comparison of CMC and PDF Modelling Predictions with Experimental Nitric Oxide LIF/Raman Measurements in a Turbulent H_2 Jet Flame," Combust. Sci. and Tech. **105**:357-375 (1995).
39. J.-Y., Chen, W.-C. Wang, and M., Koszykowski, "Numerical Simulation and Scaling of NO_x Emissions from Turbulent Hydrogen Jet Flames with Helium Dilution," Combust. Sci. Technol., vol. 110, p. 505-529 (1995).
40. J.-Y. Chen, "Stochastic Modeling of Partially Stirred Reactors," Combust. Sci. and Tech. vol. 122:63-94 (1997).
41. R. Villasenor and J.-Y. Chen, "A Four-Step Reduced Mechanism for Reacting Axisymmetric Diffusion Jet Flames," in Transport Phenomena in Combustion (edited by S.H. Chan), pp 154-165, 1997.
42. J.-Y. Chen and W.-C. Chang, "Monte Carlo Simulation of NO_x Emissions from Turbulent Hydrogen Jet Flames with Helium Dilution," in Transport Phenomena in Combustion (edited by S.H. Chan), pp 227-238, 1997.
43. J.Y. Chen and W.C. Chang, "Flamelet and PDF Modeling of CO and NO_x Emissions from a Turbulent Methane Hydrogen Jet Nonpremixed Flame," 26th Symposium (International) on Combustion/The Combustion Institute, pp. 2207-2214, 1997.
44. R.S. Barlow, G.J. Fiechtner, and J.Y. Chen, "Oxygen Atom Concentrations and NO Production Rates in a Turbulent H_2/N_2 Jet Flame," 26th Symposium (International) on Combustion/The Combustion Institute, pp. 2199-2205, 1997.

45. W.C. Chang and J.-Y. Chen, "Impact of Mixing Model on Predicted NO Formation in a Nonpremixed Partially Stirred Reactor," 26th Symposium (International) on Combustion/The Combustion Institute, pp. 2223-2229, 1997.
46. T.C. Bond, R.A. Noguchi, C.P. Chou, R.K. Mongia, R.W. Dibble, J.-Y. Chen, "Catalytic Oxidation of Natural Gas Over Supported Platinum: Flow Reactor Experiments and Detailed Numerical Modeling," 26th Symposium (International) on Combustion/The Combustion Institute, pp. 1771-1778, 1997.
47. Z. Wang and J.-Y. Chen, "Modeling of Microscale Turbulence and Chemistry interaction in Near-Field Aircraft Plumes," Journal of Geophysical Research, vol. 102, page 12,871-12,883, 1997.
48. J.P.H. Sanders, J.-Y. Chen, I. Gokalp, "Flamelet Based Modeling of NO Formation in Turbulent Hydrogen Jet Diffusion Flames," Combustion and Flame, **111**: 1-15, 1997.
49. C.P. Chou, J.-Y. Chen, C.G. Yam, and K.D. Marx, "Numerical Prediction of NO Formation in a Laminar Bunsen Flame - A Flamelet Approach," Combustion and Flame, **114**:420-435, 1998.
50. J.-Y. Chen, W.-C. Chang, "Modeling Differential Diffusion Effects in Turbulent Nonreacting/Reacting Jets with Stochastic Mixing Models," Combust. Sci. and Tech. **133**: 343-375, 1998.
51. H.P. Mallampalli, T.H. Fletcher, and J.Y. Chen, "Evaluation of CH₄/NO_x Reduced Mechanisms Used for Modeling Lean Premixed Turbulent Combustion of Natural Gas," Journal of Engineering for Gas Turbines and Power, **120**:703-712, 1998.
52. Y.-C. Chen and J.-Y. Chen, "Fuel Dilution Effect on Differential Molecular Diffusion in Laminar Hydrogen Diffusion Flames," Combustion Theory and Modelling, 2:497-514 (1998).
53. C.J. Sung, C.K. Law, and J.-Y. Chen, "An Augmented Reduced Mechanism for Methane Oxidation with Comprehensive Global Parametric Validation," 27th Symposium (International) on Combustion/The Combustion Institute, pp.195-304, 1998.
54. M.M. Tacke, S. Linow, S. Geiss, E.P. Hassel, J. Janicka, and J.-Y. Chen, "Experimental and Numerical Study of a Highly Diluted Turbulent Diffusion Flame Close to Blow-Out," 27th Symposium (International) on Combustion/The Combustion Institute, pp. 139-1148, 1998.
55. R.S. Barlow, N.S.A Smith, J.-Y. Chen, and R.W. Bilger, "Nitric Oxide Formation in Dilute Hydrogen Jet Flames: Isolation of the Effects of Radiation and Turbulence-Chemistry Submodels," Combustion and Flame, 117:4-31 (1999).
56. H.G. Im, J.H. Chen, and J.-Y. Chen, "Chemical Response of Methane/Air Diffusion Flames to Unsteady Strain Rate," Combustion and Flame, 118:204-212 (1999).
57. J.A. Blasco, N. Fueyo, J.C. Larroya, C. Dopazo, J.-Y. Chen, "A Single-Step Time Integrator of a Methane-Air Chemical System Using Artificial Neural Networks," Computers and Chemical Engineering, 23:1127-1133 (1999).
58. C.P. Chou, J.-Y. Chen, G.H. Evans, W.S. Winters, "Numerical Studies of Methane Catalytic Combustion inside a Monolith Honeycomb Reactor Using Multi-Step Surface Reactions," Combustion Science and Technology, v. 15, pp 27-57 (2000).
59. J.A. Blasco, N. Fueyo, C. Dopazo, J.-Y. Chen, "A Self-Organizing-Map Approach to Chemistry Representation in Combustion Applications," Combust. Theory Modelling 4:61-76 (2000).

60. R.S. Barlow, G.J. Fiechtner, C.D. Carter, and J.-Y. Chen, "Experiments on the Scalar Structure of Turbulent CO/H₂/N₂ Jet Flames," Combustion and Flame, 120:549-569 (2000).
61. C.J. Sung, C.K. Law and J.-Y. Chen "Further Validation of an Augmented Reduced Mechanism for Methane Oxidation: Comparison of Global Parameters and Detailed Structure," Combustion Science and Technology, vol. 156, pp. 201-220 (2000).
62. W. Meier, R.S. Barlow, Y.-L. Chen, and J.-Y. Chen, "Raman/Rayleigh/LIF Measurements in a Turbulent CH₄/H₂/N₂ Jet Diffusion Flame: Experimental Techniques and Turbulence-Chemistry Interaction," Combustion and Flame, 123:326-343 (2000).
63. T. Echekki, A.R. Kerstein, T.D. Dreeben, and J.-Y. Chen, "Computation of Turbulent Jet Diffusion Flames using the One-Dimensional Turbulence Model: Hydrogen-Air Flames," Combustion and Flame, 125: 1083-1105 (2001)
64. C.J. Sung, C.K. Law, and J.-Y. Chen, " Augmented Reduced Mechanisms for NO Emission in Methane Oxidation," Combustion and Flame, 125:906-919 (2001).
65. R. Homma, J.-Y. Chen, "Reduced Mechanisms for Prediction of NO₂ Formation and Ignition Delay in Methane-Air Combustion," Journal of Engineering for Gas Turbines and Power, vol. 123, pp. 303-307 (2001).
66. R. Homma and J.-Y. Chen, "Combustion Process Optimization by Genetic Algorithms: Reduction of NO₂ Emission via Optimal Post-Flame Process," Proceedings of the Combustion Institute, 28:2483-2489, 2001.
67. J. Eckstein, J.-Y. Chen, C.-P. Chou, and J. Janicka, "Modeling of Turbulent Mixing in Opposed Jet Configuration: One-Dimensional Monte-Carlo PDF Simulation," Proceedings of the Combustion Institute, 28:141-148, 2001.
68. J.-Y. Chen, J.A., Blasco, N. Fueyo, N., and C. Dopazo, "An Economical Strategy for Storage of Chemical Kinetics: Fitting In Situ Adaptive Tabulation with Artificial Neural Networks," Proceedings of the Combustion Institute, 28:115-121, 2001.
69. A. Kempf, H. Forkel, J.-Y. Chen, A. Sadiki, and J. Janicka, "Large Eddy Simulation of a Counterflow Configuration with and without Combustion," Proceedings of the Combustion Institute, 28:35-40, 2001.
70. M.A. Cremer, C.J. Montgomery, D.H. Wang, M.P. Heap, and J.-Y. Chen, "Development and Implementation of Reduced Chemistry for CFD Modeling of Selective Noncatalytic Reduction," Proceedings of the Combustion Institute, 28:2427-2434, 2001.
71. J.-Y. Chen and Tarek Echekki, "Numerical Study of Buoyancy Effects on the Structure and Propagation of Triple Flames," Combustion Theory and Modelling, 5:499-515 (2001).
72. J.-Y. Chen, "Automatic Generation of Reduced Mechanisms and their Applications to Combustion Modeling," Transactions of the Aeronautical and Astronautical Society of the Republic of China, 33:59-67 (2001).
73. A. Kempf, H., Forkel, H, J.-Y. Chen, A. Sadiki and J. Janicka, "A Large Eddy simulation of a counterflow configuration," ZEITSCHRIFT FUR ANGEWANDTE MATHEMATIK UND MECHANIK, 81:S541-S542 (2001).
74. R.S. Barlow, A.N. Kaprpelis, J.H. Frank, and J.-Y. Chen," Scalar Profiles and NO Formation in Laminar Opposed-Flow Partially Premixed Methane/Air Flames," Combustion & Flame, vol. 127: 2102-2118 (2001).

75. C.J. Montgomery, M.C. Cremer, J.-Y. Chen, C.K. Westbrook, and L. Q. Maurice, "Reduced Chemical Kinetic Mechanisms for Hydrocarbon Fuels," Journal of Propulsion and Power, vol 12: 192-198 (2002).
76. J.-Y. Chen, J. Kolbu, R. Homma, and R.W. Dibble, "Optimization of Homogeneous Charge Compression Ignition with Genetic Algorithms," Combustion Sciences and Technologies, 175:373-392 (2003).
77. R. Carbra, T. Myhrvold, J.-Y. Chen, R.W. Dibble, A.N. Karpetis, and R.S. Barlow, "Simultaneous Laser Raman-Rayleigh-LIF Measurements and Numerical Modeling Results of a Lifted Turbulent H₂/N₂ Jet Flame in a Vitiated Coflow," Proceedings of the Combustion Institute, 29: 1881-1888 (2002)
78. J.D. Blouch, J.-Y. Chen and C.K. Law, "A Joint Scalar PDF Study of Nonpremixed Hydrogen Ignition," Combustion and Flame vol. 135: 209-225 (2003).
79. J.-Y. Chen, "Challenging in Modelling of Turbulence-Chemistry Interactions in Large Eddy Simulations," Progress in Computational Fluid Dynamics, Vol. 4, Nos. 3-5:155-161 (2004).
80. C.-P. Chou, J.-Y. Chen, J. Janicka, and E. Mastorakos, "Modeling of Turbulent Opposed-Jet Mixing Flows with k-ε Model and Second-Order Closure," International Journal of Mass and Heat Transfer, 47: 1023-1035 (2004).
81. T. Echehki, J.-Y. Chen, and U. Hegde, "Numerical Investigation of Buoyancy Effects on Triple Flame Instability," Combustion Science and Technology 176:381-407 (2004).
82. J.-Y. Chen, "Analysis of in situ Adaptive Tabulation Speed-up Factor and Improvement with a Modified Binary Search Algorithm," Combustion Science and Technology vol. 176: 1153-1169 (2004).
83. Yi-Hann Chen and J.-Y. Chen, "Experimental Exploration of HCCI for KYMCO 100 CC Two-Stroke Gasoline Engine," Journal of the Chinese Society of Mechanical Engineers, vol. 25, No. 2:165-174 (2004).
84. D. Geyer A. Dreizler, J. Janicka, A.D. Permana, J.-Y. Chen, "Finite rate chemistry effects in turbulent opposed flows: comparison of Raman/Rayleigh measurements and Monte Carlo PDF simulation," Proceedings of the Combustion Institute, 30:711-718 (2005)
85. Y. Choi and J.-Y. Chen, "Fast Prediction of Start-Of-Combustion in HCCI with Combined Artificial Neural Networks and Ignition Delay Model," Proceedings of the Combustion Institute, 30:2711-2718 (2005).
86. R. Cabra, J.-Y. Chen, R. W. Dibble, A.N. Karpetis, and R. S. Barlow, "Lifted Methane-Air Jet Flames in a Vitiated Coflow," Combustion & Flame vol. 143: pp. 491-506 (2005).
87. R.S. Barlow, J.H. Frank, A.N. Karpetis, J.-Y. Chen, "Piloted methane/air jet flames: Transport effects and aspects of scalar structure," Combustion & Flame vol. 143: pp 433-449 (2005).
88. C.J. Montgomery, C. Yang, A.R. Parkinson, and J.-Y. Chen, "Selecting the Optimum Quasi-Steady State Species for Reduced Chemical Kinetic Mechanisms using a Genetic Algorithm," Combustion & Flame, vol. 144:37-52 (2006).
89. T. Myhrvold, I.S. Ertesvag, I.R. Gran, R. Cabra, J.-Y. Chen, "A Numerical Investigation of a lifted H₂/N₂ Turbulent Jet Flame in a Vitiated Coflow," Combustion Science and Technology vol 178: 1001-1030 (2006).

90. G.A. Ban-Weiss, J.-Y. Chen, B. A. Buchholz, R.W. Dibble, "A Numerical Investigation into the Anomalous Slight NO_x Increase when Burning Biodiesel: A New (old) Theory", Fuel Processing Technology 88 (2007) 659-667.
91. J.-Y. Chen, "A Eulerian PDF Scheme for LES of Nonpremixed Turbulent Combustion with Second-order Accurate Mixture Fraction," Combustion Modelling and Theory, vol. 11: 675-695 (2007).
92. N. Samec, F. Kokalj, J.Y.Chen "Combustion Simulation In The Secondary Chamber of A Pilot Scale Incinerator Using Different Combustion Models" Environmental Engineering Science vol. 24, 7: 905-915 (2007)
93. J.-Y. Chen, Yi-Hann Chen, Young Choi, "Development and Validation of Isooctane Skeletal Mechanisms Based on LLNL Detailed Mechanism," International Journal of Vehicle Design, vol 46, No , (2008), pp 128-138. DOI: 10.1504/IJVD.2008.017073
94. J.-Y. Chen, Y. F. Tham, "Speedy Solution of Quasi-Steady State Species by Combination of Fixed-Point Iteration and Matrix Inversion," Combustion & Flame, 153: 634-646 (2008).
95. Y.F. Tham, F. Bisetti, and J.-Y. Chen, "Development of a Highly Reduced Mechanism for Isooctane HCCI combustion with Targeted Search Algorithm.," Journal of Engineering for Gas Turbines and Power, vol. 130 (2008) 042804.
96. F. Bisetti, J.-Y. Chen, E. R. Hawkes, J.H. Chen, "Probability Density Function Treatment of Turbulence/Chemistry Interactions during the Ignition of a Temperature Stratified Mixture for Application to HCCI Engine Modeling," Combustion & Flame, vol. 155: 571-584 (2008).
97. Gregory E. Bogin Jr., J.-Y. Chen, Robert W. Dibble, "The effects of intake pressure, fuel concentration, and bias voltage on the detection of ions in a Homogeneous Charge Compression Ignition (HCCI) Engine", Proceedings of Combustion Institute 32 (2009) 2877-2884.
98. Yuk Fai Tham, J.-Y. Chen, Robert W. Dibble, "Development of a Detailed Surface Mechanism for the Selective Catalytic Reduction of NO_x with Ethanol on Silver Alumina Catalyst", Proceedings of Combustion Institute 32 (2009) 2827-2833.
99. Fabrizio Bisetti, J.-Y. Chen, Jacqueline H. Chen, Evatt R. Hawkes, "Differential Diffusion Effects during the Ignition of a Thermally Stratified Premixed Hydrogen-Mixture subject to Turbulence", Proceedings of Combustion Institute 32 (2009) 1465-1472.
100. W. Zhou, D. Moyeda, V. Lissianski, J.-Y. Chen, "Development and Implementation of Numerical Simulation for Selective Noncatalytic Reduction System Design," Ind. Eng. Chem. Res., (2009) 48, 10994-11001.
101. J Blasco, N Fueyo, C Dopazo & J-Y Chen, A self-organizing-map approach to chemistry representation in combustion applications Combustion Theory and Modelling Vol. 4 , Iss. 1,2000 2010.
102. S. Saxena, J-Y Chen and R.W. Dibble, "Increasing the signal-to-noise ratio of sparkplug ion sensors through the addition of a potassium acetate fuel additive," in press Proceedings of Combustion Institute 33, Issue 2, 2011, Pages 3081-3088
103. Gregory Chin and J.-Y. Chen, "Modeling of Emissions from HCCI Engines using a Consistent 3-Zone Model with Applications to Validation of Reduced Chemistry," Proceedings of Combustion Institute, 33, Issue 2, 2011, Pages 3073-3079.

- 104.** N. J. Killingsworth, V H. Rapp, D. L. Flowers, S. M. Aceves, J-Y. Chen, and R.W. Dibble, "The Use of Argon to Increase the Efficiency of a Hydrogen Fueled SI Engine at Low Loads," Proceedings of Combustion Institute, [33, Issue 2](#), 2011, Pages 3141-3149
- 105.** G. Chin, J.-Y. Chen, Vi Rapp, and R. W. Dibble, "Development and Validation of a Reduced DME Mechanism Applicable to Various Combustion Modes in Internal Combustion Engines," Journal of Combustion, Volume 2011 (2011), Article ID 630580.
- 106.** G. E. Bogin, Jr., A. DeFilippo, J.-Y. Chen, G. Chin, J. Luecke, M.A. Ratcliff, B.T. Zilger, and A. M. Dean, "Numerical and Experimental Investigation of n-Heptane Autoignition in the Ignition Quality Tester (IQT)," Energy & Fuels, **2011**, 25 (12), pp 5562–5572.
- 107.** M. Mehl, J.Y. Chen, W.J. Pitz, S.M. Sarathy, and C.K. Westbrook, "An approach for formulating surrogates for gasoline with application towards a reduced surrogate mechanism for CFD engine modeling," Energy & Fuels **2011**, 25 (11), pp 5215–5223.
- 108.** F. Fuest R.S. Barlow, J.-Y. Chen, A. Dreizler, "Raman/Rayleigh scattering and CO-LIF measurements in laminar and turbulent jet flames of dimethyl ether," Combustion and Flame 159 (2012) 2533–2562
- 109.** A. Validi, J.-Y. Chen and A. Ghafourian, "HCCI Intelligent Rapid Modeling by Artificial Neural Network and Genetic Algorithm," Journal of Combustion, Volume 2012 (2012), Article ID 854393, doi:10.1155/2012/854393
- 110.** T.S. Cheng, S.R. March, R.W. Pitz, J.A. Wehrmeyer J.-Y. Chen, "Laser Raman measurements of temperature and species concentration in swirling lifted hydrogen jet diffusion flames", International Journal of Hydrogen Energy 37 (2 0 1 2) 7 9 0 0-7 9 1 1
- 111.** V. Rapp, A. DeFilippo, S. Saxena, J-Y Chen, R. W. Dibble, A. Nishiyama, A. Moon and Y. Ikeda, "Extending lean operating limit and reducing emissions of methane spark-ignited engines using a microwave-assisted spark plug," Journal of Combustion, Volume 2012 (2012), Article ID 927081, doi:10.1155/2012/927081
- 112.** A. Van Blarigan, R. Seiser, J-Y Chen, R. Cattolica, R.W.Dibble "Working Fluid Composition Effects on Methane Oxy-combustion in an SI-Engine: EGR vs. CO₂," Proceedings of the Combustion Institute, Volume 34, Issue 2, 2013, Pages 2951-2958.
- 113.** Z. M. Nicolaou, J-Y. Chen, N. Swaminathan, "A 5-step reduced mechanism for combustion of CO/H₂/H₂O/CH₄/CO₂ mixtures with low hydrogen/methane and high H₂O content," Combustion and Flame, Vol. 160: 56–75 (2013).
- 114.** V. Rapp, W. Cannella, J-Y Chen, R. W. Dibble, "Predicting Fuel Performance for Future HCCI Engines," Combustion Science and Technology, 185: 735-748, 2013.
- 115.** B. Wolk, A. DeFilippo, J-Y Chen, R.W. Dibble, A.V. Nishiyama, and Y. Ikeda "Enhancement of flame development by microwave-assisted spark ignition in constant volume combustion chamber" Combustion & Flame, Volume 160, Issue 7, July 2013, Pages 1225-1234
- 116.** A. DeFilippo, G. Chin, J-Y Chen, "Development and Validation of Reaction Mechanisms for Alcohol-Blended Fuels for IC Engine Applications," Combustion Science and Technology, 185: 1202-1226 DOI: 10.1080/00202202.2013.782011 (2013).

117. D. Vuilleumier, D. Kozarac, M. Mehl, S. Saxena, W.J. Pitz, R. W. Dibble, J.-Y. Chen, S. M. Sarathy, "Intermediate temperature heat release in an HCCI engine fueled by ethanol /n-heptane mixtures: an experimental and modeling study," Combustion & Flame vol 161:680-695, 2014.
118. A. Van Blarigan, D. Kozarac, R. Seiser, J.-Y. Chen, R. Cattolica, R. W. Dibble, "Spark-Ignited Engine NO_x Emissions in a Low-Nitrogen Oxycombustion Environment," Applied Energy, 118: 22-31 (2014)
119. B. Wolk and J-Y Chen, "Computational Study of Partial Fuel Stratification for HCCI Engines Using Gasoline Surrogate Reduced Mechanism," Combustion Science and Technology, vol 186: 332–354, 2014, DOI: 10.1080/00102202.2013.870161.
120. Z. M. Nikolaou, N. Swaminathan, J.-Y. Chen, "Evaluation of a reduced mechanism for turbulent premixed combustion," Combustion & Flame, volume 161, issue 12: 3085 - 3099 (2014)
121. D. Frederick, J.-Y. Chen, "Effects of turbulence, pressure, and differential diffusion on predicted autoignition delay times for H₂/N₂ jet flames in a vitiated coflow using the Linear Eddy Model," Flow, Turbulence and Combustion, 93:283-304 (2014) DOI 10.1007/s10494-014-954703.
122. H-L Tsai, J.-Y. Chen, G. Chin "Validation of a Newly Developed n-Heptane Reduced Chemistry and Its Application to Simulations of IQT, Diesel, and HCCI Combustion," Journal of Engineering for Gas Turbines and Power, 136: 121505-1 (2014) DOI 10.1115/1.4027891.
123. R. H. Butt, J. H. Mack, Y. Chen, R. W. Dibble, J.-Y. Chen, "Improving ion current for sparkplug ion sensor controlled HCCI combustion timing using sodium, potassium, and cesium acetate: experimental and numerical modeling," Proceedings of the Combustion Institute, Volume 35, Issue 3, 2015, Pages 3107-3115.
124. B. Wolk and J.-Y. Chen, "Computational study of the pressure dependence of sequential auto-ignition for partial fuel stratification with gasoline," Proceedings of the Combustion Institute, Volume 35, Issue 3, 2015, Pages 2993-3000.
125. J.W. Girard, J.-Y. Chen, R.W. Dibble, J. Janicka, and R. Homma, "Fuel-Air Mixing in a Turbulent Coannular Pipe Flow Measured Using Laser Absorption with Genetic Algorithm-Based Tomographic Reconstruction and Modeled with LES," Eurasian Chemico-Technological Journal, 16, pgs. 117-128, 2014.
126. A. North, D. Frederick, J.-Y. Chen, R. Dibble and A. Gruber, "Stability and Liftoff of a N₂-in-H₂ Jet Flame in a Vitiated Co-flow at Atmospheric Pressure," Eurasian Chemico-Technological Journal, 16, pgs. 128-140, 2014.
127. A. North, M. Magar, J.-Y. Chen, R. Dibble and A. Gruber, "Effect of Pressure, Environment Temperature, Jet Velocity and Nitrogen Dilution on the Liftoff Characteristics of a N₂-in-H₂ Jet Flame in a Vitiated Co-flow," Eurasian Chemico-Technological Journal, 16, pgs. 141-148, 2014.
128. G. Bogin, E., Osecky, J.-Y. Chen, M. Ratcliff, J. Luecke, B. Zigler, and A. Dean, "Experiments and CFD modeling analysis of large n-alkane ignition kinetics in the Ignition Quality Tester (IQT)" Energy & Fuel 28(7):4781-4794. 2014. DOI:10.1021/ef500769j · 2.79
129. D. Kozarac, R. Tomic, I. Taritas, J-Y Chen and R. W. Dibble, "A Model for Prediction of Knock in the Cycle Simulation by Detail Characterization of Fuel and Temperature Stratification," SAE Paper 2015-01-1245, 2015.

- 130.** X. Shi, R. Seiser, J.-Y. Chen, R.W. Dibble, and R. Cattolica, “Fuel-Dithering Optimization of Efficiency of TWC on Natural Gas IC Engine,” SAE Paper 2015-01-1043.
- 131.** D.I. Pineda, J.-Y. Chen, Modeling hydrogen inhibition in gasification surface reactions, Int. J. Hydrogen Energy. 40 (2015) 6059–6071. doi:10.1016/j.ijhydene.2015.03.063.
- 132.** Shi, X., Chen, J.-Y., Chen, Z., Numerical study of laminar flame speed of fuel-stratified hydrogen/air flames. Combustion & Flame, 163 (2016) 394-405.
- 133.** J. Hunter Mack, Ryan H. Butt, Yulin Chen, Jyh-Yuan Chen, Robert W. Dibble, “Experimental and numerical investigation of ion signals in boosted HCCI combustion using cesium and potassium acetate additives,” Energy Conversion and Management 108 (2016) 181-189.
- 134.** Yulin Chen, Guangyu Dong, J. Hunter Mack, Ryan H. Butt, Jyh-Yuan Chen, Robert W. Dibble, “Cyclic variations and prior-cycle effects of ion current sensing in an HCCI engine: A time-series analysis,” Applied Energy 168 (2016) 628–635
- 135.** A. DeFilippo and J.Y. Chen, “Simulating plasma-assisted methane-air ignition using pre-calculated electron impact reaction rates,” Combustion and Flame 172 (2016) 38–48. <http://dx.doi.org/10.1016/j.combustflame.2016.07.005>
- 136.** Yuli Chen and J.Y. Chen, “Application of Jacobian defined direct interaction coefficient in DRGEP-based chemical mechanism reduction methods using different graph search algorithms” Combustion and Flame, 74 (2016) 77-84.
- 137.** D.I. Pineda, B. Wolk, J.-Y. Chen, R.W. Dibble, (2016) "Application of corona discharge ignition in a boosted direct-injection single cylinder gasoline engine: Effects on combustion phasing, fuel consumption, and emissions" SAE International Journal of Engines 9(3):1970–1988. doi:10.4271/2016-01-9045 (2016)
- 138.** Jun J. Kojima, David G. Fischer, and Jyh-Yuan Chen. "Code-Validation Scalar Measurements in High-Pressure Hydrogen-Added Methane Combustion", AIAA J. Propulsion Power, vol 33, page 285-304, 2017. <http://dx.doi.org/10.2514/1.B36108>
- 139.** TA Casey, J Han, M Belhi, PG Arias, F Bisetti, HG Im, JY Chen, “Simulations of planar non-thermal plasma assisted ignition at atmospheric pressure,” Proceedings of the Combustion Institute 36 (3), 4155-4163 (2017).
- 140.** J Han, M Belhi, TA Casey, F Bisetti, HG Im, JY Chen, “The i - V curve characteristics of burner-stabilized premixed flames: detailed and reduced models” Proceedings of the Combustion Institute 36 (1), 1241-1250, (2017). <https://doi.org/10.1016/j.proci.2016.08.083>
- 141.** Xian Shi, J-Y. Chen, Yulin Chen, “Laminar flame speeds of stratified methane, propane, and n-heptane flames”, Combustion and Flame, Vol 176:38-47 doi:10.1016/2016.10.018 (2017)
- 142.** Yulin Chen, Benjamin Wolk, Marco Mehl, Wai K. Cheng, J-Y Chen, Robert W. Dibble, “Development of a reduced chemical mechanism targeted for a 5-component gasoline surrogate: A case study on the heat release nature in a GCI engine,” Combustion and Flame 178 (2017) 268–276
- 143.** Xian Shi, Jyh-Yuan Chen, Robert W. Dibble, “Modes of reaction front propagation and end-gas combustion of hydrogen/air mixtures in a closed chamber” International Journal of Hydrogen Energy, 42 (2017) 10501-10512. <http://dx.doi.org/10.1016/j.ijhydene.2016.12.095>

144. Daniel I. Pineda, Benjamin Wolk, Tim Sennott, Jyh-Yuan Chen, Robert W. Dibble, and Dan Singleton, "The role of hydrodynamic enhancement on ignition of lean methane-air mixtures by pulsed nanosecond discharges for automotive engine applications," *Combustion Science and Technology*, Vol 189, No 11, P 2023-2037, 2017, <http://dx.doi.org/10.1080/00102202.2017.1334647>
145. E Hu, Y. Chen, Z. Zheng, J.-Y. Chen, Z Huang, "Ab initio calculation and kinetic modeling study of diethyl ether ignition with application toward a skeletal mechanism for CI engine modeling," *Fuel* 209 (2017) 09-520.
146. X. Shi and J.-Y. Chen, "Numerical analysis and model development for laminar flame speed of stratified methane/air mixtures," *Combustion Flame, Combustion and Flame*, V 176, 2017, P. 38-47. <http://dx.doi.org/10.1016/j.combustflame.2016.10.018>
147. T. S. Cheng, J.-Y. Chen, R. W. Pitzc, "Raman/LIPF data of temperature and species concentrations in swirling hydrogen jet diffusion flames: Conditional analysis and comparison to laminar flamelets," *Combustion Flame*, 86C (2017) pp. 311-324 DOI information: 10.1016/j.combustflame.2017.08.018.
148. Yulin Chen, Marco Mehl, Yongliang Xie, J.-Y. Chen, "Improved skeletal reduction on multiple gasoline-ethanol surrogates using a Jacobian-aided DRGEP approach under gasoline compression ignition (GCI) engine conditions," *Fuel* 210C (2017) pp. 617-624
149. Yulin Chen, J.-Y. Chen, "Towards improved automatic chemical kinetic model reduction regarding ignition delays and flame speeds," *Combustion Flame*, 2017 accepted Nov. 25.

Meeting and Report Publications:

1. J.-Y. Chen, W. J. McLean and F.C. Gouldin, "*The Oxidation of NO to N₂ During Combustion Quenching Processes*," Western States Spring Meeting/Combustion Institute, WSS/CI 79-17, 1979.
2. T.-H. Shih, J.-Y. Chen, and J.L. Lumley, "*Second-Order Modeling of Boundary-Free Turbulent Shear Flows with a New Model Form of Pressure Correlation*," Cornell University Report, FDA-85-07, 1985.
3. T.-H. Shih, J.L. Lumley, and J.-Y. Chen, "*Second-Order Modeling of a Passive Scalar in a Turbulent Shear Flow*," Cornell University Report, FDA-85-15, 1985.
4. J.-Y. Chen, "*Second-Order Modeling of Variable Density Turbulent Flows with Favre Averaging and a Consistent Form for Pressure Fluctuation Correlations*," Sandia Report SAND86-8858, 1986.
5. J.-Y. Chen, W. Kollmann, and R.W. Dibble, "*Numerical Computation of Turbulent Free-Shear Flows Using a Block-Tridiagonal Solver for a Staggered Grid System*," Proceedings of the 18th Annual Pittsburgh Conference, pp. 1833-1837 (1987).
6. R.W. Dibble, P. Magre, R.W. Schefer, J.-Y. Chen, V. Hartmann, and W. Kollmann, "*Measurement of Joint Probability of Velocity and Concentrations in a Turbulent Nonpremixed Flame*," Western States Spring Meeting/Combustion Institute, 1987.
7. T.-H. Shih, N. N. Mansour, and J.-Y. Chen, "*Reynolds Stress Models for Homogeneous Turbulence*," Proceedings of the 1987 Summer Program, Center for Turbulence Research, Report CTR-S87, pp. 191-204 (1987).

8. R.S. Barlow, R.W. Dibble, R.P. Lucht, and J.-Y. Chen, "*Effect of Damkohler Number on Superequilibrium OH Concentration in Turbulent Nonpremixed Jet Flames*," 1989 AIAA 27th Aerospace Sciences Meeting, paper no. 89-0061 (1989).
9. I. Kennedy, W. Kollmann, J.-Y. Chen, "*A Model for Soot Formation in a Laminar Diffusion Flame*", Eastern Section Fall Meeting/Combustion Institute, (1988).
10. R.W. Dibble, P. Magre, R.S. Barlow, J.-Y. Chen, "*Comparison of Simultaneous LDV-Laser Raman with Pitot Tube Diagnostics in a Turbulent Nonpremixed Jet Flame*," 1989 AIAA 27th Aerospace Sciences Meeting, paper no. 89-0057 (1989).
11. T.H. Shih, J.-Y. Chen, J.L. Lumley, "*Second-Order Modeling of a Passive Scalar in a Turbulent Shear Flow*," 1989 AIAA 27th Aerospace Sciences Meeting, Jan., 1989/Reno Nevada, paper no. 89-0607 (1989).
12. J.-Y. Chen, R.W. Bilger and R.W. Dibble, "*Pdf Modeling of Turbulent Nonpremixed CO/H₂/N₂ Jet Flames with Reduced Mechanisms*," The Combustion Institute International Joint Conference Australia/New Zealand and Japanese Sections, 1989 also Sandia Report SAND89-8669.
13. I. Kennedy, W. Kollmann, J.-Y. Chen, "*Predictions of Soot Formation in Laminar Diffusion Flames*," Western State Fall Meeting/Combustion Institute WSS/CI 89-92, 1989.
14. R. Villasenor, J.-Y. Chen, R.W. Pitz, "*Modeling Ideally Expanded Supersonic Turbulent Jet Flows with Nonpremixed H₂-Air Combustion*", presented at the 1990 AIAA 28th Aerospace Sciences Meeting, Jan.,1990/Reno Nevada, paper no. 90-0640 (1990).
15. M. Metternich, W. Kollmann, I.M. Kennedy, J.-Y. Chen, "*Pdf Prediction of Sooting Turbulent Flames*," presented at the 1991 AIAA 29th Aerospace Sciences Meeting, Jan. 7-10, 1991/Reno, Nevada, paper no. 91-0481 (1991).
16. R. Villasenor, J.-Y. Chen, R.W. Pitz, "*Interaction Between Chemical Reaction and Turbulence in Supersonic Nonpremixed H₂-Air Combustion*," presented at the 1991 AIAA 29th Aerospace Sciences Meeting, Jan. 7-10, 1991/Reno, Nevada, paper no. 91-0375 (1991).
17. J.-Y. Chen, "*Reduced Reaction Mechanisms for Methanol-Air Diffusion Flames*," Presented at the 1990 Fall Western States Meeting, San Diego, California, Oct. 14-16, paper no. WSS/CI 90-07 (1990).
18. J.-Y. Chen and R.W. Dibble "*A Perfectly-Stirred-Reactor Description of Turbulent Methane-Air Nonpremixed Flames*", to be presented at the International Union of Theoretical and Applied Mechanics (IUTAM) Symposium on Aerothermodynamics in Combustors, June 3-5, 1991, Taipei, Taiwan. (1991).
19. J.-Y. Chen and W. Kollmann "*Analysis of Turbulent Mixing Models*," presented at the Eighth Symposium on Turbulent Shear Flows, Munich, Sept. 1991.
20. J.-Y. Chen and W. Kollmann "*Investigation of NO_x Formation in Turbulent Nonpremixed Flames: Hydrogen-Air Jet Flames*," presented at the 8th Symposium on Turbulent Shear Flows, Munich, Sept. 1991.
21. J.-Y. Chen and W. Kollmann "*Pdf Modeling of NO_x Formation in Turbulent Nonpremixed Flames*," presented at the 1990 Spring Western States Meeting, March, 1991.

22. W. Kollmann, I. M. Kennedy, and J.-Y. Chen "Predictions of a Sooting Turbulent Diffusion Flame with an Axial Pressure Gradient, presented at the 1990 Spring Western States Meeting, March, 1991.
23. A. T. Hsu and J.-Y. Chen "A Study of PDF Turbulence Models for Combustion, presented at the 1991 9th National Aerospace Plane Technology Symposium, November 1-2, 1991.
24. M. Sion and J.-Y. Chen, "Pdf Modeling of a Turbulent Nonpremixed Methanol-Air Flame, "presented at the 1992 AIAA 30th Aerospace Sciences Meeting, AIAA 92-0097 Reno, Nevada, Jan, 1992.
25. S. Menon, P. McMurtry, A. Kerstein, J.-Y. Chen, "A New Unsteady Mixing Model to Predict NO_x Production During Rapid Mixing in a Dual-Stage Combustor," presented at the 1992 AIAA 30th Aerospace Sciences Meeting, AIAA 92-0233 Reno, Nevada, Jan., 1992.
26. N.S. Smith, R.W. Bilger, and J.-Y. Chen, "Modelling of Nonpremixed Hydrogen Jet Flames Using a Conditional Moment Closure Method," presented at 24th Symposium (International) on Combustion/Combustion Institute, 1992.
27. R.S. Barlow and J.-Y. Chen, "On Transient Flamelets and Their Relationship to Turbulent Methane-Air Jet Flames," presented at 24th Symposium (International) on Combustion/Combustion Institute, 1992.
28. J.-Y. Chen, T. Kaiser, and W. Kollmann, "Transient Behavior of Simplified Mechanisms for Methane Nonpremixed Combustion, " presented at 1992 Fall Western States Meeting/The Combustion Institute, WSS 92-99, 1992.
29. N.S. Smith, R.W. Bilger, C.D. Carter, R.S. Barlow, J.-Y. Chen, "A Comparison of CMC and PDF Modelling Predictions with Experimental Nitric Oxide LIF/Raman Measurements in Turbulent H_2 Jet Flame," presented at the 14-th International Colloquium on Dynamics of Explosions and Reactive Systems (ICDERS014) Meeting, Portugal, August 1-6th, 1993.
30. J.-Y. Chen, "Stochastic Modeling of Partially Stirred Reactors," presented at the 1993 Fall Western States Meeting/The Combustion Institute, WSS 93-071, 1993.
31. D. Andreatta, J.-Y. Chen, and R.W. Dibble, "An Engine Combustion Model with Detailed Chemical Kinetics and Simplified Mixing, "presented at the 1993 Fall Western States Meeting/The Combustion Institute, WSS 93-070, 1993.
32. W.-C. Cheng, J.-Y. Chen, and C. Herr, "Reduced Kinetic Mechanisms for the Prediction of NO_x in Hydrogen-Air Flames at Elevated Pressure with/without Helium Dilution," presented at the 1993 Fall Western States Meeting/The Combustion Institute, WSS 93-113, 1993.
33. R. Armstrong, M.L. Koszykowski, F. Dai, J.-Y. Chen N. Brown, J. MacFarlane, "Full Chemistry in Turbulent Combustion Dynamics," presented at the Fifth International Conference on Numerical Combustion, Sept. 29- Oct. 1, Garmisch-Partenkirchen, Germany, 1993.
34. C. Herr, W.-C. Cheng, J.-Y. Chen, "Automatic Generation of Reduced Mechanisms with Applications to Prediction of NO_x in Hydrogen Flames," presented at the Fifth International Conference on Numerical Combustion, Sept. 29- Oct. 1, Garmisch-Partenkirchen, Germany, 1993.

35. Chen, J.-Y., "Scaling and Modeling NO_x Emissions from Turbulent Jet Flames with Helium Dilution, " Central and Western States Sections and Mexican National Section of the International Combustion Institute and American Flame Research Committee, April 23-26, San Antonio, Texas, paper no. 95S-055, 1995.
36. Bond, T, Dibble, R.W, Chen, J.-Y., Mongia, R., and Chou, C.P., "Measured Axial Species and Temperature Profiles in Catalytic Combustion of Natural Gas Over Platinum, " Central and Western States Sections and Mexican National Section of the International Combustion Institute and American Flame Research Committee, April 23-26, San Antonio, Texas, paper no. 95S-124, 1995.
37. R.Villasenor and J.-Y. Chen, "A Four-Step Reduced Mechanism for Reacting Axisymmetric Diffusion Jet Flames, " The 8-th International Symposium on Transport Phenomena in Combustion, July 16-20, San Francisco, CA, (1995).
38. J.-Y. Chen and Wei-Chen Chang, "Monte Carlo Simulation of NO_x Emissions from Turbulent Hydrogen Jet Flames with Helium Dilution, " The 8-th International Symposium on Transport Phenomena in Combustion, July 16-20, San Francisco, CA, (1995).
39. C. G. Yam, K. Marx, J.-Y. Chen and C.-P. Chou, "Numerical Simulation for the Formation and Development of an Unsteady Jet Diffusion Flame, " The 15-th Conference, September, Lake Tahoe, CA (1995).
40. C.-P. Chou, J.-Y. Chen, C.G. Yam, and K.D. Marx, "Numerical Prediction of NO_x Emission from Laminar Bunsen Flames - A Flamelet Approach, " presented at 1995 Fall Western States Meeting/The Combustion Institute, WSS 95F-214, 1995.
41. C.G. Yam, K.D. Marx, J.-Y. Chen, and C.-P. Chou, "Numerical Study of Flickering Frequency and Emission Index of a Methane Diffusion Flame for Varying Gravitational Force, " presented at 1995 Fall Western States Meeting/The Combustion Institute, WSS 95F-223, 1995.
42. R.S. Barlow, G.J. Fiechtner, and J.-Y. Chen, "Oxygen Atom Concentrations and NO Production Rates in a Turbulent H₂/N₂ Jet Flame, " 1996 Western States Section/The Combustion Institute 1996 Spring Meeting, March 11-12, Arizona State University 96S-006, 1996.
43. J.Y. Chen and W.C. Chang, "Flamelet and PDF Modeling of CO and NO_x Emissions from a Turbulent Methane Hydrogen Jet Nonpremixed Flame, " presented at the 26th Symposium on Combustion, Naple, July, 1996.
44. W.C. Chang and J.-Y. Chen, "Impact of Mixing Model on Predicted NO Formation in a Nonpremixed Partially Stirred Reactor," Presented at the 26th Symposium on Combustion, Naple, July, 1996.
45. T.C. Bond, R.A. Noguchi, C.P. Chou, R.K. Mongia, R.W. Dibble, J.-Y. Chen, "Catalytic Oxidation of Natural Gas Over Supported Platinum: Flow Reactor Experiments and Detailed Numerical Modeling, " Presented at the 26th Symposium on Combustion, Naple, July, 1996.
46. T.C. Bond, R.A. Noguchi, C.P. Chou, R.K. Mongia, J.-Y. Chen, R.W. Dibble, "Catalytic Oxidation of Natural Gas Over Supported Platinum: Flow Reactor Experiments and Detailed Numerical Modeling," Presented at the International Gas Turbine and Aeroengine Congress & Exhibition, Birmingham, UK, June 10-13, 1996. This paper was also accepted for publication in the Transactions of the ASME.

47. H.P. Mallampalli, T.H. Fletcher, and J.Y. Chen, "Evaluation of CH₄/NO_x Global Mechanisms Used for Modeling Lean Premixed Turbulent Combustion of Natural Gas," Fall Western State Meeting, paper #96F-098, Oct 28-29, 1996.
48. J. Trajkovic, A.R. Masri, and J.Y. Chen, "Automating the Reduction of Chemical Kinetics Schemes and the Computation of Species Concentrations," submitted for consideration for presentation at the Asia-Pacific Conference on Combustion (ASPACC97), Osaka University, Japan, May 12-15, 1997.
49. M. Kraft, H. Fey, A. Schlegel, J.Y. Chen, H. Bockhorn, "A Numerical Study on the Influence of Mixing Intensity on NO_x Formation," The 3rd Workshop on Modelling of Chemical Reaction Systems, July 24 - 26, 1996, Heidelberg, Germany.
50. N. S. A. Smith, R. W. Bilger, R. S. Barlow, C. D. Carter, and J.-Y. Chen, "On The Isolation and Comparison of Turbulence/Chemistry Models For Nonpremixed Flames: Thermal NO Formation with Varying Flame Radiation," presented at The 1997 WSS/CI Spring Meeting.
51. G. Krieger, E.P. Hassel, J. Janicka, J.-Y. Chen, "Monte-Carlo and Presumed PDF Modeling of Turbulent Hydrogen-Nitrogen Diffusion Flames," Presented at the 2nd International Symposium on Turbulence, Heat and Mass Transfer Delft University of Technology, The Netherlands, June 9-12, 1997.
52. J.-Y. Chen, "Development of Reduced Mechanisms for Numerical Modelling of Turbulent Combustion," invited paper at the Workshop on "Numerical Aspects of Reduction in Chemical Kinetics," CERMICS-ENPC Cite Descartes-Champus sur Marne, France, Sept. 2nd, 1997.
53. Im, H.G., Chen, J.H., and Chen, J.-Y., "Chemical Behavior of Methane/Air Diffusion Flames with Unsteady Strain Rates," presented at the 1997 Fall Western State/Combustion Institute Meeting, Diamond Bar, CA, Oct 23-24, paper no. 97F-111, 1997.
53. R.S. Barlow, G.J. Fiechtner, C.D. Carter, M. Flury, J. Gass, and J.-Y. Chen, "Structure of Turbulent CO/H₂/N₂ Jet Flames," presented at the 1998 Spring Western States/Combustion Institute Meeting, paper no. 98S-58, Berkeley, CA March 23-24, 1998.
54. C.J. Sung, C.K. Law, and J.-Y. Chen, "An Augmented Reduced Mechanism for Methane Oxidation with Global Parametric and Detailed Structure Validation," Joint Meeting of the Combustion Institute, March, Washington DC, 1999.
55. J.-Y. Chen and T. Echekki, "Numerical Study of Buoyancy and Differential Diffusion Effects on the Structure and Dynamics of Triple Flames" Proc. 5th Int. Microgravity Combustion Workshop, NASA/CP report 1999-208917, pp. 427(1999).
56. R. Homma and J.-Y. Chen, "Reduced Mechanisms for Prediction of NO₂ Formation in Methane-Air Combustion," presented at the Second Asia-Pacific Conference on Combustion, National Cheng Kung University, Taiwan, May 9-12, 1999.
57. C.J. Montgomery, M.A. Cremer, M.P. Heap, J.-Y. Chen, C.K. Westbrook, and L.Q. Maurice, "Reduced Chemical Kinetic Mechanisms for Hydrocarbon Fuels," presented at the 35th AIAA/ASME/SAE/ASEE Joint Propulsion Conference and Exhibit, June 20-24, Los Angeles, California, 1999.
58. Homma, R., and Chen, J.-Y., "Combustion Process Optimization by Genetic Algorithms: Reduction of NO₂ Emission via Optimal Post-Flame Process," presented at 28th International Symposium on Combustion, 2000.

59. Kempf, A., Fokel, H., Chen, J.-Y., Sadiki, A., and Janicka, J. "Large Eddy Simulation of a Counterflow Configuration with and without Combustion," presented at 28th International Symposium on Combustion, 2000.
60. Eckstein, J., Chen, J.-Y., Chou, C.-P., and Janicka, J., "Modeling of Turbulent Mixing in Opposed Jet Configuration: One-Dimensional Monte-Carlo PDF Simulation," 28th International Symposium on Combustion, 2000.
61. Chen, J.-Y., Blasco, J.A., Fueyo, N., and Dopazo, C., "An Economical Strategy for Storage of Chemical Kinetics: Fitting In Situ Adaptive Tabulation with Artificial Neural Networks," 28th International Symposium on Combustion, 2000.
62. J.-Y. Chen and T. Echekki, "Numerical Study of Buoyancy Effects on Triple Flames," Presented at the 2000 Western States Spring Meeting/The Combustion Institute, March 13-14, Paper number WS 00S-11, 2000.
63. C.P. Chou, J.-Y. Chen, J. Eckstein, J. Janicka, " Modeling of Turbulent Mixing in Opposed Jet Configuration: One-Dimensional Monte-Carlo Simulation," the 2000 Western States Spring Meeting/The Combustion Institute, March 13-14, Paper number WS 00S-13, 2000.
64. J.-Y. Chen, T. Echekki, and U. Hegde, "Effect of Gravity on Triple Flame Propagation and Stability," 2nd Joint Meeting of the U.S. Sections of the Combustion Institute, Oakland, CA, March, paper # 177, 2001.
65. R.S. Barlow, J.H. Frank, and J.-Y. Chen, "Scalar Profiles and NO Formation in Laminar Opposed-Flow Partially-Premixed Methane/Air Flames," 2nd Joint Meeting of the U.S. Sections of the Combustion Institute, Oakland, CA, March, paper # 209, 2001.
66. C.P. Chou, J.-Y. Chen, J. Janicka, and E., Mastorakos, "One-Dimensional Description of Turbulent Opposed-Jet Flows with the k-e Model and the Second-Order Closures," 2nd Joint Meeting of the U.S. Sections of the Combustion Institute, Oakland, CA, March, paper # 180, 2001.
67. J. Kolbu, J.-Y. Chen, R.W. Dibble, and J. Warnatz, "Study of a Homogeneous Charge Compression Ignition (HCCI) Process using Genetic Algorithms," 2nd Joint Meeting of the U.S. Sections of the Combustion Institute, Oakland, CA, March, paper # 180, 2001.
68. J. Gerard, J.-Y. Chen, and R.W. Dibble, "Fuel-Air Mixing in a Fully Developed Turbulent Coannular Pipe Flow Explored with Tomography and Large-Eddy Simulations," 2nd Joint Meeting of the U.S. Sections of the Combustion Institute, Oakland, CA, March, paper # 121, 2001.
69. J.-Y. Chen, T. Echekki, and U. Hegde, " Effects Of Gravity On Triple Flame Propagation and Stability" Proc. 6th Int. Microgravity Combustion Workshop, NASA/CP report 20001-210826 pp. 349 (2001).
70. C. Dopazo, J. Marin, J.P. Herro, J.-Y. Chen, "Turbulent Mixing and Combustion," Second Mediterranean Combustion Symposium, Sharm-El-Sheik, Egypt, Jan. 6-11, 2002.
71. R. Homma and J.-Y. Chen, "*Combustion Process Optimization by Genetic Algorithms : Reduction of NO₂ Emission via Optimal Post-flame Process*" Proceedings of IECEC'01: 36th Intersociety Energy Conversion Engineering Conference, July 29–August 2, 2001, Savannah, Georgia.

72. M.C. Cremer, C.J. Montgomery, Wei Chao, B.R. Adams, D.K. Eklund, J.-Y. Chen, "Supersonic Combustion Simulation Using Reduced Chemical Kinetic Mechanisms," Presented at the 2002 JANAF Meeting.
73. D.H. Wang, M.J. Bocklelie, M.A. Cremer, J.-Y. Chen "A Newton-Krylov Based Solver to Modeling Finite Rate Chemistry," 4-th International Symposium on Computational Technologies fro Fluid/Thermal/Chemical/Stress Systems with Multiple Applications, 2002.
74. R. Carbra, T. Myhrvold, J.-Y. Chen, R.W. Dibble, A.N. Karpetis, and R.S. Barlow, "Simultaneous Laser Raman-Rayleigh-LIF Measurements and Numerical Modeling Results of a Lifted Turbulent H₂/N₂ Jet Flame in a Vitiated Coflow," presented at the 29-th International Symposium on Combustion, July 2002.
75. S.M. Aceves, J. Martinez-Frias, D. Flower, J.R. Smith, R.W. Dibble, and J.-Y. Chen," A Computer Generated Reduced Iso-Octane Chemical Kinetic Mechanism Applied to Simulation of HCCI Combustion," SAE Paper 2002-01-2870 (2002).
76. C. J. Montgomery, W. Zhao, D. R. Eklund, S. Cox-Stouffer, and J.-Y. Chen," Supersonic Combustion Simulations Using Reduced Chemical Kinetic Mechanisms and ISAT", 2003 AIAA CFD Conference, June, 2003.
77. Montgomery, C. J., Zhao, W., Eklund, D. R., and Chen, J.-Y., "CFD Simulations of Supersonic Hydrocarbon Combustion Using Reduced Mechanisms and ISAT," AIAA Paper 2003-3547, AIAA Computational Fluid Dynamics Conference, Orlando, FL, June 23-26, 2003.
78. W. Zhao, C.JU. Montgomery, M.A. Cremer, B. R. Adams, D.R. Eklund, J.-Y. Chen, "Implementation of Reduced Mechanisms with ISAT into CFD Simulations of Full-Scale Combustion Systems," Proceedings of IMECE'03, 2003 ASME International Mechanical Engineering Congress and Exposition, Washington, D.C. Nov. 16-21,2003.
79. A. Permana and J.-Y. Chen, "Adaptive Monte Carlo Method for PDF Modeling of Opposed Jet Reacting Flows," Presented at the 2003 Fall Western States Meeting of Combustion Instituted, WSSCI paper 03F-63, 2003.
80. Y. Choi, and J.-Y. Chen, "Numerical Modeling of Start-of -Combustion (SOC) in HCCI Engine with Artificial Neural Network (ANN)," Presented at the 2003 Fall Western States Meeting of Combustion Instituted, WSSCI paper 03F-69, 2003.
81. Y.-H. Chen and J.-Y. Chen, "Experimental Exploration of HCCI for Small 2-Stroke Gasoline Engines," Presented at the 2003 Fall Western States Meeting of Combustion Instituted, WSSCI paper 03F-90, 2003.
82. J.-Y. Chen, "Analysis of in situ Adaptive Tabulation Speed-up Factor and Improvement with a Modified Binary Search Algorithm," Presented at the 2003 Fall Western States Meeting of Combustion Instituted, WSSCI paper 03F-48, 2003.
83. Y.F. Tham, and J.-Y. Chen, "Recent Advancement on Automatic Generation of Simplified Mechanisms," Presented at the 2003 Fall Western States Meeting of Combustion Instituted, WSS-CI paper 03F-49, 2003.
84. Montgomery, C. J., Zhao, W., Adams, B. R., Tam, C.-J., and Chen, J.-Y., "CFD Simulations of a 3D Scramjet Flame holder Using Reduced Mechanisms and ISAT," submitted to the 40th AIAA/ASME/SAE/ASEE Joint Propulsion Conference, Fort Lauderdale, FL, July 11-14, 2004.

85. Q. Tang, M. Denison, M., Maguire, D. Wang, M. Cremer, M. Bockelie, J.-Y. Chen
 "Improvements on Newton-Krylov Based Solver for CFD Models using Finite Rate
 NO_x Chemistry," 5-th International Symposium on Computational Technologies for
 Fluid/Thermal/Chemical/Stress System with Industrial Applications, ASME (2004).
86. J.-Y. Chen and Yuk Fai Tham, "Numerical Study of Rich-Quick-Lean Combustion of
 Syngas," Presented at the 4th Joint Meeting of the U.S. Sections of the Combustion
 Institute at Drexel University Philadelphia, March 20-23 (2005)
87. Fabrizio Bisetti and J.-Y. Chen, "Numerical Issues of Monte Carlo PDF for Large
 Eddy Simulations of Turbulent Flames," Presented at the 4th Joint Meeting of the U.S.
 Sections of the Combustion Institute at Drexel University, Philadelphia, March 20-23
 (2005)
88. H.-W. Hsu, J.-Y. Chen, Y.-C. Chao, "The Role of Hydrogen Pre-Reaction for
 Methane Catalytic Ignition", presented at the 20th ICDERS Meeting, Montreal,
 Canada, July 2005.
89. J.W. Girard, G.E. Bogin, J.H. Mack, J.-Y. Chen, and R.W. Dibble, "A Comparison of
 Infrared Light Emitting Diodes (IR-LED) versus IR Helium-Neon (HeNe) Lasers for
 Tomographic Reconstruction of Mean and RMS Fuel Concentration in Combustor,"
 Presented at 2005 WCC/CI Meeting, paper # 05F-2, Oct 17-18, 2005.
90. Y.F. Tham and J.-Y. Chen, "Study of Rich Catalytic Combustion of Syngas as a First
 Stage in Rich-Quick-Lean (RQL) Turbine System," Presented at 2005 WCC/CI
 Meeting, paper # 05F-24, Oct 17-18, 2005.
91. F. Bisetti and J.-Y. Chen, "LES of Sandia Flame D with Eulerian PDF and Finite-
 Rate Chemistry," Presented at 2005 WCC/CI Meeting, paper # 05F-33, Oct 17-18,
 2005.
92. Y.-H. Chen and J.-Y. Chen, "Development of Isooctane Skeletal Mechanisms for
 Fast and Accurate Predictions of SOC and Emissions of HCCI Engines based on
 LLNL Detailed Mechanism," Presented at 2005 WCC/CI Meeting, paper # 05F-44,
 Oct 17-18, 2005.
93. G. Ban-Weiss, R. Gupta, J.-Y. Chen, and R.W. Dibble, "A Numerical and
 Experimental Investigation into the Anomalous Slight NO_x Increase when Burning
 BioDiesel," Presented at 2005 WCC/CI Meeting, paper # 05F-77, Oct 17-18, 2005.
94. S. M. Aceves, D. L. Flower, J.-Y. Chen, A. Babajimopoulos "Fast Prediction of
 HCCI Combustion with an Artificial Neural Network Linked to a Fluid Mechanics
 Code," SAE paper 2006-01-3298 (2006).
95. C. Olbricht, A. Sadiki, J. Janicka, J.-Y. Chen, "Study of Heat and Mass Transfer in
 Complex Mixing devices using a Hybrid LES-Monte-Carlo PDF Method," Presented at
 5-th International Symposium on Turbulence, Heat and Mass Transfer, Sept 25-29,
 2006.
96. F. Bisetti, J.-Y. Chen, E. R. Hawkes, J.H. Chen, "Probability Density Function
 Modeling of Ignition in a Temperature Stratified Mixture for Application to HCCI
 Engines," presented at 5-th US Combustion Meeting, March 25-28, paper #E16 2007
97. F. Bisetti, Y.F. Tham, J.-Y. Chen, "Development and assessment of a highly reduced
 mechanism for isooctane HCCI combustion," presented at 5-th US Combustion
 Meeting, March 25-28, paper #C18 2007
98. W. Thomas Piggott, Salvador M. Aceves, Daniel Flowers, J.Y. Chen, "Fast
 prediction of HCCI and PCCI combustion with an artificial neural network-based

- chemical kinetic model”, presented at 2007 Fall WSS/States Combustion Meeting, Oct 17-18, paper 07F-29
99. F. Bisetti, J.-Y. Chen, J. H. Chen, E. R. Hawkes, “Characterization of differential diffusion effects during the constant volume ignition of a temperature stratified lean premixed hydrogen/air mixture subject to decaying turbulence”, presented at 2007 Fall WSS/States Combustion Meeting, Oct 17-18, paper 07F-14
 100. J.-Y. Chen, Yuk Fai Tham, “Speedy solution of quasi-steady state species by combination of fixed-point iteration and matrix inversion”, presented at 2007 Fall WSS/States Combustion Meeting, Oct 17-18, 07F-13
 101. Gregory Bogin Jr., J.-Y. Chen, Robert W. Dibble, “Numerical and experimental investigation of ions in a homogeneous charge compression ignition (HCCI) engine”, presented at 2007 Fall WSS/States Combustion Meeting, Oct 17-18, 07F-60.
 102. Gregory E. Bogin Jr., J.-Y. Chen, Robert W. Dibble, “The effects of intake pressure, fuel concentration, and bias voltage on the detection of ions in a Homogeneous Charge Compression Ignition (HCCI) Engine”, presented at 32nd International Symposium on Combustion, Aug. 2008.
 103. Yuk Fai Tham, J.-Y. Chen, Robert W. Dibble, “Development of a Detailed Surface Mechanism for the Selective Catalytic Reduction of NO_x with Ethanol on Silver Alumina Catalyst”, presented at 32nd International Symposium on Combustion, Aug. 2008.
 104. Fabrizio Bisetti, J.-Y. Chen, Jacqueline H. Chen, Evatt R. Hawkes, “Differential Diffusion Effects during the Ignition of a Thermally Stratified Premixed Hydrogen-Mixture subject to Turbulence”, presented at 32nd International Symposium on Combustion, Aug. 2008.
 105. L.-C. Chien, J.-Y. Chen and T. Echekki, “Generation of chemical kinetics statistics in turbulent flames using One Dimensional Turbulence model for validation of reduced mechanisms”, Proceedings of the 6th U.S. National Combustion Meeting, Michigan, May 2009.
 106. Hsin-Luen Tsai and J.-Y. Chen, “Estimate of Maximum Allowable Droplet Size for Motorcycle Gasoline Direct Injection Engines”, 7th Asia-Pacific Conference on Combustion, National Taiwan University, Taipei, Taiwan 24-27 May 2009
 107. Samveg Saxena, T. Dillstrom, J.-Y. Chen, R.W. Dibble, “Increasing signal-to-noise ratio of spark-plug ion sensors through addition of salt-based fuel additives,” 2009 Fall Western States Meeting, Irvine, Oct 26-27, paper # 09F-62.
 108. V.H. Rapp, N. Killingsworth, S. Aceves, J.-Y. Chen, R.W. Dibble, “Investigation of knock prevention in high efficient, zero emission H₂-O₂-Ar Internal Combustion,” 2009 Fall Western States Meeting, Irvine, Oct 26-27, paper # 09F-05.
 109. A. North, R.W. Dibble, J.-Y. Chen, A. DeFillippo, “The role of autoignition versus flame propagation in lean premixed combustion in gas turbines,” 2009 Fall Western States Meeting, Irvine, Oct 26-27, paper # 09F-20.
 110. G.E. Borgin, A. M. Dean, A. DeFillippo, J.-Y. Chen, G. Chin, J. Luecke, M.A. Ratcliff, B. T. Zilger, “Modeling the fuel spray and combustion process of the Ignition Quality TesterTM with KIVA-3V, 2009 Fall Western States Meeting, Irvine, Oct 26-27, paper # 09F-45.

111. L-C. Chin and J-Y Chen “Evaluation of transient performances of reduced mechanisms in turbulent premixed jet flames using Linear Eddy Model,” 2009 Fall Western States Meeting, Irvine, Oct 26-27, paper # 09F-51.
112. G. Chin and J-Y. Chen, “Development of a consistent crevices model for multi-zone modeling of piston engines,” 2009 Fall Western States Meeting, Irvine, Oct 26-27, paper # 09F-78.
113. Samveg Saxena, J.-Y. Chen, R.W. Dibble, “A survey of experimental HCC research at U.C. Berkeley,” Proceedings of the Australian Combustion Symposium Dec. 2-4, 2009 The University of Queensland.
114. Samveg Saxena, V. Rapp, J.-Y. Chen, R.W. Dibble, "A numerical study of ultra-high efficiency combustion of a hydrogen-oxygen-argon mixture in HCCI engines," 2010 Spring Western States Meeting, Boulder Colorado, March 22-23.
115. Killingsworth, V. Rapp, D. Flowers, S. Aceves, J.-Y. Chen, R.W. Dibble, "Characteristics of knock in hydrogen-oxygen-argon SI engines," 2010 Spring Western States Meeting, Boulder Colorado, March 22-23, paper # 10S-68.
116. S. Saxena, J-Y Chen and R.W. Dibble, “Increasing the signal-to-noise ratio of sparkplug ion sensors through the addition of a potassium acetate fuel additive,” presented at the 33rd International Symposium on Combustion, Beijing, Aug. 2010.
117. Gregory Chin and J.-Y. Chen, “Modeling of Emissions from HCCI Engines using a Consistent 3-Zone Model with Applications to Validation of Reduced Chemistry,” presented at the 33rd International Symposium on Combustion, Beijing, Aug. 2010.
118. N. J. Killingsworth, V H. Rapp, D. L. Flowers, S. M. Aceves, J-Y. Chen, and R.W. Dibble, “The Use of Argon to Increase the Efficiency of a Hydrogen Fueled SI Engine at Low Loads,” presented at the 33rd International Symposium on Combustion, Beijing, Aug. 2010.
119. DeFilippo A., Chen J.Y., (2011) "Chemical Kinetic Modeling of Plasma-Assisted Methane Ignition", 7th US National Technical Meeting of the Combustion Institute, March 20-13, 2011, Atlanta, GA
120. M. Mehl, J.Y.Chen, W. Pitz, M. S. Sarathy, C. K. Westbrook, “A reduced mechanism for the study of gasoline combustion in an internal combustion engine,” 7th US National Technical Meeting of the Combustion Institute, March 20-13, 2011, Atlanta, GA.
121. Benjamin Sauer, Don Frederick, J-Y Chen, Friedrich Dinkelacker, Johannes Janicka “The effect of turbulent mixing and differential diffusion on the autoignition delay of a H₂/N₂ jet flame in vitiated coflow using the Linear Eddy Model,” 7th US National Technical Meeting of the Combustion Institute, March 20-13, 2011, Atlanta, GA.
122. A.J. North, R. W. Dibble, and J. Y. Chen, “Lift-off Heights of Lifted H₂/N₂ Jet Flames Issuing Into a Vitiated Coflow Measured Using Schlieren Imaging,” 7th US National Technical Meeting of the Combustion Institute, March 20-13, 2011, Atlanta, GA.
123. S. Saxena, M. Corvers, J-Y Chen, and R.W. Dibble, “Characterizing Ringing in HCCI Engines Using Sparkplug Ion Sensors”, 7th US National Technical Meeting of the Combustion Institute, March 20-13, 2011, Atlanta, GA.
124. H-L. Tsai, J-Y Chen, and G. Chin, “Spray Combustion Analysis in a Motorcycle Gasoline Direct Injection Engine,” presented at the 1st International Conference on January 19-21, 2011 Group Combustion of Droplets and Sprays Tainan, Taiwan.

125. H. -L. Tsai, J-Y Chen, G. Chin, "Group Combustion Characteristics inside a Motorcycle Gasoline Direct Injection Engine," 23rd ICDERS Conference in UC Irvine 2011, August.
126. S. Saxena, J.-Y. Chen and R.W. Dibble, "Maximizing Power Output in an Automotive Scale Multi-Cylinder Homogeneous Charge Compression Ignition (HCCI) Engine," SAE Paper 2011-01-0907,2011.
127. S. Saxena, J.-Y. Chen and R.W. Dibble, "Characterization of Ion Signals under Ringing Conditions in an HCCI Engine," JSAE Paper 20119085, 2011.
128. A. DeFilippo, S. Saxena, V. RapP, R.W. Dibble ,J.-Y. Chen, A. Nishiyama, Y. Ikeda, "Extending the Lean Stability Limits of Gasoline Using a Microwave-Assisted Spark Plug," SAE paper 2011-01-0663, 2011.
129. D. Frederick, A. North, J-Y. Chen, R.W. Dibble1, A. Gruber, "Analysis of Flame Propagation And Autoignition For A Lifted Nitrogen Diluted Hydrogen Turbulent Jet Flame In A Vitiated Coflow," Western States Combustion Institute Meeting, Paper 11F-14, U.C. Riverside, Oct.17-18, 2011.
130. V. Rapp, W. Cannella, T. Dillstrom, J.-Y. Chen, R.W. Dibble, "Effects of Fuel Properties on Autoignition In HCCI Engines," Western States Combustion Institute Meeting, Paper 11F-15, U.C. Riverside, Oct.17-18, 2011.
131. J.-Y. Chen, A. DeFilippo, G. T. Chin, W. Hable, "Modeling Effects of Mixed Alcohols on IC Engine Performances," Western States Combustion Institute Meeting, Paper 11F-16, U.C. Riverside, Oct.17-18, 2011.
132. A. DeFilippo, B. Wolk, J.-Y. Chen, R.W. Dibble, A. Moon, A. Nishiyama, Y. Ikeda, "A Multi-Parameter Study of the Extension of the Stable Operating Range of a Wet-Ethanol-Fueled Engine Using a Microwave-Assisted Spark Plug," Western States Combustion Institute Meeting, Paper 11F-17, U.C. Riverside, Oct.17-18, 2011.
133. B. Wolk, A. DeFilippo, J.-Y. Chen, R.W. Dibble, A. Moon, A. Nishiyama, Y. Ikeda, "Basic Explorations of Limits of Microwave Assisted Spark Plug In Constant Volume Combustion Chamber," Western States Combustion Institute Meeting, Paper 11F-44, U.C. Riverside, Oct.17-18, 2011.
134. A. Van Blarigan, R. Seiser, D. Kozarac, J.Y. Chen, R.W.Dibble, R. Cattolica, "Nitric Oxide Reduction in Stationary Power Engines Using Oxy-Combustion," Western States Combustion Institute Meeting, Paper #12S-55, Arizona State University March 19-20, 2012.
135. A. DeFilippo and J. Y. Chen, "Analysis of Electron Energy Distribution Function Assumptions on Plasma-Assisted Methane Ignition," Western States Combustion Institute Meeting, Paper #12S-48, Arizona State University March 19-20, 2012.
136. B. Wolk, Y. Zhang, A. DeFilippo, J-Y Chen, R.W. Dibble1, A. Nishiyama, Y. Ikeda, "Effectiveness Of Microwave-Assisted Spark Plug For Enhancing Flame Development In Constant Volume Combustion Chamber Under Turbulent Conditions," Western States Combustion Institute Meeting, Paper #12S-48, Arizona State University March 19-20, 2012.
137. A. Van Blarigan, D. Kozarac ,R. Seiser, R. Cattolica, J.-Y. Chen, R.W.Dibble "Experimental Study of Methane Fuel Oxycombustion in an SI Engine," Proceedings of the ASME 2012 Internal Combustion Engine Division Fall Technical Conference ICEF2012, paper number, ICEF2012-92109

138. B. Wolk, B. and J-Y. Chen, (2013) Computational study of partial fuel stratification for HCCI engines using gasoline surrogate reduced mechanism. 8th US National Meeting of the Combustion Institute, Park City, Utah, USA, May 19-22, 2013, paper 070IC-0003.
139. B. Wolk, Y. Chen, M.Mehl, J.Y. Chen, "Development of a reduced mechanism for multiple gasoline surrogates and application in CFD of stratified-charge GCI," 9th US National Combustion Meeting, Combustion Institute, May 17, 2015.
140. D.I. Pineda, B. Wolk, T. Sennott, J.-Y. Chen, R.W. Dibble, D.R. Singleton, Nanosecond Pulsed Discharge in a Lean Methane-Air Mixture, in: Laser Ignition Conf., 2015: p. T5A.2. doi:10.1364/LIC.2015.T5A.2.
141. Je Ir Ryu, Xian Shi, Jyh-Yuan Chen, "Influence of Water Content and its Gradient in Unburned Mixtures on the Extinction of a Developed Detonation," Western States Combustion Institute Meeting, paper 1B12, University of Washington, March 21-22,2016.
142. T. Casey, J.-Y. Chen, "Nanosecond pulse plasma assisted ignition simulations at atmospheric pressure," Western States Combustion Institute Meeting, paper 2A07, University of Washington, March 21-22,2016.
143. Daniel I. Pineda and Jyh-Yuan Chen, "Effects of updated transport properties of singlet oxygen species on steady laminar flame simulations," Western States Combustion Institute Meeting, paper 1B01, University of Washington, March 21-22,2016.
144. Daniel I. Pineda, Jyh-Yuan Chen, Robert W. Dibble, "Corona discharge ignition in a single cylinder research engine under boosted conditions," Western States Combustion Institute Meeting, paper 2A06, University of Washington, March 21-22, 2016.
145. Miguel Sierra Aznar, Daniel I. Pineda1, Bradley S. Cage, Johnathan P. Corvello, Xian Shi, Jyh -Yuan Chen, Robert W. Dibble, "Experimental investigation of port and direct injection strategies for internal combustion engines with argon as the working fluid," 10th US National Combustion Meeting, Combustion Institute, April 24-26, 2017.
146. Yulin Chen, Marco Mehl, Jyh-Yuan Chen, "A reduced chemistry model for multiple gasoline-ethanol surrogates by a Jacobian-aided DRGEP approach," 10th US National Combustion Meeting, Combustion Institute, April 24-26, 2017.
147. Xian Shi, Jyh-Yuan Chen, "Model development for laminar flame speed of stratified methane/air mixtures," 10th US National Combustion Meeting, Combustion Institute, April 24-26, 2017.
148. Alex Frank, Peter Therkelsen, Jyh-Yuan Chen, Robert K. Cheng, "kW Scale Combustor for Power Generation," 10th US National Combustion Meeting, Combustion Institute, April 24-26, 2017.
149. Daniel I. Pineda, Xian Shi, Tiernan A. Casey, Jyh-Yuan Chen, "Analysis of the errors associated with molecular transport parameters in combustion modeling and their effects on one-dimensional flame simulations," 10th US National Combustion Meeting, Combustion Institute, April 24-26, 2017.
150. Alex Frank, Peter Therkelsen, Jyh-Yuan Chen, Vi H. Rapp, Robert K. Cheng., "Laboratory Investigation of Down-scaling Effects on Low Swirl Burners", paper #

- 29TF-0045, Western States Section of the Combustion Institute – Fall 2017 Meeting Hosted by the University of Wyoming, October 2-3, 2017
151. Farouk Chourou, Miguel Sierra Aznar, Jyh-Yuan Che, Andreas Dreizler, “A new efficient model for multicomponent membrane separation and application to the Argon Power Cycle,” paper # 29IT-0013, Western States Section of the Combustion Institute – Fall 2017 Meeting Hosted by the University of Wyoming, October 2-3, 2017
152. Daniel I. Pineda, Tiernan A. Casey, Xian Shi, Jyh-Yuan Chen, “Uncertainty of transport parameters in flame models: a database from virial coefficient measurements,” paper # 9KI-0026, Western States Section of the Combustion Institute – Fall 2017 Meeting Hosted by the University of Wyoming, October 2-3, 2017
153. Alex Frank, Peter Therkelsen, Miguel Sierra Aznar, Jyh-Yuan Chen, Vi H. Rapp, Robert K. Cheng, “Investigation of the Down-scaling Effects on the Low Swirl Burner and its Application to Microturbines”, Turbo Expo 2018, paper GT2018-77208.

Textbooks:

- S. McAllister, J.-Y. Chen, A.C. Fernandez-Pello “Fundamentals of Combustion Processes” Springer Publisher 2011, ISBN 978-1-4419-7942-1.
- C-Y Wu, KH Chen, TC Chiu, S-B Cheng, J-Y Chen, YC Chao, Internal Combustion Engine, ChenHua Publisher, 2016, ISBN 978-986-463-073-8.

Ling-Jyh Chen. Academia Sinica Â· Institute of Information Science. PhD. Contact. About. Publications 167. Network. Projects 1. About. 167. Publications. 21,060. Reads. How we measure 'reads'. A 'read' is counted each time someone views a publication summary (such as the title, abstract, and list of authors), clicks on a figure, or views or downloads the full-text. Learn more. 2,220.Â Ling-Jyh Chen. A communication system that supports timely, scalable, and highly available information exchanges over a heterogeneous plug-and-play network systems is called an Open Information Gateway (OIGY). Chen-Hsuan Lin, Wan Lu, and Deming Chen, â€œC-Mine: Data Mining of Logic Common Cases for Improved Timing Error Resilience with Energy Efficiency,â€ ACM Transactions on Design Automation of Electronic Systems, Volume 23 Issue 2, January 2018. Nam Sung Kim, Deming Chen, Jinjun Xiong, and Wen-mei Hwu, â€œHeterogeneous Computing Meets Near-Memory Acceleration and High-level Synthesis in the Post-Moore Eraâ€, IEEE Micro, pp. 10-18, Volume: 37, Issue: 4, August 2017. K. Campbell, W. Zuo, and D. Chen, â€œNew Advances of High-Level Synthesis for Efficient and Reliable Hardware Designâ€, Integration, the VLSI Journal J. Jiang, Y. Li, J. Liu, X. Huang, C. Yuan and X. W. Lou, Adv. Mater., 2012, 24, 5166â€“5180 CrossRef CAS PubMed . J. Wang, N. Yang, H. Tang, Z. Dong, Q. Jin, M. Yang, D. Kisailus, H. Zhao, Z. Tang and D. Wang, Angew. Chem., Int. Ed., 2013, 52, 6417â€“6420 CrossRef CAS PubMed . C. Yuan, H. B. Wu, Y. Xie and X. W. Lou, Angew. Chem., Int. Ed., 2014, 53, 1488â€“1504 CrossRef CAS PubMed .Â X. Sun, C. Yan, Y. Chen, W. Si, J. Deng, S. Oswald, L. Liu and O. G. Schmidt, Adv. Energy Mater., 2014, 4, 1300912 Search PubMed . P. Poizot, S. Laruelle, S. Grugeon, L. Dupont and J.-M. Tarascon, Nature, 2000, 407, 496â€“499 CrossRef CAS PubMed . S.-Z. Huang, Y. Cai, J. Jin, J. Liu, Y. Li, H.-E. Wang, L.-H. Chen, T. Hasan and B.-L. Su, J. Mater. Chem. A, 2016, 4, 4264â€“4272 CAS . H. Chen and Y. Chen, â€œAn Experimental Comparison of Collaborative Defense Strategies for Network Security,â€ Pervasive Computing and Networking, edited by I. Woungang, published by John Wiley & Sons Limited, UK, ISBN-10: 0-470-74772-2, ISBN-13: 978-0-470-74772-8, June 2011. Y. Chen, J. Feng, W.-S. Ku, P. Liu, and Z. Su, â€œSecure Distributed Data Storage in Cloud Computing,â€ Cloud Computing, edited by R. Buyya, J. Broberg, and A. Goscinski, published by Wiley, Inc. New York, USA, 2010. ISBN-10: 0470887990, ISBN-13: 978-0470887998.Â Z. Jin and Y. Chen, â€œTelemedicine in Cloud Era: Prospect and Challenges,â€ IEEE Pervasive Computing, January â€“ March Issue, 2015.Â Peer Reviewed Conference/Workshop Papers