

Publication list of Ron Hanson

1148	J.J. Girard and R.K. Hanson, “Minimally Intrusive Optical Probe for <i>in situ</i> Shock Tube Measurements of Temperature and Species via Tunable IR Laser Absorption,” <i>Applied Physics B</i> , submitted August 2017.
1147	M. Nations, S. Wang, C.S. Goldenstein, D.F. Davidson and R.K. Hanson, “Kinetics of Excited Oxygen Formation in Shock-Heated O ₂ -Ar Mixtures,” <i>J. Phys. Chem. A</i> 120 (43) 8234-8243 DOI 10.1021/acs.jpca.6b07274
1146	S. Wang, T. Parise, S.E. Johnson, D.F. Davidson and R.K. Hanson, “A New Diagnostic for Hydrocarbon Fuels using 3.41-micron Diode Laser Absorption,” <i>Comb. and Flame</i> 186 129-139 DOI 10.1016/j.combustflame.2017.07.026
1145	S. Wang, D.F. Davidson and R.K. Hanson, “A Shock Tube Study of CH ₂ Oxidation via Simultaneous Laser Absorption Measurements of OH and CO,” International Conference on Chemical Kinetics, Chicago, IL, 5/2017.
1144	C. Hemken, U. Burke, K.Y. Lam, D. F. Davidson, R. K. Hanson, K. A. Heufer and K. Kohse-Hoinghaus, “Towards a Better Understanding of 2-butanone Oxidation: Detailed Species Measurements and Kinetic Modeling,” <i>Comb. and Flame</i> 184 195-207 (2017) DOI 10.1016/j.combustflame.2017.06.001
1143	A.M. Tulgestke, S. Johnson, D.F. Davidson and R.K. Hanson, “High-Speed Imaging of Inhomogeneous Ignition in a Shock Tube,” submitted to 26th ICDERS, Boston, Massachusetts, 1/2017.
1142	R. Xu, D. Chen, K. Wang, Y. Tao, J.K. Shao, T. Parise, Y. Zhe, S. Wang, R. Zhao, D.J. Lee, F.N. Egolfopoulos, D.F. Davidson, R.K. Hanson, C.T. Bowman and H. Wang, “HyChem Model for Petroleum-Derived Jet Fuels,” submitted to 10th U.S. National Combustion Meeting.
1141	R. Xu, H. Wang, D.F. Davidson, R.K. Hanson, C.T. Bowman, F.N. Egolfopoulos, “Evidence Supporting a Simplified Approach to Modeling High-Temperature Combustion Chemistry,” submitted to 10th U.S. National Combustion Meeting.
1140	A.M. Tulgestke, D.F. Davidson and R.K. Hanson, “Laser Absorption Measurements of Ethylene and Carbon Monoxide Time-Histories During n-heptane Oxidation at Low Temperatures Behind Reflected Shock Waves,” submitted to 10th U.S. National Combustion Meeting.
1139	A.M. Ferris, D.F. Davidson and R.K. Hanson, “Combined Laser Absorption and Gas Chromatography (GC) Speciation in a Shock Tube: Validation and Application to Ethylene Pyrolysis,” submitted to 10th U.S. National Combustion Meeting.
1138	S. Wang, T. Parise, D.F. Davidson and R.K. Hanson, “A New Diagnostic for Hydrocarbon Fuels Using 3.41-micron Diode Laser Absorption,” submitted to 10th U.S. National Combustion Meeting.
1137	J.K. Shao, D.F. Davidson and R.K. Hanson, “Shock Tube Study of Jet Fuel Pyrolysis and Ignition at Elevated Pressure,” submitted to 10th U.S. National Combustion Meeting.
1136	K. Wang, R. Xu, T. Parise, J.K. Shao, D.F. Davidson, R.K. Hanson, H. Wang, C.T. Bowman, “Evaluation of a Hybrid Chemistry Approach for Combustion of Blended Petroleum and Bio-derived Jet Fuels,” submitted to 10th U.S. National Combustion Meeting.
1135	K. Wang, R. Xu, T. Parise, J.K. Shao, D.J. Lee, A. Movaghar, D.F. Davidson, R.K. Hanson, H. Wang, C.T. Bowman and F.N. Egolfopoulos, “Combustion Kinetics of Conventional and Alternative Jet Fuels using a Hybrid Chemistry (HyChem) Approach,” submitted to 10th U.S. National Combustion Meeting.
1134	H. Ning, J. Wu, L. Ma, W. Ren, D.F. Davidson and R.K. Hanson, “Chemical Kinetic Modeling and Shock Tube Study of Methyl Propanoate Decomposition,” <i>Comb. and Flame</i> 184 30-40 (2017) DOI 10.1016/j.combustflame.2017.06.001

Publication list of Ron Hanson

1133	J.K. Shao, D.F. Davidson and R.K. Hanson, "Ignition Delay Times of Methane and Hydrogen Highly Diluted in Carbon Dioxide," ISSW 31, Nagoya, Japan, 7/17, submitted 11/16.
1132	J.K. Shao, Y. Zhu, D.F. Davidson and R.K. Hanson, "Shock Tube Study of the Effect of NO Addition on Ignition Delay Times of n-Dodecane/Air Mixtures," ISSW 31, Nagoya, Japan, 7/17, submitted 11/16.
1131	J.J. Girard, R.M. Spearrin, C.S. Goldenstein and R.K. Hanson, "Compact Optical Probe for Flame Temperature and Carbon Dioxide using Interband Cascade Laser Absorption near 4.2 μ m," <i>Comb. and Flame</i> 178 158-167 DOI 10.1016/j.combustflame.2017.01.007
1130	C.A. Almodovar, R.M. Spearrin and R.K. Hanson, "Two-color Laser Absorption near 5 μ m for Temperature and Nitric Oxide Sensing in High-temperature Gases," <i>JQSRT</i> , DOI 10.1016/j.jqsrt.2017.03.003
1129	C.S. Goldenstein, R.M. Spearrin, J.B. Jeffries and R.K. Hanson, "Infrared Laser-absorption Sensing for Combustion Gases," <i>Prog. in Energy and Comb. Sci</i> 60 132-176 (2017) DOI 10.1016/j.pecs.2016.12.002
1128	M. Nations, L.S. Chang, J.B. Jeffries, R.K. Hanson, <i>et al.</i> , "Characterization of a Large-scale Arc-jet Facility using Tunable Diode Laser Absorption Spectroscopy," <i>AIAA J.</i> , submitted 10/16.
1127	W.Y. Peng, C.S. Goldenstein, R.M. Spearrin, J.B. Jeffries and R.K. Hanson, "A Single-ended Mid-infrared Laser-absorption Sensor for Simultaneous <i>in situ</i> Measurements of H ₂ O, CO ₂ and Temperature in Combustion Flows," <i>Applied Optics</i> 55 (33) 9347-9359 (2016) DOI 10.1364/AO.55.009347
1126	R. Sur, W.Y. Peng, C.S. Strand, R.M. Spearrin, J.B. Jeffries, R.K. Hanson, <i>et al.</i> , "Mid-Infrared Laser Absorption Spectroscopy of NO ₂ at Elevated Temperatures," <i>JQSRT</i> 187 364-374 (2017) DOI 10.1016/j.jqsrt.2016.10.016
1125	D.F. Davidson, J. Shao, T. Parise and R.K. Hanson, "Shock Tube Measurements of Jet and Rocket Fuels," AIAA SciTech 2017, Grapevine, TX, 2/2016 DOI 10.2514/6.2016-0178
1124	S. Wang, D.F. Davidson and R.K. Hanson, "Shock Tube Measurement for the Dissociation Rate Constant of Acetaldehyde using Sensitive CO Diagnostic," <i>J. Phys. Chem. A</i> 120 (35) 6895-6901 (2016) DOI 10.1021/acs.jpca.6b03647
1123	S. Wang, D.F. Davidson and R.K. Hanson, "Improved Shock Tube Measurement of the CH ₄ + Ar = CH ₃ + H + Ar Rate Constant using UV Cavity-enhanced Absorption Spectroscopy of CH ₃ ," <i>J. Phys. Chem. A</i> 120 (28) 5427-5434 (2016) DOI 10.1021/acs.jpca.6b02572
1122	M.F. Campbell, K.G. Owen, D.F. Davidson and R.K. Hanson, "Dependence of Calculated Postshock Thermodynamic Variables on Vibrational Equilibrium and Input Uncertainty," <i>AIAA J. of Thermophysics and Heat Transfer</i> 31 (3) 586-608 DOI 10.2514/1.T4952
1121	W.Y. Peng, R. Sur, C.L. Strand, R.M. Spearrin, J.B. Jeffries and R.K. Hanson, "High-sensitivity <i>in situ</i> QCLAS-based Ammonia Concentration Sensor for High-temperature Applications," <i>App. Phys. B</i> 122 (7) (2016) DOI 10.1007/s00340-016-6464-2
1120	V.A. Miller, V.A. Troutman, M.G. Mungal and R.K. Hanson, " 20 kHz tracer-based PLIF of a jet in crossflow in an expansion tube ," 17th Int. Symp. on Applications of Laser Techniques to Fluid Mechanics, July 7-10, 2014.
1119	M. Gamba and R.K. Hanson, " Cinematographic PLIF Imaging of Toluene Using CW Excitation ," 16th Int. Symp. on Applications of Laser Techniques to Fluid Mechanics, July 9-12, 2012.
1118	R.K. Hanson and D.F. Davidson, " Advances in Shock Tube Techniques for Fundamental Studies of Combustion Kinetics ," 25th ICDERS Conf., Leeds, UK, Aug. 2-7, 2015.
1117	Y. Zhu, S. Wang, D.F. Davidson and R.K. Hanson, " Shock Tube Measurements of Species Time-histories during Jet Fuel Pyrolysis and Oxidation ," 25th ICDERS Conf., Leeds, UK, Aug. 2-7, 2015.

Publication list of Ron Hanson

1116	C.S. Goldenstein, R.M. Spearrin and R.K. Hanson, "Fiber-coupled Diode-laser Sensors for Calibration-free Stand-off Measurements of Gas Temperature, Pressure and Composition," <i>Applied Optics</i> 55 (3) 479-484 (2016) DOI 10.1364/AO.55.000479
1115	A.M. Tulgestke, D.F. Davidson and R.K. Hanson, "High-speed OH Imaging Diagnostic for Shock Tube Studies of Inhomogeneous Ignition," 36th Symp. (Int.) on Combustion, submitted 12/2015.
1114	S. Wang, D.F. Davidson, J.B. Jeffries and R.K. Hanson, "Time-resolved Sub-ppm CH ₃ Detection in a Shock Tube using Cavity-enhanced Absorption Spectroscopy with a ps-pulsed UV Laser," 36th Symp. (Int.) on Combustion, Seoul, Korea, 2016 DOI 10.1016/j.proci.2016.08.012
1113	S. Wang, K. Sun, D.F. Davidson, J.B. Jeffries and R.K. Hanson, "Cavity-enhanced Absorption Spectroscopy with a ps-pulsed UV Laser for Sensitive, High-speed Measurements in a Shock Tube," <i>Optics Express</i> 24 (1) 308-318 (2016) DOI 10.1364/OE.24.000308
1112	T. Parise, D.F. Davidson and R.K. Hanson, "Shock Tube/Laser Absorption Measurements of the Pyrolysis of a Bimodal Test Fuel," 36th Symp. (Int.) on Combustion, Seoul, Korea, 2016 DOI 10.1016/j.proci.2016.07.081
1111	P. Gokulakrishnan, C.C. Fuller, M. Klassen, Y. Zhu, D.F. Davidson, R.K. Hanson and B. Kiel, "Ignition of Light Hydrocarbon Mixtures Relevant to Thermal Cracking of Jet Fuels," AIAA Sci. & Tech. Forum, San Diego, Jan. 2016 DOI 10.2514/6.2016-0661
1110	D.F. Davidson, Y.Y. Zhu, J. Shao and R.K. Hanson, "Ignition Delay Time Correlations for Distillate Fuels," <i>Fuel</i> 187 26–32 (2017) DOI 10.1016/j.fuel.2016.09.047
1109	R. Sur, R.M. Spearrin, W.Y. Peng, C.L. Strand, J.B. Jeffries, G.M. Enns and R.K. Hanson, "Line Intensities and Temperature-dependent Line Broadening Coefficients of Q-branch Transitions in the ν_2 Band of Ammonia near 10.4 μm ," <i>JQSRT</i> 175 90-99 (2016) DOI 10.1016/j.jqsrt.2016.02.002
1108	S. Wang, D.F. Davidson and R.K. Hanson, "Rate Constants of Long, Branched, and Unsaturated Aldehydes with OH at Elevated Temperatures," 36th Symp. (Int.) on Combustion, Seoul, Korea, 2016 DOI 10.1016/j.proci.2016.06.017
1107	W. Ren, K.-Y. Lam, D.F. Davidson and R.K. Hanson, "Pyrolysis and Oxidation of Methyl Acetate in a Shock Tube: A Multi-species Time-history Study," 36th Symp. (Int.) on Combustion, Seoul, Korea, 2016 DOI 10.1016/j.proci.2016.05.002
1106	V.A. Troutman, C.L. Strand, M.F. Campbell, A.M. Tulgestke, V.A. Miller, D.F. Davidson and R.K. Hanson, "High-speed OH* chemiluminescence imaging of ignition through a shock tube end-wall," <i>App. Phys B</i> 122 (3) (2016) DOI 10.1007/s00340-016-6326-y
1105	V.A. Miller, M. Tilghman and R.K. Hanson, "The Hidden Complexities of the Simple Match," <i>Physics of Fluids</i> 27 091105 (2015) DOI 10.1063/1.4930906
1104	M.F. Campbell, D.F. Davidson and R.K. Hanson, "Scaling Relation for High-Temperature Biodiesel Surrogate Ignition Delay Times," <i>Fuel</i> 164 151–159 (2016) DOI 10.1016/j.fuel.2015.09.078
1103	M. Nations, S. Wang, C.S. Goldenstein, K. Sun, D.F. Davidson, J.B. Jeffries and R.K. Hanson, "Shock Tube Measurements of Excited Oxygen Atoms using Cavity-enhanced Absorption Spectroscopy," <i>Applied Optics</i> 54 (29) 8766-8775 (2015) DOI 10.1364/AO.54.008766
1102	M.F. Campbell, D.R. Haylett, D.F. Davidson and R.K. Hanson, "AEROFROSH: A Shock Condition Calculator for Multi-component Fuel Aerosol-laden Flows," <i>Shock Waves</i> 26 (4) 429-447 (2015) DOI 10.1007/s00193-015-0582-3
1101	S. Wang, S. Li, D.F. Davidson and R.K. Hanson, "Shock Tube Measurement of the High-temperature Rate Constant for OH + CH ₃ → Products," <i>J. Phys. Chem. A</i> 119 (33) 8799–8805 (2015) DOI 10.1021/acs.jpca.5b05725
1100	D.F. Davidson, A. Tulgestke and R.K. Hanson, "High-speed Imaging of Ignition behind Reflected Shock Waves," AIAA Sci. & Tech. Forum, San Diego, Jan. 2016, DOI 10.2514/6.2016-0188

Publication list of Ron Hanson

1099	D.F. Davidson, Y. Zhu, S. Wang, T. Parise, R. Sur, and R.K. Hanson, "Shock Tube Measurements of Jet and Rocket Fuels," AIAA Sci. & Tech. Forum, San Diego, Jan. 2016 DOI 10.2514/6.2016-0178
1098	R.K. Hanson and D.F. Davidson, "Chemical Kinetics and Reacting Flows," invited paper, ISSW 30/Tel Aviv, Jul. 2015, DOI 10.1007/978-3-319-46213-4_7
1097	M. Gamba, V.A. Miller, M.G. Mungal and R.K. Hanson, "Temperature and Number Density Measurement in Non-uniform Supersonic Flowfields Undergoing Mixing using Toluene PLIF Thermometry," <i>App. Phys. B: Lasers and Optics</i> 120 285-304 (2015) DOI 10.1007/s00340-015-6136-7
1096	C.S. Goldenstein, V.A. Miller and R.K. Hanson, "Infrared Planar Laser-induced Fluorescence with a CW Quantum-Cascade Laser for Spatially Resolved CO ₂ and Gas Properties," <i>App. Phys. B</i> 120 185-199 (2015) DOI 10.1007/s00340-015-6167-0
1095	V.A. Miller, R.M. Spearrin, C.L. Strand, R.K. Hanson and G.M. Enns, "Breath-Ammonia Spectroscopy for Point-of-care Pediatric Applications," <i>Biomed. Phys. Eng. Express</i> , submitted 7/2015.
1094	R. Sur, K. Sun, J.B. Jeffries, J.G. Socha and R.K. Hanson, "Scanned-wavelength-modulation Spectroscopy Sensor for CO, CO ₂ , CH ₄ and H ₂ O in a High-pressure Engineering-scale Transport-reactor Coal Gasifier," <i>Fuel</i> 150 102-111 (2015) DOI 10.1016/j.fuel.2015.02.003
1093	S. Wang, K. Sun, D.F. Davidson, J.B. Jeffries and R.K. Hanson, "Shock Tube Measurement of Acetone Dissociation using Cavity-enhanced Absorption Spectroscopy of CO," <i>J. Phys. Chem. A</i> 119 7257-7262 (2015) DOI 10.1021/jp511642a
1092	C.S. Goldenstein and R.K. Hanson, "Diode-laser Measurements of Linestrength and Temperature-dependent Lineshape Parameters for H ₂ O Transitions near 1.4 μm using Voigt, Rautian, Galatry and Speed-dependent Voigt Profiles," <i>JQSRT</i> 152 127-139 (2015) DOI 10.1016/j.jqsrt.2014.11.008
1091	D.F. Davidson, A. Tulgestke, Y. Zhu and R.K. Hanson, " Species Time-history Measurements during Jet Fuel Pyrolysis and Oxidation ," ISSW 30/Tel Aviv, 7/2015 DOI 10.1007/978-3-319-46213-4_51
1090	D.F. Davidson, A. M. Tulgestke, C. Strand, M. Campbell and R.K. Hanson, "Rapid Chemiluminescent Imaging behind Reflected Shock Waves," ISSW 30/ Tel Aviv, 7/2015 DOI 10.1007/978-3-319-46213-4_52
1089	R. Sur, S. Wang, K. Sun, D.F. Davidson, J.B. Jeffries and R.K. Hanson, "High Sensitivity Interference-free Diagnostic for Measurement of Methane in Shock Tubes," <i>JQSRT</i> 156 80-87 (2015) DOI 10.1016/j.jqsrt.2015.01.023
1088	S. Wang, E. Dames, D.F. Davidson and R.K. Hanson, "Reaction Rate Constant of CH ₂ O + H=HCO + H ₂ Revisited: A Combined Study of Direct Shock Tube Measurement and Transition State Theory Calculation," <i>J. Phys. Chem. A</i> 118 10201-10209 (2014) DOI 10.1021/jp5085795
1087	Y. Zhu, R.K. Hanson and D.F. Davidson, "Shock Tube/ Laser Absorption Measurements of Jet Fuel Pyrolysis and Oxidation," 53rd AIAA Aerospace Sciences Meeting, Kissimmee, FL 1/2015 DOI 10.2514/6.2015-1158
1086	C.L. Strand and R.K. Hanson, "Quantification of Transient Supersonic Impulse Flow Conditions via High-bandwidth TDLAS Measurements," <i>AIAA J.</i> 53 2978-2987 (2015) DOI 10.2514/1.J053842
1085	S. Li, S.M. Sarathy, D.F. Davidson, R.K. Hanson and C.K. Westbrook, "Shock Tube and Modeling Study of 2,7-dimethyloctane Pyrolysis and Oxidation," <i>Comb. and Flame</i> 162 2296-2306 (2015) DOI 10.1016/j.combustflame.2015.01.027
1084	K. Sun, S. Wang, R. Sur, X. Chao, J.B. Jeffries and R.K. Hanson, "Time-resolved in situ Detection of CO in a Shock Tube using Cavity-enhanced Absorption Spectroscopy with a Quantum-cascade Laser near 4.6 μm," <i>Optics Express</i> 22 (20) 24559-24565 (2014) DOI 10.1364/OE.22.024559
1083	R.M. Spearrin, I.A. Schultz, J.B. Jeffries and R.K. Hanson, "Laser Absorption of Nitric Oxide for Thermometry in High-enthalpy Air," <i>Meas. Sci. and Tech.</i> 25 125103 (7pp) (2014) DOI 10.1088/0957-0233/25/12/125103

Publication list of Ron Hanson

1082	C.S. Goldenstein, C.A. Almodovar, J.B. Jeffries and R.K. Hanson, "High-bandwidth Scanned-wavelength-modulation Spectroscopy Sensors for Temperature and H ₂ O in a Rotating Detonation Engine," <i>Meas. Sci. and Tech.</i> 25 (2014) DOI 10.1088/0957-0233/25/10/105104
1081	K. Owen, D.F. Davidson and R.K. Hanson, "Measurements of Oxygen Dissociation Using Laser Absorption," <i>AIAA J. of Thermophysics and Heat Transfer</i> 30 (2) 274-278 (2016) DOI 10.2514/1.T4506
1080	K. Owen, D.F. Davidson and R.K. Hanson, "Oxygen Vibrational Relaxation Times: Shock Tube/Laser Absorption Measurements," <i>AIAA J. of Thermophysics and Heat Transfer</i> 30 (4) 791-798 (2016) DOI 10.2514/1.T4505
1079	C.H. Smith, C.S. Goldenstein and R.K. Hanson, "A Scanned-wavelength Modulation Absorption Spectroscopy Sensor for Temperature and H ₂ O in Low-pressure Flames," <i>Meas. Sci. and Tech.</i> 25 115501 (13pp) (2014) DOI 10.1088/0957-0233/25/11/115501
1078	S.M. Burke, U. Burke, R. McDonagh, O. Mathieu, E.L. Petersen, W. Wang, M.A. Oehlschlaeger, B. Rhodes, R.K. Hanson, D.F. Davidson, B.W. Weber, C.-J. Sung, J. Santer, Y. Ju, E.N. Volkov, A.A. Konnov, M. Alrefae, F. Khaled, A. Farooq and H.J. Curran, "An Experimental and Modeling Study of Propene Oxidation. Part 2: Ignition Delay Time and Flame Speed Measurements," <i>Comb. and Flame</i> 132 170-177 (2014) DOI 10.1016/j.combustflame.2014.07.032
1077	S. Li, Y. Zhu, D.F. Davidson and R.K. Hanson, "Pyrolysis Study of Conventional and Alternative Fuels behind Reflected Shock Waves," <i>Fuel</i> 132 170-177 (2014) DOI 10.1016/j.fuel.2014.04.077
1076	M.F. Campbell, A.M. Tulgestke, D.F. Davidson and R.K. Hanson, "A Second-generation Constrained Reaction Volume Shock Tube," <i>Rev. Sci. Inst.</i> 85 055108 (2014) DOI 10.1063/1.4875056
1075	M.F. Campbell, T. Parise, A.M. Tulgestke, R.M. Spearrin, D.F. Davidson and R.K. Hanson, "Strategies for Obtaining Long Constant-pressure Test Times in Shock Tubes," <i>Shock Waves</i> 25 (6) 651-665 (2015) DOI 10.1007/s00193-015-0596-x
1074	M.F. Campbell, D.R. Haylett, D.F. Davidson and R.K. Hanson, "Ignition Delay Times of Very-low-vapor-pressure Biodiesel Surrogates behind Reflected Shock Waves," <i>Fuel</i> 126 271-281 (2014) DOI 10.1016/j.fuel.2014.02.050
1073	M.F. Campbell, K.G. Freeman, D.F. Davidson and R.K. Hanson, "FTIR Measurements of Mid-IR Absorption Spectra of Gaseous Fatty Acid Methyl Esters at T = 25 – 500° c," <i>JQSRT</i> 145 57-73 (2014) DOI 10.1016/j.jqsrt.2014.04.017
1072	R.M. Spearrin, C.S. Goldenstein, I.A. Schultz, J.B. Jeffries and R.K. Hanson, "Simultaneous Sensing of Temperature, CO and CO ₂ in a Scramjet Combustor using Quantum Cascade Laser Absorption Spectroscopy," <i>App. Phys. B</i> 117 689-698 (2014) DOI 10.1007/s00340-014-5884-0
1071	M.F. Campbell, D.F. Davidson and R.K. Hanson, "Ignition Delay Times of Very-low-vapor-pressure Biodiesel Surrogates behind Reflected Shock Waves," <i>Fuel</i> 126 271-281 (2014) DOI 10.1016/j.fuel.2014.02.050
1070	K. Sun, S. Wang, R. Sur, X. Chao, J.B. Jeffries and R.K. Hanson, "Sensitive and Rapid Laser Diagnostics for Shock Tube Kinetics Studies using Cavity-enhanced Absorption Spectroscopy," <i>Optics Express</i> 22 (8) 9291-9300 (2014) DOI 10.1364/OE.22.009291
1069	V.A. Miller, V.A. Troutman and R.K. Hanson, "Near-kHz 3D Tracer-based LIF Imaging of a Co-flow Jet using Toluene," <i>Meas. Sci. and Tech.</i> 25 1-10 (2014) DOI 10.1088/0957-0233/25/7/075403
1068	K. Sun, R. Sur, J.B. Jeffries, R.K. Hanson, T. Clark, J. Anthony, S. Machove and J. Northington, "Application of a Wavelength-scanned WMS H ₂ O Absorption Measurements in an Engineering-scale High-pressure Coal Gasifier," <i>App. Phys. B</i> 117 (1) 411-421 (2014) DOI 10.1007/s00340-014-5850-x
1067	R.M. Spearrin, W. Ren, J.B. Jeffries and R.K. Hanson, "Multi-band Infrared CO ₂ Absorption Sensor for Sensitive Temperature and Species Measurements in High-temperature Gases," <i>App. Phys. B</i> 116 855-865 (2014) DOI 10.1007/s00340-014-5772-7

Publication list of Ron Hanson

1066	C.S. Goldenstein, R.M. Spearrin, I.A. Schultz, J.B. Jeffries and R.K. Hanson, "Wavelength Modulation Spectroscopy near 1.4 μm for Measurements of H_2O and Temperature in High-pressure and – temperature Gases," <i>Meas. Sci. and Tech.</i> 25 1-9 (2014) DOI 10.1088/0957-0233/25/5/055101
1065	C.S. Goldenstein, C.L. Strand, I.A. Schultz, K. Sun, J.B. Jeffries and R.K. Hanson, "Fitting of Calibration-free Scanned-wavelength-modulation Spectroscopy Spectra for Determination of Gas Properties and Absorption Lineshapes," <i>Applied Optics</i> 53 356-367 (2014) DOI 10.1364/AO.53.000356
1064	I. Stranic and R.K. Hanson, "Laser Absorption Diagnostic for Measuring Acetylene Concentrations in Shock Tubes," <i>JQSRT</i> 142 58-65 (2014) DOI 10.1016/j.jqsrt.2014.03.024
1063	V.A. Miller, V.A. Troutman, R.K. Hanson and M.G. Mungal, "20 kHz Toluene PLIF Imaging of a Jet in Nearly Sonic Crossflow," <i>App. Phys. B</i> 117 401-410 (2014) DOI 10.1007/s00340-014-5849-3
1062	A. Farooq, D.F. Davidson, R.K. Hanson and C.K. Westbrook, "A Comparative Study of the Chemical Kinetics of Methyl and Ethyl Propanoate," <i>Fuel</i> 134 26-38 (2014) DOI 10.1016/j.fuel.2014.05.035
1061	R.M. Spearrin, C.S. Goldenstein, J.B. Jeffries and R.K. Hanson, "Quantum Cascade Laser Absorption Sensor for Carbon Monoxide in High-pressure-gases using Wavelength-modulation Spectroscopy," <i>Applied Optics</i> 53 1938-1946 (2014) DOI 10.1364/AO.53.001938
1060	S. Li, D.F. Davidson and R.K. Hanson, "Shock Tube Study of Ethylamine Pyrolysis and Oxidation," <i>Comb and Flame</i> 161 2512-2518 (2014) DOI 10.1016/j.combustflame.2014.04.002
1059	P.P. Lappas, A.D. McCartt, S.D. Gates, J.B. Jeffries and R.K. Hanson, "Laser Measurements of Bacterial Endospore Destruction from Shock Waves," SPIE Conf., Melbourne, Australia, 11/2013, <i>Proc. SPIE.</i> 8923 DOI 10.1117/12.2033936
1058	V.A. Miller, V.A. Troutman and R.K. Hanson, "Demonstration of 15 kHz Planar Laser-induced Fluorescence Imaging and 940 Hz Volumetric Reconstruction of a Co-flow Jet using Acetone, 3-Pentanone, Toluene and Anisole," <i>Retitled See 1069.</i>
1057	R.M. Spearrin, J.B. Jeffries and R.K. Hanson, "Mid-infrared Absorption Sensor for Measurements of CO and CO_2 in Propulsion Flows," AIAA S&T Forum 2014, National Harbor, MD, Jan. 2014 DOI 10.2514/6.2014-0390
1056	W. Ren, R.M. Spearrin, D.F. Davidson and R.K. Hanson, "Experimental and Modeling Study of the Thermal Decomposition of C_3 - C_5 Ethyl Esters behind Reflected Shock Waves," <i>J. Phys. Chem. A</i> 118 1785-1798 (2014) DOI 10.1021/jp411766b
1055	R.M. Spearrin, S. Li, D.F. Davidson, J.B. Jeffries and R.K. Hanson, "High-temperature Iso-butene Diagnostic for Shock Tube Kinetics using a Pulsed Quantum Cascade Laser near 11.3 μm ," <i>Proc. Comb. Inst.</i> 35 3645-3651 (2015) DOI 10.1016/j.proci.2014.04.002
1054	M.F. Campbell, S. Wang, C.S. Goldenstein, R.M. Spearrin, A.M. Tulgestke, L.T. Zaczek, D.F. Davidson and R.K. Hanson, "Constrained Reaction Volume Shock Tube Study of n-Heptane Oxidation: Ignition Delay Times, Multi-species Time-histories and Temperature Profiles," <i>Proc. Comb. Inst.</i> 35 231-239 (2015) DOI 10.1016/j.proci.2014.05.001
1053	C.S. Goldenstein, R.M. Spearrin, J.B. Jeffries and R.K. Hanson, "Infrared Laser Absorption Sensors for Multiple Performance Parameters in a Detonation Combustor," <i>Proc. Comb. Inst.</i> 35 3739-3747 (2015) DOI 10.1016/j.proci.2014.05.027
1052	L.T. Zaczek, K.Y. Lam, D.F. Davidson and R.K. Hanson, "A Shock Tube Study of $\text{CH}_3\text{OH} + \text{OH} \rightarrow$ Products using OH Laser Absorption," <i>Proc. Comb. Inst.</i> 35 377-384 (2015) DOI 10.1016/j.proci.2014.05.051
1051	Y. Zhu, S. Li, D.F. Davidson and R.K. Hanson, "Ignition Delay Times of Conventional and Alternative Fuels behind Reflected Shock Waves," <i>Proc. Comb. Inst.</i> 35 241-248 (2015) DOI 10.1016/j.proci.2014.05.034