

# Subith S Vasu

## List of Publications by Year in descending order

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179  
papers

3,856  
citations

172457

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144013

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183  
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183  
docs citations

183  
times ranked

2477  
citing authors

#	ARTICLE	IF	CITATIONS
1	Shock tube investigation of high-temperature, extremely-rich oxidation of several co-optima biofuels for spark-ignition engines. <i>Combustion and Flame</i> , 2022, 236, 111794.	5.2	8
2	Experimental Technique for Accurate, High-Temperature, Low-Pressure Measurement Conditions in Shock Tubes. , 2022, , .		0
3	Ignition delay times of methane fuels at thrust chamber conditions in an ultra-high-pressure shock tube. , 2022, , .		1
4	Test Location Effects on Ignition Delay Times in Shock Tubes. , 2022, , .		0
5	Temperature Measurement inside Detonation Flows with Monolithic Multi-QCLS. , 2022, , .		0
6	Influence of Binary Diffusion Coefficients on Supercritical CO <sub>2</sub> Flame Characteristics of Methane/Natural Gas. , 2022, , .		0
7	Soot Formation from a Bio-derived High Performance Jet Fuel. , 2022, , .		0
8	Ammonia Hydrogen Ignition Measurements for Clean Aircraft Propulsion. , 2022, , .		2
9	High Pressure Ignition Study of Methane and Natural Gas in Highly CO <sub>2</sub> Diluted Mixtures. , 2022, , .		0
10	Selective terahertz absorber for angle and polarization-independent spectral sensing. <i>Optics Letters</i> , 2022, 47, 1514.	3.3	6
11	Direct measurement of reaction rate for decomposition of diisopropyl methylphosphonate at high temperature using shock tube and laser absorption. <i>International Journal of Chemical Kinetics</i> , 2022, 54, 371-380.	1.6	5
12	Shock Tube and Flame Speed Measurements of 2,4,4-Trimethyl-1-Pentene: A Co-Optima Biofuel. <i>Journal of Energy Resources Technology</i> , Transactions of the ASME, 2022, 144, .	2.3	1
13	Characterization of a new ultra-high pressure shock tube facility for combustion and propulsion studies. <i>Review of Scientific Instruments</i> , 2022, 93, .	1.3	14
14	A comprehensive experimental and improved kinetic modeling study on the pyrolysis and oxidation of propyne. <i>Proceedings of the Combustion Institute</i> , 2021, 38, 479-488.	3.9	41
15	Reflected shock-initiated ignition probed via simultaneous lateral and endwall high-speed imaging with a transparent, cylindrical test-section. <i>Combustion and Flame</i> , 2021, 224, 43-53.	5.2	17
16	A comprehensive experimental and kinetic modeling study of 1- and 2-pentene. <i>Combustion and Flame</i> , 2021, 223, 166-180.	5.2	47
17	Ignition delay time and speciation of dibutyl ether at high pressures. <i>Combustion and Flame</i> , 2021, 223, 98-109.	5.2	22
18	Shock tube/laser absorption measurements of the pyrolysis of butyl acetate isomers. , 2021, , .		0

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19	Multi-species measurements during shock heated hydrocarbon pyrolysis with a broadband mid-IR OPO. , 2021, , .		0
20	Accurate prediction of terahertz spectra of molecular crystals of fentanyl and its analogs. Scientific Reports, 2021, 11, 4062.	3.3	8
21	Laser-induced fluorescence thermometry of supercritical CO <sub>2</sub> flows inside a micro-channel. Optics Letters, 2021, 46, 1924.	3.3	5
22	Oxidation and pyrolysis of methyl propyl ether. International Journal of Chemical Kinetics, 2021, 53, 915-938.	1.6	15
23	Monolithic Multi-QCL For Temperature Measurements In Detonations. , 2021, , .		0
24	An experimental and detailed kinetic modeling study of the pyrolysis and oxidation of allene and propyne over a wide range of conditions. Combustion and Flame, 2021, 233, 111578.	5.2	26
25	Influence of Equation-of-States on Supercritical CO <sub>2</sub> Combustion Mixtures. Journal of Energy Resources Technology, Transactions of the ASME, 2021, 143, .	2.3	4
26	High-temperature DMMP combustion measurements in a shock tube using laser absorption spectroscopy. , 2020, , .		0
27	DMMP pyrolysis and oxidation studies at high temperature inside a shock tube using laser absorption measurements of CO. Combustion and Flame, 2020, 214, 14-24.	5.2	21
28	High-pressure shock tube study of ethanol oxidation: Ignition delay time and CO time-history measurements. Combustion and Flame, 2020, 212, 486-499.	5.2	30
29	The influence of iso-butene kinetics on the reactivity of di-isobutylene and iso-octane. Combustion and Flame, 2020, 222, 186-195.	5.2	31
30	Multispecies Single Light-Emitting Diode Mid-Infrared Gas Sensor for Space Habitats and Vehicles. New Space, 2020, 8, 77-86.	0.8	0
31	Experimental and Kinetic Modeling Study of Laminar Burning Velocities of Cyclopentanone and Its Binary Mixtures with Ethanol and n-Propanol. Energy & Fuels, 2020, 34, 11408-11416.	5.1	4
32	Far-infrared spectrally selective LiTaO <sub>3</sub> and AlN pyroelectric detectors using resonant subwavelength metal surface structures. MRS Advances, 2020, 5, 2005-2012.	0.9	3
33	High accuracy machine learning identification of fentanyl-relevant molecular compound classification via constituent functional group analysis. Scientific Reports, 2020, 10, 13569.	3.3	9
34	Elucidating the differences in oxidation of high-performance $\hat{1}\pm$ - and $\hat{1}^2$ - diisobutylene biofuels via Synchrotron photoionization mass spectrometry. Scientific Reports, 2020, 10, 21776.	3.3	2
35	Subcooled Flow Boiling of Carbon Dioxide Near the Critical Point Inside a Microchannel. Physical Review Applied, 2020, 14, .	3.8	10
36	High-Pressure Ignition and Flame Propagation Measurements of CO <sub>2</sub> Diluted Natural Gas/Oxidizer Mixtures for Advanced Rocket and Gas Turbine Combustors. , 2020, , .		0

#	ARTICLE	IF	CITATIONS
37	Simultaneous measurements of carbon monoxide and ethylene time-histories during rich oxidation of a jet fuel surrogate behind reflected shock waves. , 2020, , .		0
38	Autoignition delay times measurements of linear unsaturated jet fuel compounds inside a shock tube. , 2020, , .		0
39	DIMP Pyrolysis at High Temperatures Behind Reflected Shock Waves. , 2020, , .		0
40	Characterization of a Laser Diagnostic Sensor for Gas Turbine Combustor Flows. , 2020, , .		0
41	Ignition delay time and CO time-history measurements in a shock tube during high performance jet fuel surrogate combustion. , 2020, , .		0
42	Shock tube and laser absorption study of CO time-histories during combustion of branched alkenes. , 2020, , .		0
43	Novel Diagnostic Technique for Ultra-Fast, Simultaneous Temperature and Concentration Measurements for Harsh Hypersonic Flows. , 2020, , .		1
44	Influence of the double bond position in combustion chemistry of methyl butene isomers: A shock tube and laser absorption study. International Journal of Chemical Kinetics, 2020, 52, 739-751.	1.6	13
45	Time-resolved measurements of key intermediate products during cyclopentanone pyrolysis in a shock tube. , 2020, , .		1
46	Laminar burning velocity measurements of high-performance jet fuel/air mixtures. , 2020, , .		0
47	Laser speciation measurements during shock tube ignition of cyclic jet and rocket fuel components. , 2020, , .		0
48	Measuring the effectiveness of high-performance Co-Optima biofuels on suppressing soot formation at high temperature. Proceedings of the National Academy of Sciences of the United States of America, 2020, 117, 3451-3460.	7.1	31
49	Comment on "Simultaneous lateral and endwall high-speed visualization of ignition in a circular shock tube" [Combustion and Flame 214 (2020) 263-265]. Combustion and Flame, 2020, 217, 37.	5.2	0
50	Revealing the critical role of radical-involved pathways in high temperature cyclopentanone pyrolysis. Combustion and Flame, 2020, 216, 280-292.	5.2	14
51	Ignition Delay Times of Oxy-Syngas and Oxy-Methane in Supercritical CO2 Mixtures for Direct-Fired Cycles. Journal of Engineering for Gas Turbines and Power, 2020, 142, .	1.1	19
52	Effects of High Fuel Loading and CO2 Dilution on Oxy-Methane Ignition Inside a Shock Tube at High Pressure. Journal of Energy Resources Technology, Transactions of the ASME, 2020, 142, .	2.3	12
53	Measurements of Density and Sound Speed in Mixtures Relevant to Supercritical CO2 Cycles. Journal of Energy Resources Technology, Transactions of the ASME, 2020, 142, .	2.3	8
54	Probing the Effects of NOx and SOx Impurities on Oxy-Fuel Combustion in Supercritical CO2: Shock Tube Experiments and Chemical Kinetic Modeling. Journal of Energy Resources Technology, Transactions of the ASME, 2020, 142, .	2.3	17

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55	Broadband mid-infrared optical parametric oscillator for dynamic high-temperature multi-species measurements in reacting systems. <i>Optics Letters</i> , 2020, 45, 491.	3.3	27
56	Development of a high temperature pyrolysis mechanism for cyclopentanone, a potential biofuel derived from biomass. , 2020, , .		0
57	Effect of Impurities on Compressor and Cooler in Supercritical CO <sub>2</sub> Cycles. <i>Journal of Energy Resources Technology</i> , Transactions of the ASME, 2019, 141, .	2.3	34
58	Ignition delay times of methane and hydrogen highly diluted in carbon dioxide at high pressures up to 300 atm. <i>Proceedings of the Combustion Institute</i> , 2019, 37, 4555-4562.	3.9	69
59	An experimental, theoretical, and modeling study of the ignition behavior of cyclopentanone. <i>Proceedings of the Combustion Institute</i> , 2019, 37, 657-665.	3.9	18
60	Towards a laser-absorption technique for ultra-fast, simultaneous temperature and concentration measurements inside pressure gain combustion devices. , 2019, , .		1
61	Molecular dynamics of combustion reactions in supercritical carbon dioxide. Part 4: boxed MD study of formyl radical dissociation and recombination. <i>Journal of Molecular Modeling</i> , 2019, 25, 35.	1.8	6
62	Soot formation behind reflected shock waves in ethylene and oxygenated biofuels. , 2019, , .		0
63	A Counter-flow Diffusion Flame study for the Supercritical CO <sub>2</sub> Combustion. , 2019, , .		0
64	Laminar burning velocity measurements in methyl ester/air mixtures. , 2019, , .		1
65	Large Eddy Simulation Of Turbulent Reacting Flow Using Premixed Conditional Moment Closure Method. , 2019, , .		0
66	Co-optima fuels combustion: A comprehensive experimental investigation of prenol isomers. <i>Fuel</i> , 2019, 254, 115630.	6.4	30
67	Molecular Dynamics of Combustion Reactions in Supercritical Carbon Dioxide. Part 5: Computational Study of Ethane Dissociation and Recombination Reactions $C_2H_6 \rightleftharpoons CH_3 + CH_3$ . <i>Journal of Physical Chemistry A</i> , 2019, 123, 4776-4784.	2.5	6
68	Theoretical Calculation of Reaction Rates and Combustion Kinetic Modeling Study of Triethyl Phosphate (TEP). <i>Journal of Physical Chemistry A</i> , 2019, 123, 4764-4775.	2.5	15
69	A shock tube and laser absorption study of CO time-histories during bio ether oxidation. , 2019, , .		0
70	Time-Resolved, Laser-Absorption Temperature Measurement in Shock Heated Mixtures with Reduced Beam Steering and Emission Noise. , 2019, , .		0
71	Molecular Dynamics of Combustion Reactions in Supercritical Carbon Dioxide. 6. Computational Kinetics of Reactions between Hydrogen Atom and Oxygen Molecule $H + O_2 \rightleftharpoons HO + O$ and $H + O_2 \rightleftharpoons HO_2$ . <i>Journal of Physical Chemistry A</i> , 2019, 123, 10772-10781.	2.5	7
72	Design of External Cavity Quantum Cascade Lasers for Combustion and Explosion Diagnostics. , 2019, , .		1

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73	Cover Image, Volume 51, Issue 1. International Journal of Chemical Kinetics, 2019, 51, i.	1.6	0
74	High-Pressure Oxy-Syngas Ignition Delay Times With CO <sub>2</sub> Dilution: Shock Tube Measurements and Comparison of the Performance of Kinetic Mechanisms. Journal of Engineering for Gas Turbines and Power, 2019, 141, .	1.1	13
75	Quantum chemical and master equation study of OH + CH <sub>2</sub> O → H <sub>2</sub> O + CHO reaction rates in supercritical CO <sub>2</sub> environment. International Journal of Chemical Kinetics, 2019, 51, 42-48.	1.6	12
76	High-speed 4-D Imaging Study of Isooctane Combustion in a Shock Tube. , 2019, , .		2
77	Infrared absorption cross sections of several organo-phosphorous chemical-weapon simulants. Journal of Molecular Spectroscopy, 2019, 355, 59-65.	1.2	18
78	A General Study of Counterflow Diffusion Flames for Supercritical CO <sub>2</sub> Combustion. Journal of Engineering for Gas Turbines and Power, 2019, 141, .	1.1	8
79	A General Study of Counterflow Diffusion Flames for Supercritical CO <sub>2</sub> Mixtures. , 2019, , .		3
80	Acousto-optically modulated quantum cascade laser for high-temperature reacting systems thermometry. Optics Letters, 2019, 44, 1435.	3.3	17
81	Ignition Delay Times of Methane and Hydrogen Highly Diluted in Carbon Dioxide. , 2019, , 151-157.		0
82	Acousto-Optically Modulated Quantum Cascade Laser (AOM QCL) for Combustion and Detonation Thermometry. , 2019, , .		0
83	Molecular Dynamics Study of Combustion Reactions in Supercritical Environment. Part 3: Boxed MD Study of CH <sub>3</sub> + HO <sub>2</sub> → CH <sub>3</sub> O + OH Reaction Kinetics. Journal of Physical Chemistry A, 2018, 122, 3337-3345.	2.5	6
84	Molecular Dynamics Study of Combustion Reactions in a Supercritical Environment. Part 2: Boxed MD Study of CO + OH → CO <sub>2</sub> + H Reaction Kinetics. Journal of Physical Chemistry A, 2018, 122, 897-908.	2.5	12
85	Sarin simulants combustion at high temperature: Time-resolved laser absorption spectroscopy of intermediate products in a shock tube. , 2018, , .		0
86	A Study of Methane and Hydrogen Ignition Delay Times in CO <sub>2</sub> at High Pressures Near 40 atm. , 2018, , .		0
87	CO time-histories measurements behind reflected shockwaves during ignition of various gaseous fuels. , 2018, , .		0
88	Is Ignition in a Shock Tube Homogeneous? An Experimental Study Behind Reflected Shock Waves. , 2018, , .		1
89	Shock Tube/Laser Absorption and Kinetic Modeling Study of Triethyl Phosphate Combustion. Journal of Physical Chemistry A, 2018, 122, 3829-3836.	2.5	23
90	Hazardous Gas Detection Sensor Using Broadband Light-Emitting Diode-Based Absorption Spectroscopy for Space Applications. New Space, 2018, 6, 28-36.	0.8	7

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91	A Study on Design Optimization of Direct-Fired sCO <sub>2</sub> Combustors. , 2018, , .		0
92	LaCoO <sub>3</sub> catalytically enhanced MgO partially stabilized ZrO <sub>2</sub> in heterogeneous methane combustion. Experimental Thermal and Fluid Science, 2018, 90, 330-335.	2.7	6
93	New insights into the shock tube ignition of H <sub>2</sub> /O <sub>2</sub> at low to moderate temperatures using high-speed end-wall imaging. Combustion and Flame, 2018, 187, 11-21.	5.2	74
94	High temperature infrared absorption cross sections of methane near 3.4 μm in Ar and CO <sub>2</sub> mixtures. Journal of Quantitative Spectroscopy and Radiative Transfer, 2018, 206, 36-45.	2.3	19
95	MHz-Rate Measurements of Time-Resolved Species Concentrations in Shock Heated Chemical Weapon Simulants. , 2018, , .		3
96	High Pressure Ignition Delay Times Measurements and Comparison of the Performance of Several Oxy-Syngas Mechanisms Under High CO <sub>2</sub> Dilution. , 2018, , .		0
97	Development of a Global Mechanism for Oxy-Methane Combustion in a CO <sub>2</sub> Environment. , 2018, , .		1
98	First Demonstration of an Acousto-Optically Modulated Quantum Cascade Laser As a Broadband, Time-Resolved Combustion Diagnostic. , 2018, , .		0
99	A Strategy of Reactant Mixing in Methane Direct-Fired sCO <sub>2</sub> Combustors. , 2018, , .		2
100	A Reduced Kinetic Mechanism for Oxy/Methane sCO <sub>2</sub> Combustor Simulations. , 2018, , .		0
101	Advancement of LED-based hazardous gas sensors for space applications. , 2018, , .		0
102	An experimental and chemical kinetic modeling study of 1,3-butadiene combustion: Ignition delay time and laminar flame speed measurements. Combustion and Flame, 2018, 197, 423-438.	5.2	432
103	Catalytic Effect of Carbon Dioxide on Reaction OH + CO → H + CO <sub>2</sub> in Supercritical Environment: Master Equation Study. Journal of Physical Chemistry A, 2018, 122, 6355-6359.	2.5	11
104	Pyrolysis of cyclopentanone: A shock tube and laser absorption study. , 2018, , .		0
105	Reduced Chemical Kinetic Mechanisms for Oxy/Methane Supercritical CO <sub>2</sub> Combustor Simulations. Journal of Energy Resources Technology, Transactions of the ASME, 2018, 140, .	2.3	29
106	Shock Tube Demonstration of Acousto-Optically Modulated Quantum Cascade Laser as a Broadband, Time-Resolved Combustion Diagnostic. Journal of Energy Resources Technology, Transactions of the ASME, 2018, 140, .	2.3	8
107	High-Speed Imaging of the Dynamics of H <sub>2</sub> /O <sub>2</sub> Ignition at Low to Moderate Temperatures in a Shock Tube. , 2017, , .		4
108	Pyrolysis of RP-2 and Surrogate Fuels in a Jet Stirred Reactor Coupled with Synchrotron Photo Ionization Mass Spectrometry. , 2017, , .		1

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109	Jet Fuel Thermal Stability Investigations using Ellipsometry. , 2017, , .		0
110	Temperature Jump Pyrolysis Studies of RP-2 Fuel. , 2017, , .		0
111	Flow stabilized porous heterogeneous combustor. Part I: Design and development. Fuel Processing Technology, 2017, 159, 353-362.	7.2	11
112	Flow stabilized porous heterogeneous combustor. Part II: Operational parameters and the acoustic emission. Fuel Processing Technology, 2017, 159, 412-420.	7.2	7
113	Quantum Chemical Study of Supercritical Carbon Dioxide Effects on Combustion Kinetics. Journal of Physical Chemistry A, 2017, 121, 3728-3735.	2.5	19
114	Performance of a Laser Ignited Multicylinder Lean Burn Natural Gas Engine. Journal of Engineering for Gas Turbines and Power, 2017, 139, .	1.1	1
115	Thermal and Acoustic Performance of Al <sub>2</sub> O <sub>3</sub> , MgO-ZrO <sub>2</sub> , and SiC Porous Media in a Flow-Stabilized Heterogeneous Combustor. Energy & Fuels, 2017, 31, 7552-7561.	5.1	11
116	Ellipsometric Measurements of the Thermal Stability of Alternative Fuels. Journal of Energy Resources Technology, Transactions of the ASME, 2017, 139, 062207-622078.	2.3	11
117	Measurements and interpretation of shock tube ignition delay times in highly CO <sub>2</sub> diluted mixtures using multiple diagnostics. Combustion and Flame, 2017, 180, 63-76.	5.2	92
118	High temperature shock tube experiments and kinetic modeling study of diisopropyl ketone ignition and pyrolysis. Combustion and Flame, 2017, 177, 207-218.	5.2	33
119	High Pressure Shock Tube Ignition Delay Time Measurements During Oxy-Methane Combustion With High Levels of CO <sub>2</sub> Dilution. Journal of Energy Resources Technology, Transactions of the ASME, 2017, 139, .	2.3	38
120	Effect of catalytically active Ce 0.8 Gd 0.2 O 1.9 coating on the heterogeneous combustion of methane within MgO stabilized ZrO <sub>2</sub> porous ceramics. Combustion and Flame, 2017, 180, 32-39.	5.2	12
121	Products and Pathways of Aldehydes Oxidation in the Negative Temperature Coefficient Region. Journal of Energy Resources Technology, Transactions of the ASME, 2017, 139, .	2.3	11
122	Reacting Unsteady Reynolds-Averaged Navier-Stokes with the Tabulated Premixed Conditional Moment Closure Method. Journal of Propulsion and Power, 2017, 33, 704-718.	2.2	3
123	Pd enhanced WC catalyst to promote heterogeneous methane combustion. Applied Thermal Engineering, 2017, 114, 663-672.	6.0	10
124	High-Speed Imaging and Measurements of Ignition Delay Times in Oxy-Syngas Mixtures With High CO <sub>2</sub> Dilution in a Shock Tube. , 2017, , .		0
125	Time-Resolved Measurements of Intermediate Concentrations in Fuel-Rich n-Heptane Oxidation Behind Reflected Shock Waves. , 2017, , .		2
126	Ignition Delay Times of High Pressure Oxy-Methane Combustion With High Levels of CO <sub>2</sub> Dilution. , 2017, , .		4



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127	High-Speed Imaging and Measurements of Ignition Delay Times in Oxy-Syngas Mixtures With High CO <sub>2</sub> Dilution in a Shock Tube. Journal of Engineering for Gas Turbines and Power, 2017, 139, .	1.1	24
128	Dynamics of Ignition observed through High Speed Imaging inside a shock tube. , 2017, , .		2
129	The Influence of Elevated Pressures on the Methane Combustion in N <sub>2</sub> and Co <sub>2</sub> Dilutions. , 2017, , .		1
130	Assessment of Detailed and Reduced JetSurF 2.0 Mechanisms Using Conditional Moment Closure Method. , 2017, , .		3
131	Assessment of Dodecane Turbulent-Chemistry Interactions Using Computational Fluid Dynamics. , 2017, , .		0
132	Quantum Chemical Study of CH <sub>3</sub> + O <sub>2</sub> Combustion Reaction System: Catalytic Effects of Additional CO <sub>2</sub> Molecule. Journal of Physical Chemistry A, 2017, 121, 5681-5689.	2.5	18
133	Fuel-rich n-heptane oxidation: A shock tube and laser absorption study. Combustion and Flame, 2017, 185, 220-233.	5.2	42
134	Thermal and Transport Properties for the Simulation of Direct-Fired sCO <sub>2</sub> Combustor. Journal of Engineering for Gas Turbines and Power, 2017, 139, .	1.1	18
135	Self-referenced octave-wide subharmonic GaP optical parametric oscillator centered at 3.3 μm and pumped by an Er-fiber laser. Optics Letters, 2017, 42, 4756.	3.3	25
136	High-Altitude Balloon Flight Demonstration of LED-Based NDIR Multi-Gas Sensor for Space Applications. , 2017, , .		2
137	Octave-wide Gallium Phosphide OPO Centered at 3 μm and Pumped by an Er-fiber Laser. , 2017, , .		0
138	Chemical Reaction CO+OH <sup>+</sup> → CO <sub>2</sub> +H <sup>+</sup> Autocatalyzed by Carbon Dioxide: Quantum Chemical Study of the Potential Energy Surfaces. Journal of Physical Chemistry A, 2016, 120, 6023-6028.	2.5	26
139	Combustion of Aldehydes in the Negative Temperature Coefficient Region: Products and Pathways. , 2016, , .		0
140	Laser Ignition and Flame Speed Measurements in Oxy-Methane Mixtures Diluted With CO <sub>2</sub> . Journal of Energy Resources Technology, Transactions of the ASME, 2016, 138, .	2.3	24
141	A Light-Emitting Diode- (LED-) Based Absorption Sensor for Simultaneous Detection of Carbon Monoxide and Carbon Dioxide. Applied Spectroscopy, 2016, 70, 962-971.	2.2	18
142	Molecular Dynamics Study of Combustion Reactions in a Supercritical Environment. Part 1: Carbon Dioxide and Water Force Field Parameters Refitting and Critical Isotherms of Binary Mixtures. Energy & Fuels, 2016, 30, 9622-9627.	5.1	17
143	Shock Tube Ignition Studies of Advanced Biofuels. , 2016, , .		4
144	Potential Energy Surfaces for the Reactions of HO <sub>2</sub> Radical with CH <sub>2</sub> O and HO <sub>2</sub> in CO <sub>2</sub> Environment. Journal of Physical Chemistry A, 2016, 120, 7681-7688.	2.5	17

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145	Measurements of Propanal Ignition Delay Times and Species Time Histories Using Shock Tube and Laser Absorption. <i>International Journal of Chemical Kinetics</i> , 2016, 48, 679-690.	1.6	37
146	Design and development of a porous heterogeneous combustor for efficient heat production by combustion of liquid and gaseous fuels. <i>Applied Energy</i> , 2016, 179, 228-236.	10.1	16
147	Large Eddy Simulation of an Enclosed Turbulent Reacting Methane Jet With the Tabulated Premixed Conditional Moment Closure Method. <i>Journal of Engineering for Gas Turbines and Power</i> , 2016, 138, .	1.1	8
148	Shock Tube Ignition and CH <sub>4</sub> Time-Histories during Propanal Oxidation. , 2016, , .		2
149	Review: laser ignition for aerospace propulsion. <i>Propulsion and Power Research</i> , 2016, 5, 1-21.	4.3	86
150	Planar Laser-Induced Fluorescence Experiments and Modeling Study of Jets in Crossflow. <i>Journal of Fluids Engineering, Transactions of the ASME</i> , 2016, 138, .	1.5	3
151	Shock tube ignition delay times and methane time-histories measurements during excess CO <sub>2</sub> diluted oxy-methane combustion. <i>Combustion and Flame</i> , 2016, 164, 152-163.	5.2	133
152	Improved combustion kinetic model and HCCI engine simulations of di-isopropyl ketone ignition. <i>Fuel</i> , 2016, 164, 141-150.	6.4	22
153	Methane Ignition Delay Times in CO <sub>2</sub> Diluted Mixtures in a Shock Tube. , 2015, , .		6
154	Unsteady Rans Simulation of an Enclosed, Turbulent Reacting Methane Jet with the Premixed CMC Method. , 2015, , .		0
155	LES Simulation of an Enclosed Turbulent Reacting Methane Jet With the Tabulated Premixed CMC Method. , 2015, , .		1
156	Ignition and Flame Propagation in Oxy-Methane Mixtures Diluted With CO <sub>2</sub> . , 2015, , .		5
157	Experimental study of transverse jet mapping using PLIF. , 2015, , .		1
158	Low temperature (550â€“700 K) oxidation pathways of cyclic ketones: dominance of HO <sub>2</sub> -elimination channels yielding conjugated cyclic coproducts. <i>Physical Chemistry Chemical Physics</i> , 2015, 17, 12124-12134.	2.8	17
159	Propionaldehyde infrared cross-sections and band strengths. <i>Journal of Quantitative Spectroscopy and Radiative Transfer</i> , 2015, 152, 107-113.	2.3	20
160	A coordinated investigation of the combustion chemistry of diisopropyl ketone, a prototype for biofuels produced by endophytic fungi. <i>Combustion and Flame</i> , 2014, 161, 711-724.	5.2	54
161	A shock tube and laser absorption study of ignition delay times and OH reaction rates of ketones: 2-Butanone and 3-buten-2-one. <i>Combustion and Flame</i> , 2014, 161, 725-734.	5.2	59
162	On the High-Temperature Combustion of <i>n</i> -Butanol: Shock Tube Data and an Improved Kinetic Model. <i>Energy &amp; Fuels</i> , 2013, 27, 7072-7080.	5.1	30

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163	Direct Kinetic Measurements of Criegee Intermediate ( $\text{CH}_2\text{OO}$ ) Formed by Reaction of $\text{CH}_2\text{I}$ with $\text{O}_2$ . <i>Science</i> , 2012, 335, 204-207.	12.6	649
164	Shock Tube Study of Syngas Ignition in Rich $\text{CO}_2$ Mixtures and Determination of the Rate of $\text{H} + \text{O}_2 + \text{CO}_2 \rightarrow \text{HO}_2 + \text{CO}_2$ . <i>Energy &amp; Fuels</i> , 2011, 25, 990-997.	5.1	53
165	Reactions of OH with Butene Isomers: Measurements of the Overall Rates and a Theoretical Study. <i>Journal of Physical Chemistry A</i> , 2011, 115, 2549-2556.	2.5	41
166	Measurements of the reaction of OH with n-butanol at high-temperatures. <i>Chemical Physics Letters</i> , 2010, 497, 26-29.	2.6	51
167	Shock-Tube Experiments and Kinetic Modeling of Toluene Ignition. <i>Journal of Propulsion and Power</i> , 2010, 26, 776-783.	2.2	29
168	Shock Tube/Laser Absorption Measurements of the Reaction Rates of OH with Ethylene and Propene. <i>Journal of Physical Chemistry A</i> , 2010, 114, 11529-11537.	2.5	48
169	Experimental Study of the Rate of $\text{OH} + \text{HO}_2 \rightarrow \text{H}_2\text{O} + \text{O}_2$ at High Temperatures Using the Reverse Reaction. <i>Journal of Physical Chemistry A</i> , 2010, 114, 5520-5525.	2.5	60
170	High-Temperature Measurements and a Theoretical Study of the Reaction of OH with 1,3-Butadiene. <i>Journal of Physical Chemistry A</i> , 2010, 114, 8312-8318.	2.5	24
171	OH time-histories during oxidation of n-heptane and methylcyclohexane at high pressures and temperatures. <i>Combustion and Flame</i> , 2009, 156, 736-749.	5.2	45
172	The use of driver inserts to reduce non-ideal pressure variations behind reflected shock waves. <i>Shock Waves</i> , 2009, 19, 113-123.	1.9	98
173	The effect of oxygenates on soot formation in rich heptane mixtures: A shock tube study. <i>Fuel</i> , 2009, 88, 1901-1906.	6.4	70
174	Shock Tube Study of Methylcyclohexane Ignition over a Wide Range of Pressure and Temperature. <i>Energy &amp; Fuels</i> , 2009, 23, 175-185.	5.1	52
175	Jet fuel ignition delay times: Shock tube experiments over wide conditions and surrogate model predictions. <i>Combustion and Flame</i> , 2008, 152, 125-143.	5.2	216
176	Nonlinear Distortion of Traveling Waves in Non-Uniform Gasdynamic Flows. <i>International Journal of Aeroacoustics</i> , 2008, 7, 243-265.	1.3	0
177	Laminar Burning Velocity Measurements in DIPK-An Advanced Biofuel. <i>SAE International Journal of Fuels and Lubricants</i> , 0, 10, 432-441.	0.2	14
178	The Effect of Diluent Gases on High-Pressure Laminar Burning Velocity Measurements of an Advanced Biofuel Ketone. <i>SAE International Journal of Fuels and Lubricants</i> , 0, 11, 273-286.	0.2	13
179	Laminar Burning Velocities of High-Performance Fuels Relevant to the Co-Optima Initiative. <i>SAE International Journal of Advances and Current Practices in Mobility</i> , 0, 1, 1139-1147.	2.0	9