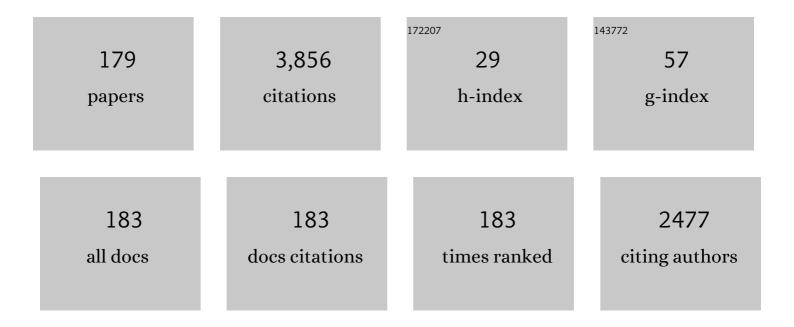
## Subith S Vasu

List of Publications by Year in descending order

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| #  | Article                                                                                                                                                                                                 | IF  | CITATIONS |
|----|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----|-----------|
| 1  | Direct Kinetic Measurements of Criegee Intermediate (CH <sub>2</sub> OO) Formed by Reaction of CH <sub>2</sub> I with O <sub>2</sub> . Science, 2012, 335, 204-207.                                     | 6.0 | 649       |
| 2  | 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.                    | 2.8 | 432       |
| 3  | Jet fuel ignition delay times: Shock tube experiments over wide conditions and surrogate model predictions. Combustion and Flame, 2008, 152, 125-143.                                                   | 2.8 | 216       |
| 4  | Shock tube ignition delay times and methane time-histories measurements during excess CO2 diluted oxy-methane combustion. Combustion and Flame, 2016, 164, 152-163.                                     | 2.8 | 133       |
| 5  | The use of driver inserts to reduce non-ideal pressure variations behind reflected shock waves. Shock Waves, 2009, 19, 113-123.                                                                         | 1.0 | 98        |
| 6  | Measurements and interpretation of shock tube ignition delay times in highly CO2 diluted mixtures using multiple diagnostics. Combustion and Flame, 2017, 180, 63-76.                                   | 2.8 | 92        |
| 7  | Review: laser ignition for aerospace propulsion. Propulsion and Power Research, 2016, 5, 1-21.                                                                                                          | 2.0 | 86        |
| 8  | New insights into the shock tube ignition of H2/O2 at low to moderate temperatures using high-speed end-wall imaging. Combustion and Flame, 2018, 187, 11-21.                                           | 2.8 | 74        |
| 9  | The effect of oxygenates on soot formation in rich heptane mixtures: A shock tube study. Fuel, 2009, 88, 1901-1906.                                                                                     | 3.4 | 70        |
| 10 | Ignition delay times of methane and hydrogen highly diluted in carbon dioxide at high pressures up to<br>300 atm. Proceedings of the Combustion Institute, 2019, 37, 4555-4562.                         | 2.4 | 69        |
| 11 | Experimental Study of the Rate of OH + HO <sub>2</sub> → H <sub>2</sub> O + O <sub>2</sub> at High<br>Temperatures Using the Reverse Reaction. Journal of Physical Chemistry A, 2010, 114, 5520-5525.   | 1.1 | 60        |
| 12 | A shock tube and laser absorption study of ignition delay times and OH reaction rates of ketones:<br>2-Butanone and 3-buten-2-one. Combustion and Flame, 2014, 161, 725-734.                            | 2.8 | 59        |
| 13 | A coordinated investigation of the combustion chemistry of diisopropyl ketone, a prototype for biofuels produced by endophytic fungi. Combustion and Flame, 2014, 161, 711-724.                         | 2.8 | 54        |
| 14 | Shock Tube Study of Syngas Ignition in Rich CO <sub>2</sub> Mixtures and Determination of the Rate of H + O <sub>2</sub> + CO <sub>2</sub> + CO <sub>2</sub> 2, Energy & amp; Fuels, 2011, 25, 990-997. | 2.5 | 53        |
| 15 | Shock Tube Study of Methylcyclohexane Ignition over a Wide Range of Pressure and Temperature.<br>Energy & Fuels, 2009, 23, 175-185.                                                                     | 2.5 | 52        |
| 16 | Measurements of the reaction of OH with n-butanol at high-temperatures. Chemical Physics Letters, 2010, 497, 26-29.                                                                                     | 1.2 | 51        |
| 17 | Shock Tube/Laser Absorption Measurements of the Reaction Rates of OH with Ethylene and Propene.<br>Journal of Physical Chemistry A, 2010, 114, 11529-11537.                                             | 1.1 | 48        |
| 18 | A comprehensive experimental and kinetic modeling study of 1- and 2-pentene. Combustion and Flame, 2021, 223, 166-180.                                                                                  | 2.8 | 47        |

| #  | Article                                                                                                                                                                                                                            | IF  | CITATIONS |
|----|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----|-----------|
| 19 | OH time-histories during oxidation of n-heptane and methylcyclohexane at high pressures and temperatures. Combustion and Flame, 2009, 156, 736-749.                                                                                | 2.8 | 45        |
| 20 | Fuel-rich n-heptane oxidation: A shock tube and laser absorption study. Combustion and Flame, 2017, 185, 220-233.                                                                                                                  | 2.8 | 42        |
| 21 | Reactions of OH with Butene Isomers: Measurements of the Overall Rates and a Theoretical Study.<br>Journal of Physical Chemistry A, 2011, 115, 2549-2556.                                                                          | 1.1 | 41        |
| 22 | A comprehensive experimental and improved kinetic modeling study on the pyrolysis and oxidation of propyne. Proceedings of the Combustion Institute, 2021, 38, 479-488.                                                            | 2.4 | 41        |
| 23 | High Pressure Shock Tube Ignition Delay Time Measurements During Oxy-Methane Combustion With<br>High Levels of CO2 Dilution. Journal of Energy Resources Technology, Transactions of the ASME, 2017,<br>139, .                     | 1.4 | 38        |
| 24 | Measurements of Propanal Ignition Delay Times and Species Time Histories Using Shock Tube and Laser Absorption. International Journal of Chemical Kinetics, 2016, 48, 679-690.                                                     | 1.0 | 37        |
| 25 | Effect of Impurities on Compressor and Cooler in Supercritical CO2 Cycles. Journal of Energy<br>Resources Technology, Transactions of the ASME, 2019, 141, .                                                                       | 1.4 | 34        |
| 26 | High temperature shock tube experiments and kinetic modeling study of diisopropyl ketone ignition and pyrolysis. Combustion and Flame, 2017, 177, 207-218.                                                                         | 2.8 | 33        |
| 27 | The influence of iso-butene kinetics on the reactivity of di-isobutylene and iso-octane. Combustion and Flame, 2020, 222, 186-195.                                                                                                 | 2.8 | 31        |
| 28 | Measuring the effectiveness of high-performance Co-Optima biofuels on suppressing soot formation<br>at high temperature. Proceedings of the National Academy of Sciences of the United States of America,<br>2020, 117, 3451-3460. | 3.3 | 31        |
| 29 | On the High-Temperature Combustion of <i>n</i> Butanol: Shock Tube Data and an Improved Kinetic Model. Energy & Fuels, 2013, 27, 7072-7080.                                                                                        | 2.5 | 30        |
| 30 | Co-optima fuels combustion: A comprehensive experimental investigation of prenol isomers. Fuel, 2019, 254, 115630.                                                                                                                 | 3.4 | 30        |
| 31 | High-pressure shock tube study of ethanol oxidation: Ignition delay time and CO time-history measurements. Combustion and Flame, 2020, 212, 486-499.                                                                               | 2.8 | 30        |
| 32 | Shock-Tube Experiments and Kinetic Modeling of Toluene Ignition. Journal of Propulsion and Power, 2010, 26, 776-783.                                                                                                               | 1.3 | 29        |
| 33 | Reduced Chemical Kinetic Mechanisms for Oxy/Methane Supercritical CO2 Combustor Simulations.<br>Journal of Energy Resources Technology, Transactions of the ASME, 2018, 140, .                                                     | 1.4 | 29        |
| 34 | Broadband mid-infrared optical parametric oscillator for dynamic high-temperature multi-species measurements in reacting systems. Optics Letters, 2020, 45, 491.                                                                   | 1.7 | 27        |
| 35 | Chemical Reaction CO+OH <sup>•</sup> → CO <sub>2</sub> +H <sup>•</sup> Autocatalyzed by Carbon<br>Dioxide: Quantum Chemical Study of the Potential Energy Surfaces. Journal of Physical Chemistry A,<br>2016, 120, 6023-6028.      | 1.1 | 26        |
| 36 | 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.                                                 | 2.8 | 26        |

| #  | Article                                                                                                                                                                                                                       | IF  | CITATIONS |
|----|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----|-----------|
| 37 | Self-referenced octave-wide subharmonic GaP optical parametric oscillator centered at 3  μm and<br>pumped by an Er-fiber laser. Optics Letters, 2017, 42, 4756.                                                               | 1.7 | 25        |
| 38 | High-Temperature Measurements and a Theoretical Study of the Reaction of OH with 1,3-Butadiene.<br>Journal of Physical Chemistry A, 2010, 114, 8312-8318.                                                                     | 1.1 | 24        |
| 39 | Laser Ignition and Flame Speed Measurements in Oxy-Methane Mixtures Diluted With CO2. Journal of Energy Resources Technology, Transactions of the ASME, 2016, 138, .                                                          | 1.4 | 24        |
| 40 | High-Speed Imaging and Measurements of Ignition Delay Times in Oxy-Syngas Mixtures With High CO2<br>Dilution in a Shock Tube. Journal of Engineering for Gas Turbines and Power, 2017, 139, .                                 | 0.5 | 24        |
| 41 | Shock Tube/Laser Absorption and Kinetic Modeling Study of Triethyl Phosphate Combustion. Journal of Physical Chemistry A, 2018, 122, 3829-3836.                                                                               | 1.1 | 23        |
| 42 | Improved combustion kinetic model and HCCI engine simulations of di-isopropyl ketone ignition. Fuel, 2016, 164, 141-150.                                                                                                      | 3.4 | 22        |
| 43 | Ignition delay time and speciation of dibutyl ether at high pressures. Combustion and Flame, 2021, 223, 98-109.                                                                                                               | 2.8 | 22        |
| 44 | 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.                                                               | 2.8 | 21        |
| 45 | Propionaldehyde infrared cross-sections and band strengths. Journal of Quantitative Spectroscopy and Radiative Transfer, 2015, 152, 107-113.                                                                                  | 1.1 | 20        |
| 46 | Quantum Chemical Study of Supercritical Carbon Dioxide Effects on Combustion Kinetics. Journal of<br>Physical Chemistry A, 2017, 121, 3728-3735.                                                                              | 1.1 | 19        |
| 47 | High temperature infrared absorption cross sections of methane near 3.4µm in Ar and CO2 mixtures.<br>Journal of Quantitative Spectroscopy and Radiative Transfer, 2018, 206, 36-45.                                           | 1.1 | 19        |
| 48 | Ignition Delay Times of Oxy-Syngas and Oxy-Methane in Supercritical CO2 Mixtures for Direct-Fired<br>Cycles. Journal of Engineering for Gas Turbines and Power, 2020, 142, .                                                  | 0.5 | 19        |
| 49 | A Light-Emitting Diode- (LED-) Based Absorption Sensor for Simultaneous Detection of Carbon<br>Monoxide and Carbon Dioxide. Applied Spectroscopy, 2016, 70, 962-971.                                                          | 1.2 | 18        |
| 50 | Quantum Chemical Study of CH <sub>3</sub> + O <sub>2</sub> Combustion Reaction System: Catalytic<br>Effects of Additional CO <sub>2</sub> Molecule. Journal of Physical Chemistry A, 2017, 121, 5681-5689.                    | 1.1 | 18        |
| 51 | Thermal and Transport Properties for the Simulation of Direct-Fired sCO2 Combustor. Journal of Engineering for Gas Turbines and Power, 2017, 139, .                                                                           | 0.5 | 18        |
| 52 | An experimental, theoretical, and modeling study of the ignition behavior of cyclopentanone.<br>Proceedings of the Combustion Institute, 2019, 37, 657-665.                                                                   | 2.4 | 18        |
| 53 | Infrared absorption cross sections of several organo-phosphorous chemical-weapon simulants.<br>Journal of Molecular Spectroscopy, 2019, 355, 59-65.                                                                           | 0.4 | 18        |
| 54 | Low temperature (550–700 K) oxidation pathways of cyclic ketones: dominance of<br>HO <sub>2</sub> -elimination channels yielding conjugated cyclic coproducts. Physical Chemistry<br>Chemical Physics, 2015, 17, 12124-12134. | 1.3 | 17        |

| #  | Article                                                                                                                                                                                                                                  | IF  | CITATIONS |
|----|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----|-----------|
| 55 | Molecular Dynamics Study of Combustion Reactions in a Supercritical Environment. Part 1: Carbon<br>Dioxide and Water Force Field Parameters Refitting and Critical Isotherms of Binary Mixtures. Energy<br>& Fuels, 2016, 30, 9622-9627. | 2.5 | 17        |
| 56 | 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.                                 | 1.1 | 17        |
| 57 | Reflected shock-initiated ignition probed via simultaneous lateral and endwall high-speed imaging with a transparent, cylindrical test-section. Combustion and Flame, 2021, 224, 43-53.                                                  | 2.8 | 17        |
| 58 | Probing the Effects of NOx and SOx Impurities on Oxy-Fuel Combustion in Supercritical CO2: Shock<br>Tube Experiments and Chemical Kinetic Modeling. Journal of Energy Resources Technology,<br>Transactions of the ASME, 2020, 142, .    | 1.4 | 17        |
| 59 | Acousto-optically modulated quantum cascade laser for high-temperature reacting systems thermometry. Optics Letters, 2019, 44, 1435.                                                                                                     | 1.7 | 17        |
| 60 | Design and development of a porous heterogeneous combustor for efficient heat production by combustion of liquid and gaseous fuels. Applied Energy, 2016, 179, 228-236.                                                                  | 5.1 | 16        |
| 61 | Theoretical Calculation of Reaction Rates and Combustion Kinetic Modeling Study of Triethyl Phosphate (TEP). Journal of Physical Chemistry A, 2019, 123, 4764-4775.                                                                      | 1.1 | 15        |
| 62 | Oxidation and pyrolysis of methyl propyl ether. International Journal of Chemical Kinetics, 2021, 53, 915-938.                                                                                                                           | 1.0 | 15        |
| 63 | Laminar Burning Velocity Measurements in DIPK-An Advanced Biofuel. SAE International Journal of<br>Fuels and Lubricants, 0, 10, 432-441.                                                                                                 | 0.2 | 14        |
| 64 | Revealing the critical role of radical-involved pathways in high temperature cyclopentanone pyrolysis. Combustion and Flame, 2020, 216, 280-292.                                                                                         | 2.8 | 14        |
| 65 | Characterization of a new ultra-high pressure shock tube facility for combustion and propulsion studies. Review of Scientific Instruments, 2022, 93, .                                                                                   | 0.6 | 14        |
| 66 | The Effect of Diluent Gases on High-Pressure Laminar Burning Velocity Measurements of an Advanced<br>Biofuel Ketone. SAE International Journal of Fuels and Lubricants, 0, 11, 273-286.                                                  | 0.2 | 13        |
| 67 | High-Pressure Oxy-Syngas Ignition Delay Times With CO2 Dilution: Shock Tube Measurements and<br>Comparison of the Performance of Kinetic Mechanisms. Journal of Engineering for Gas Turbines and<br>Power, 2019, 141, .                  | 0.5 | 13        |
| 68 | Influence of the double bond position in combustion chemistry of methyl butene isomers: A shock<br>tube and laser absorption study. International Journal of Chemical Kinetics, 2020, 52, 739-751.                                       | 1.0 | 13        |
| 69 | Effect of catalytically active Ce 0.8 Gd 0.2 O 1.9 coating on the heterogeneous combustion of methane within MgO stabilized ZrO 2 porous ceramics. Combustion and Flame, 2017, 180, 32-39.                                               | 2.8 | 12        |
| 70 | Molecular Dynamics Study of Combustion Reactions in a Supercritical Environment. Part 2: Boxed MD<br>Study of CO + OH → CO <sub>2</sub> + H Reaction Kinetics. Journal of Physical Chemistry A, 2018, 122,<br>897-908.                   | 1.1 | 12        |
| 71 | Quantum chemical and master equation study of OH + CH <sub>2</sub> O → H <sub>2</sub> O + CHO<br>reaction rates in supercritical CO <sub>2</sub> environment. International Journal of Chemical<br>Kinetics, 2019, 51, 42-48.            | 1.0 | 12        |
| 72 | Effects of High Fuel Loading and CO2 Dilution on Oxy-Methane Ignition Inside a Shock Tube at High<br>Pressure. Journal of Energy Resources Technology, Transactions of the ASME, 2020, 142, .                                            | 1.4 | 12        |

| #  | Article                                                                                                                                                                                                                                                                                            | IF  | CITATIONS |
|----|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----|-----------|
| 73 | Flow stabilized porous heterogeneous combustor. Part I: Design and development. Fuel Processing Technology, 2017, 159, 353-362.                                                                                                                                                                    | 3.7 | 11        |
| 74 | Thermal and Acoustic Performance of Al <sub>2</sub> O <sub>3</sub> , MgO–ZrO <sub>2</sub> , and SiC<br>Porous Media in a Flow-Stabilized Heterogeneous Combustor. Energy & Fuels, 2017, 31, 7552-7561.                                                                                             | 2.5 | 11        |
| 75 | Ellipsometric Measurements of the Thermal Stability of Alternative Fuels. Journal of Energy<br>Resources Technology, Transactions of the ASME, 2017, 139, 062207-622078.                                                                                                                           | 1.4 | 11        |
| 76 | Products and Pathways of Aldehydes Oxidation in the Negative Temperature Coefficient Region.<br>Journal of Energy Resources Technology, Transactions of the ASME, 2017, 139, .                                                                                                                     | 1.4 | 11        |
| 77 | Catalytic Effect of Carbon Dioxide on Reaction OH + CO → H + CO <sub>2</sub> in Supercritical<br>Environment: Master Equation Study. Journal of Physical Chemistry A, 2018, 122, 6355-6359.                                                                                                        | 1.1 | 11        |
| 78 | Pd enhanced WC catalyst to promote heterogeneous methane combustion. Applied Thermal Engineering, 2017, 114, 663-672.                                                                                                                                                                              | 3.0 | 10        |
| 79 | Subcooled Flow Boiling of Carbon Dioxide Near the Critical Point Inside a Microchannel. Physical<br>Review Applied, 2020, 14, .                                                                                                                                                                    | 1.5 | 10        |
| 80 | High accuracy machine learning identification of fentanyl-relevant molecular compound classification via constituent functional group analysis. Scientific Reports, 2020, 10, 13569.                                                                                                               | 1.6 | 9         |
| 81 | Laminar Burning Velocities of High-Performance Fuels Relevant to the Co-Optima Initiative. SAE<br>International Journal of Advances and Current Practices in Mobility, 0, 1, 1139-1147.                                                                                                            | 2.0 | 9         |
| 82 | Large Eddy Simulation of an Enclosed Turbulent Reacting Methane Jet With the Tabulated Premixed<br>Conditional Moment Closure Method. Journal of Engineering for Gas Turbines and Power, 2016, 138, .                                                                                              | 0.5 | 8         |
| 83 | Accurate prediction of terahertz spectra of molecular crystals of fentanyl and its analogs. Scientific Reports, 2021, 11, 4062.                                                                                                                                                                    | 1.6 | 8         |
| 84 | Shock Tube Demonstration of Acousto-Optically Modulated Quantum Cascade Laser as a Broadband,<br>Time-Resolved Combustion Diagnostic. Journal of Energy Resources Technology, Transactions of the<br>ASME, 2018, 140, .                                                                            | 1.4 | 8         |
| 85 | A General Study of Counterflow Diffusion Flames for Supercritical CO2 Combustion. Journal of Engineering for Gas Turbines and Power, 2019, 141, .                                                                                                                                                  | 0.5 | 8         |
| 86 | Measurements of Density and Sound Speed in Mixtures Relevant to Supercritical CO2 Cycles. Journal of Energy Resources Technology, Transactions of the ASME, 2020, 142, .                                                                                                                           | 1.4 | 8         |
| 87 | Shock tube investigation of high-temperature, extremely-rich oxidation of several co-optima biofuels for spark-ignition engines. Combustion and Flame, 2022, 236, 111794.                                                                                                                          | 2.8 | 8         |
| 88 | Flow stabilized porous heterogeneous combustor. Part II: Operational parameters and the acoustic emission. Fuel Processing Technology, 2017, 159, 412-420.                                                                                                                                         | 3.7 | 7         |
| 89 | Hazardous Gas Detection Sensor Using Broadband Light-Emitting Diode-Based Absorption Spectroscopy for Space Applications. New Space, 2018, 6, 28-36.                                                                                                                                               | 0.4 | 7         |
| 90 | Molecular Dynamics of Combustion Reactions in Supercritical Carbon Dioxide. 6. Computational<br>Kinetics of Reactions between Hydrogen Atom and Oxygen Molecule H + O <sub>2</sub> ⇌ HO + O and H<br>+ O <sub>2</sub> ⇌ HO <sub>2</sub> . Journal of Physical Chemistry A, 2019, 123, 10772-10781. | 1.1 | 7         |

| #   | Article                                                                                                                                                                                                                                                                                     | IF  | CITATIONS |
|-----|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----|-----------|
| 91  | Methane Ignition Delay Times in CO2 Diluted Mixtures in a Shock Tube. , 2015, , .                                                                                                                                                                                                           |     | 6         |
| 92  | Molecular Dynamics Study of Combustion Reactions in Supercritical Environment. Part 3: Boxed MD<br>Study of CH <sub>3</sub> + HO <sub>2</sub> → CH <sub>3</sub> O + OH Reaction Kinetics. Journal of<br>Physical Chemistry A, 2018, 122, 3337-3345.                                         | 1.1 | 6         |
| 93  | LaCoO3 catalytically enhanced MgO partially stabilized ZrO2 in heterogeneous methane combustion.<br>Experimental Thermal and Fluid Science, 2018, 90, 330-335.                                                                                                                              | 1.5 | 6         |
| 94  | Molecular dynamics of combustion reactions in supercritical carbon dioxide. Part 4: boxed MD study of formyl radical dissociation and recombination. Journal of Molecular Modeling, 2019, 25, 35.                                                                                           | 0.8 | 6         |
| 95  | Molecular Dynamics of Combustion Reactions in Supercritical Carbon Dioxide. Part 5: Computational<br>Study of Ethane Dissociation and Recombination Reactions C <sub>2</sub> H <sub>6</sub> ⇌<br>CH <sub>3</sub> + CH <sub>3</sub> . Journal of Physical Chemistry A, 2019, 123, 4776-4784. | 1.1 | 6         |
| 96  | Selective terahertz absorber for angle and polarization-independent spectral sensing. Optics Letters, 2022, 47, 1514.                                                                                                                                                                       | 1.7 | 6         |
| 97  | Ignition and Flame Propagation in Oxy-Methane Mixtures Diluted With CO2. , 2015, , .                                                                                                                                                                                                        |     | 5         |
| 98  | Laser-induced fluorescence thermometry of supercritical CO <sub>2</sub> flows inside a micro-channel. Optics Letters, 2021, 46, 1924.                                                                                                                                                       | 1.7 | 5         |
| 99  | Direct measurement of reaction rate for decomposition of diisopropyl methylphosphonate at high temperature using shock tube and laser absorption. International Journal of Chemical Kinetics, 2022, 54, 371-380.                                                                            | 1.0 | 5         |
| 100 | Shock Tube Ignition Studies of Advanced Biofuels. , 2016, , .                                                                                                                                                                                                                               |     | 4         |
| 101 | High-Speed Imaging of the Dynamics of H <sub>2</sub> /O <sub>2</sub> Ignition at Low to Moderate<br>Temperatures in a Shock Tube. , 2017, , .                                                                                                                                               |     | 4         |
| 102 | Ignition Delay Times of High Pressure Oxy-Methane Combustion With High Levels of CO2 Dilution. , 2017, , .                                                                                                                                                                                  |     | 4         |
| 103 | Experimental and Kinetic Modeling Study of Laminar Burning Velocities of Cyclopentanone and Its<br>Binary Mixtures with Ethanol and n-Propanol. Energy & Fuels, 2020, 34, 11408-11416.                                                                                                      | 2.5 | 4         |
| 104 | Influence of Equation-of-States on Supercritical CO2 Combustion Mixtures. Journal of Energy<br>Resources Technology, Transactions of the ASME, 2021, 143, .                                                                                                                                 | 1.4 | 4         |
| 105 | Planar Laser-Induced Fluorescence Experiments and Modeling Study of Jets in Crossflow. Journal of Fluids Engineering, Transactions of the ASME, 2016, 138, .                                                                                                                                | 0.8 | 3         |
| 106 | Reacting Unsteady Reynolds-Averaged Navier–Stokes with the Tabulated Premixed Conditional Moment<br>Closure Method. Journal of Propulsion and Power, 2017, 33, 704-718.                                                                                                                     | 1.3 | 3         |
| 107 | Assessment of Detailed and Reduced JetSurF 2.0 Mechanisms Using Conditional Moment Closure Method. , 2017, , .                                                                                                                                                                              |     | 3         |
| 108 | MHz-Rate Measurements of Time-Resolved Species Concentrations in Shock Heated Chemical Weapon Simulants. , 2018, , .                                                                                                                                                                        |     | 3         |

| #   | Article                                                                                                                                                                                  | IF  | CITATIONS |
|-----|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----|-----------|
| 109 | Far-infrared spectrally selective LiTaO3 and AlN pyroelectric detectors using resonant subwavelength metal surface structures. MRS Advances, 2020, 5, 2005-2012.                         | 0.5 | 3         |
| 110 | A General Study of Counterflow Diffusion Flames for Supercritical CO2 Mixtures. , 2019, , .                                                                                              |     | 3         |
| 111 | Shock Tube Ignition and CH <sub>4</sub> Time-Histories during Propanal Oxidation. , 2016, , .                                                                                            |     | 2         |
| 112 | Time-Resolved Measurements of Intermediate Concentrations in Fuel-Rich n-Heptane Oxidation Behind<br>Reflected Shock Waves. , 2017, , .                                                  |     | 2         |
| 113 | Dynamics of Ignition observed through High Speed Imaging inside a shock tube. , 2017, , .                                                                                                |     | 2         |
| 114 | High-Altitude Balloon Flight Demonstration of LED-Based NDIR Multi-Gas Sensor for Space Applications. , 2017, , .                                                                        |     | 2         |
| 115 | A Strategy of Reactant Mixing in Methane Direct-Fired sCO2 Combustors. , 2018, , .                                                                                                       |     | 2         |
| 116 | High-speed 4-D Imaging Study of Isooctane Combustion in a Shock Tube. , 2019, , .                                                                                                        |     | 2         |
| 117 | Elucidating the differences in oxidation of high-performance α- and β- diisobutylene biofuels via<br>Synchrotron photoionization mass spectrometry. Scientific Reports, 2020, 10, 21776. | 1.6 | 2         |
| 118 | Ammonia Hydrogen Ignition Measurements for Clean Aircraft Propulsion. , 2022, , .                                                                                                        |     | 2         |
| 119 | LES Simulation of an Enclosed Turbulent Reacting Methane Jet With the Tabulated Premixed CMC Method. , 2015, , .                                                                         |     | 1         |
| 120 | Experimental study of transverse jet mapping using PLIF. , 2015, , .                                                                                                                     |     | 1         |
| 121 | Pyrolysis of RP-2 and Surrogate Fuels in a Jet Stirred Reactor Coupled with Synchrotron Photo<br>Ionization Mass Spectrometry. , 2017, , .                                               |     | 1         |
| 122 | Performance of a Laser Ignited Multicylinder Lean Burn Natural Gas Engine. Journal of Engineering<br>for Gas Turbines and Power, 2017, 139, .                                            | 0.5 | 1         |
| 123 | The Influence of Elevated Pressures on the Methane Combustion in N2 and Co2 Dilutions. , 2017, , .                                                                                       |     | 1         |
| 124 | Is Ignition in a Shock Tube Homogeneous? An Experimental Study Behind Reflected Shock Waves. , 2018, ,                                                                                   |     | 1         |
| 125 | Development of a Global Mechanism for Oxy-Methane Combustion in a CO2 Environment. , 2018, , .                                                                                           |     | 1         |
| 126 | Towards a laser-absorption technique for ultra-fast, simultaneous temperature and concentration measurements inside pressure gain combustion devices. , 2019, , .                        |     | 1         |

| #   | Article                                                                                                                                                                   | IF  | CITATIONS |
|-----|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----|-----------|
| 127 | Laminar burning velocity measurements in methyl ester/air mixtures. , 2019, , .                                                                                           |     | 1         |
| 128 | Design of External Cavity Quantum Cascade Lasers for Combustion and Explosion Diagnostics. , 2019, , $\cdot$                                                              |     | 1         |
| 129 | Novel Diagnostic Technique for Ultra-Fast, Simultaneous Temperature and Concentration<br>Measurements for Harsh Hypersonic Flows. , 2020, , .                             |     | 1         |
| 130 | Time-resolved measurements of key intermediate products during cyclopentanone pyrolysis in a shock tube. , 2020, , .                                                      |     | 1         |
| 131 | Ignition delay times of methane fuels at thrust chamber conditions in an ultra-high-pressure shock<br>tube. , 2022, , .                                                   |     | 1         |
| 132 | Shock Tube and Flame Speed Measurements of 2,4,4-Trimethyl-1-Pentene: A Co-Optima Biofuel. Journal of Energy Resources Technology, Transactions of the ASME, 2022, 144, . | 1.4 | 1         |
| 133 | Nonlinear Distortion of Traveling Waves in Non-Uniform Gasdynamic Flows. International Journal of Aeroacoustics, 2008, 7, 243-265.                                        | 0.8 | Ο         |
| 134 | Unsteady Rans Simulation of an Enclosed, Turbulent Reacting Methane Jet with the Premixed CMC Method. , 2015, , .                                                         |     | 0         |
| 135 | Combustion of Aldehydes in the Negative Temperature Coefficient Region: Products and Pathways. , 2016, , .                                                                |     | Ο         |
| 136 | Jet Fuel Thermal Stability Investigations using Ellipsometry. , 2017, , .                                                                                                 |     | 0         |
| 137 | Temperature Jump Pyrolysis Studies of RP-2 Fuel. , 2017, , .                                                                                                              |     | 0         |
| 138 | High-Speed Imaging and Measurements of Ignition Delay Times in Oxy-Syngas Mixtures With High CO2<br>Dilution in a Shock Tube. , 2017, , .                                 |     | 0         |
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