

# Alexander A. Konnov

## List of Publications by Year in descending order

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Version: 2024-02-01

175  
papers

8,645  
citations

47006

47  
h-index

54911

84  
g-index

176  
all docs

176  
docs citations

176  
times ranked

3040  
citing authors

| #  | ARTICLE   | IF   | CITATIONS |
|----|---|------|-----------|
| 1  | Implementation of the NCN pathway of prompt-NO formation in the detailed reaction mechanism. <i>Combustion and Flame</i> , 2009, 156, 2093-2105.  | 5.2  | 471       |
| 2  | A comprehensive review of measurements and data analysis of laminar burning velocities for various fuel+air mixtures. <i>Progress in Energy and Combustion Science</i> , 2018, 68, 197-267.   | 31.2 | 329       |
| 3  | Remaining uncertainties in the kinetic mechanism of hydrogen combustion. <i>Combustion and Flame</i> , 2008, 152, 507-528.  | 5.2  | 284       |
| 4  | An experimental and modeling study of propene oxidation. Part 2: Ignition delay time and flame speed measurements. <i>Combustion and Flame</i> , 2015, 162, 296-314.  | 5.2  | 270       |
| 5  | Laminar burning velocity of gasolines with addition of ethanol. <i>Fuel</i> , 2014, 115, 162-169.   | 6.4  | 248       |
| 6  | Detailed Kinetic Mechanism for the Oxidation of Ammonia Including the Formation and Reduction of Nitrogen Oxides. <i>Energy &amp; Fuels</i> , 2018, 32, 10202-10217.  | 5.1  | 220       |
| 7  | Laminar burning velocity of gasoline and the gasoline surrogate components iso-octane, n-heptane and toluene. <i>Fuel</i> , 2013, 112, 355-365.   | 6.4  | 218       |
| 8  | An experimental and modeling study of ammonia with enriched oxygen content and ammonia/hydrogen laminar flame speed at elevated pressure and temperature. <i>Proceedings of the Combustion Institute</i> , 2021, 38, 2163-2174.                                   | 3.9  | 210       |
| 9  | Laminar burning velocities of n-heptane, iso-octane, ethanol and their binary and tertiary mixtures. <i>Fuel</i> , 2011, 90, 2773-2781.   | 6.4  | 202       |
| 10 | Measurements of Laminar Flame Velocity for Components of Natural Gas. <i>Energy &amp; Fuels</i> , 2011, 25, 3875-3884.  | 5.1  | 181       |
| 11 | Dioxin levels in wood combustion—a review. <i>Biomass and Bioenergy</i> , 2004, 26, 115-145.  | 5.7  | 168       |
| 12 | The effects of composition on burning velocity and nitric oxide formation in laminar premixed flames of CH <sub>4</sub> + H <sub>2</sub> + O <sub>2</sub> + N <sub>2</sub> . <i>Combustion and Flame</i> , 2007, 149, 409-417.                                    | 5.2  | 161       |
| 13 | Chemical mechanism development and reduction for combustion of NH <sub>3</sub> /H <sub>2</sub> /CH <sub>4</sub> mixtures. <i>Fuel</i> , 2019, 257, 116059.  | 6.4  | 151       |
| 14 | The effect of elevated pressures on the laminar burning velocity of methane + air mixtures. <i>Combustion and Flame</i> , 2013, 160, 1627-1635.   | 5.2  | 149       |
| 15 | Experimental study and kinetic analysis of the laminar burning velocity of NH <sub>3</sub> /syngas/air, NH <sub>3</sub> /CO/air and NH <sub>3</sub> /H <sub>2</sub> /air premixed flames at elevated pressures. <i>Combustion and Flame</i> , 2020, 221, 270-287. | 5.2  | 141       |
| 16 | Investigation of combustion enhancement by ozone additive in CH <sub>4</sub> /air flames using direct laminar burning velocity measurements and kinetic simulations. <i>Combustion and Flame</i> , 2012, 159, 120-129.  | 5.2  | 119       |
| 17 | Laminar burning velocities of primary reference fuels and simple alcohols. <i>Fuel</i> , 2014, 115, 32-40.  | 6.4  | 116       |
| 18 | Yet another kinetic mechanism for hydrogen combustion. <i>Combustion and Flame</i> , 2019, 203, 14-22.  | 5.2  | 116       |

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|----|--|-----|-----------|
| 19 | Kinetic modeling of the decomposition and flames of hydrazine. <i>Combustion and Flame</i> , 2001, 124, 106-126.   | 5.2 | 115       |
| 20 | Effects of hydrogen enrichment on adiabatic burning velocity and NO formation in methane+air flames. <i>Experimental Thermal and Fluid Science</i> , 2007, 31, 437-444.                          | 2.7 | 115       |
| 21 | The effect of temperature on the adiabatic burning velocities of diluted hydrogen flames: A kinetic study using an updated mechanism. <i>Combustion and Flame</i> , 2015, 162, 1884-1898.        | 5.2 | 110       |
| 22 | Comprehensive kinetic modeling and experimental study of a fuel-rich, premixed n-heptane flame. <i>Combustion and Flame</i> , 2015, 162, 2045-2058.  | 5.2 | 107       |
| 23 | MEASUREMENT OF ADIABATIC BURNING VELOCITY IN METHANE-OXYGEN-NITROGEN MIXTURES. <i>Combustion Science and Technology</i> , 2001, 172, 81-96.  | 2.3 | 102       |
| 24 | The temperature dependence of the laminar burning velocity of ethanol flames. <i>Proceedings of the Combustion Institute</i> , 2011, 33, 1011-1019.  | 3.9 | 99        |
| 25 | Effects of temperature and composition on the laminar burning velocity of CH <sub>4</sub> + H <sub>2</sub> + O <sub>2</sub> + N <sub>2</sub> flames. <i>Fuel</i> , 2010, 89, 114-121.            | 6.4 | 98        |
| 26 | Experimental Uncertainties of the Heat Flux Method for Measuring Burning Velocities. <i>Combustion Science and Technology</i> , 2016, 188, 853-894.  | 2.3 | 95        |
| 27 | Kinetic Modeling of the Thermal Decomposition of Ammonia. <i>Combustion Science and Technology</i> , 2000, 152, 23-37.   | 2.3 | 91        |
| 28 | The comparative and combined effects of hydrogen addition on the laminar burning velocities of methane and its blends with ethane and propane. <i>Fuel</i> , 2017, 189, 369-376.                 | 6.4 | 87        |
| 29 | Structure of premixed ammonia+air flames at atmospheric pressure: Laser diagnostics and kinetic modeling. <i>Combustion and Flame</i> , 2016, 163, 370-381.                                      | 5.2 | 83        |
| 30 | The temperature dependence of the laminar burning velocity and superadiabatic flame temperature phenomenon for NH <sub>3</sub> /air flames. <i>Combustion and Flame</i> , 2020, 217, 314-320.    | 5.2 | 81        |
| 31 | Experimental and modeling study of laminar burning velocity of biomass derived gases/air mixtures. <i>International Journal of Hydrogen Energy</i> , 2011, 36, 3769-3777.                        | 7.1 | 73        |
| 32 | NO formation rates for hydrogen combustion in stirred reactors. <i>Fuel</i> , 2001, 80, 49-65.   | 6.4 | 67        |
| 33 | Measurement of propagation speeds in adiabatic cellular premixed flames of CH <sub>4</sub> +O <sub>2</sub> +CO <sub>2</sub> . <i>Experimental Thermal and Fluid Science</i> , 2005, 29, 901-907. | 2.7 | 67        |
| 34 | Temperature Dependence of the Laminar Burning Velocity of Methanol Flames. <i>Energy &amp; Fuels</i> , 2012, 26, 1557-1564.  | 5.1 | 66        |
| 35 | A POSSIBLE NEW ROUTE FOR NO FORMATION VIA 2H <sub>3</sub> . <i>Combustion Science and Technology</i> , 2001, 168, 1-46.  | 2.3 | 65        |
| 36 | The effect of a DC electric field on the laminar burning velocity of premixed methane/air flames. <i>Proceedings of the Combustion Institute</i> , 2009, 32, 1237-1244.                          | 3.9 | 63        |

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|----|--|-----|-----------|
| 37 | Validation and analysis of detailed kinetic models for ethylene combustion. <i>Energy</i> , 2012, 43, 19-29.   | 8.8 | 63        |
| 38 | On the role of excited species in hydrogen combustion. <i>Combustion and Flame</i> , 2015, 162, 3755-3772.   | 5.2 | 63        |
| 39 | Laminar Burning Velocities of Diluted Hydrogen~Oxygen~Nitrogen Mixtures. <i>Energy &amp; Fuels</i> , 2007, 21, 1977-1981.  | 5.1 | 58        |
| 40 | Laminar burning velocity of lean H <sub>2</sub> +CO mixtures at elevated pressure using the heat flux method. <i>International Journal of Hydrogen Energy</i> , 2014, 39, 1485-1498.                   | 7.1 | 58        |
| 41 | Formation and consumption of NO in H <sub>2</sub> +O <sub>2</sub> +N <sub>2</sub> flames doped with NO or NH <sub>3</sub> at atmospheric pressure. <i>Combustion and Flame</i> , 2010, 157, 556-565.   | 5.2 | 57        |
| 42 | Laminar burning velocities of three C <sub>3</sub> H <sub>6</sub> O isomers at atmospheric pressure. <i>Fuel</i> , 2010, 89, 2864-2872.  | 6.4 | 57        |
| 43 | Parametrization of the temperature dependence of laminar burning velocity for methane and ethane flames. <i>Fuel</i> , 2019, 239, 1028-1037.   | 6.4 | 57        |
| 44 | An experimental and kinetic modeling study on the laminar burning velocity of NH <sub>3</sub> +N <sub>2</sub> O+air flames. <i>Combustion and Flame</i> , 2021, 228, 13-28.                            | 5.2 | 56        |
| 45 | PROBE SAMPLING MEASUREMENTS AND MODELING OF NITRIC OXIDE FORMATION IN METHANE-AIR FLAMES. <i>Combustion Science and Technology</i> , 2001, 169, 127-153.   | 2.3 | 51        |
| 46 | The effect of temperature on the adiabatic laminar burning velocities of CH <sub>4</sub> +air and H <sub>2</sub> +air flames. <i>Fuel</i> , 2010, 89, 2211-2216.                                       | 6.4 | 51        |
| 47 | Measurements of NO concentration in NH <sub>3</sub> -doped CH <sub>4</sub> +air flames using saturated laser-induced fluorescence and probe sampling. <i>Combustion and Flame</i> , 2013, 160, 40-46.  | 5.2 | 50        |
| 48 | Temperature-dependent rate constant for the reaction NNH + O → NH + NO. <i>Combustion and Flame</i> , 2001, 125, 1258-1264.  | 5.2 | 49        |
| 49 | Experimental and modeling studies of a biofuel surrogate compound: laminar burning velocities and jet-stirred reactor measurements of anisole. <i>Combustion and Flame</i> , 2018, 189, 325-336.       | 5.2 | 49        |
| 50 | Measurement of propagation speeds in adiabatic flat and cellular premixed flames of C <sub>2</sub> H <sub>6</sub> +O <sub>2</sub> +CO <sub>2</sub> . <i>Combustion and Flame</i> , 2004, 136, 371-376. | 5.2 | 46        |
| 51 | A detailed chemical insights into the kinetics of diethyl ether enhancing ammonia combustion and the importance of NO <sub>x</sub> recycling mechanism. <i>Fuel Communications</i> , 2022, 10, 100051. | 5.2 | 46        |
| 52 | Laminar burning velocity of acetic acid + air flames. <i>Combustion and Flame</i> , 2016, 170, 12-29.  | 5.2 | 45        |
| 53 | Small ester combustion chemistry: Computational kinetics and experimental study of methyl acetate and ethyl acetate. <i>Proceedings of the Combustion Institute</i> , 2019, 37, 419-428.               | 3.9 | 45        |
| 54 | Surrogate compounds for dioxins in incineration. A review. <i>Waste Management</i> , 2005, 25, 755-765.  | 7.4 | 44        |

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|----|---|-----|-----------|
| 55 | Onset of cellular flame instability in adiabatic CH <sub>4</sub> /O <sub>2</sub> /CO <sub>2</sub> and CH <sub>4</sub> /air laminar premixed flames stabilized on a flat-flame burner. <i>Combustion and Flame</i> , 2013, 160, 1276-1286. | 5.2 | 44        |
| 56 | Experimental and modelling study of the effect of elevated pressure on ethane and propane flames. <i>Fuel</i> , 2016, 166, 410-418.   | 6.4 | 44        |
| 57 | The new route forming NO via NNH. <i>Combustion and Flame</i> , 2000, 121, 548-550.   | 5.2 | 43        |
| 58 | Adiabatic laminar burning velocities of CH <sub>4</sub> +H <sub>2</sub> +air flames at low pressures. <i>Fuel</i> , 2010, 89, 1392-1396.  | 6.4 | 43        |
| 59 | Laminar Burning Velocities of Dimethyl Carbonate with Air. <i>Energy &amp; Fuels</i> , 2013, 27, 5513-5517.   | 5.1 | 42        |
| 60 | Experimental and modeling study of the effect of elevated pressure on lean high-hydrogen syngas flames. <i>Proceedings of the Combustion Institute</i> , 2015, 35, 655-662.   | 3.9 | 42        |
| 61 | Nitric oxide formation in premixed flames of H <sub>2</sub> +CO+CO <sub>2</sub> and air. <i>Proceedings of the Combustion Institute</i> , 2002, 29, 2171-2177.  | 3.9 | 40        |
| 62 | Laminar burning velocities of n-decane and binary kerosene surrogate mixture. <i>Fuel</i> , 2017, 187, 429-434.   | 6.4 | 39        |
| 63 | Numerical Analysis of the Impact of Water Injection on Combustion and Thermodynamics in a Gasoline Engine Using Detailed Chemistry. <i>SAE International Journal of Engines</i> , 0, 11, 1151-1166.                                       | 0.4 | 39        |
| 64 | Comparative Effect of Ammonia Addition on the Laminar Burning Velocities of Methane, n-Heptane, and Iso-octane. <i>Energy &amp; Fuels</i> , 2021, 35, 7156-7168.  | 5.1 | 39        |
| 65 | Measurement of adiabatic burning velocity in ethane-oxygen-nitrogen and in ethane-oxygen-argon mixtures. <i>Experimental Thermal and Fluid Science</i> , 2003, 27, 379-384.   | 2.7 | 38        |
| 66 | The effect of NO and NO <sub>2</sub> on the partial oxidation of methane: experiments and modeling. <i>Proceedings of the Combustion Institute</i> , 2005, 30, 1093-1100.   | 3.9 | 38        |
| 67 | On the relative importance of different routes forming NO in hydrogen flames. <i>Combustion and Flame</i> , 2003, 134, 421-424.   | 5.2 | 37        |
| 68 | Experimental and modelling study of 1CH <sub>2</sub> in premixed very rich methane flames. <i>Combustion and Flame</i> , 2016, 171, 198-210.  | 5.2 | 37        |
| 69 | The pseudo-catalytic promotion of nitric oxide oxidation by ethane at low temperatures. <i>Combustion and Flame</i> , 2005, 141, 191-199.   | 5.2 | 36        |
| 70 | Probe sampling measurements and modeling of nitric oxide formation in ethane+air flames. <i>Fuel</i> , 2007, 86, 98-105.  | 6.4 | 36        |
| 71 | An experimental and kinetic study of propanal oxidation. <i>Combustion and Flame</i> , 2018, 197, 11-21.  | 5.2 | 35        |
| 72 | Investigation of influence of detailed chemical kinetics mechanisms for hydrogen on supersonic combustion using large eddy simulation. <i>International Journal of Hydrogen Energy</i> , 2019, 44, 5007-5019.                             | 7.1 | 35        |

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|----|---|-----|-----------|
| 73 | EXPERIMENTAL STUDY OF ADIABATIC CELLULAR PREMIXED FLAMES OF METHANE (ETHANE,) Tj ETQq1 1 0.784314rgBT /Overlock 10 T  | 2.9 | 34        |
| 74 | NONCATALYTIC PARTIAL OXIDATION OF METHANE INTO SYNGAS OVER A WIDE TEMPERATURE RANGE. Combustion Science and Technology, 2004, 176, 1093-1116.   | 2.3 | 33        |
| 75 | To Better Understand the Formation of Short-Chain Acids in Combustion Systems. Combustion Science and Technology, 2007, 180, 343-370.   | 2.3 | 33        |
| 76 | The effects of dilution with nitrogen and steam on the laminar burning velocity of methanol at room and elevated temperatures. Fuel, 2013, 105, 732-738.  | 6.4 | 33        |
| 77 | Laminar premixed flat non-stretched lean flames of hydrogen in air. Combustion and Flame, 2015, 162, 4063-4074.   | 5.2 | 33        |
| 78 | Laminar burning velocity of diacetyl+air flames. Further assessment of combustion chemistry of ketene. Combustion and Flame, 2017, 178, 97-110.   | 5.2 | 33        |
| 79 | Kinetic Modeling of NO <sub>x</sub> Formation and Consumption during Methanol and Ethanol Oxidation. Combustion Science and Technology, 2019, 191, 1627-1659.                                       | 2.3 | 33        |
| 80 | Experimental and kinetic modeling study of NO formation in premixed CH <sub>4</sub> +O <sub>2</sub> +N <sub>2</sub> flames. Combustion and Flame, 2021, 223, 349-360.                               | 5.2 | 33        |
| 81 | Insights into nitromethane combustion from detailed kinetic modeling “ Pyrolysis experiments in jet-stirred and flow reactors. Fuel, 2020, 261, 116349.   | 6.4 | 32        |
| 82 | Prompt NO formation in flames: The influence of NCN thermochemistry. Proceedings of the Combustion Institute, 2013, 34, 657-666.  | 3.9 | 31        |
| 83 | Three-dimensional computational fluid dynamics engine knock prediction and evaluation based on detailed chemistry and detonation theory. International Journal of Engine Research, 2018, 19, 33-44. | 2.3 | 31        |
| 84 | Data consistency of the burning velocity measurements using the heat flux method: Hydrogen flames. Combustion and Flame, 2018, 194, 28-36.  | 5.2 | 30        |
| 85 | Photofragmentation laser-induced fluorescence imaging in premixed flames. Combustion and Flame, 2011, 158, 1908-1919.   | 5.2 | 29        |
| 86 | The differentiated effect of NO and NO <sub>2</sub> in promoting methane oxidation. Proceedings of the Combustion Institute, 2011, 33, 441-447.   | 3.9 | 29        |
| 87 | Formation and destruction of nitric oxide in methane flames doped with NO at atmospheric pressure. Proceedings of the Combustion Institute, 2009, 32, 327-334.                                      | 3.9 | 28        |
| 88 | Laminar burning velocity of nitromethane+air flames: A comparison of flat and spherical flames. Combustion and Flame, 2015, 162, 3803-3809.   | 5.2 | 27        |
| 89 | The effects of enrichment by H <sub>2</sub> on propagation speeds in adiabatic flat and cellular premixed flames of CH <sub>4</sub> +O <sub>2</sub> +CO <sub>2</sub> . Fuel, 2008, 87, 2866-2870.   | 6.4 | 26        |
| 90 | 2D effects in laminar premixed flames stabilized on a flat flame burner. Experimental Thermal and Fluid Science, 2013, 47, 213-223.   | 2.7 | 25        |

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|-----|---|-----|-----------|
| 91  | A Systematically Updated Detailed Kinetic Model for CH <sub>2</sub> O and CH <sub>3</sub> OH Combustion. Energy & Fuels, 2016, 30, 6709-6726.   | 5.1 | 25        |
| 92  | Modeling the formation of precursors of dioxins during combustion of woody fuel volatiles. Fuel, 2005, 84, 323-334.   | 6.4 | 24        |
| 93  | Laminar burning velocities of acetone in air at room and elevated temperatures. Fuel, 2013, 105, 496-502.   | 6.4 | 24        |
| 94  | The temperature dependence of the laminar burning velocities of methyl formate + air flames. Fuel, 2015, 157, 162-170.  | 6.4 | 24        |
| 95  | An experimental and kinetic modeling study on nitric oxide formation in premixed C3 alcohols flames. Proceedings of the Combustion Institute, 2021, 38, 805-812.  | 3.9 | 24        |
| 96  | Kinetics of premixed acetaldehyde + air flames. Proceedings of the Combustion Institute, 2015, 35, 499-506.   | 3.9 | 23        |
| 97  | An experimental and modeling study of nitromethane + O <sub>2</sub> + N <sub>2</sub> ignition in a shock tube. Fuel, 2016, 186, 629-638.  | 6.4 | 23        |
| 98  | Mechanism and Rate Constants of the CH <sub>3</sub> +CH <sub>2</sub> CO Reaction: A Theoretical Study. International Journal of Chemical Kinetics, 2018, 50, 273-284.   | 1.6 | 23        |
| 99  | Over-rich combustion of CH <sub>4</sub> , C <sub>2</sub> H <sub>6</sub> , and C <sub>3</sub> H <sub>8</sub> +air premixed flames investigated by the heat flux method and kinetic modeling. Combustion and Flame, 2019, 210, 339-349. | 5.2 | 23        |
| 100 | The effects of composition on the burning velocity and NO formation in premixed flames of C <sub>2</sub> H <sub>4</sub> +O <sub>2</sub> +N <sub>2</sub> . Experimental Thermal and Fluid Science, 2008, 32, 1412-1420.                | 2.7 | 22        |
| 101 | OH*-chemiluminescence during autoignition of hydrogen with air in a pressurised turbulent flow reactor. International Journal of Hydrogen Energy, 2014, 39, 12166-12181.  | 7.1 | 22        |
| 102 | PROBE SAMPLING MEASUREMENTS OF NO IN CH <sub>4</sub> +O <sub>2</sub> +N <sub>2</sub> FLAMES DOPED WITH NH <sub>3</sub> . Combustion Science and Technology, 2006, 178, 1143-1164.   | 2.3 | 21        |
| 103 | Kinetics and mechanism of chemical reactions in the H <sub>2</sub> /O <sub>2</sub> /N <sub>2</sub> flame at atmospheric pressure. Kinetics and Catalysis, 2009, 50, 156-161.  | 1.0 | 21        |
| 104 | Systematic Reduction of Detailed Chemical Reaction Mechanisms for Engine Applications. Journal of Engineering for Gas Turbines and Power, 2017, 139, .  | 1.1 | 21        |
| 105 | Experimental studies of nitromethane flames and evaluation of kinetic mechanisms. Combustion and Flame, 2018, 190, 327-336.   | 5.2 | 21        |
| 106 | Laminar burning velocities of methylcyclohexane+air flames at room and elevated temperatures: A comparative study. Combustion and Flame, 2018, 196, 99-107.   | 5.2 | 21        |
| 107 | Experimental Study and a Short Kinetic Model for High-Temperature Oxidation of Methyl Methacrylate. Combustion Science and Technology, 2019, 191, 1789-1814.  | 2.3 | 21        |
| 108 | Laminar burning velocities of benzene + air flames at room and elevated temperatures. Fuel, 2016, 175, 302-309.   | 6.4 | 20        |

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|-----|--|-----|-----------|
| 109 | Experimental and modeling study of nitric oxide formation in premixed methanol/air flames. <i>Combustion and Flame</i> , 2020, 213, 322-330.   | 5.2 | 20        |
| 110 | Combustion of propanol isomers: Experimental and kinetic modeling study. <i>Combustion and Flame</i> , 2020, 218, 189-204.   | 5.2 | 20        |
| 111 | Kinetic Modeling of Nitrogen Oxides Decomposition at Flame Temperatures. <i>Combustion Science and Technology</i> , 1999, 149, 53-78.  | 2.3 | 19        |
| 112 | Quantitative HCN measurements in CH <sub>4</sub> /N <sub>2</sub> O/O <sub>2</sub> /N <sub>2</sub> flames using mid-infrared polarization spectroscopy. <i>Combustion and Flame</i> , 2011, 158, 1898-1904. | 5.2 | 19        |
| 113 | Laminar burning velocities of rich near-limiting flames of hydrogen. <i>International Journal of Hydrogen Energy</i> , 2014, 39, 1874-1881.  | 7.1 | 19        |
| 114 | Performance of methanol kinetic mechanisms at oxy-fuel conditions. <i>Combustion and Flame</i> , 2015, 162, 1719-1728.   | 5.2 | 19        |
| 115 | Role of HOCO Chemistry in Syngas Combustion. <i>Energy &amp; Fuels</i> , 2016, 30, 2443-2457.  | 5.1 | 19        |
| 116 | Comparative analysis of detailed and reduced kinetic models for CH <sub>4</sub> +H <sub>2</sub> combustion. <i>Fuel</i> , 2019, 246, 244-258.  | 6.4 | 19        |
| 117 | Gasoline engine performance simulation of water injection and low-pressure exhaust gas recirculation using tabulated chemistry. <i>International Journal of Engine Research</i> , 2020, 21, 1857-1877.     | 2.3 | 19        |
| 118 | Nitrous oxide conversion in laminar premixed flames of CH <sub>4</sub> +O <sub>2</sub> +Ar. <i>Proceedings of the Combustion Institute</i> , 2009, 32, 319-326.  | 3.9 | 18        |
| 119 | Accurate measurements of laminar burning velocity using the Heat Flux method and thermographic phosphor technique. <i>Proceedings of the Combustion Institute</i> , 2011, 33, 939-946.                     | 3.9 | 18        |
| 120 | The Effects of Enrichment by Carbon Monoxide on Adiabatic Burning Velocity and Nitric Oxide Formation in Methane Flames. <i>Combustion Science and Technology</i> , 2008, 181, 117-135.                    | 2.3 | 17        |
| 121 | Strategy for improved NH <sub>2</sub> detection in combustion environments using an Alexandrite laser. <i>Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy</i> , 2017, 184, 235-242.  | 3.9 | 17        |
| 122 | Temperature dependence of the laminar burning velocity for n-heptane and iso-octane/air flames. <i>Fuel</i> , 2020, 276, 118007.   | 6.4 | 17        |
| 123 | Formation of NO and NH in NH <sub>3</sub> -doped CH <sub>4</sub> +N <sub>2</sub> +O <sub>2</sub> flame: Experiments and modelling. <i>Combustion and Flame</i> , 2018, 194, 278-284.                       | 5.2 | 16        |
| 124 | Experimental and modeling study of laminar burning velocities and nitric oxide formation in premixed ethylene/air flames. <i>Proceedings of the Combustion Institute</i> , 2021, 38, 395-404.              | 3.9 | 16        |
| 125 | Engine Knock Prediction and Evaluation Based on Detonation Theory Using a Quasi-Dimensional Stochastic Reactor Model. , 0, , .   |     | 14        |
| 126 | Skeletal Kinetic Mechanism Generation and Uncertainty Analysis for Combustion of Iso-octane at High Temperatures. <i>Energy &amp; Fuels</i> , 2018, 32, 3842-3850.   | 5.1 | 14        |



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|-----|--|-----|-----------|
| 127 | Multi-objective optimization of water injection in spark-ignition engines using the stochastic reactor model with tabulated chemistry. <i>International Journal of Engine Research</i> , 2019, 20, 1089-1100.  | 2.3 | 14        |
| 128 | Effect of natural gas composition on the laminar burning velocities at elevated temperatures. <i>Fuel</i> , 2019, 253, 904-909.  | 6.4 | 14        |
| 129 | Laminar burning velocities of methane+formic acid+air flames: Experimental and modeling study. <i>Combustion and Flame</i> , 2021, 225, 65-73.   | 5.2 | 14        |
| 130 | Visualisation of propane autoignition in a turbulent flow reactor using OH* chemiluminescence imaging. <i>Combustion and Flame</i> , 2013, 160, 1033-1043.   | 5.2 | 13        |
| 131 | Numerical Simulations of Flat Laminar Premixed Methane-Air Flames at Elevated Pressure. <i>Combustion Science and Technology</i> , 2014, 186, 1447-1459.   | 2.3 | 13        |
| 132 | Chemical insights into the larger sooting tendency of 2-methyl-2-butene compared to n-pentane. <i>Combustion and Flame</i> , 2019, 208, 182-197.   | 5.2 | 13        |
| 133 | Revisiting diacetyl and acetic acid flames: The role of the ketene+OH reaction. <i>Combustion and Flame</i> , 2020, 218, 28-41.  | 5.2 | 13        |
| 134 | Oxy-fuel Combustion of Ethanol in Premixed Flames. <i>Energy &amp; Fuels</i> , 2012, 26, 4269-4276.  | 5.1 | 12        |
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