# Sergei M Frolov

## List of Publications by Citations



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|---|---|---|---|
| 138 papers | 1,905 citations | 20 h-index | 40 g-index |
| 145 ext. papers | 2,361 ext. citations | 2.3 avg, IF | 5.07 L-index |

| # | Paper | IF | Citations |
|---|---|---|---|
| 138 | Pulse detonation propulsion: challenges, current status, and future perspective. *Progress in Energy and Combustion Science*, **2004**, 30, 545-672 | 33.6 | 532 |
| 137 | Large-scale hydrogen–air continuous detonation combustor. *International Journal of Hydrogen Energy*, **2015**, 40, 1616-1623 | 6.7 | 162 |
| 136 | Gaseous detonations: A selective review. *Progress in Energy and Combustion Science*, **1991**, 17, 327-371 | 33.6 | 58 |
| 135 | Three-dimensional numerical simulation of the operation of a rotating-detonation chamber with separate supply of fuel and oxidizer. *Russian Journal of Physical Chemistry B*, **2013**, 7, 35-43 | 1.2 | 52 |
| 134 | Shock wave and detonation propagation through U-bend tubes. *Proceedings of the Combustion Institute*, **2007**, 31, 2421-2428 | 5.9 | 47 |
| 133 | Experimental proof of Zel'dovich cycle efficiency gain over cycle with constant pressure combustion for hydrogen–oxygen fuel mixture. *International Journal of Hydrogen Energy*, **2015**, 40, 6970-6975 | 6.7 | 46 |
| 132 | Continuous detonation combustion of ternary hydrogen–liquid propane–air mixture in annular combustor. *International Journal of Hydrogen Energy*, **2017**, 42, 16808-16820 | 6.7 | 41 |
| 131 | Liquid-Fueled, Air-Breathing Pulse Detonation Engine Demonstrator: Operation Principles and Performance. *Journal of Propulsion and Power*, **2006**, 22, 1162-1169 | 1.8 | 39 |
| 130 | Detonation Initiation by Controlled Triggering of Electric Discharges. *Journal of Propulsion and Power*, **2003**, 19, 573-580 | 1.8 | 36 |
| 129 | Hydrogen-fueled detonation ramjet model: Wind tunnel tests at approach air stream Mach number 5.7 and stagnation temperature 1500 K. *International Journal of Hydrogen Energy*, **2018**, 43, 7515-7524 | 6.7 | 33 |
| 128 | Self-ignition of hydrocarbon–hydrogen–air mixtures. *International Journal of Hydrogen Energy*, **2013**, 38, 4177-4184 | 6.7 | 33 |
| 127 | Wind tunnel tests of a hydrogen-fueled detonation ramjet model at approach air stream Mach numbers from 4 to 8. *International Journal of Hydrogen Energy*, **2017**, 42, 25401-25413 | 6.7 | 33 |
| 126 | Reactive shock and detonation propagation in U-bend tubes. *Journal of Loss Prevention in the Process Industries*, **2007**, 20, 501-508 | 3.5 | 31 |
| 125 | Fast deflagration-to-detonation transition. *Russian Journal of Physical Chemistry B*, **2008**, 2, 442-455 | 1.2 | 30 |
| 124 | Three-dimensional numerical simulation of the operation process in a continuous detonation combustor with separate feeding of hydrogen and air. *Russian Journal of Physical Chemistry B*, **2015**, 9, 104-119 | 1.2 | 26 |
| 123 | Air-breathing pulsed detonation thrust module: Numerical simulations and firing tests. *Aerospace Science and Technology*, **2019**, 89, 275-287 | 4.9 | 24 |
| 122 | Three-dimensional numerical simulation of the characteristics of a ramjet power plant with a continuous-detonation combustor in supersonic flight. *Russian Journal of Physical Chemistry B*, **2016**, 10, 469-482 | 1.2 | 24 |

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| 121 | Mechanisms of the oxidation and combustion of normal paraffin hydrocarbons: Transition from C1–C10 to C11–C16. *Russian Journal of Physical Chemistry B*, **2013**, 7, 161-169 | 1.2 | 22 |
| 120 | Three-dimensional numerical simulation of the operation of the rotating-detonation chamber. *Russian Journal of Physical Chemistry B*, **2012**, 6, 276-288 | 1.2 | 21 |
| 119 | Spray Detonation Initiation by Controlled Triggering of Electric Dischargers. *Journal of Propulsion and Power*, **2005**, 21, 54-64 | 1.8 | 20 |
| 118 | Chemiionization and acoustic diagnostics of the process in continuous- and pulse-detonation combustors. *Doklady Physical Chemistry*, **2015**, 465, 273-278 | 0.8 | 19 |
| 117 | Energy efficiency of a continuous-detonation combustion chamber. *Combustion, Explosion and Shock Waves*, **2015**, 51, 232-245 | 1 | 19 |
| 116 | Kinetics of ?blue' flames in the gas-phase oxidation and combustion of hydrocarbons and their derivatives. *Russian Chemical Reviews*, **2007**, 76, 867-884 | 6.8 | 19 |
| 115 | Optimization study of spray detonation initiation by electric discharges. *Shock Waves*, **2005**, 14, 175-186 | 1.6 | 19 |
| 114 | Rocket Engine with Continuous Detonation Combustion of the Natural Gas–Oxygen Propellant System. *Doklady Physical Chemistry*, **2018**, 478, 31-34 | 0.8 | 17 |
| 113 | Demonstrator of continuous-detonation air-breathing ramjet: Wind tunnel data. *Doklady Physical Chemistry*, **2017**, 474, 75-79 | 0.8 | 17 |
| 112 | Experimental proof of the energy efficiency of the Zel'dovich thermodynamic cycle. *Doklady Physical Chemistry*, **2014**, 459, 207-211 | 0.8 | 16 |
| 111 | Experimental and computational studies of shock wave-to-bubbly water momentum transfer. *International Journal of Multiphase Flow*, **2017**, 92, 20-38 | 3.6 | 13 |
| 110 | Mechanism of the oxidation and combustion of normal paraffin hydrocarbons: Transition from C1–C6 to C7H16. *Russian Journal of Physical Chemistry B*, **2010**, 4, 985-994 | 1.2 | 13 |
| 109 | Flow Structure in Rotating Detonation Engine with Separate Supply of Fuel and Oxidizer: Experiment and CFD. *Shock Wave and High Pressure Phenomena*, **2018**, 39-59 | 0.3 | 12 |
| 108 | Detailed kinetic mechanism of the multistage oxidation and combustion of isobutane. *Russian Journal of Physical Chemistry B*, **2015**, 9, 268-274 | 1.2 | 11 |
| 107 | Numerical simulation of flame propagation and localized preflame autoignition in enclosures. *Journal of Loss Prevention in the Process Industries*, **2013**, 26, 302-309 | 3.5 | 11 |
| 106 | Simulation of the autoignition and combustion of n-heptane droplets using a detailed kinetic mechanism. *Russian Journal of Physical Chemistry B*, **2010**, 4, 995-1004 | 1.2 | 11 |
| 105 | Numerical simulation of the operation process and thrust performance of an air-breathing pulse detonation engine in supersonic flight conditions. *Russian Journal of Physical Chemistry B*, **2011**, 5, 597-609 | 1.2 | 10 |
| 104 | Formation of nitrogen oxides in detonation waves. *Russian Journal of Physical Chemistry B*, **2011**, 5, 661-663 | 1.2 | 10 |

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| 103 | Three-dimensional numerical simulation of a continuously rotating detonation in the annular combustion chamber with a wide gap and separate delivery of fuel and oxidizer **2016**, | | 10 |
| 102 | The Influence of the Method of Supplying Fuel Components on the Characteristics of a Rotating Detonation Engine. *Combustion Science and Technology*, **2021**, 193, 511-538 | 1.5 | 10 |
| 101 | Deflagration-to-detonation transition in a kerosene-air mixture. *Doklady Physical Chemistry*, **2007**, 416, 261-264 | 0.8 | 9 |
| 100 | Detonation initiation in a natural gas-air mixture in a tube with a focusing nozzle. *Doklady Physical Chemistry*, **2011**, 436, 10-14 | 0.8 | 8 |
| 99 | Pulse-detonation burner unit operating on natural gas. *Russian Journal of Physical Chemistry B*, **2011**, 5, 625-627 | 1.2 | 8 |
| 98 | Reduction of the deflagration-to-detonation transition distance and time in a tube with regular shaped obstacles. *Doklady Physical Chemistry*, **2007**, 415, 209-213 | 0.8 | 8 |
| 97 | The mechanisms of oxidation and combustion of normal alkane hydrocarbons: The transition from C1□3 to C4H10. *Russian Journal of Physical Chemistry B*, **2007**, 2, 477-484 | 1.2 | 8 |
| 96 | Propagation of shock and detonation waves in channels with U-shaped bends of limiting curvature. *Russian Journal of Physical Chemistry B*, **2008**, 2, 759-774 | 1.2 | 8 |
| 95 | Initiation of strong reactive shocks and detonation by traveling ignition pulses. *Journal of Loss Prevention in the Process Industries*, **2006**, 19, 238-244 | 3.5 | 8 |
| 94 | Measurement and computation of shock wave attenuation in a rough pipe. *Combustion, Explosion and Shock Waves*, **1990**, 26, 335-338 | 1 | 8 |
| 93 | Rocket Engine with Continuously Rotating Liquid-Film Detonation. *Combustion Science and Technology*, **2020**, 192, 144-165 | 1.5 | 8 |
| 92 | Numerical simulation of momentum transfer from a shock wave to a bubbly medium. *Russian Journal of Physical Chemistry B*, **2015**, 9, 363-374 | 1.2 | 7 |
| 91 | Acceleration of the deflagration-to-detonation transition in gases: From Shchelkin to our days. *Combustion, Explosion and Shock Waves*, **2012**, 48, 258-268 | 1 | 7 |
| 90 | Mechanisms of the oxidation and combustion of normal alkanes: Passage from C1-C4 to C2H5. *Russian Journal of Physical Chemistry B*, **2009**, 3, 629-635 | 1.2 | 7 |
| 89 | Mathematical modeling of the chemical inhibition of the detonation of hydrogen-air mixtures. *Russian Journal of Physical Chemistry B*, **2010**, 4, 308-320 | 1.2 | 7 |
| 88 | Mechanisms of the oxidation and combustion of normal alkanes: Transition from C1□5 to C6H14. *Russian Journal of Physical Chemistry B*, **2010**, 4, 634-640 | 1.2 | 7 |
| 87 | Detonation initiation by shock wave interaction with the prechamber jet ignition zone. *Doklady Physical Chemistry*, **2006**, 410, 255-259 | 0.8 | 7 |
| 86 | Decreasing the predetonation distance in a drop explosive mixture by combined means. *Doklady Physical Chemistry*, **2005**, 401, 28-31 | 0.8 | 7 |

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| 85 | Modelling of Turbulent Gas/Particle Combustion by a Lagrangian PDF Method. *Combustion Science and Technology*, **1999**, 149, 95-113 | 1.5 | 7 |
| 84 | Hydrogen fueled detonation ramjet: Conceptual design and test fires at Mach 1.5 and 2.0. *Aerospace Science and Technology*, **2021**, 109, 106459 | 4.9 | 7 |
| 83 | Direct Numerical Simulation of Turbulent Combustion of Hydrogen–Air Mixtures of Various Compositions in a Two-Dimensional Approximation. *Russian Journal of Physical Chemistry B*, **2019**, 13, 75-85 | 1.2 | 6 |
| 82 | Thrust characteristics of a pulse detonation engine operating on a liquid hydrocarbon fuel. *Russian Journal of Physical Chemistry B*, **2016**, 10, 291-297 | 1.2 | 6 |
| 81 | Continuous Detonation Combustion of Hydrogen: Results of Wind Tunnel Experiments. *Combustion, Explosion and Shock Waves*, **2018**, 54, 357-363 | 1 | 6 |
| 80 | Natural-Gas-Fueled Pulse-Detonation Combustor. *Journal of Propulsion and Power*, **2014**, 30, 41-46 | 1.8 | 6 |
| 79 | Thrust characteristics of an airbreathing pulse detonation engine in supersonic flight at various altitudes. *Russian Journal of Physical Chemistry B*, **2013**, 7, 276-289 | 1.2 | 6 |
| 78 | Oxidation and combustion mechanisms of paraffin hydrocarbons: Transfer from C1-C7 to C8H18, C9H20, and C10H22. *Russian Journal of Physical Chemistry B*, **2011**, 5, 974-990 | 1.2 | 6 |
| 77 | Correlation between drop vaporization and self-ignition. *Russian Journal of Physical Chemistry B*, **2009**, 3, 333-347 | 1.2 | 6 |
| 76 | A modified model of the ignition of a magnesium particle. *Russian Journal of Physical Chemistry B*, **2008**, 2, 456-462 | 1.2 | 6 |
| 75 | A detailed kinetic mechanism of multistage oxidation and combustion of isooctane. *Russian Journal of Physical Chemistry B*, **2016**, 10, 801-809 | 1.2 | 5 |
| 74 | Cyclic deflagration-to-detonation transition in the flow-type combustion chamber of a pulse-detonation burner. *Russian Journal of Physical Chemistry B*, **2013**, 7, 137-141 | 1.2 | 5 |
| 73 | Initiation of gas detonation in a tube with a shaped obstacle. *Doklady Physical Chemistry*, **2009**, 427, 129-132 | 0.8 | 5 |
| 72 | Simple model of transient drop vaporization. *Journal of Russian Laser Research*, **2006**, 27, 562-574 | 0.7 | 5 |
| 71 | Initiation of Gaseous Detonation by a Traveling Forced Ignition Pulse. *Doklady Physical Chemistry*, **2004**, 394, 16-18 | 0.8 | 5 |
| 70 | Detonation Initiation in Liquid Fuel Sprays by Successive Electric Discharges. *Doklady Physical Chemistry*, **2004**, 394, 39-41 | 0.8 | 5 |
| 69 | Pulsed detonation hydroramjet: simulations and experiments. *Shock Waves*, **2020**, 30, 221-234 | 1.6 | 5 |
| 68 | Wind Tunnel Testing of a Detonation Ramjet Model at Approach Air Stream Mach Number 5.7 and a Stagnation Temperature of 1500 K. *Doklady Physical Chemistry*, **2018**, 481, 100-103 | 0.8 | 5 |

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| 67 | A Detonation Afterburner. *Doklady Physics*, **2020**, 65, 36-39 | 0.8 | 4 |
| 66 | Gasification of low-melting hydrocarbon material in the airflow heated by hydrogen combustion. *International Journal of Hydrogen Energy*, **2020**, 45, 9098-9112 | 6.7 | 4 |
| 65 | Modeling of Low-temperature oxidation and combustion of droplets. *Doklady Physical Chemistry*, **2016**, 470, 150-153 | 0.8 | 4 |
| 64 | Autoignition and combustion of hydrocarbon-hydrogen-air homogeneous and heterogeneous ternary mixtures. *Russian Journal of Physical Chemistry B*, **2013**, 7, 457-462 | 1.2 | 4 |
| 63 | Momentum transfer from a shock wave to a bubbly liquid. *Russian Journal of Physical Chemistry B*, **2015**, 9, 895-900 | 1.2 | 4 |
| 62 | Numerical and Experimental Investigation of Detonation Initiation in Profiled Tubes. *Combustion Science and Technology*, **2010**, 182, 1735-1746 | 1.5 | 4 |
| 61 | Air-Breathing Liquid-Fueled Pulse Detonation Engine Demonstrator. *Doklady Physical Chemistry*, **2005**, 402, 93-95 | 0.8 | 4 |
| 60 | Interaction of a liquid film with a high-velocity gas flow behind a shock wave. *Combustion, Explosion and Shock Waves*, **1985**, 20, 573-579 | 1 | 4 |
| 59 | Simple model of detonation in a gas-film system with consideration of mechanical fuel removal. *Combustion, Explosion and Shock Waves*, **1985**, 21, 104-110 | 1 | 4 |
| 58 | How to utilize the kinetic energy of pulsed detonation products?. *Applied Thermal Engineering*, **2019**, 147, 728-734 | 5.8 | 4 |
| 57 | Numerical simulation of shock and detonation waves in bubbly liquids. *Shock Waves*, **2020**, 30, 263-271 | 1.6 | 4 |
| 56 | Deflagration-to-detonation transition in crossed-flow fast jets of propellant components. *Doklady Physical Chemistry*, **2017**, 476, 153-156 | 0.8 | 3 |
| 55 | Promotion of the self-ignition of fuel–air mixtures with mechanoactivated Al (Mg)–MoO3 particles. *Russian Journal of Physical Chemistry B*, **2016**, 10, 435-443 | 1.2 | 3 |
| 54 | Transient modes of propagation of the shock wave-reaction zone complex in methane-air mixtures. *Russian Journal of Physical Chemistry B*, **2014**, 8, 158-164 | 1.2 | 3 |
| 53 | Deflagration-to-detonation transition in the gas–liquid-fuel film system. *Doklady Physical Chemistry*, **2017**, 474, 93-98 | 0.8 | 3 |
| 52 | Calculation of shock wave propagation in water containing reactive gas bubbles. *Russian Journal of Physical Chemistry B*, **2017**, 11, 261-271 | 1.2 | 3 |
| 51 | Detailed kinetic mechanism of the multistep oxidation and combustion of isopentane and isohexane. *Russian Journal of Physical Chemistry B*, **2015**, 9, 933-939 | 1.2 | 3 |
| 50 | Experimental demonstration of the operation process of a pulse-detonation liquid rocket engine. *Russian Journal of Physical Chemistry B*, **2011**, 5, 664-667 | 1.2 | 3 |

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| 49 | The calculation of liquid-vapor phase equilibrium in H2O-H2O2 two-component system. *High Temperature*, **2008**, 46, 775-781 | 0.8 | 3 |
| 48 | Initiation of heterogeneous detonation in tubes with coils and Shchelkin spiral. *High Temperature*, **2006**, 44, 283-290 | 0.8 | 3 |
| 47 | Deflagration-to-Detonation Transition in Air Mixtures of Polypropylene Pyrolysis Products. *Doklady Physical Chemistry*, **2019**, 488, 129-133 | 0.8 | 3 |
| 46 | Production of highly superheated steam by cyclic detonations of propane- and methane-steam mixtures with oxygen for waste gasification. *Applied Thermal Engineering*, **2021**, 183, 116195 | 5.8 | 3 |
| 45 | Gasification of Low-Melting Fuel in a High-Temperature Flow of Inert Gas. *Journal of Propulsion and Power*, **2021**, 37, 20-28 | 1.8 | 3 |
| 44 | Low-Temperature Flameless Combustion of a Large Drop of n-Dodecane under Microgravity Conditions. *Russian Journal of Physical Chemistry B*, **2018**, 12, 245-257 | 1.2 | 3 |
| 43 | Three-Dimensional Direct Numerical Simulation of Turbulent Combustion of Hydrogen-Air Mixtures in a Synthetic Turbulent Field. *Russian Journal of Physical Chemistry B*, **2019**, 13, 636-645 | 1.2 | 2 |
| 42 | Cyclic Detonation of the Ternary Gas Mixture Propane–Oxygen–Steam for Producing Highly Superheated Steam. *Doklady Physical Chemistry*, **2020**, 490, 14-17 | 0.8 | 2 |
| 41 | Thrust characteristics of an airbreathing pulse detonation engine in flight at mach numbers of 0.4 to 5.0. *Russian Journal of Physical Chemistry B*, **2016**, 10, 272-283 | 1.2 | 2 |
| 40 | Deflagration-to-detonation transition in a high-velocity flow with separate delivery of fuel and oxidizer. *Doklady Physical Chemistry*, **2013**, 449, 91-93 | 0.8 | 2 |
| 39 | 3D simulation of hydrogen ignition in a rapid compression machine. *Journal of Loss Prevention in the Process Industries*, **2013**, 26, 1558-1568 | 3.5 | 2 |
| 38 | Hydrojet engine with pulse detonation combustion of liquid-fuel. *Doklady Physical Chemistry*, **2017**, 475, 129-133 | 0.8 | 2 |
| 37 | Magnetohydrodynamic effects of heterogeneous spray detonation. *Russian Journal of Physical Chemistry B*, **2015**, 9, 637-643 | 1.2 | 2 |
| 36 | 3D versus 2D calculation of thrust characteristics of the air-breathing pulse detonation engine under supersonic flight conditions. *Russian Journal of Physical Chemistry B*, **2014**, 8, 859-862 | 1.2 | 2 |
| 35 | Initiation of detonation in a tube with a profiled central body. *Doklady Physical Chemistry*, **2011**, 438, 114-117 | 0.8 | 2 |
| 34 | Analytical approximation of the thermal and caloric equations of state for real gases over a wide density and temperature range. *Russian Journal of Physical Chemistry B*, **2011**, 5, 1084-1105 | 1.2 | 2 |
| 33 | Initiation of gaseous detonation in tubes with sharp U-bends. *Doklady Physical Chemistry*, **2008**, 418, 22-25 | 0.8 | 2 |
| 32 | Stability of 2D two-phase reactive flows. *European Physical Journal Special Topics*, **2002**, 12, 437-444 | | 2 |

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| 31 | Organic Waste Gasification: A Selective Review. *Fuels*, **2021**, 2, 556-651 | 2.3 | 2 |
| 30 | [illegible] 5,7 [illegible] 500 *Gorenie I Vzryv (Moskva)* *Combustion and Explosion*, **2018**, 11, 54-62 | 0.5 | 2 |
| 29 | Reactor for Waste Gasification with Highly Superheated Steam. *Doklady Physical Chemistry*, **2020**, 495, 191-195 | 0.8 | 2 |
| 28 | Detonability of fuel–air mixtures. *Shock Waves*, **2020**, 30, 721-739 | 1.6 | 2 |
| 27 | Pressure measurements in detonation engines. *Proceedings of the Institution of Mechanical Engineers, Part G: Journal of Aerospace Engineering*,095441002199307 | 0.9 | 2 |
| 26 | Tests of the hydrogen-fueled detonation ramjet model in a wind tunnel with thrust measurements **2017**, | | 1 |
| 25 | Well-posed Euler model of shock-induced two-phase flow in bubbly liquid. *Shock Waves*, **2018**, 28, 253-266 | 1.6 | 1 |
| 24 | A Detailed Kinetic Mechanism of Multistage Oxidation and Combustion of Octanes. *Russian Journal of Physical Chemistry B*, **2018**, 12, 448-457 | 1.2 | 1 |
| 23 | Kinetic nature of blue flames in the autoignition of methane. *Russian Journal of Physical Chemistry B* , **2014**, 8, 326-331 | 1.2 | 1 |
| 22 | Combustion science and problems of contemporary power engineering. *Russian Journal of General Chemistry*, **2009**, 79, 2556-2561 | 0.7 | 1 |
| 21 | Real-gas properties of n-alkanes, O2, N2, H2O, CO, CO2, and H2 for diesel engine operation conditions. *Russian Journal of Physical Chemistry B*, **2009**, 3, 1191-1252 | 1.2 | 1 |
| 20 | Mechanisms of the amplification of a shock wave passing through a cool flame zone. *Russian Journal of Physical Chemistry B*, **2010**, 4, 101-109 | 1.2 | 1 |
| 19 | The pressure–temperature–concentration correlation for aqueous solutions of hydroperoxide. *High Temperature*, **2006**, 44, 47-56 | 0.8 | 1 |
| 18 | Modelling of a turbulent reacting gas/particle flow. *Acta Mechanica*, **2000**, 145, 45-63 | 2.1 | 1 |
| 17 | Pulsed combustion of fuel–air mixture in a cavity above water surface: modeling and experiments. *Shock Waves*,1 | 1.6 | 1 |
| 16 | Pulsed combustion of fuel–air mixture in a cavity under the boat bottom: modeling and experiments. *Shock Waves*,1 | 1.6 | 1 |
| 15 | Breakthrough in the Theory of Ramjets. *Russian Journal of Physical Chemistry B*, **2021**, 15, 318-325 | 1.2 | 1 |
| 14 | Heat Capacities and Enthalpies of Normal Alkanes in an Ideal Gas State. *Energies*, **2021**, 14, 2641 | 3.1 | 1 |

# List of Publications

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|---|---|---|---|
| 13 | Polyethylene Pyrolysis Products: Their Detonability in Air and Applicability to Solid-Fuel Detonation Ramjets. *Energies*, **2021**, 14, 820 | 3.1 | 1 |
| 12 | Rocket Engine with Continuous Film Detonation of Liquid Fuel. *Doklady Physical Chemistry*, **2018**, 481, 105-109 | 0.8 | 1 |
| 11 | Deflagration-to-detonation transition in stochiometric mixtures of the binary methane–hydrogen fuel with air. *International Journal of Hydrogen Energy*, **2021**, 46, 34046-34058 | 6.7 | 1 |
| 10 | Promotion of the high-temperature autoignition of hydrogen-air and methane-air mixtures by normal alkanes. *Russian Journal of Physical Chemistry B*, **2015**, 9, 250-254 | 1.2 | 0 |
| 9 | Transient combustion phenomena in high-speed flows in ducts. *Shock Waves*, **2020**, 30, 245-261 | 1.6 | 0 |
| 8 | Updated conceptual design of hydrogen/ethylene fueled detonation ramjet: Test fires at Mach 1.5, 2.0, and 2.5. *Aerospace Science and Technology*, **2022**, 126, 107602 | 4.9 | 0 |
| 7 | Natural Gas Conversion and Liquid/Solid Organic Waste Gasification by Ultra-Superheated Steam. *Energies*, **2022**, 15, 3616 | 3.1 | 0 |
| 6 | A model of laminar flames in droplet suspensions. *Russian Journal of Physical Chemistry B*, **2007**, 2, 493-499 | 22 | |
| 5 | Extension of the combustion limits for a porous burner by external heating. *Doklady Physical Chemistry*, **2006**, 406, 43-48 | 0.8 | |
| 4 | Shock-to-detonation transition in tube coils **2009**, 365-370 | | |
| 3 | Deflagration-to-detonation Transition in Stratified Oxygen–Liquid Fuel Film Systems. *Combustion Science and Technology*,1-35 | 1.5 | |
| 2 | Numerical Modeling of Gasification of Solid Hydracarbon Materials in a Heated-Inert-Gas Flow. *Journal of Engineering Physics and Thermophysics*, **2022**, 95, 20-28 | 0.6 | |
| 1 | Simulation of Multistage Autoignition in Diesel Engine Based on the Detailed Reaction Mechanism of Fuel Oxidation. *Mechanisms and Machine Science*, **2022**, 149-165 | 0.3 | |