

## LIST OF THE ACCEPTED PAPERS

### Oral Presentation

1. Al-Jaboori Muthana Abdul Majeed Jameel, Extinguish Oil Well's Fires
2. Antonov Ivan, Developing novel PIMS apparatus to study oxidation kinetics at engine-relevant pressures
3. Badernikov Artem, Results of numerical modeling of combustion processes in a vortex chamber
4. Chichinin Alexey, Double-arm three-dimensional ion imaging apparatus for the study of ion pair channels in resonance enhanced multiphoton ionization
5. Chukalovsky Alexander, N<sub>2</sub> dissociation and kinetics of N(4S) atoms in nitrogen DC glow discharge
6. Drakon Alexander, Inefficiency of suppression of methane-oxygen mixtures autoignition by halogenated hydrocarbons
7. Golovastov Sergey, Detonation decay and flame propagation through a channel with porous walls
8. Filimonova Elena, Formation of combustion wave in a hydrocarbon-air mixture in near high-voltage electrode of surface dielectric barrier discharge
9. Joarder Ratan, LES of Laser Initiation of Combustion of Gaseous Fuel-Air Mixture
10. Kobtsev Vitaly, The reduction of ignition delay time caused by singlet-oxygen molecules in low pressure hydrogen-air mixtures
11. Kopyev Evgeny, Burning of diesel fuel under vapor gasification conditions
12. Kosarev Ilya, Shock tube study of plasma-assisted dimethyl ether ignition at temperatures near self-ignition threshold
13. Kozlov Dmitry, Local optical diagnostics of high-temperature gas media using laser-induced gratings
14. Krikunova Anastasia, The gravity impact on the V-shape flame instability
15. Lopaev Dmitry, Features of oxygen metastable molecules kinetics in O<sub>2</sub> plasma with increasing pressure
16. Loukhovitski Boris, Influence of internal molecular degrees of freedom on their electric and optical properties
17. Maryandyshchev Pavel, Investigation of thermal degradation of hydrolysis lignin
18. Medvedkov Iakov, Design of a New Generation Molecular Beam Machine
19. Mikheyeva Ekaterina, Soot formation in pyrolysis of acetylene with hydrocarbon additions
20. Molokanov Alexander, Manometric Study of the Kinetics of Thermal Degradation of Alicyclic Hydrocarbons as Components of Advanced Aviation Fuels
21. Morozov Alexander, A Theoretical Study of Pyrolysis of exo-Tetrahydrodicyclopentadiene and its Primary and Secondary Unimolecular Decomposition Products
22. Muppala Siva, A Numerical study of two turbulent flame speed models for H<sub>2</sub>/CH<sub>4</sub>/air premixed combustion
23. Nigay Aleksandr, Experimental investigation of the gel fuel combustion process initiated by the hot particle
24. Nuzhnov Yuriy, To the development of the Kolmogorov K-62 theory under the conditions of intermittency of dissipative fluid
25. Perminov Valeriy, Mathematical modeling of the impact of forest fires on buildings and structures
26. Porfiriev Denis, Pyrolysis of C<sub>10</sub>H<sub>7</sub>Br in high temperature microreactor: experiment and modelling

27. Prokofev Vadim, Spin Combustion of Gasless Systems with Melting Component: 3D Simulation
28. Shaimukhametov Ramil, The Acoustic Spectrums of the combustion Process in the IC-Engines
29. Sharipov Alexander, Reaction kinetics of H<sub>2</sub> with O<sub>2</sub> in highly excited electronic states
30. Shchepakina Elena, A Geometric Approach to the Modeling of Critical Phenomena in Combustion Models
31. Shmakov Andrey, An Experimental and Numerical Study of Combustion Chemistry of Fatty Acids Esters
32. Smirnov Valery CARS and Fluorescent Study of Ignition of H<sub>2</sub>-O<sub>2</sub> Mixtures upon Photo-Dissociation of O<sub>2</sub> Molecules
33. Song Changqing, Visualization of the reaction zone of highly turbulent premixed jet flames based on the computed tomography of chemiluminescence and the planar laser induced fluorescence
34. Thomas Aaron, Reaction Dynamics of Radical Intermediates formed during Hydrocarbon Combustion
35. Titova Nataliya, Numerical study of H<sub>2</sub>S-H<sub>2</sub>O-air mixture conversion to hydrogen via activation of air by an electric discharge
36. Torokhov Sergey, The numerical study of hydrogen-air mixture ignition under laser photo dissociation of O<sub>2</sub> molecules
37. Upyrev Vladimir, Stabilization of combustion front in supersonic flow using streamer's discharge
38. Volobuev Igor, Concept of low emission combustion chamber with using streamers discharge to increase combustion speed
39. Volynets Andrey, Actinometry of O atoms with Kr at elevated pressures (10 - 100 Torr) in pure O<sub>2</sub> discharge

### Poster

1. Anisimov Vladislav, Maturation of workflow of combustion chamber with toroidal recirculation mixing zone
2. Azyazov Valeriy, Active oxygen species in combustion
3. Bashkirov Eugene, Products distribution in the reaction of atomic carbon with pyridine: theory and experiment
4. Blagin Evgeny, Increase of the energy plant efficiency in special conditions of its operation
5. Chernyshov Alexander, Thermometry in a sealed discharge cell with noble gas
6. Chichinin Alexey, Photodissociation dynamics of SCI<sub>2</sub>: resonance enhanced multi-photon ionization/time-of-flight mass spectroscopy study
7. Demyanov Andrey, Simulation of plasma initiation of ignition of methane-air mixtures under atmospheric pressure
8. Evseev Mihail, Formation Mechanisms of Phenanthrene and Anthracene
9. Gabdrashova Sholpan, Study of pyrotechnic delay composition using reinforced composite material with carbon nanotubes
10. Galimova Galiya, Reaction mechanism for the oxidation of C<sub>15</sub>H<sub>9</sub> with hydroxyl
11. Galimova Galiya, Reaction mechanism for the oxidation of C<sub>15</sub>H<sub>10</sub> with hydroxyl
12. Ghildina Anna, The rate constants calculations and the potential energy surface for indenyl C<sub>9</sub>H<sub>7</sub> +O<sub>2</sub> reaction by ab initio methods
13. Glotov Oleg, Combustion characteristics of model composite propellants with aluminum diboride

14. Kobtsev Vitaly, Methane-air flame thermometry using Planar Laser-Induced Fluorescence (PLIF)
15. Kochetov Igor, Simulation of ozone formation in an electric discharge in mixtures of methane with air
16. Kolomzarov Oleg, Substantiation of the expediency of using the combustion chamber with a toroidal recirculation zone in the small GTE
17. Korotchenko Alexandr, Formation mechanism of triphenylene
18. Matveev Sergey, Laminar burning velocities of n-decane with ethanol additions
19. Malikov Vladimir, Research materials and structures of space vehicles by multifrequency measuring system on the basis of eddy current transducers
20. Mebel Alexander, Oxidation of five-member rings in combustion
21. Miftyakhova Diana, Formation mechanism of benzo(c)phenanthrene
22. Mikheyeva Ekaterina, Experimental study of chemiluminescence in UV and VIS range at hydrogen-oxygen mixtures ignition
23. Nyashina Galina, Environmental advantages of composite fuels based on industrial wastes and different ranks of coal
24. Oleinikov Artem, The reaction of 1-naphthyl with 1,3-butadiene: a theoretical study
25. Pershin Andrey, Ozone recovery in the presence of nitrous oxides
26. Petrov Leonid, Modeling of the formation of ultrafine particles as coals burning
27. Porfiriev Denis, Kinetics of the 1-acenaphthyl+O<sub>2</sub> Reaction: A Theoretical Study
28. Rybakov Dmitry, Percolation model of combustion
29. Saleev Vladimir, Ab initio study of magnesium surface oxidation
30. Sharipov Alexander, Quantum chemical study of the reactions of H<sub>2</sub> and H<sub>2</sub>O molecules with N<sub>2</sub>(A<sup>3</sup>Σ<sup>u+</sup>)
31. Sludnova Alena, Study of a dielectric barrier discharge burner for plasma assisted combustion
32. Song Changqing, Investigation of flowfield structures of supersonic film cooling under the unheated and heated film coolant
33. Sultanova Aliya, Mechanism of Methyl Methacrylate Polymerization in the presence of the initiating system "azobisisobutyronitrile-ferrocene"
34. Titova Nataliya, 2D modeling of V-shaped turbulent methane-air flame
35. Tolstov Georgy, O<sub>2</sub>(b) quenching by NO, NO<sub>2</sub>, CH<sub>4</sub> at temperatures 297-800K
36. Torbin Alexey, Ozone recovery in presence of CO
37. Tupikin Andrey, The impact of non-stationary electric field on hydrocarbon flames
38. Tyurenkova Veronika, Mathematical modeling of burning surface in parallel flow of oxidant
39. Yatsenko Pavel, Application of ARAS and MRAS methods to study the kinetics of CF<sub>2</sub> radicals formation at pyrolysis C<sub>3</sub>F<sub>7</sub>I
40. Zubrilin Ivan, Modelling of small gas turbine engine CO emissions based on reactor network