

# CONTENTS

## Aviation, Rocket and Space Engineering

<b>Kokushkin V.V., Khomyakov M.K., Ovsyannikova N.Yu., Bogomolov N.V.</b> Dynamic of Emergency Fairing Separation from Launch Vehicle in Atmospheric Ascent .....	4
<b>Soluyanov A.A.</b> Spacecraft External Heat Flow Analysis by $z$ -Buffer Method .....	15
<b>Mayorova V.I., Mullin N.A.</b> Some Aspects of Small Spacecraft Thermal-Vacuum Testing .....	28
<b>Mosolov S.V., Sidlerov D.A.</b> Investigation of Antipulsation Partitions Influence on the Working Process Development in Oxygen-Kerosene LRE Combustion Chamber with Jet-Centrifugal Injectors by Numerical Simulation .....	44
<b>Ivanov M.Yu., Novikov A.E., Resh G.F.</b> Features of Designing and Numerical Simulation of Flow Stabilizers in Actuator Line Synchronization Systems .....	54
<b>Finogenov S.L., Kolomentsev A.I.</b> Nonisothermal Concentrator-Absorber System Performances for Solar Thermal Propulsion .....	66

## Power, Metallurgical and Chemical Engineering

<b>Dunaytsev A.A., Solonin V.I.</b> Mean Flow and Mass Exchange Structure in Dense Bundle of Fuel Rods of Gas-Cooled Reactor .....	84
---------------------------------------------------------------------------------------------------------------------------------------	----

## Mechanical Engineering and Machine Science

<b>Orlov A.I., Tsisarskiy A.D.</b> Risk Assessment Method in Creating Space-Rocket Technology .....	99
<b>Zubkov N.N., Bityutskaya Yu.L.</b> Effect of Heat-Exchange Pin-Fin Structure Parameters on its Performance Characteristics .....	108

## Mechanics

<b>Gorelov V.A., Padalkin B.V., Chudakov O.I.</b> Mathematical Model of Linear Motion on the Deformable Supporting Surface of the Two-Link Road Train with an Active Semitrailer .....	121
----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	-----