

Nikolai v Semionov

List of Publications by Year in descending order

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59
papers

429
citations

840776

11
h-index

839539

18
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59
all docs

59
docs citations

59
times ranked

42
citing authors

| # | ARTICLE | IF | CITATIONS |
|----|--|-----|-----------|
| 1 | Impact of incident Mach wave on supersonic boundary layer. Thermophysics and Aeromechanics, 2016, 23, 43-48. | 0.5 | 34 |
| 2 | Evolution of wave packets in supersonic flat-plate boundary layer. Thermophysics and Aeromechanics, 2015, 22, 17-27. | 0.5 | 33 |
| 3 | Linear development of controlled disturbances in the supersonic boundary layer on a swept wing at Mach 2. Physics of Fluids, 2016, 28, 064101. | 4.0 | 24 |
| 4 | Combined influence of coating permeability and roughness on supersonic boundary layer stability and transition. Journal of Fluid Mechanics, 2016, 798, 751-773. | 3.4 | 23 |
| 5 | Investigation of laminar-turbulent transition of supersonic boundary layer by scanning constant temperature hot-wire anemometer. AIP Conference Proceedings, 2018, , . | 0.4 | 22 |
| 6 | Method laminar-turbulent transition control of supersonic boundary layer on a swept wing. Thermophysics and Aeromechanics, 2007, 14, 337-341. | 0.5 | 21 |
| 7 | Experimental study of mean and pulsation flow characteristics in the 2D/3D supersonic boundary layer behind flat roughness elements. Thermophysics and Aeromechanics, 2014, 21, 3-13. | 0.5 | 16 |
| 8 | Experimental Investigation of the Weak Shock Wave Influence on the Boundary Layer of a Flat Blunt Plate at the Mach Number 2.5. Fluid Dynamics, 2019, 54, 257-263. | 0.9 | 14 |
| 9 | Excitation of natural oscillations in a boundary layer by an external acoustic field. Fluid Dynamics, 1986, 21, 400-404. | 0.9 | 12 |
| 10 | Hot-wire visualization of the evolution of localized wave packets in a supersonic flat-plate boundary layer. Journal of Visualization, 2017, 20, 549-557. | 1.8 | 12 |
| 11 | Experimental study of nonlinear processes in a swept-wing boundary layer at the mach number M=2. Journal of Applied Mechanics and Technical Physics, 2014, 55, 764-772. | 0.5 | 11 |
| 12 | Experimental study of the effects of couple weak waves on laminar-turbulent transition on attachment-line of a swept cylinder. AIP Conference Proceedings, 2016, , . | 0.4 | 11 |
| 13 | Experimental study of effect of a couple of weak shock waves on boundary layer of the blunt flat plate. AIP Conference Proceedings, 2018, , . | 0.4 | 11 |
| 14 | Effect of unit Reynolds number on the laminar-turbulent transition on a swept wing in supersonic flow. Thermophysics and Aeromechanics, 2018, 25, 659-665. | 0.5 | 11 |
| 15 | The impact of weak shock waves on the flow in the boundary layer of a flat plate with a variable sweep angle of the leading edge. Thermophysics and Aeromechanics, 2019, 26, 803-809. | 0.5 | 11 |
| 16 | Evolution of localized artificial disturbance in 2D and 3D supersonic boundary layers. Proceedings of the Institution of Mechanical Engineers, Part G: Journal of Aerospace Engineering, 2020, 234, 115-123. | 1.3 | 11 |
| 17 | On mechanisms of the action of weak shock waves on laminar-turbulent transition in supersonic boundary layer. AIP Conference Proceedings, 2017, , . | 0.4 | 10 |
| 18 | Instability of a three-dimensional supersonic boundary layer. Journal of Applied Mechanics and Technical Physics, 1995, 36, 840-843. | 0.5 | 9 |

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|----|---|-----|-----------|
| 19 | The influence of surface porosity on the stability and transition of supersonic boundary layer on a flat plate. <i>Thermophysics and Aeromechanics</i> , 2010, 17, 259-268. | 0.5 | 9 |
| 20 | Linear evolution of controlled disturbances in the supersonic boundary layer on a swept wing. <i>Fluid Dynamics</i> , 2014, 49, 188-197. | 0.9 | 9 |
| 21 | The influence of moderate angle-of-attack variation on disturbances evolution and transition to turbulence in supersonic boundary layer on swept wing. <i>Proceedings of the Institution of Mechanical Engineers, Part G: Journal of Aerospace Engineering</i> , 2020, 234, 96-101. | 1.3 | 9 |
| 22 | The evolution of mass flow and total temperature pulsations in flat plate boundary layer at M=2.5. <i>AIP Conference Proceedings</i> , 2017, , . | 0.4 | 8 |
| 23 | An effect of small angle of attack on disturbances evolution in swept wing boundary layer at Mach number M=2. <i>AIP Conference Proceedings</i> , 2018, , . | 0.4 | 8 |
| 24 | Hot-wire measurements of the evolution of total temperature and mass flow pulsations in supersonic boundary layer on flat plate with coating permeability. <i>AIP Conference Proceedings</i> , 2018, , . | 0.4 | 8 |
| 25 | The laminar-turbulent transition experiments in supersonic boundary layers. <i>AIP Conference Proceedings</i> , 2019, , . | 0.4 | 8 |
| 26 | Experimental investigation of effect of an external wave on supersonic boundary layer of the blunt flat plate. <i>AIP Conference Proceedings</i> , 2019, , . | 0.4 | 7 |
| 27 | Experimental Study of Turbulence Beginning of Supersonic Boundary Layer on Swept Wing at Mach Numbers 2 $\hat{=}$ 4. <i>Journal of Physics: Conference Series</i> , 2011, 318, 032018. | 0.4 | 6 |
| 28 | Hot-wire measurements of the evolution of total temperature and mass flow pulsations in a modulated 3D supersonic boundary layer. <i>AIP Conference Proceedings</i> , 2018, , . | 0.4 | 6 |
| 29 | Evolution of disturbances in a laminarized supersonic boundary layer on a swept wing. <i>Journal of Applied Mechanics and Technical Physics</i> , 2008, 49, 188-193. | 0.5 | 5 |
| 30 | Experiments on the Artificial Disturbance Evolution in 2D and 3D Spanwise Modulated Boundary Layers at Mach 2 and 2.5. <i>Procedia IUTAM</i> , 2015, 14, 48-57. | 1.2 | 5 |
| 31 | Joint permeability and roughness effect on the supersonic flat-plate boundary layer stability and transition. <i>Fluid Dynamics</i> , 2014, 49, 608-613. | 0.9 | 4 |
| 32 | The influence of flow parameters on the transition to turbulence in supersonic boundary layer on swept wing. <i>AIP Conference Proceedings</i> , 2016, , . | 0.4 | 4 |
| 33 | To the analysis of the natural pulsation development during laminar-turbulent transition in supersonic boundary layer. <i>AIP Conference Proceedings</i> , 2017, , . | 0.4 | 4 |
| 34 | Wave analysis of the evolution of a single wave packet in supersonic boundary layer. <i>AIP Conference Proceedings</i> , 2016, , . | 0.4 | 3 |
| 35 | To nonlinear disturbance interactions in 3D supersonic boundary-layer. <i>AIP Conference Proceedings</i> , 2016, , . | 0.4 | 3 |
| 36 | Excitation of localized wave packet in swept-wing supersonic boundary layer. <i>MATEC Web of Conferences</i> , 2017, 115, 02015. | 0.2 | 3 |

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|----|--|-----|-----------|
| 37 | On introduction of controlled disturbances into a longitudinal vortex in a supersonic boundary layer. AIP Conference Proceedings, 2018, , . | 0.4 | 3 |
| 38 | Evolution of a localized wave packet in the boundary layer of the swept wing at $M = 2$. Journal of Physics: Conference Series, 2019, 1382, 012048. | 0.4 | 3 |
| 39 | Structure of artificial disturbances induced by an external acoustic field in a supersonic boundary layer. Fluid Dynamics, 1989, 24, 394-398. | 0.9 | 2 |
| 40 | On the oblique breakdown mechanism in a supersonic boundary layer on a swept wing at Mach 2. AIP Conference Proceedings, 2017, , . | 0.4 | 2 |
| 41 | An Investigation of the Influence of the Parameters of a Pulse Discharge on Localized Disturbances Generated in a Supersonic Boundary Layer. Technical Physics Letters, 2019, 45, 242-245. | 0.7 | 2 |
| 42 | Experimental study of excitation and evolution of contrarotating longitudinal vortices in a boundary layer of a flat plate at $M = 2$. AIP Conference Proceedings, 2020, , . | 0.4 | 2 |
| 43 | Experimental study of heat transfer in the boundary layer of a flat plate with the impact of weak shock waves on the leading edge. AIP Conference Proceedings, 2020, , . | 0.4 | 2 |
| 44 | Stability of a wake behind a flat plate in a supersonic flow. Journal of Applied Mechanics and Technical Physics, 1995, 36, 844-847. | 0.5 | 1 |
| 45 | Influence of coating permeability and roughness on supersonic boundary layer stability. AIP Conference Proceedings, 2016, , . | 0.4 | 1 |
| 46 | On the artificial disturbance evolution in 2D/3D spanwise modulated supersonic boundary layers. AIP Conference Proceedings, 2016, , . | 0.4 | 1 |
| 47 | The effect of small angle of attack on the laminar-turbulent transition in boundary layer on swept wing at Mach number $M=2$. AIP Conference Proceedings, 2017, , . | 0.4 | 1 |
| 48 | The wave packet development in the 3D supersonic boundary layers. AIP Conference Proceedings, 2018, , . | 0.4 | 1 |
| 49 | Experimental study of the natural disturbance development in a supersonic flat plate boundary layer with a wavy surface. AIP Conference Proceedings, 2019, , . | 0.4 | 1 |
| 50 | Influence of small attack angles on the transition on the wing with the subsonic leading edge at $M=2$. AIP Conference Proceedings, 2020, , . | 0.4 | 1 |
| 51 | Correlation measurement of supersonic flow pulsations and boundary layer disturbances in wind tunnel at Mach 2. AIP Conference Proceedings, 2020, , . | 0.4 | 1 |
| 52 | Wave structure of artificial perturbations in a supersonic boundary layer on a plate. Journal of Applied Mechanics and Technical Physics, 1990, 31, 250-252. | 0.5 | 0 |
| 53 | Stability of a supersonic flat-plate wake (Comparison of numerical and experimental results). Fluid Dynamics, 2008, 43, 869-872. | 0.9 | 0 |
| 54 | Experiments on the wave train development in 3D boundary layer at Mach 2. Journal of Physics: Conference Series, 2011, 318, 032011. | 0.4 | 0 |

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|----|---|-----|-----------|
| 55 | Propagation of the wave packet in a boundary layer of swept wing at Mach number 2. AIP Conference Proceedings, 2017, , . | 0.4 | 0 |
| 56 | On the nonlinear development of controlled disturbances in the supersonic boundary layer of a swept wing. AIP Conference Proceedings, 2017, , . | 0.4 | 0 |
| 57 | Experimental investigation of the natural and controlled disturbance development in a supersonic boundary layer on the swept wing. Journal of Physics: Conference Series, 2019, 1382, 012029. | 0.4 | 0 |
| 58 | Flow inhomogeneity influence on the wave packet development in a swept wing boundary layer at Mach number of 2.0. AIP Conference Proceedings, 2020, , . | 0.4 | 0 |
| 59 | Evolution of mass flow and total temperature pulsations in flat-plate and swept-wing boundary layers at Mach 2 and 2.5. Journal of Physics: Conference Series, 2020, 1677, 012033. | 0.4 | 0 |