Alexander D Kosinov

List of Publications by Year
in descending order

132	920	687363 13	610901 24
papers	citations	h-index	g-index

132	132	132	124
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Development of Disturbances in the Supersonic Boundary Layer under Helium Injection from the Surface. Siberian Journal of Physics, 2022, 16, 41-47.	0.3	0
2	Effect of Small Angles of Attack on Laminar-Turbulent Transition in the Supersonic Boundary Layer on a Swept Wing with Ï‡ = 72Â°. Fluid Dynamics, 2022, 57, 30-36.	0.9	0
3	Investigation of laminar-turbulent transition of supersonic boundary layer by scanning constant temperature hot-wire anemometer at Mach 2-4. AIP Conference Proceedings, 2021, , .	0.4	1
4	An effect of unit Reynolds number on the laminar-turbulent transition on 3D swept wing with Ï‡ = 72Â° at M = 2. AIP Conference Proceedings, 2021, , .	0.4	1
5	Cross-correlation measurement of disturbance initiated by weak shock wave in the flat plate boundary layer with blunt leading edge at Mach 2. AIP Conference Proceedings, 2021, , .	0.4	4
6	Experimental study of the impact of N-wave on heat transfer in a boundary layer of a flat plate at the Mach number 2. AIP Conference Proceedings, 2021, , .	0.4	3
7	Experimental Studies of the Impact of Periodic Modulation of the Flow on the De-velopment of Disturbances in the Boundary Layer of a Swept Wing at a M = 2.5. Siberian Journal of Physics, 2021, 16, 81-90.	0.3	1
8	Experimental investigation of natural disturbances of a supersonic boundary layer on a swept-wing model with periodic roughness at Mach 2.5. AIP Conference Proceedings, 2021, , .	0.4	0
9	Experimental study of influence of heavy gas injection into boundary layer on perforated model surface at Mach number 2 on its stability to controlled disturbances. AIP Conference Proceedings, 2021, , .	0.4	0
10	Influence of surface sublimation on the stability of the supersonic boundary layer and the laminarâ€“turbulent transition. Physics of Fluids, 2021, 33, 024101.	4.0	5
11	Experimental study of the influence of external disturbances on the position of the laminar-turbulent transition on swept wings at M = 2. Thermophysics and Aeromechanics, 2021, 28, 319-325.	0.5	4
12	Experimental study of the laminar-turbulent transition in the boundary layer of the wing with a sweep angle of the leading edge of 72 degrees at Mach 4. AIP Conference Proceedings, 2021, , .	0.4	2
13	Effect of surface sublimation on boundary-layer stability. AIP Conference Proceedings, 2021, , .	0.4	0
14	Research on the Influence of the Unit Reynoldâ€™s Number on the Characteristics of N-Waves at M = 2.5. Siberian Journal of Physics, 2021, 16, 53-64.	0.3	0
15	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
16	The influence of moderate angle-of-attack variation on disturbances evolution and transition to turbulence in supersonic boundary layer on swept wing. Proceedings of the Institution of Mechanical Engineers, Part G: Journal of Aerospace Engineering, 2020, 234, 96-101.	1.3	9
17	On the artificial wave packet development in a spanwise modulated boundary layer on the swept wing at Mach 2. AIP Conference Proceedings, 2020, , .	0.4	2
18	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

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19	Achievements and problems of research on the development of controlled disturbances from a glow discharge in supersonic boundary layers. AIP Conference Proceedings, 2020, , .	0.4	0
20	Experimental study of natural disturbances of a supersonic boundary layer on a swept-wing model with periodic roughness. AIP Conference Proceedings, 2020, , .	0.4	0
21	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
22	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
23	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
24	Correlation measurement of supersonic flow pulsations and boundary layer disturbances in wind tunnel at Mach 2. AIP Conference Proceedings, 2020, , .	0.4	1
25	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
26	Experimental investigation of effect of an external wave on supersonic boundary layer of the blunt flat plate. AIP Conference Proceedings, 2019, , .	0.4	7
27	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
28	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
29	Experimental and numerical investigation of controlled disturbances development from two sources in supersonic boundary layer. Advances in Aerodynamics, 2019, 1, .	2.5	5
30	Influence of heavy-gas injection into supersonic boundary layer on its stability to controlled disturbances. AIP Conference Proceedings, 2019, , .	0.4	0
31	The laminar-turbulent transition experiments in supersonic boundary layers. AIP Conference Proceedings, 2019, , .	0.4	8
32	Influence of distributed heavy-gas injection on stability and transition of supersonic boundary-layer flow. Physics of Fluids, 2019, 31, .	4.0	14
33	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
34	Experimental investigation of freestream disturbances across an oblique shock wave via modal analysis with a wedge hot-film. Thermophysics and Aeromechanics, 2019, 26, 789-802.	0.5	1
35	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
36	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

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37	The correlation of the pulsations of flow in the settling chamber with the pulsations of supersonic flow. Journal of Physics: Conference Series, 2019, 1404, 012074.	0.4	3
38	Evolution of artificial disturbances in swept wing supersonic boundary layer. Journal of Physics: Conference Series, 2019, 1404, 012084.	0.4	0
39	The controlled periodic impact on the longitudinal vortex in the boundary layer at Mach 2. Journal of Physics: Conference Series, 2019, 1404, 012094.	0.4	0
40	Experimental study of the laminar-turbulent transition on models of wings with subsonic and supersonic leading edge at M = 2. Journal of Physics: Conference Series, 2019, 1404, 012097.	0.4	3
41	â€œN-waveâ€•propagation in supersonic flow at flow past the flat plate with sharp edge. Journal of Physics: Conference Series, 2019, 1404, 012102.	0.4	0
42	The experimental study of the weak shock wave action on the boundary layer of the sweep flat plate. Journal of Physics: Conference Series, 2019, 1404, 012083.	0.4	4
43	Experimental Study of the Weak Shock Wave Action on the Boundary Layer of a Plate at the Mach Number 2.5. Siberian Journal of Physics, 2019, 14, 46-55.	0.3	5
44	A Study of the Pulsations of Flow in the Settling Chamber and Their Relationship with the Pulsations of the Supersonic Flow. Siberian Journal of Physics, 2019, 14, 77-85.	0.3	0
45	An effect of small angle of attack on disturbances evolution in swept wing boundary layer at Mach number M=2. AIP Conference Proceedings, 2018, , .	0.4	8
46	Investigation of laminar-turbulent transition of supersonic boundary layer by scanning constant temperature hot-wire anemometer. AIP Conference Proceedings, 2018, , .	0.4	22
47	Hot-wire measurements of the evolution of total temperature and mass flow pulsations in supersonic boundary layer on flat plate with coating permeability. AIP Conference Proceedings, 2018, , .	0.4	8
48	The wave packet development in the 3D supersonic boundary layers. AIP Conference Proceedings, 2018, , .	0.4	1
49	Experimental investigation of influence of tangential and normal heavy-gas blowing on the supersonic boundary-layer stability. AIP Conference Proceedings, 2018, , .	0.4	0
50	On introduction of controlled disturbances into a longitudinal vortex in a supersonic boundary layer. AIP Conference Proceedings, 2018, , .	0.4	3
51	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
52	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
53	Hot-wire measurements of the evolution of total temperature and mass flow pulsations in a modulated 3D supersonic boundary layer. AIP Conference Proceedings, 2018, , .	0.4	6
54	Regimes of flow turbulization near swept wing edge in hypersonic flow. AIP Conference Proceedings, 2018, , .	0.4	2

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55	Stability of supersonic boundary layer under the influence of heavy gas injection: experimental study. Thermophysics and Aeromechanics, 2018, 25, 183-190.	0.5	9
56	Implementation of a new thermal model and static calibration of a wedge-shaped hot-film probe in a constant-temperature mode. International Journal of Heat and Mass Transfer, 2018, 126, 1-9.	4.8	7
57	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
58	Propagation of the wave packet in a boundary layer of swept wing at Mach number 2. AIP Conference Proceedings, 2017, , .	0.4	0
59	Excitation of localized wave packet in swept-wing supersonic boundary layer. MATEC Web of Conferences, 2017, 115, 02015.	0.2	3
60	The evolution of mass flow and total temperature pulsations in flat plate boundary layer at M=2.5. AIP Conference Proceedings, 2017, , .	0.4	8
61	Numerical study of the interaction of the N-wave with the plate leading edge in the supersonic stream. AIP Conference Proceedings, 2017, , .	0.4	5
62	Experimental and numerical investigation of the recovery ratio of a wedge-shaped hot-film probe. Thermophysics and Aeromechanics, 2017, 24, 187-202.	0.5	3
63	Experimental investigation of influence of heavy gas injection into supersonic boundary layer on laminar-turbulent transition. AIP Conference Proceedings, 2017, , .	0.4	1
64	Investigation of the effect of heavy gas injection into a supersonic boundary layer on laminar-turbulent transition. Fluid Dynamics, 2017, 52, 769-776.	0.9	3
65	On mechanisms of the action of weak shock waves on laminar-turbulent transition in supersonic boundary layer. AIP Conference Proceedings, 2017, , .	0.4	10
66	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
67	On the nonlinear development of controlled disturbances in the supersonic boundary layer of a swept wing. AIP Conference Proceedings, 2017, , .	0.4	0
68	Visualization of interaction of Mach waves with a bow shock. AIP Conference Proceedings, 2017, , .	0.4	3
69	To the analysis of the natural pulsation development during laminar-turbulent transition in supersonic boundary layer. AIP Conference Proceedings, 2017, , .	0.4	4
70	On the oblique breakdown mechanism in a supersonic boundary layer on a swept wing at Mach 2. AIP Conference Proceedings, 2017, , .	0.4	2
71	On the development of controlled stationary and travelling disturbances in the supersonic boundary layer of a swept wing. EPJ Web of Conferences, 2017, 159, 00024.	0.3	2
72	Influence of Heavy Gas Blowing into the Wall Layer of Supersonic Boundary-Layer on Its Transition. Siberian Journal of Physics, 2017, 12, 50-56.	0.3	1

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73	On Determination of the Mechanism of Mach Wave / Bow-Shock Interaction. Siberian Journal of Physics, 2017, 12, 20-27.	0.3	3
74	Influence of Small Angles of Attacks on the Laminar- Turbulent Transition on a Swept Wing at Mach Number M = 2. Siberian Journal of Physics, 2017, 12, 35-40.	0.3	2
75	Wave analysis of the evolution of a single wave packet in supersonic boundary layer. AIP Conference Proceedings, 2016, , .	0.4	3
76	To nonlinear disturbance interactions in 3D supersonic boundary-layer. AIP Conference Proceedings, 2016, , .	0.4	3
77	Impact of incident Mach wave on supersonic boundary layer. Thermophysics and Aeromechanics, 2016, 23, 43-48.	0.5	34
78	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
79	Influence of coating permeability and roughness on supersonic boundary layer stability. AIP Conference Proceedings, 2016, , .	0.4	1
80	On the artificial disturbance evolution in 2D/3D spanwise modulated supersonic boundary layers. AIP Conference Proceedings, 2016, , .	0.4	1
81	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
82	The influence of flow parameters on the transition to turbulence in supersonic boundary layer on swept wing. AIP Conference Proceedings, 2016, , .	0.4	4
83	Linear and nonlinear development of controlled disturbances in the supersonic boundary layer on a swept wing at Mach 2.5. Journal of Physics: Conference Series, 2016, 754, 022005.	0.4	0
84	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
85	Evolution of wave packets in supersonic flat-plate boundary layer. Thermophysics and Aeromechanics, 2015, 22, 17-27.	0.5	33
86	Experiments on the Artificial Disturbance Evolution in 2D and 3D Spanwise Modulated Boundary Layers at Mach 2 and 2.5. Procedia IUTAM, 2015, 14, 48-57.	1.2	5
87	On the relative â€œreceptivityâ€•of twoand three-dimensional supersonic boundary layers to stationary disturbances at mach 2. , 2015, , .		0
88	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
89	Joint permeability and roughness effect on the supersonic flat-plate boundary layer stability and transition. Fluid Dynamics, 2014, 49, 608-613.	0.9	4
90	Linear evolution of controlled disturbances in the supersonic boundary layer on a swept wing. Fluid Dynamics, 2014, 49, 188-197.	0.9	9

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91	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
92	Experiments on relative receptivity of three-dimensional supersonic boundary layer to controlled disturbances and its development. , 2013, , .		5
93	Experimental study of stability and transition of supersonic boundary layer on swept wing at mach number 2-4. , 2013, , .		1
94	Influence of porous-coating thickness on the stability and transition of flat-plate supersonic boundary layer. Thermophysics and Aeromechanics, 2012, 19, 555-560.	0.5	7
95	EXPERIMENTAL INVESTIGATION OF THE SUPERSONIC BOUNDARY LAYER STABILITY ON A SWEPT WING AT MACH NUMBER M = 2. TsAGI Science Journal, 2011, 42, 1-12.	0.1	6
96	Experimental Study of Turbulence Beginning of Supersonic Boundary Layer on Swept Wing at Mach Numbers 2 â€“ 4. Journal of Physics: Conference Series, 2011, 318, 032018.	0.4	6
97	Experiments on the wave train development in 3D boundary layer at Mach 2. Journal of Physics: Conference Series, 2011, 318, 032011.	0.4	0
98	The influence of surface porosity on the stability and transition of supersonic boundary layer on a flat plate. Thermophysics and Aeromechanics, 2010, 17, 259-268.	0.5	9
99	Experimental study of stability of supersonic boundary layer on swept wing. IUTAM Symposium on Cellular, Molecular and Tissue Mechanics, 2010, , 379-384.	0.2	2
100	Experiments on the wave train excitation and wave interaction in spanwise modulated supersonic boundary layer. IUTAM Symposium on Cellular, Molecular and Tissue Mechanics, 2010, , 513-516.	0.2	5
101	Evolution of disturbances in a laminarized supersonic boundary layer on a swept wing. Journal of Applied Mechanics and Technical Physics, 2008, 49, 188-193.	0.5	5
102	Method laminar-turbulent transition control of supersonic boundary layer on a swept wing. Thermophysics and Aeromechanics, 2007, 14, 337-341.	0.5	21
103	Structure of Acoustic Radiation from an Artificially Excited Supersonic Boundary Layer. International Journal of Aeroacoustics, 2005, 4, 353-362.	1.3	0
104	Stability and Transition on a Swept Cylinder in a Supersonic Flow. Journal of Applied Mechanics and Technical Physics, 2003, 44, 212-220.	0.5	7
105	Comparative Measurements in M=2.54 Flow Using Constant-Temperature and Constant-Voltage Anemometery. , 2003, , .		4
106	Constant temperature hot-wire measurements in a short duration supersonic wind tunnel. Aeronautical Journal, 2001, 105, 435-450.	1.6	16
107	Experimental study of evolution of disturbances in a supersonic boundary layer on a swept-wing model under controlled conditions. Journal of Applied Mechanics and Technical Physics, 2000, 41, 44-49.	0.5	7
108	Experimental Study of Supersonic Boundary Layer Receptivity in Controlled Conditions. , 2000, , 451-456.		2

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109	On correspondence of laminar-turbulent transition processes in natural and in controlled supersonic experiments on flat plate. , 2000, , 493-498.		1
110	On Anomalous Wave Processes in Supersonic Boundary Layer. , 2000, , 463-468.		0
111	Development of Artificial Disturbances in the Boundary Layer on a Plate and in the Wake Behind It at Supersonic Free-Flow Speed. , 2000, , 457-462.		0
112	â€œAnomalousâ€•nonlinear wave phenomena in a supersonic boundary layer. Journal of Applied Mechanics and Technical Physics, 1999, 40, 858-864.	0.5	6
113	Transition Control of Supersonic Boundary Layer on Flat Plate. Fluid Mechanics and Its Applications, 1999, , 323-328.	0.2	2
114	An experimental study of the nonlinear evolution of instability waves on a flat plate for mach number M=3. Journal of Applied Mechanics and Technical Physics, 1997, 38, 265-270.	0.5	8
115	An experimental study of generation of unstable disturbances on the leading edge of a plate AT M=2. Journal of Applied Mechanics and Technical Physics, 1997, 38, 45-51.	0.5	30
116	Experimental Investigation of Laminar-Turbulent Transition Process in Supersonic Boundary Layer Using Controlled Disturbances. Fluid Mechanics and Its Applications, 1996, , 17-26.	0.2	36
117	Instability of a Three-Dimensional Supersonic Boundary Layer. Fluid Mechanics and Its Applications, 1996, , 361-368.	0.2	7
118	Resonance Interaction of Wave Trains in Supersonic Boundary Layer. Fluid Mechanics and Its Applications, 1996, , 379-388.	0.2	17
119	Instability of a three-dimensional supersonic boundary layer. Journal of Applied Mechanics and Technical Physics, 1995, 36, 840-843.	0.5	9
120	Nonlinear Development of Waves in the Supersonic Boundary Layer. , 1995, , 181-188.		3
121	Experiments on the Nonlinear Instability of Supersonic Boundary Layers. , 1994, , 196-205.		55
122	Influence of a fan of rarefaction waves on the development of a disturbance in a supersonic boundary layer. Journal of Applied Mechanics and Technical Physics, 1992, 33, 191-193.	0.5	1
123	Experimental investigation of the development of harmonic disturbances in the boundary layer on a flat plate at mach number M=4. Fluid Dynamics, 1991, 25, 854-858.	0.9	1
124	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
125	Experiments on the stability of supersonic laminar boundary layers. Journal of Fluid Mechanics, 1990, 219, 621.	3.4	153
126	Experimental Study of the Supersonic Boundary Layer Stability on the Cone-Cylinder Model. , 1990, , 239-249.		0

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127	Stability of a supersonic boundary layer behind a fan of rarefaction waves. Journal of Applied Mechanics and Technical Physics, 1988, 30, 447-451.	0.5	2
128	Experimental investigation of the wave structure of a supersonic boundary layer. Journal of Applied Mechanics and Technical Physics, 1987, 27, 730-734.	0.5	3
129	Experimental study of the influence of blunt leading edge of a flat plate on the growth of three-dimensional waves in supersonic flow. Journal of Applied Mechanics and Technical Physics, 1987, 28, 212-215.	0.5	3
130	Growth of artificially induced disturbances in a supersonic boundary layer. Fluid Dynamics, 1985, 19, 703-709.	0.9	7
131	Development of Artificially Excited Disturbances in Supersonic Boundary Layer. , 1985, , 601-606.		10
132	Development of small perturbations in a slightly nonparallel supersonic flow. Journal of Applied Mechanics and Technical Physics, 1982, 23, 398-401.	0.5	0