Yevgeni Raitses

List of Publications by Year
in descending order

158	4,847	81743 39	118652 62
papers	citations	h-index	g-index

160	160	160	1847
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Determination of positive anode sheath in anodic carbon arc for synthesis of nanomaterials. Journal Physics D: Applied Physics, 2022, 55, 114001.	1.3	1
2	A low power flexible dielectric barrier discharge disinfects surfaces and improves the action of hydrogen peroxide. Scientific Reports, 2021, 11, 4626.	1.6	19
3	Studies of a modulated Hall thruster. Plasma Sources Science and Technology, 2021, 30, 055011.	1.3	8
4	On the mechanism of ionization oscillations in Hall thrusters. Journal of Applied Physics, 2021, 129, .	1.1	17
5	Restructuring of rotating spokes in response to changes in the radial electric field and the neutral pressure of a cylindrical magnetron plasma. Journal of Applied Physics, 2021, 129, .	1.1	7
6	High hydrogen coverage on graphene via low temperature plasma with applied magnetic field. Carbon, 2021, 177, 244-251.	5.4	17
7	Theoretical Analysis of Performance Parameters in Oscillating Plasma Thrusters. Journal of Propulsion and Power, 2021, 37, 544-552.	1.3	7
8	Magnetically insulated baffled probe (MIBP) for low-temperature and fusion-boundary plasma studies. Plasma Physics and Controlled Fusion, 2021, 63, 093001.	0.9	1
9	Ion acceleration in a wall-less Hall thruster. Journal of Applied Physics, 2021, 130, .	1.1	15
10	Quasi-steady testing approach for high-power Hall thrusters. Journal of Applied Physics, 2021, 130, .	1.1	1
11	Mitigation of breathing oscillations and focusing of the plume in a segmented electrode wall-less Hall thruster. Applied Physics Letters, 2021, 119, .	1.5	6
12	Correction: Application of Hall Thrusters with Modulated Oscillations. , 2020, , .		0
13	Characterization of plasma and gas-phase chemistry during boron-nitride nanomaterial synthesis by laser-ablation of boron-rich targets. Physical Chemistry Chemical Physics, 2020, 22, 20837-20850.	1.3	8
14	Application of Hall Thrusters with Modulated Oscillations. , 2020, , .		2
15	Physics of Eâ€‰Ã—â€‰B discharges relevant to plasma propulsion and similar technologies. Physics of Plasmas, 2020, 27, .	0.7	89
16	Theory and Modelling of Axial Mode Oscillations in Hall Thruster. , 2019, , .		6
17	Hall thruster with externally driven oscillations. , 2019, , .		1
18	Growth of nanoparticles in dynamic plasma. Physical Review E, 2019, 99, 063205.	0.8	17

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19	Determining the gas composition for the growth of BNNTs using a thermodynamic approach. Physical Chemistry Chemical Physics, 2019, 21, 13268-13286.	1.3	8
20	Self-Organization, Structures, and Anomalous Transport in Turbulent Partially Magnetized Plasmas with Crossed Electric and Magnetic Fields. Physical Review Letters, 2019, 122, 185001.	2.9	21
21	Boundary-induced effect on the spoke-like activity in Eâ€‰Ã—â€‰B plasma. Physics of Plasmas, 2019, 26, .	0.7	17
22	Control of Coherent Structures via External Drive of the Breathing Mode. Plasma Physics Reports, 2019, 45, 134-146.	0.3	12
23	A rapid technique for the determination of secondary electron emission yield from complex surfaces. Journal of Applied Physics, 2019, 126, .	1.1	8
24	On limitations of laser-induced fluorescence diagnostics for xenon ion velocity distribution function measurements in Hall thrusters. Physics of Plasmas, 2018, 25, .	0.7	21
25	Space micropropulsion systems for Cubesats and small satellites: From proximate targets to furthermost frontiers. Applied Physics Reviews, 2018, 5, .	5.5	242
26	Moderate pressure plasma source of nonthermal electrons. Journal Physics D: Applied Physics, 2018, 51, 235202.	1.3	5
27	Quantitative imaging of carbon dimer precursor for nanomaterial synthesis in the carbon arc. Plasma Sources Science and Technology, 2018, 27, 025008.	1.3	11
28	Four-Wave-Mixing Approach to InÂSitu Detection of Nanoparticles. Physical Review Applied, 2018, 9, .	1.5	20
29	Current flow instability and nonlinear structures in dissipative two-fluid plasmas. Physics of Plasmas, 2018, 25, .	0.7	21
30	Nonlinear structures and anomalous transport in partially magnetized EÃ—B plasmas. Physics of Plasmas, 2018, 25, 011608.	0.7	62
31	Floating potential of emitting surfaces in plasmas with respect to the space potential. Physics of Plasmas, 2018, 25, .	0.7	29
32	Controlling azimuthal spoke modes in a cylindrical Hall thruster using a segmented anode. Plasma Sources Science and Technology, 2018, 27, 104006.	1.3	6
33	Fast sweeping probe system for characterization of spokes in E Ã— B discharges. Review of Scientific Instruments, 2018, 89, 123501.	0.6	9
34	Hall thruster operation with externally driven breathing mode oscillations. Plasma Sources Science and Technology, 2018, 27, 094006.	1.3	20
35	Angular, temperature, and impurity effects on secondary electron emission from Ni(110). Journal of Applied Physics, 2018, 124, .	1.1	7
36	Root-growth of boron nitride nanotubes: experiments and ab initio simulations. Nanoscale, 2018, 10, 22223-22230.	2.8	19

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37	Synthesis of nanoparticles in carbon arc: measurements and modeling. MRS Communications, 2018, 8, 842-849.	0.8	21
38	Nonlinear structures of lower-hybrid waves driven by the ion beam. Physics of Plasmas, 2018, 25, .	0.7	7
39	Laser-Induced Fluorescence of Xe I and Xe II in Ambipolar Plasma Flow. IEEE Transactions on Plasma Science, 2018, 46, 3998-4009.	0.6	6
40	Scaling of spoke rotation frequency within a Penning discharge. Physics of Plasmas, 2018, 25, .	0.7	35
41	In situ diagnostics for nanomaterial synthesis in carbon arc plasma. Plasma Sources Science and Technology, 2018, 27, 084001.	1.3	11
42	Particle-in-cell simulations of anomalous transport in a Penning discharge. Physics of Plasmas, 2018, 25, .	0.7	24
43	Evolution of the electron cyclotron drift instability in two-dimensions. Physics of Plasmas, 2018, 25, .	0.7	57
44	Complex structure of the carbon arc discharge for synthesis of nanotubes. Plasma Sources Science and Technology, 2017, 26, 065019.	1.3	37
45	Compatibility of lithium plasma-facing surfaces with high edge temperatures in the Lithium Tokamak Experiment. Physics of Plasmas, 2017, 24, .	0.7	28
46	Stable synthesis of few-layered boron nitride nanotubes by anodic arc discharge. Scientific Reports, 2017, 7, 3075.	1.6	50
47	Detection of nanoparticles in carbon arc discharge with laser-induced incandescence. Carbon, 2017, 117, 154-162.	5.4	57
48	Fluid theory and simulations of instabilities, turbulent transport and coherent structures in partially-magnetized plasmas of $mathbf{E}imes mathbf{B}$ discharges. Plasma Physics and Controlled Fusion, 2017, 59, 014041.	0.9	83
49	Secondary electron emission yield from high aspect ratio carbon velvet surfaces. Journal of Applied Physics, 2017, 122, .	1.1	25
50	â€œSynthesis-onâ€•and â€œsynthesis-offâ€•modes of carbon arc operation during synthesis of carbon nanotubes. Carbon, 2017, 125, 336-343.	5.4	26
51	Recommended Practice for Use of Emissive Probes in Electric Propulsion Testing. Journal of Propulsion and Power, 2017, 33, 614-637.	1.3	41
52	Complex Structure of the Carbon Arc Discharge For Nanomaterial Synthesis. , 2017, , .		0
53	Secondary Electron Emission From Carbon Velvet. , 2017, , .		0
54	Particle-in-Cell Simulation of Anomalous Transport in a Penning Discharge. , 2017, , .		0

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55	Experimental study of time dependence ablation rate in atmospheric pressure DC carbon arc discharges. , 2017, , .		0
56	Secondary electron emission from plasma-generated nanostructured tungsten fuzz. Applied Physics Letters, 2016, 109, .	1.5	49
57	Modeling thermionic emission from laser-heated nanoparticles. Applied Physics Letters, 2016, 108, .	1.5	24
58	Secondary electron emission from lithium and lithium compounds. Applied Physics Letters, 2016, 109, .	1.5	9
59	Structure of nonlocal gradient-drift instabilities in Hall Eâ€‰Ã—â€‰B discharges. Physics of Plasmas, 2016, 23, .	0.7	22
60	Structural variations of the cathode deposit in the carbon arc. Carbon, 2016, 105, 490-495.	5.4	27
61	Unstable behavior of anodic arc discharge for synthesis of nanomaterials. Journal Physics D: Applied Physics, 2016, 49, 345201.	1.3	22
62	Measurements and theory of driven breathing oscillations in a Hall effect thruster. , 2016, , .		5
63	Turbulence and structures related to lower-hybrid and ion-sound instabilities in Hall thrusters. , 2016, , .		0
64	Anode sheath transition in an anodic arc for synthesis of nanomaterials. Plasma Sources Science and Technology, 2016, 25, 035003.	1.3	27
65	Atmospheric pressure arc discharge with ablating graphite anode. Journal Physics D: Applied Physics, 2015, 48, 245202.	1.3	16
66	Time-resolved ion velocity distribution in a cylindrical Hall thruster: Heterodyne-based experiment and modeling. Review of Scientific Instruments, 2015, 86, 033506.	0.6	23
67	Analysis of secondary electron emission for conducting materials using 4-grid LEED/AES optics. Journal Physics D: Applied Physics, 2015, 48, 195204.	1.3	22
68	Self-organisation processes in the carbon arc for nanosynthesis. Journal of Applied Physics, 2015, 117, .	1.1	26
69	Laboratory Modeling of the Plasma Layer at Hypersonic Flight. Journal of Spacecraft and Rockets, 2014, 51, 838-846.	1.3	24
70	Nonlocal kinetic theory of plasma discharges. , 2014, , .		0
71	Driving low frequency oscillations in a Hall thruster. , 2014, , .		1
72	Driving Low Frequency Breathing Oscillations in a Hall Thruster. , 2014, , .		8

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73	Effects of emitted electron temperature on the plasma sheath. Physics of Plasmas, 2014, 21, .	0.7	32
74	Wall current closure effects on plasma and sheath fluctuations in Hall thrusters. Physics of Plasmas, 2014, 21, .	0.7	6
75	Cross-field plasma lens for focusing of the Hall thruster plume. Plasma Sources Science and Technology, 2014, 23, 044005.	1.3	13
76	Plasma-wall interaction in presence of intense electron emission from walls. , 2014, , .		0
77	Role of the cathode deposit in the carbon arc for the synthesis of nanomaterials. Carbon, 2014, 77, 80-88.	5.4	22
78	Electron emission from micro-architectured materials for plasma applications. , 2014, , .		0
79	Long wavelength gradient drift instability in Hall plasma devices. II. Applications. Physics of Plasmas, 2013, 20, 052108.	0.7	34
80	Kinetic Theory of Plasma Sheaths Surrounding Electron-Emitting Surfaces. Physical Review Letters, 2013, 111, 075002.	2.9	85
81	Sheath-Induced Instabilities in Plasmas with<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:msub><mml:mi mathvariant="bold">E</mml:mi><mml:mn>0</mml:mn></mml:msub><mml:mo mathvariant="bold">Ã—</mml:mo><mml:msub><mml:mi mathvariant="bold">B</mml:mi><mml:mn>0</mml:mn></mml:msub></mml:math>Drift. Physical Review Letters, 2013, 111, 115003.	2.9	35
82	Comment on â€œThree-dimensional numerical investigation of electron transport with rotating spoke in a cylindrical anode layer Hall plasma acceleratorâ€•[Phys. Plasmas 19, 073519 (2012)]. Physics of Plasmas, 2013, 20, 014701.	0.7	1
83	Rotating spoke phenomena in hall thrusters. , 2012, , .		0
84	Cross-field electron transport induced by a rotating spoke in a cylindrical Hall thruster. Physics of Plasmas, 2012, 19, .	0.7	125
85	Long wavelength gradient drift instability in Hall plasma devices. I. Fluid theory. Physics of Plasmas, 2012, 19, .	0.7	66
86	Feedback control of an azimuthal oscillation in the Eâ€‰Ã—â€‰B discharge of Hall thrusters. Physics of Plasmas, 2012, 19, .	0.7	25
87	A comparison of emissive probe techniques for electric potential measurements in a complex plasma. , 2011, , .		0
88	Fast Camera Imaging of Hall Thruster Ignition. IEEE Transactions on Plasma Science, 2011, 39, 2950-2951.	0.6	32
89	Plasma Based nano-technology Laboratory. , 2011, , .		0
90	A comparison of emissive probe techniques for electric potential measurements in a complex plasma. Physics of Plasmas, 2011, 18, .	0.7	104

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91	Effect of Secondary Electron Emission on Electron Cross-Field Current in $E imes B$ Discharges. IEEE Transactions on Plasma Science, 2011, 39, 995-1006.	0.6	72
92	Cross-field electron transport through a rotating spoke in the cylindrical hall thruster. , 2011, , .		0
93	Ion acceleration in supersonically rotating magnetized-electron plasma. Plasma Physics and Controlled Fusion, 2011, 53, 124038.	0.9	33
94	Laser induced fluorescence measurements of the cylindrical Hall thruster plume. Physics of Plasmas, 2010, 17, .	0.7	26
95	Nonlocal collisionless and collisional electron transport in low temperature plasmas. , 2010, , .		2
96	Magnetically insulated baffled probe for real-time monitoring of equilibrium and fluctuating values of space potentials, electron and ion temperatures, and densities. Review of Scientific Instruments, 2010, 81, 10E129.	0.6	10
97	Controlling synthesis of carbon nanostructures by plasma means in arc discharge. , 2010, , .		0
98	Kinetic effects in hall plasma thrusters. , 2010, , .		0
99	Cylindrical Hall thrusters with permanent magnets. Journal of Applied Physics, 2010, 108, .	1.1	40
100	Transition in electron transport in a cylindrical Hall thruster. Applied Physics Letters, 2010, 97, .	1.5	79
101	Effects of the cathode electron emission and background gas pressure on transient phenomena in magnetized thruster discharge. , 2010, , .		0
102	Mechanism of carbon nanostructure synthesis in arc plasma. Physics of Plasmas, 2010, 17, 057101.	0.7	45
103	Single-step synthesis and magnetic separation of graphene and carbon nanotubes in arc discharge plasmas. Nanoscale, 2010, 2, 2281.	2.8	120
104	Comparisons in Performance of Electromagnet and Permanent-Magnet Cylindrical Hall-Effect Thrusters. , 2010, , .		4
105	Background Gas Pressure Effects in the Cylindrical Hall Thruster. , 2010, , .		4
106	Ionization, Plume Properties, and Performance of Cylindrical Hall Thrusters. IEEE Transactions on Plasma Science, 2010, 38, 1052-1057.	0.6	33
107	Effects of enhanced cathode electron emission on Hall thruster operation. Physics of Plasmas, 2009, 16, .	0.7	47
108	Breakdown of a Space Charge Limited Regime of a Sheath in a Weakly Collisional Plasma Bounded by Walls with Secondary Electron Emission. Physical Review Letters, 2009, 103, 145004.	2.9	88

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109	Non-local collisionless and collisional electron transport in low-temperature plasma. Plasma Physics and Controlled Fusion, 2009, 51, 124003.	0.9	27
110	Monte Carlo Simulation of Surface-Charging Phenomena on Insulators Prior to Flashover in Vacuum. IEEE Transactions on Plasma Science, 2009, 37, 698-704.	0.6	12
111	Raman spectroscopy of carbon dust samples from NSTX. Journal of Nuclear Materials, 2008, 375, 365-369.	1.3	20
112	Enhanced ablation of small anodes in a carbon nanotube arc plasma. Carbon, 2008, 46, 1322-1326.	5.4	46
113	Controlling the Plasma Potential Distribution in Segmented-Electrode Hall Thruster. IEEE Transactions on Plasma Science, 2008, 36, 1202-1203.	0.6	11
114	Controlling the Plasma Flow in the Miniaturized Cylindrical Hall Thruster. IEEE Transactions on Plasma Science, 2008, 36, 1998-2003.	0.6	21
115	Simulations of a Miniaturized Cylindrical Hall Thruster. IEEE Transactions on Plasma Science, 2008, 36, 2034-2042.	0.6	13
116	Plasma Plume of Annular and Cylindrical Hall Thrusters. IEEE Transactions on Plasma Science, 2008, 36, 1204-1205.	0.6	1
117	Cathode effects in cylindrical Hall thrusters. Journal of Applied Physics, 2008, 104, 103302.	1.1	32
118	Plasma-sheath instability in Hall thrusters due to periodic modulation of the energy of secondary electrons in cyclotron motion. Physics of Plasmas, 2008, 15, .	0.7	52
119	Special Issue on Plasma Propulsion. IEEE Transactions on Plasma Science, 2008, 36, 1962-1966.	0.6	6
120	Comment on â€œEffects of magnetic field gradient on ion beam current in cylindrical Hall ion sourceâ€•[J. Appl. Phys. 102, 123305 (2007)]. Journal of Applied Physics, 2008, 104, 066102.	1.1	5
121	Enhanced performance of cylindrical Hall thrusters. Applied Physics Letters, 2007, 90, 221502.	1.5	53
122	Effects of non-Maxwellian electron velocity distribution function on two-stream instability in low-pressure discharges. Physics of Plasmas, 2007, 14, 013508.	0.7	35
123	Kinetic effects in a Hall thruster discharge. Physics of Plasmas, 2007, 14, 057104.	0.7	114
124	Plasma acceleration from radio-frequency discharge in dielectric capillary. Applied Physics Letters, 2006, 88, 251502.	1.5	31
125	Cylindrical Hall Thrusters. , 2006, , .		11
126	Modification of electron velocity distribution in bounded plasmas by secondary electron emission. IEEE Transactions on Plasma Science, 2006, 34, 815-824.	0.6	43

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127	Electron cross-field transport in a miniaturized cylindrical Hall thruster. IEEE Transactions on Plasma Science, 2006, 34, 132-141.	0.6	34
128	Measurements of secondary electron emission effects in the Hall thruster discharge. Physics of Plasmas, 2006, 13, 014502.	0.7	82
129	Kinetic simulation of secondary electron emission effects in Hall thrusters. Physics of Plasmas, 2006, 13, 014501.	0.7	100
130	Operation of a segmented Hall thruster with low-sputtering carbon-velvet electrodes. Journal of Applied Physics, 2006, 99, 036103.	1.1	31
131	Effect of magnetic field profile on the anode fall in a Hall-effect thruster discharge. Physics of Plasmas, 2006, 13, 057104.	0.7	22
132	Segmented Electrode Hall Thruster. Journal of Propulsion and Power, 2006, 22, 1396-1401.	1.3	16
133	Space charge saturated sheath regime and electron temperature saturation in Hall thrusters. Physics of Plasmas, 2005, 12, 073507.	0.7	76
134	Electron Cross-Field Transport in a Miniaturized Cylindrical Hall Thruster. , 2005, , .		0
135	Experimental studies of anode sheath phenomena in a Hall thruster discharge. Journal of Applied Physics, 2005, 97, 103309.	1.1	42
136	Electron-wall interaction in Hall thrusters. Physics of Plasmas, 2005, 12, 057104.	0.7	114
137	Temperature gradient in Hall thrusters. Applied Physics Letters, 2004, 84, 3028-3030.	1.5	41
138	On the potential distribution in Hall thrusters. Applied Physics Letters, 2004, 85, 2481-2483.	1.5	29
139	Shielded electrostatic probe for nonperturbing plasma measurements in Hall thrusters. Review of Scientific Instruments, 2004, 75, 393-399.	0.6	35
140	Experimental studies of high-frequency azimuthal waves in Hall thrusters. Physics of Plasmas, 2004, 11, 1701-1705.	0.7	76
141	Electron cross-field transport in a low power cylindrical Hall thruster. Physics of Plasmas, 2004, 11, 4922-4933.	0.7	86
142	Anode Fall Formation in a Hall Thruster. , 2004, , .		1
143	Electron Transport and Ion Acceleration in a Low-Power Cylindrical Hall Thruster. , 2004, , .		5
144	Plasma measurements in a 100 W cylindrical Hall thruster. Journal of Applied Physics, 2004, 95, 2283-2292.	1.1	83

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145	Secondary electron emission from dielectric materials of a Hall thruster with segmented electrodes. Physics of Plasmas, 2003, 10, 2574-2577.	0.7	123
146	Enhanced ionization in the cylindrical Hall thruster. Journal of Applied Physics, 2003, 94, 852-857.	1.1	53
147	Anode sheath in Hall thrusters. Applied Physics Letters, 2003, 83, 2551-2553.	1.5	39
148	Ferroelectric cathodes in transverse magnetic fields. Journal of Applied Physics, 2003, 93, 3481-3485.	1.1	3
149	Parametric investigation of miniaturized cylindrical and annular Hall thrusters. Journal of Applied Physics, 2002, 92, 5673-5679.	1.1	109
150	High-frequency probing diagnostic for Hall current plasma thrusters. Review of Scientific Instruments, 2002, 73, 2882-2885.	0.6	8
151	Parametric investigations of a nonconventional Hall thruster. Physics of Plasmas, 2001, 8, 2579-2586.	0.7	165
152	Control of the electric-field profile in the Hall thruster. Physics of Plasmas, 2001, 8, 1048-1056.	0.7	63
153	Variable operation of Hall thruster with multiple segmented electrodes. Journal of Applied Physics, 2001, 89, 2040-2046.	1.1	41
154	Plume reduction in segmented electrode Hall thruster. Journal of Applied Physics, 2000, 88, 1263-1270.	1.1	80
155	Effect of magnetic field distribution in cylindrical Hall current plasma sources. , 0, , .		0
156	Operation of ferroelectric plasma cathodes in magnetic field. , 0, , .		0
157	A study of wall effects on hall thruster operation. , 0, , .		0
158	Study of the anodic are discharge for carbon nanotube synthesis. , 0, , .		0