Vladimir Rozhansky

List of Publications by Year
in descending order

126	3,851	172457	138484
papers	citations	29 h-index	58 g-index

126	126	126	2009
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Detached regime with highly radiating Xâ€point: Physics and modelling. Contributions To Plasma Physics, 2022, 62, .	1.1	8
2	<scp>SOLPSâ€ITER EUâ€DEMO</scp> modelling with drifts and kinetic neutrals. Contributions To Plasma Physics, 2022, 62, .	1.1	4
3	SOLPS-ITER simulations of high power exhaust for CFETR divertor with full drifts. Nuclear Fusion, 2022, 62, 026031.	3.5	6
4	SOLPS-ITER modeling of CFETR advanced divertor with Ar and Ne seeding. Nuclear Fusion, 2022, 62, 096010.	3.5	8
5	SOLPS-ITER drift modelling of ITER burning plasmas with narrow near-SOL heat flux channels. Nuclear Materials and Energy, 2021, 26, 100870.	1.3	10
6	Features of radial electric field in impurity-seeded, detached plasma in a tokamak. Physics of Plasmas, 2021, 28, 062507.	1.9	5
7	SOLPS-ITER drift modelling of JET Ne and N-seeded H-modes. Nuclear Materials and Energy, 2021, 28, 101030.	1.3	13
8	Current structure in the scrape-off layer of a tokamak in a quiescent state. Plasma Physics and Controlled Fusion, 2021, 63, 015012.	2.1	8
9	Multi-machine SOLPS-ITER comparison of impurity seeded H-mode radiative divertor regimes with metal walls. Nuclear Fusion, 2021, 61, 126073.	3.5	20
10	Currents structure in the scrape-off layer of a tokamak. Nuclear Materials and Energy, 2020, 25, 100840.	1.3	3
11	Derivation of the friction and thermal force for SOLPS-ITER multicomponent plasma modeling. Physics of Plasmas, 2020, 27, .	1.9	8
12	SOLPS-ITER modelling of ITER edge plasma with drifts and currents. Nuclear Fusion, 2020, 60, 046019.	3.5	59
13	Physics basis for the first ITER tungsten divertor. Nuclear Materials and Energy, 2019, 20, 100696.	1.3	307
14	Modeling of Globus-M connected double-null discharge. Plasma Physics and Controlled Fusion, 2019, 61, 125009.	2.1	5
15	Comparing N versus Ne as divertor radiators in ASDEX-upgrade and ITER. Nuclear Materials and Energy, 2019, 19, 72-78.	1.3	27
16	Structure of the classical scrape-off layer of a tokamak. Plasma Physics and Controlled Fusion, 2018, 60, 035001.	2.1	17
17	Impact of a new general form of friction and thermal forces on SOLPSâ€ITER modelling results. Contributions To Plasma Physics, 2018, 58, 622-628.	1.1	20
18	Modeling of Globus-M2 spherical tokamak edge with nitrogen seeding. Physics of Plasmas, 2018, 25, 122514.	1.9	5

#	Article	IF	Citations
19	Testing of the SOLPS-ITER code at Globus-M2 spherical tokamak with detached divertor. MATEC Web of Conferences, 2018, 245, 13003.	0.2	0
20	Speed-up of SOLPS-ITER code for tokamak edge modeling. Nuclear Fusion, 2018, 58, 126018.	3.5	20
21	Electric fields and currents in the detached regime of a tokamak. Contributions To Plasma Physics, 2018, 58, 540-546.	1.1	38
22	Drift Mechanism of Scrape-Off Layer Formation in a Tokamak. Technical Physics Letters, 2018, 44, 235-238.	0.7	1
23	The Role of an Electric Field in the Formation of a Detached Regime in Tokamak Plasma. Technical Physics Letters, 2018, 44, 255-259.	0.7	2
24	Drifts, currents, and power scrape-off width in SOLPS-ITER modeling of DIII-D. Nuclear Materials and Energy, 2017, 12, 973-977.	1.3	17
25	Analysis of drift effects on the tokamak power scrape-off width using SOLPS-ITER. Plasma Physics and Controlled Fusion, 2016, 58, 125012.	2.1	27
26	Globus-M plasma edge modeling with B2SOLPS5.2 code. Plasma Physics and Controlled Fusion, 2016, 58, 085007.	2.1	13
27	Modeling of ITER Edge Plasma in the Presence of Resonant Magnetic Perturbations. Contributions To Plasma Physics, 2016, 56, 587-591.	1.1	6
28	Momentum balance for impurities in SOLPS transport code. Journal of Nuclear Materials, 2015, 463, 477-479.	2.7	9
29	Stochastization and pump-out in edge plasma caused by edge localized modes. Plasma Physics and Controlled Fusion, 2015, 57, 115007.	2.1	6
30	Conceptual design of divertor and first wall for DEMO-FNS. Nuclear Fusion, 2015, 55, 123013.	3.5	7
31	Fusion Research in Ioffe Institute. Nuclear Fusion, 2015, 55, 104013.	3.5	17
32	Review of Globus-M spherical tokamak results. Nuclear Fusion, 2015, 55, 104016.	3.5	44
33	The new SOLPS-ITER code package. Journal of Nuclear Materials, 2015, 463, 480-484.	2.7	304
34	Understanding of impurity poloidal distribution in the edge pedestal by modelling. Nuclear Fusion, 2015, 55, 073017.	3.5	4
35	Overview of MAST results. Nuclear Fusion, 2015, 55, 104008.	3.5	16
36	When poloidal rotation in a tokamak remains neoclassical in the presence of resonant magnetic perturbations. Plasma Physics and Controlled Fusion, 2014, 56, 125015.	2.1	2

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37	Drifts, Currents, and Radial Electric Field in the Edge Plasma with Impact on Pedestal, Divertor Asymmetry and RMP Consequences. Contributions To Plasma Physics, 2014, 54, 508-516.	1.1	21
38	Perpendicular currents and electric fields in fully and partially ionized magnetized plasma. Physics of Plasmas, 2013, 20, .	1.9	11
39	Overview of physics results from MAST towards ITER/DEMO and the MAST Upgrade. Nuclear Fusion, 2013, 53, 104008.	3.5	21
40	Contribution of <mml:math altimg="si1.gif" overflow="scroll" xmlns:xocs="http://www.elsevier.com/xml/xocs/dtd" xmlns:xs="http://www.w3.org/2001/XMLSchema" xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance" xmlns="http://www.elsevier.com/xml/ja/dtd" xmlns:ja="http://www.elsevier.com/xml/ja/dtd" xmlns:mml="http://www.w3.org/1998/Math/MathML" xmlns:tb="http://www.elsevier.com/xml/common/table/dtd" xmlns:sb="http://www.elsevier.com/xml/common/struct-bib/dtd" xmlns:ce="http://www.elsevier.com/x	2.7	10
41	Modeling of the edge plasma of MAST Upgrade with a Super-X divertor including drifts and an edge transport barrier. Plasma Physics and Controlled Fusion, 2013, 55, 035005.	2.1	17
42	Screening of resonant magnetic perturbations by flows in tokamaks. Nuclear Fusion, 2012, 52, 054003.	3.5	106
43	Screening of resonant magnetic perturbations taking into account a self-consistent electric field. Nuclear Fusion, 2012, 52, 054011.	3.5	18
44	Parallel velocity in a narrow scrape-off layer of a tokamak. Plasma Physics and Controlled Fusion, 2012, 54, 102001.	2.1	3
45	Contribution of drifts and parallel currents to divertor asymmetries. Nuclear Fusion, 2012, 52, 103017.	3.5	53
46	Modelling of the edge plasma of MAST in the presence of resonant magnetic perturbations. Nuclear Fusion, 2011, 51, 083009.	3.5	21
47	Overview of physics results from MAST. Nuclear Fusion, 2011, 51, 094013.	3.5	33
48	Simulation of edge radial electric fields in H-regimes of ASDEX-Upgrade. Journal of Nuclear Materials, 2011, 415, S593-S596.	2.7	3
49	Investigation of beamâ€“ and waveâ€“plasma interactions in spherical tokamak Globus-M. Nuclear Fusion, 2011, 51, 103019.	3.5	24
50	Towards Modeling of ITER Hâ€mode. Contributions To Plasma Physics, 2010, 50, 338-342.	1.1	1
51	Modification of the edge transport barrier by resonant magnetic perturbations. Nuclear Fusion, 2010, 50, 034005.	3.5	57
52	New B2SOLPS5.2 transport code for H-mode regimes in tokamaks. Nuclear Fusion, 2009, 49, 025007.	3.5	112
53	Overview of results obtained at the Globus-M spherical tokamak. Nuclear Fusion, 2009, 49, 104021.	3.5	21
54	Simulation of H-modes discharges in ASDEX-Upgrade and MAST. Journal of Nuclear Materials, 2009, 390-391, 408-411.	2.7	3

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55	Overview of physics results from MAST. Nuclear Fusion, 2009, 49, 104017.	3.5	36
56	Modelling of the Radial Electric Field in the ASDEX Upgrade Ohmic Shots. Contributions To Plasma Physics, 2008, 48, 73-76.	1.1	3
57	Modeling of the parametric dependence of the edge toroidal rotation. Plasma Physics Reports, 2008, 34, 730-735.	0.9	2
58	Mechanisma of Transverse Conductivity andÂGeneration of Self-Consistent Electric Fields inÂStrongly Ionized Magnetized Plasma. Reviews of Plasma Physics, 2008, , 1-52.	1.0	14
59	Interpretation of the observed radial electric field inversion in the TUMAN-3M tokamak during MHD activity. Nuclear Fusion, 2008, 48, 075003.	3.5	28
60	Comparison of measured and simulated parallel flows at the edge plasma of MAST. Plasma Physics and Controlled Fusion, 2008, 50, 115010.	2.1	11
61	Active control of the H-mode transition on MAST. Plasma Physics and Controlled Fusion, 2008, 50, 015005.	2.1	14
62	Possible mechanism for filament motion in the SOL of a tokamak. Plasma Physics and Controlled Fusion, 2008, 50, 025008.	2.1	21
63	Diffusion and drift of a blob of partially ionized plasma in a magnetic field. Physics of Plasmas, 2007, 14, 052309.	1.9	6
64	Chapter 2: Plasma confinement and transport. Nuclear Fusion, 2007, 47, S18-S127.	3.5	649
65	Overview of physics results from MAST. Nuclear Fusion, 2007, 47, S658-S667.	3.5	25
66	Modeling of the parametric dependence of the edge toroidal rotation for MAST and ASDEX Upgrade. Journal of Nuclear Materials, 2007, 363-365, 664-668.	2.7	12
67	Modelling of the Edge Plasma with Account of Self-Consistent Electric Fields. Contributions To Plasma Physics, 2006, 46, 575-585.	1.1	31
68	Modelling of radial electric field profile for different divertor configurations. Plasma Physics and Controlled Fusion, 2006, 48, 1425-1435.	2.1	15
69	Modelling of the pellet cloud evolution and mass deposition with an account of â^‡Binduced drift. Nuclear Fusion, 2006, 46, 788-796.	3.5	12
70	Penetration of supersonic gas jets into a tokamak. Nuclear Fusion, 2006, 46, 367-382.	3.5	29
71	Generation of toroidal rotation by gas puff. Simulations of MAST experiments with B2SOLPS5.0. Journal of Nuclear Materials, 2005, 337-339, 291-295.	2.7	9
72	Modelling and consequences of drift effects in the edge plasma of Alcator C-Mod. Journal of Nuclear Materials, 2005, 337-339, 301-304.	2.7	12

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73	On the ablation models of fuel pellets. Plasma Physics Reports, 2005, 31, 993-1002.	0.9	23
74	Overview of MAST results. Nuclear Fusion, 2005, 45, S157-S167.	3.5	19
75	Integrated exhaust scenarios with actively controlled ELMs. Nuclear Fusion, 2005, 45, 502-511.	3.5	46
76	Characterization of the H-mode edge barrier at ASDEX Upgrade. Nuclear Fusion, 2005, 45, 856-862.	3.5	55
77	Mechanisms of disruptions caused by noble gas injection into tokamak plasmas. Nuclear Fusion, 2005, 45, 882-887.	3.5	6
78	Measurements of impurity and heat dynamics during noble gas jet-initiated fast plasma shutdown for disruption mitigation in DIII-D. Nuclear Fusion, 2005, 45, 1046-1055.	3.5	85
79	Impact of a pulsed supersonic deuterium gas jet on the ELM behaviour in ASDEX Upgrade. Plasma Physics and Controlled Fusion, 2005, 47, 1495-1516.	2.1	30
80	Ionizationâ€“recombination processes and ablation cloud structure for a carbon pellet. Nuclear Fusion, 2004, 44, 252-259.	3.5	15
81	Mass deposition after pellet injection into a tokamak. Plasma Physics and Controlled Fusion, 2004, 46, 575-591.	2.1	59
82	Understanding transport barriers through modelling. Plasma Physics and Controlled Fusion, 2004, 46, A1-A17.	2.1	45
83	Poloidal and toroidal flows in tokamak plasma near magnetic islands. Technical Physics Letters, 2004, 30, 538-540.	0.7	5
84	Simulation of ASDEX Upgrade Edge Plasma in the H-Regime. Contributions To Plasma Physics, 2004, 44, 200-202.	1.1	1
85	MAST and the impact of low aspect ratio on tokamak physics. Plasma Physics and Controlled Fusion, 2004, 46, B477-B494.	2.1	23
86	Improved modelling of detachment and neutral-dominated regimes using the code. Journal of Nuclear Materials, 2003, 313-316, 909-913.	2.7	8
87	Impact of drifts on the distribution of impurities in the Tokamak plasma edge. Journal of Nuclear Materials, 2003, 313-316, 1141-1149.	2.7	15
88	Modeling impurity transfer to tokamak plasma. Technical Physics Letters, 2003, 29, 214-217.	0.7	1
89	Neoclassical nature of the radial electric field at the low-to-high confinement transition. Physics of Plasmas, 2003, 10, 2604-2607.	1.9	13
90	Potentials and currents in the edge tokamak plasma: simplified approach and comparison with two-dimensional modelling. Nuclear Fusion, 2003, 43, 614-621.	3.5	29

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91	Radial electric field in the biasing experiments and effective conductivity in a tokamak. Physics of Plasmas, 2002, 9, 3385-3394.	1.9	18
92	Tokamak edge model validation and improvement. Plasma Physics and Controlled Fusion, 2002, 44, 979-984.	2.1	10
93	Modelling of electric fields in tokamak edge plasma and L-H transition. Nuclear Fusion, 2002, 42, 1110-1115.	3.5	40
94	The Structure of the Radial Electric Field in the Vicinity of the Separatrix and the L-H Transition. Contributions To Plasma Physics, 2002, 42, 230-235.	1.1	5
95	The Structure of the Radial Electric Field in the Vicinity of the Separatrix and the L-H Transition. Contributions To Plasma Physics, 2002, 42, 230-235.	1.1	2
96	Modeling of tokamak edge plasma for discharges with neutral beam injection. Journal of Nuclear Materials, 2001, 290-293, 710-714.	2.7	3
97	Electric fields and currents in an island divertor configuration. Journal of Nuclear Materials, 2001, 290-293, 829-835.	2.7	6
98	Radial electric field during dynamic processes in a tokamak and L-H transitions. Plasma Physics Reports, 2001, 27, 205-210.	0.9	5
99	Simulation of tokamak edge plasma including self-consistent electric fields. Nuclear Fusion, 2001, 41, 387-401.	3.5	177
100	B2-solps5.0: SOL transport code with drifts and currents. Contributions To Plasma Physics, 2000, 40, 328-333.	1.1	48
101	Perpendicular Conductivity and Self-Consistent Electric Fields in Tokamak Edge Plasma. Contributions To Plasma Physics, 2000, 40, 423-430.	1.1	27
102	Impact of EÃ—B drifts on impurity distribution in the scrape-off layer of a tokamak. Physics of Plasmas, 2000, 7, 1184-1191.	1.9	9
103	Electric fields and currents in front of a biased electrode (flush mounted probe) and thel-Vcharacteristics of the electrode for various mechanisms of transverse conductivity. Nuclear Fusion, 1999, 39, 613-628.	3.5	28
104	Theory of a Flush-Mounted Probe in a Magnetized Plasma. Contributions To Plasma Physics, 1998, 38, 19-24.	1.1	2
105	Drifts in the scrapeâ€off layer during hard disruptions. Contributions To Plasma Physics, 1998, 38, 124-129.	1.1	3
106	Transverse conductivity in a braided magnetic field. Physics of Plasmas, 1998, 5, 3901-3909.	1.9	36
107	Electric Fields and Transverse Conductivity in a SOL of a Tokamak. Contributions To Plasma Physics, 1996, 36, 366-370.	1.1	1
108	Transverse Conductivity and Theory of a Probe in a Magnetized Plasma. Contributions To Plasma Physics, 1996, 36, 391-395.	1.1	14

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109	H-mode studies on TUMAN-3 and TUMAN-3M. Plasma Physics and Controlled Fusion, 1996, 38, 1103-1115.	2.1	22
110	Fast expansion of a plasma beam controlled by short-circuiting effects in a longitudinal magnetic field. Plasma Sources Science and Technology, 1996, 5, 743-747.	3.1	9
111	Dynamics of the L - H transition. Plasma Physics and Controlled Fusion, 1996, 38, 1327-1330.	2.1	9
112	Evolution and stratification of a plasma cloud surrounding a pellet. Plasma Physics and Controlled Fusion, 1995, 37, 399-414.	2.1	81
113	Ohmic H-mode studies in TUMAN-3. Plasma Physics and Controlled Fusion, 1994, 36, B289-B299.	2.1	17
114	The impact of a biasing radial electric field on the scrapeâ€off layer in a divertor tokamak. Physics of Plasmas, 1994, 1, 2711-2717.	1.9	33
115	Two-dimensional nonuniformly heated magnetized plasma transport in a conducting vessel. Physical Review E, 1994, 50, 3033-3040.	2.1	3
116	The Role OF Electric Field IN SOL Plasma. Contributions To Plasma Physics, 1994, 34, 145-150.	1.1	4
117	The Effect of the Anomalous Inertia, Viscosity and the Electric Field on the Transport Within the Sol in a Tokamak. Contributions To Plasma Physics, 1994, 34, 324-330.	1.1	0
118	H mode in the TUMANâ€3 tokamak triggered by edge plasma perturbations*. Physics of Fluids B, 1993, 5, 2420-2427.	1.7	48
119	The effect of the radial electric field on the Lâ€“H transitions in tokamaks. Physics of Fluids B, 1992, 4, 1877-1888.	1.7	122
120	Analytical studies of multidimensional plasma transport in the scrape-off layer. Journal of Nuclear Materials, 1992, 196-198, 912-917.	2.7	9
121	Three-dimensional computer simulation of plasma cloud evolution in the ionosphere. Planetary and Space Science, 1990, 38, 1375-1386.	1.7	9
122	Numerical modelling of three-dimensional plasma cloud evolution in crossed E Ã— B fields. Planetary and Space Science, 1987, 35, 835-844.	1.7	15
123	Dynamics of artificial plasma clouds in â€œSPOLOKHâ€œ experiments : Cloud deformation. Planetary and Space Science, 1984, 32, 1045-1052.	1.7	10
124	Dynamics of artificial plasma clouds in â€œSpolokhâ€•experiments: Movement pattern. Planetary and Space Science, 1983, 31, 849-858.	1.7	16
125	The Characteristics of Electrostatic Probes in a Magnetic Field. Beitrage Aus Der Plasmaphysik, 1979, 19, 123-126.	0.1	1
126	Edge tokamak transport in regimes with high collisionality. Contributions To Plasma Physics, 0, , .	1.1	1