

Dmitri M Orlov

List of Publications by Year in descending order

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52
papers

2,520
citations

236925

25
h-index

189892

50
g-index

52
all docs

52
docs citations

52
times ranked

1458
citing authors

#	ARTICLE	IF	CITATIONS
1	SDBD plasma enhanced aerodynamics: concepts, optimization and applications. Progress in Aerospace Sciences, 2007, 43, 193-217.	12.1	330
2	Single dielectric barrier discharge plasma enhanced aerodynamics: physics, modeling and applications. Experiments in Fluids, 2009, 46, 1-26.	2.4	303
3	Integrated modeling applications for tokamak experiments with OMFIT. Nuclear Fusion, 2015, 55, 083008.	3.5	246
4	Progress on the application of ELM control schemes to ITER scenarios from the non-active phase to DT operation. Nuclear Fusion, 2014, 54, 033007.	3.5	214
5	Pedestal Bifurcation and Resonant Field Penetration at the Threshold of Edge-Localized Mode Suppression in the DIII-D Tokamak. Physical Review Letters, 2015, 114, 105002.	7.8	141
6	The EPED pedestal model and edge localized mode-suppressed regimes: Studies of quiescent H-mode and development of a model for edge localized mode suppression via resonant magnetic perturbations. Physics of Plasmas, 2012, 19, .	1.9	140
7	Surface Potential and Longitudinal Electric Field Measurements in the Aerodynamic Plasma Actuator. AIAA Journal, 2008, 46, 2730-2740.	2.6	75
8	3D vacuum magnetic field modelling of the ITER ELM control coil during standard operating scenarios. Nuclear Fusion, 2013, 53, 093029.	3.5	72
9	Advances in the physics understanding of ELM suppression using resonant magnetic perturbations in DIII-D. Nuclear Fusion, 2015, 55, 023002.	3.5	62
10	Characterization of Discharge Modes of Plasma Actuators. AIAA Journal, 2008, 46, 3142-3148.	2.6	60
11	Single-Dielectric Barrier Discharge Plasma Enhanced Aerodynamics: Concepts, Optimization, and Applications. Journal of Propulsion and Power, 2008, 24, 935-945.	2.2	58
12	Role of plasma response in displacements of the tokamak edge due to applied non-axisymmetric fields. Nuclear Fusion, 2013, 53, 073042.	3.5	58
13	Measurement of plasma boundary displacement by $n=2$ magnetic perturbations using imaging beam emission spectroscopy. Nuclear Fusion, 2012, 52, 123019.	3.5	47
14	Impurity confinement and transport in high confinement regimes without edge localized modes on	1.9	47
15	Sustained suppression of type-I edge-localized modes with dominantly $n=2$ magnetic fields in DIII-D. Nuclear Fusion, 2013, 53, 083019.	3.5	46
16	Validation of the model for ELM suppression with 3D magnetic fields using low torque ITER baseline scenario discharges in DIII-D. Physics of Plasmas, 2017, 24, .	1.9	43
17	Fast ion transport during applied 3D magnetic perturbations on DIII-D. Nuclear Fusion, 2015, 55, 073028.	3.5	42
18	Wide Operational Windows of Edge-Localized Mode Suppression by Resonant Magnetic Perturbations in the DIII-D Tokamak. Physical Review Letters, 2020, 125, 045001.	7.8	40

#	ARTICLE	IF	CITATIONS
19	Modulation of prompt fast-ion loss by applied $n = 2$ fields in the DIII-D tokamak. Plasma Physics and Controlled Fusion, 2014, 56, 015009.	2.1	36
20	Grassy-ELM regime with edge resonant magnetic perturbations in fully noninductive plasmas in the DIII-D tokamak. Nuclear Fusion, 2018, 58, 106010.	3.5	35
21	The effect of plasma shape and neutral beam mix on the rotation threshold for RMP-ELM suppression. Nuclear Fusion, 2019, 59, 056012.	3.5	35
22	Quiescent H-mode operation using torque from non-axisymmetric, non-resonant magnetic fields. Nuclear Fusion, 2013, 53, 073038.	3.5	27
23	Three-dimensional distortions of the tokamak plasma boundary: boundary displacements in the presence of resonant magnetic perturbations. Nuclear Fusion, 2014, 54, 083006.	3.5	27
24	The influence of three-dimensional stochastic magnetic boundaries on plasma edge transport and the resulting plasma wall interaction. Journal of Nuclear Materials, 2011, 415, S886-S893.	2.7	26
25	Advances in the steady-state hybrid regime in DIII-D—a fully non-inductive, ELM-suppressed scenario for ITER. Nuclear Fusion, 2017, 57, 116057.	3.5	25
26	Experimental imaging of separatrix splitting on DIII-D. Nuclear Fusion, 2012, 52, 122001.	3.5	24
27	The effects of an open and closed divertor on particle exhaust during edge-localized mode suppression by resonant magnetic perturbations in DIII-D. Nuclear Fusion, 2010, 50, 034011.	3.5	20
28	$L \rightarrow H$ transition trigger physics in ITER-similar plasmas with applied $n = 3$ magnetic perturbations. Nuclear Fusion, 2019, 59, 126010.	3.5	20
29	Predicting operational windows of ELMs suppression by resonant magnetic perturbations in the DIII-D and KSTAR tokamaks. Physics of Plasmas, 2021, 28, .	1.9	20
30	Impact of toroidal and poloidal mode spectra on the control of non-axisymmetric fields in tokamaks. Physics of Plasmas, 2017, 24, .	1.9	19
31	Dynamic divertor control using resonant mixed toroidal harmonic magnetic fields during ELM suppression in DIII-D. Physics of Plasmas, 2018, 25, 056102.	1.9	17
32	Comparison of the numerical modelling and experimental measurements of DIII-D separatrix displacements during H-modes with resonant magnetic perturbations. Nuclear Fusion, 2014, 54, 093008.	3.5	16
33	Suppression of type-I ELMs with reduced RMP coil set on DIII-D. Nuclear Fusion, 2016, 56, 036020.	3.5	16
34	Analysis of edge magnetic field line structure in ITER due to in-vessel ELM control coils. Fusion Engineering and Design, 2012, 87, 1536-1543.	1.9	14
35	Imaging divertor strike point splitting in RMP ELM suppression experiments in the DIII-D tokamak. Review of Scientific Instruments, 2018, 89, 10E106.	1.3	13
36	The energy confinement response of DIII-D plasmas to resonant magnetic perturbations. Nuclear Fusion, 2017, 57, 116030.	3.5	12

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37	Edge localized mode suppression and plasma response using mixed toroidal harmonic resonant magnetic perturbations in DIII-D. Nuclear Fusion, 2019, 59, 026012.	3.5	12
38	Accelerating the numerical simulation of magnetic field lines in tokamaks using the GPU. Fusion Engineering and Design, 2011, 86, 399-406.	1.9	11
39	3D modeling of boron transport in DIII-D L-mode wall conditioning experiments. Nuclear Materials and Energy, 2021, 26, 100900.	1.3	10
40	ELM suppression in helium plasmas with 3D magnetic fields. Nuclear Fusion, 2017, 57, 086016.	3.5	9
41	Numerical analysis of the effects of normalized plasma pressure on RMP ELM suppression in DIII-D. Nuclear Fusion, 2010, 50, 034010.	3.5	8
42	Toroidally resolved structure of divertor heat flux in RMP H-mode discharges on DIII-D. Journal of Nuclear Materials, 2011, 415, S901-S905.	2.7	8
43	Impact of resonant magnetic perturbations on zonal flows and microturbulence. Nuclear Fusion, 2020, 60, 096004.	3.5	8
44	Pedestal collapse by resonant magnetic perturbations. Nuclear Fusion, 2021, 61, 044001.	3.5	7
45	Automatic Between-Pulse Analysis of DIII-D Experimental Data Performed Remotely on a Supercomputer at Argonne Leadership Computing Facility. Fusion Science and Technology, 2018, 74, 135-143.	1.1	4
46	Assessment of equilibrium field coil misalignments on the divertor footprints in NSTX-U. Nuclear Fusion, 2019, 59, 076039.	3.5	4
47	Topological bifurcation of magnetic islands in NSTX-U. Nuclear Fusion, 2019, 59, 066010.	3.5	4
48	Controlling the size of non-axisymmetric magnetic footprints using resonant magnetic perturbations. Nuclear Fusion, 2022, 62, 026018.	3.5	4
49	Impact of resistive MHD plasma response on perturbation field sidebands. Plasma Physics and Controlled Fusion, 2016, 58, 075009.	2.1	2
50	New heat flux model for non-axisymmetric divertor infrared structures. Nuclear Fusion, 2021, 61, 016018.	3.5	2
51	Effects of two-dimensional magnetic uncertainties and three-dimensional error and perturbation fields on the Small Angle Slot divertor geometry and topology. Nuclear Fusion, 2018, 58, 026022.	3.5	1
52	Investigations of plasma response associated with Resonant Magnetic Perturbation fields using perturbation method in KSTAR H-mode plasmas. Nuclear Fusion, 0, , .	3.5	0