

Nikolai Gorelenkov

List of Publications by Year in descending order

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docs citations

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times ranked

866
citing authors

#	ARTICLE	IF	CITATIONS
1	Simulating energetic particle losses in JET plasmas with a reverse integration biasing scheme. Nuclear Fusion, 2022, 62, 026026.	3.5	3
2	Microturbulence-mediated route for energetic ion transport and Alfvénic mode amplitude oscillations in tokamaks. Physics Letters, Section A: General, Atomic and Solid State Physics, 2021, 386, 126944.	2.1	8
3	Hybrid simulations of sub-cyclotron compressional and global Alfvén eigenmode stability in spherical tokamaks. Nuclear Fusion, 2021, 61, 086016.	3.5	5
4	Magnetic Confinement Fusion – Plasma Theory: Energetic Particle Physics. , 2021, , 459-478.		0
5	Phase-space dynamics of Alfvén mode chirping. Physics of Plasmas, 2020, 27, 052108.	1.9	7
6	Simulation of Alfvénic avalanche onset in NSTX. Physics of Plasmas, 2020, 27, 022117.	1.9	8
7	Analytic stability boundaries for compressional and global Alfvén eigenmodes driven by fast ions. II. Interaction via Landau resonance. Physics of Plasmas, 2020, 27, 022512.	1.9	5
8	Analytic stability boundaries for compressional and global Alfvén eigenmodes driven by fast ions. I. Interaction via ordinary and anomalous cyclotron resonances. Physics of Plasmas, 2020, 27, 022513.	1.9	10
9	Verification and application of resonance broadened quasi-linear (RBQ) model with multiple Alfvénic instabilities. Physics of Plasmas, 2019, 26, 072507.	1.9	7
10	Reduced energetic particle transport models enable comprehensive time-dependent tokamak simulations. Nuclear Fusion, 2019, 59, 106013.	3.5	12
11	Modeling of chirping toroidal Alfvén eigenmodes in NSTX. Physics of Plasmas, 2019, 26, 092103.	1.9	8
12	Analytical nonlinear collisional dynamics of near-threshold eigenmodes. Nuclear Fusion, 2019, 59, 044003.	3.5	14
13	Verification and validation of integrated simulation of energetic particles in fusion plasmas. Nuclear Fusion, 2019, 59, 066006.	3.5	40
14	Collisional enhancement of energetic particle Alfvénic resonance width in tokamaks. Physics of Plasmas, 2019, 26, 032508.	1.9	8
15	Emission in the ion cyclotron range of frequencies (ICE) on NSTX and NSTX-U. Physics of Plasmas, 2019, 26, .	1.9	23
16	Collisional resonance function in discrete-resonance quasilinear plasma systems. Physics of Plasmas, 2019, 26, .	1.9	10
17	Study of the likelihood of Alfvénic mode bifurcation in NSTX and predictions for ITER baseline scenarios. Nuclear Fusion, 2018, 58, 082013.	3.5	10
18	Resonance frequency broadening of wave-particle interaction in tokamaks due to Alfvénic eigenmode. Nuclear Fusion, 2018, 58, 082017.	3.5	16

#	ARTICLE	IF	CITATIONS
19	Stochastic effects on phase-space holes and clumps in kinetic systems near marginal stability. Nuclear Fusion, 2018, 58, 082015.	3.5	4
20	Plasma equilibrium with fast ion orbit width, pressure anisotropy, and toroidal flow effects. Nuclear Fusion, 2018, 58, 082031.	3.5	4
21	Resonances between high energy particles and ideal magnetohydrodynamic modes in tokamaks. Physics of Plasmas, 2018, 25, .	1.9	13
22	Global Alfvén eigenmode scaling and suppression: experiment and theory. Nuclear Fusion, 2018, 58, 082022.	3.5	9
23	Resonance broadened quasi-linear (RBQ) model for fast ion distribution relaxation due to Alfvénic eigenmodes. Nuclear Fusion, 2018, 58, 082016.	3.5	18
24	Energetic-particle-modified global Alfvén eigenmodes. Physics of Plasmas, 2018, 25, .	1.9	8
25	Nonlinear simulations of beam-driven compressional Alfvén eigenmodes in NSTX. Physics of Plasmas, 2017, 24, .	1.9	22
26	Prediction of nonlinear evolution character of energetic-particle-driven instabilities. Nuclear Fusion, 2017, 57, 054001.	3.5	40
27	Computation of Alfvén eigenmode stability and saturation through a reduced fast ion transport model in the TRANSP tokamak transport code. Plasma Physics and Controlled Fusion, 2017, 59, 095008.	2.1	41
28	Suppression of Alfvén Modes on the National Spherical Torus Experiment Upgrade with Outboard Beam Injection. Physical Review Letters, 2017, 118, 265001.	7.8	31
29	Theory and observation of the onset of nonlinear structures due to eigenmode destabilization by fast ions in tokamaks. Physics of Plasmas, 2017, 24, 122508.	1.9	20
30	Effects of energetic particle phase space modifications by instabilities on integrated modeling. Nuclear Fusion, 2016, 56, 112005.	3.5	15
31	Validating predictive models for fast ion profile relaxation in burning plasmas. Nuclear Fusion, 2016, 56, 112015.	3.5	10
32	Saturation of Alfvén modes in tokamaks. Plasma Physics and Controlled Fusion, 2016, 58, 115007.	2.1	9
33	Electron cyclotron heating can drastically alter reversed shear Alfvén eigenmode activity in DIII-D through finite pressure effects. Nuclear Fusion, 2016, 56, 112007.	3.5	47
34	Coupling of Neutral-Beam-Driven Compressional Alfvén Eigenmodes to Kinetic Alfvén Waves in NSTX Tokamak and Energy Channeling. Physical Review Letters, 2015, 115, 015001.	7.8	36
35	Parametric dependence of fast-ion transport events on the National Spherical Torus Experiment. Nuclear Fusion, 2014, 54, 093007.	3.5	17
36	Comparing the line broadened quasilinear model to Vlasov code. Physics of Plasmas, 2014, 21, 032119.	1.9	14

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37	Energetic particle physics in fusion research in preparation for burning plasma experiments. Nuclear Fusion, 2014, 54, 125001.	3.5	200
38	Fast-ion energy loss during TAE avalanches in the National Spherical Torus Experiment. Nuclear Fusion, 2013, 53, 013006.	3.5	36
39	Stochastic orbit loss of neutral beam ions from NSTX due to toroidal Alfvén eigenmode avalanches. Nuclear Fusion, 2013, 53, 013009.	3.5	12
40	Non-linear modulation of short wavelength compressional Alfvén eigenmodes. Physics of Plasmas, 2013, 20, 042112.	1.9	18
41	Internal amplitude, structure and identification of compressional and global Alfvén eigenmodes in NSTX. Nuclear Fusion, 2013, 53, 043017.	3.5	28
42	Observation of global Alfvén eigenmode avalanche events on the National Spherical Torus Experiment. Nuclear Fusion, 2012, 52, 043001.	3.5	25
43	Study of chirping toroidicity-induced Alfvén eigenmodes in the National Spherical Torus Experiment. Nuclear Fusion, 2012, 52, 094001.	3.5	33
44	High spatial sampling global mode structure measurements via multichannel reflectometry in NSTX. Plasma Physics and Controlled Fusion, 2011, 53, 105001.	2.1	48
45	Anomalous electron transport due to multiple high frequency beam ion driven Alfvén eigenmodes. Nuclear Fusion, 2010, 50, 084012.	3.5	25
46	Modeling fast-ion transport during toroidal Alfvén eigenmode avalanches in National Spherical Torus Experiment. Physics of Plasmas, 2009, 16, 122505.	1.9	59
47	Collective fast ion instability-induced losses in National Spherical Tokamak Experiment. Physics of Plasmas, 2006, 13, 056109.	1.9	89
48	Observation of compressional Alfvén eigenmodes (CAE) in a conventional tokamak. Nuclear Fusion, 2006, 46, 324-334.	3.5	42
49	Fast ion loss in a $\tilde{\omega}$ -sea-of-TAE™. Nuclear Fusion, 2006, 46, S926-S932.	3.5	42
50	Discrete compressional Alfvén eigenmode spectrum in tokamaks. Nuclear Fusion, 2006, 46, S933-S941.	3.5	22
51	Interpretation of the finite pressure gradient effects in the reversed shear Alfvén eigenmode theory. Plasma Physics and Controlled Fusion, 2006, 48, 1255-1269.	2.1	33
52	Energetic ion transport by abrupt large-amplitude event induced by negative-ion-based neutral beam injection in the JT-60U. Nuclear Fusion, 2005, 45, 1474-1480.	3.5	44
53	Beam anisotropy effect on Alfvén eigenmode stability in ITER-like plasmas. Nuclear Fusion, 2005, 45, 226-237.	3.5	68
54	Instability in the Frequency Range of Alfvén Eigenmodes Driven by Negative-Ion-Based Neutral Beams in JT-60U. Journal of Plasma and Fusion Research, 2005, 81, 547-552.	0.4	1

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55	Phenomenology of compressional Alfvén eigenmodes. Physics of Plasmas, 2004, 11, 3653-3659.	1.9	28
56	Self-consistent equilibrium model of low aspect-ratio toroidal plasma with energetic beam ions. Physics of Plasmas, 2003, 10, 3240-3251.	1.9	53
57	Theory and observations of high frequency Alfvén eigenmodes in low aspect ratio plasmas. Nuclear Fusion, 2003, 43, 228-233.	3.5	53
58	Compressional Alfvén eigenmode dispersion in low aspect ratio plasmas. Physics of Plasmas, 2002, 9, 3483-3488.	1.9	19
59	Compressional Alfvén eigenmode instability in NSTX. Nuclear Fusion, 2002, 42, 977-985.	3.5	42
60	On properties of compressional Alfvén eigenmode instability driven by super-Alfvénic ions. Nuclear Fusion, 2002, 42, 1216-1220.	3.5	2
61	Alfvén eigenmodes driven by Alfvénic beam ions in JT-60U. Nuclear Fusion, 2001, 41, 603-612.	3.5	93
62	Fast particle finite orbit width and Larmor radius effects on low-n toroidicity induced Alfvén eigenmode excitation. Physics of Plasmas, 1999, 6, 2802-2807.	1.9	99
63	Magnetosonic eigenmodes near the magnetic field well in a spherical torus. Physics of Plasmas, 1998, 5, 4104-4106.	1.9	8
64	Alfvén cyclotron instability and ion cyclotron emission. Nuclear Fusion, 1995, 35, 1743-1752.	3.5	77
65	Excitation of Alfvén cyclotron instability by charged fusion products in tokamaks. Physics of Plasmas, 1995, 2, 1961-1971.	1.9	58
66	On the collisional damping of TAE-modes on trapped electrons in tokamaks. Physica Scripta, 1992, 45, 163-166.	2.5	81