

# Jong-Kyu Park

## List of Publications by Year in descending order

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79  
papers

3,289  
citations

126907

33  
h-index

149698

56  
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82  
all docs

82  
docs citations

82  
times ranked

1156  
citing authors

#	ARTICLE	IF	CITATIONS
1	Suppression of Edge Localized Modes in High-Confinement KSTAR Plasmas by Nonaxisymmetric Magnetic Perturbations. <i>Physical Review Letters</i> , 2012, 109, 035004.	7.8	295
2	Principal physics developments evaluated in the ITER design review. <i>Nuclear Fusion</i> , 2009, 49, 065012.	3.5	200
3	Computation of three-dimensional tokamak and spherical torus equilibria. <i>Physics of Plasmas</i> , 2007, 14, 052110.	1.9	176
4	Pedestal Bifurcation and Resonant Field Penetration at the Threshold of Edge-Localized Mode Suppression in the DIII-D Tokamak. <i>Physical Review Letters</i> , 2015, 114, 105002.	7.8	141
5	Control of Asymmetric Magnetic Perturbations in Tokamaks. <i>Physical Review Letters</i> , 2007, 99, 195003.	7.8	131
6	Nonambipolar Transport by Trapped Particles in Tokamaks. <i>Physical Review Letters</i> , 2009, 102, 065002.	7.8	126
7	Observation of a Multimode Plasma Response and its Relationship to Density Pumpout and Edge-Localized Mode Suppression. <i>Physical Review Letters</i> , 2015, 114, 105001.	7.8	124
8	Advances towards QH-mode viability for ELM-stable operation in ITER. <i>Nuclear Fusion</i> , 2011, 51, 083018.	3.5	116
9	Progress in understanding error-field physics in NSTX spherical torus plasmas. <i>Nuclear Fusion</i> , 2010, 50, 045008.	3.5	77
10	3D field phase-space control in tokamak plasmas. <i>Nature Physics</i> , 2018, 14, 1223-1228.	16.7	77
11	Importance of plasma response to nonaxisymmetric perturbations in tokamaks. <i>Physics of Plasmas</i> , 2009, 16, 056115.	1.9	74
12	Comparisons of linear and nonlinear plasma response models for non-axisymmetric perturbations. <i>Physics of Plasmas</i> , 2013, 20, .	1.9	73
13	Measurement and modeling of three-dimensional equilibria in DIII-D. <i>Physics of Plasmas</i> , 2011, 18, .	1.9	72
14	Effect of resonant and non-resonant magnetic braking on error field tolerance in high beta plasmas. <i>Nuclear Fusion</i> , 2009, 49, 115001.	3.5	71
15	Three-Dimensional Drift Kinetic Response of High- $\beta^2$ Plasmas in the DIII-D Tokamak. <i>Physical Review Letters</i> , 2015, 114, 145005.	7.8	69
16	On Demand Triggering of Edge Localized Instabilities Using External Nonaxisymmetric Magnetic Perturbations in Toroidal Plasmas. <i>Physical Review Letters</i> , 2010, 104, 045001.	7.8	66
17	Collisional boundary layer analysis for neoclassical toroidal plasma viscosity in tokamaks. <i>Physics of Plasmas</i> , 2008, 15, .	1.9	64
18	Error field correction in ITER. <i>Nuclear Fusion</i> , 2008, 48, 045006.	3.5	63

#	ARTICLE	IF	CITATIONS
19	The density dependence of edge-localized-mode suppression and pump-out by resonant magnetic perturbations in the DIII-D tokamak. <i>Physics of Plasmas</i> , 2019, 26, .	1.9	51
20	Overview of NSTX Upgrade initial results and modelling highlights. <i>Nuclear Fusion</i> , 2017, 57, 102006.	3.5	45
21	Self-consistent perturbed equilibrium with neoclassical toroidal torque in tokamaks. <i>Physics of Plasmas</i> , 2017, 24, .	1.9	45
22	Reactor-relevant quiescent H-mode operation using torque from non-axisymmetric, non-resonant magnetic fields. <i>Physics of Plasmas</i> , 2012, 19, .	1.9	44
23	Plasma rotation driven by static nonresonant magnetic fields. <i>Physics of Plasmas</i> , 2009, 16, 056119.	1.9	43
24	The limits and challenges of error field correction for ITER. <i>Physics of Plasmas</i> , 2012, 19, .	1.9	43
25	Rotational Resonance of Nonaxisymmetric Magnetic Braking in the KSTAR Tokamak. <i>Physical Review Letters</i> , 2013, 111, 095002.	7.8	41
26	Benchmarking kinetic calculations of resistive wall mode stability. <i>Physics of Plasmas</i> , 2014, 21, .	1.9	41
27	Enhanced understanding of non-axisymmetric intrinsic and controlled field impacts in tokamaks. <i>Nuclear Fusion</i> , 2017, 57, 116054.	3.5	41
28	Experimental tests of linear and nonlinear three-dimensional equilibrium models in DIII-D. <i>Physics of Plasmas</i> , 2015, 22, .	1.9	40
29	The importance of matched poloidal spectra to error field correction in DIII-D. <i>Physics of Plasmas</i> , 2014, 21, .	1.9	39
30	Neoclassical toroidal viscosity in perturbed equilibria with general tokamak geometry. <i>Physics of Plasmas</i> , 2013, 20, .	1.9	36
31	Observation and correction of non-resonant error fields in NSTX. <i>Plasma Physics and Controlled Fusion</i> , 2010, 52, 104003.	2.1	34
32	Shielding of external magnetic perturbations by torque in rotating tokamak plasmas. <i>Physics of Plasmas</i> , 2009, 16, 082512.	1.9	33
33	Error field correction in DIII-D Ohmic plasmas with either handedness. <i>Nuclear Fusion</i> , 2011, 51, 023003.	3.5	33
34	The impact of 3D fields on tearing mode stability of H-modes. <i>Nuclear Fusion</i> , 2011, 51, 073016.	3.5	33
35	Theory comparison and numerical benchmarking on neoclassical toroidal viscosity torque. <i>Physics of Plasmas</i> , 2014, 21, .	1.9	32
36	ELM control experiments in the KSTAR device. <i>Nuclear Fusion</i> , 2012, 52, 114011.	3.5	31

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37	Kinetic energy principle and neoclassical toroidal torque in tokamaks. <i>Physics of Plasmas</i> , 2011, 18, .	1.9	28
38	Îf Monte Carlo calculation of neoclassical transport in perturbed tokamaks. <i>Physics of Plasmas</i> , 2012, 19, 082503.	1.9	28
39	Computation of resistive instabilities by matched asymptotic expansions. <i>Physics of Plasmas</i> , 2016, 23, .	1.9	26
40	Scenario development during commissioning operations on the National Spherical Torus Experiment Upgrade. <i>Nuclear Fusion</i> , 2018, 58, 046010.	3.5	25
41	Decoupled recovery of energy and momentum with correction of $n^2$ error fields. <i>Nuclear Fusion</i> , 2015, 55, 083012.	3.3	22
42	Rotation and Kinetic Modifications of the Tokamak Ideal-Wall Pressure Limit. <i>Physical Review Letters</i> , 2014, 113, 255002.	7.8	21
43	Dependence of neoclassical toroidal viscosity on the poloidal spectrum of applied nonaxisymmetric fields. <i>Nuclear Fusion</i> , 2016, 56, 036008.	3.5	21
44	Equilibrium drives of the low and high field side $n^2$ plasma response and impact on global confinement. <i>Nuclear Fusion</i> , 2016, 56, 056001.	3.5	21
45	Predicting operational windows of ELMs suppression by resonant magnetic perturbations in the DIII-D and KSTAR tokamaks. <i>Physics of Plasmas</i> , 2021, 28, .	1.9	20
46	Spectral asymmetry due to magnetic coordinates. <i>Physics of Plasmas</i> , 2008, 15, .	1.9	19
47	Effect of nonaxisymmetric magnetic perturbations on divertor heat and particle flux profiles in National Spherical Torus Experiment. <i>Physics of Plasmas</i> , 2011, 18, .	1.9	19
48	Identification of multi-modal plasma responses to applied magnetic perturbations using the plasma reluctance. <i>Physics of Plasmas</i> , 2016, 23, .	1.9	19
49	Impact of toroidal and poloidal mode spectra on the control of non-axisymmetric fields in tokamaks. <i>Physics of Plasmas</i> , 2017, 24, .	1.9	19
50	Empirical scaling of the $n^2$ error field penetration threshold in tokamaks. <i>Nuclear Fusion</i> , 2020, 60, 086010.	3.5	19
51	Comparison of divertor heat flux splitting by 3D fields with field line tracing simulation in KSTAR. <i>Physics of Plasmas</i> , 2017, 24, 052506.	1.9	18
52	Test of the ITER-like resonant magnetic perturbation configurations for edge-localized mode crash suppression on KSTAR. <i>Nuclear Fusion</i> , 2019, 59, 126045.	3.5	18
53	Tamed stability and transport using controlled non-axisymmetric fields in KSTAR. <i>Nuclear Fusion</i> , 2019, 59, 056009.	3.5	16
54	Sensitivity to error fields in NSTX high $\hat{n}^2$ plasmas. <i>Nuclear Fusion</i> , 2012, 52, 023004.	3.5	15

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55	Nonambipolar Transport due to Electrons with 3D Resistive Response in the KSTAR Tokamak. Physical Review Letters, 2019, 123, 095001.	7.8	15
56	Nonlinear modeling of the scaling law for the $m/n = 3/2$ error field penetration threshold. Nuclear Fusion, 2020, 60, 076006.	3.5	15
57	Identification of multiple eigenmode growth rates in DIII-D and EAST tokamak plasmas. Nuclear Fusion, 2019, 59, 024001.	3.5	14
58	Observation of resonant and non-resonant magnetic braking in the $n = 1$ non-axisymmetric configurations on KSTAR. Nuclear Fusion, 2017, 57, 126035.	3.5	12
59	Identification of multiple eigenmode growth rates towards real time detection in DIII-D and KSTAR tokamak plasmas. Nuclear Fusion, 2021, 61, 056009.	3.5	12
60	Localizing resonant magnetic perturbations for edge localized mode control in KSTAR. Nuclear Fusion, 2020, 60, 096023.	3.5	12
61	Error Field Tolerance and Error Field Correction Strategies and Their Applicability to ITER. Fusion Science and Technology, 2011, 59, 572-585.	1.1	11
62	Three-dimensional equilibria and island energy transport due to resonant magnetic perturbation edge localized mode suppression on DIII-D. Physics of Plasmas, 2015, 22, .	1.9	9
63	Quasisymmetric Optimization of Nonaxisymmetry in Tokamaks. Physical Review Letters, 2021, 126, 125001.	7.8	8
64	Physics basis for design of 3D coils in tokamaks. Nuclear Fusion, 2021, 61, 076010.	3.5	8
65	Optimization of 3D controlled ELM-free state with recovered global confinement for KSTAR with $n = 1$ resonant magnetic field perturbation. Nuclear Fusion, 2022, 62, 026043.	3.5	8
66	NSTX-U theory, modeling and analysis results. Nuclear Fusion, 2022, 62, 042023.	3.5	8
67	Pedestal collapse by resonant magnetic perturbations. Nuclear Fusion, 2021, 61, 044001.	3.5	7
68	Nonlinear two-fluid modeling of plasma response to RMPs for the ELM control in the ITER baseline. Nuclear Fusion, 2021, 61, 106006.	3.5	7
69	Overview of the COMPASS results <sup>*</sup> . Nuclear Fusion, 2022, 62, 042021.	3.5	7
70	Overview of recent progress in 3D field physics in KSTAR. Journal of the Korean Physical Society, 2022, 80, 759-786.	0.7	6
71	Design and experimental demonstration of feedback adaptive RMP ELM controller toward complete long pulse ELM suppression on KSTAR. Physics of Plasmas, 2022, 29, .	1.9	6
72	Parametric dependencies of locked mode thresholds in KSTAR L-mode plasmas. Nuclear Fusion, 2021, 61, 086009.	3.5	5

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73	Error field impact on mode locking and divertor heat flux in NSTX-U. Nuclear Fusion, 2019, 59, 086021.	3.5	4
74	Influence of triangularity on the plasma response to resonant magnetic perturbations. Nuclear Fusion, 2022, 62, 076031.	3.5	4
75	Ideal plasma response to vacuum magnetic fields with resonant magnetic perturbations in non-axisymmetric tokamaks. Plasma Physics and Controlled Fusion, 2015, 57, 104002.	2.1	3
76	Ideal Perturbed Equilibria in Tokamaks and Control of External Magnetic Perturbations. Contributions To Plasma Physics, 2010, 50, 669-672.	1.1	2
77	Modeling of resistive plasma response in toroidal geometry using an asymptotic matching approach. Physics of Plasmas, 2020, 27, .	1.9	1
78	Toward holistic understanding of the ITER-like resonant magnetic perturbation (RMP) ELM control on KSTAR. Nuclear Fusion, 2022, 62, 066014.	3.5	1
79	NSTX-U theory, modeling and analysis results. Nuclear Fusion, 0, , .	3.5	0