G T A Huijsmans

List of Publications by Year
in descending order

39	1,122	394421	395702
papers	citations	19 h-index	33 g-index

39	39	39	1070
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	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
2	Non-linear magnetohydrodynamic modeling of plasma response to resonant magnetic perturbations. Physics of Plasmas, 2013, 20, .	1.9	99
3	The JOREK non-linear extended MHD code and applications to large-scale instabilities and their control in magnetically confined fusion plasmas. Nuclear Fusion, 2021, 61, 065001.	3.5	85
4	Mechanism of Edge Localized Mode Mitigation by Resonant Magnetic Perturbations. Physical Review Letters, 2014, 113, 115001.	7.8	60
5	Non-linear MHD modelling of ELM triggering by pellet injection in DIII-D and implications for ITER. Nuclear Fusion, 2014, 54, 073008.	3.5	53
6	Progress in understanding disruptions triggered by massive gas injection via 3D non-linear MHD modelling with JOREK. Plasma Physics and Controlled Fusion, 2017, 59, 014006.	2.1	47
7	Three-dimensional non-linear magnetohydrodynamic modeling of massive gas injection triggered disruptions in JET. Physics of Plasmas, 2015, 22, .	1.9	45
8	The quiescent H-mode regime for high performance edge localized mode-stable operation in future	1.9	45
9	Recent progress in understanding the processes underlying the triggering of and energy loss associated with type I ELMs. Nuclear Fusion, 2014, 54, 114012.	3.5	36
10	Modelling of edge localised modes and edge localised mode control. Physics of Plasmas, 2015, 22, .	1.9	34
11	Reduction of edge localized mode intensity on DIII-D by on-demand triggering with high frequency pellet injection and implications for ITER. Physics of Plasmas, 2013, 20, .	1.9	30
12	Understanding the effect resonant magnetic perturbations have on ELMs. Plasma Physics and Controlled Fusion, 2013, 55, 124003.	2.1	30
13	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
14	Resistive MHD simulation of edge-localized-modes for double-null discharges in the MAST device. Plasma Physics and Controlled Fusion, 2013, 55, 095001.	2.1	26
15	Simulating the nonlinear interaction of relativistic electrons and tokamak plasma instabilities: Implementation and validation of a fluid model. Physical Review E, 2019, 99, 063317.	2.1	26
16	Non-linear modeling of the threshold between ELM mitigation and ELM suppression by resonant magnetic perturbations in ASDEX upgrade. Physics of Plasmas, 2019, 26, 042503.	1.9	26
17	Extended full-MHD simulation of non-linear instabilities in tokamak plasmas. Physics of Plasmas, 2020, 27, .	1.9	24
18	Edge localized mode rotation and the nonlinear dynamics of filaments. Physics of Plasmas, 2016, 23, 042513.	1.9	22

#	Article	IF	Citations
19	New H-mode regimes with small ELMs and high thermal confinement in the Joint European Torus. Physics of Plasmas, 2022, 29, .	1.9	21
20	Non-linear MHD simulations of ELMs in JET and quantitative comparisons to experiments. Plasma Physics and Controlled Fusion, 2016, 58, 014026.	2.1	20
21	First predictive simulations for deuterium shattered pellet injection in ASDEX Upgrade. Physics of Plasmas, 2020, 27, 022510.	1.9	17
22	Linear MHD stability analysis of post-disruption plasmas in ITER. Plasma Physics Reports, 2016, 42, 486-494.	0.9	13
23	Understanding the reduction of the edge safety factor during hot VDEs and fast edge cooling events. Physics of Plasmas, 2020, 27, 032501.	1.9	13
24	Thermal quench and current profile relaxation dynamics in massive-material-injection-triggered tokamak disruptions. Plasma Physics and Controlled Fusion, 2021, 63, 115006.	2.1	13
25	ELM mitigation with pellet ELM triggering and implications for PFCs and plasma performance in ITER. Journal of Nuclear Materials, 2015, 463, 104-108.	2.7	12
26	Kinetic modeling of ELM-induced tungsten transport in a tokamak plasma. Physics of Plasmas, 2019, 26, .	1.9	12
27	A wall-aligned grid generator for non-linear simulations of MHD instabilities in tokamak plasmas. Computer Physics Communications, 2019, 243, 41-50.	7.5	10
28	MHD simulations of small ELMs at low triangularity in ASDEX Upgrade. Plasma Physics and Controlled Fusion, 2022, 64, 054011.	2.1	10
29	Early evolution of electron cyclotron driven current during suppression of tearing modes in a circular tokamak. Physics of Plasmas, 2016, 23, 102507.	1.9	9
30	Non-linear MHD modelling of edge localized modes suppression by resonant magnetic perturbations in ITER. Nuclear Fusion, 2022, 62, 066022.	3.5	9
31	Comparing spontaneous and pellet-triggered ELMs via non-linear extended MHD simulations. Plasma Physics and Controlled Fusion, 2021, 63, 075016.	2.1	7
32	PB3D: A new code for edge 3-D ideal linear peeling-ballooning stability. Journal of Computational Physics, 2017, 330, 997-1009.	3.8	6
33	Modeling of TAE mode excitation with an antenna in realistic X-point geometry. Physics of Plasmas, 2020, 27, 012507.	1.9	6
34	Collisional-radiative non-equilibrium impurity treatment for JOREK simulations. Plasma Physics and Controlled Fusion, 2021, 63, 125003.	2.1	5
35	Numerical study of tearing mode seeding in tokamak X-point plasma. Physics of Plasmas, 2019, 26, .	1.9	4
36	Global ITG eigenmodes: From ballooning angle and radial shift to Reynolds stress and nonlinear saturation. Physics of Plasmas, 2020, 27, .	1.9	3

#	Article	IF	Citations
37	Evaluation of first wall heat fluxes due to magnetic perturbations for a range of ITER scenarios. Journal of Nuclear Materials, 2015, 463, 406-410.	2.7	2
38	Closed-Form Solutions for the Trajectories of Charged Particles in an Exponentially Varying Magnetostatic Field. IEEE Transactions on Plasma Science, 2019, 47, 296-299.	1.3	1
39	Evaluation of core beta effects on pedestal MHD stability in ITER and consequences for energy confinement. Physics of Plasmas, 2020, 27, 092502.	1.9	0