

Anders H Nielsen

List of Publications by Year in descending order

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2119
citing authors

#	ARTICLE	IF	CITATIONS
1	Comparison of dynamical features between the fast H-L and the H-I-L transition for EAST RF-heated plasmas. <i>Physica Scripta</i> , 2022, 97, 015601.	2.5	2
2	Recent progress in H transition studies at JET: tritium, helium, hydrogen and deuterium. <i>Nuclear Fusion</i> , 2022, 62, 076026.	3.5	15
3	Conservation of currents in reduced full-F electromagnetic kinetic and fluid models. <i>Plasma Physics and Controlled Fusion</i> , 2022, 64, 054005.	2.1	2
4	Overview of the TCV tokamak experimental programme. <i>Nuclear Fusion</i> , 2022, 62, 042018.	3.5	30
5	Preliminary analysis of alternative divertors for DEMO. <i>Nuclear Materials and Energy</i> , 2021, 26, 100908.	1.3	19
6	Edge turbulence in ISTTOK: a multi-code fluid validation. <i>Plasma Physics and Controlled Fusion</i> , 2021, 63, 055013.	2.1	8
7	Dependence of upstream SOL density shoulder on divertor neutral pressure observed in L-mode and H-mode plasmas in the EAST superconducting tokamak. <i>Nuclear Fusion</i> , 2021, 61, 076018.	3.5	5
8	Scrape-off layer transport and filament characteristics in high-density tokamak regimes. <i>Nuclear Fusion</i> , 2020, 60, 016001.	3.5	43
9	Dynamics of seeded blobs under the influence of inelastic neutral interactions. <i>Physics of Plasmas</i> , 2020, 27, .	1.9	11
10	Influence of injection parameters on fueling efficiency of supersonic molecular beam injection into turbulent fusion plasmas. <i>Physics of Plasmas</i> , 2020, 27, .	1.9	2
11	On the role of integrated computer modelling in fusion technology. <i>Fusion Engineering and Design</i> , 2020, 157, 111671.	1.9	11
12	Scaling of L-mode heat flux for ITER and COMPASS-U divertors, based on five tokamaks. <i>Nuclear Fusion</i> , 2020, 60, 066016.	3.5	26
13	Overview of physics studies on ASDEX Upgrade. <i>Nuclear Fusion</i> , 2019, 59, 112014.	3.5	38
14	Physics research on the TCV tokamak facility: from conventional to alternative scenarios and beyond. <i>Nuclear Fusion</i> , 2019, 59, 112023.	3.5	43
15	Dependence on plasma shape and plasma fueling for small edge-localized mode regimes in TCV and ASDEX Upgrade. <i>Nuclear Fusion</i> , 2019, 59, 086020.	3.5	34
16	Overview of the JET preparation for deuterium-tritium operation with the ITER like-wall. <i>Nuclear Fusion</i> , 2019, 59, 112021.	3.5	87
17	Study of power width scaling in scrape-off layer with 2D electrostatic turbulence code based on EAST L-mode discharges. <i>Physics of Plasmas</i> , 2019, 26, 042509.	1.9	6
18	Synthetic edge and scrape-off layer diagnostics—a bridge between experiments and theory. <i>Nuclear Fusion</i> , 2019, 59, 086059.	3.5	8

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19	Statistical study of particle flux footprint widths with tungsten divertor in EAST. Plasma Physics and Controlled Fusion, 2019, 61, 045001.	2.1	12
20	Plasma particle sources due to interactions with neutrals in a turbulent scrape-off layer of a toroidally confined plasma. Physics of Plasmas, 2018, 25, .	1.9	30
21	Investigation into the formation of the scrape-off layer density shoulder in JET ITER-like wall L-mode and H-mode plasmas. Nuclear Fusion, 2018, 58, 056001.	3.5	38
22	Scrape-off layer power fall-off length from turbulence simulations of ASDEX Upgrade L-mode. Plasma Physics and Controlled Fusion, 2018, 60, 085018.	2.1	13
23	A new model of the L-H transition and H-mode power threshold. Plasma Science and Technology, 2018, 20, 094003.	1.5	1
24	Effect of $\tilde{\nu}_i B$ drift on the H-mode power threshold in upper single null plasmas with ITER-like tungsten divertor on EAST. Physics of Plasmas, 2018, 25, .	1.9	13
25	Efficient generation of energetic ions in multi-ion plasmas by radio-frequency heating. Nature Physics, 2017, 13, 973-978.	16.7	73
26	Overview of progress in European medium sized tokamaks towards an integrated plasma-edge/wall solution ^a . Nuclear Fusion, 2017, 57, 102014.	3.5	23
27	Numerical simulations of blobs with ion dynamics. Plasma Physics and Controlled Fusion, 2017, 59, 025012.	2.1	35
28	Overview of the JET results in support to ITER. Nuclear Fusion, 2017, 57, 102001.	3.5	150
29	Modification of SOL profiles and fluctuations with line-average density and divertor flux expansion in TCV. Nuclear Fusion, 2017, 57, 116014.	3.5	35
30	E _A -B mean flows in finite ion temperature plasmas. Physics of Plasmas, 2017, 24, 062309.	1.9	2
31	Overview of recent physics results from MAST. Nuclear Fusion, 2017, 57, 102007.	3.5	16
32	Overview of the TCV tokamak program: scientific progress and facility upgrades. Nuclear Fusion, 2017, 57, 102011.	3.5	52
33	The influence of blobs on neutral particles in the scrape-off layer. Plasma Physics and Controlled Fusion, 2016, 58, 044010.	2.1	25
34	Temperature dynamics and velocity scaling laws for interchange driven, warm ion plasma filaments. Plasma Physics and Controlled Fusion, 2016, 58, 044011.	2.1	14
35	Blob dynamics in the TORPEX experiment: a multi-code validation. Plasma Physics and Controlled Fusion, 2016, 58, 044005.	2.1	41
36	Multi-code analysis of scrape-off layer filament dynamics in MAST. Plasma Physics and Controlled Fusion, 2016, 58, 105002.	2.1	22

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37	Collisional transport across the magnetic field in drift-fluid models. Physics of Plasmas, 2016, 23, .	1.9	35
38	Low-to-High Confinement Transition Mediated by Turbulence Radial Wave Number Spectral Shift in a Fusion Plasma. Physical Review Letters, 2016, 116, 095002.	7.8	16
39	Study on the L α -H transition power threshold with RF heating and lithium-wall coating on EAST. Nuclear Fusion, 2016, 56, 056013.	3.5	19
40	L α -H power threshold studies with tungsten/carbon divertor on the EAST tokamak. Radiation Effects and Defects in Solids, 2016, 171, 359-373.	1.2	0
41	Numerical modeling of the transition from low to high confinement in magnetically confined plasma. Plasma Physics and Controlled Fusion, 2016, 58, 014031.	2.1	38
42	COMPARISON BETWEEN 2D TURBULENCE MODEL ESEL AND EXPERIMENTAL DATA FROM AUG AND COMPASS TOKAMAKS. Acta Polytechnica, 2015, 55, 128-135.	0.6	3
43	One-dimensional modelling of limit-cycle oscillation and H-mode power scaling. Nuclear Fusion, 2015, 55, 053029.	3.5	12
44	Gyrofluid potential vorticity equation and turbulent equipartition states. Plasma Physics and Controlled Fusion, 2015, 57, 054016.	2.1	7
45	Simulation of transition dynamics to high confinement in fusion plasmas. Physics Letters, Section A: General, Atomic and Solid State Physics, 2015, 379, 3097-3101.	2.1	39
46	Overview of MAST results. Nuclear Fusion, 2015, 55, 104008.	3.5	16
47	Three dimensional simulations of plasma filaments in the scrape off layer: A comparison with models of reduced dimensionality. Physics of Plasmas, 2014, 21, .	1.9	63
48	Langmuir-magnetic probe measurements of ELMs and dithering cycles in the EAST tokamak. Plasma Physics and Controlled Fusion, 2014, 56, 095023.	2.1	10
49	Dynamics of L α -H transition and I-phase in EAST. Nuclear Fusion, 2014, 54, 103002.	3.5	33
50	Study of the L α -I α -H transition with a new dual gas puff imaging system in the EAST superconducting tokamak. Nuclear Fusion, 2014, 54, 013007.	3.5	15
51	New Edge Coherent Mode Providing Continuous Transport in Long-Pulse H-mode Plasmas. Physical Review Letters, 2014, 112, 185004.	7.8	93
52	Electric Probe Measurements of the Poloidal Velocity in the Scrape-Off Layer of ASDEX Upgrade. Contributions To Plasma Physics, 2014, 54, 273-278.	1.1	0
53	Overview of physics results from MAST towards ITER/DEMO and the MAST Upgrade. Nuclear Fusion, 2013, 53, 104008.	3.5	21
54	Overview of the JET results with the ITER-like wall. Nuclear Fusion, 2013, 53, 104002.	3.5	70

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55	Numerical investigation of Scrape Off Layer anomalous particle transport for MAST parameters. Journal of Nuclear Materials, 2013, 438, S530-S535.	2.7	4
56	Experimental and numerical characterization of the turbulence in the scrape-off layer of MAST. Plasma Physics and Controlled Fusion, 2013, 55, 025005.	2.1	38
57	Numerical scalings of the decay lengths in the scrape-off layer. Plasma Physics and Controlled Fusion, 2013, 55, 074010.	2.1	13
58	Radial transport in the far scrape-off layer of ASDEX Upgrade during L-mode and ELMy H-mode. Nuclear Fusion, 2013, 53, 043021.	3.5	11
59	Statistical characterization of turbulence in the boundary plasma of EAST. Plasma Physics and Controlled Fusion, 2013, 55, 115007.	2.1	24
60	Simulations of edge and scrape off layer turbulence in mega ampere spherical tokamak plasmas. Plasma Physics and Controlled Fusion, 2012, 54, 095011.	2.1	36
61	Profiles and Fluctuations in Edge and SOL Turbulence. Contributions To Plasma Physics, 2012, 52, 391-400.	1.1	1
62	Steady-state and time-dependent modelling of parallel transport in the scrape-off layer. Plasma Physics and Controlled Fusion, 2011, 53, 065004.	2.1	14
63	The effect of plasma fluctuations on parallel transport parameters in the SOL. Journal of Nuclear Materials, 2011, 415, S471-S474.	2.7	15
64	A Dip Structure in the Intrinsic Toroidal Rotation Near the Edge of the Ohmic Plasmas in EAST. Plasma Science and Technology, 2011, 13, 397-404.	1.5	12
65	Overview of JET results. Nuclear Fusion, 2011, 51, 094008.	3.5	33
66	Observation of Blobs and Holes in the Boundary Plasma of EAST Tokamak. Plasma Science and Technology, 2011, 13, 410-414.	1.5	9
67	The influence of finite Larmor radius effects on the radial interchange motions of plasma filaments. Physics of Plasmas, 2011, 18, .	1.9	52
68	The influence of the edge density fluctuations on electron cyclotron wave beam propagation in tokamaks. Journal of Physics: Conference Series, 2010, 260, 012002.	0.4	9
69	Sharp vorticity gradients in two-dimensional turbulence and the energy spectrum. Theoretical and Computational Fluid Dynamics, 2010, 24, 253-258.	2.2	11
70	Interpretation of fast measurements of plasma potential, temperature and density in SOL of ASDEX Upgrade. Nuclear Fusion, 2010, 50, 105001.	3.5	48
71	Intermittent convective transport carried by propagating electromagnetic filamentary structures in nonuniformly magnetized plasma. Physics of Plasmas, 2010, 17, 022501.	1.9	38
72	Blob/hole formation and zonal-flow generation in the edge plasma of the JET tokamak. Nuclear Fusion, 2009, 49, 092002.	3.5	81

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73	Sharp vorticity gradients in two-dimensional turbulence and the energy spectrum. IUTAM Symposium on Cellular, Molecular and Tissue Mechanics, 2009, , 269-274.	0.2	0
74	Progress in Edge Plasma Transport Modeling on JET. Contributions To Plasma Physics, 2008, 48, 190-195.	1.1	3
75	The European turbulence code benchmarking effort: turbulence driven by thermal gradients in magnetically confined plasmas. Plasma Physics and Controlled Fusion, 2008, 50, 124015.	2.1	51
76	Fast Ion Collective Thomson Scattering Diagnostic for ITER: Design Elements. Fusion Science and Technology, 2008, 53, 69-76.	1.1	12
77	Dissipative processes in interchange driven scrape-off layer turbulence. Nuclear Fusion, 2007, 47, 417-433.	3.5	83
78	Fluctuations and transport in the TCV scrape-off layer. Nuclear Fusion, 2007, 47, 667-676.	3.5	147
79	Collisionality dependent transport in TCV SOL plasmas. Plasma Physics and Controlled Fusion, 2007, 49, B47-B57.	2.1	76
80	Effects of sharp vorticity gradients in two-dimensional hydrodynamic turbulence. Physics of Fluids, 2007, 19, .	4.0	29
81	Parallel SOL flow on TCV. Journal of Nuclear Materials, 2007, 363-365, 505-510.	2.7	59
82	Turbulent transport in the TCV SOL. Journal of Nuclear Materials, 2007, 363-365, 575-580.	2.7	64
83	Two-dimensional convection and interchange motions in fluids and magnetized plasmas. Physica Scripta, 2006, T122, 104-124.	2.5	36
84	Interchange turbulence in the TCV scrape-off layer. Plasma Physics and Controlled Fusion, 2006, 48, L1-L10.	2.1	135
85	Turbulence simulations of blob formation and radial propagation in toroidally magnetized plasmas. Physica Scripta, 2006, T122, 89-103.	2.5	39
86	Generation of zonal flows in rotating fluids and magnetized plasmas. Physica Scripta, 2006, T122, 44-51.	2.5	13
87	Shear flow generation and energetics in electromagnetic turbulence. Physics of Plasmas, 2005, 12, 052515.	1.9	61
88	Turbulence spreading, anomalous transport, and pinch effect. Physics of Plasmas, 2005, 12, 122306.	1.9	48
89	Mechanism and scaling for convection of isolated structures in nonuniformly magnetized plasmas. Physics of Plasmas, 2005, 12, 090701.	1.9	94
90	Up-gradient transport in a probabilistic transport model. Physics of Plasmas, 2005, 12, 084501.	1.9	6

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91	Turbulence and intermittent transport at the boundary of magnetized plasmas. <i>Physics of Plasmas</i> , 2005, 12, 062309.	1.9	100
92	Computations of Intermittent Transport in Scrape-Off Layer Plasmas. <i>Physical Review Letters</i> , 2004, 92, 165003.	7.8	150
93	Statistical properties of transport in plasma turbulence. <i>Physics Letters, Section A: General, Atomic and Solid State Physics</i> , 2004, 321, 355-365.	2.1	39
94	Thermomechanical analysis of insulated subsea flowlines. <i>Proceedings of the Institution of Mechanical Engineers Part M: Journal of Engineering for the Maritime Environment</i> , 2004, 218, 77-91.	0.5	1
95	Accuracy of Spectral and Finite Difference Schemes in 2D Advection Problems. <i>SIAM Journal of Scientific Computing</i> , 2003, 25, 104-126.	2.8	45
96	On the origin of time-dependent behaviour in a barotropically unstable shear layer. <i>Nonlinear Processes in Geophysics</i> , 2003, 10, 289-302.	1.3	9
97	Dynamics of Vortex Interactions in Two-Dimensional Flows. <i>Physica Scripta</i> , 2001, T98, 29.	2.5	5
98	Two-dimensional turbulence in square and circular domains with no-slip walls. <i>European Journal of Mechanics, B/Fluids</i> , 2001, 20, 557-576.	2.5	43
99	Dynamical properties of forced shear layers in an annular geometry. <i>Journal of Fluid Mechanics</i> , 2000, 402, 255-289.	3.4	18
100	An accurate and efficient spectral method for studies of the dynamical properties of forced, circular shear layers. <i>Applied Numerical Mathematics</i> , 2000, 33, 175-181.	2.1	1
101	Vortex Statistics for Turbulence in a Container with Rigid Boundaries. <i>Physical Review Letters</i> , 2000, 85, 752-755.	7.8	28
102	Shear-flow instability in a rotating fluid. <i>Journal of Fluid Mechanics</i> , 1999, 387, 177-204.	3.4	36
103	Dispersion of ideal particles in a two-dimensional model of electrostatic turbulence. <i>Physics of Plasmas</i> , 1999, 6, 4575-4585.	1.9	46
104	On the interaction between two oppositely signed, shielded, monopolar vortices. <i>Physics of Fluids</i> , 1998, 10, 3099-3110.	4.0	9
105	Formation and temporal evolution of the Lamb-dipole. <i>Physics of Fluids</i> , 1997, 9, 982-991.	4.0	46
106	Turbulent transport in low- β^2 plasmas. <i>Physics of Plasmas</i> , 1996, 3, 1530-1544.	1.9	71
107	Self-organization and coherent structures in plasmas and fluids. <i>Physica Scripta</i> , 1996, T63, 49-58.	2.5	9
108	Dipolar vortices in two-dimensional flows. <i>Mathematics and Computers in Simulation</i> , 1996, 40, 207-221.	4.4	8

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109	Vortex merging and spectral cascade in two-dimensional flows. <i>Physics of Fluids</i> , 1996, 8, 2263-2265.	4.0	23
110	Self-organization in circular shear layers. <i>Physica Scripta</i> , 1996, T67, 33-37.	2.5	4
111	The Eulerian-Lagrangian transformation in two-dimensional random flows. <i>Journal of Atmospheric and Solar-Terrestrial Physics</i> , 1995, 57, 215-223.	0.9	8
112	Coherent structures in plasmas and fluids. <i>AIP Conference Proceedings</i> , 1995, , .	0.4	0
113	Dynamics of a nonlinear dipole vortex. <i>Physics of Fluids</i> , 1995, 7, 2220-2229.	4.0	31
114	Electrostatic fluctuations and turbulent plasma transport in low- β^2 plasmas. <i>Physica Scripta</i> , 1995, 51, 632-637.	2.5	7
115	Experimental Evidence for Mode Selection in Turbulent Plasma Transport. <i>Europhysics Letters</i> , 1994, 27, 209-214.	2.0	6
116	Vortex Dipoles Colliding with Curved Walls. <i>NATO ASI Series Series B: Physics</i> , 1993, , 51-54.	0.2	4
117	Coherent vortical structures in two-dimensional plasma turbulence. <i>Plasma Physics and Controlled Fusion</i> , 1992, 34, 2065-2070.	2.1	12
118	Studies of the Eulerian-Lagrangian transformation in two-dimensional random flows. <i>Journal of Fluid Mechanics</i> , 1991, 224, 485-505.	3.4	12
119	Coherent structures in two-dimensional plasma turbulence. <i>Physics of Fluids B</i> , 1991, 3, 1609-1625.	1.7	87
120	Plasma vortices and their relation to cross-field diffusion: A laboratory study. <i>Physical Review Letters</i> , 1990, 64, 3023-3026.	7.8	16
121	Simulations of scrape-off layer power width for EAST H-mode plasma and ITER 15MA baseline scenario by 2D electrostatic turbulence code. <i>Nuclear Fusion</i> , 0, , .	3.5	2