Maarit J KÃ¤pylÃ¤

List of Publications by Year
in descending order

117 papers	3,136 citations	136950 32 h-index	182427 51 g-index
117 all docs	117 docs citations	117 times ranked	1478 citing authors

#	Article	IF	Citations
1	Zeeman-Doppler imaging of five young solar-type stars. Astronomy and Astrophysics, 2022, 659, A71.	5.1	5
2	Scalable communication for high-order stencil computations using CUDA-aware MPI. Parallel Computing, 2022, 111, 102904.	2.1	6
3	Compressible Test-field Method and Its Application to Shear Dynamos. Astrophysical Journal, 2022, 932, 8.	4.5	8
4	Modelling the interplay between epidemics and regional socio-economics. Physica A: Statistical Mechanics and Its Applications, 2022, 604, 127696.	2.6	2
5	Interaction of Large- and Small-scale Dynamos in Isotropic Turbulent Flows from GPU-accelerated Simulations. Astrophysical Journal, 2021, 907, 83.	4.5	7
6	The Pencil Code, a modular MPI code for partial differential equations and particles: multipurpose and multiuser-maintained. Journal of Open Source Software, 2021, 6, 2807.	4.6	92
7	Small-scale Dynamo in Supernova-driven Interstellar Turbulence. Astrophysical Journal Letters, 2021, 910, L15.	8.3	18
8	A Knee Point in the Rotationâ€“Activity Scaling of Late-type Stars with a Connection to Dynamo Transitions. Astrophysical Journal, 2021, 910, 110.	4.5	10
9	Investigating Global Convective Dynamos with Mean-field Models: Full Spectrum of Turbulent Effects Required. Astrophysical Journal Letters, 2021, 919, L13.	8.3	12
10	Inferring magnetic helicity spectrum in spherical domains: Method and example applications. Astronomy and Astrophysics, 2021, 654, A3.	5.1	3
11	Physically motivated heat-conduction treatment in simulations of solar-like stars: effects on dynamo transitions. Astronomy and Astrophysics, 2021, 645, A141.	5.1	8
12	f-mode strengthening from a localised bipolar subsurface magnetic field. Geophysical and Astrophysical Fluid Dynamics, 2020, 114, 196-212.	1.2	4
13	Sensitivity to luminosity, centrifugal force, and boundary conditions in spherical shell convection. Geophysical and Astrophysical Fluid Dynamics, 2020, 114, 8-34.	1.2	17
14	Modelling supernova-driven turbulence. Geophysical and Astrophysical Fluid Dynamics, 2020, 114, 77-105.	1.2	12
15	Common dynamo scaling in slowly rotating young and evolved stars. Nature Astronomy, 2020, 4, 658-662.	10.1	23
16	Turbulent viscosity and magnetic Prandtl number from simulations of isotropically forced turbulence. Astronomy and Astrophysics, 2020, 636, A93.	5.1	7
17	Rotational dependence of turbulent transport coefficients in global convective dynamo simulations of solar-like stars. Astronomy and Astrophysics, 2020, 642, A66.	5.1	13
18	Helicity proxies from linear polarisation of solar active regions. Astronomy and Astrophysics, 2020, 641, A46.	5.1	6

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19	Shapes of stellar activity cycles. Astronomy and Astrophysics, 2020, 638, A69.	5.1	7
20	On the Existence of Shear-current Effects in Magnetized Burgulence. Astrophysical Journal, 2020, 905, 179.	4.5	5
21	Effects of a subadiabatic layer on convection and dynamos in spherical wedge simulations. Geophysical and Astrophysical Fluid Dynamics, 2019, 113, 149-183.	1.2	21
22	Starspot activity of HD 199178. Astronomy and Astrophysics, 2019, 625, A79.	5.1	11
23	Spot evolution on LQ Hya from 2006â€“2017: temperature maps based on SOFIN and FIES data. Astronomy and Astrophysics, 2019, 629, A120.	5.1	7
24	Differences in the solar cycle variability of simple and complex active regions during 1996â€“2018. Astronomy and Astrophysics, 2019, 629, A45.	5.1	17
25	Stellar Dynamos in the Transition Regime: Multiple Dynamo Modes and Antisolar Differential Rotation. Astrophysical Journal, 2019, 886, 21.	4.5	19
26	Long-term spot monitoring of the young solar analogue V889 Herculis. Astronomy and Astrophysics, 2019, 622, A170.	5.1	10
27	Large-scale dynamos in rapidly rotating plane layer convection. Astronomy and Astrophysics, 2018, 612, A97.	5.1	16
28	Bihelical Spectrum of Solar Magnetic Helicity and Its Evolution. Astrophysical Journal, 2018, 863, 182.	4.5	18
29	Estimating activity cycles with probabilistic methods. Astronomy and Astrophysics, 2018, 619, A6.	5.1	49
30	Turbulent transport coefficients in spherical wedge dynamo simulations of solar-like stars. Astronomy and Astrophysics, 2018, 609, A51.	5.1	50
31	Estimating activity cycles with probabilistic methods. Astronomy and Astrophysics, 2018, 615, A111.	5.1	8
32	The supernova-regulated ISM. Astronomy and Astrophysics, 2018, 611, A15.	5.1	20
33	Transition from axi- to nonaxisymmetric dynamo modes in spherical convection models of solar-like stars. Astronomy and Astrophysics, 2018, 616, A160.	5.1	48
34	The supernova-regulated ISM. Astronomy and Astrophysics, 2018, 614, A101.	5.1	7
35	Smallâ€scale dynamos in simulations of stratified turbulent convection. Astronomische Nachrichten, 2018, 339, 127-133.	1.2	12
36	Method of frequency dependent correlations: investigating the variability of total solar irradiance. Astronomy and Astrophysics, 2017, 600, A9.	5.1	1

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37	Methods for compressible fluid simulation on GPUs using high-order finite differences. Computer Physics Communications, 2017, 217, 11-22.	7.5	14
38	Solar Cycle Occurrence of AlfvÃ©nic Fluctuations and Related Geoâ€Efficiency. Journal of Geophysical Research: Space Physics, 2017, 122, 9848-9857.	2.4	6
39	Convection-driven spherical shell dynamos at varying Prandtl numbers. Astronomy and Astrophysics, 2017, 599, A4.	5.1	39
40	Extended Subadiabatic Layer in Simulations of Overshooting Convection. Astrophysical Journal Letters, 2017, 845, L23.	8.3	44
41	Longâ€term variations of turbulent transport coefficients in a solarlike convective dynamo simulation. Astronomische Nachrichten, 2017, 338, 885-895.	1.2	5
42	Zeeman-Doppler imaging of active young solar-type stars. Astronomy and Astrophysics, 2016, 587, A28.	5.1	20
43	Robustness of oscillatoryÎ±²dynamos in spherical wedges. Astronomy and Astrophysics, 2016, 593, A134.	5.1	9
44	Influence of a coronal envelope as a free boundary to global convective dynamo simulations. Astronomy and Astrophysics, 2016, 596, A115.	5.1	27
45	Multiple dynamo modes as a mechanism for long-term solar activity variations. Astronomy and Astrophysics, 2016, 589, A56.	5.1	68
46	Magnetic flux concentrations from turbulent stratified convection. Astronomy and Astrophysics, 2016, 588, A150.	5.1	23
47	Method for estimating cycle lengths from multidimensional time series: Test cases and application to a massive â€œin silicoâ€•dataset. , 2016, , .		0
48	Singular Value Decomposition update and its application to (Inc)-OP-ELM. Neurocomputing, 2016, 174, 99-108.	5.9	10
49	The Maunder minimum (1645â€“1715) was indeed a grand minimum: A reassessment of multiple datasets. Astronomy and Astrophysics, 2015, 581, A95.	5.1	158
50	Testing turbulent closure models with convection simulations. Astronomische Nachrichten, 2015, 336, 32-52.	1.2	5
51	Doppler imaging of LQ Hydrae for 1998â€“2002. Astronomy and Astrophysics, 2015, 581, A69.	5.1	12
52	STATISTICAL STUDY OF STRONG AND EXTREME GEOMAGNETIC DISTURBANCES AND SOLAR CYCLE CHARACTERISTICS. Astrophysical Journal, 2015, 806, 272.	4.5	46
53	Magnetically controlled stellar differential rotation near the transition from solar to anti-solar profiles. Astronomy and Astrophysics, 2015, 576, A26.	5.1	82
54	Multiperiodicity, modulations, and flip-flops in variable star light curves. Astronomy and Astrophysics, 2015, 577, A120.	5.1	14

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55	Quantifying the effect of turbulent magnetic diffusion on the growth rate of the magnetoâ^rotational instability. Astronomy and Astrophysics, 2014, 567, A139.	5.1	6
56	Confirmation of bistable stellar differential rotation profiles. Astronomy and Astrophysics, 2014, 570, A43.	5.1	80
57	QUENCHING AND ANISOTROPY OF HYDROMAGNETIC TURBULENT TRANSPORT. Astrophysical Journal, 2014, 795, 16.	4.5	30
58	ON THE CAUSE OF SOLAR-LIKE EQUATORWARD MIGRATION IN GLOBAL CONVECTIVE DYNAMO SIMULATIONS. Astrophysical Journal Letters, 2014, 796, L12.	8.3	46
59	AN AZIMUTHAL DYNAMO WAVE IN SPHERICAL SHELL CONVECTION. Astrophysical Journal Letters, 2014, 780, L22.	8.3	27
60	Doppler images of DI Piscium during 2004â€“2006. Astronomy and Astrophysics, 2014, 562, A139.	5.1	7
61	High-resolution ammonia mapping of the very young protostellar core Chamaeleon-MMS1. Astronomy and Astrophysics, 2014, 564, A99.	5.1	10
62	EFFECTS OF ENHANCED STRATIFICATION ON EQUATORWARD DYNAMO WAVE PROPAGATION. Astrophysical Journal, 2013, 778, 41.	4.5	106
63	SPOKE-LIKE DIFFERENTIAL ROTATION IN A CONVECTIVE DYNAMO WITH A CORONAL ENVELOPE. Astrophysical Journal, 2013, 778, 141.	4.5	35
64	The supernova-regulated ISM â€“ I. The multiphase structure. Monthly Notices of the Royal Astronomical Society, 2013, 432, 1396-1423.	4.4	86
65	Oscillatory large-scale dynamos from Cartesian convection simulations. Geophysical and Astrophysical Fluid Dynamics, 2013, 107, 244-257.	1.2	17
66	The supernova-regulated ISM â€“ II. The mean magnetic field. Monthly Notices of the Royal Astronomical Society: Letters, 2013, 430, L40-L44.	3.3	70
67	Flip-flops of FK Comae Berenices. Astronomy and Astrophysics, 2013, 553, A40.	5.1	33
68	NEW SCALING FOR THE ALPHA EFFECT IN SLOWLY ROTATING TURBULENCE. Astrophysical Journal, 2013, 762, 127.	4.5	19
69	Multiperiodicity, modulations and flip-flops in variable star light curves. Astronomy and Astrophysics, 2013, 559, A97.	5.1	16
70	Magnetic field topology of the RS CVn star II Pegasi. Astronomy and Astrophysics, 2013, 550, A84.	5.1	41
71	Mean-field closure parameters for passive scalar turbulence. Physica Scripta, 2012, 86, 018406.	2.5	3
72	CYCLIC MAGNETIC ACTIVITY DUE TO TURBULENT CONVECTION IN SPHERICAL WEDGE GEOMETRY. Astrophysical Journal Letters, 2012, 755, L22.	8.3	149

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73	Gregor@night: The future highâ€resolution stellar spectrograph for the GREGOR solar telescope. Astronomische Nachrichten, 2012, 333, 901-910.	1.2	1
74	Ejections of Magnetic Structures Above a Spherical Wedge Driven by a Convective Dynamo with Differential Rotation. Solar Physics, 2012, 280, 299-319.	2.5	20
75	DYNAMO ACTION IN THERMALLY UNSTABLE INTERSTELLAR FLOWS. Astrophysical Journal, 2012, 753, 32.	4.5	6
76	Doppler images of II Pegasi for 2004â€“2010. Astronomy and Astrophysics, 2012, 538, A126.	5.1	23
77	Negative effective magnetic pressure in turbulent convection. Monthly Notices of the Royal Astronomical Society, 2012, 422, 2465-2473.	4.4	33
78	Verification of Reynolds stress parameterizations from simulations. Astronomische Nachrichten, 2012, 333, 78-83.	1.2	4
79	Multiperiodicity, modulations and flip-flops in variable star light curves. Astronomy and Astrophysics, 2011, 535, A23.	5.1	6
80	STARSPOTS DUE TO LARGE-SCALE VORTICES IN ROTATING TURBULENT CONVECTION. Astrophysical Journal, 2011, 742, 34.	4.5	36
81	Coronal ejections from convective spherical shell dynamos. Proceedings of the International Astronomical Union, 2011, 7, 154-158.	0.0	1
82	Reynolds stress and heat flux in spherical shell convection. Astronomy and Astrophysics, 2011, 531, A162.	5.1	71
83	Magnetorotational instability driven dynamos at low magnetic Prandtl numbers. Monthly Notices of the Royal Astronomical Society, 2011, 413, 901-907.	4.4	43
84	Spot activity of II Peg. Astronomische Nachrichten, 2011, 332, 859-865.	1.2	11
85	Effects of stratification in spherical shell convection. Astronomische Nachrichten, 2011, 332, 883-890.	1.2	29
86	Dependence of the largeâ€scale vortex instability on latitude, stratification, and domain size. Astronomische Nachrichten, 2011, 332, 876-882.	1.2	15
87	Doppler images of the RSÂCVn binary IIÂPegasi during the years 1994â€“2002. Astronomy and Astrophysics, 2011, 526, A44.	5.1	21
88	From convective to stellar dynamos. Proceedings of the International Astronomical Union, 2010, 6, 279-287.	0.0	1
89	ANGULAR MOMENTUM TRANSPORT IN CONVECTIVELY UNSTABLE SHEAR FLOWS. Astrophysical Journal, 2010, 719, 67-76.	4.5	12
90	Convective dynamos in spherical wedge geometry. Astronomische Nachrichten, 2010, 331, 73-81.	1.2	70

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91	Influence of Ohmic diffusion on the excitation and dynamics of MRI. Astronomische Nachrichten, 2010, 331, 34-45.	1.2	10
92	The Î± effect in rotating convection with sinusoidal shear. Monthly Notices of the Royal Astronomical Society, 2010, 402, 1458-1466.	4.4	22
93	Solar active regions: a nonparametric statistical analysis. Astronomy and Astrophysics, 2010, 513, A48.	5.1	10
94	Open and closed boundaries in large-scale convective dynamos. Astronomy and Astrophysics, 2010, 518, A22.	5.1	18
95	Alpha effect and turbulent diffusion from convection. Astronomy and Astrophysics, 2009, 500, 633-646.	5.1	75
96	Turbulent stresses as a function of shear rate in a local disk model. Astronomische Nachrichten, 2009, 330, 92-99.	1.2	12
97	LARGE-SCALE DYNAMOS IN RIGIDLY ROTATING TURBULENT CONVECTION. Astrophysical Journal, 2009, 697, 1153-1163.	4.5	45
98	Reynolds stresses from hydrodynamic turbulence with shear and rotation. Astronomy and Astrophysics, 2009, 505, 955-968.	5.1	21
99	Dynamically dominant magnetic fields in the diffuse interstellar medium. Proceedings of the International Astronomical Union, 2008, 4, 87-88.	0.0	2
100	Stellar nonlinear dynamos: observations and modelling. Proceedings of the International Astronomical Union, 2008, 4, 417-418.	0.0	0
101	A solar mean field dynamo benchmark. Astronomy and Astrophysics, 2008, 483, 949-960.	5.1	83
102	Large-scale dynamos in turbulent convection with shear. Astronomy and Astrophysics, 2008, 491, 353-362.	5.1	96
103	Thermal Instability in Shearing and Periodic Turbulence. Astrophysical Journal, 2007, 654, 945-954.	4.5	23
104	Does the Sun have a face?. Astronomische Nachrichten, 2007, 328, 1020-1022.	1.2	2
105	Magnetoconvection and dynamo coefficients. Astronomy and Astrophysics, 2006, 455, 401-412.	5.1	49
106	Solar dynamo models withÎ± -effect and turbulent pumping from local 3D convection calculations. Astronomische Nachrichten, 2006, 327, 884-894.	1.2	42
107	Local models of stellar convection. Astronomy and Astrophysics, 2006, 448, 433-438.	5.1	4
108	Kinematic frames and â€œactive longitudesâ€• does the Sun have a face?. Astronomy and Astrophysics, 2006, 460, 875-885.	5.1	16

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109	Estimates of the Strouhal number from numerical models of convection. Astronomische Nachrichten, 2005, 326, 186-189.	1.2	1
110	Local models of stellar convection. Astronomy and Astrophysics, 2005, 438, 403-410.	5.1	14
111	Modelling the turbulent magnetized ISM. Astrophysics and Space Science, 2004, 289, 449-457.	1.4	0
112	Local models of stellar convection:. Astronomy and Astrophysics, 2004, 422, 793-816.	5.1	59
113	Stellar dynamos - perspectives and challenges. EAS Publications Series, 2003, 9, 9-9.	0.3	1
114	Starspot cycles from Doppler imaging and photometric time series as nonlinear dynamo. Astronomische Nachrichten, 2002, 323, 367-370.	1.2	13
115	A Supernova-regulated Interstellar Medium: Simulations of the Turbulent Multiphase Medium. Astrophysical Journal, 1999, 514, L99-L102.	4.5	168
116	Driving Galactic Turbulence by Supernova Explosions. Studia Geophysica Et Geodaetica, 1998, 42, 410-418.	0.5	3
117	Generation of mean flows in rotating anisotropic turbulence: The case of solar near-surface shear layer. Astronomy and Astrophysics, 0, , .	5.1	2