

# Christoph Federrath

## List of Publications by Year in descending order

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171  
papers

10,117  
citations

28274

55  
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38395

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171  
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docs citations

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times ranked

4399  
citing authors

#	ARTICLE	IF	CITATIONS
1	Velocity structure functions in multiphase turbulence: interpreting kinematics of $H\text{I}\pm$ filaments in cool-core clusters. Monthly Notices of the Royal Astronomical Society, 2022, 510, 2327-2343.	4.4	24
2	VETTAM: a scheme for radiation hydrodynamics with adaptive mesh refinement using the variable Eddington tensor method. Monthly Notices of the Royal Astronomical Society, 2022, 512, 401-423.	4.4	8
3	The Effects of Magnetic Fields and Outflow Feedback on the Shape and Evolution of the Density Probability Distribution Function in Turbulent Star-forming Clouds. Astrophysical Journal, 2022, 927, 75.	4.5	14
4	Fundamental scales in the kinematic phase of the turbulent dynamo. Monthly Notices of the Royal Astronomical Society, 2022, 513, 2457-2470.	4.4	9
5	The velocity statistics of turbulent clouds in the presence of gravity, magnetic fields, radiation, and outflow feedback. Monthly Notices of the Royal Astronomical Society, 2022, 513, 2100-2110.	4.4	12
6	Characterizing the turbulent multiphase haloes with periodic box simulations. Monthly Notices of the Royal Astronomical Society, 2022, 510, 3778-3793.	4.4	8
7	Non-ideal magnetohydrodynamic simulations of subcritical pre-stellar cores with non-equilibrium chemistry. Monthly Notices of the Royal Astronomical Society, 2022, 510, 4420-4435.	4.4	6
8	Theoretical and Observational Evidence for Coriolis Effects in Coronal Magnetic Fields via Direct Current Driven Flaring Events. Astrophysical Journal, 2022, 929, 54.	4.5	3
9	Turbulent dynamo in the two-phase interstellar medium. Monthly Notices of the Royal Astronomical Society, 2022, 514, 957-976.	4.4	18
10	The driving mode of shock-driven turbulence. Monthly Notices of the Royal Astronomical Society, 2022, 514, 1782-1800.	4.4	3
11	Turbulence generation by shock interaction with a highly nonuniform medium. Physical Review E, 2022, 105, .	2.1	2
12	Multiphase turbulence in galactic haloes: effect of the driving. Monthly Notices of the Royal Astronomical Society, 2022, 514, 3139-3159.	4.4	5
13	The physics of gas phase metallicity gradients in galaxies. Monthly Notices of the Royal Astronomical Society, 2021, 502, 5935-5961.	4.4	36
14	Magnetic fields in the Milky Way from pulsar observations: effect of the correlation between thermal electrons and magnetic fields. Monthly Notices of the Royal Astronomical Society, 2021, 502, 2220-2237.	4.4	20
15	Magnetic Fields in Elliptical Galaxies: An Observational Probe of the Fluctuation Dynamo Action. Astrophysical Journal, 2021, 907, 2.	4.5	8
16	The sonic scale of interstellar turbulence. Nature Astronomy, 2021, 5, 365-371.	10.1	73
17	Impact of relativistic jets on the star formation rate: a turbulence-regulated framework. Monthly Notices of the Royal Astronomical Society, 2021, 508, 4738-4757.	4.4	26
18	Testing the turbulent origin of the stellar initial mass function. Monthly Notices of the Royal Astronomical Society, 2021, 503, 1138-1148.	4.4	11

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19	Magnetic field amplification in accretion discs around the first stars: implications for the primordial IMF. Monthly Notices of the Royal Astronomical Society, 2021, 503, 2014-2032.	4.4	29
20	Reconstructing three-dimensional densities from two-dimensional observations of molecular gas. Monthly Notices of the Royal Astronomical Society, 2021, 502, 5997-6009.	4.4	5
21	On the origin of the mass-metallicity gradient relation in the local Universe. Monthly Notices of the Royal Astronomical Society, 2021, 504, 53-64.	4.4	22
22	Efficient Highly Subsonic Turbulent Dynamo and Growth of Primordial Magnetic Fields. Physical Review Letters, 2021, 126, 091103.	7.8	16
23	A multishock model for the density variance of anisotropic, highly magnetized, supersonic turbulence. Monthly Notices of the Royal Astronomical Society, 2021, 504, 4354-4368.	4.4	17
24	Visualizing the world's largest turbulence simulation. Parallel Computing, 2021, 102, 102758.	2.1	2
25	The Single-cloud Star Formation Relation. Astrophysical Journal Letters, 2021, 912, L19.	8.3	24
26	The density structure of supersonic self-gravitating turbulence. Monthly Notices of the Royal Astronomical Society, 2021, 507, 4335-4351.	4.4	20
27	The role of gas kinematics in setting metallicity gradients at high redshift. Monthly Notices of the Royal Astronomical Society, 2021, 506, 1295-1308.	4.4	7
28	Shock-multicloud interactions in galactic outflows II. Radiative fractal clouds and cold gas thermodynamics. Monthly Notices of the Royal Astronomical Society, 2021, 506, 5658-5680.	4.4	20
29	The IMF and multiplicity of stars from gravity, turbulence, magnetic fields, radiation, and outflow feedback. Monthly Notices of the Royal Astronomical Society, 2021, 507, 2448-2467.	4.4	18
30	The dependence of the hierarchical distribution of star clusters on galactic environment. Monthly Notices of the Royal Astronomical Society, 2021, 507, 5542-5566.	4.4	7
31	Quantifying stochasticity-driven uncertainties in H&sc>ii</sc> region metallicities. Monthly Notices of the Royal Astronomical Society, 2021, 508, 3290-3303.	4.4	0
32	Saturation mechanism of the fluctuation dynamo in supersonic turbulent plasmas. Physical Review Fluids, 2021, 6, .	2.5	19
33	A new method for measuring the 3D turbulent velocity dispersion of molecular clouds. Monthly Notices of the Royal Astronomical Society, 2021, 509, 5237-5252.	4.4	8
34	Implementation of stellar heating feedback in simulations of star cluster formation: effects on the initial mass function. Monthly Notices of the Royal Astronomical Society, 2020, 496, 5201-5210.	4.4	15
35	Shock-multicloud interactions in galactic outflows I. Cloud layers with lognormal density distributions. Monthly Notices of the Royal Astronomical Society, 2020, 499, 2173-2195.	4.4	12
36	The importance of magnetic fields for the initial mass function of the first stars. Monthly Notices of the Royal Astronomical Society, 2020, 497, 336-351.	4.4	49

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37	Turbulence in stratified atmospheres: implications for the intracluster medium. Monthly Notices of the Royal Astronomical Society, 2020, 493, 5838-5853.	4.4	25
38	Honing and proofing Astrophysical codes on the road to Exascale. Experiences from code modernization on many-core systems. Future Generation Computer Systems, 2020, 112, 93-107.	7.5	2
39	Quantifying the effects of spatial resolution and noise on galaxy metallicity gradients. Monthly Notices of the Royal Astronomical Society, 2020, 495, 3819-3838.	4.4	16
40	High-resolution survey for planetary companions to young stars in the Taurus molecular cloud. Monthly Notices of the Royal Astronomical Society, 2020, 498, 1382-1396.	4.4	7
41	The predicted properties of helium-enriched globular cluster progenitors at high redshift. Monthly Notices of the Royal Astronomical Society, 2020, 496, 3222-3234.	4.4	0
42	Magnetic field fluctuations in anisotropic, supersonic turbulence. Monthly Notices of the Royal Astronomical Society, 2020, 498, 1593-1608.	4.4	20
43	Seed magnetic fields in turbulent small-scale dynamos. Monthly Notices of the Royal Astronomical Society, 2020, 499, 2076-2086.	4.4	21
44	Molecular cloud formation by compression of magnetized turbulent gas subjected to radiative cooling. Monthly Notices of the Royal Astronomical Society, 2020, 493, 3098-3113.	4.4	19
45	The SAMI galaxy survey: gas velocity dispersions in low-z star-forming galaxies and the drivers of turbulence. Monthly Notices of the Royal Astronomical Society, 2020, 495, 2265-2284.	4.4	24
46	Filaments and striations: anisotropies in observed, supersonic, highly magnetized turbulent clouds. Monthly Notices of the Royal Astronomical Society, 2020, 492, 668-685.	4.4	19
47	X-raying molecular clouds with a short flare: probing statistics of gas density and velocity fields. Monthly Notices of the Royal Astronomical Society, 2020, 495, 1414-1432.	4.4	6
48	On the turbulence driving mode of expanding H $\alpha$ regions. Monthly Notices of the Royal Astronomical Society, 2020, 493, 4643-4656.	4.4	18
49	Structure and kinematics of shocked gas in Sgr B2: further evidence of a cloud-cloud collision from SiO emission maps. Monthly Notices of the Royal Astronomical Society, 2020, 499, 4918-4939.	4.4	11
50	On the compressive nature of turbulence driven by ionizing feedback in the pillars of the Carina Nebula. Monthly Notices of the Royal Astronomical Society, 2020, 500, 1721-1740.	4.4	19
51	Turbulent density and pressure fluctuations in the stratified intracluster medium. Monthly Notices of the Royal Astronomical Society, 2020, 500, 5072-5087.	4.4	24
52	The Launching of Cold Clouds by Galaxy Outflows. III. The Influence of Magnetic Fields. Astrophysical Journal, 2020, 892, 59.	4.5	28
53	Spinning Bar and a Star-formation Inefficient Repertoire: Turbulence in Hickson Compact Group NGC 7674. Astrophysical Journal, 2020, 893, 26.	4.5	4
54	Compressible Turbulence in the Interstellar Medium: New Insights from a High-resolution Supersonic Turbulence Simulation. Astrophysical Journal, 2020, 904, 160.	4.5	20

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55	The Catalogue for Astrophysical Turbulence Simulations (CATS). <i>Astrophysical Journal</i> , 2020, 905, 14.	4.5	12
56	The dependence of episodic accretion on eccentricity during the formation of binary stars. <i>Astronomy and Astrophysics</i> , 2020, 641, A59.	5.1	12
57	Through thick or thin: multiple components of the magneto-ionic medium towards the nearby H&#226;ii region Sharpless 2&#226;27 revealed by Faraday tomography. <i>Monthly Notices of the Royal Astronomical Society</i> , 2019, 487, 4751-4767.	4.4	17
58	Testing star formation laws on spatially resolved regions in a $z \hat{\sim} 4.3$ starburst galaxy. <i>Monthly Notices of the Royal Astronomical Society</i> , 2019, 487, 4305-4312.	4.4	17
59	The relation between the true and observed fractal dimensions of turbulent clouds. <i>Monthly Notices of the Royal Astronomical Society</i> , 2019, 487, 2070-2081.	4.4	13
60	The role of the H2 adiabatic index in the formation of the first stars. <i>Monthly Notices of the Royal Astronomical Society</i> , 2019, 490, 513-526.	4.4	17
61	The Role of Magnetic Fields in Setting the Star Formation Rate and the Initial Mass Function. <i>Frontiers in Astronomy and Space Sciences</i> , 2019, 6, .	2.8	95
62	Rest-frame UV and optical emission line diagnostics of ionized gas properties: a test case in a star-forming knot of a lensed galaxy at $z \hat{\sim} 1.7$ . <i>Monthly Notices of the Royal Astronomical Society</i> , 2019, 488, 5862-5886.	4.4	8
63	The relation between the turbulent Mach number and observed fractal dimensions of turbulent clouds. <i>Monthly Notices of the Royal Astronomical Society</i> , 2019, 488, 2493-2502.	4.4	20
64	The role of turbulence during the formation of circumbinary discs. <i>Monthly Notices of the Royal Astronomical Society</i> , 2019, 486, 3647-3663.	4.4	14
65	On the dynamics and survival of fractal clouds in galactic winds. <i>Monthly Notices of the Royal Astronomical Society</i> , 2019, 486, 4526-4544.	4.4	26
66	Tiny grains shining bright in the gaps of Herbig Ae transitional discs. <i>Monthly Notices of the Royal Astronomical Society</i> , 2019, 486, 3721-3740.	4.4	5
67	The SAMI Galaxy Survey: Quenching of Star Formation in Clusters I. <i>Transition Galaxies. Astrophysical Journal</i> , 2019, 873, 52.	4.5	63
68	On the shape and completeness of the column density probability distribution function of molecular clouds. <i>Monthly Notices of the Royal Astronomical Society</i> , 2019, 482, 5233-5240.	4.4	28
69	The metallicity and elemental abundance maps of kinematically atypical galaxies for constraining minor merger and accretion histories. <i>Monthly Notices of the Royal Astronomical Society</i> , 2019, 485, 3215-3223.	4.4	3
70	The SAMI Galaxy Survey: Bayesian inference for gas disc kinematics using a hierarchical Gaussian mixture model. <i>Monthly Notices of the Royal Astronomical Society</i> , 2019, 485, 4024-4044.	4.4	10
71	The role of initial magnetic field structure in the launching of protostellar jets. <i>Monthly Notices of the Royal Astronomical Society</i> , 2019, 485, 5532-5542.	4.4	18
72	Magnetic Field Tomography in Two Clouds toward Ursa Major Using H i Fibers. <i>Astrophysical Journal</i> , 2019, 873, 38.	4.5	8

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73	The SAMI Galaxy Survey: observing the environmental quenching of star formation in GAMA groups. Monthly Notices of the Royal Astronomical Society, 2019, 483, 2851-2870.	4.4	38
74	The SAMI Galaxy Survey: Data Release Two with absorption-line physics value-added products. Monthly Notices of the Royal Astronomical Society, 2018, 481, 2299-2319.	4.4	73
75	Testing star formation laws in a starburst galaxy at redshift 3 resolved with ALMA. Monthly Notices of the Royal Astronomical Society, 2018, 477, 4380-4390.	4.4	35
76	The SAMI Galaxy Survey: gas content and interaction as the drivers of kinematic asymmetry. Monthly Notices of the Royal Astronomical Society, 2018, 476, 2339-2351.	4.4	21
77	The effect of photoionizing feedback on star formation in isolated and colliding clouds. Publication of the Astronomical Society of Japan, 2018, 70, .	2.5	22
78	<scp>Phantom</scp>: A Smoothed Particle Hydrodynamics and Magnetohydrodynamics Code for Astrophysics. Publications of the Astronomical Society of Australia, 2018, 35, .	3.4	267
79	Numerical calibration of the HCNâ€“star formation correlation. Monthly Notices of the Royal Astronomical Society, 2018, 479, 1702-1710.	4.4	35
80	Multiplicity of disc-bearing stars in Upper Scorpius and Upper Centaurus-Lupus. Monthly Notices of the Royal Astronomical Society, 2018, 480, 5099-5112.	4.4	18
81	Star formation in cloud cores â€” simulations and observations of dense molecular cores and the formation of solar mass stars. Proceedings of the International Astronomical Union, 2018, 14, 43-50.	0.0	1
82	Compression of turbulent magnetized gas in giant molecular clouds. Monthly Notices of the Royal Astronomical Society, 2018, 473, 2144-2159.	4.4	15
83	Filament formation in windâ€“cloud interactionsâ€” II. Clouds with turbulent density, velocity, and magnetic fields. Monthly Notices of the Royal Astronomical Society, 2018, 473, 3454-3489.	4.4	41
84	The KMOS Redshift One Spectroscopic Survey (KROSS): the origin of disc turbulence in $z \sim 1$ star-forming galaxies. Monthly Notices of the Royal Astronomical Society, 2018, 474, 5076-5104.	4.4	70
85	The SAMI Galaxy Survey: Data Release One with emission-line physics value-added products. Monthly Notices of the Royal Astronomical Society, 2018, 475, 716-734.	4.4	65
86	The SAMI Galaxy Survey: spatially resolving the main sequence of star formation. Monthly Notices of the Royal Astronomical Society, 2018, 475, 5194-5214.	4.4	89
87	The turbulent formation of stars. Physics Today, 2018, 71, 38-42.	0.3	87
88	Star formation in simulated galaxies: understanding the transition to quiescence at $z \sim 10$ . Monthly Notices of the Royal Astronomical Society, 2017, 469, 4249-4257.	4.4	15
89	Centrifugally driven winds from protostellar accretion discs â€” I. Formulation and initial results. Monthly Notices of the Royal Astronomical Society, 2017, 471, 1488-1505.	4.4	12
90	The Most Ancient Spiral Galaxy: A 2.6-Gyr-old Disk with a Tranquil Velocity Field. Astrophysical Journal, 2017, 850, 61.	4.5	24

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91	The SAMI Galaxy Survey: a new method to estimate molecular gas surface densities from star formation rates. Monthly Notices of the Royal Astronomical Society, 2017, 468, 3965-3978.	4.4	26
92	Probes of turbulent driving mechanisms in molecular clouds from fluctuations in synchrotron intensity. Monthly Notices of the Royal Astronomical Society, 2017, 466, 2272-2283.	4.4	13
93	Binary star formation and the outflows from their discs. Monthly Notices of the Royal Astronomical Society, 2017, 470, 1626-1641.	4.4	25
94	The SAMI Galaxy Survey: energy sources of the turbulent velocity dispersion in spatially resolved local star-forming galaxies. Monthly Notices of the Royal Astronomical Society, 2017, 470, 4573-4582.	4.4	37
95	The SAMI Galaxy Survey: global stellar populations on the size-mass plane. Monthly Notices of the Royal Astronomical Society, 2017, 472, 2833-2855.	4.4	72
96	The driving of turbulence in simulations of molecular cloud formation and evolution. Monthly Notices of the Royal Astronomical Society, 2017, 472, 2496-2503.	4.4	21
97	On the effective turbulence driving mode of molecular clouds formed in disc galaxies. Monthly Notices of the Royal Astronomical Society, 2017, 469, 383-393.	4.4	34
98	Relationship between turbulence energy and density variance in the solar neighbourhood molecular clouds. Astronomy and Astrophysics, 2017, 608, L3.	5.1	26
99	Converging on the Initial Mass Function of Stars. Journal of Physics: Conference Series, 2017, 837, 012007.	0.4	19
100	The small-scale turbulent dynamo in smoothed particle magnetohydrodynamics. Journal of Physics: Conference Series, 2016, 719, 012003.	0.4	0
101	The role of turbulence, magnetic fields and feedback for star formation. Journal of Physics: Conference Series, 2016, 719, 012002.	0.4	14
102	The link between solenoidal turbulence and slow star formation in G0.253+0.016. Proceedings of the International Astronomical Union, 2016, 11, 123-128.	0.0	15
103	A comparison between grid and particle methods on the small-scale dynamo in magnetized supersonic turbulence. Monthly Notices of the Royal Astronomical Society, 2016, 461, 1260-1275.	4.4	23
104	Parallel Implementation of Lossy Data Compression for Temporal Data Sets. , 2016, , .		3
105	Magnetic field amplification in turbulent astrophysical plasmas. Journal of Plasma Physics, 2016, 82, .	2.1	103
106	The reliability of observational measurements of column density probability distribution functions. Astronomy and Astrophysics, 2016, 590, A104.	5.1	29
107	On the universality of interstellar filaments: theory meets simulations and observations. Monthly Notices of the Royal Astronomical Society, 2016, 457, 375-388.	4.4	142
108	SHOCKFIND - an algorithm to identify magnetohydrodynamic shock waves in turbulent clouds. Monthly Notices of the Royal Astronomical Society, 2016, 463, 1026-1039.	4.4	16

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109	THE LINK BETWEEN TURBULENCE, MAGNETIC FIELDS, FILAMENTS, AND STAR FORMATION IN THE CENTRAL MOLECULAR ZONE CLOUD G0.253+0.016. <i>Astrophysical Journal</i> , 2016, 832, 143.	4.5	134
110	Filament formation in wind-cloud interactions I. Spherical clouds in uniform magnetic fields. <i>Monthly Notices of the Royal Astronomical Society</i> , 2016, 455, 1309-1333.	4.4	59
111	Saturation of the turbulent dynamo. <i>Physical Review E</i> , 2015, 92, 023010.	2.1	55
112	A UNIVERSAL, TURBULENCE-REGULATED STAR FORMATION LAW: FROM MILKY WAY CLOUDS TO HIGH-REDSHIFT DISK AND STARBURST GALAXIES. <i>Astrophysical Journal Letters</i> , 2015, 806, L36.	8.3	61
113	The density variance-Mach number relation in isothermal and non-isothermal adiabatic turbulence. <i>Monthly Notices of the Royal Astronomical Society</i> , 2015, 451, 1380-1389.	4.4	58
114	The density structure and star formation rate of non-isothermal polytropic turbulence. <i>Monthly Notices of the Royal Astronomical Society</i> , 2015, 448, 3297-3313.	4.4	85
115	Understanding star formation in molecular clouds. <i>Astronomy and Astrophysics</i> , 2015, 578, A29.	5.1	70
116	Understanding star formation in molecular clouds. <i>Astronomy and Astrophysics</i> , 2015, 575, A79.	5.1	91
117	A universal, turbulence-regulated, multi-freefall star formation law. <i>Proceedings of the International Astronomical Union</i> , 2015, 11, 740-740.	0.0	0
118	Nonlinear closures for scale separation in supersonic magnetohydrodynamic turbulence. <i>New Journal of Physics</i> , 2015, 17, 023070.	2.9	17
119	Inefficient star formation through turbulence, magnetic fields and feedback. <i>Monthly Notices of the Royal Astronomical Society</i> , 2015, 450, 4035-4042.	4.4	177
120	THE TURBULENT DYNAMO IN HIGHLY COMPRESSIBLE SUPERSONIC PLASMAS. <i>Astrophysical Journal Letters</i> , 2014, 797, L19.	8.3	94
121	COLLECTIVE OUTFLOW FROM A SMALL MULTIPLE STELLAR SYSTEM. <i>Astrophysical Journal</i> , 2014, 788, 14.	4.5	35
122	An observational method to measure the relative fractions of solenoidal and compressible modes in interstellar clouds. <i>Monthly Notices of the Royal Astronomical Society</i> , 2014, 442, 1451-1469.	4.4	22
123	Principal component analysis of molecular clouds: can CO reveal the dynamics?. <i>Monthly Notices of the Royal Astronomical Society</i> , 2014, 440, 465-475.	4.4	12
124	MODELING JET AND OUTFLOW FEEDBACK DURING STAR CLUSTER FORMATION. <i>Astrophysical Journal</i> , 2014, 790, 128.	4.5	139
125	Unfolding the Laws of Star Formation: The Density Distribution of Molecular Clouds. <i>Science</i> , 2014, 344, 183-185.	12.6	104
126	Magnetic fields during high redshift structure formation. <i>Astronomische Nachrichten</i> , 2013, 334, 531-536.	1.2	9



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127	The small-scale dynamo: breaking universality at high Mach numbers. <i>New Journal of Physics</i> , 2013, 15, 023017.	2.9	42
128	The origin of physical variations in the star formation law. <i>Monthly Notices of the Royal Astronomical Society</i> , 2013, 436, 3167-3172.	4.4	71
129	WHAT DETERMINES THE DENSITY STRUCTURE OF MOLECULAR CLOUDS? A CASE STUDY OF ORION B WITH <i>HERSCHEL</i>. <i>Astrophysical Journal Letters</i> , 2013, 766, L17.	8.3	194
130	On the universality of supersonic turbulence. <i>Monthly Notices of the Royal Astronomical Society</i> , 2013, 436, 1245-1257.	4.4	230
131	A MEASUREMENT OF THE TURBULENCE-DRIVEN DENSITY DISTRIBUTION IN A NON-STAR-FORMING MOLECULAR CLOUD. <i>Astrophysical Journal</i> , 2013, 779, 50.	4.5	37
132	Connection between dense gas mass fraction, turbulence driving, and star formation efficiency of molecular clouds. <i>Astronomy and Astrophysics</i> , 2013, 553, L8.	5.1	53
133	ON THE STAR FORMATION EFFICIENCY OF TURBULENT MAGNETIZED CLOUDS. <i>Astrophysical Journal</i> , 2013, 763, 51.	4.5	295
134	Cluster-formation in the Rosette molecular cloud at the junctions of filaments (Corrigendum). <i>Astronomy and Astrophysics</i> , 2013, 551, C1.	5.1	8
135	Magnetic field amplification by small-scale dynamo action: Dependence on turbulence models and Reynolds and Prandtl numbers. <i>Physical Review E</i> , 2012, 85, 026303.	2.1	78
136	Cluster-formation in the Rosette molecular cloud at the junctions of filaments. <i>Astronomy and Astrophysics</i> , 2012, 540, L11.	5.1	267
137	THE STAR FORMATION RATE OF TURBULENT MAGNETIZED CLOUDS: COMPARING THEORY, SIMULATIONS, AND OBSERVATIONS. <i>Astrophysical Journal</i> , 2012, 761, 156.	4.5	553
138	A NEW DENSITY VARIANCE- $\text{MACH}$ NUMBER RELATION FOR SUBSONIC AND SUPERSONIC ISOTHERMAL TURBULENCE. <i>Astrophysical Journal</i> , 2012, 761, 149.	4.5	92
139	Small-scale dynamo action in primordial halos. <i>Proceedings of the International Astronomical Union</i> , 2012, 8, 237-248.	0.0	0
140	Statistical properties of supersonic turbulence in the Lagrangian and Eulerian frameworks. <i>Journal of Fluid Mechanics</i> , 2012, 692, 183-206.	3.4	49
141	Star formation in the first galaxies - I. Collapse delayed by Lyman-Werner radiation. <i>Monthly Notices of the Royal Astronomical Society</i> , 2012, 426, 1159-1177.	4.4	72
142	THE SMALL-SCALE DYNAMO AND NON-IDEAL MAGNETOHYDRODYNAMICS IN PRIMORDIAL STAR FORMATION. <i>Astrophysical Journal</i> , 2012, 754, 99.	4.5	119
143	Modelling H <sub>2</sub> formation in the turbulent interstellar medium: solenoidal versus compressive turbulent forcing. <i>Monthly Notices of the Royal Astronomical Society</i> , 2012, 421, 2531-2542.	4.4	47
144	The density variance-Mach number relation in supersonic turbulence - I. Isothermal, magnetized gas. <i>Monthly Notices of the Royal Astronomical Society</i> , 2012, 423, 2680-2689.	4.4	179

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145	Magnetic field amplification during gravitational collapse - influence of turbulence, rotation and gravitational compression. Monthly Notices of the Royal Astronomical Society, 2012, 423, 3148-3162.	4.4	68
146	THE TURBULENCE SPECTRUM OF MOLECULAR CLOUDS IN THE GALACTIC RING SURVEY: A DENSITY-DEPENDENT PRINCIPAL COMPONENT ANALYSIS CALIBRATION. Astrophysical Journal, 2011, 740, 120.	4.5	89
147	The link between molecular cloud structure and turbulence. Astronomy and Astrophysics, 2011, 529, A1.	5.1	92
148	Importance of the initial conditions for star formation - I. Cloud evolution and morphology. Monthly Notices of the Royal Astronomical Society, 2011, 413, 2741-2759.	4.4	153
149	A robust numerical scheme for highly compressible magnetohydrodynamics: Nonlinear stability, implementation and tests. Journal of Computational Physics, 2011, 230, 3331-3351.	3.8	137
150	Mach Number Dependence of Turbulent Magnetic Field Amplification: Solenoidal versus Compressive Flows. Physical Review Letters, 2011, 107, 114504.	7.8	194
151	THE DENSITY VARIANCEâ€“MACH NUMBER RELATION IN SUPERSONIC, ISOTHERMAL TURBULENCE. Astrophysical Journal Letters, 2011, 727, L21.	8.3	127
152	COMPARING NUMERICAL METHODS FOR ISOTHERMAL MAGNETIZED SUPERSONIC TURBULENCE. Astrophysical Journal, 2011, 737, 13.	4.5	105
153	A NEW JEANS RESOLUTION CRITERION FOR (M)HD SIMULATIONS OF SELF-GRAVITATING GAS: APPLICATION TO MAGNETIC FIELD AMPLIFICATION BY GRAVITY-DRIVEN TURBULENCE. Astrophysical Journal, 2011, 731, 62.	4.5	274
154	Comparing the statistics of interstellar turbulence in simulations and observations. Astronomy and Astrophysics, 2010, 512, A81.	5.1	631
155	MODELING COLLAPSE AND ACCRETION IN TURBULENT GAS CLOUDS: IMPLEMENTATION AND COMPARISON OF SINK PARTICLES IN AMR AND SPH. Astrophysical Journal, 2010, 713, 269-290.	4.5	335
156	A method for reconstructing the PDF of a 3D turbulent density field from 2D observations. Monthly Notices of the Royal Astronomical Society: Letters, 2010, 405, L56-L60.	3.3	59
157	Modelling CO formation in the turbulent interstellar medium. Monthly Notices of the Royal Astronomical Society, 2010, , .	4.4	126
158	A method for reconstructing the variance of a 3D physical field from 2D observations: application to turbulence in the interstellar medium. Monthly Notices of the Royal Astronomical Society, 2010, 403, 1507-1515.	4.4	78
159	THE GENERATION OF STRONG MAGNETIC FIELDS DURING THE FORMATION OF THE FIRST STARS. Astrophysical Journal Letters, 2010, 721, L134-L138.	8.3	159
160	Algorithmic comparisons of decaying, isothermal, supersonic turbulence. Astronomy and Astrophysics, 2009, 508, 541-560.	5.1	81
161	Numerical simulations of compressively driven interstellar turbulence. Astronomy and Astrophysics, 2009, 494, 127-145.	5.1	172
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