

# Christopher F Mckee

## List of Publications by Year in descending order

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117  
papers

15,843  
citations

26626  
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120  
docs citations

120  
times ranked

6481  
citing authors

#	ARTICLE	IF	CITATIONS
1	Mapping the magnetic field in the Taurus/B211 filamentary cloud with SOFIA HAWC+ and comparing with simulation. Monthly Notices of the Royal Astronomical Society, 2022, 510, 6085-6109.	4.4	24
2	Magnetic fields in the formation of the first stars – II. Results. Monthly Notices of the Royal Astronomical Society, 2022, 511, 5042-5069.	4.4	15
3	Turbulence in the heavens. Nature Astronomy, 2021, 5, 342-343.	10.1	3
4	Infrared dust echoes from neutron star mergers. Monthly Notices of the Royal Astronomical Society, 2021, 507, 3672-3689.	4.4	4
5	Magnetic fields in the formation of the first stars – I. Theory versus simulation. Monthly Notices of the Royal Astronomical Society, 2020, 496, 5528-5551.	4.4	31
6	Massive Warm/Hot Galaxy Coronae. II. Isentropic Model. Astrophysical Journal, 2020, 893, 82.	4.5	44
7	How do bound star clusters form?. Monthly Notices of the Royal Astronomical Society, 2020, 494, 624-641.	4.4	33
8	Star Clusters Across Cosmic Time. Annual Review of Astronomy and Astrophysics, 2019, 57, 227-303.	24.3	363
9	Effect of angular momentum alignment and strong magnetic fields on the formation of protostellar discs. Monthly Notices of the Royal Astronomical Society, 2018, 473, 2124-2143.	4.4	40
10	Ultra-Compact High Velocity Clouds as Minihalos and Dwarf Galaxies. Proceedings of the International Astronomical Union, 2018, 14, 483-487.	0.0	0
11	Dark Matter that Interacts with Baryons: Density Distribution within the Earth and New Constraints on the Interaction Cross-section. Astrophysical Journal, 2018, 866, 111.	4.5	26
12	Formation of stellar clusters in magnetized, filamentary infrared dark clouds. Monthly Notices of the Royal Astronomical Society, 2018, 473, 4220-4241.	4.4	43
13	The effects of magnetic fields and protostellar feedback on low-mass cluster formation. Monthly Notices of the Royal Astronomical Society, 2018, 476, 771-792.	4.4	58
14	The Supernova Rate beyond the Optical Radius. Astrophysical Journal Letters, 2018, 863, L1.	8.3	5
15	The high-mass slope of the IMF. Monthly Notices of the Royal Astronomical Society, 2018, 480, 2449-2465.	4.4	7
16	MASSIVE WARM/HOT GALAXY CORONAE AS PROBED BY UV/X-RAY OXYGEN ABSORPTION AND EMISSION. I. BASIC MODEL. Astrophysical Journal, 2017, 835, 52.	4.5	107
17	Moving-mesh Simulations of Star-forming Cores in Magneto-gravo-turbulence. Astrophysical Journal, 2017, 838, 40.	4.5	69
18	Chemistry and radiative shielding in star-forming galactic discs. Monthly Notices of the Royal Astronomical Society, 2017, 465, 885-905.	4.4	44

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19	Bondi–Hoyle accretion in a turbulent, magnetized medium. Monthly Notices of the Royal Astronomical Society, 2017, 468, 717-727.	4.4	5
20	An unstable truth: how massive stars get their mass. Monthly Notices of the Royal Astronomical Society, 2016, 463, 2553-2573.	4.4	100
21	What physics determines the peak of the IMF? Insights from the structure of cores in radiation-magnetohydrodynamic simulations. Monthly Notices of the Royal Astronomical Society, 2016, 460, 3272-3283.	4.4	40
22	Magnetized interstellar molecular clouds – I. Comparison between simulations and Zeeman observations. Monthly Notices of the Royal Astronomical Society, 2015, 452, 2500-2527.	4.4	65
23	The CH <sup>+</sup> abundance in turbulent, diffuse molecular clouds. Monthly Notices of the Royal Astronomical Society, 2015, 453, 2748-2759.	4.4	24
24	The linewidth-size scaling law of molecular gas revisited. Proceedings of the International Astronomical Union, 2015, 11, 714-715.	0.0	0
25	Numerical simulation of star formation in filamentary dark molecular clouds. Proceedings of the International Astronomical Union, 2015, 11, 103-106.	0.0	0
26	The turbulent origin of spin–orbit misalignment in planetary systems. Monthly Notices of the Royal Astronomical Society, 2015, 450, 3306-3318.	4.4	96
27	STARS, GAS, AND DARK MATTER IN THE SOLAR NEIGHBORHOOD. Astrophysical Journal, 2015, 814, 13.	4.5	193
28	BONDI-HOYLE ACCRETION IN AN ISOTHERMAL MAGNETIZED PLASMA. Astrophysical Journal, 2014, 783, 50.	4.5	27
29	THE FRAGMENTATION OF MAGNETIZED, MASSIVE STAR-FORMING CORES WITH RADIATIVE FEEDBACK. Astrophysical Journal, 2013, 766, 97.	4.5	143
30	INTERSTELLAR H <sub>2</sub> O MASERS FROM J SHOCKS. Astrophysical Journal, 2013, 773, 70.	4.5	67
31	RADIATION TRANSFER OF MODELS OF MASSIVE STAR FORMATION. II. EFFECTS OF THE OUTFLOW. Astrophysical Journal, 2013, 766, 86.	4.5	29
32	ULTRA-COMPACT HIGH VELOCITY CLOUDS AS MINIHALOS AND DWARF GALAXIES. Astrophysical Journal, 2013, 777, 119.	4.5	37
33	A MASSIVE PROTOSTAR FORMING BY ORDERED COLLAPSE OF A DENSE, MASSIVE CORE. Astrophysical Journal, 2013, 767, 58.	4.5	30
34	PHOTOMETRIC REDSHIFTS OF SUBMILLIMETER GALAXIES. Astrophysical Journal, 2013, 773, 113.	4.5	6
35	RADIATION-HYDRODYNAMIC SIMULATIONS OF THE FORMATION OF ORION-LIKE STAR CLUSTERS. II. THE INITIAL MASS FUNCTION FROM WINDS, TURBULENCE, AND RADIATION. Astrophysical Journal, 2012, 754, 71.	4.5	178
36	A UNIVERSAL, LOCAL STAR FORMATION LAW IN GALACTIC CLOUDS, NEARBY GALAXIES, HIGH-REDSHIFT DISKS, AND STARBURSTS. Astrophysical Journal, 2012, 745, 69.	4.5	417

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37	AMBIPOLAR DIFFUSION HEATING IN TURBULENT SYSTEMS. <i>Astrophysical Journal</i> , 2012, 760, 33.	4.5	25
38	FEEDBACK EFFECTS ON LOW-MASS STAR FORMATION. <i>Astrophysical Journal</i> , 2012, 747, 22.	4.5	80
39	RADIATIVELY EFFICIENT MAGNETIZED BONDI ACCRETION. <i>Astrophysical Journal</i> , 2012, 744, 185.	4.5	17
40	A STABLE, ACCURATE METHODOLOGY FOR HIGH MACH NUMBER, STRONG MAGNETIC FIELD MHD TURBULENCE WITH ADAPTIVE MESH REFINEMENT: RESOLUTION AND REFINEMENT STUDIES. <i>Astrophysical Journal</i> , 2012, 745, 139.	4.5	51
41	SUB-ALFVÉNIC NON-IDEAL MAGNETOHYDRODYNAMIC TURBULENCE SIMULATIONS WITH AMBIPOLAR DIFFUSION. III. IMPLICATIONS FOR OBSERVATIONS AND TURBULENT ENHANCEMENT. <i>Astrophysical Journal</i> , 2012, 744, 73.	4.5	14
42	OBSERVING SIMULATED PROTOSTARS WITH OUTFLOWS: HOW ACCURATE ARE PROTOSTELLAR PROPERTIES INFERRED FROM SEDs?. <i>Astrophysical Journal</i> , 2012, 753, 98.	4.5	49
43	METALLICITY AND THE UNIVERSALITY OF THE INITIAL MASS FUNCTION. <i>Astrophysical Journal</i> , 2011, 735, 49.	4.5	43
44	THE PROTOSTELLAR LUMINOSITY FUNCTION. <i>Astrophysical Journal</i> , 2011, 736, 53.	4.5	97
45	THE GLOBAL EVOLUTION OF GIANT MOLECULAR CLOUDS. II. THE ROLE OF ACCRETION. <i>Astrophysical Journal</i> , 2011, 738, 101.	4.5	98
46	WHICH PHASE OF THE INTERSTELLAR MEDIUM CORRELATES WITH THE STAR FORMATION RATE?. <i>Astrophysical Journal</i> , 2011, 731, 25.	4.5	139
47	AN INITIAL MASS FUNCTION FOR INDIVIDUAL STARS IN GALACTIC DISKS. I. CONSTRAINING THE SHAPE OF THE INITIAL MASS FUNCTION. <i>Astrophysical Journal</i> , 2011, 726, 27.	4.5	44
48	ANISOTROPY LENGTHENS THE DECAY TIME OF TURBULENCE IN MOLECULAR CLOUDS. <i>Astrophysical Journal</i> , 2011, 738, 88.	4.5	11
49	IRAS 15099+5856: REMARKABLE MID-INFRARED SOURCE WITH PROMINENT CRYSTALLINE SILICATE EMISSION EMBEDDED IN THE SUPERNOVA REMNANT MSH15-52. <i>Astrophysical Journal</i> , 2011, 732, 6.	4.5	11
50	RADIATION-HYDRODYNAMIC SIMULATIONS OF MASSIVE STAR FORMATION WITH PROTOSTELLAR OUTFLOWS. <i>Astrophysical Journal</i> , 2011, 740, 107.	4.5	125
51	RADIATION-HYDRODYNAMIC SIMULATIONS OF THE FORMATION OF ORION-LIKE STAR CLUSTERS. I. IMPLICATIONS FOR THE ORIGIN OF THE INITIAL MASS FUNCTION. <i>Astrophysical Journal</i> , 2011, 740, 74.	4.5	110
52	Let There Be Dust. <i>Science</i> , 2011, 333, 1227-1228.	12.6	3
53	The Luminosity Problem: Testing Theories of Star Formation. <i>Proceedings of the International Astronomical Union</i> , 2010, 6, 73-80.	0.0	3
54	Ambipolar Diffusion Effects on Weakly Ionized Turbulence Molecular Clouds. <i>Proceedings of the International Astronomical Union</i> , 2010, 6, 421-424.	0.0	0

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55	THE PROTOSTELLAR MASS FUNCTION. <i>Astrophysical Journal</i> , 2010, 716, 167-180.	4.5	39
56	THE ATOMIC-TO-MOLECULAR TRANSITION IN GALAXIES. III. A NEW METHOD FOR DETERMINING THE MOLECULAR CONTENT OF PRIMORDIAL AND DUSTY CLOUDS. <i>Astrophysical Journal</i> , 2010, 709, 308-320.	4.5	149
57	RADIATION FEEDBACK, FRAGMENTATION, AND THE ENVIRONMENTAL DEPENDENCE OF THE INITIAL MASS FUNCTION. <i>Astrophysical Journal</i> , 2010, 713, 1120-1133.	4.5	97
58	THE DARK MOLECULAR GAS. <i>Astrophysical Journal</i> , 2010, 716, 1191-1207.	4.5	538
59	METAL-ION ABSORPTION IN CONDUCTIVELY EVAPORATING CLOUDS. <i>Astrophysical Journal</i> , 2010, 718, 1315-1331.	4.5	41
60	REGULATION OF STAR FORMATION RATES IN MULTIPHASE GALACTIC DISKS: A THERMAL/DYNAMICAL EQUILIBRIUM MODEL. <i>Astrophysical Journal</i> , 2010, 721, 975-994.	4.5	299
61	SUB-ALFVÉN%NIC NON-IDEAL MHD TURBULENCE SIMULATIONS WITH AMBIPOLAR DIFFUSION. II. COMPARISON WITH OBSERVATION, CLUMP PROPERTIES, AND SCALING TO PHYSICAL UNITS. <i>Astrophysical Journal</i> , 2010, 720, 1612-1634.	4.5	59
62	THE STAR FORMATION LAW IN ATOMIC AND MOLECULAR GAS. <i>Astrophysical Journal</i> , 2009, 699, 850-856.	4.5	342
63	THE ATOMIC-TO-MOLECULAR TRANSITION IN GALAXIES. II: H I AND H <sub>2</sub> COLUMN DENSITIES. <i>Astrophysical Journal</i> , 2009, 693, 216-235.	4.5	364
64	THE EFFECTS OF RADIATIVE TRANSFER ON LOW-MASS STAR FORMATION. <i>Astrophysical Journal</i> , 2009, 703, 131-149.	4.5	254
65	The formation of the first stars and galaxies. <i>Nature</i> , 2009, 459, 49-54.	27.8	275
66	The Formation of Massive Star Systems by Accretion. <i>Science</i> , 2009, 323, 754-757.	12.6	467
67	A minimum column density of $1 \times 10^{22} \text{ cm}^{-2}$ for massive star formation. <i>Nature</i> , 2008, 451, 1082-1084.	27.8	262
68	Star Formation at Zero and Very Low Metallicities. <i>AIP Conference Proceedings</i> , 2008, , .	0.4	4
69	Far-Infrared Spectral Energy Distributions and Photometric Redshifts of Dusty Galaxies. <i>Astrophysical Journal</i> , 2008, 683, 693-706.	4.5	18
70	Driven and Decaying Turbulence Simulations of Low-Mass Star Formation: From Clumps to Cores to Protostars. <i>Astrophysical Journal</i> , 2008, 686, 1174-1194.	4.5	98
71	The Formation of the First Stars. II. Radiative Feedback Processes and Implications for the Initial Mass Function. <i>Astrophysical Journal</i> , 2008, 681, 771-797.	4.5	211
72	THE KINEMATICS OF MOLECULAR CLOUD CORES IN THE PRESENCE OF DRIVEN AND DECAYING TURBULENCE: COMPARISONS WITH OBSERVATIONS. <i>Astronomical Journal</i> , 2008, 136, 404-420.	4.7	42

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73	A Massive-Star-forming Infrared Loop around the Crab-like Supernova Remnant G54.1+0.3: Post-Main-Sequence Triggered Star Formation?. <i>Astrophysical Journal</i> , 2008, 673, L147-L150.	4.5	40
74	Sub-Alfvénic Nonideal MHD Turbulence Simulations with Ambipolar Diffusion. I. Turbulence Statistics. <i>Astrophysical Journal</i> , 2008, 684, 380-394.	4.5	56
75	The Atomic-to-Molecular Transition in Galaxies. I. An Analytic Approximation for Photodissociation Fronts in Finite Clouds. <i>Astrophysical Journal</i> , 2008, 689, 865-882.	4.5	181
76	Equations and Algorithms for Mixed-frame Flux-limited Diffusion Radiation Hydrodynamics. <i>Astrophysical Journal</i> , 2007, 667, 626-643.	4.5	121
77	Radiation-Hydrodynamic Simulations of Collapse and Fragmentation in Massive Protostellar Cores. <i>Astrophysical Journal</i> , 2007, 656, 959-979.	4.5	313
78	Molecular Line Emission from Massive Protostellar Disks: Predictions for ALMA and EVLA. <i>Astrophysical Journal</i> , 2007, 665, 478-491.	4.5	61
79	Reconstructing Deconstruction: High-Velocity Cloud Distance through Disruption Morphology. <i>Astrophysical Journal</i> , 2007, 656, 907-913.	4.5	45
80	Theory of Star Formation. <i>Annual Review of Astronomy and Astrophysics</i> , 2007, 45, 565-687.	24.3	1,849
81	Bondi-Hoyle Accretion in a Turbulent Medium. <i>Astrophysical Journal</i> , 2006, 638, 369-381.	4.5	69
82	A Galactic Origin for the Local Ionized X-Ray Absorbers. <i>Astrophysical Journal</i> , 2006, 644, 174-179.	4.5	74
83	Equilibrium Star Cluster Formation. <i>Astrophysical Journal</i> , 2006, 641, L121-L124.	4.5	190
84	The Heavy-Ion Approximation for Ambipolar Diffusion Calculations for Weakly Ionized Plasmas. <i>Astrophysical Journal</i> , 2006, 653, 1280-1291.	4.5	38
85	On the Hydrodynamic Interaction of Shock Waves with Interstellar Clouds. II. The Effect of Smooth Cloud Boundaries on Cloud Destruction and Cloud Turbulence. <i>Astrophysical Journal, Supplement Series</i> , 2006, 164, 477-505.	7.7	124
86	The Global Evolution of Giant Molecular Clouds. I. Model Formulation and Quasi-Equilibrium Behavior. <i>Astrophysical Journal</i> , 2006, 653, 361-382.	4.5	166
87	A General Theory of Turbulence-regulated Star Formation, from Spirals to Ultraluminous Infrared Galaxies. <i>Astrophysical Journal</i> , 2005, 630, 250-268.	4.5	794
88	How Protostellar Outflows Help Massive Stars Form. <i>Astrophysical Journal</i> , 2005, 618, L33-L36.	4.5	115
89	Cosmic-Ray Acceleration at the Forward Shock in Tycho's Supernova Remnant: Evidence from Chandra X-Ray Observations. <i>Astrophysical Journal</i> , 2005, 634, 376-389.	4.5	267
90	Bondi Accretion in the Presence of Vorticity. <i>Astrophysical Journal</i> , 2005, 618, 757-768.	4.5	65

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91	SEDs of massive protostars. Proceedings of the International Astronomical Union, 2005, 1, 276-281.	0.0	0
92	The formation of stars by gravitational collapse rather than competitive accretion. Nature, 2005, 438, 332-334.	27.8	120
93	An unsplit, cell-centered Godunov method for ideal MHD. Journal of Computational Physics, 2005, 203, 422-448.	3.8	48
94	Radiation pressure in massive star formation. Proceedings of the International Astronomical Union, 2005, 1, 231-236.	0.0	7
95	Farâ€infrared SEDs of Embedded Protostars and Dusty Galaxies. I. Theory for Spherical Sources. Astrophysical Journal, 2005, 631, 792-808.	4.5	38
96	Embedding Lagrangian Sink Particles in Eulerian Grids. Astrophysical Journal, 2004, 611, 399-412.	4.5	210
97	The Formation of the First Stars. I. Mass Infall Rates, Accretion Disk Structure, and Protostellar Evolution. Astrophysical Journal, 2004, 603, 383-400.	4.5	179
98	Mass Limits to Primordial Star Formation from Protostellar Feedback. AIP Conference Proceedings, 2003, , .	0.4	1
99	Neutral Atomic Phases of the Interstellar Medium in the Galaxy. Astrophysical Journal, 2003, 587, 278-311.	4.5	858
100	Time Dependence of the Ultraviolet Radiation Field in the Local Interstellar Medium. Astrophysical Journal, 2003, 584, 797-817.	4.5	91
101	The Formation of Massive Stars from Turbulent Cores. Astrophysical Journal, 2003, 585, 850-871.	4.5	791
102	Atomic Hydrogen Gas in Dark Matter Minihalos and the Compact Highâ€Velocity Clouds. Astrophysical Journal, Supplement Series, 2002, 143, 419-453.	7.7	124
103	Massive star formation in 100,000 years from turbulent and pressurized molecular clouds. Nature, 2002, 416, 59-61.	27.8	296
104	Fragmentation and Star Formation in Turbulent Cores. Symposium - International Astronomical Union, 2001, 200, 361-370.	0.1	5
105	Photoionization of Galactic Halo Gas by Old Supernova Remnants. Astrophysical Journal, 2000, 541, 218-233.	4.5	34
106	Shock Origin of High-Velocity Maser Emission from: Circumnuclear Disks. Highlights of Astronomy, 1998, 11, 968-969.	0.0	0
107	Shock Origin of High-Velocity Maser Emission from Circumnuclear Disks. International Astronomical Union Colloquium, 1998, 164, 217-218.	0.1	0
108	Doppler Shift Asymmetry in Highâ€Velocity Maser Emission from Shocks in Circumnuclear Disks. Astrophysical Journal, 1998, 494, 218-235.	4.5	55

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109	The Jeans Condition: A New Constraint on Spatial Resolution in Simulations of Isothermal Self-gravitational Hydrodynamics. Astrophysical Journal, 1997, 489, L179-L183.	4.5	756
110	The Galactic Distribution of OB Associations in Molecular Clouds. Astrophysical Journal, 1997, 476, 166-183.	4.5	297
111	The Local Bubble and Beyond: Summary. International Astronomical Union Colloquium, 1997, 166, 563-580.	0.1	1
112	CO and the Multiphase ISM. Symposium - International Astronomical Union, 1997, 170, 25-32.	0.1	0
113	Equipartition of energy for turbulent astrophysical fluids: Accounting for the unseen energy in molecular clouds. Astrophysical Journal, 1995, 439, 779.	4.5	48
114	Compton-Heated Winds from Accretion Disks. , 1994, , 332-335.		0
115	Photoionization-regulated star formation and the structure of molecular clouds. Astrophysical Journal, 1989, 345, 782.	4.5	453
116	Supernova Remnant Shocks in an Inhomogeneous Interstellar Medium. International Astronomical Union Colloquium, 1988, 101, 205-222.	0.1	1
117	X-ray Emission from Supernova Remnants in a Cloudy Medium. Symposium - International Astronomical Union, 1983, 101, 87-97.	0.1	2