

Adam Frank

List of Publications by Year in descending order

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246
papers

7,736
citations

44069

48
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71685

76
g-index

254
all docs

254
docs citations

254
times ranked

3839
citing authors

#	ARTICLE	IF	CITATIONS
1	Shapes and Shaping of Planetary Nebulae. Annual Review of Astronomy and Astrophysics, 2002, 40, 439-486.	24.3	509
2	A Divergence-free Upwind Code for Multidimensional Magnetohydrodynamic Flows. Astrophysical Journal, 1998, 509, 244-255.	4.5	205
3	Laboratory Astrophysics and Collimated Stellar Outflows: The Production of Radiatively Cooled Hypersonic Plasma Jets. Astrophysical Journal, 2002, 564, 113-119.	4.5	189
4	Laboratory formation of a scaled protostellar jet by coaligned poloidal magnetic field. Science, 2014, 346, 325-328.	12.6	173
5	The evolution of magnetic tower jets in the laboratory. Physics of Plasmas, 2007, 14, 056501.	1.9	153
6	Magnetic tower outflows from a radial wire array Z-pinch. Monthly Notices of the Royal Astronomical Society, 2005, 361, 97-108.	4.4	145
7	Jet Deflection via Crosswinds: Laboratory Astrophysical Studies. Astrophysical Journal, 2004, 616, 988-997.	4.5	135
8	Dynamos in asymptotic-giant-branch stars as the origin of magnetic fields shaping planetary nebulae. Nature, 2001, 409, 485-487.	27.8	130
9	On the Planet and the Disk of C o K u TAURI/4. Astrophysical Journal, 2004, 612, L137-L140.	4.5	123
10	The Magnetohydrodynamic Kelvin-Helmholtz Instability: A Two-dimensional Numerical Study. Astrophysical Journal, 1996, 460, 777.	4.5	119
11	Numerical Magnetohydrodynamics in Astrophysics: Algorithm and Tests for Multidimensional Flow. Astrophysical Journal, 1995, 452, 785.	4.5	115
12	Isolated versus common envelope dynamos in planetary nebula progenitors. Monthly Notices of the Royal Astronomical Society, 2007, 376, 599-608.	4.4	114
13	Hydrodynamic Interaction of Strong Shocks with Inhomogeneous Media. I. Adiabatic Case. Astrophysical Journal, 2002, 576, 832-848.	4.5	105
14	The Magnetohydrodynamic Kelvin-Helmholtz Instability: A Three-dimensional Study of Nonlinear Evolution. Astrophysical Journal, 2000, 545, 475-493.	4.5	104
15	EXPLOSIVE OUTFLOWS POWERED BY THE DECAY OF NON-HIERARCHICAL MULTIPLE SYSTEMS OF MASSIVE STARS: ORION BN/KL. Astrophysical Journal, 2011, 727, 113.	4.5	103
16	SIMULATING MAGNETOHYDRODYNAMICAL FLOW WITH CONSTRAINED TRANSPORT AND ADAPTIVE MESH REFINEMENT: ALGORITHMS AND TESTS OF THE AstroBEAR CODE. Astrophysical Journal, Supplement Series, 2009, 182, 519-542.	7.7	100
17	Magnetohydrodynamic Stellar and Disk Winds: Application to Planetary Nebulae. Astrophysical Journal, 2001, 546, 288-298.	4.5	92
18	Radiation gasdynamics of planetary nebulae - V. Hot bubble and slow wind dynamics. Monthly Notices of the Royal Astronomical Society, 1995, 273, 401-410.	4.4	91

#	ARTICLE	IF	CITATIONS
19	High-Energy-Density Laboratory Astrophysics Studies of Jets and Bow Shocks. <i>Astrophysical Journal</i> , 2005, 634, L77-L80.	4.5	90
20	Accretion in common envelope evolution. <i>Monthly Notices of the Royal Astronomical Society</i> , 2018, 480, 1898-1911.	4.4	90
21	[ITAL]Hubble[/ITAL] [ITAL]Space[/ITAL] [ITAL]T[/ITAL][ITAL]elescope[/ITAL] Wide Field Planetary Camera 2 Observations of $\hat{\iota}$ Carinae. <i>Astronomical Journal</i> , 1998, 116, 2443-2461.	4.7	88
22	THE<i>CHANDRA</i>X-RAY SURVEY OF PLANETARY NEBULAE (CHANPLANS): PROBING BINARITY, MAGNETIC FIELDS, AND WIND COLLISIONS. <i>Astronomical Journal</i> , 2012, 144, 58.	4.7	80
23	Turbulence Driven by Outflowâ€blown Cavities in the Molecular Cloud of NGC 1333. <i>Astrophysical Journal</i> , 2005, 632, 941-955.	4.5	79
24	FLUID DYNAMICS OF STELLAR JETS IN REAL TIME: THIRD EPOCH<i>HUBBLE SPACE TELESCOPE</i>IMAGES OF HH 1, HH 34, AND HH 47. <i>Astrophysical Journal</i> , 2011, 736, 29.	4.5	79
25	Exploring astrophysics-relevant magnetohydrodynamics with pulsed-power laboratory facilities. <i>Reviews of Modern Physics</i> , 2019, 91, .	45.6	77
26	The MHD Kelvinâ€Helmholtz Instability. II. The Roles of Weak and Oblique Fields in Planar Flows. <i>Astrophysical Journal</i> , 1997, 482, 230-244.	4.5	76
27	The radiation gas dynamics of planetary nebulae. 4. From the Owl to the Eskimo. <i>Astrophysical Journal</i> , 1994, 430, 800.	4.5	74
28	OUTFLOW-DRIVEN TURBULENCE IN MOLECULAR CLOUDS. <i>Astrophysical Journal</i> , 2009, 695, 1376-1381.	4.5	71
29	EPISODIC MAGNETIC BUBBLES AND JETS: ASTROPHYSICAL IMPLICATIONS FROM LABORATORY EXPERIMENTS. <i>Astrophysical Journal</i> , 2009, 691, L147-L150.	4.5	70
30	Mass transfer and disc formation in AGB binary systems. <i>Monthly Notices of the Royal Astronomical Society</i> , 2017, 468, 4465-4477.	4.4	67
31	Effects of Cooling on the Propagation of Magnetized Jets. <i>Astrophysical Journal</i> , 1998, 494, L79-L83.	4.5	65
32	Production of radiatively cooled hypersonic plasma jets and links to astrophysical jets. <i>Plasma Physics and Controlled Fusion</i> , 2005, 47, B465-B479.	2.1	65
33	An X-ray outburst from the rapidly accreting young star that illuminates McNeil's nebula. <i>Nature</i> , 2004, 430, 429-431.	27.8	63
34	A Mechanism for the Production of Jets and Ansaes in Planetary Nebulae. <i>Astrophysical Journal</i> , 1996, 471, L53-L56.	4.5	62
35	Magnetic Fields in Stellar Jets. <i>Astrophysical Journal</i> , 2007, 661, 910-918.	4.5	60
36	The homunculus of Eta Carinae: an interacting stellar winds paradigm. <i>Astrophysical Journal</i> , 1995, 441, L77.	4.5	60

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37	Stellar wind paleontology - Shells and halos of planetary nebulae. <i>Astronomical Journal</i> , 1990, 100, 1903.	4.7	59
38	Application of Magnetohydrodynamic Disk Wind Solutions to Planetary and Protoplanetary Nebulae. <i>Astrophysical Journal</i> , 2004, 614, 737-744.	4.5	58
39	Planets Rapidly Create Holes in Young Circumstellar Disks. <i>Astrophysical Journal</i> , 2006, 640, 1110-1114.	4.5	58
40	Bipolar outflows and the evolution of stars. <i>New Astronomy Reviews</i> , 1999, 43, 31-65.	12.8	57
41	ASpitzer Space TelescopeInfrared Spectrograph Spectral Atlas of Luminous 8 $\frac{1}{4}$ m Sources in the Large Magellanic Cloud. <i>Astronomical Journal</i> , 2006, 132, 1890-1909.	4.7	57
42	Astrophysical gasdynamics confronts reality - The shaping of planetary nebulae. <i>Astrophysical Journal</i> , 1993, 404, L25.	4.5	57
43	Precessing Jets and Point-Symmetric Nebulae. <i>Astrophysical Journal</i> , 1995, 447, .	4.5	57
44	A Compact X-Ray Source and Possible X-Ray Jets within the Planetary Nebula Menzel 3. <i>Astrophysical Journal</i> , 2003, 591, L37-L40.	4.5	55
45	LABORATORY EXPERIMENTS, NUMERICAL SIMULATIONS, AND ASTRONOMICAL OBSERVATIONS OF DEFLECTED SUPERSONIC JETS: APPLICATION TO HH 110. <i>Astrophysical Journal</i> , 2009, 705, 1073-1094.	4.5	55
46	Collimation of astrophysical jets by inertial confinement. <i>Nature</i> , 1992, 355, 524-526.	27.8	53
47	The impact of recent advances in laboratory astrophysics on our understanding of the cosmos. <i>Reports on Progress in Physics</i> , 2012, 75, 036901.	20.1	51
48	OUTFLOWS FROM EVOLVED STARS: THE RAPIDLY CHANGING FINGERS OF CRL 618. <i>Astrophysical Journal</i> , 2013, 772, 20.	4.5	51
49	Hot planetary winds near a star: dynamics, wind-wind interactions, and observational signatures. <i>Monthly Notices of the Royal Astronomical Society</i> , 2017, 466, 2458-2473.	4.4	51
50	THE CHANDRA PLANETARY NEBULA SURVEY (ChanPlaNS). III. X-RAY EMISSION FROM THE CENTRAL STARS OF PLANETARY NEBULAE. <i>Astrophysical Journal</i> , 2015, 800, 8.	4.5	48
51	Driving Spiral Arms in the Circumstellar Disks of HD 100546 and HD 141569A. <i>Astronomical Journal</i> , 2005, 129, 2481-2495.	4.7	47
52	Efficient parallelization for AMR MHD multiphysics calculations; implementation in AstroBEAR. <i>Journal of Computational Physics</i> , 2013, 236, 461-476.	3.8	46
53	Scaled laboratory experiments explain the kink behaviour of the Crab Nebula jet. <i>Nature Communications</i> , 2016, 7, 13081.	12.8	46
54	Jets and Outflows from Star to Cloud: Observations Confront Theory. , 2014, , .		46

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55	Generation of episodic magnetically driven plasma jets in a radial foil Z-pinch. <i>Physics of Plasmas</i> , 2010, 17, .	1.9	44
56	Hydrodynamical Models of Outflow Collimation in Young Stellar Objects. <i>Astrophysical Journal</i> , 1996, 472, 684-702.	4.5	44
57	Interaction of Infall and Winds in Young Stellar Objects. <i>Astrophysical Journal</i> , 2000, 530, 923-938.	4.5	44
58	Where is the Doughnut? Luminous Blue Variable Bubbles and Aspherical Fast Winds. <i>Astrophysical Journal</i> , 1998, 500, 291-301.	4.5	42
59	Uncovering the socioeconomic facets of human mobility. <i>Scientific Reports</i> , 2021, 11, 8616.	3.3	42
60	The Evolution of Protoplanetary Disk Edges. <i>Astrophysical Journal</i> , 2004, 612, 1152-1162.	4.5	41
61	SELF-CONVERGENCE OF RADIATIVELY COOLING CLUMPS IN THE INTERSTELLAR MEDIUM. <i>Astrophysical Journal</i> , 2010, 722, 412-424.	4.5	41
62	Supersonic Radiatively Cooled Rotating Flows and Jets in the Laboratory. <i>Physical Review Letters</i> , 2008, 100, 035001.	7.8	40
63	From bipolar to elliptical: simulating the morphological evolution of planetary nebulae. <i>Monthly Notices of the Royal Astronomical Society</i> , 2012, 424, 2055-2068.	4.4	40
64	THE CHANDRA PLANETARY NEBULA SURVEY (CHANPLANS). II. X-RAY EMISSION FROM COMPACT PLANETARY NEBULAE. <i>Astrophysical Journal</i> , 2014, 794, 99.	4.5	40
65	Direct-drive cryogenic target implosion performance on OMEGA. <i>Physics of Plasmas</i> , 2004, 11, 2790-2797.	1.9	39
66	A New Empirical Constraint on the Prevalence of Technological Species in the Universe. <i>Astrobiology</i> , 2016, 16, 359-362.	3.0	39
67	Astrophysical Explosions Driven by a Rotating, Magnetized, Gravitating Sphere. <i>Astrophysical Journal</i> , 2006, 647, L45-L48.	4.5	38
68	Proto-Planetary Nebulae as Explosions: Bullets versus Jets and Nebular Shaping. <i>Astrophysical Journal</i> , 2008, 679, 1327-1337.	4.5	37
69	Collimated Outflow Formation via Binary Stars: Three-Dimensional Simulations of Asymptotic Giant Branch Wind and Disk Wind Interactions. <i>Astrophysical Journal</i> , 2004, 600, 992-1003.	4.5	37
70	PROTOSTELLAR OUTFLOW EVOLUTION IN TURBULENT ENVIRONMENTS. <i>Astrophysical Journal</i> , 2009, 692, 816-826.	4.5	36
71	Formation of episodic magnetically driven radiatively cooled plasma jets in the laboratory. <i>Astrophysics and Space Science</i> , 2009, 322, 19-23.	1.4	36
72	Bipolar planetary nebulae from outflow collimation by common envelope evolution. <i>Monthly Notices of the Royal Astronomical Society</i> , 2020, 497, 2855-2869.	4.4	36

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73	Outflow collimation in young stellar objects. Monthly Notices of the Royal Astronomical Society, 1997, 292, 795-807.	4.4	35
74	ISOTROPICALLY DRIVEN VERSUS OUTFLOW DRIVEN TURBULENCE: OBSERVATIONAL CONSEQUENCES FOR MOLECULAR CLOUDS. Astrophysical Journal, 2010, 722, 145-157.	4.5	35
75	The formation and evolution of wind-capture discs in binary systems. Monthly Notices of the Royal Astronomical Society, 2013, 433, 295-306.	4.4	35
76	Observational Properties of Protoplanetary Disk Gaps. Astrophysical Journal, 2006, 637, L125-L128.	4.5	34
77	The Formation of Crystalline Dust in AGB Winds from Binary-induced Spiral Shocks. Astrophysical Journal, 2008, 675, L101-L104.	4.5	34
78	Outflow-driven Cavities: Numerical Simulations of Intermediaries of Protostellar Turbulence. Astrophysical Journal, 2006, 653, 416-424.	4.5	33
79	V1647 Orionis: The X-Ray Evolution of a Pre-Main-Sequence Accretion Burst. Astrophysical Journal, 2006, 648, L43-L46.	4.5	33
80	ON THE STRUCTURE AND STABILITY OF MAGNETIC TOWER JETS. Astrophysical Journal, 2012, 757, 66.	4.5	33
81	Structure and Stability of Keplerian Magnetohydrodynamic Jets. Astrophysical Journal, 2000, 533, 897-910.	4.5	33
82	High Spatial Resolution Mid- and Far-infrared Imaging Study of NGC 2346. Astrophysical Journal, Supplement Series, 2004, 154, 302-308.	7.7	32
83	BOW SHOCK FRAGMENTATION DRIVEN BY A THERMAL INSTABILITY IN LABORATORY ASTROPHYSICS EXPERIMENTS. Astrophysical Journal, 2015, 815, 96.	4.5	32
84	Magnetic Collimation in Planetary Nebulae. Astrophysical Journal, 2001, 557, 250-255.	4.5	32
85	Interaction of a supersonic, radiatively cooled plasma jet with an ambient medium. Physics of Plasmas, 2012, 19, 022708.	1.9	31
86	The formation of reverse shocks in magnetized high energy density supersonic plasma flows. Physics of Plasmas, 2014, 21, 056305.	1.9	31
87	Three-dimensional single-mode nonlinear ablative Rayleigh-Taylor instability. Physics of Plasmas, 2016, 23, .	1.9	31
88	The unity and diversity of Planetary or Nebulae radiation-gasdynamics of PNe, 2. Astronomical Journal, 1994, 107, 261.	4.7	31
89	Wide-Angle Wind-driven Bipolar Outflows: High-Resolution Models with Application to Source I of the Becklin-Neugebauer/Kleinmann-Low OMC Region. Astrophysical Journal, 2005, 631, 1010-1021.	4.5	29
90	A global jet/circulation model for young stars. Astronomy and Astrophysics, 2002, 387, 187-200.	5.1	29

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91	The Propagation of Magnetocentrifugally Launched Jets. I. Astrophysical Journal, 2000, 540, 342-361.	4.5	29
92	Precessing jets and molecular outflows: a 3D numerical study. Monthly Notices of the Royal Astronomical Society, 1996, 282, 1114-1128.	4.4	28
93	Influence of Magnetic Fields on Pulsed, Radiative Jets. Astrophysical Journal, 2000, 530, 834-850.	4.5	28
94	Earth as a Hybrid Planet: The Anthropocene in an Evolutionary Astrobiological Context. Anthropocene, 2017, 19, 13-21.	3.3	27
95	X-Ray Emission from the Pre-planetary Nebula Henize 3-1475. Astrophysical Journal, 2003, 599, L87-L90.	4.5	26
96	The Fermi Paradox and the Aurora Effect: Exo-civilization Settlement, Expansion, and Steady States. Astronomical Journal, 2019, 158, 117.	4.7	26
97	Effects of radiation pressure on the evaporative wind of HD 209458b. Monthly Notices of the Royal Astronomical Society, 2020, 493, 1292-1305.	4.4	26
98	SN 1987A: Rotation and a Binary Companion. Astrophysical Journal, 1999, 512, 322-331.	4.5	26
99	Enhanced X-ray variability from V1647 Ori, the young star in outburst illuminating McNeil's Nebula. Astronomy and Astrophysics, 2005, 438, 159-168.	5.1	25
100	Shock propagation in deuterium-tritium-saturated foam. Physics of Plasmas, 2005, 12, 062705.	1.9	25
101	The Timescale Correlation Method: Distances to Planetary Nebulae with Halos. Astrophysical Journal, 1997, 477, 226-234.	4.5	24
102	Interaction of radiatively cooled plasma jets with neutral gases for laboratory astrophysics studies. High Energy Density Physics, 2013, 9, 141-147.	1.5	24
103	Wind-accelerated orbital evolution in binary systems with giant stars. Monthly Notices of the Royal Astronomical Society, 2018, 473, 747-756.	4.4	24
104	[F[CLC]e[/CLC] [CSC]ii[/CSC]] Bubbles in the Young Planetary Nebula Hubble 12. Astrophysical Journal, 1999, 522, L69-L72.	4.5	23
105	Planetary Nebulae Shaped by Common Envelope Evolution. Galaxies, 2018, 6, 113.	3.0	23
106	The Silurian hypothesis: would it be possible to detect an industrial civilization in the geological record?. International Journal of Astrobiology, 2019, 18, 142-150.	1.6	23
107	Protostellar Jet Collisions Reduce the Efficiency of Outflow-Driven Turbulence in Molecular Clouds. Astrophysical Journal, 2006, 646, 1059-1069.	4.5	23
108	Ambipolar Diffusion in Young Stellar Object Jets. Astrophysical Journal, 1999, 524, 947-951.	4.5	22

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109	Astrophysical jets: Observations, numerical simulations, and laboratory experiments. <i>Physics of Plasmas</i> , 2009, 16, 041005.	1.9	22
110	Triggered star formation and its consequences. <i>Monthly Notices of the Royal Astronomical Society</i> , 2014, 444, 2884-2892.	4.4	22
111	Molecular cloud formation in high-shear, magnetized colliding flows. <i>Monthly Notices of the Royal Astronomical Society</i> , 2016, 460, 2110-2128.	4.4	22
112	Common envelope evolution on the asymptotic giant branch: unbinding within a decade?. <i>Monthly Notices of the Royal Astronomical Society</i> , 2020, 495, 4028-4039.	4.4	22
113	A Laboratory Investigation of Supersonic Clumpy Flows: Experimental Design and Theoretical Analysis. <i>Astrophysical Journal</i> , 2004, 604, 213-221.	4.5	21
114	Experimental Studies of Magnetically Driven Plasma Jets. <i>Astrophysics and Space Science</i> , 2011, 336, 41-46.	1.4	21
115	THE ILLUMINATION AND GROWTH OF CRL 2688: AN ANALYSIS OF NEW AND ARCHIVAL HUBBLE SPACE TELESCOPE OBSERVATIONS. <i>Astrophysical Journal</i> , 2012, 745, 188.	4.5	21
116	Generation of a circumstellar gas disc by hot Jupiter WASP-12b. <i>Monthly Notices of the Royal Astronomical Society</i> , 2018, 478, 2592-2598.	4.4	21
117	How drag force evolves in global common envelope simulations. <i>Monthly Notices of the Royal Astronomical Society</i> , 2019, 490, 3727-3739.	4.4	21
118	The Magnetohydrodynamic Kelvin-Helmholtz Instability. III. The Role of Sheared Magnetic Field in Planar Flows. <i>Astrophysical Journal</i> , 2000, 529, 536-547.	4.5	20
119	ON THE ROLE OF AMBIENT ENVIRONMENTS IN THE COLLAPSE OF BONNOR-EBERT SPHERES. <i>Astrophysical Journal</i> , 2014, 790, 70.	4.5	20
120	Models of the Mass-ejection Histories of Pre-planetary Nebulae. IV. Magnetized Winds and the Origins of Jets, Bullets, and FLIERs. <i>Astrophysical Journal</i> , 2020, 889, 13.	4.5	20
121	Sustainability and the astrobiological perspective: Framing human futures in a planetary context. <i>Anthropocene</i> , 2014, 5, 32-41.	3.3	19
122	Three-dimensional hydrodynamic simulations of L^2 Puppis. <i>Monthly Notices of the Royal Astronomical Society</i> , 2016, 460, 4182-4187.	4.4	19
123	The structure of bow shocks formed by the interaction of pulsed-power driven magnetised plasma flows with conducting obstacles. <i>Physics of Plasmas</i> , 2017, 24, .	1.9	19
124	The Anthropocene Generalized: Evolution of Exo-Civilizations and Their Planetary Feedback. <i>Astrobiology</i> , 2018, 18, 503-518.	3.0	19
125	Energy budget and core-envelope motion in common envelope evolution. <i>Monthly Notices of the Royal Astronomical Society</i> , 2019, 486, 1070-1085.	4.4	19
126	Starspots and the Generation of Spherical Stellar Outflows. <i>Astronomical Journal</i> , 1995, 110, 2457.	4.7	19

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127	Intelligence as a planetary scale process. <i>International Journal of Astrobiology</i> , 2022, 21, 47-61.	1.6	19
128	THE EFFECTS OF FLOW-INHOMOGENEITIES ON MOLECULAR CLOUD FORMATION: LOCAL VERSUS GLOBAL COLLAPSE. <i>Astrophysical Journal</i> , 2014, 790, 37.	4.5	18
129	Numerical Simulations and Astrophysical Applications of Laboratory Jets at Omega. <i>Astrophysics and Space Science</i> , 2007, 307, 57-62.	1.4	17
130	Bow shocks in ablated plasma streams for nested wire array z-pinches: A laboratory astrophysics testbed for radiatively cooled shocks. <i>Physics of Plasmas</i> , 2010, 17, .	1.9	17
131	The Shock Dynamics of Heterogeneous YSO Jets:3D Simulations Meet Multi-epoch Observations. <i>Astrophysical Journal</i> , 2017, 837, 143.	4.5	17
132	Models of the Hydrodynamic Histories of Post-AGB Stars. I. Multiflow Shaping of OH 231.8+04.2. <i>Astrophysical Journal</i> , 2017, 843, 108.	4.5	17
133	Models of the Mass-ejection Histories of Pre-planetary Nebulae. III. The Shaping of Lobes by Post-AGB Winds. <i>Astrophysical Journal</i> , 2019, 877, 30.	4.5	17
134	MAGNETIC NESTED-WIND SCENARIOS FOR BIPOLAR OUTFLOWS: PREPLANETARY AND YSO NEBULAR SHAPING. <i>Astrophysical Journal</i> , 2009, 707, 1485-1494.	4.5	16
135	MAGNETOHYDRODYNAMIC SHOCK-CLUMP EVOLUTION WITH SELF-CONTAINED MAGNETIC FIELDS. <i>Astrophysical Journal</i> , 2013, 774, 133.	4.5	16
136	Structure of a Magnetic Flux Annihilation Layer Formed by the Collision of Supersonic, Magnetized Plasma Flows. <i>Physical Review Letters</i> , 2016, 116, 225001.	7.8	16
137	The inner cavity of the circumnuclear disc. <i>Monthly Notices of the Royal Astronomical Society</i> , 2016, 459, 1721-1736.	4.4	16
138	The Case for Technosignatures: Why They May Be Abundant, Long-lived, Highly Detectable, and Unambiguous. <i>Astrophysical Journal Letters</i> , 2022, 927, L30.	8.3	16
139	HYPERSONIC BUCKSHOT: ASTROPHYSICAL JETS AS HETEROGENEOUS COLLIMATED PLASMOIDS. <i>Astrophysical Journal</i> , 2009, 695, 999-1005.	4.5	15
140	Interactions of magnetized plasma flows in pulsed-power driven experiments. <i>Plasma Physics and Controlled Fusion</i> , 2020, 62, 014020.	2.1	15
141	Stellar Outflows Driven by Magnetized Wide- \angle Winds. <i>Astrophysical Journal</i> , 2003, 582, 269-276.	4.5	14
142	Contact inequality: first contact will likely be with an older civilization. <i>International Journal of Astrobiology</i> , 2020, 19, 430-437.	1.6	14
143	Jet Deflection by a Quasi-Steady-State Side Wind in the Laboratory. <i>Astrophysics and Space Science</i> , 2007, 307, 29-34.	1.4	13
144	WHEN SHOCK WAVES COLLIDE. <i>Astrophysical Journal</i> , 2016, 823, 148.	4.5	13

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145	Reorienting MHD colliding flows: a shock physics mechanism for generating filaments normal to magnetic fields. <i>Monthly Notices of the Royal Astronomical Society</i> , 2017, 470, 2938-2948.	4.4	13
146	Strings in the $\hat{\iota}$ -Carinae Nebula: Hypersonic Radiative Cosmic Bullets. <i>Astrophysical Journal</i> , 2004, 613, 387-392.	4.5	12
147	SERENDIPITOUS XMM-NEWTON DETECTION OF X-RAY EMISSION FROM THE BIPOLAR PLANETARY NEBULA Hb 5. <i>Astrophysical Journal</i> , 2009, 694, 1481-1484.	4.5	12
148	NUMERICAL SIMULATIONS OF Z-PINCH EXPERIMENTS TO CREATE SUPERSONIC DIFFERENTIALLY ROTATING PLASMA FLOWS. <i>Astrophysical Journal</i> , 2013, 767, 84.	4.5	12
149	Photoevaporative flows from exoplanet atmospheres: a 3D radiative hydrodynamic parameter study. <i>Monthly Notices of the Royal Astronomical Society</i> , 2019, 483, 1481-1495.	4.4	12
150	The Magnetic Geometry of Pulsed Astrophysical Jets. <i>Astrophysical Journal</i> , 2000, 545, L153-L156.	4.5	12
151	The Interaction between a Pulsed Astrophysical Jet and Small-Scale Heterogeneous Media. <i>Astrophysical Journal</i> , 2008, 672, 996-1005.	4.5	11
152	Laboratory experiments to study supersonic astrophysical flows interacting with clumpy environments. <i>Astrophysics and Space Science</i> , 2009, 322, 101-105.	1.4	11
153	Laboratory Modeling of Standing Shocks and Radiatively Cooled Jets with Angular Momentum. <i>Astrophysics and Space Science</i> , 2007, 307, 51-56.	1.4	10
154	Models of the Mass-ejection Histories of Pre-planetary Nebulae. II. The Formation of Minkowski's Butterfly and its Proboscis in M2-9. <i>Astrophysical Journal</i> , 2018, 853, 168.	4.5	10
155	Hydrodynamic simulations of disrupted planetary accretion discs inside the core of an AGB star. <i>Monthly Notices of the Royal Astronomical Society</i> , 2019, 490, 1179-1185.	4.4	10
156	Large Proper-Motion Infrared [F _{CLC}]/[CSC] Emission-Line Features in GGD 37. <i>Astrophysical Journal</i> , 2000, 528, L115-L118.	4.5	9
157	CONSEQUENCES OF MAGNETIC FIELD STRUCTURE FOR HEAT TRANSPORT IN MAGNETOHYDRODYNAMICS. <i>Astrophysical Journal</i> , 2012, 748, 24.	4.5	9
158	MAGNETOHYDRODYNAMIC EFFECTS ON PULSED YOUNG STELLAR OBJECT JETS. I. 2.5D SIMULATIONS. <i>Astrophysical Journal</i> , 2015, 800, 41.	4.5	9
159	Formation of radiatively cooled, supersonically rotating, plasma flows in Z-pinch experiments: Towards the development of an experimental platform to study accretion disk physics in the laboratory. <i>High Energy Density Physics</i> , 2015, 17, 63-67.	1.5	9
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