

Steven A Balbus

List of Publications by Year in descending order

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26
papers

6,827
citations

623734
14
h-index

552781
26
g-index

27
all docs

27
docs citations

27
times ranked

3376
citing authors

#	ARTICLE	IF	CITATIONS
1	A powerful local shear instability in weakly magnetized disks. I - Linear analysis. II - Nonlinear evolution. <i>Astrophysical Journal</i> , 1991, 376, 214.	4.5	3,498
2	Instability, turbulence, and enhanced transport in accretion disks. <i>Reviews of Modern Physics</i> , 1998, 70, 1-53.	45.6	2,085
3	A Powerful Local Shear Instability in Weakly Magnetized Disks. II. Nonlinear Evolution. <i>Astrophysical Journal</i> , 1991, 376, 223.	4.5	344
4	On the Dynamical Foundations of $\hat{\nu}$ Disks. <i>Astrophysical Journal</i> , 1999, 521, 650-658.	4.5	264
5	The ionization fraction in $\hat{\nu}$ models of protoplanetary discs. <i>Monthly Notices of the Royal Astronomical Society</i> , 2002, 329, 18-28.	4.4	234
6	Stellar mergers as the origin of magnetic massive stars. <i>Nature</i> , 2019, 574, 211-214.	27.8	126
7	The spectral evolution of disc dominated tidal disruption events. <i>Monthly Notices of the Royal Astronomical Society</i> , 2020, 492, 5655-5674.	4.4	40
8	Long-term evolution of a magnetic massive merger product. <i>Monthly Notices of the Royal Astronomical Society</i> , 2020, 495, 2796-2812.	4.4	37
9	An accretion disc instability induced by a temperature sensitive $\hat{\nu}$ parameter. <i>Monthly Notices of the Royal Astronomical Society</i> , 2014, 441, 681-689.	4.4	21
10	The evolution of Kerr discs and late-time tidal disruption event light curves. <i>Monthly Notices of the Royal Astronomical Society</i> , 2018, 481, 3348-3356.	4.4	21
11	ASASSN-15lh: a TDE about a maximally rotating $10^9 M_{\odot}$ black hole. <i>Monthly Notices of the Royal Astronomical Society: Letters</i> , 2020, 497, L13-L18.	3.3	21
12	Evolution of relativistic thin discs with a finite ISCO stress $\hat{\nu}$ I. Stalled accretion. <i>Monthly Notices of the Royal Astronomical Society</i> , 2019, 489, 132-142.	4.4	17
13	When is high Reynolds number shear flow not turbulent?. <i>Journal of Fluid Mechanics</i> , 2017, 824, 1-4.	3.4	16
14	The general relativistic thin disc evolution equation. <i>Monthly Notices of the Royal Astronomical Society</i> , 2017, 471, 4832-4838.	4.4	16
15	Dynamical, biological and anthropic consequences of equal lunar and solar angular radii. <i>Proceedings of the Royal Society A: Mathematical, Physical and Engineering Sciences</i> , 2014, 470, 20140263.	2.1	15
16	The Goldreich-Schubert-Fricke instability in stellar radiative zones. <i>Monthly Notices of the Royal Astronomical Society</i> , 2016, 460, 338-344.	4.4	12
17	Evolution of relativistic thin discs with a finite ISCO stress $\hat{\nu}$ II. Late time behaviour. <i>Monthly Notices of the Royal Astronomical Society</i> , 2019, 489, 143-152.	4.4	12
18	Surprises in astrophysical gasdynamics. <i>Reports on Progress in Physics</i> , 2016, 79, 066901.	20.1	9

#	ARTICLE	IF	CITATIONS
19	Tides: A key environmental driver of osteichthyan evolution and the fish-tetrapod transition? Proceedings of the Royal Society A: Mathematical, Physical and Engineering Sciences, 2020, 476, 20200355.	2.1	7
20	Simplified derivation of the gravitational wave stress tensor from the linearized Einstein field equations. Proceedings of the National Academy of Sciences of the United States of America, 2016, 113, 11662-11666.	7.1	6
21	An upper observable black hole mass scale for tidal destruction events with thermal X-ray spectra. Monthly Notices of the Royal Astronomical Society, 2021, 505, 1629-1644.	4.4	6
22	Energy partition between Alfvénic and compressive fluctuations in magnetorotational turbulence with near-azimuthal mean magnetic field. Journal of Plasma Physics, 2022, 88, .	2.1	6
23	On the high-frequency spectrum of a classical accretion disc. Monthly Notices of the Royal Astronomical Society: Letters, 2014, 444, L54-L57.	3.3	4
24	Elasticity of tangled magnetic fields. Journal of Plasma Physics, 2020, 86, .	2.1	4
25	Hard X-ray emission from a Compton scattering corona in large black hole mass tidal disruption events. Monthly Notices of the Royal Astronomical Society, 2021, 504, 4730-4742.	4.4	4
26	A Poynting theorem formulation for the gravitational wave stress pseudo tensor. International Journal of Modern Physics D, 0, , 2142003.	2.1	1