Jeffrey S Oishi

List of Publications by Year
in descending order

41	3,983	304743 22	330143 37
papers	citations	h-index	g-index

42	42	42	3697
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Rapid planetesimal formation in turbulent circumstellar disks. Nature, 2007, 448, 1022-1025.	27.8	972
2	yt: A MULTI-CODE ANALYSIS TOOLKIT FOR ASTROPHYSICAL SIMULATION DATA. Astrophysical Journal, Supplement Series, 2011, 192, 9.	7.7	959
3	ENZO: AN ADAPTIVE MESH REFINEMENT CODE FOR ASTROPHYSICS. Astrophysical Journal, Supplement Series, 2014, 211, 19.	7.7	615
4	Dedalus: A flexible framework for numerical simulations with spectral methods. Physical Review Research, 2020, 2, .	3.6	218
5	SIMULATING THE COMMON ENVELOPE PHASE OF A RED GIANT USING SMOOTHED-PARTICLE HYDRODYNAMICS AND UNIFORM-GRID CODES. Astrophysical Journal, 2012, 744, 52.	4.5	189
6	MAGNETIC FIELDS IN POPULATION III STAR FORMATION. Astrophysical Journal, 2012, 745, 154.	4.5	134
7	Cassiopeia A and Its Clumpy Presupernova Wind. Astrophysical Journal, 2003, 593, L23-L26.	4.5	108
8	Turbulent Torques on Protoplanets in a Dead Zone. Astrophysical Journal, 2007, 670, 805-819.	4.5	85
9	A validated non-linear Kelvinâ€“Helmholtz benchmark for numerical hydrodynamics. Monthly Notices of the Royal Astronomical Society, 2016, 455, 4274-4288.	4.4	66
10	The Inability of Ambipolar Diffusion to Set a Characteristic Mass Scale in Molecular Clouds. Astrophysical Journal, 2006, 638, 281-285.	4.5	50
11	ON HYDRODYNAMIC MOTIONS IN DEAD ZONES. Astrophysical Journal, 2009, 704, 1239-1250.	4.5	50
12	MAGNETOROTATIONAL TURBULENCE TRANSPORTS ANGULAR MOMENTUM IN STRATIFIED DISKS WITH LOW MAGNETIC PRANDTL NUMBER BUT MAGNETIC REYNOLDS NUMBER ABOVE A CRITICAL VALUE. Astrophysical Journal, 2011, 740, 18.	4.5	46
13	ENZO: An Adaptive Mesh Refinement Code for Astrophysics (Version 2.6). Journal of Open Source Software, 2019, 4, 1636.	4.6	44
14	SELF-GENERATED TURBULENCE IN MAGNETIC RECONNECTION. Astrophysical Journal Letters, 2015, 806, L12.	8.3	43
15	Flow-Induced Symmetry Breaking in Growing Bacterial Biofilms. Physical Review Letters, 2019, 123, 258101.	7.8	41
16	Numerical simulations of internal wave generation by convection in water. Physical Review E, 2015, 91, 063016.	2.1	40
17	TURBULENT CHEMICAL DIFFUSION IN CONVECTIVELY BOUNDED CARBON FLAMES. Astrophysical Journal, 2016, 832, 71.	4.5	39
18	Hybrid Adaptive Ray-Moment Method (HARM2): A highly parallel method for radiation hydrodynamics on adaptive grids. Journal of Computational Physics, 2017, 330, 924-942.	3.8	34

#	Article	IF	Citations
19	ON THE STABILITY OF DUST-LADEN PROTOPLANETARY VORTICES. Astrophysical Journal, 2010, 721, 1593-1602.	4.5	33
20	Dynamical Expansion of H<scp>ii</scp>Regions from Ultracompact to Compact Sizes in Turbulent, Selfâ€gravitating Molecular Clouds. Astrophysical Journal, 2007, 668, 980-992.	4.5	28
21	Tensor calculus in polar coordinates using Jacobi polynomials. Journal of Computational Physics, 2016, 325, 53-73.	3.8	28
22	CONDUCTION IN LOW MACH NUMBER FLOWS. I. LINEAR AND WEAKLY NONLINEAR REGIMES. Astrophysical Journal, 2014, 797, 94.	4.5	27
23	Convective Dynamics and Disequilibrium Chemistry in the Atmospheres of Giant Planets and Brown Dwarfs. Astrophysical Journal, 2018, 854, 8.	4.5	19
24	Single-hemisphere Dynamos in M-dwarf Stars. Astrophysical Journal Letters, 2020, 902, L3.	8.3	17
25	The Weakly Nonlinear Magnetorotational Instability in a Local Geometry. Astrophysical Journal, 2017, 841, 1.	4.5	16
26	Breezing through the Space Environment of Barnardâ€™s Star b. Astrophysical Journal Letters, 2019, 875, L12.	8.3	15
27	Predicting the Rossby Number in Convective Experiments. Astrophysical Journal, 2019, 872, 138.	4.5	11
28	Accelerated evolution of convective simulations. Physical Review Fluids, 2018, 3, .	2.5	9
29	The Weakly Nonlinear Magnetorotational Instability in a Global, Cylindrical Taylorâ€“Couette Flow. Astrophysical Journal, 2017, 841, 2.	4.5	8
30	Tensor calculus in spherical coordinates using Jacobi polynomials. Part-II: Implementation and examples. Journal of Computational Physics: X, 2019, 3, 100012.	0.7	8
31	A Constrainedâ€Transport Magnetohydrodynamics Algorithm with Nearâ€Spectral Resolution. Astrophysical Journal, 2008, 677, 520-529.	4.5	6
32	Tensor calculus in spherical coordinates using Jacobi polynomials. Part-I: Mathematical analysis and derivations. Journal of Computational Physics: X, 2019, 3, 100013.	0.7	6
33	eigentools: A Python package for studying differential eigenvalue problems with an emphasis on robustness. Journal of Open Source Software, 2021, 6, 3079.	4.6	5
34	Generalized quasilinear approximation of the interaction of convection and mean flows in a thermal annulus. Proceedings of the Royal Society A: Mathematical, Physical and Engineering Sciences, 2018, 474, 20180422.	2.1	4
35	Performance of parallel-in-time integration for Rayleigh BÃ©nard convection. Computing and Visualization in Science, 2020, 23, 1.	1.2	4
36	The magnetorotational instability prefers three dimensions. Proceedings of the Royal Society A: Mathematical, Physical and Engineering Sciences, 2020, 476, 20190622.	2.1	4

#	Article	IF	Citations
37	Convective Boundary Mixing Processes. Research Notes of the AAS, 2022, 6, 41.	0.7	2
38	Numerical Methods for Radiative Feedback from the First Stars: Ionization in Adaptive Mesh Refinement Simulations. , 2010, , .		0
39	Magnetic fields and angular momentum in population III star formation. , 2012, , .		0
40	Turbulence and small scale dynamo action in population III star formation. , 2012, , .		0
41	Methods for Simulating the Heavy Core Instability. EPJ Web of Conferences, 2013, 46, 06001.	0.3	0