Gilles Chabrier

List of Publications by Year in descending order

Source: https://exaly.com/author-pdf/6387680/publications.pdf

Version: 2024-02-01

27 papers

10,863 citations

361296 20 h-index 27 g-index

28 all docs 28 docs citations

times ranked

28

8571 citing authors

#	Article	IF	CITATIONS
1	Galactic Stellar and Substellar Initial Mass Function. Publications of the Astronomical Society of the Pacific, 2003, 115, 763-795.	1.0	6,700
2	New evolutionary models for pre-main sequence and main sequence low-mass stars down to the hydrogen-burning limit. Astronomy and Astrophysics, 2015, 577, A42.	2.1	1,153
3	Theory of Low-Mass Stars and Substellar Objects. Annual Review of Astronomy and Astrophysics, 2000, 38, 337-377.	8.1	462
4	Analytical Theory for the Initial Mass Function: CO Clumps and Prestellar Cores. Astrophysical Journal, 2008, 684, 395-410.	1.6	437
5	The Initial Mass Function: From Salpeter 1955 to 2005. , 2005, , 41-50.		254
6	THE MASS-DEPENDENCE OF ANGULAR MOMENTUM EVOLUTION IN SUN-LIKE STARS. Astrophysical Journal Letters, 2015, 799, L23.	3.0	230
7	Fluid hydrogen at high density: Pressure ionization. Physical Review A, 1992, 46, 2084-2100.	1.0	222
8	The molecular-metallic transition of hydrogen and the structure of Jupiter and Saturn. Astrophysical Journal, 1992, 391, 817.	1.6	178
9	Heat Transport in Giant (Exo)planets: A New Perspective. Astrophysical Journal, 2007, 661, L81-L84.	1.6	171
10	ANALYTICAL THEORY FOR THE INITIAL MASS FUNCTION. II. PROPERTIES OF THE FLOW. Astrophysical Journal, 2009, 702, 1428-1442.	1.6	171
11	Equation of state of fully ionized electron-ion plasmas. Physical Review E, 1998, 58, 4941-4949.	0.8	134
12	New Models of Jupiter in the Context of Juno and Galileo. Astrophysical Journal, 2019, 872, 100.	1.6	114
13	VARIATIONS OF THE STELLAR INITIAL MASS FUNCTION IN THE PROGENITORS OF MASSIVE EARLY-TYPE GALAXIES AND IN EXTREME STARBURST ENVIRONMENTS. Astrophysical Journal, 2014, 796, 75.	1.6	112
14	MAGNETICALLY SELF-REGULATED FORMATION OF EARLY PROTOPLANETARY DISKS. Astrophysical Journal Letters, 2016, 830, L8.	3.0	107
15	Layered convection as the origin of Saturn's luminosity anomaly. Nature Geoscience, 2013, 6, 347-350.	5.4	105
16	ANALYTICAL THEORY FOR THE INITIAL MASS FUNCTION. III. TIME DEPENDENCE AND STAR FORMATION RATE. Astrophysical Journal, 2013, 770, 150.	1.6	84
17	Simulations of protostellar collapse using multigroup radiation hydrodynamics. Astronomy and Astrophysics, 2013, 557, A90.	2.1	52
18	WISE J072003.20-084651.2B is a Massive T Dwarf ^{â^—} ^{â€} . Astronomical Journal, 2019, 158, 174.	1.9	27

#	Article	IF	CITATIONS
19	Analytical Core Mass Function (CMF) from Filaments: Under Which Circumstances Can Filament Fragmentation Reproduce the CMF?. Astrophysical Journal, 2017, 847, 114.	1.6	24
20	What Is the Role of Stellar Radiative Feedback in Setting the Stellar Mass Spectrum?. Astrophysical Journal, 2020, 904, 194.	1.6	22
21	Evolution of the Density PDF in Star-forming Clouds: The Role of Gravity. Astrophysical Journal Letters, 2020, 903, L2.	3.0	22
22	Protostellar Collapse: Regulation of the Angular Momentum and Onset of an Ionic Precursor. Astrophysical Journal, 2020, 900, 180.	1.6	20
23	How First Hydrostatic Cores, Tidal Forces, and Gravoturbulent Fluctuations Set the Characteristic Mass of Stars. Astrophysical Journal, 2019, 883, 140.	1.6	15
24	A New Equation of State for Dense Hydrogen–Helium Mixtures. II. Taking into Account Hydrogen–Helium Interactions. Astrophysical Journal, 2021, 917, 4.	1.6	12
25	The Parallax of VHS J1256–1257 from CFHT and Pan-STARRS-1. Research Notes of the AAS, 2020, 4, 54.	0.3	11
26	Superadiabaticity in Jupiter and Giant Planet Interiors. Astrophysical Journal Letters, 2021, 913, L21.	3.0	8
27	Generalized Transport Equation for the Autocovariance Function of the Density Field and Mass Invariant in Star-forming Clouds. Astrophysical Journal Letters, 2021, 922, L36.	3.0	3