

# Gilles Chabrier

## List of Publications by Year in descending order

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Version: 2024-02-01

27  
papers

10,863  
citations

361296

20  
h-index

526166

27  
g-index

28  
all docs

28  
docs citations

28  
times ranked

8571  
citing authors

#	ARTICLE	IF	CITATIONS
1	Superadiabaticity in Jupiter and Giant Planet Interiors. <i>Astrophysical Journal Letters</i> , 2021, 913, L21.	3.0	8
2	A New Equation of State for Dense Hydrogen–Helium Mixtures. II. Taking into Account Hydrogen–Helium Interactions. <i>Astrophysical Journal</i> , 2021, 917, 4.	1.6	12
3	Generalized Transport Equation for the Autocovariance Function of the Density Field and Mass Invariant in Star-forming Clouds. <i>Astrophysical Journal Letters</i> , 2021, 922, L36.	3.0	3
4	Protostellar Collapse: Regulation of the Angular Momentum and Onset of an Ionic Precursor. <i>Astrophysical Journal</i> , 2020, 900, 180.	1.6	20
5	What Is the Role of Stellar Radiative Feedback in Setting the Stellar Mass Spectrum?. <i>Astrophysical Journal</i> , 2020, 904, 194.	1.6	22
6	Evolution of the Density PDF in Star-forming Clouds: The Role of Gravity. <i>Astrophysical Journal Letters</i> , 2020, 903, L2.	3.0	22
7	The Parallax of VHS J1256+1257 from CFHT and Pan-STARRS-1. <i>Research Notes of the AAS</i> , 2020, 4, 54.	0.3	11
8	How First Hydrostatic Cores, Tidal Forces, and Gravoturbulent Fluctuations Set the Characteristic Mass of Stars. <i>Astrophysical Journal</i> , 2019, 883, 140.	1.6	15
9	New Models of Jupiter in the Context of Juno and Galileo. <i>Astrophysical Journal</i> , 2019, 872, 100.	1.6	114
10	WISE J072003.20-084651.2B is a Massive T Dwarf. <i>Astronomical Journal</i> , 2019, 158, 174.	1.9	27
11	Analytical Core Mass Function (CMF) from Filaments: Under Which Circumstances Can Filament Fragmentation Reproduce the CMF?. <i>Astrophysical Journal</i> , 2017, 847, 114.	1.6	24
12	MAGNETICALLY SELF-REGULATED FORMATION OF EARLY PROTOPLANETARY DISKS. <i>Astrophysical Journal Letters</i> , 2016, 830, L8.	3.0	107
13	New evolutionary models for pre-main sequence and main sequence low-mass stars down to the hydrogen-burning limit. <i>Astronomy and Astrophysics</i> , 2015, 577, A42.	2.1	1,153
14	THE MASS-DEPENDENCE OF ANGULAR MOMENTUM EVOLUTION IN SUN-LIKE STARS. <i>Astrophysical Journal Letters</i> , 2015, 799, L23.	3.0	230
15	VARIATIONS OF THE STELLAR INITIAL MASS FUNCTION IN THE PROGENITORS OF MASSIVE EARLY-TYPE GALAXIES AND IN EXTREME STARBURST ENVIRONMENTS. <i>Astrophysical Journal</i> , 2014, 796, 75.	1.6	112
16	Layered convection as the origin of Saturn’s luminosity anomaly. <i>Nature Geoscience</i> , 2013, 6, 347-350.	5.4	105
17	ANALYTICAL THEORY FOR THE INITIAL MASS FUNCTION. III. TIME DEPENDENCE AND STAR FORMATION RATE. <i>Astrophysical Journal</i> , 2013, 770, 150.	1.6	84
18	Simulations of protostellar collapse using multigroup radiation hydrodynamics. <i>Astronomy and Astrophysics</i> , 2013, 557, A90.	2.1	52

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19	ANALYTICAL THEORY FOR THE INITIAL MASS FUNCTION. II. PROPERTIES OF THE FLOW. <i>Astrophysical Journal</i> , 2009, 702, 1428-1442.	1.6	171
20	Analytical Theory for the Initial Mass Function: CO Clumps and Prestellar Cores. <i>Astrophysical Journal</i> , 2008, 684, 395-410.	1.6	437
21	Heat Transport in Giant (Exo)planets: A New Perspective. <i>Astrophysical Journal</i> , 2007, 661, L81-L84.	1.6	171
22	The Initial Mass Function: From Salpeter 1955 to 2005. , 2005, , 41-50.		254
23	Galactic Stellar and Substellar Initial Mass Function. <i>Publications of the Astronomical Society of the Pacific</i> , 2003, 115, 763-795.	1.0	6,700
24	Theory of Low-Mass Stars and Substellar Objects. <i>Annual Review of Astronomy and Astrophysics</i> , 2000, 38, 337-377.	8.1	462
25	Equation of state of fully ionized electron-ion plasmas. <i>Physical Review E</i> , 1998, 58, 4941-4949.	0.8	134
26	Fluid hydrogen at high density: Pressure ionization. <i>Physical Review A</i> , 1992, 46, 2084-2100.	1.0	222
27	The molecular-metallic transition of hydrogen and the structure of Jupiter and Saturn. <i>Astrophysical Journal</i> , 1992, 391, 817.	1.6	178