Javier Ballesteros-Paredes

List of Publications by Year
in descending order

42 papers	1,972 citations	257357 24 h-index	302012 39 g-index
44 all docs	44 docs citations	44 times ranked	1596 citing authors

#	Article	IF	Citations
1	Gravity or turbulence? Velocity dispersion-size relation. Monthly Notices of the Royal Astronomical Society, 2011, 411, 65-70.	1.6	188
2	Global hierarchical collapse in molecular clouds. Towards a comprehensive scenario. Monthly Notices of the Royal Astronomical Society, 2019, 490, 3061-3097.	1.6	164
3	Gravity or turbulence? - II. Evolving column density probability distribution functions in molecular clouds. Monthly Notices of the Royal Astronomical Society, 2011, 416, 1436-1442.	1.6	139
4	HIGH- AND LOW-MASS STAR-FORMING REGIONS FROM HIERARCHICAL GRAVITATIONAL FRAGMENTATION. HIGH LOCAL STAR FORMATION RATES WITH LOW GLOBAL EFFICIENCIES. Astrophysical Journal, 2009, 707, 1023-1033.	1.6	125
5	MOLECULAR CLOUD EVOLUTION. III. ACCRETION VERSUS STELLAR FEEDBACK. Astrophysical Journal, 2010, 715, 1302-1317.	1.6	105
6	Six myths on the virial theorem for interstellar clouds. Monthly Notices of the Royal Astronomical Society, 2006, 372, 443-449.	1.6	101
7	A Search for Larsonâ€Type Relations in Numerical Simulations of the ISM: Evidence for Nonconstant Column Densities. Astrophysical Journal, 1997, 474, 292-307.	1.6	96
8	The Molecular Cloud Lifecycle. Space Science Reviews, 2020, 216, 50.	3.7	77
9	GRAVITATIONAL COLLAPSE AND FILAMENT FORMATION: COMPARISON WITH THE PIPE NEBULA. Astrophysical Journal, 2009, 704, 1735-1742.	1.6	73
10	Rapid star formation and global gravitational collapse. Monthly Notices of the Royal Astronomical Society, 2012, 420, 1457-1461.	1.6	72
11	Star Formation Efficiency in Driven, Supercritical, Turbulent Clouds. Astrophysical Journal, 2005, 630, L49-L52.	1.6	65
12	The Physics of Star Cluster Formation and Evolution. Space Science Reviews, 2020, 216, 1.	3.7	65
13	Gravity or turbulence? â€“ III. Evidence of pure thermal Jeans fragmentation at â^¼0.1Âpc scale. Monthly Notices of the Royal Astronomical Society, 2015, 453, 3786-3798.	1.6	64
14	Dynamics of cluster-forming hub-filament systems. Astronomy and Astrophysics, 2019, 629, A81.	2.1	62
15	On the structure of molecular clouds. Monthly Notices of the Royal Astronomical Society, 2012, 427, 2562-2571.	1.6	46
16	Bondiâ€“Hoyleâ€“Littleton accretion and the upper-mass stellar initial mass function. Monthly Notices of the Royal Astronomical Society, 2015, 452, 566-574.	1.6	39
17	From Diffuse Gas to Dense Molecular Cloud Cores. Space Science Reviews, 2020, 216, 1.	3.7	38
18	The nature of the velocity field in molecular clouds - I. The non-magnetic case. Monthly Notices of the Royal Astronomical Society, 2008, , .	1.6	32

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19	SIGNATURES OF STAR CLUSTER FORMATION BY COLD COLLAPSE. Astrophysical Journal, 2015, 815, 27.	1.6	32
20	ENERGY BUDGET OF FORMING CLUMPS IN NUMERICAL SIMULATIONS OF COLLAPSING CLOUDS. Astrophysical Journal, 2016, 833, 113.	1.6	32
21	Are fibres in molecular cloud filaments real objects?. Monthly Notices of the Royal Astronomical Society, 2017, 472, 647-656.	1.6	31
22	The Origin of the Stellar Mass Distribution and Multiplicity. Space Science Reviews, 2020, 216, 1.	3.7	29
23	A HERSCHEL VIEW OF PROTOPLANETARY DISKS IN THE Ïƒ ORI CLUSTER. Astrophysical Journal, 2016, 829, 38.	1.6	26
24	Gravity or turbulence? IV. Collapsing cores in out-of-virial disguise. Monthly Notices of the Royal Astronomical Society, 0, , .	1.6	26
25	Tracers of stellar mass loss - I. Optical and near-IR colours and surface brightness fluctuations. Monthly Notices of the Royal Astronomical Society, 2010, 403, 1213-1238.	1.6	25
26	Kinematics and structure of star-forming regions: insights from cold collapse models. Monthly Notices of the Royal Astronomical Society, 2018, 473, 2372-2377.	1.6	23
27	Tidal forces as a regulator of star formation in Taurus. Monthly Notices of the Royal Astronomical Society: Letters, 2009, 395, L81-L84.	1.2	22
28	On the gravitational content of molecular clouds and their cores. Monthly Notices of the Royal Astronomical Society, 2009, 393, 1563-1572.	1.6	21
29	Magnetized Converging Flows toward the Hot Core in the Intermediate/High-mass Star-forming Region NGC 6334 V. Astrophysical Journal, 2017, 844, 44.	1.6	20
30	Structure and expansion law of Hâ€‰ii regions in structured molecular clouds. Monthly Notices of the Royal Astronomical Society, 2019, 487, 2200-2214.	1.6	20
31	Flipping-up the field: gravitational feedback as a mechanism for young clusters dispersal. Monthly Notices of the Royal Astronomical Society, 2019, 488, 3406-3415.	1.6	17
32	Turbulent Fragmentation and Star Formation. Astrophysics and Space Science, 2004, 292, 193-205.	0.5	16
33	The number fraction of discs around brown dwarfs in Orion OB1a and the 25 Orionis group. Monthly Notices of the Royal Astronomical Society, 2015, 450, 3490-3502.	1.6	15
34	Molecular cloud formation as seen in synthetic Hâ€‰i and molecular gas observations. Monthly Notices of the Royal Astronomical Society, 2015, 452, 1353-1374.	1.6	14
35	Herschel PACS Observations of 4â€“10 Myr Old Classical T Tauri Stars in Orion OB1. Astrophysical Journal, 2018, 859, 1.	1.6	14
36	The Role of Gravity in Producing Power-law Mass Functions. Astrophysical Journal, 2018, 868, 50.	1.6	10

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37	What is the physics behind the Larson massâ€“size relation?. Monthly Notices of the Royal Astronomical Society, 2019, 490, 2648-2655.	1.6	10
38	Why most molecular clouds are gravitationally dominated. Monthly Notices of the Royal Astronomical Society, 2022, 515, 2822-2836.	1.6	7
39	Molecular Clouds: Formation and Disruption. Astrophysics and Space Science, 2004, 289, 243-254.	0.5	6
40	DARK MATTER AS AN ACTIVE GRAVITATIONAL AGENT IN CLOUD COMPLEXES. Astrophysical Journal, 2012, 748, 101.	1.6	3
41	Gravity or turbulence V: Star forming regions undergoing violent relaxation. Monthly Notices of the Royal Astronomical Society, 0, , .	1.6	2
42	Surface brightness fluctuations, tracers of stellar mass-loss?. Proceedings of the International Astronomical Union, 2009, 5, 48-51.	0.0	0