Jesus Zavala Franco

List of Publications by Year
in descending order

65 papers	3,819 citations	126907 33 h-index	118850 62 g-index
66 all docs	66 docs citations	66 times ranked	2896 citing authors

#	Article	IF	Citations
1	Degeneracies between self-interacting dark matter and supernova feedback as cusp-core transformation mechanisms. Monthly Notices of the Royal Astronomical Society, 2022, 513, 3458-3481.	4.4	18
2	ETHOS â€•an effective theory of structure formation: Impact of dark acoustic oscillations on cosmic dawn. Physical Review D, 2021, 103, .	4.7	14
3	The halo mass function and inner structure of ETHOS haloes at high redshift. Monthly Notices of the Royal Astronomical Society, 2021, 506, 128-138.	4.4	11
4	The onset of gravothermal core collapse in velocity-dependent self-interacting dark matter subhaloes. Monthly Notices of the Royal Astronomical Society, 2021, 505, 5327-5339.	4.4	29
5	Conservation of radial actions in time-dependent spherical potentials. Monthly Notices of the Royal Astronomical Society, 2021, 508, 1404-1430.	4.4	2
6	Supernova-driven Mechanism of Cusp-core Transformation: an Appraisal. Astrophysical Journal, 2021, 921, 126.	4.5	13
7	Local group star formation in warm and self-interacting dark matter cosmologies. Monthly Notices of the Royal Astronomical Society, 2020, 498, 702-717.	4.4	9
8	ETHOS â€“ an effective parametrization and classification for structure formation: the non-linear regime at z â‰³ 5. Monthly Notices of the Royal Astronomical Society, 2020, 498, 3403-3419.	4.4	20
9	Galaxy formation with BECDM â€“ II. Cosmic filaments and first galaxies. Monthly Notices of the Royal Astronomical Society, 2020, 494, 2027-2044.	4.4	58
10	Self-Interacting Dark Matter Subhalos in the MilkyÂWayâ€™s Tides. Physical Review Letters, 2020, 124, 141102.	7.8	52
11	Dark Matter Haloes and Subhaloes. Galaxies, 2019, 7, 81.	3.0	74
12	First Star-Forming Structures in Fuzzy Cosmic Filaments. Physical Review Letters, 2019, 123, 141301.	7.8	94
13	ETHOS â€“ an Effective Theory of Structure Formation: detecting dark matter interactions through the Lyman-Î± forest. Monthly Notices of the Royal Astronomical Society, 2019, 487, 522-536.	4.4	23
14	The nature of core formation in dark matter haloes: adiabatic or impulsive?. Monthly Notices of the Royal Astronomical Society, 2019, 485, 1008-1028.	4.4	14
15	ETHOS â€“ an effective theory of structure formation: formation of the first haloes and their stars. Monthly Notices of the Royal Astronomical Society, 2019, 485, 5474-5489.	4.4	14
16	Evaporating the Milky Way halo and its satellites with inelastic self-interacting dark matter. Monthly Notices of the Royal Astronomical Society, 2019, 484, 5437-5452.	4.4	46
17	The interplay of self-interacting dark matter and baryons in shaping the halo evolution. Monthly Notices of the Royal Astronomical Society, 2019, 484, 4563-4573.	4.4	35
18	Diverse dark matter density at sub-kiloparsec scales in MilkyÂWay satellites: Implications for the nature of dark matter. Physical Review D, 2019, 100, .	4.7	47

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19	Binary pulsars as probes of a Galactic dark matter disk. Physics of the Dark Universe, 2018, 19, 1-11.	4.9	17
20	Towards an improved model of self-interacting dark matter haloes. Journal of Cosmology and Astroparticle Physics, 2018, 2018, 038-038.	5.4	24
21	ETHOS â€“ an effective theory of structure formation: predictions for the high-redshift Universe â€“ abundance of galaxies and reionization. Monthly Notices of the Royal Astronomical Society, 2018, 477, 2886-2899.	4.4	42
22	Gravitational lensing and the power spectrum of dark matter substructure: Insights from the ETHOS <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mi>N</mml:mi></mml:math> -body simulations. Physical Review D, 2018, 98, .	4.7	32
23	The structure and assembly history of cluster-sized haloes in self-interacting dark matter. Monthly Notices of the Royal Astronomical Society, 2018, 474, 746-759.	4.4	35
24	The impact of baryonic discs on the shapes and profiles of self-interacting dark matter haloes. Monthly Notices of the Royal Astronomical Society, 2018, 479, 359-367.	4.4	46
25	A rumble in the dark: signatures of self-interacting dark matter in supermassive black hole dynamics and galaxy density profiles. Monthly Notices of the Royal Astronomical Society, 2017, 469, 2845-2854.	4.4	36
26	A merger in the dusty,<i>z</i>= 7.5 galaxy A1689-zD1?. Monthly Notices of the Royal Astronomical Society, 2017, 466, 138-146.	4.4	70
27	Galaxy formation with BECDM â€“ I. Turbulence and relaxation of idealized haloes. Monthly Notices of the Royal Astronomical Society, 2017, 471, 4559-4570.	4.4	208
28	Spreading out and staying sharp â€“ creating diverse rotation curves via baryonic and self-interaction effects. Monthly Notices of the Royal Astronomical Society, 2017, 468, 2283-2295.	4.4	109
29	Angular power spectrum of the diffuse gamma-ray emission as measured by the Fermi Large Area Telescope and constraints on its dark matter interpretation. Physical Review D, 2016, 94, .	4.7	43
30	Contributions to cosmic reionization from dark matter annihilation and decay. Physical Review D, 2016, 94, .	4.7	96
31	ETHOSâ€"an effective theory of structure formation: From dark particle physics to the matter distribution of the Universe. Physical Review D, 2016, 93, .	4.7	155
32	ETHOS â€“ an effective theory of structure formation: dark matter physics as a possible explanation of the small-scale CDM problems. Monthly Notices of the Royal Astronomical Society, 2016, 460, 1399-1416.	4.4	185
33	The link between the assembly of the inner dark matter halo and the angular momentum evolution of galaxies in the EAGLE simulation. Monthly Notices of the Royal Astronomical Society, 2016, 460, 4466-4482.	4.4	86
34	Enhanced tidal stripping of satellites in the galactic halo from dark matter self-interactions. Monthly Notices of the Royal Astronomical Society, 2016, 461, 710-727.	4.4	57
35	Universal clustering of dark matter in phase space. Monthly Notices of the Royal Astronomical Society, 2016, 457, 986-992.	4.4	13
36	Scattering, damping, and acoustic oscillations: Simulating the structure of dark matter halos with relativistic force carriers. Physical Review D, 2014, 90, .	4.7	91

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37	Galactic PeV neutrinos from dark matter annihilation. Physical Review D, 2014, 89, .	4.7	47
38	The growth of galactic bulges through mergers in Î› cold dark matter haloes revisited â€“ II. Morphological mix evolution. Monthly Notices of the Royal Astronomical Society, 2014, 441, 417-430.	4.4	15
39	DARK MATTER CORES IN THE FORNAX AND SCULPTOR DWARF GALAXIES: JOINING HALO ASSEMBLY AND DETAILED STAR FORMATION HISTORIES. Astrophysical Journal Letters, 2014, 782, L39.	8.3	47
40	Dwarf galaxies in CDM and SIDM with baryons: observational probes of the nature of dark matter. Monthly Notices of the Royal Astronomical Society, 2014, 444, 3684-3698.	4.4	166
41	Clustering in the phase space of dark matter haloes â€“ I. Results from the Aquarius simulations. Monthly Notices of the Royal Astronomical Society, 2014, 441, 1317-1328.	4.4	5
42	Clustering in the phase space of dark matter haloes â€“ II. Stable clustering and dark matter annihilation. Monthly Notices of the Royal Astronomical Society, 2014, 441, 1329-1339.	4.4	16
43	Dark matter implications of Fermi-LAT measurement of anisotropies in the diffuse gamma-ray background. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2014, 742, 149-153.	1.6	14
44	Direct detection of self-interacting dark matter. Monthly Notices of the Royal Astronomical Society, 2013, 430, 1722-1735.	4.4	60
45	The abundance of (not just) dark matter haloes. Monthly Notices of the Royal Astronomical Society, 2013, 431, 1366-1382.	4.4	130
46	Constraining self-interacting dark matter with the Milky Wayâ€™s dwarf spheroidals. Monthly Notices of the Royal Astronomical Society: Letters, 2013, 431, L20-L24.	3.3	326
47	Characterization of dark-matter-induced anisotropies in the diffuse gamma-ray background. Monthly Notices of the Royal Astronomical Society, 2013, 429, 1529-1553.	4.4	49
48	The growth of galactic bulges through mergers in Î› CDM haloes revisited â€“ I. Present-day properties. Monthly Notices of the Royal Astronomical Society, 2012, 427, 1503-1516.	4.4	33
49	Removal and mixing of the coronal gas from satellites in galaxy groups: cooling the intragroup gas. Monthly Notices of the Royal Astronomical Society, 2012, 426, 3464-3476.	4.4	8
50	Dark Matter implications of the Fermi-LAT measurement of anisotropies in the diffuse gamma-ray background: Status report. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2012, 692, 132-136.	1.6	2
51	Subhaloes in self-interacting galactic dark matter haloes. Monthly Notices of the Royal Astronomical Society, 2012, 423, 3740-3752.	4.4	431
52	Cosmic X-ray and gamma-ray background from dark matter annihilation. Physical Review D, 2011, 83, .	4.7	28
53	Extragalactic gamma-ray background radiation from dark matter annihilation. Monthly Notices of the Royal Astronomical Society, 2010, , .	4.4	30
54	Relic density and CMB constraints on dark matter annihilation with Sommerfeld enhancement. Physical Review D, 2010, 81, .	4.7	65

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55	THE VELOCITY FUNCTION IN THE LOCAL ENVIRONMENT FROM Î›CDM AND Î›WDM CONSTRAINED SIMULATIONS. Astrophysical Journal, 2009, 700, 1779-1793.	4.5	160
56	Bulges versus discs: the evolution of angular momentum in cosmological simulations of galaxy formation. Monthly Notices of the Royal Astronomical Society, 2008, 387, 364-370.	4.4	82
57	Three-dimensional hydrodynamical simulations of the large-scale structure of W50â^'SS433. Monthly Notices of the Royal Astronomical Society, 2008, 387, 839-844.	4.4	20
58	Constraining the mSUGRA (minimal supergravity) parameter space using the entropy of dark matter halos. Journal of Cosmology and Astroparticle Physics, 2008, 2008, 003.	5.4	3
59	ON THE BARYONIC, STELLAR, AND LUMINOUS SCALING RELATIONS OF DISK GALAXIES. Astronomical Journal, 2008, 136, 1340-1360.	4.7	62
60	Empirical testing of Tsallisâ€™ Thermodynamics as a model for dark matter halos. AIP Conference Proceedings, 2006, , .	0.4	6
61	Entropy considerations in constraining the mSUGRA parameter space. AIP Conference Proceedings, 2006, , .	0.4	1
62	Stellar polytropes and Navarroâ€“Frenkâ€“White halo models: comparison with observations. Journal of Cosmology and Astroparticle Physics, 2006, 2006, 008-008.	5.4	20
63	PIONEER ANOMALY? GRAVITATIONAL PULL DUE TO THE KUIPER BELT. International Journal of Modern Physics D, 2006, 15, 533-544.	2.1	8
64	The luminous and dark matter content of disk galaxies. Astronomy and Astrophysics, 2003, 412, 633-650.	5.1	55
65	The impact of inelastic self-interacting dark matter on the dark matter structure of a Milky Way halo. Monthly Notices of the Royal Astronomical Society, 0, , .	4.4	10