Rowan J Smith

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64 2,847 5 5.05 ext. papers ext. citations avg, IF L-index

#	Paper	IF	Citations
59	SIMULATIONS ON A MOVING MESH: THE CLUSTERED FORMATION OF POPULATION III PROTOSTARS. <i>Astrophysical Journal</i> , 2011 , 737, 75	4.7	324
58	The formation and fragmentation of disks around primordial protostars. <i>Science</i> , 2011 , 331, 1040-2	33.3	280
57	Formation and evolution of primordial protostellar systems. <i>Monthly Notices of the Royal Astronomical Society</i> , 2012 , 424, 399-415	4.3	239
56	CO-dark gas and molecular filaments in Milky Way-type galaxies. <i>Monthly Notices of the Royal Astronomical Society</i> , 2014 , 441, 1628-1645	4.3	123
55	The simultaneous formation of massive stars and stellar clusters. <i>Monthly Notices of the Royal Astronomical Society</i> , 2009 , 400, 1775-1784	4.3	123
54	On the nature of star-forming filaments II. Filament morphologies. <i>Monthly Notices of the Royal Astronomical Society</i> , 2014 , 445, 2900-2917	4.3	116
53	The efficiency of star formation in clustered and distributed regions. <i>Monthly Notices of the Royal Astronomical Society</i> , 2011 , 410, 2339-2346	4.3	90
52	The effects of accretion luminosity upon fragmentation in the early universe. <i>Monthly Notices of the Royal Astronomical Society</i> , 2011 , 414, 3633-3644	4.3	88
51	THE ROLE OF COSMIC-RAY PRESSURE IN ACCELERATING GALACTIC OUTFLOWS. <i>Astrophysical Journal Letters</i> , 2016 , 827, L29	7.9	82
50	THE BONES OF THE MILKY WAY. Astrophysical Journal, 2014, 797, 53	4.7	81
49	On the nature of star-forming filaments []I. Subfilaments and velocities. <i>Monthly Notices of the Royal Astronomical Society</i> , 2016 , 455, 3640-3655	4.3	80
48	Fragmentation in molecular clouds and its connection to the IMF. <i>Monthly Notices of the Royal Astronomical Society</i> , 2009 , 396, 830-841	4.3	61
47	A theoretical explanation for the Central Molecular Zone asymmetry. <i>Monthly Notices of the Royal Astronomical Society</i> , 2018 , 475, 2383-2402	4.3	49
46	Shocks, cooling and the origin of star formation rates in spiral galaxies. <i>Monthly Notices of the Royal Astronomical Society</i> , 2013 , 430, 1790-1800	4.3	49
45	LINE PROFILES OF CORES WITHIN CLUSTERS. II. SIGNATURES OF DYNAMICAL COLLAPSE DURING HIGH-MASS STAR FORMATION. <i>Astrophysical Journal</i> , 2013 , 771, 24	4.7	49
44	The structure of molecular clouds and the universality of the clump mass function. <i>Monthly Notices of the Royal Astronomical Society</i> , 2008 , 391, 1091-1099	4.3	47
43	The CARMA-NRO Orion Survey. Astrophysical Journal, Supplement Series, 2018, 236, 25	8	44

(2019-2012)

42	Variable accretion rates and fluffy first stars. <i>Monthly Notices of the Royal Astronomical Society</i> , 2012 , 424, 457-463	4.3	43	
41	LINE PROFILES OF CORES WITHIN CLUSTERS. I. THE ANATOMY OF A FILAMENT. <i>Astrophysical Journal</i> , 2012 , 750, 64	4.7	41	
40	Simultaneous low- and high-mass star formation in a massive protocluster: ALMA observations of G11.92 0 .61?. <i>Monthly Notices of the Royal Astronomical Society</i> , 2017 , 468, 3694-3708	4.3	35	
39	Simulations of the star-forming molecular gas in an interacting M51-like galaxy. <i>Monthly Notices of the Royal Astronomical Society</i> , 2020 , 492, 2973-2995	4.3	31	
38	Massive 70 In quiet clumps III. Non-thermal motions driven by gravity in massive star formation?. <i>Monthly Notices of the Royal Astronomical Society</i> , 2018 , 473, 4975-4985	4.3	30	
37	A quantification of the non-spherical geometry and accretion of collapsing cores. <i>Monthly Notices of the Royal Astronomical Society</i> , 2011 , 411, 1354-1366	4.3	29	
36	Thermal Feedback in the High-mass Star- and Cluster-forming Region W51. <i>Astrophysical Journal</i> , 2017 , 842, 92	4.7	28	
35	CO-dark gas and molecular filaments in Milky Way-type galaxies III. The temperature distribution of the gas. <i>Monthly Notices of the Royal Astronomical Society</i> , 2016 , 462, 3011-3025	4.3	28	
34	WEAKLY INTERACTING MASSIVE PARTICLE DARK MATTER AND FIRST STARS: SUPPRESSION OF FRAGMENTATION IN PRIMORDIAL STAR FORMATION. <i>Astrophysical Journal</i> , 2012 , 761, 154	4.7	28	
33	The Cloud Factory I: Generating resolved filamentary molecular clouds from galactic-scale forces. <i>Monthly Notices of the Royal Astronomical Society</i> , 2020 , 492, 1594-1613	4.3	28	
32	Simulations of the Milky Way® Central Molecular Zone III. Star formation. <i>Monthly Notices of the Royal Astronomical Society</i> , 2020 , 497, 5024-5040	4.3	27	
31	THE IMPACT OF THERMODYNAMICS ON GRAVITATIONAL COLLAPSE: FILAMENT FORMATION AND MAGNETIC FIELD AMPLIFICATION. <i>Astrophysical Journal Letters</i> , 2012 , 760, L28	7.9	27	
30	The CARMA-NRO Orion Survey. Astronomy and Astrophysics, 2019, 623, A142	5.1	25	
29	Simulations of the Milky Way\(\text{\text{\text{S}}}\) central molecular zone \(\text{\text{\text{I}}}\). Gas dynamics. Monthly Notices of the Royal Astronomical Society, 2020, 499, 4455-4478	4.3	25	
28	Line profiles of cores within clusters III. What is the most reliable tracer of core collapse in dense clusters?. <i>Monthly Notices of the Royal Astronomical Society</i> , 2014 , 444, 874-886	4.3	19	
27	The geometry of the gas surrounding the Central Molecular Zone: on the origin of localized molecular clouds with extreme velocity dispersions. <i>Monthly Notices of the Royal Astronomical Society</i> , 2019 , 488, 4663-4673	4.3	17	
26	Low-metallicity star formation: relative impact of metals and magnetic fields. <i>Monthly Notices of the Royal Astronomical Society</i> , 2014 , 442, 3112-3126	4.3	16	
25	Strong Excess Faraday Rotation on the Inside of the Sagittarius Spiral Arm. <i>Astrophysical Journal Letters</i> , 2019 , 887, L7	7.9	13	

24	A SOFIA Survey of [C ii] in the Galaxy M51. I. [C ii] as a Tracer of Star Formation. <i>Astrophysical Journal Letters</i> , 2018 , 869, L30	7.9	10
23	The fragmentation of expanding shells III. Oligarchic accretion and the mass spectrum of fragments. <i>Monthly Notices of the Royal Astronomical Society</i> , 2011 , 411, 2230-2240	4.3	9
22	The history of dynamics and stellar feedback revealed by the H I filamentary structure in the disk of the Milky Way. <i>Astronomy and Astrophysics</i> , 2020 , 642, A163	5.1	8
21	The CARMA-NRO Orion Survey: Core Emergence and Kinematics in the Orion A Cloud. <i>Astrophysical Journal</i> , 2019 , 882, 45	4.7	5
20	The structure and kinematics of dense gas in NGC 2068. <i>Monthly Notices of the Royal Astronomical Society</i> , 2013 , 429, 3252-3265	4.3	5
19	Dynamically Driven Inflow onto the Galactic Center and its Effect upon Molecular Clouds. <i>Astrophysical Journal</i> , 2021 , 922, 79	4.7	5
18	Synthetic Large-scale Galactic Filaments: On Their Formation, Physical Properties, and Resemblance to Observations. <i>Astrophysical Journal</i> , 2019 , 887, 186	4.7	5
17	sgame v3: Gas Fragmentation in Postprocessing of Cosmological Simulations for More Accurate Infrared Line Emission Modeling. <i>Astrophysical Journal</i> , 2021 , 922, 88	4.7	4
16	Formation and evolution of primordial protostellar systems 2012,		3
15	Gravity and Rotation Drag the Magnetic Field in High-mass Star Formation. <i>Astrophysical Journal</i> , 2020 , 904, 168	4.7	3
14	The Core Mass Function in the Orion Nebula Cluster Region: What Determines the Final Stellar Masses?. <i>Astrophysical Journal Letters</i> , 2021 , 910, L6	7.9	3
13	A SOFIA Survey of [C ii] in the Galaxy M51. II. [C ii] and CO Kinematics across the Spiral Arms. <i>Astrophysical Journal</i> , 2020 , 900, 132	4.7	2
12	The Cloud Factory II: gravoturbulent kinematics of resolved molecular clouds in a galactic potential. <i>Monthly Notices of the Royal Astronomical Society</i> , 2020 , 500, 5268-5296	4.3	2
11	Simulations of the star-forming molecular gas in an interacting M51-like galaxy: cloud population statistics. <i>Monthly Notices of the Royal Astronomical Society</i> , 2021 , 505, 5438-5459	4.3	2
10	The CARMA-NRO Orion Survey: Filament Formation via Collision-induced Magnetic Reconnection The Stick in Orion A. <i>Astrophysical Journal</i> , 2021 , 906, 80	4.7	2
9	The Effects of Accretion Luminosity on the Environment of the First Stars 2010 ,		1
8	High-resolution CARMA Observation of Molecular Gas in the North America and Pelican Nebulae. <i>Astronomical Journal</i> , 2021 , 161, 229	4.9	О
7	The CARMA-NRO Orion SurveyData Release. <i>Research Notes of the AAS</i> , 2021 , 5, 55	0.8	0

LIST OF PUBLICATIONS

6	Is the molecular KS relationship universal down to low metallicities?. <i>Monthly Notices of the Royal Astronomical Society</i> , 2022 , 510, 4146-4165	4.3	О
5	Kinematic and thermal structure at the onset of high-mass star formation - ISOSS23053. <i>Proceedings of the International Astronomical Union</i> , 2015 , 12, 125-126	0.1	
4	The Formation of Massive Stars. <i>Proceedings of the International Astronomical Union</i> , 2010 , 6, 57-64	0.1	
3	The Birth of an IMF. Thirty Years of Astronomical Discovery With UKIRT, 2014, 323-327	0.3	
2	Spiral Shocks, Cooling, and the Origin of Star Formation Rates. <i>Thirty Years of Astronomical Discovery With UKIRT</i> , 2014 , 151-155	0.3	
1	The Magnetic Field in the Milky Way Filamentary Bone G47. Astrophysical Journal Letters, 2022 , 926, L6	7.9	