

# Helen R Russell

## List of Publications by Year in descending order

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86  
papers

4,601  
citations

66336

42  
h-index

102480

66  
g-index

86  
all docs

86  
docs citations

86  
times ranked

3118  
citing authors

#	ARTICLE	IF	CITATIONS
1	The quiescent intracluster medium in the core of the Perseus cluster. <i>Nature</i> , 2016, 535, 117-121.	27.8	348
2	An Infrared Survey of Brightest Cluster Galaxies. II. Why are Some Brightest Cluster Galaxies Forming Stars?. <i>Astrophysical Journal</i> , 2008, 681, 1035-1045.	4.5	229
3	Star formation inside a galactic outflow. <i>Nature</i> , 2017, 544, 202-206.	27.8	164
4	Radiative efficiency, variability and Bondi accretion on to massive black holes: the transition from radio AGN to quasars in brightest cluster galaxies. <i>Monthly Notices of the Royal Astronomical Society</i> , 2013, 432, 530-553.	4.4	139
5	Cold, clumpy accretion onto an active supermassive black hole. <i>Nature</i> , 2016, 534, 218-221.	27.8	137
6	A MECHANISM FOR STIMULATING AGN FEEDBACK BY LIFTING GAS IN MASSIVE GALAXIES. <i>Astrophysical Journal</i> , 2016, 830, 79.	4.5	130
7	A $10^{10}$ SOLAR MASS FLOW OF MOLECULAR GAS IN THE A1835 BRIGHTEST CLUSTER GALAXY. <i>Astrophysical Journal</i> , 2014, 785, 44.	4.5	112
8	A wide Chandra view of the core of the Perseus cluster. <i>Monthly Notices of the Royal Astronomical Society</i> , 2011, 418, 2154-2164.	4.4	108
9	X-ray observations of the galaxy cluster PKS 0745-191: to the virial radius, and beyond. <i>Monthly Notices of the Royal Astronomical Society</i> , 2009, 395, 657-666.	4.4	104
10	Inside the Bondi radius of M87. <i>Monthly Notices of the Royal Astronomical Society</i> , 2015, 451, 588-600.	4.4	95
11	A new bound on axion-like particles. <i>Journal of Cosmology and Astroparticle Physics</i> , 2017, 2017, 036-036.	5.4	92
12	Ubiquitous cold and massive filaments in cool core clusters. <i>Astronomy and Astrophysics</i> , 2019, 631, A22.	5.1	92
13	Astrophysical Limits on Very Light Axion-like Particles from Chandra Grating Spectroscopy of NGC 1275. <i>Astrophysical Journal</i> , 2020, 890, 59.	4.5	89
14	A Galaxy-scale Fountain of Cold Molecular Gas Pumped by a Black Hole. <i>Astrophysical Journal</i> , 2018, 865, 13.	4.5	85
15	Hitomi Constraints on the 3.5 keV Line in the Perseus Galaxy Cluster. <i>Astrophysical Journal Letters</i> , 2017, 837, L15.	8.3	84
16	The Onset of Thermally Unstable Cooling from the Hot Atmospheres of Giant Galaxies in Clusters: Constraints on Feedback Models. <i>Astrophysical Journal</i> , 2017, 851, 66.	4.5	83
17	Shock fronts, electron-ion equilibration and intracluster medium transport processes in the merging cluster Abell 2146. <i>Monthly Notices of the Royal Astronomical Society</i> , 2012, 423, 236-255.	4.4	79
18	Alma Observations of Massive Molecular Gas Filaments Encasing Radio Bubbles in the Phoenix Cluster. <i>Astrophysical Journal</i> , 2017, 836, 130.	4.5	79

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19	Driving massive molecular gas flows in central cluster galaxies with AGN feedback. Monthly Notices of the Royal Astronomical Society, 2019, 490, 3025-3045.	4.4	79
20	Deep high-resolution X-ray spectra from cool-core clusters. Monthly Notices of the Royal Astronomical Society, 2010, 402, 127-144.	4.4	75
21	Do sound waves transport the AGN energy in the Perseus cluster?. Monthly Notices of the Royal Astronomical Society: Letters, 2017, 464, L1-L5.	3.3	75
22	Direct X-ray spectral deprojection of galaxy clusters. Monthly Notices of the Royal Astronomical Society, 2008, 390, 1207-1216.	4.4	74
23	MASSIVE MOLECULAR GAS FLOWS IN THE A1664 BRIGHTEST CLUSTER GALAXY. Astrophysical Journal, 2014, 784, 78.	4.5	72
24	A comprehensive study of the radio properties of brightest cluster galaxies. Monthly Notices of the Royal Astronomical Society, 2015, 453, 1201-1222.	4.4	72
25	ALMA observations of cold molecular gas filaments trailing rising radio bubbles in PKS0745+191. Monthly Notices of the Royal Astronomical Society, 2016, 458, 3134-3149.	4.4	72
26	A very deep Chandra view of metals, sloshing and feedback in the Centaurus cluster of galaxies. Monthly Notices of the Royal Astronomical Society, 2016, 457, 82-109.	4.4	71
27	The Origin of Molecular Clouds in Central Galaxies. Astrophysical Journal, 2018, 853, 177.	4.5	70
28	An Infrared Survey of Brightest Cluster Galaxies. I.. Astrophysical Journal, Supplement Series, 2008, 176, 39-58.	7.7	67
29	Optical emission line nebulae in galaxy cluster cores 1: the morphological, kinematic and spectral properties of the sample. Monthly Notices of the Royal Astronomical Society, 2016, 460, 1758-1789.	4.4	66
30	The X-ray luminous cluster underlying the bright radio-quiet quasar H1821+643. Monthly Notices of the Royal Astronomical Society, 2010, 402, 1561-1579.	4.4	63
31	The ASTRO-H X-ray Observatory. Proceedings of SPIE, 2012, , .	0.8	63
32	Cycling of the powerful AGN in MS 0735.6+7421 and the duty cycle of radio AGN in clusters. Monthly Notices of the Royal Astronomical Society, 2014, 442, 3192-3205.	4.4	61
33	A giant radio halo in the cool core cluster CL1821+643. Monthly Notices of the Royal Astronomical Society: Letters, 2014, 444, L44-L48.	3.3	60
34	Detecting edges in the X-ray surface brightness of galaxy clusters. Monthly Notices of the Royal Astronomical Society, 2016, 460, 1898-1911.	4.4	54
35	Chandra observation of two shock fronts in the merging galaxy cluster Abell 2146. Monthly Notices of the Royal Astronomical Society, 2010, , no-no.	4.4	51
36	A Universal Entropy Profile for the Hot Atmospheres of Galaxies and Clusters within $R_{\text{sub}} > 2500$ . Astrophysical Journal, 2018, 862, 39.	4.5	51

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37	Close entrainment of massive molecular gas flows by radio bubbles in the central galaxy of Abell 1795. <i>Monthly Notices of the Royal Astronomical Society</i> , 2017, 472, 4024-4037.	4.4	49
38	MOLECULAR GAS ALONG A BRIGHT $\text{H I} \pm$ FILAMENT IN 2A 0335+096 REVEALED BY ALMA. <i>Astrophysical Journal</i> , 2016, 832, 148.	4.5	48
39	The ASTRO-H (Hitomi) x-ray astronomy satellite. <i>Proceedings of SPIE</i> , 2016, , .	0.8	47
40	X-Ray Scaling Relations of Early-type Galaxies. <i>Astrophysical Journal</i> , 2018, 857, 32.	4.5	47
41	A merger mystery: no extended radio emission in the merging cluster Abell 2146. <i>Monthly Notices of the Royal Astronomical Society: Letters</i> , 2011, 417, L1-L5.	3.3	45
42	<i>Herschel</i> observations of extended atomic gas in the core of the Perseus cluster. <i>Monthly Notices of the Royal Astronomical Society</i> , 2012, 426, 2957-2977.	4.4	44
43	Cold gas dynamics in Hydra-A: evidence for a rotating disc. <i>Monthly Notices of the Royal Astronomical Society</i> , 2014, 437, 862-878.	4.4	43
44	Anatomy of a Cooling Flow: The Feedback Response to Pure Cooling in the Core of the Phoenix Cluster. <i>Astrophysical Journal</i> , 2019, 885, 63.	4.5	42
45	The relation between line emission and brightest cluster galaxies in three exceptional clusters: evidence for gas cooling from the intracluster medium. <i>Monthly Notices of the Royal Astronomical Society</i> , 2012, 421, 3409-3417.	4.4	37
46	A relationship between halo mass, cooling, active galactic nuclei heating and the co-evolution of massive black holes. <i>Monthly Notices of the Royal Astronomical Society</i> , 2017, 464, 4360-4382.	4.4	37
47	Hydrostatic Chandra X-ray analysis of SPT-selected galaxy clusters “ I. Evolution of profiles and core properties. <i>Monthly Notices of the Royal Astronomical Society</i> , 2018, 474, 1065-1098.	4.4	37
48	New constraints on light axion-like particles using <i>Chandra</i> transmission grating spectroscopy of the powerful cluster-hosted quasar H1821+643. <i>Monthly Notices of the Royal Astronomical Society</i> , 2021, 510, 1264-1277.	4.4	36
49	High radio-frequency properties and variability of brightest cluster galaxies. <i>Monthly Notices of the Royal Astronomical Society</i> , 2015, 453, 1223-1240.	4.4	35
50	Measuring bulk flows of the intracluster medium in the Perseus and Coma galaxy clusters using <i>XMM-Newton</i> . <i>Astronomy and Astrophysics</i> , 2020, 633, A42.	5.1	34
51	Mass Distribution in Galaxy Cluster Cores. <i>Astrophysical Journal</i> , 2017, 837, 51.	4.5	31
52	Origins of Molecular Clouds in Early-type Galaxies. <i>Astrophysical Journal</i> , 2019, 887, 149.	4.5	29
53	The effect of the quasar H1821+643 on the surrounding intracluster medium: revealing the underlying cooling flow. <i>Monthly Notices of the Royal Astronomical Society</i> , 2014, 442, 2809-2816.	4.4	28
54	Effects of the variability of the nucleus of NGC 1275 on X-ray observations of the surrounding intracluster medium. <i>Monthly Notices of the Royal Astronomical Society</i> , 2015, 451, 3061-3067.	4.4	25

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55	A $^{13}\text{CO}$ Detection in a Brightest Cluster Galaxy. <i>Astrophysical Journal</i> , 2017, 848, 101.	4.5	25
56	Sunyaev-Zeldovich observation of the Bullet-like cluster Abell 2146 with the Arcminute Microkelvin Imager. <i>Monthly Notices of the Royal Astronomical Society</i> , 2011, 414, 3751-3763.	4.4	23
57	Residual cooling and persistent star formation amid active galactic nucleus feedback in Abell 2597. <i>Monthly Notices of the Royal Astronomical Society</i> , 2012, 424, 1042-1060.	4.4	23
58	<i>HST</i> imaging of the dusty filaments and nucleus swirl in NGC 4696 at the centre of the Centaurus Cluster. <i>Monthly Notices of the Royal Astronomical Society</i> , 2016, 461, 922-928.	4.4	23
59	Mystery solved: discovery of extended radio emission in the merging galaxy cluster Abell 2146. <i>Monthly Notices of the Royal Astronomical Society</i> , 2018, 475, 2743-2753.	4.4	23
60	The bow shock, cold fronts and disintegrating cool core in the merging galaxy group RX J0751.3+5012. <i>Monthly Notices of the Royal Astronomical Society</i> , 2014, 444, 629-641.	4.4	22
61	Molecular Gas Filaments and Star-forming Knots Beneath an X-Ray Cavity in RXC J1504-0248. <i>Astrophysical Journal</i> , 2018, 863, 193.	4.5	22
62	An Enormous Molecular Gas Flow in the RX J0821+0752 Galaxy Cluster. <i>Astrophysical Journal</i> , 2019, 870, 57.	4.5	22
63	Multiphase signatures of active galactic nucleus feedback in Abell 2597. <i>Monthly Notices of the Royal Astronomical Society</i> , 2012, 424, 1026-1041.	4.4	21
64	Feedback, scatter and structure in the core of the PKS 0745-191 galaxy cluster. <i>Monthly Notices of the Royal Astronomical Society</i> , 2014, 444, 1497-1517.	4.4	21
65	THE X-RAY SPECTRUM OF THE COOLING-FLOW QUASAR H1821+643: A MASSIVE BLACK HOLE FEEDING OFF THE INTRACLUSTER MEDIUM. <i>Astrophysical Journal Letters</i> , 2014, 792, L41.	8.3	21
66	The imprints of AGN feedback within a supermassive black hole's sphere of influence. <i>Monthly Notices of the Royal Astronomical Society</i> , 2018, 477, 3583-3599.	4.4	19
67	Searching for cool and cooling X-ray emitting gas in 45 galaxy clusters and groups. <i>Monthly Notices of the Royal Astronomical Society</i> , 2019, 485, 1757-1774.	4.4	17
68	A series of shocks and edges in Abell 2219. <i>Monthly Notices of the Royal Astronomical Society</i> , 2017, 464, 2896-2909.	4.4	16
69	Evidence of Runaway Gas Cooling in the Absence of Supermassive Black Hole Feedback at the Epoch of Cluster Formation. <i>Astrophysical Journal Letters</i> , 2020, 898, L50.	8.3	15
70	Riding the wake of a merging galaxy cluster. <i>Monthly Notices of the Royal Astronomical Society</i> , 2012, 420, 2956-2968.	4.4	14
71	Dynamical analysis of galaxy cluster merger Abell 2146. <i>Monthly Notices of the Royal Astronomical Society</i> , 2015, 453, 2719-2731.	4.4	14
72	The distribution of dark and luminous matter in the unique galaxy cluster merger Abell 2146. <i>Monthly Notices of the Royal Astronomical Society</i> , 2016, 459, 517-527.	4.4	14

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73	AGN feedback in the Phoenix cluster. Monthly Notices of the Royal Astronomical Society, 2018, 480, 4113-4123.	4.4	14
74	The X-ray luminous cluster underlying the $z = 1.04$ quasar PKS f1229 $\hat{\sim}$ 021. Monthly Notices of the Royal Astronomical Society, 2012, 422, 590-599.	4.4	13
75	AMI observations of 10 CLASH galaxy clusters: SZ and X-ray data used together to determine cluster dynamical states. Monthly Notices of the Royal Astronomical Society, 2016, 460, 569-589.	4.4	13
76	Revealing a Highly Dynamic Cluster Core in Abell 1664 with Chandra. Astrophysical Journal, 2019, 875, 65.	4.5	11
77	Constraining merging galaxy clusters with X-ray and lensing simulations and observations: the case of Abell 2146. Monthly Notices of the Royal Astronomical Society, 2021, 509, 1201-1216.	4.4	10
78	Discovery of a diffuse optical line emitting halo in the core of the Centaurus cluster of galaxies: line emission outside the protection of the filaments. Monthly Notices of the Royal Astronomical Society, 2019, 483, 4984-4998.	4.4	8
79	<i>Chandra</i> X-ray observations of the hyper-luminous infrared galaxy IRAS F15307+3252. Monthly Notices of the Royal Astronomical Society, 2017, 464, 2223-2233.	4.4	7
80	A Massive, Clumpy Molecular Gas Distribution and Displaced AGN in Zw 3146. Astrophysical Journal, 2021, 910, 53.	4.5	7
81	Thermally Unstable Cooling Stimulated by Uplift: The Spoiler Clusters. Astrophysical Journal, 2020, 897, 57.	4.5	7
82	Suppressed cooling and turbulent heating in the core of X-ray luminous clusters RXCJ1504.1-0248 and Abell 1664. Monthly Notices of the Royal Astronomical Society, 2021, 505, 1589-1599.	4.4	6
83	The structure of cluster merger shocks: turbulent width and the electron heating time-scale. Monthly Notices of the Royal Astronomical Society, 2022, 514, 1477-1493.	4.4	5
84	The mass distribution of the unusual merging cluster Abell 2146 from strong lensing. Monthly Notices of the Royal Astronomical Society, 2017, 464, 2469-2480.	4.4	4
85	Turbulent magnetic fields in merging clusters: a case study of Abell 2146. Monthly Notices of the Royal Astronomical Society, 2022, 512, 2157-2170.	4.4	2
86	Spitzer Observations of Star Formation in Brightest Cluster Galaxies. , 2009, , .		0