Roeland P Van Der Marel

List of Publications by Citations

82 papers	6,531 citations	41 h-index	80 g-index
84 ext. papers	7,120 ext. citations	4.8 avg, IF	6.11 L-index

#	Paper	IF	Citations
82	A new method for the identification of non-Gaussian line profiles in elliptical galaxies. *Astrophysical Journal*, **1993**, 407, 525	4.7	564
81	Resolved Massive Star Clusters in the Milky Way and Its Satellites: Brightness Profiles and a Catalog of Fundamental Parameters. *Astrophysical Journal, Supplement Series*, **2005**, 161, 304-360	8	543
80	New Understanding of Large Magellanic Cloud Structure, Dynamics, and Orbit from Carbon Star Kinematics. *Astronomical Journal*, **2002**, 124, 2639-2663	4.9	398
79	Are the Magellanic Clouds on Their First Passage about the Milky Way?. *Astrophysical Journal*, **2007**, 668, 949-967	4.7	356
78	THIRD-EPOCH MAGELLANIC CLOUD PROPER MOTIONS. I.HUBBLE SPACE TELESCOPE/WFC3 DATA AND ORBIT IMPLICATIONS. *Astrophysical Journal*, **2013**, 764, 161	4.7	322
77	Magellanic Cloud Structure from Near-Infrared Surveys. I. The Viewing Angles of the Large Magellanic Cloud. *Astronomical Journal*, **2001**, 122, 1807-1826	4.9	256
76	The Proper Motion of the Large Magellanic Cloud UsingHST. *Astrophysical Journal*, **2006**, 638, 772-785	4.7	250
75	The role of dwarf galaxy interactions in shaping the Magellanic System and implications for Magellanic Irregulars. *Monthly Notices of the Royal Astronomical Society*, **2012**, 421, 2109-2138	4.3	240
74	Is the SMC Bound to the LMC? TheHubble Space TelescopeProper Motion of the SMC. *Astrophysical Journal*, **2006**, 652, 1213-1229	4.7	212
73	THIRD-EPOCH MAGELLANIC CLOUD PROPER MOTIONS. II. THE LARGE MAGELLANIC CLOUD ROTATION FIELD IN THREE DIMENSIONS. *Astrophysical Journal*, **2014**, 781, 121	4.7	171
72	NEW LIMITS ON AN INTERMEDIATE-MASS BLACK HOLE IN OMEGA CENTAURI. I.HUBBLE SPACE TELESCOPEPHOTOMETRY AND PROPER MOTIONS. *Astrophysical Journal*, **2010**, 710, 1032-1062	4.7	164
71	THE SPACE MOTION OF LEO I: THE MASS OF THE MILKY WAY'S DARK MATTER HALO. *Astrophysical Journal*, **2013**, 768, 140	4.7	154
70	NEW LIMITS ON AN INTERMEDIATE-MASS BLACK HOLE IN OMEGA CENTAURI. II. DYNAMICAL MODELS. *Astrophysical Journal*, **2010**, 710, 1063-1088	4.7	152
69	THE M31 VELOCITY VECTOR. II. RADIAL ORBIT TOWARD THE MILKY WAY AND IMPLIED LOCAL GROUP MASS. *Astrophysical Journal*, **2012**, 753, 8	4.7	151
68	Gaia DR2 proper motions of dwarf galaxies within 420 kpc. *Astronomy and Astrophysics*, **2018**, 619, A103	5.1	149
67	Magellanic Cloud Structure from Near-Infrared Surveys. II. Star Count Maps and the Intrinsic Elongation of the Large Magellanic Cloud. *Astronomical Journal*, **2001**, 122, 1827-1843	4.9	124
66	HYDRA II: A FAINT AND COMPACT MILKY WAY DWARF GALAXY FOUND IN THE SURVEY OF THE MAGELLANIC STELLAR HISTORY. *Astrophysical Journal Letters*, **2015**, 804, L5	7.9	119

65	HUBBLE SPACE TELESCOPEPROPER MOTION (HSTPROMO) CATALOGS OF GALACTIC GLOBULAR CLUSTERS. II. KINEMATIC PROFILES AND MAPS. *Astrophysical Journal*, **2015**, 803, 29	4.7	110
64	RAM PRESSURE STRIPPING OF THE LARGE MAGELLANIC CLOUD□S DISK AS A PROBE OF THE MILKY WAY□S CIRCUMGALACTIC MEDIUM. *Astrophysical Journal*, **2015**, 815, 77	4.7	93
63	M31 Transverse Velocity and Local Group Mass from Satellite Kinematics. *Astrophysical Journal*, **2008**, 678, 187-199	4.7	93
62	THE SPACE MOTION OF LEO I:HUBBLE SPACE TELESCOPEPROPER MOTION AND IMPLIED ORBIT. *Astrophysical Journal*, **2013**, 768, 139	4.7	92
61	Evidence for an Intermediate-mass Milky Way fromGaiaDR2 Halo Globular Cluster Motions. *Astrophysical Journal*, **2019**, 873, 118	4.7	90
60	THE M31 VELOCITY VECTOR. I.HUBBLE SPACE TELESCOPEPROPER-MOTION MEASUREMENTS. *Astrophysical Journal*, **2012**, 753, 7	4.7	88
59	The Missing Satellites of the Magellanic Clouds? Gaia Proper Motions of the Recently Discovered Ultra-faint Galaxies. *Astrophysical Journal*, **2018**, 867, 19	4.7	85
58	No energy equipartition in globular clusters. *Monthly Notices of the Royal Astronomical Society*, **2013**, 435, 3272-3282	4.3	83
57	Intermediate-Mass Black Hole Induced Quenching of Mass Segregation in Star Clusters. *Astrophysical Journal*, **2008**, 686, 303-309	4.7	63
56	HUBBLE SPACE TELESCOPEPROPER MOTION (HSTPROMO) CATALOGS OF GALACTIC GLOBULAR CLUSTERS. III. DYNAMICAL DISTANCES AND MASS-TO-LIGHT RATIOs. *Astrophysical Journal*, **2015**, 812, 149	4.7	62
55	LOW SURFACE BRIGHTNESS IMAGING OF THE MAGELLANIC SYSTEM: IMPRINTS OF TIDAL INTERACTIONS BETWEEN THE CLOUDS IN THE STELLAR PERIPHERY. *Astrophysical Journal*, **2016**, 825, 20	4.7	61
54	TheHSTLarge Programme on□entauri. II. Internal Kinematics. *Astrophysical Journal*, **2018**, 853, 86	4.7	59
53	SMASH: Survey of the MAgellanic Stellar History. *Astronomical Journal*, **2017**, 154, 199	4.9	59
52	AbsoluteHubble Space TelescopeProper Motion (HSTPROMO) of Distant Milky Way Globular Clusters: Galactocentric Space Velocities and the Milky Way Mass. *Astrophysical Journal*, **2018**, 862, 52	4.7	58
51	THE HUBBLE SPACE TELESCOPE UV LEGACY SURVEY OF GALACTIC GLOBULAR CLUSTERS: THE INTERNAL KINEMATICS OF THE MULTIPLE STELLAR POPULATIONS IN NGC 2808. *Astrophysical Journal Letters*, **2015**, 810, L13	7.9	58
50	THE M31 VELOCITY VECTOR. III. FUTURE MILKY WAY M31□M33 ORBITAL EVOLUTION, MERGING, AND FATE OF THE SUN. *Astrophysical Journal*, **2012**, 753, 9	4.7	58
49	The State-of-the-artHSTAstro-photometric Analysis of the Core of□entauri. I. The Catalog. *Astrophysical Journal*, **2017**, 842, 6	4.7	57
48	Hubble Space TelescopeProper Motion (HSTPROMO) Catalogs of Galactic Globular Clusters. V. The Rapid Rotation of 47 Tuc Traced and Modeled in Three Dimensions. *Astrophysical Journal*, **2017**, 844, 167	4.7	52

47	The Orbital Histories of Magellanic Satellites Using Gaia DR2 Proper Motions. *Astrophysical Journal*, **2020**, 893, 121	4.7	51
46	First Gaia Dynamics of the Andromeda System: DR2 Proper Motions, Orbits, and Rotation of M31 and M33. *Astrophysical Journal*, **2019**, 872, 24	4.7	48
45	The Proper Motion Field of the Small Magellanic Cloud: Kinematic Evidence for Its Tidal Disruption. *Astrophysical Journal*, **2018**, 864, 55	4.7	44
44	FIRST GAIA LOCAL GROUP DYNAMICS: MAGELLANIC CLOUDS PROPER MOTION AND ROTATION. *Astrophysical Journal Letters*, **2016**, 832, L23	7.9	43
43	Hubble Space Telescope Proper Motion (HSTPROMO) Catalogs of Galactic Globular Cluster. VI. Improved Data Reduction and Internal-kinematic Analysis of NGC 362. *Astrophysical Journal*, **2018**, 861, 99	4.7	43
42	SMASHing the LMC: A Tidally Induced Warp in the Outer LMC and a Large-scale Reddening Map. *Astrophysical Journal*, **2018**, 866, 90	4.7	42
41	Ships Passing in the Night: Spectroscopic Analysis of Two Ultra-faint Satellites in the Constellation Carina. *Astrophysical Journal*, **2018**, 857, 145	4.7	38
40	Space Motions of the Dwarf Spheroidal Galaxies Draco and Sculptor Based onHSTProper Motions with a ~10 yr Time Baseline. *Astrophysical Journal*, **2017**, 849, 93	4.7	34
39	VARIABLE STARS IN THE FIELD OF THE HYDRA II ULTRA-FAINT DWARF GALAXY. *Astronomical Journal*, **2016**, 151, 118	4.9	32
38	The State-of-the-artHSTAstro-photometric Analysis of the Core of ω Centauri. III. The Main Sequence's Multiple Populations Galore. *Astrophysical Journal*, **2017**, 844, 164	4.7	31
37	HUBBLE SPACE TELESCOPEPROPER MOTIONS ALONG THE SAGITTARIUS STREAM. I. OBSERVATIONS AND RESULTS FOR STARS IN FOUR FIELDS. *Astrophysical Journal*, **2015**, 803, 56	4.7	29
36	Exploring the Very Extended Low-surface-brightness Stellar Populations of the Large Magellanic Cloud with SMASH. *Astrophysical Journal*, **2019**, 874, 118	4.7	27
35	The Proper-motion Field along the Magellanic Bridge: A New Probe of the LMC–SMC Interaction. *Astrophysical Journal*, **2019**, 874, 78	4.7	27
34	MASS SEGREGATION IN NGC 2298: LIMITS ON THE PRESENCE OF AN INTERMEDIATE MASS BLACK HOLE. *Astrophysical Journal*, **2009**, 699, 1511-1517	4.7	25
33	Tycho-GaiaAstrometric Solution Parallaxes and Proper Motions for Five Galactic Globular Clusters. *Astrophysical Journal*, **2017**, 839, 89	4.7	23
32	The Hubble Space Telescope UV Legacy Survey of Galactic Globular Clusters. XVIII. Proper-motion Kinematics of Multiple Stellar Populations in the Core Regions of NGC 6352. *Astrophysical Journal*, **2019**, 873, 109	4.7	23
31	HST/ACS DIRECT AGES OF THE DWARF ELLIPTICAL GALAXIES NGC 147 AND NGC 185. *Astrophysical Journal*, **2015**, 811, 114	4.7	23
30	SMASH 1: A VERY FAINT GLOBULAR CLUSTER DISRUPTING IN THE OUTER REACHES OF THE LMC?. *Astrophysical Journal Letters*, **2016**, 830, L10	7.9	22

29	SMASHing the LMC: Mapping a Ring-like Stellar Overdensity in the LMC Disk. *Astrophysical Journal*, **2018**, 869, 125	4.7	21
28	TheHSTLarge Programme on Centauri. III. Absolute Proper Motion. *Astrophysical Journal*, **2018**, 854, 45	4.7	20
27	ISOTROPIC AT THE BREAK? 3D KINEMATICS OF MILKY WAY HALO STARS IN THE FOREGROUND OF M31. *Astrophysical Journal*, **2016**, 820, 18	4.7	19
26	The State-of-the-artHSTAstro-photometric Analysis of the Core of Centauri. II. Differential-reddening Map. *Astrophysical Journal*, **2017**, 842, 7	4.7	16
25	The Proper Motion of Pyxis: The First Use of Adaptive Optics in Tandem withHSTon a Faint Halo Object. *Astrophysical Journal*, **2017**, 840, 30	4.7	15
24	HUBBLE SPACE TELESCOPEPROPER MOTIONS OF INDIVIDUAL STARS IN STELLAR STREAMS: ORPHAN, SAGITTARIUS, LETHE, AND THE NEW PARALLEL STREAM *Astrophysical Journal*, **2016**, 833, 235	4.7	15
23	HUBBLE TARANTULA TREASURY PROJECT. V. THE STAR CLUSTER HODGE 301: THE OLD FACE OF 30 DORADUS. *Astrophysical Journal*, **2016**, 833, 154	4.7	15
22	The course of the Orphan Stream in the Northern Galactic hemisphere traced with Gaia DR2. *Monthly Notices of the Royal Astronomical Society*, **2019**, 486, 936-949	4.3	14
21	The Hubble Space Telescope UV Legacy Survey of Galactic Globular Clusters. XX. Ages of Single and Multiple Stellar Populations in Seven Bulge Globular Clusters. *Astrophysical Journal*, **2020**, 891, 37	4.7	14
20	HST Proper Motions of NGC 147 and NGC 185: Orbital Histories and Tests of a Dynamically Coherent Andromeda Satellite Plane. *Astrophysical Journal*, **2020**, 901, 43	4.7	14
19	HST Astrometry in the 30 Doradus Region. II. Runaway Stars from New Proper Motions in the Large Magellanic Cloud. *Astronomical Journal*, **2018**, 156, 98	4.9	13
18	HSTASTROMETRY IN THE 30 DORADUS REGION: MEASURING PROPER MOTIONS OF INDIVIDUAL STARS IN THE LARGE MAGELLANIC CLOUD. *Astronomical Journal*, **2015**, 150, 89	4.9	12
17	SMASHing the low surface brightness SMC. *Monthly Notices of the Royal Astronomical Society*, **2020**, 498, 1034-1049	4.3	12
16	The Second Data Release of the Survey of the MAgellanic Stellar History (SMASH). *Astronomical Journal*, **2021**, 161, 74	4.9	10
15	HALO7D II: The Halo Velocity Ellipsoid and Velocity Anisotropy with Distant Main-sequence Stars. *Astrophysical Journal*, **2019**, 879, 120	4.7	9
14	Gaia TGAS search for Large Magellanic Cloud runaway supergiant stars. *Astronomy and Astrophysics*, **2017**, 603, A75	5.1	9
13	Nature of a shell of young stars in the outskirts of the Small Magellanic Cloud. *Astronomy and Astrophysics*, **2019**, 631, A98	5.1	9
12	The absolute proper motions of the Arches and Quintuplet clusters. *Monthly Notices of the Royal Astronomical Society*, **2020**, 497, 4733-4741	4.3	6

11	Internal rotation of Milky Way dwarf spheroidal satellites with Gaia Early Data Release 3. *Monthly Notices of the Royal Astronomical Society*, **2021**, 505, 5884-5895	4.3	6
10	Revealing the Structure and Internal Rotation of the Sagittarius Dwarf Spheroidal Galaxy with Gaia and Machine Learning. *Astrophysical Journal*, **2021**, 908, 244	4.7	6
9	Star Formation Histories of Ultra-faint Dwarf Galaxies: Environmental Differences between Magellanic and Non-Magellanic Satellites?*. *Astrophysical Journal Letters*, **2021**, 920, L19	7.9	5
8	An Upper Limit on the Mass of a Central Black Hole in the Large Magellanic Cloud from the Stellar Rotation Field. *Astrophysical Journal*, **2017**, 846, 14	4.7	4
7	Deciphering the Kinematic Structure of the Small Magellanic Cloud through Its Red Giant Population. *Astrophysical Journal*, **2021**, 910, 36	4.7	3
6	Mapping Gaia Parallax Systematic Errors over the Sky with Faint Milky Way Stars. *Astronomical Journal*, **2021**, 161, 58	4.9	3
5	The Recent LMC–SMC Collision: Timing and Impact Parameter Constraints from Comparison of Gaia LMC Disk Kinematics and N-body Simulations. *Astrophysical Journal*, **2022**, 927, 153	4.7	3
4	Hunting for intermediate-mass black holes in globular clusters: an astrometric study of NGC 6441. *Monthly Notices of the Royal Astronomical Society*, **2021**, 503, 1490-1506	4.3	2
3	Reaching the Oldest Stars beyond the Local Group: Ancient Star Formation in UGC 4483*. *Astrophysical Journal*, **2021**, 911, 62	4.7	1
2	Magellanic Clouds Proper Motion and Rotation with Gaia DR1. *Proceedings of the International Astronomical Union*, **2017**, 12, 249-250	0.1	
1	Imprints of evolution on the internal kinematics of Globular Clusters. *Proceedings of the International Astronomical Union*, **2019**, 14, 544-548	0.1	