Marco A Milla

List of Publications by Year
in descending order

73 papers	783 citations	567281 15 h-index	642732 23 g-index
75 all docs	75 docs citations	75 times ranked	669 citing authors

#	Article	IF	Citations
1	Equatorial spread-F initiation: Post-sunset vortex, thermospheric winds, gravity waves. Journal of Atmospheric and Solar-Terrestrial Physics, 2007, 69, 2416-2427.	1.6	124
2	Coherent and incoherent scatter radar study of the climatology and dayâ€toâ€day variability of mean <i>F</i> region vertical drifts and equatorial spread <i>F</i>. Journal of Geophysical Research: Space Physics, 2016, 121, 1466-1482.	2.4	40
3	Radar images of the Moon at 6-meter wavelength. Icarus, 2017, 297, 179-188.	2.5	31
4	Incoherent Scatter Spectral Theoriesâ€"Part I: A General Framework and Results for Small Magnetic Aspect Angles. IEEE Transactions on Geoscience and Remote Sensing, 2011, 49, 315-328.	6.3	26
5	Incoherent Scatter Spectral Theoriesâ€"Part II: Modeling the Spectrum for Modes Propagating Perpendicular to ${f B}$. IEEE Transactions on Geoscience and Remote Sensing, 2011, 49, 329-345.	6.3	25
6	Multistatic Specular Meteor Radar Network in Peru: System Description and Initial Results. Earth and Space Science, 2021, 8, e2020EA001293.	2.6	25
7	Coherent MIMO to Improve Aperture Synthesis Radar Imaging of Field-Aligned Irregularities: First Results at Jicamarca. IEEE Transactions on Geoscience and Remote Sensing, 2018, 56, 2980-2990.	6.3	23
8	Radar imaging with compressed sensing. Radio Science, 2013, 48, 582-588.	1.6	22
9	Dataâ€driven numerical simulations of equatorial spread <i>F</i> in the Peruvian sector. Journal of Geophysical Research: Space Physics, 2014, 119, 3815-3827.	2.4	22
10	On the Genesis of Postmidnight Equatorial Spread <i>F</i>: Results for the American/Peruvian Sector. Geophysical Research Letters, 2018, 45, 7354-7361.	4.0	20
11	Rocket and incoherent scatter radar common-volume electron measurements of the equatorial lower ionosphere. Geophysical Research Letters, 2006, 33, .	4.0	19
12	Prompt Penetration and Substorm Effects Over Jicamarca During the September 2017 Geomagnetic Storm. Journal of Geophysical Research: Space Physics, 2021, 126, e2021JA029651.	2.4	19
13	F-region electron density and <i>T_e / T_i</i> measurements using incoherent scatter power data collected at ALTAIR. Annales Geophysicae, 2006, 24, 1333-1342.	1.6	16
14	Naturally enhanced ion-line spectra around the equatorial 150-km region. Annales Geophysicae, 2009, 27, 933-942.	1.6	16
15	Topside equatorial ionospheric density, temperature, and composition under equinox, low solar flux conditions. Journal of Geophysical Research: Space Physics, 2015, 120, 3899-3912.	2.4	16
16	Dataâ€driven numerical simulations of equatorial spread F in the Peruvian sector 3: Solstice. Journal of Geophysical Research: Space Physics, 2015, 120, 10,809.	2.4	15
17	New opportunities offered by Cubesats for space research in Latin America: The SUCHAI project case. Advances in Space Research, 2016, 58, 2134-2147.	2.6	15
18	Early Morning Equatorial Ionization Anomaly From GOLD Observations. Journal of Geophysical Research: Space Physics, 2020, 125, e2019JA027487.	2.4	15

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19	Incoherent scatter spectrum theory for modes propagating perpendicular to the geomagnetic field. Journal of Geophysical Research, 2006, 111, .	3.3	14
20	A multistatic HF beacon network for ionospheric specification in the Peruvian sector. Radio Science, 2016, 51, 392-401.	1.6	13
21	Simultaneous 6300â€‰Ã… airglow and radar observations of ionospheric irregularities and dynamics at the geomagnetic equator. Annales Geophysicae, 2018, 36, 473-487.	1.6	12
22	A multi-beam incoherent scatter radar technique for the estimation of ionospheric electron density and <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" altimg="si0005.gif" overflow="scroll"><mml:msub><mml:mrow><mml:mi>T</mml:mi></mml:mrow><mml:mrow><mml:mi>e</mml:mi></mml:mrow></mm profiles at Jicamarca. Journal of Atmospheric and Solar-Terrestrial Physics, 2013, 105-106, 214-229.	1.6	11
23	Equatorial 150 km echoes and daytime F region vertical plasma drifts in the Brazilian longitude sector. Annales Geophysicae, 2013, 31, 1867-1876.	1.6	11
24	AMISRâ€14: Observations of equatorial spread <i>F</i>. Geophysical Research Letters, 2015, 42, 5100-5108.	4.0	11
25	Multi-instrumented observations of the equatorial F-region during June solstice: large-scale wave structures and spread-F. Progress in Earth and Planetary Science, 2018, 5, .	3.0	11
26	A global 3-D electron density reconstruction model based on radio occultation data and neural networks. Journal of Atmospheric and Solar-Terrestrial Physics, 2021, 221, 105702.	1.6	11
27	The zonal motion of equatorial plasma bubbles relative to the background ionosphere. Journal of Geophysical Research: Space Physics, 2014, 119, 5943-5950.	2.4	10
28	Daytime ionospheric equatorial vertical drifts during the 2008â€“2009 extreme solar minimum. Journal of Geophysical Research: Space Physics, 2015, 120, 1452-1459.	2.4	10
29	Simultaneous observations of structure function parameter of refractive index using a high-resolution radar and the DataHawk small airborne measurement system. Annales Geophysicae, 2016, 34, 767-780.	1.6	10
30	ALTAIR incoherent scatter observations of the equatorial daytime ionosphere. Geophysical Research Letters, 2006, 33, .	4.0	9
31	Dataâ€driven numerical simulations of equatorial spread <i>F</i> in the Peruvian sector: 2. Autumnal equinox. Journal of Geophysical Research: Space Physics, 2014, 119, 6981-6993.	2.4	9
32	Height Variation of Gaps in 150â€km Echoes and Whole Atmosphere Community Climate Model Electron Densities Suggest Link to Upper Hybrid Resonance. Journal of Geophysical Research: Space Physics, 2020, 125, e2019JA027204.	2.4	9
33	Simultaneous ground-based and in situ Swarm observations of equatorial F-region irregularities over Jicamarca. Annales Geophysicae, 2020, 38, 1063-1080.	1.6	9
34	Comparison of MLT Momentum Fluxes Over the Andes at Four Different Latitudinal Sectors Using Multistatic Radar Configurations. Journal of Geophysical Research D: Atmospheres, 2022, 127, .	3.3	8
35	Concurrent observations at the magnetic equator of smallâ€scale irregularities and largeâ€scale depletions associated with equatorial spread <i>F</i>. Journal of Geophysical Research: Space Physics, 2015, 120, 10,883.	2.4	7
36	Ionospheric Specification and Space Weather Forecasting With an HF Beacon Network in the Peruvian Sector. Journal of Geophysical Research: Space Physics, 2018, 123, 6851-6864.	2.4	7

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37	Radar Studies of Heightâ€Dependent Equatorial <i>F</i> region Vertical and Zonal Plasma Drifts. Journal of Geophysical Research: Space Physics, 2019, 124, 2058-2071.	2.4	7
38	Improved spectral observations of equatorial spread F echoes at Jicamarca using aperiodic transmitter coding. Journal of Atmospheric and Solar-Terrestrial Physics, 2004, 66, 1543-1548.	1.6	6
39	Range-Doppler Mapping of Space-Based Targets Using the JRO 50ÂMHz Radar. Earth, Moon and Planets, 2017, 120, 169-188.	0.6	6
40	The Case for Combining a Large Lowâ€Band Very High Frequency Transmitter With Multiple Receiving Arrays for Geospace Research: A Geospace Radar. Radio Science, 2019, 54, 533-551.	1.6	6
41	Apertureâ€Synthesis Radar Imaging With Compressive Sensing for Ionospheric Research. Radio Science, 2019, 54, 503-516.	1.6	6
42	VIPIR and 50 MHz Radar Studies of Gravity Wave Signatures in 150â€km Echoes Observed at Jicamarca. Journal of Geophysical Research: Space Physics, 2020, 125, e2019JA027535.	2.4	6
43	A Study on Meteor Head Echo Using a Probabilistic Detection Model at Jicamarca. Journal of Geophysical Research: Space Physics, 2020, 125, e2019JA027459.	2.4	6
44	Particle dynamics description of â€œBGK collisionsâ€•as a Poisson process. Journal of Geophysical Research, 2009, 114, .	3.3	5
45	Unmanned Aircraft System for Andean Volcano monitoring and surveillance. , 2019, , .		5
46	Multi-Instrument Rainfall-Rate Estimation in the Peruvian Central Andes. Journal of Atmospheric and Oceanic Technology, 2020, 37, 1811-1826.	1.3	5
47	Fregion plasma density estimation at Jicamarca using the complex cross-correlation of orthogonal polarized backscatter fields. Radio Science, 2004, 39, n/a-n/a.	1.6	4
48	Implementation of a ground based synthetic aperture radar (GB-SAR) for landslide monitoring: system description and preliminary results. , 2016, , .		4
49	Highâ€altitude incoherentâ€scatter measurements at Jicamarca. Journal of Geophysical Research: Space Physics, 2017, 122, 2292-2299.	2.4	4
50	Analysis of Extreme Meteorological Events in the Central Andes of Peru Using a Set of Specialized Instruments. Atmosphere, 2021, 12, 408.	2.3	4
51	The early history of the Jicamarca Radio Observatory and the incoherent scatter technique. History of Geo- and Space Sciences, 2019, 10, 245-266.	0.4	4
52	Magnetic aspect sensitivity of 3-m<i>F</i>-region field-aligned plasma density irregularities over Jicamarca. Journal of Geophysical Research, 2011, 116, n/a-n/a.	3.3	3
53	Incoherent Scatter Radar - Spectral Signal Model and Ionospheric Applications. , 2012, , .		3
54	The August 2011 URSI World Day campaign: Initial results. Journal of Atmospheric and Solar-Terrestrial Physics, 2015, 134, 47-55.	1.6	3

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55	Design and implementation of a high speed interface system over Gigabit Ethernet based on FPGA for use on radar acquisition systems. , 2017, , .		3
56	Mesospheric Wind Estimation With the Jicamarca MST Radar Using Spectral Mainlobe Identification. Radio Science, 2019, 54, 1222-1239.	1.6	3
57	Radio Beacon and Radar Assessment and Forecasting ofÂEquatorial F Region Ionospheric Stability. Journal of Geophysical Research: Space Physics, 2019, 124, 9511-9524.	2.4	3
58	MELISSA: System description and spectral features of preâ€•and postâ€•midnight F â€•region echoes. Journal of Geophysical Research: Space Physics, 2019, 124, 10482-10496.	2.4	3
59	High Altitude Echoes From the Equatorial Topside Ionosphere During Solar Minimum. Journal of Geophysical Research: Space Physics, 2021, 126, e2020JA028424.	2.4	3
60	On the characterization of radar receivers for meteorâ€head echoes studies. Radio Science, 2013, 48, 33-41.	1.6	2
61	Broad plasma depletions detected in the bottomside of the equatorial <i>F</i> region: Simultaneous ROCSATâ€1 and JULIA observations. Journal of Geophysical Research: Space Physics, 2014, 119, 5978-5984.	2.4	2
62	Spacial Gradient Based TEC Estimation Algorithm with Code Noise Multipath Correction Evaluation Using Simultaneous Incoherent Scatter Radar Measurements. , 0, , .		2
63	VHF voice and data communications via Equatorial Electrojet scattering: Channel characterization and application of a frequency diversity technique using Software Defined Radio technology. , 2011, , .		1
64	The Jicamarca phased-array radar. , 2013, , .		1
65	Dataset on the first weather radar campaign over Lima, Peru. Data in Brief, 2021, 35, 106937.	1.0	1
66	Mapping Irregularities in the Postsunset Equatorial Ionosphere With an Expanded Network of HF Beacons. Journal of Geophysical Research: Space Physics, 2021, 126, e2021JA029229.	2.4	1
67	The effects of Coulomb collisions on H⁺ and He⁺ plasmas for topside incoherent scatter radar applications at Jicamarca. , 2011, , .		0
68	Data-driven numerical simulations and forecasts of equatorial spread F in the peruvian sector. , 2014, , .		0
69	Updating the full-profile incoherent scatter analysis at Jicamarca. , 2014, , .		0
70	The Online System for Lidar Data Handling and Real Time Monitoring of Lidar Operations at ALO-USU. EPJ Web of Conferences, 2016, 119, 25015.	0.3	0
71	Design and implementation of a mechanical system for a ground based synthetic aperture radar with automatic antenna pointing: Preliminary results. , 2017, , .		0
72	FPGA-based GPS controlled timing system with nanosecond accuracy and leap second support. , 2019, , .		0

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73	Comparison of GB-SAR Imaging Algorithms for a Landslide Monitoring Application. , 2020, , .		0