Baptiste Cecconi

List of Publications by Year
in descending order

142	4,073	101543	138484
papers	citations	36 h-index	58 g-index

174	174	174	2302
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	S/WAVES: The Radio and Plasma Wave Investigation onÂtheÂSTEREO Mission. Space Science Reviews, 2008, 136, 487-528.	8.1	313
2	Radio and Plasma Wave Observations at Saturn from Cassini's Approach and First Orbit. Science, 2005, 307, 1255-1259.	12.6	236
3	Response of Jupiter's and Saturn's auroral activity to the solar wind. Journal of Geophysical Research, 2009, 114, .	3.3	161
4	Jupiter's low-frequency radio spectrum from Cassini/Radio and Plasma Wave Science (RPWS) absolute flux density measurements. Journal of Geophysical Research, 2004, 109, .	3.3	143
5	The Electric Antennas for the STEREO/WAVES Experiment. Space Science Reviews, 2008, 136, 529-547.	8.1	107
6	An Earth-like correspondence between Saturn's auroral features and radio emission. Nature, 2005, 433, 722-725.	27.8	104
7	Saturn kilometric radiation: Average and statistical properties. Journal of Geophysical Research, 2008, 113, .	3.3	98
8	Direction finding and antenna calibration through analytical inversion of radio measurements performed using a system of two or three electric dipole antennas on a three-axis stabilized spacecraft. Radio Science, 2005, 40, n/a-n/a.	1.6	90
9	The Solar Orbiter Radio and Plasma Waves (RPW) instrument. Astronomy and Astrophysics, 2020, 642, A12.	5.1	80
10	Properties of Saturn kilometric radiation measured within its source region. Geophysical Research Letters, 2010, 37, .	4.0	74
11	Modulation of Saturnâ€™s radio clock by solar wind speed. Nature, 2007, 450, 265-267.	27.8	70
12	Planetary and exoplanetary low frequency radio observations from the Moon. Planetary and Space Science, 2012, 74, 156-166.	1.7	68
13	Quasi thermal noise spectroscopy in the inner magnetosphere of Saturn with Cassini/RPWS: Electron temperatures and density. Geophysical Research Letters, 2005, 32, .	4.0	67
14	The Solar Orbiter Science Activity Plan. Astronomy and Astrophysics, 2020, 642, A3.	5.1	67
15	An auroral oval at the footprint of Saturn's kilometric radio sources, colocated with the UV aurorae. Journal of Geophysical Research, 2009, 114, .	3.3	65
16	Multipoint Observations of Solar Type III Radio Bursts from STEREO and Wind. Solar Physics, 2009, 259, 255-276.	2.5	62
17	Magnetospheric period magnetic field oscillations at Saturn: Equatorial phase â€œjitterâ€•produced by superposition of southern and northern period oscillations. Journal of Geophysical Research, 2011, 116, n/a-n/a.	3.3	62
18	Modeling of Ioâ€Jupiter decameter arcs, emission beaming and energy source. Geophysical Research Letters, 2008, 35, .	4.0	61

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19	Saturn lightning recorded by Cassini/RPWS in 2004. Icarus, 2006, 183, 135-152.	2.5	57
20	On the character and distribution of lowerâ€frequency radio emissions at Saturn and their relationship to substormâ€like events. Journal of Geophysical Research, 2009, 114, .	3.3	57
21	Variation of Saturn's UV aurora with SKR phase. Geophysical Research Letters, 2010, 37, .	4.0	57
22	TRACKING THE CME-DRIVEN SHOCK WAVE ON 2012 MARCH 5 AND RADIO TRIANGULATION OF ASSOCIATED RADIO EMISSION. Astrophysical Journal, 2014, 791, 115.	4.5	53
23	Models and data analysis tools for the Solar Orbiter mission. Astronomy and Astrophysics, 2020, 642, A2.	5.1	53
24	Modeling of Saturn kilometric radiation arcs and equatorial shadow zone. Journal of Geophysical Research, 2008, 113, .	3.3	52
25	Farside explorer: unique science from a mission to the farside of the moon. Experimental Astronomy, 2012, 33, 529-585.	3.7	52
26	Earthâ€based detection of Uranus' aurorae. Geophysical Research Letters, 2012, 39, .	4.0	51
27	Emission and propagation of Saturn kilometric radiation: Magnetoionic modes, beaming pattern, and polarization state. Journal of Geophysical Research, 2011, 116, n/a-n/a.	3.3	49
28	The search for radio emission from the exoplanetary systems 55 Cancri, Ï… Andromedae, and Ï„ BoÃ¶tis using LOFAR beam-formed observations. Astronomy and Astrophysics, 2021, 645, A59.	5.1	49
29	Goniopolarimetric study of the revolution 29 perikrone using the Cassini Radio and Plasma Wave Science instrument highâ€frequency radio receiver. Journal of Geophysical Research, 2009, 114, .	3.3	47
30	Planetary period oscillations in Saturn's magnetosphere: Evidence in magnetic field phase data for rotational modulation of Saturn kilometric radiation emissions. Journal of Geophysical Research, 2011, 116, n/a-n/a.	3.3	44
31	Uranus Pathfinder: exploring the origins and evolution of Ice Giant planets. Experimental Astronomy, 2012, 33, 753-791.	3.7	44
32	Model of a variable radio period for Saturn. Journal of Geophysical Research, 2005, 110, .	3.3	43
33	Observation of similar radio signatures at Saturn and Jupiter: Implications for the magnetospheric dynamics. Geophysical Research Letters, 2007, 34, .	4.0	41
34	In-flight calibration of the Cassini-Radio and Plasma Wave Science (RPWS) antenna system for direction-finding and polarization measurements. Journal of Geophysical Research, 2004, 109, .	3.3	39
35	Source locations of narrowband radio emissions detected at Saturn. Journal of Geophysical Research, 2009, 114, .	3.3	38
36	OSS (Outer Solar System): a fundamental and planetary physics mission to Neptune, Triton and the Kuiper Belt. Experimental Astronomy, 2012, 34, 203-242.	3.7	37

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37	Elliptical polarization of Saturn Kilometric Radiation observed from high latitudes. Journal of Geophysical Research, 2009, 114, .	3.3	36
38	Lead angles and emitting electron energies of Io-controlled decameter radio arcs. Planetary and Space Science, 2010, 58, 1188-1198.	1.7	36
39	Relationship between solar wind corotating interaction regions and the phasing and intensity of Saturn kilometric radiation bursts. Annales Geophysicae, 2008, 26, 3641-3651.	1.6	35
40	Auroral electron distributions within and close to the Saturn kilometric radiation source region. Journal of Geophysical Research, 2011, 116, .	3.3	35
41	Natural radio emission of Jupiter as interferences for radar investigations of the icy satellites of Jupiter. Planetary and Space Science, 2012, 61, 32-45.	1.7	35
42	Interplanetary conditions and magnetospheric dynamics during the Cassini orbit insertion fly-through of Saturn's magnetosphere. Journal of Geophysical Research, 2005, 110, .	3.3	33
43	STEREO/Waves Goniopolarimetry. Space Science Reviews, 2008, 136, 549-563.	8.1	33
44	CMI growth rates for Saturnian kilometric radiation. Geophysical Research Letters, 2010, 37, .	4.0	33
45	Extraordinary fieldâ€aligned current signatures in Saturn's highâ€latitude magnetosphere: Analysis of Cassini data during Revolution 89. Journal of Geophysical Research, 2010, 115, .	3.3	31
46	Z mode waves as the source of Saturn narrowband radio emissions. Journal of Geophysical Research, 2010, 115, .	3.3	30
47	Simultaneous observations of Jovian quasi-periodic radio emissions by the Galileo and Cassini spacecraft. Journal of Geophysical Research, 2004, 109, .	3.3	29
48	Statistical Survey of Type III Radio Bursts at Long Wavelengths Observed by the Solar TErrestrial RElations Observatory (STEREO)/Waves Instruments: Radio Flux Density Variations with Frequency. Solar Physics, 2014, 289, 3121-3135.	2.5	29
49	Longâ€term modulations of Saturn's auroral radio emissions by the solar wind and seasonal variations controlled by the solar ultraviolet flux. Journal of Geophysical Research: Space Physics, 2013, 118, 7019-7035.	2.4	28
50	VESPA: A community-driven Virtual Observatory in Planetary Science. Planetary and Space Science, 2018, 150, 65-85.	1.7	28
51	Jupiter radio emission induced by Ganymede and consequences for the radio detection of exoplanets. Astronomy and Astrophysics, 2018, 618, A84.	5.1	27
52	ExPRES: an Exoplanetary and Planetary Radio Emissions Simulator. Astronomy and Astrophysics, 2019, 627, A30.	5.1	26
53	Goniopolarimetric inversion using SVD: An application to type III radio bursts observed by STEREO. Journal of Geophysical Research, 2012, 117, .	3.3	25
54	The Planetary Virtual Observatory and Laboratory (PVOL) and its integration into the Virtual European Solar and Planetary Access (VESPA). Planetary and Space Science, 2018, 150, 22-35.	1.7	25

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55	Saturn's Northern Aurorae at Solstice From HST Observations Coordinated With Cassini's Grand Finale. Geophysical Research Letters, 2018, 45, 9353-9362.	4.0	24
56	Automated Multi-Dataset Analysis (AMDA): An on-line database and analysis tool for heliospheric and planetary plasma data. Planetary and Space Science, 2021, 201, 105214.	1.7	24
57	Ground-based and spacecraft observations of lightning activity on Saturn. Planetary and Space Science, 2012, 61, 53-59.	1.7	23
58	Ioâ€Jupiter decametric arcs observed by Juno/Waves compared to ExPRES simulations. Geophysical Research Letters, 2017, 44, 9225-9232.	4.0	22
59	The low-frequency source of Saturnâ€™s kilometric radiation. Science, 2018, 362, .	12.6	22
60	Statistical Survey of Type III Radio Bursts at Long Wavelengths Observed by the Solar TErrestrial RElations Observatory (STEREO)/Waves Instruments: Goniopolarimetric Properties and Radio Source Locations. Solar Physics, 2014, 289, 4633-4652.	2.5	21
61	Fast and slow frequency-drifting millisecond bursts in Jovian decametric radio emissions. Astronomy and Astrophysics, 2014, 568, A53.	5.1	21
62	FROM LARGE-SCALE LOOPS TO THE SITES OF DENSE FLARING LOOPS: PREFERENTIAL CONDITIONS FOR LONG-PERIOD PULSATIONS IN SOLAR FLARES. Astrophysical Journal, 2010, 719, 151-165.	4.5	20
63	The EPN-TAP protocol for the Planetary Science Virtual Observatory. Astronomy and Computing, 2014, 7-8, 52-61.	1.7	20
64	Detection of Jupiter decametric emissions controlled by Europa and Ganymede with Voyager/PRA and Cassini/RPWS. Journal of Geophysical Research: Space Physics, 2017, 122, 9228-9247.	2.4	20
65	Auroral kilometric radiation diurnal, semidiurnal, and shorterâ€term modulations disentangled by Cassini. Journal of Geophysical Research, 2010, 115, .	3.3	19
66	NenUFAR: Instrument description and science case. , 2015, , .		18
67	Science data visualization in planetary and heliospheric contexts with 3DView. Planetary and Space Science, 2018, 150, 111-130.	1.7	18
68	The SPASE Data Model: A Metadata Standard for Registering, Finding, Accessing, and Using Heliophysics Data Obtained From Observations and Modeling. Space Weather, 2018, 16, 1899-1911.	3.7	18
69	Influence of an extended source on goniopolarimetry (or direction finding) with Cassini and Solar Terrestrial Relations Observatory radio receivers. Radio Science, 2007, 42, n/a-n/a.	1.6	17
70	Search for Saturn's Xâ€ray aurorae at the arrival of a solar wind shock. Journal of Geophysical Research: Space Physics, 2013, 118, 2145-2156.	2.4	17
71	High spectral and temporal resolution observations of Saturn kilometric radiation. Geophysical Research Letters, 2005, 32, .	4.0	16
72	Linear prediction studies for the solar wind and Saturn kilometric radiation. Annales Geophysicae, 2006, 24, 3139-3150.	1.6	15

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73	Discovering the sky at the Longest Wavelengths (DSL). , 2016, , .		15
74	AMDA, Automated Multi-Dataset Analysis: A Web-Based Service Provided by the CDPP. Thirty Years of Astronomical Discovery With UKIRT, 2010, , 239-247.	0.3	15
75	A nightside source of Saturn's kilometric radiation: Evidence for an inner magnetosphere energy driver. Geophysical Research Letters, 2005, 32, n/a-n/a.	4.0	13
76	Virtual Planetary Space Weather Services offered by the Europlanet H2020 Research Infrastructure. Planetary and Space Science, 2018, 150, 50-59.	1.7	13
77	Source mechanism of Saturn narrowband emission. Annales Geophysicae, 2010, 28, 1013-1021.	1.6	12
78	Simulations of radio-wave anisotropic scattering to interpret type III radio burst data from Solar Orbiter, Parker Solar Probe, STEREO, and Wind. Astronomy and Astrophysics, 2021, 656, A34.	5.1	12
79	Dual-frequency single-pulse study of PSR B0950+08. Astronomy and Astrophysics, 2022, 658, A143.	5.1	12
80	Space Weather applications with CDPP/AMDA. Advances in Space Research, 2010, 45, 1145-1155.	2.6	11
81	NOIRE study report: Towards a low frequency radio interferometer in space. , 2018, , .		11
82	Planetary Science Virtual Observatory architecture. Astronomy and Computing, 2014, 7-8, 71-80.	1.7	10
83	Survey of Saturn electrostatic cyclotron harmonic wave intensity. Journal of Geophysical Research: Space Physics, 2017, 122, 8214-8227.	2.4	10
84	HAPI: An API Standard for Accessing Heliophysics Time Series Data. Journal of Geophysical Research: Space Physics, 2021, 126, .	2.4	10
85	Studying Sunâ€“Planet Connections Using the Heliophysics Integrated Observatory (HELIO). Solar Physics, 2012, 280, 603-621.	2.5	9
86	AlfvÃ©n: magnetosphereâ€”ionosphere connection explorers. Experimental Astronomy, 2012, 33, 445-489.	3.7	9
87	Pulsars with NenuFAR: Backend and pipelines. Astronomy and Astrophysics, 2021, 652, A34.	5.1	9
88	A broad-band radio study of PSRÂJ0250+5854: the slowest spinning radio pulsar known. Monthly Notices of the Royal Astronomical Society, 2021, 508, 1102-1114.	4.4	9
89	Latitudinal Beaming of Jupiter's Radio Emissions From Juno/Waves Flux Density Measurements. Journal of Geophysical Research: Space Physics, 2021, 126, e2021JA029435.	2.4	9
90	Observations of Shock Propagation through Turbulent Plasma in the Solar Corona. Astrophysical Journal, 2021, 921, 3.	4.5	9

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91	First observations and performance of the RPW instrument on board the Solar Orbiter mission. Astronomy and Astrophysics, 2021, 656, A41.	5.1	9
92	Wind/WAVES Observations of Auroral Kilometric Radiation: Automated Burst Detection and Terrestrial Solar Wind â€•Magnetosphere Coupling Effects. Journal of Geophysical Research: Space Physics, 2022, 127, .	2.4	9
93	Daily variations of auroral kilometric radiation observed by STEREO. Geophysical Research Letters, 2009, 36, .	4.0	8
94	Description, accessibility and usage of SOIR/Venus Express atmospheric profiles of Venus distributed in VESPA (Virtual European Solar and Planetary Access). Planetary and Space Science, 2018, 150, 60-64.	1.7	8
95	Statistical Study on Spatial Distribution and Polarization of Saturn Narrowband Emissions. Astrophysical Journal, 2021, 918, 64.	4.5	8
96	STEREO database of interplanetary Langmuir electric waveforms. Journal of Geophysical Research: Space Physics, 2016, 121, 1062-1070.	2.4	7
97	Virtual European Solar & Planetary Access (VESPA): A Planetary Science Virtual Observatory Cornerstone. Data Science Journal, 2020, 19, .	1.3	7
98	Determining the Beaming of Io Decametric Emissions: A Remote Diagnostic to Probe the Ioâ€Jupiter Interaction. Journal of Geophysical Research: Space Physics, 2022, 127, .	2.4	7
99	Joining the yellow hub: Uses of the Simple Application Messaging Protocol in Space Physics analysis tools. Astronomy and Computing, 2014, 7-8, 62-70.	1.7	6
100	Meeting the Magnetic EMC Challenges for the In-Situ Field Measurements on the Juice Mission. , 2019, , .		6
101	Jupiter's Auroral Radio Emissions Observed by Cassini: Rotational Versus Solar Wind Control, and Components Identification. Journal of Geophysical Research: Space Physics, 2021, 126, e2021JA029780.	2.4	6
102	Polarization and direction of arrival of Jovian quasiperiodic bursts observed by Cassini. Journal of Geophysical Research, 2012, 117, .	3.3	5
103	Mars Crater Database: A participative project for the classification of the morphological characteristics of large Martian craters. , 2021, , 629-644.		5
104	Solar Orbiter/RPW antenna calibration in the radio domain and its application to type III burst observations. Astronomy and Astrophysics, 2021, 656, A33.	5.1	5
105	Facilitating reuse of planetary spatial research data â€“ Conceptualizing an open map repository as part of a Planetary Research Data Infrastructure. Planetary and Space Science, 2021, 204, 105269.	1.7	5
106	Empirical Selection of Auroral Kilometric Radiation During a Multipoint Remote Observation With Wind and Cassini. Journal of Geophysical Research: Space Physics, 2021, 126, e2021JA029425.	2.4	5
107	Spectral Analysis of Solar Radio Type III Bursts from 20 kHz to 410 MHz. Astrophysical Journal, 2022, 924, 58.	4.5	5
108	The influence of Titan on Saturn kilometric radiation. Annales Geophysicae, 2010, 28, 395-406.	1.6	4

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109	Inâ€flight calibration of STEREOâ€B/WAVES antenna system. Radio Science, 2014, 49, 146-156.	1.6	4
110	Goniopolarimetry: Space-borne radio astronomy with imaging capabilities. Comptes Rendus Physique, 2014, 15, 441-447.	0.9	4
111	MASER: A Science Ready Toolbox for Low Frequency Radio Astronomy. Data Science Journal, 2020, 19, .	1.3	4
112	The apparent source size of type III radio bursts: Preliminary results by the STEREOâˆ•WAVES instruments. , 2010, , .		3
113	Enabling interoperability in planetary sciences and heliophysics: The case for an information model. Planetary and Space Science, 2018, 150, 43-49.	1.7	3
114	Seasonal variation of northâ€“south asymmetry in the intensity of Saturn Kilometric Radiation from 2004 to 2017. Planetary and Space Science, 2019, 178, 104711.	1.7	3
115	Measuring the Earth's Synchrotron Emission From Radiation Belts With a Lunar Near Side Radio Array. Radio Science, 2020, 55, e2019RS006891.	1.6	3
116	Comment on â€œLocating the source field lines of Jovian decametric radio emissionsâ€•by YuMing Wang et al.. Earth and Planetary Physics, 2022, 6, 10-12.	1.1	3
117	Reflection and Refraction of the Lâ€O Mode 5ÂkHz Saturn Narrowband Emission by the Magnetosheath. Geophysical Research Letters, 2022, 49, .	4.0	3
118	Comment on â€œSpectral features of SKR observed by Cassini/RPWS: Frequency bandwidth, flux density and polarizationâ€•by Patrick Galopeau et al.. Journal of Geophysical Research, 2009, 114, .	3.3	2
119	Compressive Sampling for Efficient Astrophysical Signals Digitizing: From Compressibility Study to Data Recovery. Journal of Astronomical Instrumentation, 2016, 05, .	1.5	2
120	Compressed sensing for astrophysical signals. , 2016, , .		2
121	TREPS, a tool for coordinate and time transformations in space physics. Planetary and Space Science, 2018, 150, 86-90.	1.7	2
122	FITS Format for Planetary Surfaces: Definitions, Applications, and Best Practices. Earth and Space Science, 2018, 5, 640-651.	2.6	2
123	S/WAVES: The Radio and Plasma Wave Investigation onÂtheÂSTEREO Mission. , 2008, , 487-528.		2
124	The Electric Antennas for the STEREO/WAVES Experiment. , 2008, , 529-547.		2
125	Jovian auroral radio source occultation modelling and application to the JUICE science mission planning. Planetary and Space Science, 2021, 209, 105344.	1.7	2
126	The Solar Orbiter Radio and Plasma Waves (RPW) instrument (Corrigendum). Astronomy and Astrophysics, 2021, 654, C2.	5.1	2

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127	Effect of an Interplanetary Coronal Mass Ejection on Saturnâ€™s Radio Emission. Frontiers in Astronomy and Space Sciences, 2022, 9, .	2.8	2
128	Correction to â€œAn auroral oval at the footprint of Saturn's kilometric radio sources, colocated with the UV auroraeâ€• Journal of Geophysical Research, 2009, 114, n/a-n/a.	3.3	1
129	The Heliophysics Feature Catalogue, a tool for the study of solar features. Proceedings of the International Astronomical Union, 2013, 8, 512-514.	0.0	1
130	A high dynamic range stacked ADCs receiver for long wavelength radio astronomy observations. , 2014, , .		1
131	Bridging the Gap Between Geographical Information Systems and Planetary Virtual Observatory. Earth and Space Science, 2019, 6, 515-526.	2.6	1
132	Calibration of the JUICE RWI antennas by numerical simulation. Radio Science, 2021, 56, e2021RS007309.	1.6	1
133	Statistical Survey of Type III Radio Bursts at Long Wavelengths Observed by the Solar TErrestrial RElations Observatory (STEREO)/Waves Instruments: Radio Flux Density Variations with Frequency. , 2014, , 499-513.		1
134	Pilot Study and Early Results of the Cosmic Filaments and Magnetism Survey with Nenufar: The Coma Cluster Field. Galaxies, 2021, 9, 105.	3.0	1
135	Performances of the Passive SAR Imaging of Jupiterâ€™s Icy Moons. IEEE Transactions on Geoscience and Remote Sensing, 2022, 60, 1-13.	6.3	1
136	Saturn's radio clock. Astronomy and Geophysics, 2008, 49, 4.13-4.15.	0.2	0
137	Correction to â€œInfluence of an extended source on goniopolarimetry (or direction finding) with Cassini and Solar Terrestrial Relations Observatory radio receiversâ€• Radio Science, 2010, 45, n/a-n/a.	1.6	0
138	Ground-based and space observations of planetary thunderstorm activity. , 2010, , .		0
139	A CMOS 65nm 120 dB Stacked A/D converters receiver for long wavelength radio astronomy observations. , 2016, , .		0
140	The Faraday rotation effect in Saturn Kilometric Radiation observed by the CASSINI spacecraft. Icarus, 2021, 370, 114661.	2.5	0
141	Jovian Radio Emissions Modeling and their Future Investigation with EJSM (invited; abstract). , 0, , .		0
142	STEREO/Waves Goniopolarimetry. , 2008, , 549-563.		0