nicole Meyer-Vernet

List of Publications by Year
in descending order

135	5,170	94433 37	98798 67
papers	citations	h-index	g-index

142	142	142	2716
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	The FIELDS Instrument Suite for Solar Probe Plus. Space Science Reviews, 2016, 204, 49-82.	8.1	521
2	Highly structured slow solar wind emerging from an equatorial coronal hole. Nature, 2019, 576, 237-242.	27.8	401
3	Tool kit for antennae and thermal noise near the plasma frequency. Journal of Geophysical Research, 1989, 94, 2405-2415.	3.3	221
4	The Radio Plasma Imager investigation on the IMAGE spacecraft. Space Science Reviews, 2000, 91, 319-359.	8.1	140
5	On the physics of resonant disk-satellite interaction. Icarus, 1987, 69, 157-175.	2.5	130
6	Dust Detection by the Wave Instrument on STEREO: Nanoparticles Picked up by the Solar Wind?. Solar Physics, 2009, 256, 463-474.	2.5	129
7	On natural noises detected by antennas in plasmas. Journal of Geophysical Research, 1979, 84, 5373-5377.	3.3	127
8	Plasma Diagnosis from Thermal Noise and Limits on Dust Flux or Mass in Comet Giacobini-Zinner. Science, 1986, 232, 370-374.	12.6	120
9	Geomagnetic origin of the radio emission from cosmic ray induced air showers observed by CODALEMA. Astroparticle Physics, 2009, 31, 192-200.	4.3	115
10	First In Situ Measurements of Electron Density and Temperature from Quasi-thermal Noise Spectroscopy with Parker Solar Probe/FIELDS. Astrophysical Journal, Supplement Series, 2020, 246, 44.	7.7	106
11	Shot noise from grain and particle impacts in Saturn's ring plane. Geophysical Research Letters, 1983, 10, 5-8.	4.0	98
12	Ulysses Radio and Plasma Wave Observations in the Jupiter Environment. Science, 1992, 257, 1524-1531.	12.6	96
13	Solar wind radial and latitudinal structure: Electron density and core temperature from Ulysses thermal noise spectroscopy. Journal of Geophysical Research, 1998, 103, 1969-1979.	3.3	88
14	Temperature Inversion in the Io Plasma Torus. Icarus, 1995, 116, 202-213.	2.5	87
15	Interplanetary dust detection by radio antennas: Mass calibration and fluxes measured by STEREO/WAVES. Journal of Geophysical Research, 2012, 117, .	3.3	87
16	Bernstein waves in the Io plasma torus: A novel kind of electron temperature sensor. Journal of Geophysical Research, 1993, 98, 21163-21176.	3.3	82
17	Latitudinal structure of outer Io plasma torus. Journal of Geophysical Research, 2002, 107, SMP 24-1.	3.3	67
18	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

#	ARTICLE	IF	CITATIONS
19	Quasiâ€thermal noise spectroscopy: The art and the practice. Journal of Geophysical Research: Space Physics, 2017, 122, 7925-7945.	2.4	67
20	Electrostatic noise in nonâ€Maxwellian plasmas: Generic properties and â€œkappaâ€• distributions. Journal of Geophysical Research, 1991, 96, 5825-5836.	3.3	63
21	Asteroid colors: a novel tool for magnetic field detection? The case of Vesta. Astronomy and Astrophysics, 2006, 451, L43-L46.	5.1	62
22	Dust in the planetary system: Dust interactions in space plasmas of the solar system. Physics Reports, 2014, 536, 1-39.	25.6	62
23	Voyager 2 at Uranus: Grain impacts in the ring plane. Geophysical Research Letters, 1986, 13, 617-620.	4.0	61
24	Nonequilibrium Processes in the Solar Corona, Transition Region, Flares, and Solar Wind (Invited) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50 5	2.5	60
25	Spacecraft charging and ion wake formation in the near-Sun environment. Physics of Plasmas, 2010, 17, 072903.	1.9	59
26	Anticorrelation between the Bulk Speed and the Electron Temperature in the Pristine Solar Wind: First Results from the <i>Parker Solar Probe</i> and Comparison with <i>Helios</i>. Astrophysical Journal, Supplement Series, 2020, 246, 62.	7.7	55
27	Quasi-thermal noise in space plasma: â€œkappaâ€• distributions. Physics of Plasmas, 2009, 16, .	1.9	54
28	Quasi-thermal noise in a drifting plasma: Theory and application to solar wind diagnostic on Ulysses. Journal of Geophysical Research, 1999, 104, 6691-6704.	3.3	53
29	Dusty Plasma Effects in Near Earth Space and Interplanetary Medium. Space Science Reviews, 2011, 161, 1-47.	8.1	52
30	How does the solar wind blow? A simple kinetic model. European Journal of Physics, 1999, 20, 167-176.	0.6	51
31	The Solar Wind Energy Flux. Solar Physics, 2012, 279, 197-205.	2.5	50
32	Electron temperature in the solar wind: Generic radial variation from kinetic collisionless models. Journal of Geophysical Research, 1998, 103, 29705-29717.	3.3	49
33	Detecting nanoparticles at radio frequencies: Jovian dust stream impacts on Cassini/RPWS. Geophysical Research Letters, 2009, 36, .	4.0	49
34	Physical parameters for hot and cold electron populations in comet Giacobiniâ€Zinner with the ICE Radio Experiment. Geophysical Research Letters, 1986, 13, 279-282.	4.0	43
35	Force per cross-sectional area from molecules to muscles: a general property of biological motors. Royal Society Open Science, 2016, 3, 160313.	2.4	43
36	Quasiâ€thermal noise in a stable plasma at rest: Theory and observations from ISEE 3. Journal of Geophysical Research, 1981, 86, 11127-11138.	3.3	42

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37	Acceleration of Weakly Collisional Solar-Type Winds. Astrophysical Journal, 2005, 626, L117-L120.	4.5	41
38	Solar wind electron parameters from quasi-thermal noise spectroscopy and comparison with other measurements on Ulysses. Journal of Geophysical Research, 1995, 100, 19881.	3.3	40
39	Dispersion of electrostatic waves in the Io plasma torus and derived electron temperature. Journal of Geophysical Research, 1995, 100, 21697-21708.	3.3	37
40	Constraints on Saturn's E Ring from the Voyager 1 Radio Astronomy Instrument. Icarus, 1996, 123, 113-128.	2.5	37
41	The importance of monopole antennas for dust observations: Why Wind/WAVES does not detect nanodust. Geophysical Research Letters, 2014, 41, 2716-2720.	4.0	37
42	Statistics and Polarization of Type III Radio Bursts Observed in the Inner Heliosphere. Astrophysical Journal, Supplement Series, 2020, 246, 49.	7.7	35
43	STEREO SECCHI and S/WAVES Observations ofÂSpacecraft Debris Caused by Micron-Size Interplanetary Dust Impacts. Solar Physics, 2009, 256, 475-488.	2.5	34
44	Frequency range of dust detection in space with radio and plasma wave receivers: Theory and application to interplanetary nanodust impacts on Cassini. Journal of Geophysical Research: Space Physics, 2017, 122, 8-22.	2.4	34
45	Ion thermal noise in the solar wind: Interpretation of the â€œexcessâ€• electric noise on ISEE 3. Journal of Geophysical Research, 1986, 91, 3294-3298.	3.3	33
46	Electron properties of highâ€speed solar wind from polar coronal holes obtained by Ulysses thermal noise spectroscopy: Not so dense, not so hot. Geophysical Research Letters, 2008, 35, .	4.0	33
47	Large-Scale Variation of Solar Wind Electron Properties from Quasi-Thermal Noise Spectroscopy: Ulysses Measurements. Solar Physics, 2011, 271, 141-148.	2.5	33
48	Measuring plasma parameters with thermal noise spectroscopy. Geophysical Monograph Series, 1998, , 205-210.	0.1	33
49	Collisionless model of the solar wind in a spiral magnetic field. Geophysical Research Letters, 2001, 28, 223-226.	4.0	32
50	Large scale structure of planetary environments: the importance of not being Maxwellian. Planetary and Space Science, 2001, 49, 247-260.	1.7	31
51	The Radio Plasma Imager Investigation on the Image Spacecraft. , 2000, , 319-359.		31
52	Comet Giacobini-Zinner diagnosis from radio measurements. Advances in Space Research, 1985, 5, 37-46.	2.6	29
53	Quasi-Thermal Noise Diagnostics in Space Plasmas. Astrophysics and Space Science, 2001, 277, 309-311.	1.4	28
54	On the antenna calibration of space radio instruments using the galactic background: General formulas and application to STEREO/WAVES. Radio Science, 2011, 46, .	1.6	28

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55	Detection of Bernstein wave forbidden bands in the Jovian magnetosphere: A new way to measure the electron density. Journal of Geophysical Research, 1997, 102, 2373-2379.	3.3	27
56	Dust distribution around Neptune: Grain impacts near the ring plane measured by the Voyager Planetary Radio Astronomy Experiment. Journal of Geophysical Research, 1991, 96, 19187-19196.	3.3	26
57	Dust in the interplanetary medium. Plasma Physics and Controlled Fusion, 2010, 52, 124012.	2.1	26
58	Nano dust impacts on spacecraft and boom antenna charging. Astrophysics and Space Science, 2012, 341, 309-314.	1.4	26
59	Dust observations with antenna measurements and its prospects for observations with Parker Solar Probe and Solar Orbiter. Annales Geophysicae, 2019, 37, 1121-1140.	1.6	26
60	The radio waves and thermal electrostatic noise spectroscopy (SORBET) experiment on BEPICOLOMBO/MMO/PWI: Scientific objectives and performance. Advances in Space Research, 2006, 38, 680-685.	2.6	25
61	Observations of Langmuir ponderomotive effects using the Solar TErrestrial RElations Observatory spacecraft as a density probe. Physics of Plasmas, 2011, 18, 082308.	1.9	25
62	Core electron temperature and density in the innermost Saturn's magnetosphere from HF power spectra analysis on Cassini. Journal of Geophysical Research: Space Physics, 2013, 118, 7170-7180.	2.4	22
63	Solar wind thermal electrons in the ecliptic plane between 1 and 4 AU: Preliminary results from the Ulysses radio receiver. Geophysical Research Letters, 1992, 19, 1295-1298.	4.0	21
64	Electrostatic noise in nonâ€Maxwellian plasmas: â€œFlatâ€topâ€• distribution function. Journal of Geophysical Research, 1989, 94, 15407-15414.	3.3	20
65	On the unconstrained expansion of a spherical plasma cloud turning collisionless: case of a cloud generated by a nanometre dust grain impact on an uncharged target in space. Plasma Physics and Controlled Fusion, 2012, 54, 045005.	2.1	19
66	Interplanetary Nanodust Detection by the Solar Terrestrial Relations Observatory/WAVES Low Frequency Receiver. Solar Physics, 2013, 286, 549-559.	2.5	19
67	The distribution of interplanetary dust between 0.96 and 1.04 au as inferred from impacts on the STEREO spacecraft observed by the heliospheric imagersâ˜…. Monthly Notices of the Royal Astronomical Society, 2012, 420, 1355-1366.	4.4	17
68	Nanodust detection near 1â€‰AU from spectral analysis of Cassini/Radio and Plasma Wave Science data. Geophysical Research Letters, 2014, 41, 5382-5388.	4.0	17
69	Maximum relative speeds of living organisms: Why do bacteria perform as fast as ostriches?. Physical Biology, 2016, 13, 066006.	1.8	17
70	On the thermal noise â€œtemperatureâ€• in an anisotropic plasma. Geophysical Research Letters, 1994, 21, 397-400.	4.0	16
71	Plasma thermal noise: The long wavelength radio limit. Geophysical Monograph Series, 2000, , 67-74.	0.1	16
72	How fast do living organisms move: Maximum speeds from bacteria to elephants and whales. American Journal of Physics, 2015, 83, 719-722.	0.7	16

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73	Quasiâ€thermal noise corrections due to particle impacts or emission. Journal of Geophysical Research, 1983, 88, 8081-8093.	3.3	15
74	A novel method to measure the solar wind speed. Geophysical Research Letters, 1996, 23, 1649-1652.	4.0	14
75	On the charge of nanograins in cold environments and Enceladus dust. Icarus, 2013, 226, 583-590.	2.5	14
76	Electron density and temperature in the Io plasma torus from Ulysses thermal noise measurements. Planetary and Space Science, 1993, 41, 1011-1020.	1.7	13
77	Kinetic and Hydrodynamic Representations of Coronal Expansion and The Solar Wind. AIP Conference Proceedings, 2010, , .	0.4	13
78	Energy loss by slow magnetic monopoles in a thermal plasma. Astrophysical Journal, 1985, 290, 21.	4.5	13
79	Detection of Interstellar Dust with STEREO/WAVES at 1 AU. Solar Physics, 2012, 281, 501.	2.5	12
80	Effect of the Interplanetary Medium on Nanodust Observations by the Solar Terrestrial Relations Observatory. Solar Physics, 2015, 290, 933-942.	2.5	12
81	Quasiâ€thermal noise measurements on STEREO: Kinetic temperature deduction using electron shot noise model. Journal of Geophysical Research: Space Physics, 2016, 121, 129-139.	2.4	12
82	Solar wind energy flux observations in the inner heliosphere: first results from Parker Solar Probe. Astronomy and Astrophysics, 2021, 650, A14.	5.1	12
83	First dust measurements with the Solar Orbiter Radio and Plasma Wave instrument. Astronomy and Astrophysics, 2021, 656, A30.	5.1	12
84	Losses due to the inhomogeneous sheath surrounding an antenna in a plasma. Radio Science, 1978, 13, 69-73.	1.6	11
85	Constraints on Saturn's G Ring from the Voyager 2 Radio Astronomy Instrument. Icarus, 1998, 132, 311-320.	2.5	11
86	Measurements of stray antenna capacitance in the STEREO/WAVES instrument: Comparison of the measured voltage spectrum with an antenna electron shot noise model. Radio Science, 2010, 45, n/a-n/a.	1.6	11
87	The physics and detection of nanodust in the solar system. Plasma Physics and Controlled Fusion, 2015, 57, 014015.	2.1	11
88	INTERPLANETARY FAST SHOCK DIAGNOSIS WITH THE RADIO RECEIVER ON ULYSSES. , 1992, , 465-468.		11
89	Some constraints on particles in Saturn's spokes. Icarus, 1984, 57, 422-431.	2.5	10
90	POLE-TO-POLE SOLAR WIND DENSITY FROM ULYSSES RADIO MEASUREMENTS. Solar Physics, 1997, 172, 335-343.	2.5	10

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91	Solar wind electron temperature and density measurements on the Solar Orbiter with thermal noise spectroscopy. Advances in Space Research, 2005, 36, 1471-1473.	2.6	10
92	Half a Century of Kinetic Solar Wind Models. , 2010, , .		10
93	Title is missing!. Astrophysics and Space Science, 2001, 277, 189-193.	1.4	9
94	Radio pulses from cosmic ray air showers. Astronomy and Astrophysics, 2008, 480, 15-25.	5.1	9
95	Comet P/Giacobini-Zinner electron and H2O(+) column densities from ICE and ground-based observations. Astronomical Journal, 1987, 93, 474.	4.7	9
96	Noncollisional losses in an inhomogeneous plasma. Physics of Fluids, 1977, 20, 536.	1.4	8
97	The detection of dust grains by a wire dipole antenna: The Radio Dust Analyzer. Journal of Geophysical Research, 1996, 101, 24471-24477.	3.3	8
98	Title is missing!. Space Science Reviews, 2001, 97, 105-108.	8.1	8
99	In Situ Detection of Interplanetary and Jovian Nanodust with Radio and Plasma Wave Instruments. Astrophysics and Space Science Library, 2012, , 133-160.	2.7	8
100	Impedance of a short antenna in a warm magnetoplasma: Experiment and comparison with theory. Radio Science, 1978, 13, 1059-1068.	1.6	7
101	High-speed solar wind from Ulysses measurements and comparison with exospheric models. , 1999, , .		7
102	Broadening and occultation of radio sources by comet Giacobini-Zinner as observed from ICE. Geophysical Research Letters, 1986, 13, 407-410.	4.0	6
103	The trajectory of an electron in a plasma. American Journal of Physics, 2008, 76, 934-936.	0.7	6
104	A Short Review of Passive R. F. Electric Antennas as In Situ Detectors of Space Plasmas. , 2009, , .		6
105	Electric dipole antennae used as micrometeoroid detectors. Planetary and Space Science, 1989, 37, 1291-1302.	1.7	5
106	Some Basic Aspects of Solar Wind Acceleration. AIP Conference Proceedings, 2003, , .	0.4	5
107	How does the solar wind blow? Some basic aspects. Proceedings of the International Astronomical Union, 2006, 2, 269.	0.0	5
108	Weak line discovered by Voyager 1 in the interstellar medium: Quasi-thermal noise produced by very few fast electrons. Astronomy and Astrophysics, 2022, 658, L12.	5.1	5

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109	Dust In The Interplanetary Mediumâ€"Interactions With The Solar Wind. , 2010, , .		4
110	Radio Plasma Imager Simulations and Measurements. , 2000, , 361-389.		4
111	Detection of fast nanoparticles in the solar wind. , 2010, , .		3
112	Quasi-thermal noise spectroscopy: preliminary comparison between kappa and sum of two Maxwellian distributions. , 2010, , .		3
113	On the detection of nano dust using spacecraft based boom antennas. AIP Conference Proceedings, 2013, , .	0.4	3
114	Plasma Waves in Space: The Importance of Properly Accounting for the Measuring Device. Journal of Geophysical Research: Space Physics, 2020, 125, e2019JA027723.	2.4	3
115	An analytical model for dust impact voltage signals and its application to STEREO/WAVES data. Astronomy and Astrophysics, 2022, 659, A15.	5.1	3
116	Rocket spin effects on the current collected by a cylindrical probe in the ionosphere. Journal of Geophysical Research, 1976, 81, 450-456.	3.3	2
117	Surprises in classical physics: radiation problems in stable and linear plasmas. European Journal of Physics, 1984, 5, 150-156.	0.6	2
118	Comment on â€œElectrostatic noise measurement with a pair of spherical probes near interplanetary shocksâ€•by Jacques Solomon and Frederic Touzin. Journal of Geophysical Research, 1992, 97, 185-187.	3.3	2
119	Structure and perturbations. , 0, , 291-334.		2
120	Comments on â€˜A boundary value problem treatment of an electric dipole in a warm isotropic plasma using the multiple water bag modelâ€™ by N. Singh. Radio Science, 1979, 14, 1183-1184.	1.6	1
121	Cometary plasma wave observations. Computer Physics Communications, 1988, 49, 9-15.	7.5	1
122	Quasi-thermal Noise Spectra Measured by a Dipole Antenna in the Upper Hybrid frequency band. Astrophysics and Space Science, 2001, 277, 313-316.	1.4	1
123	Study of stellar wind energy flux: from the Sun to Beltegeuse. , 2009, , .		1
124	Inner-Source Pickup Ions as Sensitive Probes to the Inner-Heliospheric Micro-State. AIP Conference Proceedings, 2010, , .	0.4	1
125	Quasi-Thermal Noise Diagnostics in Space Plasmas. , 2001, , 309-311.		1
126	High-frequency transverse fresnel drag in a moving magneto-active plasma. Astrophysics and Space Science, 1980, 73, 207-212.	1.4	0

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127	Reply to R. N. Singh's comments on the paper by lesceux et al.. Planetary and Space Science, 1990, 38, 951-952.	1.7	0
128	Observing the Solar Wind Between 1 and 4 AU with the Radio Receiver on Ulysses. Advances in Space Research, 1993, 13, 295.	2.6	0
129	Broadening and Occultation of Radio Sources by Comet Giacobini-Zinner as Observed from Ice. Special Publications, 2013, , 407-410.	0.0	0
130	Physical Parameters for Hot and Cold Electron Populations in Comet Giacobini-Zinner with the Ice Radio Experiment. Special Publications, 2013, , 279-282.	0.0	0
131	How fast do mobile organisms respond to stimuli? Response times from bacteria to elephants and whales. Physical Biology, 2021, 18, 026002.	1.8	0
132	Quasi-Thermal Noise Spectra Measured by a Dipole Antenna in the Upper Hybrid Frequency Band. , 2001, , 313-316.		0
133	Solar Wind Electron Observations Near Solar Maximum at High Latitudes from Thermal Noise Spectroscopy. , 2001, , 105-108.		0
134	Electron Temperature in the Solar Wind from a Kinetic Collisionless Model: Application to High-Latitude Ulysses Observations. , 2001, , 189-193.		0
135	Voyager planetary radio astronomy: Grain and particle impacts shot noise in Saturn's ring plane. International Astronomical Union Colloquium, 1984, 75, 289-297.	0.1	0