nicole Meyer-Vernet

List of Publications by Year
in descending order

135 papers	5,170 citations	94433 37 h-index	98798 67 g-index
142 all docs	142 docs citations	142 times ranked	2716 citing authors

#	Article	IF	Citations
1	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
2	An analytical model for dust impact voltage signals and its application to STEREO/WAVES data. Astronomy and Astrophysics, 2022, 659, A15.	5.1	3
3	How fast do mobile organisms respond to stimuli? Response times from bacteria to elephants and whales. Physical Biology, 2021, 18, 026002.	1.8	0
4	Solar wind energy flux observations in the inner heliosphere: first results from Parker Solar Probe. Astronomy and Astrophysics, 2021, 650, A14.	5.1	12
5	First dust measurements with the Solar Orbiter Radio and Plasma Wave instrument. Astronomy and Astrophysics, 2021, 656, A30.	5.1	12
6	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
7	Statistics and Polarization of Type III Radio Bursts Observed in the Inner Heliosphere. Astrophysical Journal, Supplement Series, 2020, 246, 49.	7.7	35
8	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
9	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
10	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
11	Highly structured slow solar wind emerging from an equatorial coronal hole. Nature, 2019, 576, 237-242.	27.8	401
12	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
13	Quasiâ€‘thermal noise spectroscopy: The art and the practice. Journal of Geophysical Research: Space Physics, 2017, 122, 7925-7945.	2.4	67
14	Nonequilibrium Processes in the Solar Corona, Transition Region, Flares, and Solar Wind (Invited) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50 2	2.5	60
15	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
16	Maximum relative speeds of living organisms: Why do bacteria perform as fast as ostriches?. Physical Biology, 2016, 13, 066006.	1.8	17
17	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
18	The FIELDS Instrument Suite for Solar Probe Plus. Space Science Reviews, 2016, 204, 49-82.	8.1	521

#	Article	IF	Citations
19	Effect of the Interplanetary Medium on Nanodust Observations by the Solar Terrestrial Relations Observatory. Solar Physics, 2015, 290, 933-942.	2.5	12
20	The physics and detection of nanodust in the solar system. Plasma Physics and Controlled Fusion, 2015, 57, 014015.	2.1	11
21	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
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	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
24	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
25	On the charge of nanograins in cold environments and Enceladus dust. Icarus, 2013, 226, 583-590.	2.5	14
26	Interplanetary Nanodust Detection by the Solar Terrestrial Relations Observatory/WAVES Low Frequency Receiver. Solar Physics, 2013, 286, 549-559.	2.5	19
27	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
28	On the detection of nano dust using spacecraft based boom antennas. AIP Conference Proceedings, 2013, , .	0.4	3
29	Broadening and Occultation of Radio Sources by Comet Giacobini-Zinner as Observed from Ice. Special Publications, 2013, , 407-410.	0.0	0
30	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
31	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
32	Nano dust impacts on spacecraft and boom antenna charging. Astrophysics and Space Science, 2012, 341, 309-314.	1.4	26
33	Detection of Interstellar Dust with STEREO/WAVES at 1 AU. Solar Physics, 2012, 281, 501.	2.5	12
34	Interplanetary dust detection by radio antennas: Mass calibration and fluxes measured by STEREO/WAVES. Journal of Geophysical Research, 2012, 117, .	3.3	87
35	The Solar Wind Energy Flux. Solar Physics, 2012, 279, 197-205.	2.5	50
36	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

#	ARTICLE	IF	CITATIONS
37	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
38	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
39	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
40	Large-Scale Variation of Solar Wind Electron Properties from Quasi-Thermal Noise Spectroscopy: Ulysses Measurements. Solar Physics, 2011, 271, 141-148.	2.5	33
41	Dusty Plasma Effects in Near Earth Space and Interplanetary Medium. Space Science Reviews, 2011, 161, 1-47.	8.1	52
42	Dust in the interplanetary medium. Plasma Physics and Controlled Fusion, 2010, 52, 124012.	2.1	26
43	Spacecraft charging and ion wake formation in the near-Sun environment. Physics of Plasmas, 2010, 17, 072903.	1.9	59
44	Kinetic and Hydrodynamic Representations of Coronal Expansion and The Solar Wind. AIP Conference Proceedings, 2010, , .	0.4	13
45	Dust In The Interplanetary Mediumâ€"Interactions With The Solar Wind. , 2010, , .		4
46	Detection of fast nanoparticles in the solar wind. , 2010, , .		3
47	Inner-Source Pickup Ions as Sensitive Probes to the Inner-Heliospheric Micro-State. AIP Conference Proceedings, 2010, , .	0.4	1
48	Quasi-thermal noise spectroscopy: preliminary comparison between kappa and sum of two Maxwellian distributions. , 2010, , .		3
49	Half a Century of Kinetic Solar Wind Models. , 2010, , .		10
50	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
51	Quasi-thermal noise in space plasma: â€œkappaâ€•distributions. Physics of Plasmas, 2009, 16, .	1.9	54
52	Study of stellar wind energy flux: from the Sun to Beltegeuse. , 2009, , .		1
53	A Short Review of Passive R. F. Electric Antennas as In Situ Detectors of Space Plasmas. , 2009, , .		6
54	Dust Detection by the Wave Instrument on STEREO: Nanoparticles Picked up by the Solar Wind?. Solar Physics, 2009, 256, 463-474.	2.5	129

#	Article	IF	Citations
55	STEREO SECCHI and S/WAVES Observations ofÂSpacecraft Debris Caused by Micron-Size Interplanetary Dust Impacts. Solar Physics, 2009, 256, 475-488.	2.5	34
56	Geomagnetic origin of the radio emission from cosmic ray induced air showers observed by CODALEMA. Astroparticle Physics, 2009, 31, 192-200.	4.3	115
57	Detecting nanoparticles at radio frequencies: Jovian dust stream impacts on Cassini/RPWS. Geophysical Research Letters, 2009, 36, .	4.0	49
58	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
59	The trajectory of an electron in a plasma. American Journal of Physics, 2008, 76, 934-936.	0.7	6
60	Radio pulses from cosmic ray air showers. Astronomy and Astrophysics, 2008, 480, 15-25.	5.1	9
61	How does the solar wind blow? Some basic aspects. Proceedings of the International Astronomical Union, 2006, 2, 269.	0.0	5
62	Asteroid colors: a novel tool for magnetic field detection? The case of Vesta. Astronomy and Astrophysics, 2006, 451, L43-L46.	5.1	62
63	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
64	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
65	Acceleration of Weakly Collisional Solar-Type Winds. Astrophysical Journal, 2005, 626, L117-L120.	4.5	41
66	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
67	Some Basic Aspects of Solar Wind Acceleration. AIP Conference Proceedings, 2003, , .	0.4	5
68	Latitudinal structure of outer Io plasma torus. Journal of Geophysical Research, 2002, 107, SMP 24-1.	3.3	67
69	Collisionless model of the solar wind in a spiral magnetic field. Geophysical Research Letters, 2001, 28, 223-226.	4.0	32
70	Large scale structure of planetary environments: the importance of not being Maxwellian. Planetary and Space Science, 2001, 49, 247-260.	1.7	31
71	Title is missing!. Space Science Reviews, 2001, 97, 105-108.	8.1	8
72	Title is missing!. Astrophysics and Space Science, 2001, 277, 189-193.	1.4	9

#	ARTICLE	IF	CITATIONS
73	Quasi-Thermal Noise Diagnostics in Space Plasmas. Astrophysics and Space Science, 2001, 277, 309-311.	1.4	28
74	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
75	Quasi-Thermal Noise Spectra Measured by a Dipole Antenna in the Upper Hybrid Frequency Band. , 2001, , 313-316.		0
76	Solar Wind Electron Observations Near Solar Maximum at High Latitudes from Thermal Noise Spectroscopy. , 2001, , 105-108.		0
77	Electron Temperature in the Solar Wind from a Kinetic Collisionless Model: Application to High-Latitude Ulysses Observations. , 2001, , 189-193.		0
78	Quasi-Thermal Noise Diagnostics in Space Plasmas. , 2001, , 309-311.		1
79	The Radio Plasma Imager investigation on the IMAGE spacecraft. Space Science Reviews, 2000, 91, 319-359.	8.1	140
80	Plasma thermal noise: The long wavelength radio limit. Geophysical Monograph Series, 2000, , 67-74.	0.1	16
81	The Radio Plasma Imager Investigation on the Image Spacecraft. , 2000, , 319-359.		31
82	Radio Plasma Imager Simulations and Measurements. , 2000, , 361-389.		4
83	High-speed solar wind from Ulysses measurements and comparison with exospheric models. , 1999, , .		7
84	How does the solar wind blow? A simple kinetic model. European Journal of Physics, 1999, 20, 167-176.	0.6	51
85	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
86	Constraints on Saturn's G Ring from the Voyager 2 Radio Astronomy Instrument. Icarus, 1998, 132, 311-320.	2.5	11
87	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
88	Electron temperature in the solar wind: Generic radial variation from kinetic collisionless models. Journal of Geophysical Research, 1998, 103, 29705-29717.	3.3	49
89	Measuring plasma parameters with thermal noise spectroscopy. Geophysical Monograph Series, 1998, , 205-210.	0.1	33
90	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

#	Article	IF	Citations
91	POLE-TO-POLE SOLAR WIND DENSITY FROM ULYSSES RADIO MEASUREMENTS. Solar Physics, 1997, 172, 335-343.	2.5	10
92	A novel method to measure the solar wind speed. Geophysical Research Letters, 1996, 23, 1649-1652.	4.0	14
93	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
94	Constraints on Saturn's E Ring from the Voyager 1 Radio Astronomy Instrument. Icarus, 1996, 123, 113-128.	2.5	37
95	Temperature Inversion in the Io Plasma Torus. Icarus, 1995, 116, 202-213.	2.5	87
96	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
97	Dispersion of electrostatic waves in the Io plasma torus and derived electron temperature. Journal of Geophysical Research, 1995, 100, 21697-21708.	3.3	37
98	On the thermal noise â€œtemperatureâ€• in an anisotropic plasma. Geophysical Research Letters, 1994, 21, 397-400.	4.0	16
99	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
100	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
101	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
102	Ulysses Radio and Plasma Wave Observations in the Jupiter Environment. Science, 1992, 257, 1524-1531.	12.6	96
103	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
104	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
105	INTERPLANETARY FAST SHOCK DIAGNOSIS WITH THE RADIO RECEIVER ON ULYSSES. , 1992, , 465-468.		11
106	Electrostatic noise in nonâ€Maxwellian plasmas: Generic properties and â€œkappaâ€• distributions. Journal of Geophysical Research, 1991, 96, 5825-5836.	3.3	63
107	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
108	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

#	ARTICLE	IF	CITATIONS
109	Electric dipole antennae used as micrometeoroid detectors. Planetary and Space Science, 1989, 37, 1291-1302.	1.7	5
110	Tool kit for antennae and thermal noise near the plasma frequency. Journal of Geophysical Research, 1989, 94, 2405-2415.	3.3	221
111	Electrostatic noise in nonâ€Maxwellian plasmas: â€œFlatâ€topâ€• distribution function. Journal of Geophysical Research, 1989, 94, 15407-15414.	3.3	20
112	Cometary plasma wave observations. Computer Physics Communications, 1988, 49, 9-15.	7.5	1
113	On the physics of resonant disk-satellite interaction. Icarus, 1987, 69, 157-175.	2.5	130
114	Comet P/Giacobini-Zinner electron and H2O(+) column densities from ICE and ground-based observations. Astronomical Journal, 1987, 93, 474.	4.7	9
115	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
116	Broadening and occultation of radio sources by comet Giacobini-Zinner as observed from ICE. Geophysical Research Letters, 1986, 13, 407-410.	4.0	6
117	Voyager 2 at Uranus: Grain impacts in the ring plane. Geophysical Research Letters, 1986, 13, 617-620.	4.0	61
118	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
119	Plasma Diagnosis from Thermal Noise and Limits on Dust Flux or Mass in Comet Giacobini-Zinner. Science, 1986, 232, 370-374.	12.6	120
120	Comet Giacobini-Zinner diagnosis from radio measurements. Advances in Space Research, 1985, 5, 37-46.	2.6	29
121	Energy loss by slow magnetic monopoles in a thermal plasma. Astrophysical Journal, 1985, 290, 21.	4.5	13
122	Surprises in classical physics: radiation problems in stable and linear plasmas. European Journal of Physics, 1984, 5, 150-156.	0.6	2
123	Some constraints on particles in Saturn's spokes. Icarus, 1984, 57, 422-431.	2.5	10
124	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
125	Shot noise from grain and particle impacts in Saturn's ring plane. Geophysical Research Letters, 1983, 10, 5-8.	4.0	98
126	Quasiâ€thermal noise corrections due to particle impacts or emission. Journal of Geophysical Research, 1983, 88, 8081-8093.	3.3	15

#	ARTICLE	IF	CITATIONS
127	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
128	High-frequency transverse fresnel drag in a moving magneto-active plasma. Astrophysics and Space Science, 1980, 73, 207-212.	1.4	0
129	On natural noises detected by antennas in plasmas. Journal of Geophysical Research, 1979, 84, 5373-5377.	3.3	127
130	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
131	Losses due to the inhomogeneous sheath surrounding an antenna in a plasma. Radio Science, 1978, 13, 69-73.	1.6	11
132	Impedance of a short antenna in a warm magnetoplasma: Experiment and comparison with theory. Radio Science, 1978, 13, 1059-1068.	1.6	7
133	Noncollisional losses in an inhomogeneous plasma. Physics of Fluids, 1977, 20, 536.	1.4	8
134	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
135	Structure and perturbations. , 0, , 291-334.		2