## C M Carr

## List of Publications by Year in descending order

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82410 70961 5,959 148 41 72 citations h-index g-index papers 155 155 155 2863 citing authors docs citations times ranked all docs

#	Article	IF	Citations
1	The BepiColombo Planetary Magnetometer MPO-MAG: What Can We Learn from the Hermean Magnetic Field?. Space Science Reviews, 2021, 217, 1.	3.7	45
2	Thin Current Sheet Behind the Dipolarization Front. Journal of Geophysical Research: Space Physics, 2021, 126, e2021JA029518.	0.8	8
3	Impact of the Solar Wind Dynamic Pressure on the Fieldâ€Aligned Currents in the Magnetotail: Cluster Observation. Journal of Geophysical Research: Space Physics, 2021, 126, .	0.8	O
4	Observation of the Largeâ€Amplitude and Fastâ€Damped Plasma Sheet Flapping Triggered by Reconnectionâ€Induced Ballooning Instability. Journal of Geophysical Research: Space Physics, 2020, 125, e2020JA028218.	0.8	5
5	Investigating Mercuryâ $\in$ Ms Environment with the Two-Spacecraft BepiColombo Mission. Space Science Reviews, 2020, 216, 1.	3.7	71
6	The BepiColombo–Mio Magnetometer en Route to Mercury. Space Science Reviews, 2020, 216, 1.	3.7	19
7	Far-ultraviolet aurora identified at comet 67P/Churyumov-Gerasimenko. Nature Astronomy, 2020, 4, 1084-1091.	4.2	11
8	Cluster and MMS Simultaneous Observations of Magnetosheath High Speed Jets and Their Impact on the Magnetopause. Frontiers in Astronomy and Space Sciences, 2020, 6, .	1.1	18
9	The Solar Orbiter magnetometer. Astronomy and Astrophysics, 2020, 642, A9.	2.1	136
10	Southâ€North Hemispheric Asymmetry of the FAE Distribution Around the Cusp Region: Cluster Observation. Journal of Geophysical Research: Space Physics, 2019, 124, 5342-5352.	0.8	3
11	Direct evidence of nonstationary collisionless shocks in space plasmas. Science Advances, 2019, 5, eaau9926.	4.7	27
12	Influence of the IMF Cone Angle on Invariant Latitudes of Polar Region Footprints of FACs in the Magnetotail: Cluster Observation. Journal of Geophysical Research: Space Physics, 2018, 123, 2588-2597.	0.8	4
13	The Castalia mission to Main Belt Comet 133P/Elst-Pizarro. Advances in Space Research, 2018, 62, 1947-1976.	1.2	27
14	Plasma source and loss at comet 67P during the Rosetta mission. Astronomy and Astrophysics, 2018, 618, A77.	2.1	38
15	O <sup>+</sup> Escape During the Extreme Space Weather Event of 4–10 September 2017. Space Weather, 2018, 16, 1363-1376.	1.3	20
16	On the origin of molecular oxygen in cometary comae. Nature Communications, 2018, 9, 2580.	5.8	22
17	Current sheets in comet 67P/Churyumovâ€Gerasimenko's coma. Journal of Geophysical Research: Space Physics, 2017, 122, 3308-3321.	0.8	11
18	Vertical structure of the near-surface expanding ionosphere of comet 67P probed by Rosetta. Monthly Notices of the Royal Astronomical Society, 2017, 469, S118-S129.	1.6	39

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19	Distribution of Field-Aligned Electron Events in the High-Altitude Polar Region: Cluster Observations. Journal of Geophysical Research: Space Physics, 2017, 122, 11,245-11,255.	0.8	2
20	Diamagnetic region(s): structure of the unmagnetized plasma around Comet 67P/CG. Monthly Notices of the Royal Astronomical Society, 2017, 469, S372-S379.	1.6	51
21	Two years of solar wind and pickup ion measurements at comet 67P/Churyumov–Gerasimenko. Monthly Notices of the Royal Astronomical Society, 2017, 469, S262-S267.	1.6	5
22	Mass-loading, pile-up, and mirror-mode waves at comet 67P/Churyumov-Gerasimenko. Annales Geophysicae, 2016, 34, 1-15.	0.6	46
23	Two-point observations of low-frequency waves at 67P/Churyumov-Gerasimenko during the descent of PHILAE: comparison of RPCMAG and ROMAP. Annales Geophysicae, 2016, 34, 609-622.	0.6	34
24	RPC observation of the development and evolution of plasma interaction boundaries at 67P/Churyumov-Gerasimenko. Monthly Notices of the Royal Astronomical Society, 2016, 462, S9-S22.	1.6	62
25	First detection of a diamagnetic cavity at comet 67P/Churyumov-Gerasimenko. Astronomy and Astrophysics, 2016, 588, A24.	2.1	95
26	Solar wind interaction with comet 67P: Impacts of corotating interaction regions. Journal of Geophysical Research: Space Physics, 2016, 121, 949-965.	0.8	33
27	Quasi-continuous reconnection accompanied by FTEs during IMF Bzâ‰^ 0 nT observed by Double Star TC-1 at the dawnside magnetopause. Advances in Space Research, 2016, 58, 208-217.	1.2	2
28	EMC aspects of turbulence heating observer (THOR) spacecraft., 2016,,.		3
29	Van Allen Probes, THEMIS, GOES, and Cluster observations of EMIC waves, ULF pulsations, and an electron flux dropout. Journal of Geophysical Research: Space Physics, 2016, 121, 1990-2008.	0.8	15
30	Ionospheric plasma of comet 67P probed by <i>Rosetta</i> at 3Âau from the Sun. Monthly Notices of the Royal Astronomical Society, 2016, 462, S331-S351.	1.6	75
31	CME impact on comet 67P/Churyumov-Gerasimenko. Monthly Notices of the Royal Astronomical Society, 2016, 462, S45-S56.	1.6	42
32	Structure and evolution of the diamagnetic cavity at comet 67P/Churyumov–Gerasimenko. Monthly Notices of the Royal Astronomical Society, 2016, 462, S459-S467.	1.6	79
33	Spatial distribution of lowâ€energy plasma around comet 67P/CG from Rosetta measurements. Geophysical Research Letters, 2015, 42, 4263-4269.	1.5	74
34	Evolution of the plasma environment of comet 67P from spacecraft potential measurements by the Rosetta Langmuir probe instrument. Geophysical Research Letters, 2015, 42, 10,126.	1.5	49
35	Experimental determination of the dispersion relation of magnetosonic waves. Journal of Geophysical Research: Space Physics, 2015, 120, 9632-9650.	0.8	21
36	Observation of a new type of low-frequency waves at comet 67P/Churyumov-Gerasimenko. Annales Geophysicae, 2015, 33, 1031-1036.	0.6	66

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37	Evolution of the ion environment of comet 67P/Churyumov-Gerasimenko. Astronomy and Astrophysics, 2015, 583, A20.	2.1	76
38	ON MULTIPLE RECONNECTION <i>X</i> -LINES AND TRIPOLAR PERTURBATIONS OF STRONG GUIDE MAGNETIC FIELDS. Astrophysical Journal, 2015, 805, 43.	1.6	22
39	Simultaneous fieldâ€aligned currents at Swarm and Cluster satellites. Geophysical Research Letters, 2015, 42, 3683-3691.	1.5	32
40	Birth of a comet magnetosphere: A spring of water ions. Science, 2015, 347, aaa0571.	6.0	107
41	Observations of discrete harmonics emerging from equatorial noise. Nature Communications, 2015, 6, 7703.	5.8	93
42	The nonmagnetic nucleus of comet 67P/Churyumov-Gerasimenko. Science, 2015, 349, aaa5102.	6.0	52
43	CESAR: Cryogenic Electronics for Space Applications. Journal of Low Temperature Physics, 2014, 176, 446.	0.6	4
44	Space magnetometer based on an anisotropic magnetoresistive hybrid sensor. Review of Scientific Instruments, 2014, 85, 125117.	0.6	22
45	TID Response of a Hybrid AMR Vector Magnetometer. , 2014, , .		4
46	Cluster observations of the substructure of a flux transfer event: analysis of high-time-resolution particle data. Annales Geophysicae, 2014, 32, 1093-1117.	0.6	15
47	Increases in plasma sheet temperature with solar wind driving during substorm growth phases. Geophysical Research Letters, 2014, 41, 8713-8721.	1.5	22
48	Direct calculation of the ring current distribution and magnetic structure seen by Cluster during geomagnetic storms. Journal of Geophysical Research: Space Physics, 2014, 119, 2458-2465.	0.8	32
49	The forceâ€free configuration of flux ropes in geomagnetotail: Cluster observations. Journal of Geophysical Research: Space Physics, 2014, 119, 6327-6341.	0.8	24
50	Interinstrument calibration using magnetic field data from the flux-gate magnetometer (FGM) and electron drift instrument (EDI) onboard Cluster. Geoscientific Instrumentation, Methods and Data Systems, 2014, 3, 1-11.	0.6	17
51	An initial investigation of the long-term trends in the fluxgate magnetometer (FGM) calibration parameters on the four Cluster spacecraft. Geoscientific Instrumentation, Methods and Data Systems, 2014, 3, 95-109.	0.6	10
52	Solar wind entry into the high-latitude terrestrial magnetosphere during geomagnetically quiet times. Nature Communications, 2013, 4, 1466.	5.8	68
53	Two different types of plasmoids in the plasma sheet: Cluster multisatellite analysis application. Journal of Geophysical Research: Space Physics, 2013, 118, 5437-5444.	0.8	19
54	Near-magnetic-field scaling for verification of spacecraft equipment. Geoscientific Instrumentation, Methods and Data Systems, 2013, 2, 249-255.	0.6	6

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55	Cluster and TC-1 observation of magnetic holes in the plasma sheet. Annales Geophysicae, 2012, 30, 583-595.	0.6	64
56	Magnetoresistive magnetometer for space science applications. Measurement Science and Technology, 2012, 23, 025902.	1.4	38
57	Spatial gradients from irregular, multipleâ€point spacecraft configurations. Journal of Geophysical Research, 2012, 117, .	3.3	31
58	Automatic parameterization for magnetometer zero offset determination. Geoscientific Instrumentation, Methods and Data Systems, 2012, 1, 103-109.	0.6	8
59	AXIOM: Advanced Xâ€ray imaging of the magnetosheath. Astronomische Nachrichten, 2012, 333, 388-392.	0.6	1
60	AXIOM: advanced X-ray imaging of the magnetosphere. Experimental Astronomy, 2012, 33, 403-443.	1.6	30
61	Magnetic field measurements during the ROSETTA flyby at asteroid (21)Lutetia. Planetary and Space Science, 2012, 66, 155-164.	0.9	22
62	On the possibility to determine the electrical conductivity of 67P/CG from ROSETTA magnetic field observations. Planetary and Space Science, 2012, 65, 1-9.	0.9	1
63	The Rosetta campaign to detect an exosphere at Lutetia. Planetary and Space Science, 2012, 66, 165-172.	0.9	9
64	TC-1 observations of a flux rope: Generation by multiple X line reconnection. Journal of Geophysical Research, 2011, 116, .	3.3	14
65	Magnetopause response to variations in the solar wind: Conjunction observations between Cluster, TC-1, and SuperDARN. Journal of Geophysical Research, 2011, 116, n/a-n/a.	3.3	8
66	Transient Pc3 wave activity generated by a hot flow anomaly: Cluster, Rosetta, and ground-based observations. Journal of Geophysical Research, 2011, 116, n/a-n/a.	3.3	38
67	The magnetic configuration of the high-latitude cusp and dayside magnetopause under strong magnetic shears. Journal of Geophysical Research, 2011, 116, n/a-n/a.	3.3	9
68	Multiple responses of magnetotail to the enhancement and fluctuation of solar wind dynamic pressure and the southward turning of interplanetary magnetic field. Journal of Geophysical Research, 2011, 116, $n/a-n/a$ .	3.3	25
69	Magnetopause reconnection across wide local time. Annales Geophysicae, 2011, 29, 1683-1697.	0.6	57
70	Magnetic field investigations during ROSETTA's 2867 Åteins flyby. Planetary and Space Science, 2010, 58, 1124-1128.	0.9	28
71	Magnetic field investigation of Mercury's magnetosphere and the inner heliosphere by MMO/MGF. Planetary and Space Science, 2010, 58, 279-286.	0.9	29
72	The fluxgate magnetometer of the BepiColombo Mercury Planetary Orbiter. Planetary and Space Science, 2010, 58, 287-299.	0.9	70

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73	Interplanetary shock transmitted into the Earth's magnetosheath: Cluster and Double Star observations. Annales Geophysicae, 2010, 28, 1141-1156.	0.6	34
74	The large-scale magnetospheric electric field observed by Double Star TC-1. Annales Geophysicae, 2010, 28, 1625-1631.	0.6	1
75	Mirror waves and mode transition observed in the magnetosheath by Double Star TC-1. Annales Geophysicae, 2009, 27, 351-355.	0.6	4
76	The DynaMICCS perspective. Experimental Astronomy, 2009, 23, 1017-1055.	1.6	17
77	Simultaneous observations of flux transfer events by THEMIS, Cluster, Double Star, and SuperDARN: Acceleration of FTEs. Journal of Geophysical Research, 2009, 114, .	3.3	27
78	Simultaneous measurements of Martian plasma boundaries by Rosetta and Mars Express. Planetary and Space Science, 2009, 57, 1085-1096.	0.9	13
79	Convective bursty flows in the nearâ€Earth magnetotail inside 13 R <sub>E</sub> . Journal of Geophysical Research, 2009, 114, .	3.3	16
80	Substorm expansion triggered by a sudden impulse front propagating from the dayside magnetopause. Journal of Geophysical Research, 2009, $114$ , .	3.3	30
81	Deformation and evolution of solar wind discontinuities through their interactions with the Earth's bow shock. Journal of Geophysical Research, 2009, 114, .	3.3	13
82	A solar storm observed from the Sun to Venus using the STEREO, Venus Express, and MESSENGER spacecraft. Journal of Geophysical Research, 2009, $114$ , .	3.3	65
83	Rosetta and Mars Express observations of the influence of high solar wind pressure on the Martian plasma environment. Annales Geophysicae, 2009, 27, 4533-4545.	0.6	21
84	Calibration techniques for magnetometers implementing on-board de-spinning algorithms. Advances in Space Research, 2008, 41, 1571-1578.	1.2	3
85	Surveys on magnetospheric plasmas based on the Double Star Project (DSP) exploration. Science in China Series D: Earth Sciences, 2008, 51, 1639-1647.	0.9	2
86	Near-Earth bursty bulk flows and AE index. Science in China Series D: Earth Sciences, 2008, 51, 1704-1712.	0.9	1
87	Shrinkage of magnetosphere observed by TC-1 satellite during the high-speed solar wind stream. Science in China Series D: Earth Sciences, 2008, 51, 1695-1703.	0.9	6
88	Solar wind transport into magnetosphere caused by magnetic reconnection at high latitude magnetopause during northward IMF: Cluster-DSP conjunction observations. Science in China Series D: Earth Sciences, 2008, 51, 1677-1684.	0.9	4
89	TC-1 observation of ion high-speed flow reversal in the near-Earth plasma sheet during substorm. Science in China Series D: Earth Sciences, 2008, 51, 1721-1730.	0.9	6
90	Structures of magnetic null points in reconnection diffusion region: Cluster observations. Science Bulletin, 2008, 53, 1880-1886.	4.3	2

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91	Convective high-speed flow and field-aligned high-speed flows explored by TC-1. Science Bulletin, 2008, 53, 2371-2375.	4.3	2
92	Study of waves in the magnetotail region with cluster and DSP. Advances in Space Research, 2008, 41, 1593-1597.	1.2	8
93	Plasma sheet oscillations and their relation to substorm development: Cluster and double star TC1 case study. Advances in Space Research, 2008, 41, 1585-1592.	1.2	3
94	Modified gradiometer technique applied to Double Star (TC-1). Advances in Space Research, 2008, 41, 1579-1584.	1.2	14
95	Characteristics of middle―to lowâ€atitude Pi2 excited by bursty bulk flows. Journal of Geophysical Research, 2008, 113, .	3.3	58
96	Magnetotail dipolarization and associated current systems observed by Cluster and Double Star. Journal of Geophysical Research, 2008, 113, .	3.3	14
97	Reconnection at the dayside magnetopause: Comparisons of global MHD simulation results with Cluster and Double Star observations. Journal of Geophysical Research, 2008, 113, .	3.3	18
98	Local fieldâ€aligned currents in the magnetotail and ionosphere as observed by a Cluster, Double Star, and MIRACLE conjunction. Journal of Geophysical Research, 2008, 113, .	3.3	10
99	Formation of the lowâ€latitude boundary layer and cusp under the northward IMF: Simultaneous observations by Cluster and Double Star. Journal of Geophysical Research, 2008, 113, .	3.3	32
100	Response of the inner magnetosphere and the plasma sheet to a sudden impulse. Journal of Geophysical Research, 2008, $113$ , .	3.3	31
101	Coordinated Cluster and Double Star observations of the dayside magnetosheath and magnetopause at different latitudes near noon. Journal of Geophysical Research, 2008, 113, .	3.3	3
102	Occurrence of reconnection jets at the dayside magnetopause: Double Star observations. Journal of Geophysical Research, 2008, $113$ , .	3.3	77
103	Latitude and local time dependence of ULF wave power at the magnetopause: A Cluster–Double Star study. Journal of Geophysical Research, 2008, 113, .	3.3	7
104	Electron structure of the magnetopause boundary layer: Cluster/Double Star observations. Journal of Geophysical Research, 2008, $113$ , .	3.3	12
105	Multiâ€point observations of the inner boundary of the plasma sheet during geomagnetic disturbances. Geophysical Research Letters, 2008, 35, .	1.5	19
106	Multispacecraft and groundâ€based observations of substorm timing and activations: Two case studies. Journal of Geophysical Research, 2008, 113, .	3.3	21
107	Magnetic configurations of the tilted current sheets in magnetotail. Annales Geophysicae, 2008, 26, 3525-3543.	0.6	56
108	Dipolarization Observed by TC1 and Cluster During Substorm in Sep. 14, 2004. Chinese Journal of Geophysics, 2007, 50, 866-876.	0.2	0

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109	A radiation tolerant digital fluxgate magnetometer. Measurement Science and Technology, 2007, 18, 3645-3650.	1.4	26
110	TC1 and Cluster observation of an FTE on 4 January 2005: A close conjunction. Geophysical Research Letters, 2007, 34, .	1.5	16
111	TC-1 observations of flux pileup and dipolarization-associated expansion in the near-Earth magnetotail during substorms. Geophysical Research Letters, 2007, 34, .	1.5	30
112	New approach for determining the normal of the bow shock based on Cluster four-point magnetic field measurements. Journal of Geophysical Research, 2007, 112, n/a-n/a.	3.3	14
113	Cluster observations of waves in the whistler frequency range associated with magnetic reconnection in the Earth's magnetotail. Journal of Geophysical Research, 2007, $112$ , .	3.3	95
114	Flow burst-induced Kelvin-Helmholtz waves in the terrestrial magnetotail. Geophysical Research Letters, 2007, 34, .	1.5	33
115	Global view of dayside magnetic reconnection with the duskâ€dawn IMF orientation: A statistical study for Double Star and Cluster data. Geophysical Research Letters, 2007, 34, .	1.5	60
116	Near-simultaneous magnetotail flux rope observations with Cluster and Double Star. Annales Geophysicae, 2007, 25, 1887-1897.	0.6	16
117	On the location of dayside magnetic reconnection during an interval of duskward oriented IMF. Annales Geophysicae, 2007, 25, 219-238.	0.6	20
118	Little or no solar wind enters Venus' atmosphere at solar minimum. Nature, 2007, 450, 654-656.	13.7	79
119	RPC-MAG The Fluxgate Magnetometer in the ROSETTA Plasma Consortium. Space Science Reviews, 2007, 128, 649-670.	3.7	154
120	RPC: The Rosetta Plasma Consortium. Space Science Reviews, 2007, 128, 629-647.	3.7	135
121	Double Star TC-1 observation of the earthward flowing plasmoids in the near magnetotail. Science Bulletin, 2007, 52, 1843-1848.	1.7	3
122	Plasma sheet stretching accompanied by field aligned energetic ion fluxes observed by the NUADU instrument aboard TC-2. Science Bulletin, 2007, 52, 1719-1723.	1.7	6
123	Joint observations by Cluster satellites of bursty bulk flows in the magnetotail. Journal of Geophysical Research, 2006, 111, .	3.3	174
124	Flux closure during a substorm observed by Cluster, Double Star, IMAGE FUV, SuperDARN, and Greenland magnetometers. Annales Geophysicae, 2006, 24, 751-767.	0.6	8
125	Oscillatory magnetic flux tube slippage in the plasma sheet. Annales Geophysicae, 2006, 24, 1695-1704.	0.6	71
126	Do BBFs contribute to inner magnetosphere dipolarizations: Concurrent Cluster and Double Star observations. Geophysical Research Letters, 2006, 33, .	1.5	50

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127	The Double Star magnetic field investigation: Overview of instrument performance and initial results. Advances in Space Research, 2006, 38, 1828-1833.	1.2	5
128	Magnetic field investigation of the Venus plasma environment: Expected new results from Venus Express. Planetary and Space Science, 2006, 54, 1336-1343.	0.9	235
129	Double Star, Cluster, and ground-based observations of magnetic reconnection during an interval of duskward oriented IMF: preliminary results. Annales Geophysicae, 2005, 23, 2903-2907.	0.6	5
130	A statistical study on the correlations between plasma sheet and solar wind based on DSP explorations. Annales Geophysicae, 2005, 23, 2961-2966.	0.6	10
131	The Double Star magnetic field investigation: instrument design, performance and highlights of the first year's observations. Annales Geophysicae, 2005, 23, 2713-2732.	0.6	129
132	Coordinated Cluster/Double Star observations of dayside reconnection signatures. Annales Geophysicae, 2005, 23, 2867-2875.	0.6	47
133	Simultaneous Double Star and Cluster FTEs observations on the dawnside flank of the magnetosphere. Annales Geophysicae, 2005, 23, 2877-2887.	0.6	9
134	Double Star/Cluster observation of neutral sheet oscillations on 5 August 2004. Annales Geophysicae, 2005, 23, 2909-2914.	0.6	58
135	Observation of reconnection pulses by Cluster and Double Star. Annales Geophysicae, 2005, 23, 2921-2927.	0.6	4
136	Plasma flow channels with ULF waves observed by Cluster and Double Star. Annales Geophysicae, 2005, 23, 2929-2935.	0.6	27
137	Double Star TC-1 observations of component reconnection at the dayside magnetopause: a preliminary study. Annales Geophysicae, 2005, 23, 2889-2895.	0.6	32
138	Cluster and Double Star observations of dipolarization. Annales Geophysicae, 2005, 23, 2915-2920.	0.6	19
139	Electron pitch angle variations recorded at the high magnetic latitude boundary layer by the NUADU instrument on the TC-2 spacecraft. Annales Geophysicae, 2005, 23, 2953-2959.	0.6	1
140	Multiple flux rope events at the magnetopause observations by TC-1 on 18 March 2004. Annales Geophysicae, 2005, 23, 2897-2901.	0.6	4
141	The structure of high altitude O <sup>+</sup> energization and outflow: a case study. Annales Geophysicae, 2004, 22, 2497-2506.	0.6	33
142	Cluster magnetic field observations of magnetospheric boundaries. Geophysical Monograph Series, 2003, , 63-69.	0.1	1
143	Cluster magnetic field observations at a quasi-parallel bow shock. Annales Geophysicae, 2002, 20, 1699-1710.	0.6	41
144	Cluster magnetic field observations of the bowshock: Orientation, motion and structure. Annales Geophysicae, 2001, 19, 1399-1409.	0.6	51

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145	The Cluster Magnetic Field Investigation: overview of in-flight performance and initial results. Annales Geophysicae, 2001, 19, 1207-1217.	0.6	1,042
146	Cluster magnetic field observations in the magnetosheath: four-point measurements of mirror structures. Annales Geophysicae, 2001, 19, 1421-1428.	0.6	54
147	Cluster as a wave telescope – first results from the fluxgate magnetometer. Annales Geophysicae, 2001, 19, 1439-1447.	0.6	107
148	The Rosetta plasma consortium: Technical realization and scientific aims. Advances in Space Research, 1999, 24, 1149-1158.	1,2	16