## 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 Cluster Magnetic Field Investigation: overview of in-flight performance and initial results. Annales Geophysicae, 2001, 19, 1207-1217.	0.6	1,042
2	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
3	Joint observations by Cluster satellites of bursty bulk flows in the magnetotail. Journal of Geophysical Research, 2006, $111$ , .	3.3	174
4	RPC-MAG The Fluxgate Magnetometer in the ROSETTA Plasma Consortium. Space Science Reviews, 2007, 128, 649-670.	3.7	154
5	The Solar Orbiter magnetometer. Astronomy and Astrophysics, 2020, 642, A9.	2.1	136
6	RPC: The Rosetta Plasma Consortium. Space Science Reviews, 2007, 128, 629-647.	3.7	135
7	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
8	Birth of a comet magnetosphere: A spring of water ions. Science, 2015, 347, aaa0571.	6.0	107
9	Cluster as a wave telescope – first results from the fluxgate magnetometer. Annales Geophysicae, 2001, 19, 1439-1447.	0.6	107
10	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
11	First detection of a diamagnetic cavity at comet 67P/Churyumov-Gerasimenko. Astronomy and Astrophysics, 2016, 588, A24.	2.1	95
12	Observations of discrete harmonics emerging from equatorial noise. Nature Communications, 2015, 6, 7703.	5.8	93
13	Little or no solar wind enters Venus' atmosphere at solar minimum. Nature, 2007, 450, 654-656.	13.7	79
14	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
15	Occurrence of reconnection jets at the dayside magnetopause: Double Star observations. Journal of Geophysical Research, 2008, $113$ , .	3.3	77
16	Evolution of the ion environment of comet 67P/Churyumov-Gerasimenko. Astronomy and Astrophysics, 2015, 583, A20.	2.1	76
17	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
18	Spatial distribution of lowâ€energy plasma around comet 67P/CG from Rosetta measurements. Geophysical Research Letters, 2015, 42, 4263-4269.	1.5	74

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19	Oscillatory magnetic flux tube slippage in the plasma sheet. Annales Geophysicae, 2006, 24, 1695-1704.	0.6	71
20	Investigating Mercury's Environment with the Two-Spacecraft BepiColombo Mission. Space Science Reviews, 2020, 216, 1.	3.7	71
21	The fluxgate magnetometer of the BepiColombo Mercury Planetary Orbiter. Planetary and Space Science, 2010, 58, 287-299.	0.9	70
22	Solar wind entry into the high-latitude terrestrial magnetosphere during geomagnetically quiet times. Nature Communications, 2013, 4, 1466.	5.8	68
23	Observation of a new type of low-frequency waves at comet 67P/Churyumov-Gerasimenko. Annales Geophysicae, 2015, 33, 1031-1036.	0.6	66
24	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
25	Cluster and TC-1 observation of magnetic holes in the plasma sheet. Annales Geophysicae, 2012, 30, 583-595.	0.6	64
26	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
27	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
28	Double Star/Cluster observation of neutral sheet oscillations on 5 August 2004. Annales Geophysicae, 2005, 23, 2909-2914.	0.6	58
29	Characteristics of middle―to lowâ€latitude Pi2 excited by bursty bulk flows. Journal of Geophysical Research, 2008, 113, .	3.3	58
30	Magnetopause reconnection across wide local time. Annales Geophysicae, 2011, 29, 1683-1697.	0.6	57
31	Magnetic configurations of the tilted current sheets in magnetotail. Annales Geophysicae, 2008, 26, 3525-3543.	0.6	56
32	Cluster magnetic field observations in the magnetosheath: four-point measurements of mirror structures. Annales Geophysicae, 2001, 19, 1421-1428.	0.6	54
33	The nonmagnetic nucleus of comet 67P/Churyumov-Gerasimenko. Science, 2015, 349, aaa5102.	6.0	52
34	Cluster magnetic field observations of the bowshock: Orientation, motion and structure. Annales Geophysicae, 2001, 19, 1399-1409.	0.6	51
35	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
36	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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37	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
38	Coordinated Cluster/Double Star observations of dayside reconnection signatures. Annales Geophysicae, 2005, 23, 2867-2875.	0.6	47
39	Mass-loading, pile-up, and mirror-mode waves at comet 67P/Churyumov-Gerasimenko. Annales Geophysicae, 2016, 34, 1-15.	0.6	46
40	The BepiColombo Planetary Magnetometer MPO-MAG: What Can We Learn from the Hermean Magnetic Field?. Space Science Reviews, 2021, 217, 1.	3.7	45
41	CME impact on comet 67P/Churyumov-Gerasimenko. Monthly Notices of the Royal Astronomical Society, 2016, 462, S45-S56.	1.6	42
42	Cluster magnetic field observations at a quasi-parallel bow shock. Annales Geophysicae, 2002, 20, 1699-1710.	0.6	41
43	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
44	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
45	Magnetoresistive magnetometer for space science applications. Measurement Science and Technology, 2012, 23, 025902.	1.4	38
46	Plasma source and loss at comet 67P during the Rosetta mission. Astronomy and Astrophysics, 2018, 618, A77.	2.1	38
47	Interplanetary shock transmitted into the Earth's magnetosheath: Cluster and Double Star observations. Annales Geophysicae, 2010, 28, 1141-1156.	0.6	34
48	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
49	The structure of high altitude O <sup>+</sup> energization and outflow: a case study. Annales Geophysicae, 2004, 22, 2497-2506.	0.6	33
50	Flow burst-induced Kelvin-Helmholtz waves in the terrestrial magnetotail. Geophysical Research Letters, 2007, 34, .	1.5	33
51	Solar wind interaction with comet 67P: Impacts of corotating interaction regions. Journal of Geophysical Research: Space Physics, 2016, 121, 949-965.	0.8	33
52	Double Star TC-1 observations of component reconnection at the dayside magnetopause: a preliminary study. Annales Geophysicae, 2005, 23, 2889-2895.	0.6	32
53	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
54	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

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55	Simultaneous fieldâ€aligned currents at Swarm and Cluster satellites. Geophysical Research Letters, 2015, 42, 3683-3691.	1.5	32
56	Response of the inner magnetosphere and the plasma sheet to a sudden impulse. Journal of Geophysical Research, 2008, $113$ , .	3.3	31
57	Spatial gradients from irregular, multipleâ€point spacecraft configurations. Journal of Geophysical Research, 2012, 117, .	3.3	31
58	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
59	Substorm expansion triggered by a sudden impulse front propagating from the dayside magnetopause. Journal of Geophysical Research, 2009, 114, .	3.3	30
60	AXIOM: advanced X-ray imaging of the magnetosphere. Experimental Astronomy, 2012, 33, 403-443.	1.6	30
61	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
62	Magnetic field investigations during ROSETTA's 2867 Åteins flyby. Planetary and Space Science, 2010, 58, 1124-1128.	0.9	28
63	Plasma flow channels with ULF waves observed by Cluster and Double Star. Annales Geophysicae, 2005, 23, 2929-2935.	0.6	27
64	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
65	The Castalia mission to Main Belt Comet 133P/Elst-Pizarro. Advances in Space Research, 2018, 62, 1947-1976.	1.2	27
66	Direct evidence of nonstationary collisionless shocks in space plasmas. Science Advances, 2019, 5, eaau9926.	4.7	27
67	A radiation tolerant digital fluxgate magnetometer. Measurement Science and Technology, 2007, 18, 3645-3650.	1.4	26
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	The forceâ $\in$ ree configuration of flux ropes in geomagnetotail: Cluster observations. Journal of Geophysical Research: Space Physics, 2014, 119, 6327-6341.	0.8	24
70	Magnetic field measurements during the ROSETTA flyby at asteroid (21)Lutetia. Planetary and Space Science, 2012, 66, 155-164.	0.9	22
71	Space magnetometer based on an anisotropic magnetoresistive hybrid sensor. Review of Scientific Instruments, 2014, 85, 125117.	0.6	22
72	Increases in plasma sheet temperature with solar wind driving during substorm growth phases. Geophysical Research Letters, 2014, 41, 8713-8721.	1.5	22

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73	ON MULTIPLE RECONNECTION (i) X (/i) -LINES AND TRIPOLAR PERTURBATIONS OF STRONG GUIDE MAGNETIC FIELDS. Astrophysical Journal, 2015, 805, 43.	1.6	22
74	On the origin of molecular oxygen in cometary comae. Nature Communications, 2018, 9, 2580.	5.8	22
<b>7</b> 5	Multispacecraft and ground $\hat{\epsilon}$ based observations of substorm timing and activations: Two case studies. Journal of Geophysical Research, 2008, 113, .	3.3	21
76	Experimental determination of the dispersion relation of magnetosonic waves. Journal of Geophysical Research: Space Physics, 2015, 120, 9632-9650.	0.8	21
77	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
78	On the location of dayside magnetic reconnection during an interval of duskward oriented IMF. Annales Geophysicae, 2007, 25, 219-238.	0.6	20
79	O <sup>+</sup> Escape During the Extreme Space Weather Event of 4–10 September 2017. Space Weather, 2018, 16, 1363-1376.	1.3	20
80	Cluster and Double Star observations of dipolarization. Annales Geophysicae, 2005, 23, 2915-2920.	0.6	19
81	Multiâ€point observations of the inner boundary of the plasma sheet during geomagnetic disturbances. Geophysical Research Letters, 2008, 35, .	1.5	19
82	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
83	The BepiColombo–Mio Magnetometer en Route to Mercury. Space Science Reviews, 2020, 216, 1.	3.7	19
84	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
85	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
86	The DynaMICCS perspective. Experimental Astronomy, 2009, 23, 1017-1055.	1.6	17
87	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
88	The Rosetta plasma consortium: Technical realization and scientific aims. Advances in Space Research, 1999, 24, 1149-1158.	1.2	16
89	TC1 and Cluster observation of an FTE on 4 January 2005: A close conjunction. Geophysical Research Letters, 2007, 34, .	1.5	16
90	Near-simultaneous magnetotail flux rope observations with Cluster and Double Star. Annales Geophysicae, 2007, 25, 1887-1897.	0.6	16

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91	Convective bursty flows in the nearâ€Earth magnetotail inside 13 R <sub>E</sub> . Journal of Geophysical Research, 2009, 114, .	3.3	16
92	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
93	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
94	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
95	Modified gradiometer technique applied to Double Star (TC-1). Advances in Space Research, 2008, 41, 1579-1584.	1.2	14
96	Magnetotail dipolarization and associated current systems observed by Cluster and Double Star. Journal of Geophysical Research, 2008, 113, .	3.3	14
97	TC-1 observations of a flux rope: Generation by multiple X line reconnection. Journal of Geophysical Research, 2011, 116, .	3.3	14
98	Simultaneous measurements of Martian plasma boundaries by Rosetta and Mars Express. Planetary and Space Science, 2009, 57, 1085-1096.	0.9	13
99	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
100	Electron structure of the magnetopause boundary layer: Cluster/Double Star observations. Journal of Geophysical Research, 2008, $113$ , .	3.3	12
101	Current sheets in comet 67P/Churyumovâ€Gerasimenko's coma. Journal of Geophysical Research: Space Physics, 2017, 122, 3308-3321.	0.8	11
102	Far-ultraviolet aurora identified at comet 67P/Churyumov-Gerasimenko. Nature Astronomy, 2020, 4, 1084-1091.	4.2	11
103	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
104	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
105	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
106	Simultaneous Double Star and Cluster FTEs observations on the dawnside flank of the magnetosphere. Annales Geophysicae, 2005, 23, 2877-2887.	0.6	9
107	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
108	The Rosetta campaign to detect an exosphere at Lutetia. Planetary and Space Science, 2012, 66, 165-172.	0.9	9

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109	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
110	Study of waves in the magnetotail region with cluster and DSP. Advances in Space Research, 2008, 41, 1593-1597.	1.2	8
111	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
112	Automatic parameterization for magnetometer zero offset determination. Geoscientific Instrumentation, Methods and Data Systems, 2012, 1, 103-109.	0.6	8
113	Thin Current Sheet Behind the Dipolarization Front. Journal of Geophysical Research: Space Physics, 2021, 126, e2021JA029518.	0.8	8
114	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
115	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
116	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
117	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
118	Near-magnetic-field scaling for verification of spacecraft equipment. Geoscientific Instrumentation, Methods and Data Systems, 2013, 2, 249-255.	0.6	6
119	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
120	The Double Star magnetic field investigation: Overview of instrument performance and initial results. Advances in Space Research, 2006, 38, 1828-1833.	1.2	5
121	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
122	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
123	Observation of reconnection pulses by Cluster and Double Star. Annales Geophysicae, 2005, 23, 2921-2927.	0.6	4
124	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
125	Mirror waves and mode transition observed in the magnetosheath by Double Star TC-1. Annales Geophysicae, 2009, 27, 351-355.	0.6	4
126	CESAR: Cryogenic Electronics for Space Applications. Journal of Low Temperature Physics, 2014, 176, 446.	0.6	4

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127	TID Response of a Hybrid AMR Vector Magnetometer., 2014,,.		4
128	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
129	Multiple flux rope events at the magnetopause observations by TC-1 on 18 March 2004. Annales Geophysicae, 2005, 23, 2897-2901.	0.6	4
130	Double Star TC-1 observation of the earthward flowing plasmoids in the near magnetotail. Science Bulletin, 2007, 52, 1843-1848.	1.7	3
131	Calibration techniques for magnetometers implementing on-board de-spinning algorithms. Advances in Space Research, 2008, 41, 1571-1578.	1.2	3
132	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
133	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
134	EMC aspects of turbulence heating observer (THOR) spacecraft. , 2016, , .		3
135	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
136	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
137	Structures of magnetic null points in reconnection diffusion region: Cluster observations. Science Bulletin, 2008, 53, 1880-1886.	4.3	2
138	Convective high-speed flow and field-aligned high-speed flows explored by TC-1. Science Bulletin, 2008, 53, 2371-2375.	4.3	2
139	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
140	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
141	Cluster magnetic field observations of magnetospheric boundaries. Geophysical Monograph Series, 2003, , 63-69.	0.1	1
142	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
143	Near-Earth bursty bulk flows and AE index. Science in China Series D: Earth Sciences, 2008, 51, 1704-1712.	0.9	1
144	The large-scale magnetospheric electric field observed by Double Star TC-1. Annales Geophysicae, 2010, 28, 1625-1631.	0.6	1

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145	AXIOM: Advanced Xâ€ray imaging of the magnetosheath. Astronomische Nachrichten, 2012, 333, 388-392.	0.6	1
146	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
147	Dipolarization Observed by TC1 and Cluster During Substorm in Sep. 14, 2004. Chinese Journal of Geophysics, 2007, 50, 866-876.	0.2	O
148	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	0