M R Argall

List of Publications by Citations

68 papers	2,135 citations	21 h-index	45 g-index
75 ext. papers	2,595 ext. citations	5.5 avg, IF	3.91 L-index

#	Paper	IF	Citations
68	Electron-scale measurements of magnetic reconnection in space. *Science*, **2016**, 352, aaf2939	33.3	418
67	The Space Physics Environment Data Analysis System (SPEDAS). *Space Science Reviews*, **2019**, 215, 9	7.5	205
66	Electron magnetic reconnection without ion coupling in Earth's turbulent magnetosheath. *Nature*, **2018**, 557, 202-206	50.4	173
65	Electron-scale dynamics of the diffusion region during symmetric magnetic reconnection in space. *Science*, **2018**, 362, 1391-1395	33.3	139
64	Ion-scale secondary flux ropes generated by magnetopause reconnection as resolved by MMS. *Geophysical Research Letters*, **2016**, 43, 4716-4724	4.9	80
63	Estimates of terms in Ohm's law during an encounter with an electron diffusion region. *Geophysical Research Letters*, **2016**, 43, 5918-5925	4.9	68
62	Currents and associated electron scattering and bouncing near the diffusion region at Earth's magnetopause. *Geophysical Research Letters*, **2016**, 43, 3042-3050	4.9	65
61	Electron jet of asymmetric reconnection. *Geophysical Research Letters*, **2016**, 43, 5571-5580	4.9	59
60	Properties of the Turbulence Associated with Electron-only Magnetic Reconnection in Earth Magnetosheath. *Astrophysical Journal Letters*, **2019**, 877, L37	7.9	52
59	Observations of whistler mode waves with nonlinear parallel electric fields near the dayside magnetic reconnection separatrix by the Magnetospheric Multiscale mission. *Geophysical Research Letters*, **2016**, 43, 5909-5917	4.9	51
58	Magnetospheric Multiscale observations of large-amplitude, parallel, electrostatic waves associated with magnetic reconnection at the magnetopause. *Geophysical Research Letters*, **2016**, 43, 5626-5634	4.9	49
57	Spatiotemporal evolution of electron characteristics in the electron diffusion region of magnetic reconnection: Implications for acceleration and heating. *Geophysical Research Letters*, **2015**, 42, 2586-2593	4.9	49
56	The Electron Drift Instrument for MMS. *Space Science Reviews*, **2016**, 199, 283-305	7.5	42
55	Magnetic Reconnection, Turbulence, and Particle Acceleration: Observations in the Earth's Magnetotail. *Geophysical Research Letters*, **2018**, 45, 3338-3347	4.9	40
54	Higher-Order Turbulence Statistics in the Earth's Magnetosheath and the Solar Wind Using Magnetospheric Multiscale Observations. *Journal of Geophysical Research: Space Physics*, **2018**, 123, 9941	2.6	40
53	Whistler mode waves and Hall fields detected by MMS during a dayside magnetopause crossing. *Geophysical Research Letters*, **2016**, 43, 5943-5952	4.9	36
52	Drift waves, intense parallel electric fields, and turbulence associated with asymmetric magnetic reconnection at the magnetopause. *Geophysical Research Letters*, **2017**, 44, 2978-2986	4.9	35

51	Electron Scattering by High-frequency Whistler Waves at Earth's Bow Shock. *Astrophysical Journal Letters*, **2017**, 842, L11	7.9	29
50	Lower Hybrid Drift Waves and Electromagnetic Electron Space-Phase Holes Associated With Dipolarization Fronts and Field-Aligned Currents Observed by the Magnetospheric Multiscale Mission During a Substorm. *Journal of Geophysical Research: Space Physics*, **2017**, 122, 12,236-12,257	2.6	24
49	Highly structured electron anisotropy in collisionless reconnection exhausts. *Geophysical Research Letters*, **2014**, 41, 5389-5395	4.9	24
48	New Insights into the Nature of Turbulence in the Earth's Magnetosheath Using Magnetospheric MultiScale Mission Data. *Astrophysical Journal*, **2018**, 859, 127	4.7	21
47	The nonlinear behavior of whistler waves at the reconnecting dayside magnetopause as observed by the Magnetospheric Multiscale mission: A case study. *Journal of Geophysical Research: Space Physics*, **2017**, 122, 5487-5501	2.6	20
46	Magnetospheric Multiscale Mission observations and non-force free modeling of a flux transfer event immersed in a super-Alfvenic flow. *Geophysical Research Letters*, **2016**, 43, 6070-6077	4.9	20
45	Generation of Electron Whistler Waves at the Mirror Mode Magnetic Holes: MMS Observations and PIC Simulation. *Journal of Geophysical Research: Space Physics*, **2018**, 123, 6383-6393	2.6	19
44	MMS, Van Allen Probes, GOES 13, and Ground-Based Magnetometer Observations of EMIC Wave Events Before, During, and After a Modest Interplanetary Shock. *Journal of Geophysical Research: Space Physics*, **2018**, 123, 8331-8357	2.6	19
43	Polynomial Reconstruction of the Reconnection Magnetic Field Observed by Multiple Spacecraft. *Journal of Geophysical Research: Space Physics*, **2020**, 125, e2019JA027481	2.6	18
42	The Properties of Lion Roars and Electron Dynamics in Mirror Mode Waves Observed by the Magnetospheric MultiScale Mission. *Journal of Geophysical Research: Space Physics*, **2018**, 123, 93-103	2.6	18
41	A SURVEY OF MAGNETIC WAVES EXCITED BY NEWBORN INTERSTELLAR He+OBSERVED BY THEACESPACECRAFT AT 1 au. *Astrophysical Journal*, **2016**, 830, 47	4.7	17
40	Magnetic Waves Excited by Newborn Interstellar Pickup Ions Measured by the Voyager Spacecraft from 1 to 45 au. II. Instability and Turbulence Analyses. *Astrophysical Journal*, **2018**, 863, 76	4.7	17
39	Electron heating and energy inventory during asymmetric reconnection in a laboratory plasma. *Journal of Geophysical Research: Space Physics*, **2017**, 122, 9264-9281	2.6	16
38	Magnetic Waves Excited by Newborn Interstellar Pickup Ions Measured by the Voyager Spacecraft from 1 to 45 au. I. Wave Properties. *Astrophysical Journal*, **2018**, 863, 75	4.7	16
37	ACE observations of magnetic waves arising from newborn interstellar pickup helium ions. *Geophysical Research Letters*, **2015**, 42, 9617-9623	4.9	15
36	Solar Wind Turbulence from 1 to 45 au. IV. Turbulent Transport and Heating of the Solar Wind Using Voyager Observations. *Astrophysical Journal*, **2020**, 900, 94	4.7	15
35	A New Method of 3-D Magnetic Field Reconstruction. *Geophysical Research Letters*, **2020**, 47, e2019GL085542	4.9	14
34	Structure and Dissipation Characteristics of an Electron Diffusion Region Observed by MMS During a Rapid, Normal-Incidence Magnetopause Crossing. *Journal of Geophysical Research: Space Physics*, **2017**, 122, 11,901-11,916	2.6	14

33	Solar Wind Turbulence from 1 to 45 au. III. Anisotropy of Magnetic Fluctuations in the Inertial Range Using Voyager and ACE Observations. *Astrophysical Journal*, **2020**, 900, 93	4.7	14
32	Magnetic Waves Excited by Newborn Interstellar Pickup Ions Measured by the Voyager Spacecraft from 1 to 45 au. III. Observation Times. *Astrophysical Journal, Supplement Series*, **2018**, 237, 34	8	14
31	Observation of Magnetic Waves Excited by Newborn Interstellar Pickup He+ Observed by theVoyager 2Spacecraft at 30 au. *Astrophysical Journal*, **2017**, 849, 61	4.7	12
30	Solar Wind Turbulence from 1 to 45 au. I. Evidence for Dissipation of Magnetic Fluctuations Using Voyager and ACE Observations. *Astrophysical Journal*, **2020**, 900, 91	4.7	12
29	A Survey of Plasma Waves Appearing Near Dayside Magnetopause Electron Diffusion Region Events. *Journal of Geophysical Research: Space Physics*, **2019**, 124, 7837-7849	2.6	11
28	Solar Wind Turbulence from 1 to 45 au. II. Analysis of Inertial-range Fluctuations Using Voyager and ACE Observations. *Astrophysical Journal*, **2020**, 900, 92	4.7	11
27	Electron Inflow Velocities and Reconnection Rates at Earth's Magnetopause and Magnetosheath. *Geophysical Research Letters*, **2020**, 47, e2020GL089082	4.9	11
26	Electron Scattering by Low-frequency Whistler Waves at Earth□ Bow Shock. *Astrophysical Journal*, **2019**, 886, 53	4.7	11
25	Observations of Low-Frequency Magnetic Waves due to Newborn Interstellar Pickup Ions Using ACE, Ulysses, and Voyager Data. *Journal of Physics: Conference Series*, **2017**, 900, 012018	0.3	10
24	Electron Dynamics Within the Electron Diffusion Region of Asymmetric Reconnection. *Journal of Geophysical Research: Space Physics*, **2018**, 123, 146-162	2.6	9
23	Multipoint MMS observations of fine-scale SAPS structure in the inner magnetosphere. *Geophysical Research Letters*, **2016**, 43, 7294-7300	4.9	8
22	MMS SITL Ground Loop: Automating the Burst Data Selection Process. *Frontiers in Astronomy and Space Sciences*, **2020**, 7, 54	3.8	8
21	Differing Properties of Two Ion-Scale Magnetopause Flux Ropes. *Journal of Geophysical Research: Space Physics*, **2018**, 123, 114-131	2.6	7
20	Hodographic approach for determining spacecraft trajectories through magnetic reconnection diffusion regions. *Geophysical Research Letters*, **2017**, 44, 1625-1633	4.9	6
19	Energy Conversion and Electron Acceleration in the Magnetopause Reconnection Diffusion Region. *Geophysical Research Letters*, **2019**, 46, 10274-10282	4.9	6
18	Dipolarization in the inner magnetosphere during a geomagnetic storm on 7 October 2015. *Geophysical Research Letters*, **2016**, 43, 9397-9405	4.9	5
17	Relativistic Electron Increase During Chorus Wave Activities on the 6□ March 2016 Geomagnetic Storm. *Journal of Geophysical Research: Space Physics*, **2017**, 122, 11,302-11,319	2.6	4
16	Multiscale Coupling During Magnetopause Reconnection: Interface Between the Electron and Ion Diffusion Regions. *Journal of Geophysical Research: Space Physics*, **2020**, 125, e2020JA027985	2.6	3

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15	Energy Balance and Time Dependence of a Magnetotail Electron Diffusion Region. *Journal of Geophysical Research: Space Physics*, **2020**, 125, e2020JA028290	2.6	3
14	An Encounter With the Ion and Electron Diffusion Regions at a Flapping and Twisted Tail Current Sheet. *Journal of Geophysical Research: Space Physics*, **2021**, 126, e2020JA028903	2.6	3
13	EDR signatures observed by MMS in the 16 October event presented in a 2-D parametric space. *Journal of Geophysical Research: Space Physics*, **2017**, 122, 3262-3276	2.6	2
12	Observation of an inertial-range energy cascade within a reconnection jet in the Earth magnetotail. *Monthly Notices of the Royal Astronomical Society: Letters*, **2020**, 500, L6-L10	4.3	2
11	Velocity Rotation Events in the Outer Magnetosphere Near the Magnetopause. *Journal of Geophysical Research: Space Physics*, **2019**, 124, 4137-4156	2.6	2
10	MMS Observations of Reconnection at Dayside Magnetopause Crossings During Transitions of the Solar Wind to Sub-Alfvnic Flow. *Journal of Geophysical Research: Space Physics*, **2017**, 122, 9934-9951	2.6	2
9	Millisecond observations of nonlinear wave electron interaction in electron phase space holes. *Physics of Plasmas*, **2022**, 29, 012309	2.1	2
8	Theory, observations, and simulations of kinetic entropy in a magnetotail electron diffusion region. *Physics of Plasmas*, **2022**, 29, 022902	2.1	2
7	Origin and structure of electromagnetic generator regions at the edge of the electron diffusion region. *Physics of Plasmas*, **2021**, 28, 112901	2.1	2
6	Solar Wind Turbulence from 1 to 45 au. V. Data Intervals from the Voyager Observations. *Astrophysical Journal, Supplement Series*, **2020**, 250, 14	8	2
5	Two-Dimensional Velocity of the Magnetic Structure Observed on July 11, 2017 by the Magnetospheric Multiscale Spacecraft. *Journal of Geophysical Research: Space Physics*, **2021**, 126, e2020JA028705	2.6	2
4	Low-frequency Waves due to Newborn Interstellar Pickup He+ Observed by the Ulysses Spacecraft. *Astrophysical Journal*, **2021**, 923, 185	4.7	2
3	Effects in the Near-Magnetopause Magnetosheath Elicited by Large-Amplitude Alfvnic Fluctuations Terminating in a Field and Flow Discontinuity. *Journal of Geophysical Research: Space Physics*, **2018**, 123, 8983-9004	2.6	1
2	High-latitude Observations of Inertial-range Turbulence by the Ulysses Spacecraft During the Solar Minimum of 1993 96. *Astrophysical Journal*, **2022**, 927, 43	4.7	1
1	A Multi-Instrument Study of a Dipolarization Event in the Inner Magnetosphere. *Journal of Geophysical Research: Space Physics*, **2021**, 126, e2021JA029294	2.6	