

W S Daughton

List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/7684662/publications.pdf>

Version: 2024-02-01

181
papers

10,175
citations

24978

57
h-index

40881

93
g-index

187
all docs

187
docs citations

187
times ranked

3505
citing authors

#	ARTICLE	IF	CITATIONS
1	Role of electron physics in the development of turbulent magnetic reconnection in collisionless plasmas. <i>Nature Physics</i> , 2011, 7, 539-542.	6.5	474
2	Fully kinetic simulations of undriven magnetic reconnection with open boundary conditions. <i>Physics of Plasmas</i> , 2006, 13, 072101.	0.7	440
3	Formation of Hard Power Laws in the Energetic Particle Spectra Resulting from Relativistic Magnetic Reconnection. <i>Physical Review Letters</i> , 2014, 113, 155005.	2.9	333
4	Coherent structures, intermittent turbulence, and dissipation in high-temperature plasmas. <i>Physics of Plasmas</i> , 2013, 20, .	0.7	290
5	PARTICLE ACCELERATION AND PLASMA DYNAMICS DURING MAGNETIC RECONNECTION IN THE MAGNETICALLY DOMINATED REGIME. <i>Astrophysical Journal</i> , 2015, 806, 167.	1.6	238
6	Multi-scale structure of the electron diffusion region. <i>Geophysical Research Letters</i> , 2007, 34, .	1.5	234
7	The link between shocks, turbulence, and magnetic reconnection in collisionless plasmas. <i>Physics of Plasmas</i> , 2014, 21, .	0.7	217
8	Transition from collisional to kinetic regimes in large-scale reconnection layers. <i>Physical Review Letters</i> , 2009, 103, 065004.	2.9	210
9	Electromagnetic properties of the lower-hybrid drift instability in a thin current sheet. <i>Physics of Plasmas</i> , 2003, 10, 3103-3119.	0.7	200
10	Large-scale electron acceleration by parallel electric fields during magnetic reconnection. <i>Nature Physics</i> , 2012, 8, 321-324.	6.5	191
11	Phase diagram for magnetic reconnection in heliophysical, astrophysical, and laboratory plasmas. <i>Physics of Plasmas</i> , 2011, 18, .	0.7	187
12	The unstable eigenmodes of a neutral sheet. <i>Physics of Plasmas</i> , 1999, 6, 1329-1343.	0.7	181
13	Collisionless magnetic reconnection in the presence of a guide field. <i>Physics of Plasmas</i> , 2004, 11, 4102-4114.	0.7	173
14	Intermittent Dissipation at Kinetic Scales in Collisionless Plasma Turbulence. <i>Physical Review Letters</i> , 2012, 109, 195001.	2.9	155
15	Advances in petascale kinetic plasma simulation with VPIC and Roadrunner. <i>Journal of Physics: Conference Series</i> , 2009, 180, 012055.	0.3	144
16	A review of pressure anisotropy caused by electron trapping in collisionless plasma, and its implications for magnetic reconnection. <i>Physics of Plasmas</i> , 2013, 20, .	0.7	143
17	Evidence and theory for trapped electrons in guide field magnetotail reconnection. <i>Journal of Geophysical Research</i> , 2008, 113, .	3.3	124
18	Nonlinear Evolution of the Lower-Hybrid Drift Instability in a Current Sheet. <i>Physical Review Letters</i> , 2004, 93, 105004.	2.9	123

#	ARTICLE	IF	CITATIONS
19	Energy transfer, pressure tensor, and heating of kinetic plasma. <i>Physics of Plasmas</i> , 2017, 24, .	0.7	115
20	EFFICIENT PRODUCTION OF HIGH-ENERGY NONTHERMAL PARTICLES DURING MAGNETIC RECONNECTION IN A MAGNETICALLY DOMINATED ION-ELECTRON PLASMA. <i>Astrophysical Journal Letters</i> , 2016, 818, L9.	3.0	113
21	Why does Steady-State Magnetic Reconnection have a Maximum Local Rate of Order 0.1?. <i>Physical Review Letters</i> , 2017, 118, 085101.	2.9	112
22	Collisionless magnetic reconnection in large-scale electron-positron plasmas. <i>Physics of Plasmas</i> , 2007, 14, .	0.7	104
23	Regimes of the Electron Diffusion Region in Magnetic Reconnection. <i>Physical Review Letters</i> , 2013, 110, 135004.	2.9	101
24	MMS observations of electron-scale filamentary currents in the reconnection exhaust and near the X line. <i>Geophysical Research Letters</i> , 2016, 43, 6060-6069.	1.5	99
25	Computing the reconnection rate in turbulent kinetic layers by using electron mixing to identify topology. <i>Physics of Plasmas</i> , 2014, 21, .	0.7	98
26	Electromagnetic proton/proton instabilities in the solar wind. <i>Journal of Geophysical Research</i> , 1998, 103, 20613-20620.	3.3	94
27	Influence of the Lower-Hybrid Drift Instability on Magnetic Reconnection in Asymmetric Configurations. <i>Physical Review Letters</i> , 2012, 108, 185001.	2.9	90
28	illuminating electron diffusion regions of collisionless magnetic reconnection using electron agyrotropy. <i>Journal of Geophysical Research</i> , 2008, 113, .	3.3	87
29	Equations of State for Collisionless Guide-Field Reconnection. <i>Physical Review Letters</i> , 2009, 102, 085001.	2.9	87
30	Kinetic theory of the drift kink instability in a current sheet. <i>Journal of Geophysical Research</i> , 1998, 103, 29429-29443.	3.3	86
31	Estimates of terms in Ohm's law during an encounter with an electron diffusion region. <i>Geophysical Research Letters</i> , 2016, 43, 5918-5925.	1.5	86
32	Three-dimensional dynamics of vortex-induced reconnection and comparison with THEMIS observations. <i>Journal of Geophysical Research: Space Physics</i> , 2013, 118, 5742-5757.	0.8	83
33	Electromagnetic proton/proton instabilities in the solar wind: Simulations. <i>Journal of Geophysical Research</i> , 1999, 104, 4657-4667.	3.3	82
34	Bifurcated Structure of the Electron Diffusion Region in Three-Dimensional Magnetic Reconnection. <i>Physical Review Letters</i> , 2013, 110, 265004.	2.9	82
35	Ion-ion kink instability in the magnetotail: 2. Three-dimensional full particle and hybrid simulations and comparison with observations. <i>Journal of Geophysical Research</i> , 2003, 108, .	3.3	79
36	Direct Evidence for a Three-Dimensional Magnetic Flux Rope Flanked by Two Active Magnetic Reconnection X Lines at Earth's Magnetopause. <i>Physical Review Letters</i> , 2011, 107, 165007.	2.9	78

#	ARTICLE	IF	CITATIONS
37	Saturation of Backward Stimulated Scattering of a Laser Beam in the Kinetic Regime. Physical Review Letters, 2007, 99, 265004.	2.9	75
38	Ion-ion kink instability in the magnetotail: 1. Linear theory. Journal of Geophysical Research, 2003, 108, .	3.3	72
39	Influence of the lower hybrid drift instability on the onset of magnetic reconnection. Physics of Plasmas, 2004, 11, 4489-4500.	0.7	72
40	New insights into dissipation in the electron layer during magnetic reconnection. Geophysical Research Letters, 2008, 35, .	1.5	72
41	Double layer electric fields aiding the production of energetic flat-top distributions and superthermal electrons within magnetic reconnection exhausts. Physics of Plasmas, 2015, 22, .	0.7	72
42	Kinetic Structure of the Electron Diffusion Region in Antiparallel Magnetic Reconnection. Physical Review Letters, 2011, 106, 065002.	2.9	69
43	Onset of reconnection in the near magnetotail: PIC simulations. Journal of Geophysical Research: Space Physics, 2014, 119, 9773-9789.	0.8	69
44	Scaling of Magnetic Reconnection in Relativistic Collisionless Pair Plasmas. Physical Review Letters, 2015, 114, 095002.	2.9	69
45	Influence of Coulomb collisions on the structure of reconnection layers. Physics of Plasmas, 2009, 16, .	0.7	68
46	Electron energization and mixing observed by MMS in the vicinity of an electron diffusion region during magnetopause reconnection. Geophysical Research Letters, 2016, 43, 6036-6043.	1.5	67
47	Recent Evolution in the Theory of Magnetic Reconnection and Its Connection with Turbulence. Space Science Reviews, 2013, 178, 307-323.	3.7	66
48	Design considerations for indirectly driven double shell capsules. Physics of Plasmas, 2018, 25, .	0.7	65
49	Saturation of backward stimulated scattering of laser in kinetic regime: Wavefront bowing, trapped particle modulational instability, and trapped particle self-focusing of plasma waves. Physics of Plasmas, 2008, 15, .	0.7	64
50	Turbulent mass transfer caused by vortex induced reconnection in collisionless magnetospheric plasmas. Nature Communications, 2017, 8, 1582.	5.8	63
51	Energy transfer channels and turbulence cascade in Vlasov-Maxwell turbulence. Physical Review E, 2017, 95, 061201.	0.8	63
52	Different $k \perp D$ regimes for nonlinear effects on Langmuir waves. Physics of Plasmas, 2006, 13, 055906.	0.7	61
53	Two-dimensional wake potentials in sub- and supersonic dusty plasmas. Physics of Plasmas, 2000, 7, 2306-2313.	0.7	60
54	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.	1.5	60

#	ARTICLE	IF	CITATIONS
55	Electron energization and structure of the diffusion region during asymmetric reconnection. <i>Geophysical Research Letters</i> , 2016, 43, 2405-2412.	1.5	60
56	The unexpected role of the lower hybrid drift instability in magnetic reconnection in three dimensions. <i>Physics of Plasmas</i> , 2003, 10, 1577-1587.	0.7	59
57	Cluster observations of bidirectional beams caused by electron trapping during antiparallel reconnection. <i>Journal of Geophysical Research</i> , 2010, 115, .	3.3	58
58	Flux Pileup in Collisionless Magnetic Reconnection: Bursty Interaction of Large Flux Ropes. <i>Physical Review Letters</i> , 2011, 107, 025002.	2.9	56
59	Enhanced electron mixing and heating in asymmetric reconnection at the Earth's magnetopause. <i>Geophysical Research Letters</i> , 2017, 44, 2096-2104.	1.5	56
60	Ion kinetic effects on the wake potential behind a dust grain in a flowing plasma. <i>Physics of Plasmas</i> , 2000, 7, 2320-2328.	0.7	55
61	First Resolved Observations of the Demagnetized Electron-Diffusion Region of an Astrophysical Magnetic-Reconnection Site. <i>Physical Review Letters</i> , 2012, 108, 225005.	2.9	55
62	Identification of Intermittent Multifractal Turbulence in Fully Kinetic Simulations of Magnetic Reconnection. <i>Physical Review Letters</i> , 2013, 110, 205002.	2.9	54
63	Determining the Dominant Acceleration Mechanism during Relativistic Magnetic Reconnection in Large-scale Systems. <i>Astrophysical Journal Letters</i> , 2019, 879, L23.	3.0	54
64	Two-fluid theory of the drift kink instability. <i>Journal of Geophysical Research</i> , 1999, 104, 28701-28707.	3.3	52
65	Formation of a localized acceleration potential during magnetic reconnection with a guide field. <i>Physics of Plasmas</i> , 2009, 16, .	0.7	52
66	Nonlinear dynamics of thin current sheets. <i>Physics of Plasmas</i> , 2002, 9, 3668-3678.	0.7	50
67	Three-Dimensional Dynamics of Collisionless Magnetic Reconnection in Large-Scale Pair Plasmas. <i>Physical Review Letters</i> , 2008, 101, 125001.	2.9	50
68	Measurement of the Magnetic Reconnection Rate in the Earth's Magnetotail. <i>Journal of Geophysical Research: Space Physics</i> , 2018, 123, 9150-9168.	0.8	50
69	Magnetic reconnection in the era of exascale computing and multiscale experiments. <i>Nature Reviews Physics</i> , 2022, 4, 263-282.	11.9	50
70	Recent progress on particle acceleration and reconnection physics during magnetic reconnection in the magnetically-dominated relativistic regime. <i>Physics of Plasmas</i> , 2020, 27, .	0.7	48
71	Electron heat flux constraints in the solar wind. <i>Physics of Plasmas</i> , 1999, 6, 2607-2612.	0.7	47
72	Small-angle Coulomb collision model for particle-in-cell simulations. <i>Journal of Computational Physics</i> , 2009, 228, 1391-1403.	1.9	47

#	ARTICLE	IF	CITATIONS
73	Flushing effect in reconnection: Effects of minority species of oxygen ions. Planetary and Space Science, 2011, 59, 526-536.	0.9	47
74	Recent Evolution in the Theory of Magnetic Reconnection and Its Connection with Turbulence. Space Sciences Series of ISSI, 2013, , 231-247.	0.0	47
75	Do dispersive waves play a role in collisionless magnetic reconnection?. Physics of Plasmas, 2014, 21, 022113.	0.7	45
76	Drift turbulence, particle transport, and anomalous dissipation at the reconnecting magnetopause. Physics of Plasmas, 2018, 25, .	0.7	45
77	Electron dynamics in two-dimensional asymmetric anti-parallel reconnection. Physics of Plasmas, 2011, 18, .	0.7	44
78	Emerging Parameter Space Map of Magnetic Reconnection in Collisional and Kinetic Regimes. Space Science Reviews, 2012, 172, 271-282.	3.7	44
79	Kinetic theory of collisionless tearing at the magnetopause. Journal of Geophysical Research, 2005, 110, .	3.3	43
80	Magnitude of the Hall fields during magnetic reconnection. Geophysical Research Letters, 2010, 37, .	1.5	43
81	Role of electron temperature anisotropy in the onset of magnetic reconnection. Geophysical Research Letters, 2004, 31, .	1.5	42
82	Nonlinear backward stimulated Raman scattering from electron beam acoustic modes in the kinetic regime. Physics of Plasmas, 2006, 13, 072701.	0.7	42
83	Spacecraft Observations and Analytic Theory of Crescent-Shaped Electron Distributions in Asymmetric Magnetic Reconnection. Physical Review Letters, 2016, 117, 185101.	2.9	42
84	Nonlinear development of stimulated Raman scattering from electrostatic modes excited by self-consistent non-Maxwellian velocity distributions. Physical Review E, 2006, 73, 025401.	0.8	40
85	The inversion layer of electric fields and electron phase-space-hole structure during two-dimensional collisionless magnetic reconnection. Physics of Plasmas, 2011, 18, 012904.	0.7	40
86	Energy dynamics and current sheet structure in fluid and kinetic simulations of decaying magnetohydrodynamic turbulence. Physics of Plasmas, 2015, 22, .	0.7	39
87	Phase space structure of the electron diffusion region in reconnection with weak guide fields. Physics of Plasmas, 2012, 19, .	0.7	37
88	Pressure Tensor Elements Breaking the Frozen-In Law During Reconnection in Earth's Magnetotail. Physical Review Letters, 2019, 123, 225101.	2.9	37
89	Efficient Nonthermal Ion and Electron Acceleration Enabled by the Flux-Rope Kink Instability in 3D Nonrelativistic Magnetic Reconnection. Physical Review Letters, 2021, 127, 185101.	2.9	37
90	Physics of saturation of collisionless tearing mode as a function of guide field. Journal of Geophysical Research, 2005, 110, .	3.3	36

#	ARTICLE	IF	CITATIONS
91	Antiparallel versus component merging at the magnetopause: Current bifurcation and intermittent reconnection. <i>Journal of Geophysical Research</i> , 2005, 110, .	3.3	36
92	Cause of super-thermal electron heating during magnetotail reconnection. <i>Geophysical Research Letters</i> , 2010, 37, .	1.5	36
93	Hybrid simulations of magnetic reconnection with kinetic ions and fluid electron pressure anisotropy. <i>Physics of Plasmas</i> , 2016, 23, .	0.7	36
94	Demonstration of Anisotropic Fluid Closure Capturing the Kinetic Structure of Magnetic Reconnection. <i>Physical Review Letters</i> , 2012, 109, 115004.	2.9	35
95	Generation of lower hybrid and whistler waves by an ion velocity ring distribution. <i>Physics of Plasmas</i> , 2012, 19, .	0.7	35
96	Turbulent plasma transport across the Earth's low-latitude boundary layer. <i>Geophysical Research Letters</i> , 2014, 41, 8704-8712.	1.5	35
97	Collisionless reconnection in the large guide field regime: Gyrokinetic versus particle-in-cell simulations. <i>Physics of Plasmas</i> , 2014, 21, 020708.	0.7	35
98	The island coalescence problem: Scaling of reconnection in extended fluid models including higher-order moments. <i>Physics of Plasmas</i> , 2015, 22, .	0.7	35
99	Mass and Energy Transfer Across the Earth's Magnetopause Caused by Vortex-Induced Reconnection. <i>Journal of Geophysical Research: Space Physics</i> , 2017, 122, 11,505.	0.8	35
100	Magnetic Energy Release, Plasma Dynamics, and Particle Acceleration in Relativistic Turbulent Magnetic Reconnection. <i>Astrophysical Journal</i> , 2021, 919, 111.	1.6	34
101	Equations of state in collisionless magnetic reconnection. <i>Physics of Plasmas</i> , 2010, 17, .	0.7	33
102	Highly structured electron anisotropy in collisionless reconnection exhausts. <i>Geophysical Research Letters</i> , 2014, 41, 5389-5395.	1.5	33
103	Current sheets and pressure anisotropy in the reconnection exhaust. <i>Physics of Plasmas</i> , 2014, 21, 012103.	0.7	33
104	Role of Ion Kinetic Physics in the Interaction of Magnetic Flux Ropes. <i>Physical Review Letters</i> , 2015, 115, 175004.	2.9	33
105	Magnetic Pumping as a Source of Particle Heating and Power-law Distributions in the Solar Wind. <i>Astrophysical Journal Letters</i> , 2017, 850, L28.	3.0	32
106	Experimental study of energy transfer in double shell implosions. <i>Physics of Plasmas</i> , 2019, 26, .	0.7	32
107	Electromagnetic instability of thin reconnection layers: Comparison of three-dimensional simulations with MRX observations. <i>Physics of Plasmas</i> , 2013, 20, .	0.7	31
108	Pulsating Magnetic Reconnection Driven by Three-Dimensional Flux-Rope Interactions. <i>Physical Review Letters</i> , 2016, 116, 235101.	2.9	31

#	ARTICLE	IF	CITATIONS
109	In situ observations of flux rope at the separatrix region of magnetic reconnection. Journal of Geophysical Research: Space Physics, 2016, 121, 205-213.	0.8	30
110	New role of the lower-hybrid drift instability in the magnetic reconnection. Physics of Plasmas, 2005, 12, 055901.	0.7	29
111	Two-dimensional fully kinetic simulations of driven magnetic reconnection with boundary conditions relevant to the Magnetic Reconnection Experiment. Physics of Plasmas, 2008, 15, .	0.7	29
112	Study of energy conversion and partitioning in the magnetic reconnection layer of a laboratory	0.7	28
113	Particle acceleration during magnetic reconnection in a low-beta pair plasma. Physics of Plasmas, 2016, 23, .	0.7	28
114	Empirical bridge function for strongly coupled Yukawa systems. Physical Review E, 2000, 61, 2129-2132.	0.8	27
115	Debye scale turbulence within the electron diffusion layer during magnetic reconnection. Physics of Plasmas, 2014, 21, 032114.	0.7	26
116	Multi-scale structures of turbulent magnetic reconnection. Physics of Plasmas, 2016, 23, .	0.7	26
117	New approach for the study of linear Vlasov stability of inhomogeneous systems. Physics of Plasmas, 2006, 13, 092110.	0.7	25
118	Driven magnetic reconnection near the Dreicer limit. Physics of Plasmas, 2010, 17, .	0.7	25
119	Simulations of anti-parallel reconnection using a nonlocal heat flux closure. Physics of Plasmas, 2017, 24, .	0.7	25
120	In-plane electric fields in magnetic islands during collisionless magnetic reconnection. Physics of Plasmas, 2012, 19, 112902.	0.7	23
121	The relation between reconnected flux, the parallel electric field, and the reconnection rate in a three-dimensional kinetic simulation of magnetic reconnection. Physics of Plasmas, 2013, 20, 122105.	0.7	23
122	Influence of 3D plasmoid dynamics on the transition from collisional to kinetic reconnection. Physics of Plasmas, 2019, 26, .	0.7	22
123	Two-stage bulk electron heating in the diffusion region of anti-parallel symmetric reconnection. Physics of Plasmas, 2016, 23, .	0.7	21
124	Kinetic theory and simulation of collisionless tearing in bifurcated current sheets. Physics of Plasmas, 2008, 15, 012901.	0.7	20
125	The role of guide field in magnetic reconnection driven by island coalescence. Physics of Plasmas, 2017, 24, .	0.7	20
126	Spacecraft Observations of Oblique Electron Beams Breaking the Frozen-In Law During Asymmetric Reconnection. Physical Review Letters, 2018, 120, 055101.	2.9	20

#	ARTICLE	IF	CITATIONS
127	Electron energization during magnetic island coalescence. <i>Physics of Plasmas</i> , 2012, 19, 072120.	0.7	19
128	Interchange instabilities in a partially ionized plasma. <i>Physics of Plasmas</i> , 1998, 5, 2217-2231.	0.7	18
129	The two-fluid dynamics and energetics of the asymmetric magnetic reconnection in laboratory and space plasmas. <i>Nature Communications</i> , 2018, 9, 5223.	5.8	18
130	A mechanism for reduced compression in indirectly driven layered capsule implosions. <i>Physics of Plasmas</i> , 2022, 29, .	0.7	18
131	Kinetic Alfvén waves and electron physics. I. Generation from ion-ion streaming. <i>Physics of Plasmas</i> , 2007, 14, 062104.	0.7	17
132	Secondary Island Formation in Collisional and Collisionless Kinetic Simulations of Magnetic Reconnection. <i>AIP Conference Proceedings</i> , 2011, , .	0.3	17
133	Transition in electron physics of magnetic reconnection in weakly collisional plasma. <i>Journal of Plasma Physics</i> , 2015, 81, .	0.7	16
134	Collisionless instability of thin current sheets in the presence of sheared parallel flows. <i>Physics of Plasmas</i> , 2008, 15, .	0.7	15
135	Fluid vs. kinetic magnetic reconnection with strong guide fields. <i>Physics of Plasmas</i> , 2015, 22, .	0.7	14
136	Kinetic Simulations of Magnetic Reconnection in Partially Ionized Plasmas. <i>Physical Review Letters</i> , 2019, 122, 015101.	2.9	14
137	Frozen flux violation, electron demagnetization and magnetic reconnection. <i>Physics of Plasmas</i> , 2015, 22, .	0.7	13
138	Quiet direct simulation of plasmas. <i>Physics of Plasmas</i> , 2002, 9, 1898-1904.	0.7	12
139	Linear theory of anisotropy driven modes in a Harris neutral sheet. <i>Physics of Plasmas</i> , 2010, 17, .	0.7	12
140	Progress Toward Fabrication of Machined Metal Shells for the First Double-Shell Implosions at the National Ignition Facility. <i>Fusion Science and Technology</i> , 2018, 73, 344-353.	0.6	12
141	Computational study of instability and fill tube mitigation strategies for double shell implosions. <i>Physics of Plasmas</i> , 2019, 26, .	0.7	12
142	Three-dimensional stability of current sheets supported by electron pressure anisotropy. <i>Physics of Plasmas</i> , 2019, 26, .	0.7	12
143	Particle-in-cell studies of laser-driven hot spots and a statistical model for mesoscopic properties of Raman backscatter. <i>European Physical Journal Special Topics</i> , 2006, 133, 253-257.	0.2	11
144	Quasi-separatrix layer reconnection for nonlinear line-tied collisionless tearing modes. <i>Plasma Physics and Controlled Fusion</i> , 2014, 56, 064013.	0.9	11

#	ARTICLE	IF	CITATIONS
145	Fast magnetic reconnection with large guide fields. <i>Physics of Plasmas</i> , 2015, 22, 010701.	0.7	11
146	Processes setting the structure of the electron distribution function within the exhausts of anti-parallel reconnection. <i>Physics of Plasmas</i> , 2016, 23, .	0.7	11
147	Role of electron physics in slow mode shocks. <i>Journal of Geophysical Research</i> , 2001, 106, 25031-25039.	3.3	10
148	Reconnection and interchange instability in the near magnetotail. <i>Earth, Planets and Space</i> , 2015, 67, .	0.9	10
149	Influence of plasma beta on the generation of lower hybrid and whistler waves by an ion velocity ring distribution. <i>Physics of Plasmas</i> , 2015, 22, 022102.	0.7	10
150	Experimental study of the dynamics of a thin current sheet. <i>Physica Scripta</i> , 2016, 91, 054002.	1.2	9
151	Kinetic Alfvén waves and electron physics. II. Oblique slow shocks. <i>Physics of Plasmas</i> , 2007, 14, 062105.	0.7	8
152	Scaling laws for magnetic reconnection, set by regulation of the electron pressure anisotropy to the firehose threshold. <i>Geophysical Research Letters</i> , 2015, 42, 10,549-10,556.	1.5	8
153	A two-fluid study of oblique tearing modes in a force-free current sheet. <i>Physics of Plasmas</i> , 2016, 23, .	0.7	8
154	Validation of Anisotropic Electron Fluid Closure Through In Situ Spacecraft Observations of Magnetic Reconnection. <i>Geophysical Research Letters</i> , 2019, 46, 6223-6229.	1.5	8
155	A drift kinetic model for the expander region of a magnetic mirror. <i>Physics of Plasmas</i> , 2021, 28, 042510.	0.7	8
156	Laboratory Verification of Electron-Scale Reconnection Regions Modulated by a Three-Dimensional Instability. <i>Journal of Geophysical Research: Space Physics</i> , 2021, 126, e2021JA029316.	0.8	8
157	Quiet direct simulation of coulomb collisions. <i>IEEE Transactions on Plasma Science</i> , 2003, 31, 19-24.	0.6	7
158	Hodographic approach for determining spacecraft trajectories through magnetic reconnection diffusion regions. <i>Geophysical Research Letters</i> , 2017, 44, 1625-1633.	1.5	7
159	Astrophysical Explosions Revisited: Collisionless Coupling of Debris to Magnetized Plasma. <i>Journal of Geophysical Research: Space Physics</i> , 2021, 126, e2021JA029125.	0.8	7
160	Mechanisms of shape transfer and preheating in indirect-drive double shell collisions. <i>Physics of Plasmas</i> , 2022, 29, .	0.7	7
161	Nonlinear saturation of the parallel velocity shear instability. <i>Physics of Plasmas</i> , 1996, 3, 3185-3187.	0.7	6
162	Dissipation in oblique slow shocks. <i>Journal of Geophysical Research</i> , 2005, 110, .	3.3	6

#	ARTICLE	IF	CITATIONS
163	Vlasov simulation in multiple spatial dimensions. <i>Physics of Plasmas</i> , 2011, 18, .	0.7	6
164	Kinetic-scale flux rope reconnection in periodic and line-tied geometries. <i>Physics of Plasmas</i> , 2018, 25, .	0.7	6
165	Shear Alfvén Waves Driven by Magnetic Reconnection as an Energy Source for the Aurora Borealis. <i>Geophysical Research Letters</i> , 2021, 48, e2021GL094201.	1.5	6
166	The application of the single-channel random phase approximation to radiative properties of dense He and Li plasmas. <i>Journal of Quantitative Spectroscopy and Radiative Transfer</i> , 2004, 83, 83-92.	1.1	5
167	Electron quasi-viscous effects in collisionless slow-mode shocks. <i>Geophysical Research Letters</i> , 2004, 31, n/a-n/a.	1.5	5
168	Developing one-dimensional implosions for inertial confinement fusion science. <i>High Power Laser Science and Engineering</i> , 2016, 4, .	2.0	5
169	Collisionless kinetic theory of oblique tearing instabilities. <i>Physics of Plasmas</i> , 2018, 25, .	0.7	5
170	Anisotropic Electron Fluid Closure Validated by in Situ Spacecraft Observations in the far Exhaust of Guide Field Reconnection. <i>Journal of Geophysical Research: Space Physics</i> , 2021, 126, .	0.8	5
171	The Structure of Warm Dense Matter Modeled with an Average Atom Model with Ion-Ion Correlations. <i>Lecture Notes in Computational Science and Engineering</i> , 2014, , 151-176.	0.1	4
172	Influence of Inflow Density and Temperature Asymmetry on the Formation of Electron Jets during Magnetic Reconnection. <i>Geophysical Research Letters</i> , 2020, 47, e2020GL087612.	1.5	4
173	Generation of a Strong Parallel Electric Field and Embedded Electron Jet in the Exhaust of Moderate Guide Field Reconnection. <i>Geophysical Research Letters</i> , 2022, 49, .	1.5	4
174	Effects of ion composition on backward stimulated Raman and Brillouin scattering in a laser-driven hot spot. <i>European Physical Journal Special Topics</i> , 2006, 133, 335-337.	0.2	3
175	A Drift-Kinetic Method for Obtaining Gradients in Plasma Properties From Single-Point Distribution Function Data. <i>Journal of Geophysical Research: Space Physics</i> , 2020, 125, e2020JA027965.	0.8	2
176	New Insights Into Collisionless Magnetic Reconnection Enabled by Ultra-High Performance Three-Dimensional Kinetic Simulations. <i>IEEE Transactions on Plasma Science</i> , 2008, 36, 1110-1111.	0.6	1
177	Preface for frontiers of magnetic reconnection research in heliophysical, astrophysical, and laboratory plasmas. <i>Physics of Plasmas</i> , 2022, 29, .	0.7	1
178	Quiet Monte Carlo method for the simulation of hydrodynamics, radiation, transport, and plasma. , 0, , .		0
179	Three-dimensional simulation of KeV photon laser operation using GeV ultra short laser-generated electron bunches. , 2008, , .		0
180	Equation of state of warm dense matter at DARHT-2 facility. , 2009, , .		0

#	ARTICLE	IF	CITATIONS
181	Why Is Reconnection in the Solar Wind so Different than in Other Environments?. , 2010, , .		0