## W S Daughton

List of Publications by Year in descending order

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| #  | Article  | IF   | CITATIONS |
|----|--|------|-----------|
| 1  | Magnetic reconnection in the era of exascale computing and multiscale experiments. Nature Reviews Physics, 2022, 4, 263-282.   | 26.6 | 50        |
| 2  | A mechanism for reduced compression in indirectly driven layered capsule implosions. Physics of Plasmas, 2022, 29, .   | 1.9  | 18        |
| 3  | Mechanisms of shape transfer and preheating in indirect-drive double shell collisions. Physics of Plasmas, 2022, 29, .   | 1.9  | 7         |
| 4  | Preface for frontiers of magnetic reconnection research in heliophysical, astrophysical, and<br>laboratory plasmas. Physics of Plasmas, 2022, 29, .  | 1.9  | 1         |
| 5  | Generation of a Strong Parallel Electric Field and Embedded Electron Jet in the Exhaust of Moderate<br>Guide Field Reconnection. Geophysical Research Letters, 2022, 49, .                       | 4.0  | 4         |
| 6  | Anisotropic Electron Fluid Closure Validated by in Situ Spacecraft Observations in the far Exhaust of<br>Guideâ€field Reconnection. Journal of Geophysical Research: Space Physics, 2021, 126, . | 2.4  | 5         |
| 7  | A drift kinetic model for the expander region of a magnetic mirror. Physics of Plasmas, 2021, 28, 042510.  | 1.9  | 8         |
| 8  | Laboratory Verification of Electronâ€Scale Reconnection Regions Modulated by a Threeâ€Dimensional<br>Instability. Journal of Geophysical Research: Space Physics, 2021, 126, e2021JA029316.      | 2.4  | 8         |
| 9  | Shear Alfvén Waves Driven by Magnetic Reconnection as an Energy Source for the Aurora Borealis.<br>Geophysical Research Letters, 2021, 48, e2021GL094201.  | 4.0  | 6         |
| 10 | Astrophysical Explosions Revisited: Collisionless Coupling of Debris to Magnetized Plasma. Journal of<br>Geophysical Research: Space Physics, 2021, 126, e2021JA029125.                          | 2.4  | 7         |
| 11 | Magnetic Energy Release, Plasma Dynamics, and Particle Acceleration in Relativistic Turbulent<br>Magnetic Reconnection. Astrophysical Journal, 2021, 919, 111.                                   | 4.5  | 34        |
| 12 | Efficient Nonthermal Ion and Electron Acceleration Enabled by the Flux-Rope Kink Instability in 3D<br>Nonrelativistic Magnetic Reconnection. Physical Review Letters, 2021, 127, 185101.         | 7.8  | 37        |
| 13 | Influence of Inflow Density and Temperature Asymmetry on the Formation of Electron Jets during<br>Magnetic Reconnection. Geophysical Research Letters, 2020, 47, e2020GL087612.                  | 4.0  | 4         |
| 14 | A Driftâ€Kinetic Method for Obtaining Gradients in Plasma Properties From Singleâ€Point Distribution<br>Function Data. Journal of Geophysical Research: Space Physics, 2020, 125, e2020JA027965. | 2.4  | 2         |
| 15 | Recent progress on particle acceleration and reconnection physics during magnetic reconnection in the magnetically-dominated relativistic regime. Physics of Plasmas, 2020, 27, .                | 1.9  | 48        |
| 16 | Influence of 3D plasmoid dynamics on the transition from collisional to kinetic reconnection. Physics of Plasmas, 2019, 26, .  | 1.9  | 22        |
| 17 | Determining the Dominant Acceleration Mechanism during Relativistic Magnetic Reconnection in Large-scale Systems. Astrophysical Journal Letters, 2019, 879, L23.                                 | 8.3  | 54        |
| 18 | Validation of Anisotropic Electron Fluid Closure Through In Situ Spacecraft Observations of Magnetic Reconnection. Geophysical Research Letters, 2019, 46, 6223-6229.                            | 4.0  | 8         |

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|----|---|------|-----------|
| 19 | Experimental study of energy transfer in double shell implosions. Physics of Plasmas, 2019, 26, .   | 1.9  | 32        |
| 20 | Computational study of instability and fill tube mitigation strategies for double shell implosions.<br>Physics of Plasmas, 2019, 26, .  | 1.9  | 12        |
| 21 | Three-dimensional stability of current sheets supported by electron pressure anisotropy. Physics of<br>Plasmas, 2019, 26, .   | 1.9  | 12        |
| 22 | Pressure Tensor Elements Breaking the Frozen-In Law During Reconnection in Earth's Magnetotail.<br>Physical Review Letters, 2019, 123, 225101.                                  | 7.8  | 37        |
| 23 | Kinetic Simulations of Magnetic Reconnection in Partially Ionized Plasmas. Physical Review Letters, 2019, 122, 015101.  | 7.8  | 14        |
| 24 | Collisionless kinetic theory of oblique tearing instabilities. Physics of Plasmas, 2018, 25, .  | 1.9  | 5         |
| 25 | Spacecraft Observations of Oblique Electron Beams Breaking the Frozen-In Law During Asymmetric Reconnection. Physical Review Letters, 2018, 120, 055101.                        | 7.8  | 20        |
| 26 | Kinetic-scale flux rope reconnection in periodic and line-tied geometries. Physics of Plasmas, 2018, 25, .  | 1.9  | 6         |
| 27 | Progress Toward Fabrication of Machined Metal Shells for the First Double-Shell Implosions at the National Ignition Facility. Fusion Science and Technology, 2018, 73, 344-353. | 1.1  | 12        |
| 28 | The two-fluid dynamics and energetics of the asymmetric magnetic reconnection in laboratory and space plasmas. Nature Communications, 2018, 9, 5223.                            | 12.8 | 18        |
| 29 | Design considerations for indirectly driven double shell capsules. Physics of Plasmas, 2018, 25, .  | 1.9  | 65        |
| 30 | Measurement of the Magnetic Reconnection Rate in the Earth's Magnetotail. Journal of Geophysical<br>Research: Space Physics, 2018, 123, 9150-9168.                              | 2.4  | 50        |
| 31 | Drift turbulence, particle transport, and anomalous dissipation at the reconnecting magnetopause.<br>Physics of Plasmas, 2018, 25, .  | 1.9  | 45        |
| 32 | Hodographic approach for determining spacecraft trajectories through magnetic reconnection diffusion regions. Geophysical Research Letters, 2017, 44, 1625-1633.                | 4.0  | 7         |
| 33 | Why does Steady-State Magnetic Reconnection have a Maximum Local Rate of Order 0.1?. Physical Review Letters, 2017, 118, 085101.  | 7.8  | 112       |
| 34 | The role of guide field in magnetic reconnection driven by island coalescence. Physics of Plasmas, 2017, 24, .  | 1.9  | 20        |
| 35 | Enhanced electron mixing and heating in $3\hat{e}\Theta$ asymmetric reconnection at the Earth's magnetopause. Geophysical Research Letters, 2017, 44, 2096-2104.                | 4.0  | 56        |
| 36 | Mass and Energy Transfer Across the Earth's Magnetopause Caused by Vortexâ€Induced Reconnection.<br>Journal of Geophysical Research: Space Physics, 2017, 122, 11,505.          | 2.4  | 35        |

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|----|---|------|-----------|
| 37 | Simulations of anti-parallel reconnection using a nonlocal heat flux closure. Physics of Plasmas, 2017, 24, .   | 1.9  | 25        |
| 38 | Energy transfer, pressure tensor, and heating of kinetic plasma. Physics of Plasmas, 2017, 24, .  | 1.9  | 115       |
| 39 | Turbulent mass transfer caused by vortex induced reconnection in collisionless magnetospheric plasmas. Nature Communications, 2017, 8, 1582.  | 12.8 | 63        |
| 40 | Energy transfer channels and turbulence cascade in Vlasov-Maxwell turbulence. Physical Review E, 2017, 95, 061201.  | 2.1  | 63        |
| 41 | Magnetic Pumping as a Source of Particle Heating and Power-law Distributions in the Solar Wind.<br>Astrophysical Journal Letters, 2017, 850, L28.                                     | 8.3  | 32        |
| 42 | Experimental study of the dynamics of a thin current sheet. Physica Scripta, 2016, 91, 054002.  | 2.5  | 9         |
| 43 | A two-fluid study of oblique tearing modes in a force-free current sheet. Physics of Plasmas, 2016, 23, .   | 1.9  | 8         |
| 44 | Developing one-dimensional implosions for inertial confinement fusion science. High Power Laser<br>Science and Engineering, 2016, 4, .  | 4.6  | 5         |
| 45 | EFFICIENT PRODUCTION OF HIGH-ENERGY NONTHERMAL PARTICLES DURING MAGNETIC RECONNECTION IN A MAGNETICALLY DOMINATED ION–ELECTRON PLASMA. Astrophysical Journal Letters, 2016, 818, L9.  | 8.3  | 113       |
| 46 | Electron energization and structure of the diffusion region during asymmetric reconnection.<br>Geophysical Research Letters, 2016, 43, 2405-2412.                                     | 4.0  | 60        |
| 47 | Processes setting the structure of the electron distribution function within the exhausts of anti-parallel reconnection. Physics of Plasmas, 2016, 23, .                              | 1.9  | 11        |
| 48 | Multi-scale structures of turbulent magnetic reconnection. Physics of Plasmas, 2016, 23, .  | 1.9  | 26        |
| 49 | Particle acceleration during magnetic reconnection in a low-beta pair plasma. Physics of Plasmas, 2016, 23, .   | 1.9  | 28        |
| 50 | Two-stage bulk electron heating in the diffusion region of anti-parallel symmetric reconnection.<br>Physics of Plasmas, 2016, 23, .   | 1.9  | 21        |
| 51 | In situ observations of flux rope at the separatrix region of magnetic reconnection. Journal of<br>Geophysical Research: Space Physics, 2016, 121, 205-213.                           | 2.4  | 30        |
| 52 | MMS observations of electronâ€scale filamentary currents in the reconnection exhaust and near the X<br>line. Geophysical Research Letters, 2016, 43, 6060-6069.                       | 4.0  | 99        |
| 53 | Pulsating Magnetic Reconnection Driven by Three-Dimensional Flux-Rope Interactions. Physical Review Letters, 2016, 116, 235101.   | 7.8  | 31        |
| 54 | 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. | 4.0  | 67        |

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|----|---|-----|-----------|
| 55 | Estimates of terms in Ohm's law during an encounter with an electron diffusion region. Geophysical<br>Research Letters, 2016, 43, 5918-5925.  | 4.0 | 86        |
| 56 | Spacecraft Observations and Analytic Theory of Crescent-Shaped Electron Distributions in Asymmetric Magnetic Reconnection. Physical Review Letters, 2016, 117, 185101.  | 7.8 | 42        |
| 57 | Hybrid simulations of magnetic reconnection with kinetic ions and fluid electron pressure anisotropy. Physics of Plasmas, 2016, 23, .   | 1.9 | 36        |
| 58 | Scaling laws for magnetic reconnection, set by regulation of the electron pressure anisotropy to the firehose threshold. Geophysical Research Letters, 2015, 42, 10,549-10,556.                               | 4.0 | 8         |
| 59 | Role of Ion Kinetic Physics in the Interaction of Magnetic Flux Ropes. Physical Review Letters, 2015, 115, 175004.  | 7.8 | 33        |
| 60 | 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. | 4.0 | 60        |
| 61 | Frozen flux violation, electron demagnetization and magnetic reconnection. Physics of Plasmas, 2015, 22, .  | 1.9 | 13        |
| 62 | The island coalescence problem: Scaling of reconnection in extended fluid models including higher-order moments. Physics of Plasmas, 2015, 22, .  | 1.9 | 35        |
| 63 | Double layer electric fields aiding the production of energetic flat-top distributions and superthermal electrons within magnetic reconnection exhausts. Physics of Plasmas, 2015, 22, .                      | 1.9 | 72        |
| 64 | Fluid vs. kinetic magnetic reconnection with strong guide fields. Physics of Plasmas, 2015, 22, .   | 1.9 | 14        |
| 65 | Reconnection and interchange instability in the near magnetotail. Earth, Planets and Space, 2015, 67, .   | 2.5 | 10        |
| 66 | PARTICLE ACCELERATION AND PLASMA DYNAMICS DURING MAGNETIC RECONNECTION IN THE MAGNETICALLY DOMINATED REGIME. Astrophysical Journal, 2015, 806, 167.   | 4.5 | 238       |
| 67 | Transition in electron physics of magnetic reconnection in weakly collisional plasma. Journal of Plasma Physics, 2015, 81, .  | 2.1 | 16        |
| 68 | Study of energy conversion and partitioning in the magnetic reconnection layer of a laboratory  | 1.9 | 28        |
| 69 | Energy dynamics and current sheet structure in fluid and kinetic simulations of decaying magnetohydrodynamic turbulence. Physics of Plasmas, 2015, 22, .  | 1.9 | 39        |
| 70 | Influence of plasma beta on the generation of lower hybrid and whistler waves by an ion velocity ring distribution. Physics of Plasmas, 2015, 22, 022102.   | 1.9 | 10        |
| 71 | Fast magnetic reconnection with large guide fields. Physics of Plasmas, 2015, 22, 010701.   | 1.9 | 11        |
| 72 | Scaling of Magnetic Reconnection in Relativistic Collisionless Pair Plasmas. Physical Review Letters, 2015, 114, 095002.  | 7.8 | 69        |

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|----|---|-----|-----------|
| 73 | Highly structured electron anisotropy in collisionless reconnection exhausts. Geophysical Research<br>Letters, 2014, 41, 5389-5395.                                       | 4.0 | 33        |
| 74 | Turbulent plasma transport across the Earth's low″atitude boundary layer. Geophysical Research<br>Letters, 2014, 41, 8704-8712.   | 4.0 | 35        |
| 75 | Debye scale turbulence within the electron diffusion layer during magnetic reconnection. Physics of Plasmas, 2014, 21, 032114.  | 1.9 | 26        |
| 76 | The link between shocks, turbulence, and magnetic reconnection in collisionless plasmas. Physics of Plasmas, 2014, 21, .  | 1.9 | 217       |
| 77 | Current sheets and pressure anisotropy in the reconnection exhaust. Physics of Plasmas, 2014, 21, 012103.   | 1.9 | 33        |
| 78 | Collisionless reconnection in the large guide field regime: Gyrokinetic versus particle-in-cell simulations. Physics of Plasmas, 2014, 21, 020708.                        | 1.9 | 35        |
| 79 | Do dispersive waves play a role in collisionless magnetic reconnection?. Physics of Plasmas, 2014, 21, 022113.  | 1.9 | 45        |
| 80 | The Structure of Warm Dense Matter Modeled with an Average Atom Model with Ion-Ion Correlations. Lecture Notes in Computational Science and Engineering, 2014, , 151-176. | 0.3 | 4         |
| 81 | Quasi-separatrix layer reconnection for nonlinear line-tied collisionless tearing modes. Plasma<br>Physics and Controlled Fusion, 2014, 56, 064013.                       | 2.1 | 11        |
| 82 | Formation of Hard Power Laws in the Energetic Particle Spectra Resulting from Relativistic Magnetic Reconnection. Physical Review Letters, 2014, 113, 155005.             | 7.8 | 333       |
| 83 | Computing the reconnection rate in turbulent kinetic layers by using electron mixing to identify topology. Physics of Plasmas, 2014, 21, .                                | 1.9 | 98        |
| 84 | Onset of reconnection in the near magnetotail: PIC simulations. Journal of Geophysical Research:<br>Space Physics, 2014, 119, 9773-9789.                                  | 2.4 | 69        |
| 85 | Bifurcated Structure of the Electron Diffusion Region in Three-Dimensional Magnetic Reconnection.<br>Physical Review Letters, 2013, 110, 265004.                          | 7.8 | 82        |
| 86 | Recent Evolution in the Theory of Magnetic Reconnection and Its Connection with Turbulence. Space Science Reviews, 2013, 178, 307-323.                                    | 8.1 | 66        |
| 87 | Regimes of the Electron Diffusion Region in Magnetic Reconnection. Physical Review Letters, 2013, 110, 135004.  | 7.8 | 101       |
| 88 | A review of pressure anisotropy caused by electron trapping in collisionless plasma, and its implications for magnetic reconnection. Physics of Plasmas, 2013, 20, .      | 1.9 | 143       |
| 89 | Identification of Intermittent Multifractal Turbulence in Fully Kinetic Simulations of Magnetic Reconnection. Physical Review Letters, 2013, 110, 205002.                 | 7.8 | 54        |
| 90 | Coherent structures, intermittent turbulence, and dissipation in high-temperature plasmas. Physics of Plasmas, 2013, 20, .  | 1.9 | 290       |

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|-----|---|------|-----------|
| 91  | Threeâ€dimensional dynamics of vortexâ€induced reconnection and comparison with THEMIS<br>observations. Journal of Geophysical Research: Space Physics, 2013, 118, 5742-5757.   | 2.4  | 83        |
| 92  | Electromagnetic instability of thin reconnection layers: Comparison of three-dimensional simulations with MRX observations. Physics of Plasmas, 2013, 20, .   | 1.9  | 31        |
| 93  | 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.   | 1.9  | 23        |
| 94  | Recent Evolution in the Theory of Magnetic Reconnection and Its Connection with Turbulence. Space Sciences Series of ISSI, 2013, , 231-247.   | 0.0  | 47        |
| 95  | Electron energization during magnetic island coalescence. Physics of Plasmas, 2012, 19, 072120.   | 1.9  | 19        |
| 96  | In-plane electric fields in magnetic islands during collisionless magnetic reconnection. Physics of<br>Plasmas, 2012, 19, 112902.   | 1.9  | 23        |
| 97  | Phase space structure of the electron diffusion region in reconnection with weak guide fields.<br>Physics of Plasmas, 2012, 19, .   | 1.9  | 37        |
| 98  | Influence of the Lower-Hybrid Drift Instability on Magnetic Reconnection in Asymmetric<br>Configurations. Physical Review Letters, 2012, 108, 185001.   | 7.8  | 90        |
| 99  | First Resolved Observations of the Demagnetized Electron-Diffusion Region of an Astrophysical<br>Magnetic-Reconnection Site. Physical Review Letters, 2012, 108, 225005.  | 7.8  | 55        |
| 100 | Intermittent Dissipation at Kinetic Scales in Collisionless Plasma Turbulence. Physical Review Letters, 2012, 109, 195001.  | 7.8  | 155       |
| 101 | Emerging Parameter Space Map of Magnetic Reconnection in Collisional and Kinetic Regimes. Space<br>Science Reviews, 2012, 172, 271-282.   | 8.1  | 44        |
| 102 | Demonstration of Anisotropic Fluid Closure Capturing the Kinetic Structure of Magnetic Reconnection. Physical Review Letters, 2012, 109, 115004.  | 7.8  | 35        |
| 103 | Generation of lower hybrid and whistler waves by an ion velocity ring distribution. Physics of Plasmas, 2012, 19, .   | 1.9  | 35        |
| 104 | Large-scale electron acceleration by parallel electric fields during magnetic reconnection. Nature Physics, 2012, 8, 321-324.   | 16.7 | 191       |
| 105 | Role of electron physics in the development of turbulent magnetic reconnection in collisionless plasmas. Nature Physics, 2011, 7, 539-542.  | 16.7 | 474       |
| 106 | Flushing effect in reconnection: Effects of minority species of oxygen ions. Planetary and Space Science, 2011, 59, 526-536.  | 1.7  | 47        |
| 107 | Secondary Island Formation in Collisional and Collisionless Kinetic Simulations of Magnetic Reconnection. AIP Conference Proceedings, 2011, , .   | 0.4  | 17        |
| 108 | Direct Evidence for a Three-Dimensional Magnetic Flux Rope Flanked by Two Active Magnetic<br>Reconnection <mml:math <br="" xmlns:mml="http://www.w3.org/1998/Math/MathML">display="inline"&gt;<mml:mi>X</mml:mi></mml:math> Lines at Earth's Magnetopause. Physical Review<br>Letters, 2011, 107, 165007. | 7.8  | 78        |

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|-----|--|-----|-----------|
| 109 | Flux Pileup in Collisionless Magnetic Reconnection: Bursty Interaction of Large Flux Ropes. Physical Review Letters, 2011, 107, 025002.  | 7.8 | 56        |
| 110 | Kinetic Structure of the Electron Diffusion Region in Antiparallel Magnetic Reconnection. Physical Review Letters, 2011, 106, 065002.  | 7.8 | 69        |
| 111 | Vlasov simulation in multiple spatial dimensions. Physics of Plasmas, 2011, 18, .  | 1.9 | 6         |
| 112 | The inversion layer of electric fields and electron phase-space-hole structure during two-dimensional collisionless magnetic reconnection. Physics of Plasmas, 2011, 18, 012904. | 1.9 | 40        |
| 113 | Phase diagram for magnetic reconnection in heliophysical, astrophysical, and laboratory plasmas.<br>Physics of Plasmas, 2011, 18, .  | 1.9 | 187       |
| 114 | Electron dynamics in two-dimensional asymmetric anti-parallel reconnection. Physics of Plasmas, 2011, 18, .  | 1.9 | 44        |
| 115 | Linear theory of anisotropy driven modes in a Harris neutral sheet. Physics of Plasmas, 2010, 17, .  | 1.9 | 12        |
| 116 | Why Is Reconnection in the Solar Wind so Different than in Other Environments?. , 2010, , .  |     | 0         |
| 117 | Driven magnetic reconnection near the Dreicer limit. Physics of Plasmas, 2010, 17, .   | 1.9 | 25        |
| 118 | Equations of state in collisionless magnetic reconnection. Physics of Plasmas, 2010, 17, .   | 1.9 | 33        |
| 119 | Magnitude of the Hall fields during magnetic reconnection. Geophysical Research Letters, 2010, 37, .   | 4.0 | 43        |
| 120 | Cluster observations of bidirectional beams caused by electron trapping during antiparallel reconnection. Journal of Geophysical Research, 2010, 115, .                          | 3.3 | 58        |
| 121 | Cause of superâ€ŧhermal electron heating during magnetotail reconnection. Geophysical Research<br>Letters, 2010, 37, .   | 4.0 | 36        |
| 122 | Influence of Coulomb collisions on the structure of reconnection layers. Physics of Plasmas, 2009, 16, .   | 1.9 | 68        |
| 123 | Formation of a localized acceleration potential during magnetic reconnection with a guide field.<br>Physics of Plasmas, 2009, 16, .  | 1.9 | 52        |
| 124 | Equations of State for Collisionless Guide-Field Reconnection. Physical Review Letters, 2009, 102, 085001.   | 7.8 | 87        |
| 125 | Advances in petascale kinetic plasma simulation with VPIC and Roadrunner. Journal of Physics:<br>Conference Series, 2009, 180, 012055.   | 0.4 | 144       |
| 126 | Small-angle Coulomb collision model for particle-in-cell simulations. Journal of Computational Physics, 2009, 228, 1391-1403.  | 3.8 | 47        |

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|-----|---|-----|-----------|
| 127 | Transition from collisional to kinetic regimes in large-scale reconnection layers. Physical Review<br>Letters, 2009, 103, 065004.   | 7.8 | 210       |
| 128 | Equation of state of warm dense matter at DARHT-2 facility. , 2009, , .   |     | 0         |
| 129 | New insights into dissipation in the electron layer during magnetic reconnection. Geophysical Research Letters, 2008, 35, .   | 4.0 | 72        |
| 130 | "Illuminating―electron diffusion regions of collisionless magnetic reconnection using electron<br>agyrotropy. Journal of Geophysical Research, 2008, 113, .   | 3.3 | 87        |
| 131 | Evidence and theory for trapped electrons in guide field magnetotail reconnection. Journal of<br>Geophysical Research, 2008, 113, .   | 3.3 | 124       |
| 132 | Saturation of backward stimulated scattering of laser in kinetic regime: Wavefront bowing, trapped<br>particle modulational instability, and trapped particle self-focusing of plasma waves. Physics of<br>Plasmas, 2008, 15, . | 1.9 | 64        |
| 133 | Three-dimensional simulation of KeV photon laser operation using GeV ultra short laser-generated electron bunches. , 2008, , .  |     | 0         |
| 134 | Three-Dimensional Dynamics of Collisionless Magnetic Reconnection in Large-Scale Pair Plasmas.<br>Physical Review Letters, 2008, 101, 125001.   | 7.8 | 50        |
| 135 | Two-dimensional fully kinetic simulations of driven magnetic reconnection with boundary conditions relevant to the Magnetic Reconnection Experiment. Physics of Plasmas, 2008, 15, .  | 1.9 | 29        |
| 136 | Kinetic theory and simulation of collisionless tearing in bifurcated current sheets. Physics of Plasmas, 2008, 15, 012901.  | 1.9 | 20        |
| 137 | Collisionless instability of thin current sheets in the presence of sheared parallel flows. Physics of Plasmas, 2008, 15, .   | 1.9 | 15        |
| 138 | New Insights Into Collisionless Magnetic Reconnection Enabled by Ultra-High Performance<br>Three-Dimensional Kinetic Simulations. IEEE Transactions on Plasma Science, 2008, 36, 1110-1111.                                     | 1.3 | 1         |
| 139 | Kinetic Alfvén waves and electron physics. I. Generation from ion-ion streaming. Physics of Plasmas, 2007, 14, 062104.  | 1.9 | 17        |
| 140 | Kinetic Alfvén waves and electron physics. II. Oblique slow shocks. Physics of Plasmas, 2007, 14, 062105.   | 1.9 | 8         |
| 141 | Saturation of Backward Stimulated Scattering of a Laser Beam in the Kinetic Regime. Physical Review<br>Letters, 2007, 99, 265004.   | 7.8 | 75        |
| 142 | Collisionless magnetic reconnection in large-scale electron-positron plasmas. Physics of Plasmas, 2007, 14, .   | 1.9 | 104       |
| 143 | Multiâ€scale structure of the electron diffusion region. Geophysical Research Letters, 2007, 34, .  | 4.0 | 234       |
| 144 | Nonlinear backward stimulated Raman scattering from electron beam acoustic modes in the kinetic regime. Physics of Plasmas, 2006, 13, 072701.   | 1.9 | 42        |

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|-----|---|-----|-----------|
| 145 | Particle-in-cell studies of laser-driven hot spots and a statistical model for mesoscopic properties of<br>Raman backscatter. European Physical Journal Special Topics, 2006, 133, 253-257.           | 0.2 | 11        |
| 146 | Effects of ion composition on backward stimulated Raman and Brillouin scattering in a laser-driven hot spot. European Physical Journal Special Topics, 2006, 133, 335-337.                            | 0.2 | 3         |
| 147 | Nonlinear development of stimulated Raman scattering from electrostatic modes excited by self-consistent non-Maxwellian velocity distributions. Physical Review E, 2006, 73, 025401.                  | 2.1 | 40        |
| 148 | New approach for the study of linear Vlasov stability of inhomogeneous systems. Physics of Plasmas, 2006, 13, 092110.   | 1.9 | 25        |
| 149 | Different kλD regimes for nonlinear effects on Langmuir waves. Physics of Plasmas, 2006, 13, 055906.  | 1.9 | 61        |
| 150 | Fully kinetic simulations of undriven magnetic reconnection with open boundary conditions. Physics of Plasmas, 2006, 13, 072101.  | 1.9 | 440       |
| 151 | New role of the lower-hybrid drift instability in the magnetic reconnection. Physics of Plasmas, 2005, 12, 055901.  | 1.9 | 29        |
| 152 | Physics of saturation of collisionless tearing mode as a function of guide field. Journal of<br>Geophysical Research, 2005, 110, .  | 3.3 | 36        |
| 153 | Antiparallel versus component merging at the magnetopause: Current bifurcation and intermittent reconnection. Journal of Geophysical Research, 2005, 110, .   | 3.3 | 36        |
| 154 | Kinetic theory of collisionless tearing at the magnetopause. Journal of Geophysical Research, 2005, 110, .  | 3.3 | 43        |
| 155 | Dissipation in oblique slow shocks. Journal of Geophysical Research, 2005, 110, .   | 3.3 | 6         |
| 156 | Nonlinear Evolution of the Lower-Hybrid Drift Instability in a Current Sheet. Physical Review Letters, 2004, 93, 105004.  | 7.8 | 123       |
| 157 | Collisionless magnetic reconnection in the presence of a guide field. Physics of Plasmas, 2004, 11, 4102-4114.  | 1.9 | 173       |
| 158 | Influence of the lower hybrid drift instability on the onset of magnetic reconnection. Physics of Plasmas, 2004, 11, 4489-4500.   | 1.9 | 72        |
| 159 | The application of the single-channel random phase approximation to radiative properties of dense He<br>and Li plasmas. Journal of Quantitative Spectroscopy and Radiative Transfer, 2004, 83, 83-92. | 2.3 | 5         |
| 160 | Electron quasi-viscous effects in collisionless slow-mode shocks. Geophysical Research Letters, 2004,<br>31, n/a-n/a.   | 4.0 | 5         |
| 161 | Role of electron temperature anisotropy in the onset of magnetic reconnection. Geophysical Research Letters, 2004, 31, .  | 4.0 | 42        |
| 162 | Quiet direct simulation of coulomb collisions. IEEE Transactions on Plasma Science, 2003, 31, 19-24.  | 1.3 | 7         |

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|-----|--|-----|-----------|
| 163 | Ion-ion kink instability in the magnetotail: 1. Linear theory. Journal of Geophysical Research, 2003, 108, .   | 3.3 | 72        |
| 164 | Ion-ion kink instability in the magnetotail: 2. Three-dimensional full particle and hybrid simulations and comparison with observations. Journal of Geophysical Research, 2003, 108, . | 3.3 | 79        |
| 165 | Electromagnetic properties of the lower-hybrid drift instability in a thin current sheet. Physics of Plasmas, 2003, 10, 3103-3119.   | 1.9 | 200       |
| 166 | The unexpected role of the lower hybrid drift instability in magnetic reconnection in three dimensions. Physics of Plasmas, 2003, 10, 1577-1587.                                       | 1.9 | 59        |
| 167 | Nonlinear dynamics of thin current sheets. Physics of Plasmas, 2002, 9, 3668-3678.   | 1.9 | 50        |
| 168 | Quiet direct simulation of plasmas. Physics of Plasmas, 2002, 9, 1898-1904.  | 1.9 | 12        |
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