

# Charles E Seyler

## List of Publications by Year in descending order

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79  
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83  
all docs

83  
docs citations

83  
times ranked

1199  
citing authors

#	ARTICLE	IF	CITATIONS
1	Plasma thermal transport with a generalized 8-moment distribution function. Physics of Plasmas, 2022, 29, 034502.	1.9	0
2	Formulation of 8-moment plasma transport with application to the Nernst effect. Physics of Plasmas, 2021, 28, .	1.9	4
3	Erratum to "Design of a 3-D Printed Experimental Platform for Studying the Formation and Magnetization of Turbulent Plasma Jets" [Nov 20 4056-4067]. IEEE Transactions on Plasma Science, 2021, 49, 1259-1259.	1.3	0
4	Current polarity effects on laboratory plasma jets. Physics of Plasmas, 2021, 28, .	1.9	2
5	Axial magnetic flux amplification in Hall-magnetohydrodynamic simulations of externally magnetized z-pinch. Physics of Plasmas, 2020, 27, .	1.9	12
6	Design of a 3-D Printed Experimental Platform for Studying the Formation and Magnetization of Turbulent Plasma Jets. IEEE Transactions on Plasma Science, 2020, 48, 4056-4067.	1.3	1
7	Extended magnetohydrodynamics simulations of thin-foil Z-pinch implosions with comparison to experiments. Physics of Plasmas, 2020, 27, .	1.9	4
8	10.1063/5.0011833.2. , 2020, , .		0
9	Plasma Jet Formation Disruption From a Critical Applied Uniform Axial Magnetic Field. IEEE Transactions on Plasma Science, 2019, 47, 3204-3213.	1.3	2
10	Power Flow in Pulsed-Power Systems: The Influence of Hall Physics and Modeling of the Plasma-Vacuum Interface. IEEE Transactions on Plasma Science, 2019, 47, 2064-2073.	1.3	0
11	The influence of Hall physics on power-flow along a coaxial transmission line. Physics of Plasmas, 2018, 25, .	1.9	6
12	The Generation of Warm Dense Matter Using a Magnetic Anvil Cell. IEEE Transactions on Plasma Science, 2018, 46, 3968-3972.	1.3	5
13	The influence of the Hall term on the development of magnetized laser-produced plasma jets. Physics of Plasmas, 2018, 25, .	1.9	6
14	External Magnetic Field Effects on Ablation of Current-Driven Foils Using an Extended Magnetohydrodynamics Simulation. IEEE Transactions on Plasma Science, 2018, 46, 3746-3752.	1.3	3
15	Helical instability in MagLIF due to axial flux compression by low-density plasma. Physics of Plasmas, 2018, 25, .	1.9	37
16	Axial magnetic field injection in magnetized liner inertial fusion. Physics of Plasmas, 2017, 24, .	1.9	14
17	Applied axial magnetic field effects on laboratory plasma jets: Density hollowing, field compression, and azimuthal rotation. Physics of Plasmas, 2017, 24, .	1.9	22
18	Relativistic Modeling Capabilities in PERSEUS Extended-MHD Simulation Code for HED Plasmas. IEEE Transactions on Plasma Science, 2016, 44, 1112-1126.	1.3	2

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19	Extended Magnetohydrodynamic Plasma Jets With External Magnetic Fields. IEEE Transactions on Plasma Science, 2016, 44, 638-642.	1.3	9
20	Computational extended magneto-hydrodynamical study of shock structure generated by flows past an obstacle. Physics of Plasmas, 2015, 22, .	1.9	8
21	Magnetized laboratory plasma jets: Experiment and simulation. Physical Review E, 2015, 91, 013110.	2.1	7
22	Investigation of radiative bow-shocks in magnetically accelerated plasma flows. Physics of Plasmas, 2015, 22, 052710.	1.9	10
23	Modeling of strongly collimated jets produced by high energy density plasmas on COBRA. Plasma Physics and Controlled Fusion, 2014, 56, 035002.	2.1	10
24	The impact of Hall physics on magnetized high energy density plasma jets. Physics of Plasmas, 2014, 21, .	1.9	14
25	A positivity-preserving semi-implicit discontinuous Galerkin scheme for solving extended magnetohydrodynamics equations. Journal of Computational Physics, 2014, 278, 400-415.	3.8	35
26	Impact of the Hall Effect on High-Energy-Density Plasma Jets. Physical Review Letters, 2013, 110, 015002.	7.8	26
27	Three-dimensional modeling of the electromagnetic characteristics of equatorial plasma depletions. Journal of Geophysical Research: Space Physics, 2013, 118, 3505-3514.	2.4	14
28	Pinching of ablation streams via magnetic field curvature in wire-array Z-pinchs. Physics of Plasmas, 2012, 19, 022109.	1.9	7
29	Anode-Cathode Asymmetry in a Wire-Array Z-Pinch: Highly Resolved Axial-Shear-Flow Structure Observed on the Outer Edges of Ablating Wires. IEEE Transactions on Plasma Science, 2011, 39, 2430-2431.	1.3	2
30	Relaxation model for extended magnetohydrodynamics: Comparison to magnetohydrodynamics for dense Z-pinchs. Physics of Plasmas, 2011, 18, 012703.	1.9	56
31	The role of magnetic field in the transition to streaming ablation in wire arrays. Physics of Plasmas, 2010, 17, 052706.	1.9	15
32	Two-dimensional turbulence, space shuttle plume transport in the thermosphere, and a possible relation to the Great Siberian Impact Event. Geophysical Research Letters, 2009, 36, .	4.0	28
33	Reconnection Effects in z-pinch Wire Arrays from 2-D Hall-MHD Simulations. , 2007, , .		0
34	Particle energization by oblique inertial Alfvén waves in the auroral region. Journal of Geophysical Research, 2007, 112, .	3.3	50
35	Particle-in-cell simulations of current shear-driven instabilities and the generation of broadband ELF fluctuations. Journal of Geophysical Research, 2006, 111, .	3.3	10
36	Internal waves and undular bores in mesospheric inversion layers. Journal of Geophysical Research, 2005, 110, .	3.3	31

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37	SIERRA observations of Alfvénic processes in the topside auroral ionosphere. Journal of Geophysical Research, 2005, 110, .	3.3	25
38	The relationship between field-aligned currents and low-frequency electromagnetic fluctuations. Geophysical Research Letters, 2003, 30, .	4.0	11
39	Instability of inertial Alfvén waves in transverse sheared flow. Journal of Geophysical Research, 2003, 108, .	3.3	24
40	WIGNER FUNCTION IN THE SYMMETRIC GAUGE: DE HAAS-VAN ALPHEN OSCILLATIONS, MAGNETIC FIELD LOCALIZATION AND UNCERTAINTY PRINCIPLE. International Journal of Modern Physics B, 2003, 17, 4683-4732.	2.0	6
41	THE QUANTUM WIGNER FUNCTION IN A MAGNETIC FIELD. International Journal of Modern Physics B, 2003, 17, 4555-4592.	2.0	12
42	Magnetic bubbles and kinetic Alfvén waves in the high-latitude magnetopause boundary. Journal of Geophysical Research, 2001, 106, 29503-29514.	3.3	49
43	Instability at the electron inertial scale. Journal of Geophysical Research, 2001, 106, 21623-21644.	3.3	29
44	On the perpendicular scale of electron phase-space holes. Geophysical Research Letters, 2000, 27, 169-172.	4.0	95
45	On the existence of Alfvénic solitary waves. Physics of Plasmas, 1999, 6, 4778-4780.	1.9	12
46	Electron beam formation by small-scale oblique inertial Alfvén waves. Journal of Geophysical Research, 1999, 104, 17233-17249.	3.3	35
47	Observation of Bound States and Counterrotating Lower Hybrid Eigenmodes in the Auroral Ionosphere. Physical Review Letters, 1998, 80, 5734-5737.	7.8	32
48	Broadband ELF plasma emission during auroral energization: 1. Slow ion acoustic waves. Journal of Geophysical Research, 1998, 103, 4343-4375.	3.3	119
49	Electrostatic broadband ELF wave emission by Alfvén wave breaking. Journal of Geophysical Research, 1998, 103, 7027-7041.	3.3	37
50	Theory of nearly perpendicular electrostatic plasma waves and comparison to Freja satellite observations. Journal of Geophysical Research, 1996, 101, 21795-21813.	3.3	41
51	On the most probable states of two-dimensional plasmas. Journal of Plasma Physics, 1996, 56, 553-567.	2.1	2
52	Theory and simulation of low-frequency plasma waves and comparison to Freja satellite observations. Journal of Geophysical Research, 1995, 100, 21453-21472.	3.3	51
53	Nonlinear magnetic field transport in opening switch plasmas. Physics of Fluids B, 1993, 5, 1115-1127.	1.7	36
54	Electron acceleration by Alfvén waves in the magnetosphere. Journal of Geophysical Research, 1992, 97, 3953-3963.	3.3	106

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55	Kinetic stabilization of interchange modes in an axisymmetric mirror by large orbit radius thermal ions. <i>Physics of Fluids B</i> , 1991, 3, 1015-1025.	1.7	3
56	Reduced magnetofluid dynamics in the lower-hybrid frequency range. <i>Physics of Fluids B</i> , 1991, 3, 2449-2451.	1.7	19
57	A mathematical model of the structure and evolution of small-scale discrete auroral arcs. <i>Journal of Geophysical Research</i> , 1990, 95, 17199-17215.	3.3	111
58	Nonlinear 3D evolution of bounded kinetic Alfvén waves due to shear flow and collisionless tearing instability. <i>Geophysical Research Letters</i> , 1988, 15, 756-759.	4.0	48
59	Symmetry properties of a multidimensional dispersion functional. <i>Physics of Fluids</i> , 1987, 30, 2414.	1.4	4
60	Particle and fluid simulations of resistive current-driven electrostatic ion cyclotron waves. <i>Physics of Fluids</i> , 1987, 30, 3113.	1.4	19
61	Stimulated Raman scattering of nonlinear space-charge and transverse magnetic waves with a longitudinal wiggler. <i>Physics of Fluids</i> , 1987, 30, 190.	1.4	18
62	Kinetic tilting stability of field-reversed configurations. <i>Physics of Fluids</i> , 1986, 29, 2616.	1.4	86
63	The status of observations and theory of high latitude ionospheric and magnetospheric plasma turbulence. <i>Space Science Reviews</i> , 1985, 41, 91.	8.1	132
64	The dispersion functional for multidimensional equilibria. <i>Physics of Fluids</i> , 1985, 28, 3546.	1.4	12
65	Inadequacies of finite Larmor radius treatments of the internal tilting instability in field-reversed configurations. <i>Physics of Fluids</i> , 1984, 27, 2151.	1.4	13
66	Nonlinear space-charge wave propagation on thin annular electron beams. <i>Physics of Fluids</i> , 1984, 27, 1808.	1.4	7
67	A symmetric regularized-long-wave equation. <i>Physics of Fluids</i> , 1984, 27, 4.	1.4	97
68	Magnetohydrodynamic equilibrium and stability of field-reversed configurations. <i>Physics of Fluids</i> , 1983, 26, 1295.	1.4	50
69	Stability of Vlasov equilibria. Part 1. General theory. <i>Journal of Plasma Physics</i> , 1982, 27, 13-24.	2.1	27
70	Stability of Vlasov equilibria. Part 2. One non-ignorable co-ordinate. <i>Journal of Plasma Physics</i> , 1982, 27, 25-35.	2.1	18
71	Stability of Vlasov equilibria. Part 3. Models. <i>Journal of Plasma Physics</i> , 1982, 27, 37-53.	2.1	21
72	Reconnection Phenomena during the Formation Phase of Field-Reversal Experiments. <i>Physical Review Letters</i> , 1981, 46, 1519-1522.	7.8	18

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73	Finite Larmor radius model for axisymmetric compact toroids. <i>Physics of Fluids</i> , 1981, 24, 1989.	1.4	17
74	Resonant particle effects on finite Larmor radius stabilization. <i>Physics of Fluids</i> , 1980, 23, 331.	1.4	29
75	Vlasov-fluid stability of a rigidly rotating theta pinch. <i>Physics of Fluids</i> , 1979, 22, 2324.	1.4	41
76	Thermodynamics of two-dimensional plasmas or discrete line vortex fluids. <i>Physics of Fluids</i> , 1976, 19, 1336.	1.4	39
77	Two-dimensional turbulence in inviscid fluids or guiding center plasmas. <i>Physics of Fluids</i> , 1975, 18, 803.	1.4	106
78	Partition function for a two-dimensional plasma in the random-phase approximation. <i>Physical Review Letters</i> , 1974, 32, 515-517.	7.8	30
79	Pulse propagation in a magnetoplasma: 1. Longitudinal propagation. <i>Journal of Geophysical Research</i> , 1972, 77, 4237-4241.	3.3	5