Allan N Kaufman

List of Publications by Year
in descending order

53 papers	2,851 citations	236925 25 h-index	233421 45 g-index
54 all docs	54 docs citations	54 times ranked	1041 citing authors

#	Article	IF	Citations
1	Theoretical plasma physics. Journal of Plasma Physics, 2019, 85, .	2.1	3
2	A half-century in plasma physics. Journal of Physics: Conference Series, 2009, 169, 012002.	0.4	3
3	Conversion among collective waves via gyroballistic waves. AIP Conference Proceedings, 2001, , .	0.4	0
4	Modulated electromagnetic waves in relativistic plasmas: field and kinetic equations. Journal of Plasma Physics, 1995, 53, 185-212.	2.1	0
5	Kinetic analysis of minority gyroresonant heating: Conversion fields in tokamak geometry. AIP Conference Proceedings, 1994, , .	0.4	0
6	Wave-action conservation for pseudo-Hermitian fields. Physical Review Letters, 1993, 70, 521-524.	7.8	16
7	Self‐consistent theory for ion gyroresonance. Physics of Fluids B, 1992, 4, 1735-1753.	1.7	31
8	Analytic theory of ICRF minority heating. AIP Conference Proceedings, 1989, , .	0.4	0
9	Scattering of an ICRF magnetosonic wave by plasma density turbulence. AIP Conference Proceedings, 1989, , .	0.4	0
10	Wave chaos in the stadium: Statistical properties of short-wave solutions of the Helmholtz equation. Physical Review A, 1988, 37, 3067-3086.	2.5	255
11	Congruent reduction in geometric optics and mode conversion. Physics of Fluids, 1987, 30, 3050.	1.4	46
12	Phase-space–Lagrangian action principle and the generalized $K-\ddot{I}$theorem. Physical Review A, 1987, 36, 982-984.	2.5	16
13	Congruent reduction and mode conversion in 4-dimensional plasmas. AIP Conference Proceedings, 1987, , .	0.4	0
14	Canonical-dissipative formulation of relativistic plasma kinetic theory with self-consistent Maxwell field. Physics Letters, Section A: General, Atomic and Solid State Physics, 1987, 120, 331-333.	2.1	11
15	The electric dipole of a guiding center and the plasma momentum density. Physics of Fluids, 1986, 29, 1736.	1.4	20
16	Wave entropy: A derivation by Jaynes' principle. Physics of Fluids, 1986, 29, 2326.	1.4	6
17	Oscillation center theory and ponderomotive stabilization of low-frequency plasma modes. Physics of Fluids, 1986, 29, 1908.	1.4	43
18	Theory of beat-resonant coupling of electrostatic modes. Physics of Fluids, 1986, 29, 3219.	1.4	8

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19	Lorentz-covariant dissipative lagrangian systems. Physics Letters, Section A: General, Atomic and Solid State Physics, 1985, 109, 87-89.	2.1	14
20	Locally coupled evolution of wave and particle distribution in general magnetoplasma geometry. Physics Letters, Section A: General, Atomic and Solid State Physics, 1985, 111, 19-21.	2.1	11
21	Theory of Ponderomotive Stabilization of a Magnetically Confined Plasma. Physical Review Letters, 1984, 53, 1061-1064.	7.8	42
22	Ponderomotive hamiltonian and Lyapunov stability for magnetically confined plasma in the presence of rf field. Physics Letters, Section A: General, Atomic and Solid State Physics, 1984, 106, 29-33.	2.1	10
23	Dissipative hamiltonian systems: A unifying principle. Physics Letters, Section A: General, Atomic and Solid State Physics, 1984, 100, 419-422.	2.1	192
24	The Lie-transformed Vlasov action principle: Relativistically covariant wave propagation and self-consistent ponderomotive effects. Physics Letters, Section A: General, Atomic and Solid State Physics, 1984, 105, 277-279.	2.1	25
25	The covariant lie-transformed plasma action principle. , 1984, , 87-90.		0
26	Correlations of periodic, area-preserving maps. Physica D: Nonlinear Phenomena, 1983, 6, 375-384.	2.8	77
27	Hamiltonian structure of two-fluid plasma dynamics. Physical Review A, 1982, 25, 2437-2439.	2.5	52
28	Algebraic structure of the plasma quasilinear equations. Physics Letters, Section A: General, Atomic and Solid State Physics, 1982, 88, 405-406.	2.1	20
29	Natural Poisson Structures of Nonlinear Plasma Dynamics. Physica Scripta, 1982, T2B, 517-521.	2.5	13
30	Ponderomotive effects in collisionless plasma: A Lie transform approach. Physics of Fluids, 1981, 24, 1238.	1.4	132
31	Spectrum and Eigenfunctions for a Hamiltonian with Stochastic Trajectories. Physical Review Letters, 1979, 42, 1189-1191.	7.8	539
32	Hamiltonian Theory of Ponderomotive Effects of an Electromagnetic Wave in a Nonuniform Magnetic Field. Physical Review Letters, 1979, 43, 1668-1671.	7.8	42
33	Oscillation centres and mode coupling in non-uniform Vlasov plasma. Journal of Plasma Physics, 1979, 22, 105-119.	2.1	22
34	Effects of beat-wave electron trapping on stimulated Raman and Thomson scattering. Physics of Fluids, 1978, 21, 404.	1.4	25
35	Stochastic acceleration by an obliquely propagating wave-An example of overlapping resonances. Physics of Fluids, 1978, 21, 2230.	1.4	120
36	Lie-Operator Approach to Mode Coupling in Nonuniform Plasma. Physical Review Letters, 1978, 40, 1266-1269.	7.8	32

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37	Beat Hamiltonians and generalized ponderomotive forces in hot magnetized plasma. Journal of Plasma Physics, 1978, 20, 365-390.	2.1	27
38	Nonlinear plasma waves excited near resonance. Physics of Fluids, 1977, 20, 1113.	1.4	28
39	Ponderomotive Force and Linear Susceptibility in Vlasov Plasma. Physical Review Letters, 1977, 39, 402-404.	7.8	72
40	Generalized Ponderomotive Forces and Three-Wave Interaction. , 1977, , 159-165.		11
41	Diffusion Due to a Single Wave in a Magnetized Plasma. , 1977, , 475-485.		1
42	Simulation of laser beat heating of a plasma. Physics of Fluids, 1975, 18, 470.	1.4	51
43	Stochastic Acceleration by a Single Wave in a Magnetic Field. Physical Review Letters, 1975, 34, 1613-1616.	7.8	123
44	Nonlinear Interaction of Electromagnetic Waves in a Plasma Density Gradient. Physical Review Letters, 1973, 30, 1306-1309.	7.8	57
45	Beat Heating of a Plasma. Physical Review Letters, 1972, 29, 581-584.	7.8	155
46	Reformulation of quasi-linear theory. Journal of Plasma Physics, 1972, 8, 1-5.	2.1	65
47	Quasilinear Diffusion of an Axisymmetric Toroidal Plasma. Physics of Fluids, 1972, 15, 1063.	1.4	232
48	The Darwin Model as a Tool for Electromagnetic Plasma Simulation. Physics of Fluids, 1971, 14, 446.	1.4	60
49	Resonant Interactions between Particles and Normal Modes in a Cylindrical Plasma. Physics of Fluids, 1971, 14, 387.	1.4	28
50	Interactions of Waves and Particles in an Inhomogeneous One-Dimensional Plasma. Physics of Fluids, 1970, 13, 956.	1.4	17
51	Elementary Derivation of the Dielectric Constant of an Imperfect Gas. Journal of Chemical Physics, 1962, 36, 439-440.	3.0	4
52	Microscopic Basis of Macroscopic Magnetostatic Energy. Journal of Chemical Physics, 1962, 37, 1988-1990.	3.0	7
53	Plasma Viscosity in a Magnetic Field. Physics of Fluids, 1960, 3, 610.	1.4	86