Allan N Kaufman

List of Publications by Year in descending order

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

#	Article	IF	CITATIONS
1	Spectrum and Eigenfunctions for a Hamiltonian with Stochastic Trajectories. Physical Review Letters, 1979, 42, 1189-1191.	7.8	539
2	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
3	Quasilinear Diffusion of an Axisymmetric Toroidal Plasma. Physics of Fluids, 1972, 15, 1063.	1.4	232
4	Dissipative hamiltonian systems: A unifying principle. Physics Letters, Section A: General, Atomic and Solid State Physics, 1984, 100, 419-422.	2.1	192
5	Beat Heating of a Plasma. Physical Review Letters, 1972, 29, 581-584.	7.8	155
6	Ponderomotive effects in collisionless plasma: A Lie transform approach. Physics of Fluids, 1981, 24, 1238.	1.4	132
7	Stochastic Acceleration by a Single Wave in a Magnetic Field. Physical Review Letters, 1975, 34, 1613-1616.	7.8	123
8	Stochastic acceleration by an obliquely propagating wave-An example of overlapping resonances. Physics of Fluids, 1978, 21, 2230.	1.4	120
9	Plasma Viscosity in a Magnetic Field. Physics of Fluids, 1960, 3, 610.	1.4	86
10	Correlations of periodic, area-preserving maps. Physica D: Nonlinear Phenomena, 1983, 6, 375-384.	2.8	77
11	Ponderomotive Force and Linear Susceptibility in Vlasov Plasma. Physical Review Letters, 1977, 39, 402-404.	7.8	72
12	Reformulation of quasi-linear theory. Journal of Plasma Physics, 1972, 8, 1-5.	2.1	65
13	The Darwin Model as a Tool for Electromagnetic Plasma Simulation. Physics of Fluids, 1971, 14, 446.	1.4	60
14	Nonlinear Interaction of Electromagnetic Waves in a Plasma Density Gradient. Physical Review Letters, 1973, 30, 1306-1309.	7.8	57
15	Hamiltonian structure of two-fluid plasma dynamics. Physical Review A, 1982, 25, 2437-2439.	2.5	52
16	Simulation of laser beat heating of a plasma. Physics of Fluids, 1975, 18, 470.	1.4	51
17	Congruent reduction in geometric optics and mode conversion. Physics of Fluids, 1987, 30, 3050.	1.4	46
18	Oscillation center theory and ponderomotive stabilization of low-frequency plasma modes. Physics of Fluids, 1986, 29, 1908.	1.4	43

#	Article	IF	Citations
19	Hamiltonian Theory of Ponderomotive Effects of an Electromagnetic Wave in a Nonuniform Magnetic Field. Physical Review Letters, 1979, 43, 1668-1671.	7.8	42
20	Theory of Ponderomotive Stabilization of a Magnetically Confined Plasma. Physical Review Letters, 1984, 53, 1061-1064.	7.8	42
21	Lie-Operator Approach to Mode Coupling in Nonuniform Plasma. Physical Review Letters, 1978, 40, 1266-1269.	7.8	32
22	Selfâ€consistent theory for ion gyroresonance. Physics of Fluids B, 1992, 4, 1735-1753.	1.7	31
23	Resonant Interactions between Particles and Normal Modes in a Cylindrical Plasma. Physics of Fluids, 1971, 14, 387.	1.4	28
24	Nonlinear plasma waves excited near resonance. Physics of Fluids, 1977, 20, 1113.	1.4	28
25	Beat Hamiltonians and generalized ponderomotive forces in hot magnetized plasma. Journal of Plasma Physics, 1978, 20, 365-390.	2.1	27
26	Effects of beat-wave electron trapping on stimulated Raman and Thomson scattering. Physics of Fluids, 1978, 21, 404.	1.4	25
27	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
28	Oscillation centres and mode coupling in non-uniform Vlasov plasma. Journal of Plasma Physics, 1979, 22, 105-119.	2.1	22
29	Algebraic structure of the plasma quasilinear equations. Physics Letters, Section A: General, Atomic and Solid State Physics, 1982, 88, 405-406.	2.1	20
30	The electric dipole of a guiding center and the plasma momentum density. Physics of Fluids, 1986, 29, 1736.	1.4	20
31	Interactions of Waves and Particles in an Inhomogeneous One-Dimensional Plasma. Physics of Fluids, 1970, 13, 956.	1.4	17
32	Phase-space–Lagrangian action principle and the generalizedK-χtheorem. Physical Review A, 1987, 36, 982-984.	2.5	16
33	Wave-action conservation for pseudo-Hermitian fields. Physical Review Letters, 1993, 70, 521-524.	7.8	16
34	Lorentz-covariant dissipative lagrangian systems. Physics Letters, Section A: General, Atomic and Solid State Physics, 1985, 109, 87-89.	2.1	14
35	Natural Poisson Structures of Nonlinear Plasma Dynamics. Physica Scripta, 1982, T2B, 517-521.	2.5	13
36	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

3

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37	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
38	Generalized Ponderomotive Forces and Three-Wave Interaction., 1977,, 159-165.		11
39	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
40	Theory of beat-resonant coupling of electrostatic modes. Physics of Fluids, 1986, 29, 3219.	1.4	8
41	Microscopic Basis of Macroscopic Magnetostatic Energy. Journal of Chemical Physics, 1962, 37, 1988-1990.	3.0	7
42	Wave entropy: A derivation by Jaynes' principle. Physics of Fluids, 1986, 29, 2326.	1.4	6
43	Elementary Derivation of the Dielectric Constant of an Imperfect Gas. Journal of Chemical Physics, 1962, 36, 439-440.	3.0	4
44	A half-century in plasma physics. Journal of Physics: Conference Series, 2009, 169, 012002.	0.4	3
45	Theoretical plasma physics. Journal of Plasma Physics, 2019, 85, .	2.1	3
46	Diffusion Due to a Single Wave in a Magnetized Plasma. , 1977, , 475-485.		1
47	The covariant lie-transformed plasma action principle. , 1984, , 87-90.		O
48	Congruent reduction and mode conversion in 4-dimensional plasmas. AIP Conference Proceedings, 1987, , .	0.4	0
49	Analytic theory of ICRF minority heating. AIP Conference Proceedings, 1989, , .	0.4	0
50	Scattering of an ICRF magnetosonic wave by plasma density turbulence. AIP Conference Proceedings, $1989, \ldots$	0.4	0
51	Kinetic analysis of minority gyroresonant heating: Conversion fields in tokamak geometry. AIP Conference Proceedings, 1994, , .	0.4	0
52	Modulated electromagnetic waves in relativistic plasmas: field and kinetic equations. Journal of Plasma Physics, 1995, 53, 185-212.	2.1	0
53	Conversion among collective waves via gyroballistic waves. AIP Conference Proceedings, 2001, , .	0.4	0