Charles F Kennel

List of Publications by Year
in descending order

95 papers	12,750 citations	36203 51 h-index	42291 92 g-index
98 all docs	98 docs citations	98 times ranked	4041 citing authors

#	Article	IF	Citations
1	Limit on stably trapped particle fluxes. Journal of Geophysical Research, 1966, 71, 1-28.	3.3	2,533
2	Velocity Space Diffusion from Weak Plasma Turbulence in a Magnetic Field. Physics of Fluids, 1966, 9, 2377.	1.4	876
3	Topside current instabilities. Journal of Geophysical Research, 1971, 76, 3055-3078.	3.3	842
4	Confinement of the Crab pulsar's wind by its supernova remnant. Astrophysical Journal, 1984, 283, 694.	1.6	763
5	Pitch-angle diffusion of radiation belt electrons within the plasmasphere. Journal of Geophysical Research, 1972, 77, 3455-3474.	3.3	688
6	Magnetohydrodynamic model of Crab nebula radiation. Astrophysical Journal, 1984, 283, 710.	1.6	467
7	Relativistic electron precipitation during magnetic storm main phase. Journal of Geophysical Research, 1971, 76, 4446-4453.	3.3	397
8	Consequences of a magnetospheric plasma. Reviews of Geophysics, 1969, 7, 379-419.	9.0	392
9	VLF electric field observations in the magnetosphere. Journal of Geophysical Research, 1970, 75, 6136-6152.	3.3	317
10	Electron precipitation pulsations. Journal of Geophysical Research, 1970, 75, 1279-1289.	3.3	259
11	Low-Frequency Whistler Mode. Physics of Fluids, 1966, 9, 2190.	1.4	226
12	Can the ionosphere regulate magnetospheric convection?. Journal of Geophysical Research, 1973, 78, 2837-2851.	3.3	211
13	Changes in magnetospheric configuration during the substorm growth phase. Journal of Geophysical Research, 1972, 77, 3361-3370.	3.3	178
14	Characteristics of ion flow in the quiet state of the inner plasma sheet. Geophysical Research Letters, 1993, 20, 1711-1714.	1.5	177
15	Collisionless shock waves in high Î² plasmas: 1. Journal of Geophysical Research, 1967, 72, 3303-3326.	3.3	174
16	Plasma Wave Observations at Comet Giacobini-Zinner. Science, 1986, 232, 377-381.	6.0	154
17	Evidence for a magnetosphere at Ganymede from plasma-wave observations by the Galileo spacecraft. Nature, 1996, 384, 535-537.	13.7	152
18	A parametric survey of the first critical Mach number for a fast MHD shock. Journal of Plasma Physics, 1984, 32, 429-441.	0.7	148

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19	Nonlinear, dispersive, elliptically polarized AlfveÌn waves. Physics of Fluids, 1988, 31, 1949.	1.4	146
20	Galileo Plasma Wave Observations in the Io Plasma Torus and Near Io. Science, 1996, 274, 391-392.	6.0	131
21	Thermal anisotropies and electromagnetic instabilities in the solar wind. Journal of Geophysical Research, 1968, 73, 6149-6165.	3.3	125
22	Escape of heated ions upstream of quasiâ€parallel shocks. Geophysical Research Letters, 1982, 9, 531-534.	1.5	120
23	Polarization of the auroral electrojet. Journal of Geophysical Research, 1972, 77, 2835-2850.	3.3	118
24	Electron pitch-angle diffusion driven by oblique whistler-mode turbulence. Journal of Plasma Physics, 1971, 6, 589-606.	0.7	115
25	Quasi-trapped VLF propagation in the outer magnetosphere. Journal of Geophysical Research, 1967, 72, 857-870.	3.3	113
26	Relativistic nonlinear plasma waves in a magnetic field. Journal of Plasma Physics, 1976, 15, 335-355.	0.7	111
27	First measurements of plasma waves near Mars. Nature, 1989, 341, 607-609.	13.7	109
28	Linear theory of equatorial spread<i>F</i>. Journal of Geophysical Research, 1975, 80, 4581-4590.	3.3	105
29	Detection of Electric-Field Turbulence in the Earth's Bow Shock. Physical Review Letters, 1968, 21, 1761-1764.	2.9	101
30	Climate policy: Ditch the 2ÂÂ°C warming goal. Nature, 2014, 514, 30-31.	13.7	99
31	OGO 5 observations of electrostatic turbulence in bow shock magnetic structures. Journal of Geophysical Research, 1970, 75, 3751-3768.	3.3	98
32	Unstable growth of unducted whistlers propagating at an angle to the geomagnetic field. Journal of Geophysical Research, 1967, 72, 871-878.	3.3	94
33	Isotope Separation in Plasmas by Use of Ion Cyclotron Resonance. Physical Review Letters, 1976, 37, 1547-1550.	2.9	93
34	First Plasma Wave Observations at Neptune. Science, 1989, 246, 1494-1498.	6.0	91
35	Auroral micropulsation instability. Journal of Geophysical Research, 1970, 75, 1863-1878.	3.3	89
36	Small amplitude waves in high Î² plasmas. Journal of Plasma Physics, 1969, 3, 55-74.	0.7	80

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37	Global simulation of the timeâ€dependent magnetosphere. Geophysical Research Letters, 1978, 5, 609-612.	1.5	80
38	ISEEâ€1 and â€2 observations of magnetic field strength overshoots in quasiâ€perpendicular bow shocks. Geophysical Research Letters, 1982, 9, 1037-1040.	1.5	75
39	Plasma wave spectra near slow mode shocks in the distant magnetotail. Geophysical Research Letters, 1984, 11, 1050-1053.	1.5	73
40	Satellite studies of magnetospheric substorms on August 15, 1968: 8. Ogo 5 plasma wave observations. Journal of Geophysical Research, 1973, 78, 3119-3130.	3.3	71
41	Jupiter's Magnetosphere. Annual Review of Astronomy and Astrophysics, 1977, 15, 389-436.	8.1	71
42	Global simulations of the threeâ€dimensional magnetosphere. Geophysical Research Letters, 1981, 8, 257-260.	1.5	71
43	Lightning and Plasma Wave Observations from the Galileo Flyby of Venus. Science, 1991, 253, 1522-1525.	6.0	71
44	Structure and evolution of smallâ€amplitude intermediate shock waves. Physics of Fluids B, 1990, 2, 253-269.	1.7	65
45	Relativistic magnetohydrodynamic winds of finite temperature. Geophysical and Astrophysical Fluid Dynamics, 1983, 26, 147-222.	0.4	64
46	Detection of Jovian whistler mode chorus; Implications for the Io torus aurora. Geophysical Research Letters, 1980, 7, 45-48.	1.5	63
47	Highâ€Frequency Hall Current Instability. Radio Science, 1971, 6, 209-213.	0.8	59
48	Resonant particle instabilities in a uniform magnetic field. Journal of Plasma Physics, 1967, 1, 75-80.	0.7	55
49	Magnetospheres of the planets. Space Science Reviews, 1973, 14, 511-533.	3.7	55
50	MHD intermediate shock discontinuities. Part 1. Rankineâ€"Hugoniot conditions. Journal of Plasma Physics, 1989, 42, 299-319.	0.7	55
51	Fast time resolved spectral analysis of VLF banded emissions. Journal of Geophysical Research, 1971, 76, 2366-2381.	3.3	52
52	Chaos in driven AlfvÃ©n systems. Physics of Fluids B, 1990, 2, 2581-2590.	1.7	51
53	Correlated whistler and electron plasma oscillation bursts detected on ISEEâ€3. Geophysical Research Letters, 1980, 7, 129-132.	1.5	50
54	Ultrarelativistic electromagnetic pulses in plasmas. Physical Review A, 1981, 23, 1906-1914.	1.0	50

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55	Finite Larmor radius hydromagnetics. Annals of Physics, 1966, 38, 63-94.	1.0	49
56	ISEEâ€3 wave measurements in the distant geomagnetic tail and boundary layer. Geophysical Research Letters, 1984, 11, 335-338.	1.5	44
57	Ultrarelativistic waves in overdense electron-positron plasmas. Physical Review A, 1982, 25, 1023-1039.	1.0	43
58	Collisionless Shock Waves. Scientific American, 1991, 264, 106-113.	1.0	41
59	Resonantly unstable off-angle hydromagnetic waves. Journal of Plasma Physics, 1967, 1, 81-104.	0.7	39
60	High time resolution plasma wave and magnetic field observations of the Jovian bow shock. Geophysical Research Letters, 1985, 12, 183-186.	1.5	36
61	Critical Mach numbers in classical magnetohydrodynamics. Journal of Geophysical Research, 1987, 92, 13427-13437.	3.3	35
62	Structure and evolution of time-dependent intermediate shocks. Physical Review Letters, 1992, 68, 56-59.	2.9	34
63	The role of intermediate shocks in magnetic reconnection. Geophysical Research Letters, 1992, 19, 229-232.	1.5	34
64	Communicating Climate Knowledge. Current Anthropology, 2012, 53, 226-244.	0.8	34
65	On the marginally stable saturation spectrum of unstable type I equatorial electrojet irregularities. Journal of Geophysical Research, 1974, 79, 249-266.	3.3	33
66	Cosmic-Ray Generation by Pulsars. Physical Review Letters, 1973, 31, 1364-1367.	2.9	32
67	Pulsar magnetospheres. Space Science Reviews, 1979, 24, 407.	3.7	32
68	Shock structure in classical magnetohydrodynamics. Journal of Geophysical Research, 1988, 93, 8545-8557.	3.3	31
69	The electromagnetic interchange mode in a partly-ionized collisional plasma. Journal of Plasma Physics, 1975, 14, 121-134.	0.7	24
70	Finite Î² drift AlfvÃ©n instability. Journal of Geophysical Research, 1973, 78, 7521-7530.	3.3	18
71	Making climate science more relevant. Science, 2016, 354, 421-422.	6.0	18
72	Planetary vital signs. Nature Climate Change, 2015, 5, 969-970.	8.1	16

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73	Influence of Arctic sea-ice variability on Pacific trade winds. Proceedings of the National Academy of Sciences of the United States of America, 2020, 117, 2824-2834.	3.3	15
74	Possibility of Landau damping of gravitational waves. Physical Review D, 1979, 19, 1070-1083.	1.6	14
75	The collisional drift mode in a partly-ionized plasma. Journal of Plasma Physics, 1975, 14, 135-142.	0.7	12
76	Getting serious about the new realities of global climate change. Bulletin of the Atomic Scientists, 2013, 69, 49-57.	0.2	12
77	Refraction by the Electromagnetic Pump of Parametrically Generated Electrostatic Waves. Physical Review Letters, 1973, 30, 597-600.	2.9	11
78	Trail of the Crab progenitor star. Nature, 1983, 301, 586-587.	13.7	11
79	Effect of parallel refraction on magnetospheric upper hybrid waves. Geophysical Research Letters, 1984, 11, 865-868.	1.5	9
80	The effects of density gradients on the convective amplification of upper hybrid waves in the magnetosphere. Planetary and Space Science, 1985, 33, 1331-1357.	0.9	9
81	High IonÎ²Pitch-Angle Instability. Physical Review Letters, 1966, 17, 245-246.	2.9	7
82	The gathering anthropocene crisis. Infrastructure Asset Management, 2021, 8, 83-95.	1.2	7
83	An Earth Systems Science Agency. Science, 2008, 321, 44-45.	6.0	5
84	Addressing our planetary crisis. Sustainability Science, 2022, 17, 5-7.	2.5	5
85	Fusion policy advisory committee: final report. Journal of Fusion Energy, 1991, 10, 127-156.	0.5	4
86	Plasma waves at collisionless shocks in space: The observations of Frederick L. Scarf. Advances in Space Research, 1991, 11, 3-14.	1.2	3
87	Knowledge action networks and regional climate change adaptation. Technovation, 2013, 33, 107.	4.2	3
88	The magnetohydrodynamic Rankine-Hugoniot relations. AIP Conference Proceedings, 1994, , .	0.3	2
89	Beyond 2020: converging crises demand integrated responses. Sustainability Science, 2021, 16, 691-693.	2.5	2
90	Coping with Uncertainty in Space Science Planning. Science, 2014, 343, 140-141.	6.0	1

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91	Where We Are Now, Where We Are Going: Scripps Science in Two Centuries. Oceanography, 2003, 16, 8-10.	0.5	1
92	Angelopoulos, Schrag, and Tabazadeh receive 2001 James B. Macelwane Medal. Eos, 2002, 83, 138.	0.1	0
93	Louis J. Lanzerotti receives 2011 William Bowie Medal: Citation. Eos, 2012, 93, 6-6.	0.1	0
94	Afterword: Speaking Scientific Truth to Power. The Cambridge Journal of Anthropology, 2013, 31, .	1.5	0
95	Rosenbluth and Sagdeev in Trieste: The Birth of Modern Space Plasma Physics. Journal of Geophysical Research: Space Physics, 2020, 125, e2020JA027859.	0.8	0