Peter Kollmann

List of Publications by Year
in descending order

105	3,028	172457	189892
papers	citations	29 h-index	50 g-index

132	132	132	2216
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	The Pluto system: Initial results from its exploration by New Horizons. Science, 2015, 350, aad1815.	12.6	407
2	The geology of Pluto and Charon through the eyes of New Horizons. Science, 2016, 351, 1284-1293.	12.6	219
3	The atmosphere of Pluto as observed by New Horizons. Science, 2016, 351, aad8866.	12.6	201
4	Initial results from the New Horizons exploration of 2014 MU ₆₉ , a small Kuiper Belt object. Science, 2019, 364, .	12.6	113
5	Juno observations of energetic charged particles over Jupiter's polar regions: Analysis of monodirectional and bidirectional electron beams. Geophysical Research Letters, 2017, 44, 4410-4418.	4.0	90
6	Discrete and broadband electron acceleration in Jupiterâ€™s powerful aurora. Nature, 2017, 549, 66-69.	27.8	79
7	Waveâ€Particle Interaction of AlfvÃ©n Waves in Jupiter's Magnetosphere: Auroral and Magnetospheric Particle Acceleration. Journal of Geophysical Research: Space Physics, 2018, 123, 9560-9573.	2.4	64
8	Saturn's inner magnetospheric convection pattern: Further evidence. Journal of Geophysical Research, 2012, 117, .	3.3	60
9	Plutoâ€™s interaction with its space environment: Solar wind, energetic particles, and dust. Science, 2016, 351, aad9045.	12.6	60
10	Investigation of dephasing rates in an interacting Rydberg gas. New Journal of Physics, 2009, 11, 055014.	2.9	51
11	Energetic particle phase space densities at Saturn: Cassini observations and interpretations. Journal of Geophysical Research, 2011, 116, .	3.3	51
12	Diverse Electron and Ion Acceleration Characteristics Observed Over Jupiter's Main Aurora. Geophysical Research Letters, 2018, 45, 1277-1285.	4.0	49
13	Energetic Particles and Acceleration Regions Over Jupiter's Polar Cap and Main Aurora: A Broad Overview. Journal of Geophysical Research: Space Physics, 2020, 125, e2019JA027699.	2.4	47
14	Electron Acceleration to MeV Energies at Jupiter and Saturn. Journal of Geophysical Research: Space Physics, 2018, 123, 9110-9129.	2.4	46
15	Processes forming and sustaining Saturnâ€™s proton radiation belts. Icarus, 2013, 222, 323-341.	2.5	45
16	Radiation Belt Radial Diffusion at Earth and Beyond. Space Science Reviews, 2020, 216, 1.	8.1	45
17	The formation of Charonâ€™s red poles from seasonally cold-trapped volatiles. Nature, 2016, 539, 65-68.	27.8	44
18	Precipitating Electron Energy Flux and Characteristic Energies in Jupiter's Main Auroral Region as Measured by Juno/JEDI. Journal of Geophysical Research: Space Physics, 2018, 123, 7554-7567.	2.4	42

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19	Energetic particle signatures of magnetic fieldâ€aligned potentials over Jupiter's polar regions. Geophysical Research Letters, 2017, 44, 8703-8711.	4.0	41
20	Long- and short-term variability of Saturn's ionic radiation belts. Journal of Geophysical Research, 2011, 116, n/a-n/a.	3.3	40
21	Charge states of energetic oxygen and sulfur ions in Jupiter's magnetosphere. Journal of Geophysical Research: Space Physics, 2016, 121, 2264-2273.	2.4	38
22	Dust grains fall from Saturnâ€™s D-ring into its equatorial upper atmosphere. Science, 2018, 362, .	12.6	37
23	Intervals of Intense Energetic Electron Beams Over Jupiter's Poles. Journal of Geophysical Research: Space Physics, 2018, 123, 1989-1999.	2.4	35
24	Transport of energetic electrons into Saturn's inner magnetosphere. Journal of Geophysical Research, 2010, 115, .	3.3	34
25	Effects of radial motion on interchange injections at Saturn. Icarus, 2016, 264, 342-351.	2.5	33
26	Rotationally driven magnetic reconnection in Saturnâ€™s dayside. Nature Astronomy, 2018, 2, 640-645.	10.1	32
27	Energetic charged particle weathering of Saturn's inner satellites. Planetary and Space Science, 2012, 61, 60-65.	1.7	31
28	Solar Energetic Particles (SEP) and Galactic Cosmic Rays (GCR) as tracers of solar wind conditions near Saturn: Event lists and applications. Icarus, 2018, 300, 47-71.	2.5	31
29	Method to Derive Ion Properties From Juno JADE Including Abundance Estimates for O⁺ and S²⁺. Journal of Geophysical Research: Space Physics, 2020, 125, e2018JA026169.	2.4	31
30	A Physical Model of the Proton Radiation Belts of Jupiter inside Europa's Orbit. Journal of Geophysical Research: Space Physics, 2018, 123, 3512-3532.	2.4	30
31	A heavy ion and proton radiation belt inside of Jupiter's rings. Geophysical Research Letters, 2017, 44, 5259-5268.	4.0	28
32	The variable extension of Saturn×³s electron radiation belts. Planetary and Space Science, 2014, 104, 3-17.	1.7	27
33	The vertical thickness of Jupiter's Europa gas torus from charged particle measurements. Geophysical Research Letters, 2016, 43, 9425-9433.	4.0	27
34	A radiation belt of energetic protons located between Saturn and its rings. Science, 2018, 362, .	12.6	27
35	Drift-resonant, relativistic electron acceleration at the outer planets: Insights from the response of Saturnâ€™s radiation belts to magnetospheric storms. Icarus, 2018, 305, 160-173.	2.5	26
36	Properties of planetward ion flows in Venusâ€™ magnetotail. Icarus, 2016, 274, 73-82.	2.5	25

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37	Energetic electron observations of Rheaâ€™s magnetospheric interaction. Icarus, 2012, 221, 116-134.	2.5	24
38	The lens feature on the inner saturnian satellites. Icarus, 2014, 234, 155-161.	2.5	24
39	Close Cassini flybys of Saturnâ€™s ring moons Pan, Daphnis, Atlas, Pandora, and Epimetheus. Science, 2019, 364, .	12.6	24
40	Magnetospheric considerations for solar system ice state. Icarus, 2018, 302, 560-564.	2.5	23
41	Observation and interpretation of energetic ion conics in Jupiter's polar magnetosphere. Geophysical Research Letters, 2017, 44, 4419-4425.	4.0	21
42	Heavy Ion Charge States in Jupiter's Polar Magnetosphere Inferred From Auroral Megavolt Electric Potentials. Journal of Geophysical Research: Space Physics, 2020, 125, e2020JA028052.	2.4	21
43	Long- and Short-term Variability of Galactic Cosmic-Ray Radial Intensity Gradients between 1 and 9.5 au: Observations by Cassini, BESS, BESS-Polar, PAMELA, and AMS-02. Astrophysical Journal, 2020, 904, 165.	4.5	20
44	The Formation of Saturnâ€™s and Jupiterâ€™s Electron Radiation Belts by Magnetospheric Electric Fields. Astrophysical Journal Letters, 2020, 905, L10.	8.3	20
45	The puzzling detection of x-rays from Pluto by Chandra. Icarus, 2017, 287, 103-109.	2.5	19
46	Interstellar Probe: Humanity's exploration of the Galaxy Begins. Acta Astronautica, 2022, 199, 364-373.	3.2	19
47	The evolution of Saturnâ€™s radiation belts modulated by changes in radial diffusion. Nature Astronomy, 2017, 1, 872-877.	10.1	18
48	Mimasâ€™ far-UV albedo: Spatial variations. Icarus, 2012, 220, 922-931.	2.5	17
49	Jovian Injections Observed at High Latitude. Geophysical Research Letters, 2019, 46, 9397-9404.	4.0	17
50	Energetic particle measurements in the vicinity of Dione during the three Cassini encounters 2005â€“2011. Icarus, 2013, 226, 617-628.	2.5	16
51	Juno/JEDI observations of 0.01 to >10ÂMeV energetic ions in the Jovian auroral regions: Anticipating a source for polar Xâ€ray emission. Geophysical Research Letters, 2017, 44, 6476-6482.	4.0	16
52	Magnetospheric Studies: A Requirement for Addressing Interdisciplinary Mysteries in the Ice Giant Systems. Space Science Reviews, 2020, 216, 1.	8.1	16
53	Energetic Proton Acceleration Associated With Io's Footprint Tail. Geophysical Research Letters, 2020, 47, e2020GL090839.	4.0	16
54	The â€œPuckâ€•energetic charged particle detector: Design, heritage, and advancements. Journal of Geophysical Research: Space Physics, 2016, 121, 7900-7913.	2.4	15

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55	Reconnection Acceleration in Saturnâ€™s Dayside Magnetodisk: A Multicase Study with Cassini. Astrophysical Journal Letters, 2018, 868, L23.	8.3	15
56	Suprathermal Ions in the Outer Heliosphere. Astrophysical Journal, 2019, 876, 46.	4.5	15
57	Influence of Solar Disturbances on Galactic Cosmic Rays in the Solar Wind, Heliosheath, and Local Interstellar Medium: Advanced Composition Explorer, New Horizons, and Voyager Observations. Astrophysical Journal, 2020, 905, 69.	4.5	15
58	The Cassini Enceladus encounters 2005â€“2010 in the view of energetic electron measurements. Icarus, 2012, 218, 433-447.	2.5	14
59	The impact of a slow interplanetary coronal mass ejection on Venus. Journal of Geophysical Research: Space Physics, 2015, 120, 3489-3502.	2.4	14
60	Heliospheric Conditions at Saturn During Cassini's Ringâ€Grazing and Proximal Orbits. Geophysical Research Letters, 2018, 45, 10812-10818.	4.0	14
61	Sources, Sinks, and Transport of Energetic Electrons Near Saturn's Main Rings. Geophysical Research Letters, 2019, 46, 3590-3598.	4.0	13
62	MeV proton flux predictions near Saturn's D ring. Journal of Geophysical Research: Space Physics, 2015, 120, 8586-8602.	2.4	12
63	Evidence for dust-driven, radial plasma transport in Saturnâ€™s inner radiation belts. Icarus, 2016, 274, 272-283.	2.5	12
64	Spectral Signatures of Adiabatic Electron Acceleration at Saturn Through Corotation Drift Cancelation. Geophysical Research Letters, 2019, 46, 10240-10249.	4.0	12
65	Io's Effect on Energetic Charged Particles as Seen in Juno Data. Geophysical Research Letters, 2019, 46, 13615-13620.	4.0	12
66	The Case for a New Frontiersâ€“Class Uranus Orbiter: System Science at an Underexplored and Unique World with a Mid-scale Mission. Planetary Science Journal, 2022, 3, 58.	3.6	12
67	Juno Energetic Neutral Atom (ENA) Remote Measurements of Magnetospheric Injection Dynamics in Jupiter's Io Torus Regions. Journal of Geophysical Research: Space Physics, 2020, 125, e2020JA027964.	2.4	11
68	The in-situ exploration of Jupiterâ€™s radiation belts. Experimental Astronomy, 2022, 54, 745-789.	3.7	11
69	A source of very energetic oxygen located in Jupiterâ€™s inner radiation belts. Science Advances, 2022, 8, eabm4234.	10.3	11
70	Energetic electron microsignatures as tracers of radial flows and dynamics in Saturn's innermost magnetosphere. Journal of Geophysical Research, 2010, 115, .	3.3	10
71	Radiation near Jupiter detected by Juno/JEDI during PJ1 and PJ3. Geophysical Research Letters, 2017, 44, 4426-4431.	4.0	10
72	Jupiter's Ion Radiation Belts Inward of Europa's Orbit. Journal of Geophysical Research: Space Physics, 2021, 126, e2020JA028925.	2.4	10

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73	Energy Spectra Near Ganymede From Juno Data. Geophysical Research Letters, 2021, 48, e2021GL093021.	4.0	10
74	Saturn's Innermost Radiation Belt Throughout and Inward of the Dâ€Ring. Geophysical Research Letters, 2018, 45, 10,912.	4.0	9
75	Galactic Cosmic Rays Access to the Magnetosphere of Saturn. Journal of Geophysical Research: Space Physics, 2019, 124, 166-177.	2.4	9
76	Where Is the Io Plasma Torus? A Comparison of Observations by Juno Radio Occultations to Predictions From Jovian Magnetic Field Models. Journal of Geophysical Research: Space Physics, 2020, 125, e2019JA027633.	2.4	9
77	HELIOSPHERIC ENERGETIC NEUTRAL HYDROGEN MEASURED WITH ASPERA-3 AND ASPERA-4. Astrophysical Journal, 2013, 775, 24.	4.5	8
78	Energetic Neutral and Charged Particle Measurements in the Inner Saturnian Magnetosphere During the Grand Finale Orbits of Cassini 2016/2017. Geophysical Research Letters, 2018, 45, 10,847.	4.0	8
79	Jovian Cosmic-Ray Protons in the Heliosphere: Constraints by Cassini Observations. Astrophysical Journal, 2019, 871, 223.	4.5	8
80	Acceleration of Ions in Jovian Plasmoids: Does Turbulence Play a Role?. Journal of Geophysical Research: Space Physics, 2019, 124, 5056-5069.	2.4	7
81	Inflow Speed Analysis of Interchange Injections in Saturn's Magnetosphere. Journal of Geophysical Research: Space Physics, 2020, 125, e2020JA028299.	2.4	7
82	Energetic Electron Distributions Near the Magnetic Equator in the Jovian Plasma Sheet and Outer Radiation Belt Using Juno Observations. Geophysical Research Letters, 2021, 48, .	4.0	6
83	Callisto's Atmosphere and Its Space Environment: Prospects for the Particle Environment Package on Board JUICE. Earth and Space Science, 2022, 9, .	2.6	6
84	Energetic charged particle fluxes relevant to Ganymede's polar region. Geophysical Research Letters, 0, , .	4.0	6
85	Energetic Electron Periodicities During the Cassini Grand Finale. Journal of Geophysical Research: Space Physics, 2017, 122, 12,229-12,235.	2.4	5
86	Energetic Electron Pitch Angle Distributions During the Cassini Final Orbits. Geophysical Research Letters, 2018, 45, 2911-2917.	4.0	5
87	Plasma and energetic particle observations in Jupiter's deep tail near the magnetopause. Journal of Geophysical Research: Space Physics, 2014, 119, 6432-6444.	2.4	4
88	Energetic electron measurements near Enceladus by Cassini during 2005â€“2015. Icarus, 2018, 306, 256-274.	2.5	4
89	Pluto's Interaction With Energetic Heliospheric Ions. Journal of Geophysical Research: Space Physics, 2019, 124, 7413-7424.	2.4	4
90	Spectra of Saturnâ€™s proton belts revealed. Icarus, 2022, 376, 114795.	2.5	4

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91	Losses of Radiation Belt Energetic Particles by Encounters With Four of the Inner Moons of Jupiter. Journal of Geophysical Research E: Planets, 2022, 127, .	3.6	4
92	Loss of Energetic Ions Comprising the Ring Current Populations of Jupiter's Middle and Inner Magnetosphere. Journal of Geophysical Research: Space Physics, 2022, 127, .	2.4	4
93	Plasma, Neutral Atmosphere, and Energetic Radiation Environments of Planetary Rings. , 0, , 363-398.		3
94	Correction of Galileo Energetic Particle Detector, Composition Measurement System High Rate Data: Semiconductor Dead Layer Correction. Space Science Reviews, 2020, 216, 1.	8.1	3
95	High Latitude Zones of GeV Heavy Ions at the Inner Edge of Jupiter's Relativistic Electron Belt. Journal of Geophysical Research E: Planets, 2021, 126, e2020JE006772.	3.6	3
96	Classification of Cassiniâ€™s Orbit Regions as Magnetosphere, Magnetosheath, and Solar Wind via Machine Learning. Frontiers in Astronomy and Space Sciences, 0, 9, .	2.8	3
97	An Empirical Model of the Equatorial Electron Pitch Angle Distributions in Earth's Outer Radiation Belt. Space Weather, 2022, 20, .	3.7	3
98	Global Configuration and Seasonal Variations of Saturnâ€™s Magnetosphere. , 2018, , 126-165.		2
99	Highâ€Energy (>10 MeV) Oxygen and Sulfur Ions Observed at Jupiter From Pulse Width Measurements of the JEDI Sensors. Geophysical Research Letters, 2019, 46, 10959-10966.	4.0	2
100	Ice Giants â€" The Return of the Rings. , 2021, 53, .		2
101	Jupiter high-energy/high-latitude electron environment from Junoâ€™s JEDI and UVS science instrument background noise. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2021, 1002, 165244.	1.6	2
102	Energetic Neutral Atoms From Jupiter's Polar Regions. Journal of Geophysical Research: Space Physics, 2020, 125, e2020JA028697.	2.4	2
103	Dawnâ€Dusk Asymmetry in Energetic (>20ÂkeV) Particles Adjacent to Saturn's Magnetopause. Journal of Geophysical Research: Space Physics, 2021, 126, e2020JA028264.	2.4	1
104	Magnetospheric Studies: A requirement for addressing interdisciplinary mysteries in the Ice Giant systems. , 2021, 53, .		1
105	Charge Exchange Ion Losses in Saturnâ€™s Magnetosphere. Journal of Geophysical Research: Space Physics, 2021, 126, e2021JA029310.	2.4	1