Shri G Kanekal

List of Publications by Year
in descending order

102 papers	8,035 citations	61984 43 h-index	48315 88 g-index
106 all docs	106 docs citations	106 times ranked	2120 citing authors

#	Article	IF	Citations
1	AGILE Instrument: Advanced Energetic Ion Electron Telescope. IEEE Transactions on Nuclear Science, 2022, 69, 811-817.	2.0	0
2	Statistics of Multiâ€MeV Electron Driftâ€Periodic Flux Oscillations Using Van Allen Probes Observations. Geophysical Research Letters, 2022, 49, .	4.0	2
3	Van Allen Belt Punctures and Their Correlation With Solar Wind, Geomagnetic Activity, and ULF Waves. Journal of Geophysical Research: Space Physics, 2021, 126, .	2.4	1
4	Dynamic Mechanisms Associated With Highâ€Energy Electron Flux Dropout in the Earth's Outer Radiation Belt Under the Influence of a Coronal Mass Ejection Sheath Region. Journal of Geophysical Research: Space Physics, 2021, 126, .	2.4	9
5	Evolution of Pitch Angle Distributions of Relativistic Electrons During Geomagnetic Storms: Van Allen Probes Observations. Journal of Geophysical Research: Space Physics, 2021, 126, e2020JA028335.	2.4	4
6	RBSPâ€ECT Combined Pitch Angle Resolved Electron Flux Data Product. Journal of Geophysical Research: Space Physics, 2021, 126, e2020JA028637.	2.4	11
7	Radiation Belt Response to Fast Reverse Shock at Geosynchronous Orbit. Astrophysical Journal, 2021, 910, 154.	4.5	3
8	Dynamics of the terrestrial radiation belts: a review of recent results during the VarSITI (Variability) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50	3.0	16
9	The Relativistic Electron-Proton Telescope (REPT) Investigation: Design, Operational Properties, and Science Highlights. Space Science Reviews, 2021, 217, 1.	8.1	23
10	Van Allen Probes Observations of Multiâ€MeV Electron Driftâ€Periodic Flux Oscillations in Earth's Outer Radiation Belt During the March 2017 Event. Journal of Geophysical Research: Space Physics, 2021, 126, e2021JA029284.	2.4	7
11	Multiâ€MeV Electron Dynamics Near the Inner Edge of the Outer Radiation Belt. Geophysical Research Letters, 2021, 48, .	4.0	3
12	Evidence for Energetic Neutral Hydrogen Emission from Solar Particle Events. Astrophysical Journal, 2021, 923, 195.	4.5	4
13	Evolution of Pitch Angleâ€Distributed Megaelectron Volt Electrons During Each Phase of the Geomagnetic Storm. Journal of Geophysical Research: Space Physics, 2020, 125, e2019JA027086.	2.4	2
14	Solar Energetic Proton Access to the Nearâ€Equatorial Inner Magnetosphere. Journal of Geophysical Research: Space Physics, 2020, 125, e2019JA027584.	2.4	5
15	A Framework for Understanding and Quantifying the Loss and Acceleration of Relativistic Electrons in the Outer Radiation Belt During Geomagnetic Storms. Space Weather, 2020, 18, e2020SW002477.	3.7	11
16	Radial Response of Outer Radiation Belt Relativistic Electrons During Enhancement Events at Geostationary Orbit. Journal of Geophysical Research: Space Physics, 2020, 125, e2019JA027660.	2.4	4
17	The Role of the Dynamic Plasmapause in Outer Radiation Belt Electron Flux Enhancement. Geophysical Research Letters, 2020, 47, e2020GL086991.	4.0	3
18	The MERiT Onboard the CeREs: A Novel Instrument to Study Energetic Particles in the Earth's Radiation Belts. Journal of Geophysical Research: Space Physics, 2019, 124, 5734-5760.	2.4	12

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19	Variation of Radiation Belt Electron Flux During CMEâ€•and CIRâ€Driven Geomagnetic Storms: Van Allen Probes Observations. Journal of Geophysical Research: Space Physics, 2019, 124, 6524-6540.	2.4	13
20	RBSPâ€ECT Combined Spinâ€Averaged Electron Flux Data Product. Journal of Geophysical Research: Space Physics, 2019, 124, 9124-9136.	2.4	34
21	Plasmaspheric hiss waves generate a reversed energy spectrum of radiation belt electrons. Nature Physics, 2019, 15, 367-372.	16.7	66
22	Characteristics of Highâ€Energy Proton Responses to Geomagnetic Activities in the Inner Radiation Belt Observed by the RBSP Satellite. Journal of Geophysical Research: Space Physics, 2019, 124, 7581-7591.	2.4	4
23	Characterization and Evolution of Radiation Belt Electron Energy Spectra Based on the Van Allen Probes Measurements. Journal of Geophysical Research: Space Physics, 2019, 124, 4217-4232.	2.4	25
24	Multiyear Measurements of Radiation Belt Electrons: Acceleration, Transport, and Loss. Journal of Geophysical Research: Space Physics, 2019, 124, 2588-2602.	2.4	48
25	Quantifying the Contribution of Microbursts to Global Electron Loss in the Radiation Belts. Journal of Geophysical Research: Space Physics, 2019, 124, 1111-1124.	2.4	20
26	Contribution of ULF Wave Activity to the Global Recovery of the Outer Radiation Belt During the Passage of a Highâ€Speed Solar Wind Stream Observed in September 2014. Journal of Geophysical Research: Space Physics, 2019, 124, 1660-1678.	2.4	14
27	The Effects of Geomagnetic Storms and Solar Wind Conditions on the Ultrarelativistic Electron Flux Enhancements. Journal of Geophysical Research: Space Physics, 2019, 124, 1948-1965.	2.4	25
28	On the Contribution of EMIC Waves to the Reconfiguration of the Relativistic Electron Butterfly Pitch Angle Distribution Shape on 2014 September 12â€"A Case Study*. Astrophysical Journal, 2019, 872, 36.	4.5	8
29	Comparison of Van Allen Probes Energetic Electron Data With Corresponding GOESâ€15 Measurements: 2012â€“2018. Journal of Geophysical Research: Space Physics, 2019, 124, 9924-9942.	2.4	16
30	On the Acceleration Mechanism of Ultrarelativistic Electrons in the Center of the Outer Radiation Belt: A Statistical Study. Journal of Geophysical Research: Space Physics, 2019, 124, 8590-8599.	2.4	27
31	Recent advances in our understanding of the Earth's Radiation Belts. , 2019, , .		1
32	The Response of Earth's Electron Radiation Belts to Geomagnetic Storms: Statistics From the Van Allen Probes Era Including Effects From Different Storm Drivers. Journal of Geophysical Research: Space Physics, 2019, 124, 1013-1034.	2.4	84
33	Modeling the Proton Radiation Belt With Van Allen Probes Relativistic Electronâ€Proton Telescope Data. Journal of Geophysical Research: Space Physics, 2018, 123, 685-697.	2.4	22
34	On the cause of two prompt shock-induced relativistic electron depletion events. Journal of Atmospheric and Solar-Terrestrial Physics, 2018, 177, 208-217.	1.6	8
35	The Acceleration of Ultrarelativistic Electrons During a Small to Moderate Storm of 21 April 2017. Geophysical Research Letters, 2018, 45, 5818-5825.	4.0	25
36	Fast Diffusion of Ultrarelativistic Electrons in the Outer Radiation Belt: 17 March 2015 Storm Event. Geophysical Research Letters, 2018, 45, 10874-10882.	4.0	49

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37	Characteristics, Occurrence, and Decay Rates of Remnant Belts Associated With Threeâ€Belt Events in the Earth's Radiation Belts. Geophysical Research Letters, 2018, 45, 12,099.	4.0	11
38	An Empirical Model of Radiation Belt Electron Pitch Angle Distributions Based On Van Allen Probes Measurements. Journal of Geophysical Research: Space Physics, 2018, 123, 3493-3511.	2.4	41
39	Artificial Neural Networks for Determining Magnetospheric Conditions. , 2018, , 279-300.		24
40	On the relation between radiation belt electrons and solar wind parameters/geomagnetic indices: Dependence on the first adiabatic invariant and L[*]. Journal of Geophysical Research: Space Physics, 2017, 122, 1624-1642.	2.4	38
41	Proton straggling in thick silicon detectors. Nuclear Instruments & Methods in Physics Research B, 2017, 394, 145-152.	1.4	4
42	Radiation belt electron dynamics at low L (<4): Van Allen Probes era versus previous two solar cycles. Journal of Geophysical Research: Space Physics, 2017, 122, 5224-5234.	2.4	33
43	Investigating the source of nearâ€relativistic and relativistic electrons in Earth's inner radiation belt. Journal of Geophysical Research: Space Physics, 2017, 122, 695-710.	2.4	48
44	On the Effect of Geomagnetic Storms on Relativistic Electrons in the Outer Radiation Belt: Van Allen Probes Observations. Journal of Geophysical Research: Space Physics, 2017, 122, 11,100.	2.4	47
45	CIMI simulations with newly developed multiparameter chorus and plasmaspheric hiss wave models. Journal of Geophysical Research: Space Physics, 2017, 122, 9344-9357.	2.4	17
46	Van Allen Probes Measurements of Energetic Particle Deep Penetration Into the Low L Region (LÂ<Â4) During the Storm on 8 April 2016. Journal of Geophysical Research: Space Physics, 2017, 122, 12,140.	2.4	22
47	The Role of Solar Wind Structures in the Generation of ULF Waves in the Inner Magnetosphere. Solar Physics, 2017, 292, 1.	2.5	7
48	Outer radiation belt dropout dynamics following the arrival of two interplanetary coronal mass ejections. Geophysical Research Letters, 2016, 43, 978-987.	4.0	26
49	Radiation belt electron acceleration during the 17 March 2015 geomagnetic storm: Observations and simulations. Journal of Geophysical Research: Space Physics, 2016, 121, 5520-5536.	2.4	77
50	Current energetic particle sensors. Journal of Geophysical Research: Space Physics, 2016, 121, 8840-8858.	2.4	9
51	Inward diffusion and loss of radiation belt protons. Journal of Geophysical Research: Space Physics, 2016, 121, 1969-1978.	2.4	26
52	Highly relativistic radiation belt electron acceleration, transport, and loss: Large solar storm events of March and June 2015. Journal of Geophysical Research: Space Physics, 2016, 121, 6647-6660.	2.4	93
53	Prompt acceleration of magnetospheric electrons to ultrarelativistic energies by the 17 March 2015 interplanetary shock. Journal of Geophysical Research: Space Physics, 2016, 121, 7622-7635.	2.4	68
54	Prompt injections of highly relativistic electrons induced by interplanetary shocks: A statistical study of Van Allen Probes observations. Geophysical Research Letters, 2016, 43, 12,317.	4.0	32

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55	Observations of the impenetrable barrier, the plasmapause, and the VLF bubble during the 17 March 2015 storm. Journal of Geophysical Research: Space Physics, 2016, 121, 5537-5548.	2.4	59
56	Source and seed populations for relativistic electrons: Their roles in radiation belt changes. Journal of Geophysical Research: Space Physics, 2015, 120, 7240-7254.	2.4	215
57	On the use of drift echoes to characterize onâ€orbit sensor discrepancies. Journal of Geophysical Research: Space Physics, 2015, 120, 2076-2087.	2.4	8
58	Solar wind conditions leading to efficient radiation belt electron acceleration: A superposed epoch analysis. Geophysical Research Letters, 2015, 42, 6906-6915.	4.0	48
59	Relativistic electron response to the combined magnetospheric impact of a coronal mass ejection overlapping with a highâ€speed stream: Van Allen Probes observations. Journal of Geophysical Research: Space Physics, 2015, 120, 7629-7641.	2.4	17
60	Upper limit on the inner radiation belt MeV electron intensity. Journal of Geophysical Research: Space Physics, 2015, 120, 1215-1228.	2.4	77
61	Observations of the inner radiation belt: CRAND and trapped solar protons. Journal of Geophysical Research: Space Physics, 2014, 119, 6541-6552.	2.4	50
62	An impenetrable barrier to ultrarelativistic electrons in the Van Allen radiation belts. Nature, 2014, 515, 531-534.	27.8	159
63	Radiation belt electron acceleration by chorus waves during the 17 March 2013 storm. Journal of Geophysical Research: Space Physics, 2014, 119, 4681-4693.	2.4	182
64	Peculiar pitch angle distribution of relativistic electrons in the inner radiation belt and slot region. Geophysical Research Letters, 2014, 41, 2250-2257.	4.0	53
65	Gradual diffusion and punctuated phase space density enhancements of highly relativistic electrons: Van Allen Probes observations. Geophysical Research Letters, 2014, 41, 1351-1358.	4.0	127
66	Electron Acceleration in the Heart of the Van Allen Radiation Belts. Science, 2013, 341, 991-994.	12.6	463
67	Rapid local acceleration of relativistic radiation-belt electrons by magnetospheric chorus. Nature, 2013, 504, 411-414.	27.8	608
68	Science Goals and Overview of the Radiation Belt Storm Probes (RBSP) Energetic Particle, Composition, and Thermal Plasma (ECT) Suite on NASAâ€™s Van Allen Probes Mission. Space Science Reviews, 2013, 179, 311-336.	8.1	463
69	Science Objectives and Rationale for the Radiation Belt Storm Probes Mission. Space Science Reviews, 2013, 179, 3-27.	8.1	841
70	A Long-Lived Relativistic Electron Storage Ring Embedded in Earthâ€™s Outer Van Allen Belt. Science, 2013, 340, 186-190.	12.6	216
71	The Relativistic Electron-Proton Telescope (REPT) Instrument on Board the Radiation Belt Storm Probes (RBSP) Spacecraft: Characterization of Earthâ€™s Radiation Belt High-Energy Particle Populations. Space Science Reviews, 2013, 179, 337-381.	8.1	334
72	First results from CSSWE CubeSat: Characteristics of relativistic electrons in the nearâ€Earth environment during the October 2012 magnetic storms. Journal of Geophysical Research: Space Physics, 2013, 118, 6489-6499.	2.4	65

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73	James Van Allen and His Namesake <scp>NASA</scp> Mission. Eos, 2013, 94, 469-470.	0.1	4
74	The Relativistic Electron-Proton Telescope (REPT) Instrument on Board the Radiation Belt Storm Probes (RBSP) Spacecraft: Characterization of Earthâ€™s Radiation Belt High-Energy Particle Populations. , 2012, , 337-381.		31
75	Variability of the total radiation belt electron content. Journal of Geophysical Research, 2009, 114, .	3.3	14
76	Relativistic electron loss timescales in the slot region. Journal of Geophysical Research, 2009, 114, .	3.3	137
77	Solar cycle changes, geomagnetic variations, and energetic particle properties in the inner magnetosphere. Journal of Atmospheric and Solar-Terrestrial Physics, 2008, 70, 195-206.	1.6	72
78	Lowâ€altitude measurements of 2â€“6 MeV electron trapping lifetimes at 1.5 â‰¤ L â‰¤ 2.5. Geophysical Research Letters, 2007, 34, .	4.0	68
79	Acceleration mechanism responsible for the formation of the new radiation belt during the 2003 Halloween solar storm. Geophysical Research Letters, 2006, 33, .	4.0	157
80	Outward radial diffusion driven by losses at magnetopause. Journal of Geophysical Research, 2006, 111, .	3.3	328
81	Radiation belt responses to the solar events of Octoberâ€”November 2003. Geophysical Monograph Series, 2005, , 251-259.	0.1	1
82	Relativistic electron events in 2002: Studies of pitch angle isotropization. Journal of Geophysical Research, 2005, 110, .	3.3	23
83	Radiation belt representation of the energetic electron environment: Model and data synthesis using the SalammbÃ´ radiation belt transport code and Los Alamos geosynchronous and GPS energetic particle data. Space Weather, 2005, 3, n/a-n/a.	3.7	27
84	Dynamic relationship between the outer radiation belt and the plasmapause during Marchâ€“May 2001. Geophysical Research Letters, 2005, 32, .	4.0	53
85	An extreme distortion of the Van Allen belt arising from the â€˜Hallowe'enâ€™ solar storm in 2003. Nature, 2004, 432, 878-881.	27.8	299
86	Characterizing the Earth's outer Van Allen zone using a radiation belt content index. Space Weather, 2004, 2, n/a-n/a.	3.7	45
87	Structure of Earth's outer radiation belt inferred from long-term electron flux dynamics. Geophysical Research Letters, 2003, 30, .	4.0	20
88	Modulation of Jovian electrons at 1 AU during solar cycles 22-23. Geophysical Research Letters, 2003, 30, .	4.0	6
89	Long-term-average, solar cycle, and seasonal response of magnetospheric energetic electrons to the solar wind speed. Journal of Geophysical Research, 2002, 107, SMP 22-1.	3.3	68
90	Studies of relativistic electron injection events in 1997 and 1998. Journal of Geophysical Research, 2001, 106, 19157-19168.	3.3	26

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91	Long term measurements of radiation belts by SAMPEX and their variations. Geophysical Research Letters, 2001, 28, 3827-3830.	4.0	154
92	Multisatellite measurements of relativistic electrons: Global coherence. Journal of Geophysical Research, 2001, 106, 29721-29732.	3.3	84
93	Relationships between precipitating auroral zone electrons and lower thermospheric nitric oxide densities: 1998 - 2000. Journal of Geophysical Research, 2001, 106, 24465-24480.	3.3	38
94	Rapid enchancements of relativistic electrons deep in the magnetosphere during the May 15, 1997, magnetic storm. Journal of Geophysical Research, 1999, 104, 4467-4476.	3.3	47
95	Magnetospheric response to magnetic cloud (coronal mass ejection) events: Relativistic electron observations from SAMPEX and Polar. Journal of Geophysical Research, 1999, 104, 24885-24894.	3.3	43
96	Strong electron acceleration in the Earth's magnetosphere. Advances in Space Research, 1998, 21, 609-613.	2.6	83
97	Coronal mass ejections, magnetic clouds, and relativistic magnetospheric electron events: ISTP. Journal of Geophysical Research, 1998, 103, 17279-17291.	3.3	144
98	A strong CME-related magnetic cloud interaction with the Earth's Magnetosphere: ISTP observations of rapid relativistic electron acceleration on May 15, 1997. Geophysical Research Letters, 1998, 25, 2975-2978.	4.0	118
99	Recurrent geomagnetic storms and relativistic electron enhancements in the outer magnetosphere: ISTP coordinated measurements. Journal of Geophysical Research, 1997, 102, 14141-14148.	3.3	133
100	Multisatellite observations of the outer zone electron variation during the November 3â€“4, 1993, magnetic storm. Journal of Geophysical Research, 1997, 102, 14123-14140.	3.3	274
101	Are energetic electrons in the solar wind the source of the outer radiation belt?. Geophysical Research Letters, 1997, 24, 923-926.	4.0	110
102	Relativistic electron acceleration and decay time scales in the inner and outer radiation belts: SAMPEX. Geophysical Research Letters, 1994, 21, 409-412.	4.0	211