Andreas Shalchi

List of Publications by Year
in descending order

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161	6,551	76326	69250
papers	citations	40 h-index	77 g-index

162	162	162	5592
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Subspace approximation to the cosmic ray Fokker-Planck equation with perpendicular diffusion. Astrophysics and Space Science, 2021, 366, 1.	1.4	3
2	Landau Damping of Langmuir Waves: An Alternative Derivation. Physics, 2021, 3, 940-954.	1.4	0
3	Field line random walk in magnetic turbulence. Physics of Plasmas, 2021, 28, .	1.9	7
4	Perpendicular Diffusion of Energetic Particles: A Complete Analytical Theory. Astrophysical Journal, 2021, 923, 209.	4.5	13
5	Detailed test-particle simulations of energetic particles interacting with magnetized plasmas I. Two-component turbulence. Advances in Space Research, 2020, 66, 2001-2023.	2.6	4
6	Heuristic Description of Perpendicular Transport. Journal of Physics: Conference Series, 2020, 1620, 012018.	0.4	1
7	Perpendicular Transport of Energetic Particles in Magnetic Turbulence. Space Science Reviews, 2020, 216, 1.	8.1	56
8	Distribution Functions of Energetic Particles Experiencing Compound Subdiffusion. Astrophysical Journal, 2020, 890, 147.	4.5	2
9	Heuristic Description of Perpendicular Particle Transport in Turbulence with Super-diffusive Magnetic Field Lines. Astrophysical Journal, 2020, 898, 135.	4.5	6
10	Heuristic Description of Perpendicular Diffusion of Energetic Particles in Astrophysical Plasmas. Astrophysical Journal Letters, 2019, 881, L27.	8.3	21
11	Field line random walk, field line separation, and particle transport in turbulence with weak transverse complexity. Advances in Space Research, 2019, 64, 2426-2438.	2.6	11
12	Comparison between test-particle simulations and test-particle theories for cosmic ray transport: III. Dynamical turbulence. Journal of Physics Communications, 2019, 3, 015016.	1.2	2
13	Subspace approximations to the cosmic ray Fokkerâ€“Planck equation. Monthly Notices of the Royal Astronomical Society, 2019, 485, 1635-1650.	4.4	5
14	Time-Dependent Perpendicular Transport of Energetic Particles. Journal of Physics: Conference Series, 2019, 1332, 012014.	0.4	0
15	Perturbation theory based solution of the pitch-angle dependent cosmic ray diffusion equation. Advances in Space Research, 2019, 63, 653-664.	2.6	3
16	The influence of non-Gaussian distribution functions on the time-dependent perpendicular transport of energetic particles. Advances in Space Research, 2018, 61, 2827-2836.	2.6	6
17	Analytic forms of the cosmic ray perpendicular diffusion coefficient with implicit contribution of slab modes. Advances in Space Research, 2018, 62, 2817-2827.	2.6	3
18	Analytical Description of the Time-dependent Perpendicular Transport of Energetic Particles. Astrophysical Journal, 2018, 864, 155.	4.5	5

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19	Time-dependent transport of energetic particles in magnetic turbulence: computer simulations versus analytical theory. Astrophysics and Space Science, 2018, 363, 1.	1.4	10
20	Numerical Test of Analytical Theories for Perpendicular Diffusion in Small Kubo Number Turbulence. Astrophysical Journal, 2017, 839, 115.	4.5	8
21	Time-dependent perpendicular transport of energetic particles in magnetic turbulence with transverse complexity. Physics of Plasmas, 2017, 24, .	1.9	23
22	Time-dependent Perpendicular Transport of Energetic Particles for Different Turbulence Configurations and Parallel Transport Models. Astrophysical Journal, 2017, 847, 9.	4.5	11
23	Analytical forms of the first 14 moments of the cosmic ray Fokkerâ€“Planck equation. Journal of Plasma Physics, 2017, 83, .	2.1	1
24	Simple Analytical Forms of the Perpendicular Diffusion Coefficient for Two-component Turbulence. III. Damping Model of Dynamical Turbulence. Astrophysical Journal, 2017, 847, 118.	4.5	11
25	Solutions of the cosmic ray velocity diffusion equation. Advances in Space Research, 2017, 60, 1532-1546.	2.6	4
26	Numerical analysis of the Fokker-Planck equation with adiabatic focusing: Realistic pitch-angle scattering. Advances in Space Research, 2017, 59, 722-735.	2.6	6
27	Stochastic field-line wandering in magnetic turbulence with shear. II. Decorrelation trajectory method. Physics of Plasmas, 2017, 24, .	1.9	9
28	THE IMPLICIT CONTRIBUTION OF SLAB MODES TO THE PERPENDICULAR DIFFUSION COEFFICIENT OF PARTICLES INTERACTING WITH TWO-COMPONENT TURBULENCE. Astrophysical Journal, 2016, 830, 130.	4.5	8
29	The influence of the Kubo number on the transport of energetic particles. New Journal of Physics, 2016, 18, 085010.	2.9	1
30	Stochastic field-line wandering in magnetic turbulence with shear. I. Quasi-linear theory. Physics of Plasmas, 2016, 23, 072306.	1.9	9
31	Monte Carlo simulations of intensity profiles for energetic particle propagation. Astronomy and Astrophysics, 2016, 586, A118.	5.1	4
32	Parallel diffusion of energetic particles interacting with noisy reduced MHD turbulence. Monthly Notices of the Royal Astronomical Society, 2016, 456, 3803-3812.	4.4	3
33	Simulations of energetic particles interacting with nonlinear anisotropic dynamical turbulence. Astrophysics and Space Science, 2016, 361, 1.	1.4	1
34	NUMERICAL TEST OF DIFFERENT APPROXIMATIONS USED IN THE TRANSPORT THEORY OF ENERGETIC PARTICLES. Astrophysical Journal, 2016, 823, 23.	4.5	11
35	Finite gyroradius corrections in the theory of perpendicular diffusion 2. Strong velocity diffusion. Advances in Space Research, 2016, 57, 431-442.	2.6	8
36	SIMULATIONS OF ENERGETIC PARTICLES INTERACTING WITH DYNAMICAL MAGNETIC TURBULENCE. Astrophysical Journal, 2016, 817, 136.	4.5	17

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37	Finite gyroradius corrections in the theory of perpendicular diffusion 1. Suppressed velocity diffusion. Advances in Space Research, 2015, 56, 1264-1275.	2.6	11
38	The influence of different turbulence models on the diffusion coefficients of energetic particles. Journal of Geophysical Research: Space Physics, 2015, 120, 4095-4111.	2.4	22
39	ANALYTIC FORMS OF THE PERPENDICULAR DIFFUSION COEFFICIENT IN NRMHD TURBULENCE. Astrophysical Journal, 2015, 799, 232.	4.5	4
40	Perpendicular diffusion of energetic particles in collisionless plasmas. Physics of Plasmas, 2015, 22, .	1.9	44
41	COSMIC RAY ACCELERATION AT PERPENDICULAR SHOCKS IN SUPERNOVA REMNANTS. Astrophysical Journal, 2014, 792, 133.	4.5	41
42	Detailed numerical investigation of 90â˜ scattering of energetic particles interacting with magnetic turbulence. Physics of Plasmas, 2014, 21, 042906.	1.9	11
43	PERPENDICULAR DIFFUSION OF ENERGETIC PARTICLES IN NOISY REDUCED MAGNETOHYDRODYNAMIC TURBULENCE. Astrophysical Journal, 2014, 794, 56.	4.5	21
44	Parallel and perpendicular diffusion coefficients of energetic particles interacting with shear AlfvÃ©n waves. Monthly Notices of the Royal Astronomical Society, 2014, 444, 2676-2684.	4.4	8
45	DETAILED NUMERICAL INVESTIGATION OF THE BOHM LIMIT IN COSMIC RAY DIFFUSION THEORY. Astrophysical Journal, 2014, 785, 31.	4.5	21
46	PITCH-ANGLE SCATTERING OF ENERGETIC PARTICLES WITH ADIABATIC FOCUSING. Astrophysical Journal, 2014, 794, 138.	4.5	8
47	On the universality of asymptotic limits in the theory of field line diffusion and perpendicular transport of energetic particles. Advances in Space Research, 2014, 53, 1024-1034.	2.6	10
48	The different transport regimes of pitch-angle scattering of energetic particles. Astrophysics and Space Science, 2014, 350, 197-210.	1.4	6
49	SIMPLE ANALYTICAL FORMS OF THE PERPENDICULAR DIFFUSION COEFFICIENT FOR TWO-COMPONENT TURBULENCE. II. DYNAMICAL TURBULENCE WITH CONSTANT CORRELATION TIME. Astrophysical Journal, 2014, 780, 138.	4.5	14
50	NUMERICAL ANALYSIS OF THE FOKKER-PLANCK EQUATION WITH ADIABATIC FOCUSING: ISOTROPIC PITCH-ANGLE SCATTERING. Astrophysical Journal, 2013, 772, 35.	4.5	12
51	Perpendicular transport of charged particles: Results for the unified nonlinear transport theory derived from the Newtonâ€“Lorentz equation. Advances in Space Research, 2013, 52, 936-950.	2.6	2
52	The role of the Kubo number in two-component turbulence. Physics of Plasmas, 2013, 20, .	1.9	7
53	SIMPLE ANALYTICAL FORMS OF THE PERPENDICULAR DIFFUSION COEFFICIENT FOR TWO-COMPONENT TURBULENCE. I. MAGNETOSTATIC TURBULENCE. Astrophysical Journal, 2013, 774, 7.	4.5	24
54	Perpendicular diffusion in magnetostatic slab turbulence: The theorem on reduced dimensionality and microscopic diffusion. Journal of Atmospheric and Solar-Terrestrial Physics, 2013, 97, 37-42.	1.6	2

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55	Simulated energetic particle transport in the interplanetary space: The Palmer consensus revisited. Journal of Geophysical Research: Space Physics, 2013, 118, 642-647.	2.4	15
56	Benchmarking the unified nonlinear transport theory for Goldreich-Sridhar turbulence. Astrophysics and Space Science, 2013, 344, 187-191.	1.4	14
57	Analytical description of field-line random walk in Goldreichâ€“Sridhar turbulence. Monthly Notices of the Royal Astronomical Society, 2013, 431, 1923-1928.	4.4	7
58	ON THE DIFFERENT ANALYTICAL RESULTS OBTAINED FOR THE PARALLEL DIFFUSION COEFFICIENT OF COSMIC PARTICLES WITH ADIABATIC FOCUSING. Astrophysical Journal, 2013, 765, 153.	4.5	11
59	THEORETICAL EXPLANATION OF THE COSMIC-RAY PERPENDICULAR DIFFUSION COEFFICIENT IN THE NEARBY STARBURST GALAXY NGC 253. Astrophysical Journal, 2013, 764, 37.	4.5	17
60	Pitch-Angle Dependent Perpendicular Diffusion of Energetic Particles Interacting With Magnetic Turbulence. Applied Physics Research, 2013, 6, .	0.0	4
61	Analytical description of nonlinear particle transport in slab turbulence: High particle energies and stochastic acceleration. Physics of Plasmas, 2012, 19, 102901.	1.9	4
62	Random walk of magnetic field lines in dynamical turbulence: A field line tracing method. II. Two-dimensional turbulence. Physics of Plasmas, 2012, 19, .	1.9	6
63	Gyrophase diffusion of charged particles in random magnetic fields. Monthly Notices of the Royal Astronomical Society, 2012, 426, 880-891.	4.4	4
64	Parallel transport of cosmic rays for non-diffusive pitch-angle scattering: I. Using the standard Fokkerâ€“Planck equation. Physica Scripta, 2012, 85, 065901.	2.5	4
65	Magnetic-field-line random walk in turbulence: A two-point correlation function description. Physical Review E, 2012, 85, 026411.	2.1	6
66	DRIFT COEFFICIENTS OF CHARGED PARTICLES IN TURBULENT MAGNETIC FIELDS. Astrophysical Journal, 2012, 744, 125.	4.5	39
67	Compound diffusion of energetic particles: a Kappa model for the parallel distribution function. Astrophysics and Space Science, 2012, 340, 351-358.	1.4	1
68	Particle acceleration and transport at an oblique CME-driven shock. Advances in Space Research, 2012, 49, 1067-1075.	2.6	66
69	Numerical investigation of the influence of large turbulence scales on the parallel and perpendicular transport of cosmic rays. Advances in Space Research, 2012, 49, 1643-1652.	2.6	19
70	Test-particle transport: higher-order correlations and time-dependent diffusion. Plasma Physics and Controlled Fusion, 2011, 53, 105016.	2.1	17
71	Simulating heliospheric and solar particle diffusion using the Parker spiral geometry. Journal of Geophysical Research, 2011, 116, n/a-n/a.	3.3	20
72	IMPROVED ANALYTICAL DESCRIPTION OF PARALLEL DIFFUSION WITH ADIABATIC FOCUSING. Astrophysical Journal, 2011, 728, 113.	4.5	24

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73	NUMERICAL TEST OF IMPROVED NONLINEAR GUIDING CENTER THEORIES. Astrophysical Journal, 2011, 735, 92.	4.5	38
74	Numerical investigation of the cosmic-ray scattering anisotropy and Bohm diffusion in space plasmas. Monthly Notices of the Royal Astronomical Society, 2011, 413, 2950-2956.	4.4	9
75	A heuristic derivation of an improved analytical theory for perpendicular diffusion of charged particles. Advances in Space Research, 2011, 48, 1499-1505.	2.6	5
76	H.E.S.S. constraints on dark matter annihilations towards the sculptor and carina dwarf galaxies. Astroparticle Physics, 2011, 34, 608-616.	4.3	74
77	Magnetic Field Line Random Walk in Twoâ€dimensional Turbulence: Markovian Diffusion versus Superdiffusion. Contributions To Plasma Physics, 2011, 51, 920-930.	1.1	23
78	Velocity correlation functions of charged particles derived from the Fokkerâ€“Planck equation. Advances in Space Research, 2011, 47, 1147-1164.	2.6	12
79	Search for Lorentz Invariance breaking with a likelihood fit of the PKS 2155-304 flare data taken on MJD 53944. Astroparticle Physics, 2011, 34, 738-747.	4.3	94
80	Particle Scattering in Magnetized Plasmas and Diffusive Shock Acceleration at Perpendicular Interplanetary Shock Waves. AIP Conference Proceedings, 2011, , .	0.4	0
81	Search for a Dark Matter Annihilation Signal from the Galactic Center Halo with H.E.S.S.. Physical Review Letters, 2011, 106, 161301.	7.8	209
82	Applicability of the Taylor-Green-Kubo formula in particle diffusion theory. Physical Review E, 2011, 83, 046402.	2.1	34
83	Charged-particle transport in space plasmas: an improved theory for cross-field scattering. Plasma Physics and Controlled Fusion, 2011, 53, 074010.	2.1	17
84	Comment on â€œCosmic ray diffusion: Detailed investigation of a recent modelâ€•[Phys. Plasmas 18, 082305 (2011)]. Physics of Plasmas, 2011, 18, 114701.	1.9	4
85	INFLUENCE OF TURBULENCE DISSIPATION EFFECTS ON THE PROPAGATION OF LOW-ENERGY COSMIC RAYS IN THE GALAXY. Astrophysical Journal, 2010, 725, 2110-2116.	4.5	12
86	A GENERALIZED NONLINEAR GUIDING CENTER THEORY FOR THE COLLISIONLESS ANOMALOUS PERPENDICULAR DIFFUSION OF COSMIC RAYS. Astrophysical Journal, 2010, 716, 671-692.	4.5	29
87	A UNIFIED PARTICLE DIFFUSION THEORY FOR CROSS-FIELD SCATTERING: SUBDIFFUSION, RECOVERY OF DIFFUSION, AND DIFFUSION IN THREE-DIMENSIONAL TURBULENCE. Astrophysical Journal Letters, 2010, 720, L127-L130.	8.3	151
88	SCALING THEORY FOR CROSS-FIELD TRANSPORT OF COSMIC RAYS IN TURBULENT FIELDS. Astrophysical Journal, 2010, 711, 997-1007.	4.5	40
89	Analytic forms of the perpendicular cosmic ray diffusion coefficient for an arbitrary turbulence spectrum and applications on transport of Galactic protons and acceleration atÂinterplanetary shocks. Astrophysics and Space Science, 2010, 325, 99-111.	1.4	86
90	Random walk of magnetic field lines: analytical theory versus simulations. Astrophysics and Space Science, 2010, 330, 279-287.	1.4	26

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91	Diffusive shock acceleration at interplanetary perpendicular shock waves: Influence of the large scale structure of turbulence on the maximum particle energy. Advances in Space Research, 2010, 46, 1208-1217.	2.6	42
92	Erratum to â€œObservations of the Sagittarius dwarf galaxy by the HESS experiment and search for a dark matter signalâ€•[Astropart. Phys. 29(1) (2008) 55â€“62]. Astroparticle Physics, 2010, 33, 274-275.	4.3	16
93	Localizing the VHE Î³-ray source at the Galactic Centre. Monthly Notices of the Royal Astronomical Society, 2010, 402, 1877-1882.	4.4	55
94	Influence of spectral anisotropy on the random walk of magnetic field lines. Monthly Notices of the Royal Astronomical Society, 2010, 406, 634-643.	4.4	4
95	PERPENDICULAR DIFFUSION OF COSMIC RAYS FOR A GOLDREICH-SRIDHAR SPECTRUM. Astrophysical Journal, 2010, 725, 2117-2127.	4.5	35
96	Random walk of magnetic field lines in dynamical turbulence: A field line tracing method. I. Slab turbulence. Physics of Plasmas, 2010, 17, .	1.9	10
97	On the diffusivity of cosmic ray transport. Journal of Geophysical Research, 2010, 115, .	3.3	26
98	Reproducing spacecraft measurements of magnetic correlations in the solar wind. Monthly Notices of the Royal Astronomical Society, 2010, 403, 287-294.	4.4	14
99	On the widespread use of the Corrsin hypothesis in diffusion theories. Physics of Plasmas, 2010, 17, .	1.9	25
100	A SEARCH FOR A DARK MATTER ANNIHILATION SIGNAL TOWARD THE CANIS MAJOR OVERDENSITY WITH H.E.S.S.. Astrophysical Journal, 2009, 691, 175-181.	4.5	38
101	SIMULTANEOUS OBSERVATIONS OF PKS 2155â€“304 WITH HESS, FERMI , RXTE , AND ATOM: SPECTRAL ENERGY DISTRIBUTIONS AND VARIABILITY IN A LOW STATE. Astrophysical Journal, 2009, 696, L150-L155.	4.5	144
102	Analytical description of nonlinear cosmic ray scattering: isotropic and quasilinear regimes of pitch-angle diffusion. Astronomy and Astrophysics, 2009, 507, 589-597.	5.1	58
103	Analytical description for field-line wandering in strong magnetic turbulence. Physical Review E, 2009, 80, 066408.	2.1	18
104	Detection of Gamma Rays from a Starburst Galaxy. Science, 2009, 326, 1080-1082.	12.6	172
105	Non-linear Guiding Center Theory and Acceleration of Cosmic Rays at Supernova Remnant Shocks. , 2009, , .		5
106	Nonlinear Cosmic Ray Diffusion Theories. Astrophysics and Space Science Library, 2009, , .	2.7	265
107	Nonlinear field line random walk for non-Gaussian statistics. Journal of Physics A: Mathematical and Theoretical, 2009, 42, 345501.	2.1	15
108	Detailed analytical investigation of magnetic field line random walk in turbulent plasmas: II. Isotropic turbulence. Journal of Plasma Physics, 2009, 75, 183-192.	2.1	3

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109	Radio Imaging of the Very-High-Energy Î³-Ray Emission Region in the Central Engine of a Radio Galaxy. Science, 2009, 325, 444-448.	12.6	175
110	Compound perpendicular transport of charged particles withÂdrift, advection, wave propagation effects, and an arbitrary turbulence spectrum. Astrophysics and Space Science, 2009, 321, 197-207.	1.4	6
111	Quasi-linear perpendicular diffusion coefficients of charged cosmic rays calculated directly from the Newton-Lorentz equation. Monthly Notices of the Royal Astronomical Society, 2009, 394, 2089-2097.	4.4	11
112	Random walk of magnetic field lines: Subdiffusive, diffusive, and superdiffusive regimes. Advances in Space Research, 2009, 43, 1429-1435.	2.6	99
113	Diffusive shock acceleration in supernova remnants: On the validity of the Bohm limit. Astroparticle Physics, 2009, 31, 237-242.	4.3	17
114	Relation between different theories for cosmic ray cross field diffusion. Advances in Space Research, 2009, 44, 1326-1336.	2.6	18
115	Plasma-particle interaction for strong stochastic magnetic fields: Isotropic and anisotropic scattering regimes. Physical Review D, 2009, 79, .	4.7	17
116	Nonlinear propagation, confinement, and anisotropy of ultrahigh-energy cosmic rays in the Galaxy. Physical Review D, 2009, 80, .	4.7	15
117	Compound and perpendicular diffusion of cosmic rays and random walk of the field lines: II. Non-parallel particle transport and drifts. Journal of Physics A: Mathematical and Theoretical, 2009, 42, 235502.	2.1	16
118	PITCH-ANGLE DIFFUSION COEFFICIENTS OF CHARGED PARTICLES FROM COMPUTER SIMULATIONS. Astrophysical Journal, 2009, 707, 61-66.	4.5	60
119	DISCOVERY OF VERY HIGH ENERGY Î³-RAY EMISSION FROM CENTAURUS A WITH H.E.S.S.. Astrophysical Journal, 2009, 695, L40-L44.	4.5	177
120	DISCOVERY OF GAMMA-RAY EMISSION FROM THE SHELL-TYPE SUPERNOVA REMNANT RCW 86 WITH HESS. Astrophysical Journal, 2009, 692, 1500-1505.	4.5	96
121	Analytical forms of correlation functions and length scales ofÂastrophysical turbulence. Astrophysics and Space Science, 2008, 315, 31-43.	1.4	8
122	Forms of Eulerian correlation functions in the solar wind. Astrophysics and Space Science, 2008, 318, 149-159.	1.4	2
123	Observations of the Sagittarius dwarf galaxy by the HESS experiment and search for a dark matter signal. Astroparticle Physics, 2008, 29, 55-62.	4.3	87
124	Perpendicular transport of charged particles in slab turbulence: recovery of diffusion for realistic wavespectra?. Journal of Physics G: Nuclear and Particle Physics, 2008, 35, 025202.	3.6	8
125	Time-dependent test-particle scattering perpendicular to a mean magnetic field: the four transport regimes and validity of the FLRW limit. Plasma Physics and Controlled Fusion, 2008, 50, 055001.	2.1	14
126	Energy Spectrum of Cosmic-Ray Electrons at TeV Energies. Physical Review Letters, 2008, 101, 261104.	7.8	516

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127	Limits on an Energy Dependence of the Speed of Light from a Flare of the Active Galaxy PKS 2155-304. Physical Review Letters, 2008, 101, 170402.	7.8	95
128	Detailed analytical investigation of magnetic field line random walk in turbulent plasmas: I. Two-component slab/two-dimensional turbulence. Journal of Plasma Physics, 2008, 74, 657-677.	2.1	1
129	Nonlinear Guiding Center Theory of Perpendicular Diffusion: Derivation from the Newtonâ€Lorentz Equation. Astrophysical Journal, 2008, 685, 971-975.	4.5	41
130	Pitch-angle scattering in pure two-dimensional and two-component turbulence. Astronomy and Astrophysics, 2008, 483, 371-381.	5.1	18
131	Semiâ€“Quasiâ€Linear Description of Cosmicâ€Ray Perpendicular Transport. Astrophysical Journal, 2008, 672, 642-649.	4.5	14
132	The Cosmicâ€Ray Diffusion Tensor in Nonaxisymmetric Turbulence. Astrophysical Journal, 2008, 677, 671-675.	4.5	29
133	Solving the 90Â° Scattering Problem in Isotropic Turbulence. Astrophysical Journal, 2008, 685, L165-L168.	4.5	50
134	Cosmicâ€Ray Diffusion Approximation with Weak Adiabatic Focusing. Astrophysical Journal, 2008, 686, 292-302.	4.5	48
135	An Exceptional Very High Energy Gamma-Ray Flare of PKS 2155-304. Astrophysical Journal, 2007, 664, L71-L74.	4.5	644
136	Generalized compound transport of charged particles in turbulent magnetized plasmas. Journal of Physics A: Mathematical and Theoretical, 2007, 40, 11191-11201.	2.1	8
137	Parameter study of particle transport in partially turbulent magnetic fields. Journal of Physics G: Nuclear and Particle Physics, 2007, 34, 209-218.	3.6	8
138	Velocity correlation functions of charged test particles. Journal of Physics G: Nuclear and Particle Physics, 2007, 34, 859-870.	3.6	14
139	H.E.S.S. Observations of the Supernova Remnant RX J0852.0â^'4622: Shellâ€Type Morphology and Spectrum of a Widely Extended Very High Energy Gammaâ€Ray Source. Astrophysical Journal, 2007, 661, 236-249.	4.5	167
140	A New Type of Cosmicâ€Ray Anisotropy from Perpendicular Diffusion. I. Modification of the Spatial Diffusion Tensor and the Diffusionâ€Convection Cosmicâ€Ray Transport Equation. Astrophysical Journal, 2007, 661, 185-189.	4.5	16
141	Random walk of magnetic field-lines for different values of the energy range spectral index. Physics of Plasmas, 2007, 14, .	1.9	47
142	Analytical description of stochastic field-line wandering in magnetic turbulence. Physics of Plasmas, 2007, 14, .	1.9	63
143	Field line wandering and perpendicular scattering of charged particles in AlfvÃ©nic slab turbulence. Astronomy and Astrophysics, 2007, 475, 415-420.	5.1	20
144	A new theory for perpendicular transport of cosmic rays. Astronomy and Astrophysics, 2007, 470, 405-409.	5.1	98

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145	Comparison between test-particle simulations and test-particle theories for cosmic ray transport: I. Magnetostatic turbulence. Journal of Physics G: Nuclear and Particle Physics, 2006, 32, 809-833.	3.6	38
146	Comparison between test-particle simulations and test-particle theories for cosmic ray transport: II. Plasma wave turbulence. Journal of Physics G: Nuclear and Particle Physics, 2006, 32, 1045-1059.	3.6	21
147	Fast Variability of Tera-Electron Volt Â Rays from the Radio Galaxy M87. Science, 2006, 314, 1424-1427.	12.6	277
148	Analytical investigation of the two-dimensional cosmic ray Fokker-Planck equation. Astronomy and Astrophysics, 2006, 448, 809-816.	5.1	42
149	Non-linear momentum diffusion of heliospheric cosmic rays. Monthly Notices of the Royal Astronomical Society, 2006, 371, 1898-1902.	4.4	2
150	Parallel and Perpendicular Transport of Heliospheric Cosmic Rays in an Improved Dynamical Turbulence Model. Astrophysical Journal, 2006, 642, 230-243.	4.5	91
151	Extended nonlinear guiding center theory of perpendicular diffusion. Astronomy and Astrophysics, 2006, 453, L43-L46.	5.1	84
152	Evidence for the Nonlinear Transport of Galactic Cosmic Rays. Astrophysical Journal, 2005, 626, L97-L99.	4.5	39
153	Cosmic ray transport in strong turbulence. Monthly Notices of the Royal Astronomical Society, 2005, 363, 107-111.	4.4	7
154	Second-order quasilinear theory of cosmic ray transport. Physics of Plasmas, 2005, 12, 052905.	1.9	89
155	Time-dependent transport and subdiffusion of cosmic rays. Journal of Geophysical Research, 2005, 110, .	3.3	43
156	Quasilinear perpendicular diffusion of cosmic rays in weak dynamical turbulence. Astronomy and Astrophysics, 2004, 420, 821-832.	5.1	39
157	Analytic Forms of the Perpendicular Diffusion Coefficient in Magnetostatic Turbulence. Astrophysical Journal, 2004, 604, 675-686.	4.5	118
158	Nonlinear guiding center theory of perpendicular diffusion: General properties and comparison with observation. Geophysical Research Letters, 2004, 31, n/a-n/a.	4.0	74
159	Nonlinear Parallel and Perpendicular Diffusion of Charged Cosmic Rays in Weak Turbulence. Astrophysical Journal, 2004, 616, 617-629.	4.5	141
160	Nonlinear Guiding Center Theory of Perpendicular Diffusion in Dynamical Turbulence. Astrophysical Journal, 2004, 615, 805-812.	4.5	30
161	The Parallel Mean Free Path of Heliospheric Cosmic Rays in Composite Slab/Twoâ€dimensional Geometry. I. The Damping Model of Dynamical Turbulence. Astrophysical Journal, 2004, 604, 861-873.	4.5	39