Todor Stanev

List of Publications by Year
in descending order

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121 papers	7,458 citations	71102 41 h-index	51608 86 g-index
123 all docs	123 docs citations	123 times ranked	4629 citing authors

#	Article	IF	Citations
1	Cosmic Ray Interactions. Astrophysics and Space Science Library, 2021, , 17-44.	2.7	0
2	Cosmic Rays Underground. Astrophysics and Space Science Library, 2021, , 141-176.	2.7	0
3	Cosmic Rays at the Top of the Atmosphere. Astrophysics and Space Science Library, 2021, , 93-124.	2.7	0
4	The Birth of Cosmic Rays. Astrophysics and Space Science Library, 2021, , 45-73.	2.7	0
5	Cosmic Rays in the Galaxy. Astrophysics and Space Science Library, 2021, , 75-92.	2.7	0
6	Cosmic Ray Showers. Astrophysics and Space Science Library, 2021, , 179-229.	2.7	0
7	Cosmic Rays in the Atmosphere. Astrophysics and Space Science Library, 2021, , 125-140.	2.7	0
8	Hadronic interaction model sibyll 2.3d and extensive air showers. Physical Review D, 2020, 102, .	4.7	102
9	The hadronic interaction model Sibyll 2.3c and muon production in extensive air-showers. EPJ Web of Conferences, 2019, 208, 11002.	0.3	6
10	Supernova explosions of massive stars and cosmic rays. Advances in Space Research, 2018, 62, 2773-2816.	2.6	15
11	Multimessenger observations of a flaring blazar coincident with high-energy neutrino IceCube-170922A. Science, 2018, 361, .	12.6	654
12	Neutrino emission from the direction of the blazar TXS 0506+056 prior to the IceCube-170922A alert. Science, 2018, 361, 147-151.	12.6	601
13	Data-driven model of the cosmic-ray flux and mass composition from 10 GeV to 10^{11} GeV. , 2017, , .		34
14	Cosmic PeV neutrinos and the sources of ultrahigh energy protons. Physical Review D, 2014, 90, .	4.7	33
15	High energy cosmic rays: sources and fluxes. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2014, 742, 42-46.	1.6	17
16	Cosmogenic neutrinos and gamma rays. Comptes Rendus Physique, 2014, 15, 349-356.	0.9	7
17	Neutrinos and cosmic rays. Astroparticle Physics, 2012, 39-40, 120-128.	4.3	5
18	THE CENTAURUS A ULTRAHIGH-ENERGY COSMIC-RAY EXCESS AND THE LOCAL EXTRAGALACTIC MAGNETIC FIELD. Astrophysical Journal, 2012, 758, 16.	4.5	18

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19	Ultrahigh energy cosmic rays. Reviews of Modern Physics, 2011, 83, 907-942.	45.6	116
20	Photon and neutrino emission from active galactic nuclei. Nuclear Physics, Section B, Proceedings Supplements, 2011, 217, 284-286.	0.4	4
21	THE ORIGIN OF COSMIC RAYS: EXPLOSIONS OF MASSIVE STARS WITH MAGNETIC WINDS AND THEIR SUPERNOVA MECHANISM. Astrophysical Journal, 2010, 725, 184-187.	4.5	71
22	THE WMAP HAZE FROM THE GALACTIC CENTER REGION DUE TO MASSIVE STAR EXPLOSIONS AND A REDUCED COSMIC RAY SCALE HEIGHT. Astrophysical Journal Letters, 2010, 710, L53-L57.	8.3	26
23	ULTRA HIGH ENERGY COSMIC RAYS: ORIGIN AND PROPAGATION. Modern Physics Letters A, 2010, 25, 1467-1481.	1.2	4
24	High Energy Cosmic Rays. , 2010, , .		39
25	Propagation of ultrahigh-energy cosmic rays. New Journal of Physics, 2009, 11, 065013.	2.9	12
26	Active Galactic Nuclei: Sources for ultra high energy cosmic rays?. Nuclear Physics, Section B, Proceedings Supplements, 2009, 190, 61-78.	0.4	16
27	Cosmic ray interaction event generator SIBYLL 2.1. Physical Review D, 2009, 80, .	4.7	355
28	Status, performance, and first results of the IceTop array. Nuclear Physics, Section B, Proceedings Supplements, 2009, 196, 159-164.	0.4	9
29	Ultrahigh energy cosmic rays and neutrinos. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2008, 588, 215-220.	1.6	5
30	ULTRA HIGH ENERGY COSMIC RAYS: ORIGIN AND PROPAGATION. , 2007, , .		1
31	High-energy cosmic rays. Nuclear Physics A, 2006, 777, 98-110.	1.5	44
32	High energy neutrinos from cosmic ray interactions in clusters of galaxies. Physical Review D, 2006, 73, .	4.7	22
33	High energy neutrinos: sources and fluxes. Journal of Physics: Conference Series, 2006, 39, 386-392.	0.4	1
34	Muon flux at the geographical South Pole. Astroparticle Physics, 2006, 25, 361-367.	4.3	4
35	Ultra high energy interaction models for Monte Carlo calculations: what model is the best fit. Nuclear Physics, Section B, Proceedings Supplements, 2006, 151, 135-142.	0.4	1
36	Cosmogenic neutrinos from cosmic ray interactions with extragalactic infrared photons. Physical Review D, 2006, 73, .	4.7	28

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37	IceTop Status in 2004. Nuclear Physics, Section B, Proceedings Supplements, 2005, 145, 327-330.	0.4	2
38	Atmospheric neutrino challenges. Nuclear Physics, Section B, Proceedings Supplements, 2005, 145, 69-74.	0.4	4
39	Neutrinos: The Key to Ultrahigh Energy Cosmic Rays. Physical Review Letters, 2005, 95, 141101.	7.8	60
40	On the shape of the ultrahigh energy cosmic ray spectrum. Physical Review D, 2005, 72, .	4.7	34
41	Influence of shower fluctuations and primary composition on studies of the shower longitudinal development. Physical Review D, 2004, 69, .	4.7	15
42	GZK cutoff and associated neutrinos. Nuclear Physics, Section B, Proceedings Supplements, 2004, 136, 103-110.	0.4	2
43	Neutrino production by UHECR proton interactions in the infrared background. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 2004, 595, 50-54.	4.1	14
44	Charge ratio of muons from atmospheric neutrinos. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 2003, 561, 125-129.	4.1	2
45	Propagation of ultrahigh energy protons in regular extragalactic magnetic fields. Physical Review D, 2003, 68, .	4.7	15
46	Atmospheric shower fluctuations and the constant intensity cut method. Physical Review D, 2002, 66, .	4.7	18
47	Hybrid simulations of extensive air showers. Physical Review D, 2002, 66, .	4.7	66
48	Ultra high energy cosmic rays and magnetic fields. Nuclear Physics, Section B, Proceedings Supplements, 2002, 110, 491-493.	0.4	0
49	Ultrahighâ€“Energy Cosmicâ€Ray Propagation in the Galaxy: Clustering versus Isotropy. Astrophysical Journal, 2002, 572, 185-201.	4.5	49
50	Neutrinos from propagation of ultrahigh energy protons. Physical Review D, 2001, 64, .	4.7	331
51	A Possible Nearby Origin for the Highest-Energy Events Observed. , 2001, , 181-195.		3
52	Origin and Physics of the Highest Energy Particles in the Universe. , 2001, , 515-537.		2
53	Monte Carlo simulations of photohadronic processes in astrophysics. Computer Physics Communications, 2000, 124, 290-314.	7.5	318
54	Pion production in proton collisions with light nuclei: implications for atmospheric neutrinos. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 2000, 472, 113-118.	4.1	31

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55	Origin of the highest energy cosmic rays. Nuclear Physics, Section B, Proceedings Supplements, 2000, 87, 417-419.	0.4	33
56	Propagation of ultrahigh energy protons in the nearby universe. Physical Review D, 2000, 62, .	4.7	126
57	Antiprotons at Solar Maximum. Physical Review Letters, 1999, 83, 674-677.	7.8	88
58	Predicting Proton-Air Cross Sections atsâˆ¼30TeVUsing Accelerator and Cosmic Ray Data. Physical Review Letters, 1999, 83, 4926-4928.	7.8	22
59	Possible Tau Appearance Experiment with Atmospheric Neutrinos. Physical Review Letters, 1999, 83, 5427-5430.	7.8	22
60	Cut-offs and pile-ups in shock acceleration spectra. Astroparticle Physics, 1999, 10, 185-196.	4.3	30
61	Photohadronic Processes in Astrophysical Environments. Publications of the Astronomical Society of Australia, 1999, 16, 160-166.	3.4	73
62	The nature and the origin of the highest energy cosmic rays. Nuclear Physics, Section B, Proceedings Supplements, 1998, 60, 181-190.	0.4	2
63	Geomagnetic effects on atmospheric neutrinos. Physical Review D, 1998, 58, .	4.7	32
64	Path length distributions of atmospheric neutrinos. Physical Review D, 1998, 57, 1977-1982.	4.7	44
65	Proton-proton cross section atsâˆ¼30TeV. Physical Review D, 1998, 58, .	4.7	32
66	Gammaâ€Ray Production in Supernova Remnants. Astrophysical Journal, 1998, 492, 219-227.	4.5	126
67	Constraints on the Extragalactic Infrared Background from Gamma-Ray Observations of Markarian 501. Astrophysical Journal, 1998, 494, L159-L162.	4.5	98
68	Nature of the highest energy cosmic rays. Physical Review D, 1997, 55, 1365-1371.	4.7	32
69	Î³ray astronomy with muons. Physical Review D, 1997, 55, 4475-4479.	4.7	16
70	Ultraâ€“Highâ€Energy Cosmic Rays and the Largeâ€Scale Structure of the Galactic Magnetic Field. Astrophysical Journal, 1997, 479, 290-295.	4.5	156
71	Atmospheric neutrino flux above 1 GeV. Physical Review D, 1996, 53, 1314-1323.	4.7	274
72	Atmospheric neutrinos: Muon and electron neutrinos problem. Nuclear Physics, Section B, Proceedings Supplements, 1996, 48, 165-171.	0.4	1

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73	Limits on Models of the Ultrahigh Energy Cosmic Rays Based on Topological Defects. Physical Review Letters, 1996, 77, 3708-3711.	7.8	109
74	Comparison of atmospheric neutrino flux calculations at low energies. Physical Review D, 1996, 54, 5578-5584.	4.7	60
75	Particle astrophysics with high energy neutrinos. Physics Reports, 1995, 258, 173-236.	25.6	445
76	Origin of galactic cosmic rays. Physical Review D, 1995, 51, 3450-3454.	4.7	35
77	Arrival Directions of the Most Energetic Cosmic Rays. Physical Review Letters, 1995, 75, 3056-3059.	7.8	140
78	Solar and Supernova Neutrinos. , 1995, , 55-67.		0
79	sibyll: An event generator for simulation of high energy cosmic ray cascades. Physical Review D, 1994, 50, 5710-5731.	4.7	326
80	Hybrid simulations of electromagnetic cascades. Astroparticle Physics, 1994, 2, 35-42.	4.3	4
81	High Energy cosmic neutrinos. Nuclear Physics, Section B, Proceedings Supplements, 1994, 35, 185-196.	0.4	2
82	Diffuse radiation from cosmic ray interactions in the galaxy. Astroparticle Physics, 1993, 1, 281-287.	4.3	73
83	Atmospheric neutrino data and neutrino oscillations. Physical Review D, 1993, 48, 1140-1149.	4.7	50
84	Cosmic-ray composition around1018eV. Physical Review D, 1993, 47, 1919-1932.	4.7	96
85	Nucleus-nucleus collisions and interpretation of cosmic-ray cascades. Physical Review D, 1992, 46, 5013-5025.	4.7	159
86	Propagation of multi-TeV muons. Physical Review D, 1991, 44, 3543-3554.	4.7	201
87	Signatures of cosmic-ray interactions on the solar surface. Astrophysical Journal, 1991, 382, 652.	4.5	113
88	Acceleration of Cosmic Rays At Young Supernova Remnants. , 1991, , 177-186.		0
89	Variation of the solar neutrino flux with the Sun's activity. Nature, 1990, 348, 407-411.	27.8	56
90	The photoproduction threshold. Implications for air showers. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 1990, 243, 444-450.	4.1	9

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91	Astrophysical sources of high energy neutrinos. Nuclear Physics, Section B, Proceedings Supplements, 1990, 14, 17-27.	0.4	4
92	Simulation of atmospheric cascades and deep-underground muons. Physical Review D, 1990, 42, 3668-3689.	4.7	76
93	Production of Energetic Gamma-Rays and Neutrinos at Binary Systems. , 1989, , 39-48.		0
94	Burst of TeVÎ³rays from SN 1987A: Cosmic storage rings?. Physical Review Letters, 1989, 63, 1035-1037.	7.8	3
95	Search for photons of energy>50 TeV from SN 1987A in early 1988. Physical Review Letters, 1989, 62, 1425-1428.	7.8	13
96	Air-shower detection of ultrahigh-energy muons and neutrinos. Physical Review D, 1989, 40, 1472-1476.	4.7	8
97	Flux of atmospheric neutrinos. Physical Review D, 1989, 39, 3532-3534.	4.7	196
98	Mini-jets in minimum-bias events. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 1989, 219, 375-380.	4.1	83
99	Signatures of particle acceleration at SN 1987A. Astrophysical Journal, 1989, 345, 423.	4.5	14
100	On the possibility of observations of high energy neutrino and gamma-ray fluxes from SN1987A. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 1988, 264, 32-36.	1.6	0
101	Electromagnetic component of1014â€“1016-eV air showers. Physical Review D, 1988, 37, 649-656.	4.7	28
102	Cosmic-ray neutrinos in the atmosphere. Physical Review D, 1988, 38, 85-95.	4.7	110
103	Energetic (>1 GeV) neutrinos as a probe of acceleration in the new supernova. Physical Review Letters, 1987, 58, 1695-1697.	7.8	40
104	Energetic (>1 GeV) Neutrinos as a Probe of Acceleration in the New Supernova. Physical Review Letters, 1987, 59, 844-844.	7.8	5
105	Particle acceleration and production of energetic photons in SN1987A. Nature, 1987, 329, 314-316.	27.8	38
106	Constraints on models of Cygnus X-3 from high-energy gamma-ray absorption at source. Astrophysical Journal, 1987, 322, 838.	4.5	29
107	Are deep underground detectors goodÎ³-ray telescopes?. Physical Review D, 1986, 33, 2740-2743.	4.7	8
108	Restrictions on primaries responsible for correlated muon events at Soudan. Physical Review D, 1986, 33, 2597-2601.	4.7	1

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109	Constraints on cosmic-ray observation of Cygnus X-3. Nature, 1985, 317, 409-411.	27.8	19
110	Muon bundles in underground detectors. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 1985, 235, 183-192.	1.6	52
111	Production of high-energy muons in gamma showers. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 1985, 158, 75-76.	4.1	17
112	Response of deep detectors to extraterrestrial neutrinos. Physical Review D, 1985, 31, 2770-2772.	4.7	26
113	Calculation of Neutrino Flux from Cygnus X-3. Physical Review Letters, 1985, 54, 2265-2268.	7.8	61
114	Neutrino-induced muon flux deep underground and search for neutrino oscillations. Physical Review D, 1984, 30, 985-990.	4.7	48
115	Analysis of deep-underground muons. Physical Review D, 1983, 27, 1448-1456.	4.7	32
116	Flux of Atmospheric Neutrinos. Physical Review Letters, 1983, 51, 223-226.	7.8	76
117	Inelasticity of nucleus-nucleus collisions and composition of high-energy cosmic rays. Physical Review D, 1983, 28, 464-467.	4.7	1
118	Ultrahigh-energy cross section from study of longitudinal development of air showers. Physical Review D, 1982, 26, 336-339.	4.7	34
119	Development of ultrahigh-energy electromagnetic cascades in water and lead including the Landau-Pomeranchuk-Migdal effect. Physical Review D, 1982, 25, 1291-1304.	4.7	105
120	Nucleus-nucleus collisions and interpretation of cosmic-ray cascades above 100 TeV. Physical Review D, 1982, 25, 2341-2350.	4.7	25
121	Simulation of Centauro events. Physical Review D, 1981, 23, 771-776.	4.7	5