Pasquale Dario Serpico

List of Publications by Year
in descending order

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139	8,430	34105 52	45317 90
papers	citations	h-index	g-index

140	140	140	5176
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Relic neutrino decoupling including flavour oscillations. Nuclear Physics B, 2005, 729, 221-234.	2.5	597
2	Pulsars as the sources of high energy cosmic ray positrons. Journal of Cosmology and Astroparticle Physics, 2009, 2009, 025-025.	5.4	473
3	Primordial nucleosynthesis: From precision cosmology to fundamental physics. Physics Reports, 2009, 472, 1-76.	25.6	371
4	First Results from the CERN Axion Solar Telescope. Physical Review Letters, 2005, 94, 121301.	7.8	298
5	An improved limit on the axionâ€“photon coupling from the CAST experiment. Journal of Cosmology and Astroparticle Physics, 2007, 2007, 010-010.	5.4	211
6	PArthENoPE: Public algorithm evaluating the nucleosynthesis of primordial elements. Computer Physics Communications, 2008, 178, 956-971.	7.5	196
7	CMB bounds on disk-accreting massive primordial black holes. Physical Review D, 2017, 96, .	4.7	196
8	Spectral Breaks as a Signature of Cosmic Ray Induced Turbulence in the Galaxy. Physical Review Letters, 2012, 109, 061101.	7.8	190
9	Nuclear reaction network for primordial nucleosynthesis: a detailed analysis of rates, uncertainties and light nuclei yields. Journal of Cosmology and Astroparticle Physics, 2004, 2004, 010-010.	5.4	176
10	Diffuse gamma ray constraints on annihilating or decaying Dark Matter after Fermi. Nuclear Physics B, 2010, 840, 284-303.	2.5	162
11	Are IceCube neutrinos unveiling PeV-scale decaying dark matter?. Journal of Cosmology and Astroparticle Physics, 2013, 2013, 054-054.	5.4	158
12	Cosmological constraints on exotic injection of electromagnetic energy. Journal of Cosmology and Astroparticle Physics, 2017, 2017, 043-043.	5.4	151
13	A robust upper limit on <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" altimg="si1.gif" overflow="scroll"><mml:msub><mml:mi>N</mml:mi><mml:mi mathvariant="normal">eff</mml:mi></mml:msub></mml:math> from BBN, circa 2011. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 2011, 701, 296-299.	4.1	148
14	A fresh look at linear cosmological constraints on a decaying Dark Matter component. Journal of Cosmology and Astroparticle Physics, 2016, 2016, 036-036.	5.4	146
15	High-Energy Antiprotons from Old Supernova Remnants. Physical Review Letters, 2009, 103, 081103.	7.8	141
16	Cosmic microwave background bounds on primordial black holes including dark matter halo accretion. Physical Review Research, 2020, 2, .	3.6	140
17	Galactic Center gamma-ray ``excess'' from an active past of the Galactic Centre?. Journal of Cosmology and Astroparticle Physics, 2014, 2014, 052-052.	5.4	138
18	Role of dense matter in collective supernova neutrino transformations. Physical Review D, 2008, 78, .	4.7	137

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19	Milky Way as a kiloparsec-scale axionscope. Physical Review D, 2008, 77, .	4.7	134
20	Probing eV-scale axions with CAST. Journal of Cosmology and Astroparticle Physics, 2009, 2009, 008-008.	5.4	120
21	Astrophysical models for the origin of the positron â€œexcessâ€• Astroparticle Physics, 2012, 39-40, 2-11.	4.3	120
22	PRESENT STATUS OF PRIMORDIAL NUCLEOSYNTHESIS AFTER WMAP: RESULTS FROM A NEW BBN CODE. International Journal of Modern Physics A, 2004, 19, 4431-4453.	1.5	112
23	Detecting Axionlike Particles with Gamma Ray Telescopes. Physical Review Letters, 2007, 99, 231102.	7.8	110
24	Physics at the $$e^+ e^-$$ e + e - linear collider. European Physical Journal C, 2015, 75, 371.	3.9	110
25	Millisecond pulsars and the Galactic Center gamma-ray excess: the importance of luminosity function and secondary emission. Journal of Cosmology and Astroparticle Physics, 2015, 2015, 023-023.	5.4	107
26	QCD-Electroweak First-Order Phase Transition in a Supercooled Universe. Physical Review Letters, 2017, 119, 141301.	7.8	98
27	Lepton asymmetry and primordial nucleosynthesis in the era of precision cosmology. Physical Review D, 2005, 71, .	4.7	96
28	AMS-02 antiprotons, at last! Secondary astrophysical component and immediate implications for Dark Matter. Journal of Cosmology and Astroparticle Physics, 2015, 2015, 023-023.	5.4	96
29	Strongest model-independent bound on the lifetime of Dark Matter. Journal of Cosmology and Astroparticle Physics, 2014, 2014, 028-028.	5.4	94
30	MeV-mass dark matter and primordial nucleosynthesis. Physical Review D, 2004, 70, .	4.7	92
31	IceCube events and decaying dark matter: hints and constraints. Journal of Cosmology and Astroparticle Physics, 2014, 2014, 054-054.	5.4	92
32	Gamma ray constraints on decaying dark matter. Physical Review D, 2012, 86, .	4.7	88
33	Signatures of axionlike particles in the spectra of TeV gamma-ray sources. Physical Review D, 2007, 76, .	4.7	80
34	On the merger rate of primordial black holes: effects of nearest neighbours distribution and clustering. Journal of Cosmology and Astroparticle Physics, 2018, 2018, 043-043.	5.4	77
35	Search for dark matter annihilation signatures in H.E.S.S. observations of dwarf spheroidal galaxies. Physical Review D, 2014, 90, .	4.7	76
36	Probing the neutrino mass hierarchy with the rise time of a supernova burst. Physical Review D, 2012, 85, .	4.7	72

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37	New evaluation of the antiproton production cross section for cosmic ray studies. Physical Review D, 2014, 90, .	4.7	71
38	Indications for a High-Rigidity Break in the Cosmic-Ray Diffusion Coefficient. Physical Review Letters, 2017, 119, 241101.	7.8	71
39	Photon-axion conversion as a mechanism for supernova dimming: Limits from CMB spectral distortion. Physical Review D, 2005, 72, .	4.7	66
40	Role of electroweak bremsstrahlung for indirect dark matter signatures. Physical Review D, 2009, 80, .	4.7	66
41	Model-independent dark matter annihilation bound from the diffuse gamma ray flux. Physical Review D, 2007, 76, .	4.7	63
42	Earth matter effects in supernova neutrinos: optimal detector locations. Journal of Cosmology and Astroparticle Physics, 2006, 2006, 012-012.	5.4	61
43	Possible causes of a rise with energy of the cosmic ray positron fraction. Physical Review D, 2009, 79, .	4.7	60
44	DIFFUSE Î³-RAY EMISSION FROM UNRESOLVED BL LAC OBJECTS. Astrophysical Journal, 2014, 786, 129.	4.5	60
45	Measuring the 13 Neutrino Mixing Angle and theCPPhase with Neutrino Telescopes. Physical Review Letters, 2005, 94, 211102.	7.8	59
46	Gamma-ray bounds from EAS detectors and heavy decaying dark matter constraints. Journal of Cosmology and Astroparticle Physics, 2015, 2015, 014-014.	5.4	58
47	Nonlinear cosmic ray Galactic transport in the light of AMS-02 and Voyager data. Astronomy and Astrophysics, 2015, 583, A95.	5.1	58
48	Effects of non-standard neutrinoâ€“electron interactions on relic neutrino decoupling. Nuclear Physics B, 2006, 756, 100-116.	2.5	56
49	The Galactic magnetic field as spectrograph for ultra-high energy cosmic rays. Astroparticle Physics, 2007, 26, 378-386.	4.3	56
50	Relaxing nucleosynthesis constraints on Brans-Dicke theories. Physical Review D, 2006, 74, .	4.7	53
51	Light sterile neutrino production in the early universe with dynamical neutrino asymmetries. Physical Review D, 2012, 86, .	4.7	52
52	Nonuniversal BBN bounds on electromagnetically decaying particles. Physical Review D, 2015, 91, .	4.7	52
53	Cosmic-ray transport from AMS-02 boron to carbon ratio data: Benchmark models and interpretation. Physical Review D, 2019, 99, .	4.7	52
54	Photon-Axion Conversion in Intergalactic Magnetic Fields and Cosmological Consequences. , 2008, , 115-134.		52

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55	AMS-02 antiprotons' consistency with a secondary astrophysical origin. Physical Review Research, 2020, 2, .	3.6	50
56	Extracting the gamma ray signal from dark matter annihilation in the galactic center region. Physical Review D, 2008, 77, .	4.7	48
57	Multimomentum and multiflavor active-sterile neutrino oscillations in the early universe: Role of neutrino asymmetries and effects on nucleosynthesis. Physical Review D, 2013, 87, .	4.7	48
58	Probing the 2-3 leptonic mixing at high-energy neutrino telescopes. Physical Review D, 2006, 73, .	4.7	47
59	Theoretical uncertainties in extracting cosmic-ray diffusion parameters: the boron-to-carbon ratio. Astronomy and Astrophysics, 2015, 580, A9.	5.1	46
60	Nonstandard neutrino-neutrino refractive effects in dense neutrino gases. Physical Review D, 2008, 78, .	4.7	40
61	The Comptonâ€“Getting effect on ultra-high energy cosmic rays of cosmological origin. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 2006, 640, 225-229.	4.1	38
62	Revisiting cosmological bounds on radiative neutrino lifetime. Physical Review D, 2007, 76, .	4.7	38
63	Loophole to the Universal Photon Spectrum in Electromagnetic Cascades and Application to the Cosmological Lithium Problem. Physical Review Letters, 2015, 114, 091101.	7.8	37
64	Oscillations of solar atmosphere neutrinos. Physical Review D, 2006, 74, .	4.7	34
65	Optimal angular window for observing dark matter annihilation from the Galactic Center region: The case of gamma-ray lines. Astroparticle Physics, 2008, 29, 380-385.	4.3	34
66	Search for 14.4 keV solar axions emitted in the M1-transition of⁵⁷Fe nuclei with CAST. Journal of Cosmology and Astroparticle Physics, 2009, 2009, 002-002.	5.4	34
67	Bremsstrahlung gamma rays from light dark matter. Journal of Cosmology and Astroparticle Physics, 2013, 2013, 035-035.	5.4	34
68	Stringent constraint on neutrino Lorentz invariance violation from the two IceCube PeV neutrinos. Physical Review D, 2013, 87, .	4.7	34
69	Angular signatures of dark matter in the diffuse gamma ray background. Journal of Cosmology and Astroparticle Physics, 2007, 2007, 013-013.	5.4	33
70	Cosmological Neutrino Mass Detection: The Best Probe of Neutrino Lifetime. Physical Review Letters, 2007, 98, .	7.8	33
71	Dark matter constraints from dwarf galaxies: a data-driven analysis. Journal of Cosmology and Astroparticle Physics, 2018, 2018, 029-029.	5.4	33
72	The signature of large scale structures on the very high energy gamma ray sky. Journal of Cosmology and Astroparticle Physics, 2007, 2007, 013-013.	5.4	32

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73	Can one observe Earth matter effects with supernova neutrinos?. Physical Review D, 2012, 86, .	4.7	32
74	Millisecond Pulsar Origin of the Galactic Center Excess and Extended Gamma-Ray Emission from Andromeda: A Closer Look. Astrophysical Journal, 2018, 862, 79.	4.5	32
75	Path to metallicity: Synthesis of CNO elements in standard BBN. Physical Review D, 2007, 75, .	4.7	31
76	Dark Matter annihilations in halos and high-redshift sources of reionization of the universe. Journal of Cosmology and Astroparticle Physics, 2015, 2015, 041-041.	5.4	31
77	Instability in the Dense Supernova Neutrino Gas with Flavor-Dependent Angular Distributions. Physical Review Letters, 2012, 108, 231102.	7.8	30
78	Cross-correlating galaxy catalogs and gravitational waves: A tomographic approach. Physical Review Research, 2020, 2, .	3.6	30
79	Diffuse cosmic neutrino background from population III stars. Astroparticle Physics, 2005, 23, 303-312.	4.3	29
80	Impact of sterile neutrinos on the early time flux from a galactic supernova. Physical Review D, 2014, 90, .	4.7	29
81	The footprint of large scale cosmic structure on the ultrahigh energy cosmic ray distribution. Journal of Cosmology and Astroparticle Physics, 2006, 2006, 009-009.	5.4	28
82	CMB bounds on dark matter annihilation: Nucleon energy losses after recombination. Physical Review D, 2013, 87, .	4.7	28
83	Revisiting primordial black hole capture into neutron stars. Physical Review D, 2020, 102, .	4.7	27
84	Flavor stability analysis of dense supernova neutrinos with flavor-dependent angular distributions. Physical Review D, 2012, 86, .	4.7	26
85	Extragalactic gamma-ray signal from dark matter annihilation: a power spectrum based computation. Monthly Notices of the Royal Astronomical Society: Letters, 2012, 421, L87-L91.	3.3	26
86	Constraining cosmological dark matter annihilation with gamma ray observations. Physical Review D, 2009, 80, .	4.7	25
87	Dark matter constraints from dwarf galaxies with data-driven J-factors. Journal of Cosmology and Astroparticle Physics, 2020, 2020, 004-004.	5.4	25
88	Highâ€Energy Neutrino Signals from the Epoch of Reionization. Astrophysical Journal, 2008, 675, 937-945.	4.5	24
89	Extragalactic gamma-ray signal from dark matter annihilation: an appraisal. Monthly Notices of the Royal Astronomical Society, 2014, 441, 1861-1878.	4.4	24
90	Heavy sterile neutrino emission in core-collapse supernovae: constraints and signatures. Journal of Cosmology and Astroparticle Physics, 2020, 2020, 010-010.	5.4	24

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91	Disentangling neutrino-nucleon cross section and high energy neutrino flux with a<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:msup><mml:mi>km</mml:mi><mml:mn>3</mml:mn></mml:msup></mml:math>neutrino telescope. Physical Review D, 2008, 77, .	4.7	23
92	Signatures of sneutrino dark matter in an extension of the CMSSM. Journal of High Energy Physics, 2016, 2016, 1.	4.7	23
93	Isotropic x-ray bound on primordial black hole dark matter. Physical Review D, 2021, 103, .	4.7	23
94	AMS-02 antiprotons and dark matter: Trimmed hints and robust bounds. SciPost Physics, 2022, 12, .	4.9	22
95	Stable laws and cosmic ray physics. Astronomy and Astrophysics, 2017, 600, A68.	5.1	20
96	Astrophysical limitations to the identification of dark matter: Indirect neutrino signalsvis-Ã-visdirect detection recoil rates. Physical Review D, 2010, 82, .	4.7	19
97	â€œDiscrepant hardeningsâ€•in cosmic ray spectra: A first estimate of the effects on secondary antiproton and diffuse gamma-ray yields. Physical Review D, 2011, 83, .	4.7	18
98	Future constraints on neutrino isocurvature perturbations in the curvaton scenario. Physical Review D, 2012, 85, .	4.7	18
99	Where do IceCube neutrinos come from? Hints from the diffuse gamma-ray flux. Journal of Cosmology and Astroparticle Physics, 2021, 2021, 037-037.	5.4	18
100	A GLOBAL AUTOCORRELATION STUDY AFTER THE FIRST AUGER DATA: IMPACT ON THE NUMBER DENSITY OF UHECR SOURCES. Astrophysical Journal, 2009, 702, 825-832.	4.5	17
101	Flavour-dependent radiative correction to neutrino-neutrino refraction. Journal of High Energy Physics, 2009, 2009, 020-020.	4.7	17
102	An INTEGRAL/SPI view of reticulum II: particle dark matter and primordial black holes limits in the MeV range. Monthly Notices of the Royal Astronomical Society, 2022, 511, 914-924.	4.4	16
103	Clustering Properties of Ultraâ€“Highâ€Energy Cosmic Rays and the Search for Their Astrophysical Sources. Astrophysical Journal, 2008, 676, 807-815.	4.5	15
104	First implications of Tibet <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mrow><mml:msub><mml:mrow><mml:mi>AS</mml:mi></mml:mrow><mml:mrow><mml:mi>γ</mml:mi></mml:mrow></mml:msub></mml:mrow></mml:math>data for heavy dark matter. Physical Review D, 2021, 104, .	4.7	13
105	The QCD phase transition behind a PBH origin of LIGO/Virgo events?. Journal of Cosmology and Astroparticle Physics, 2022, 2022, 009.	5.4	12
106	Gamma rays from dark matter annihilation in the central region of the Galaxy. New Journal of Physics, 2009, 11, 105010.	2.9	11
107	Massive sterile neutrinos in the early Universe: From thermal decoupling to cosmological constraints. Physical Review D, 2021, 104, .	4.7	11
108	Ultrahigh energy neutrinos in the Mediterranean: detecting Î½Ï„and Î½Î¼with a km3telescope. Journal of Cosmology and Astroparticle Physics, 2007, 2007, 007-007.	5.4	10

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109	Entering the cosmic ray precision era. Journal of Astrophysics and Astronomy, 2018, 39, 1.	1.0	10
110	First hints of large scale structures in the ultrahigh energy sky?. Physical Review D, 2006, 74, .	4.7	9
111	Probing the Fermi-LAT GeV Excess with Gravitational Waves. Physical Review Letters, 2019, 122, 081103.	7.8	8
112	Galactic bulge millisecond pulsars shining in x rays: A <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mi>Î³</mml:mi></mml:math> -ray perspective. Physical Review D, 2021, 104, .	4.7	8
113	Astrophysical interpretation of the medium scale clustering in the ultrahigh energy sky. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 2008, 660, 307-314.	4.1	6
114	Neutrinos and cosmology: A lifetime relationship. Journal of Physics: Conference Series, 2009, 173, 012018.	0.4	3
115	The CAST experiment.. Journal of Physics: Conference Series, 2008, 110, 062023.	0.4	2
116	Gamma ray astrophysics and signatures of axion-like particles. Advances in Space Research, 2009, 43, 335-341.	2.6	2
117	Collective flavor transitions of supernova neutrinos. Nuclear Physics, Section B, Proceedings Supplements, 2009, 188, 101-106.	0.4	2
118	Chapter 5 Dark Matter and New Physics Beyond the Standard Model with LHAASO. Chinese Physics C, 2022, 46, 030005.	3.7	2
119	Neutrinos and Primordial Nucleosynthesis. Nuclear Physics, Section B, Proceedings Supplements, 2005, 145, 351-354.	0.4	1
120	First results from the CAST experiment. Journal of Physics: Conference Series, 2006, 39, 117-119.	0.4	1
121	Solar atmosphere neutrino oscillations. Nuclear Physics, Section B, Proceedings Supplements, 2007, 168, 283-285.	0.4	1
122	Publisherâ€™s Note: Gamma Ray Constraints on Decaying Dark Matter [Phys. Rev. D86, 083506 (2012)]. Physical Review D, 2012, 86, .	4.7	1
123	The proton and helium anomalies in the light of the Myriad model. EPJ Web of Conferences, 2017, 136, 02006.	0.3	1
124	Standard and non-standard primordial neutrinos. Physica Scripta, 2006, T127, 95-96.	2.5	1
125	The Nuclear Reactions in Standard BBN. Nuclear Physics A, 2005, 758, 803-806.	1.5	0
126	Neutrinos and Cosmology: An Update. AIP Conference Proceedings, 2005, , .	0.4	0

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127	Search for solar axions: the CAST experiment. AIP Conference Proceedings, 2006, , .	0.4	0
128	CAST â€" A CERN Experiment to Search for Solar Axions. AIP Conference Proceedings, 2007, , .	0.4	0
129	Prospects for the CERN Axion Solar Telescope sensitivity to 14.4keV axions. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2007, 580, 37-39.	1.6	0
130	Axion Opportunities in Gamma ray astronomy. , 2009, , .		0
131	Ultra-high energy cosmic ray autocorrelation function after Auger. Nuclear Physics, Section B, Proceedings Supplements, 2009, 188, 283-285.	0.4	0
132	High energy rise of the cosmic ray positron fraction: Possible causes. Nuclear Physics, Section B, Proceedings Supplements, 2009, 194, 145-150.	0.4	0
133	High energy neutrino flavor ratios, neutrino mixing angles, and astrophysical diagnostics. Nuclear Physics, Section B, Proceedings Supplements, 2011, 221, 397.	0.4	0
134	Status of indirect dark matter detection. Journal of Physics: Conference Series, 2012, 375, 012029.	0.4	0
135	Messengers of the universe: Session IV Summary. Nuclear Physics, Section B, Proceedings Supplements, 2013, 237-238, 364-369.	0.4	0
136	What can Fermi LAT observation of the Galactic Centre tell us about its active past?. Proceedings of the International Astronomical Union, 2016, 12, 115-118.	0.0	0
137	(Indirect) dark matter searches: Status and challenges. International Journal of Modern Physics E, 2021, 30, 2130002.	1.0	0
138	AN UPDATED NUCLEAR REACTION NETWORK FOR BBN. , 2004, , .		0
139	ANISOTROPIES OF ULTRA-HIGH ENERGY COSMIC RAYS. , 2008, , .		0