

# Supriya Pan

## List of Articles by Year in descending order

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126

peer-reviewed  
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8,366

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8612

doc citations

81256

44

h-index

4303

citing authors

#	ARTICLE	IF	CITATIONS
1	Testing an oscillatory behavior of dark energy. <i>Physical Review D</i> , 2025, 111, .	4.7	20
2	A Note on Gravitational Dark Matter Production. <i>Universe</i> , 2025, 11, 49.	2.4	0
3	Gravitational reheating formulas and bounds in oscillating backgrounds. II. Constraints on the spectral index and gravitational dark matter production. <i>Physical Review D</i> , 2025, 111, .	4.7	2
4	On the Perturbed Friedmann Equations in Newtonian Gauge. <i>Universe</i> , 2025, 11, 64.	2.4	2
5	An overview of what current data can (and cannot yet) say about evolving dark energy. <i>Physics of the Dark Universe</i> , 2025, 48, 101906.	5.7	63
6	Probing the cold nature of dark matter. <i>Physical Review D</i> , 2025, 111, .	4.7	23
7	In search of an interaction in the dark sector through Gaussian process and ANN approaches. <i>Monthly Notices of the Royal Astronomical Society</i> , 2025, 540, 2253-2268.	4.7	12
8	Solving an interacting quintessence model with a sound horizon initial condition and its observational constraints. <i>Journal of High Energy Astrophysics</i> , 2025, 47, 100403.	8.5	2
9	A Metric Approach to Newtonian Cosmology and Its Applications to Gravitational Systems. <i>Symmetry</i> , 2025, 17, 1000.	1.9	1
10	Interacting phantom dark energy: New accelerating scaling attractors. <i>Physical Review D</i> , 2025, 112, .	4.7	10
11	Parametrizing the Hubble function instead of dark energy: Many possibilities. <i>Physical Review D</i> , 2025, 112, .	4.7	4
12	Evidence of dynamical dark energy in a non-flat universe: current and future observations. <i>Journal of Cosmology and Astroparticle Physics</i> , 2024, 2024, 052.	5.5	14
13	Phase space analysis of sign-shifting interacting dark energy models. <i>Physical Review D</i> , 2024, 109, .	4.7	31
14	Late-time constraints on interacting dark energy: Analysis independent of $H_0$ , $r_d$ , and $M_B$ . <i>Astronomy and Astrophysics</i> , 2024, 688, A156.	5.9	39
15	Dynamical dark energy confronted with multiple CMB missions. <i>Physics of the Dark Universe</i> , 2024, 45, 101539.	5.7	27
16	Possible impact of non-Gaussianities on cosmological constraints in neutrino physics. <i>Physical Review D</i> , 2024, 109, .	4.7	6
17	Cosmology in $R^2$ -gravity: Effects of a higher derivative scalar condensate background. <i>Journal of High Energy Astrophysics</i> , 2024, 43, 231-238.	8.5	2
18	Tightening the reins on nonminimal dark sector physics: Interacting dark energy with dynamical and nondynamical equation of state. <i>Physical Review D</i> , 2024, 110, .	4.7	36

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19	Coupled phantom cosmological model motivated by the warm inflationary paradigm. <i>Physical Review D</i> , 2024, 110, .	4.7	9
20	Robust preference for Dynamical Dark Energy in DESI BAO and SN measurements. <i>Journal of Cosmology and Astroparticle Physics</i> , 2024, 2024, 035.	5.5	126
21	Constraints on sterile neutrinos and the cosmological tensions. <i>Physical Review D</i> , 2024, 110, .	4.7	11
22	Reheating Constraints and the H0 Tension in Quintessential Inflation. <i>Symmetry</i> , 2024, 16, 1434.	1.9	1
23	Gravitational reheating formulas and bounds in oscillating backgrounds. <i>Physical Review D</i> , 2024, 110, .	4.7	4
24	Observational constraints on soft dark energy and soft dark matter: Challenging $\Lambda$ CDM cosmology. <i>Nuclear Physics B</i> , 2023, 986, 116042.	2.7	16
25	Exploring bulk viscous unified scenarios with gravitational waves standard sirens. <i>Monthly Notices of the Royal Astronomical Society</i> , 2023, 520, 1146-1154.	4.7	9
26	Revealing the effects of curvature on the cosmological models. <i>Physical Review D</i> , 2023, 107, .	4.7	48
27	New late-time constraints on $f(R)$ gravity. <i>Physics of the Dark Universe</i> , 2023, 42, 101281.	5.7	21
28	IWDM: the fate of an interacting non-cold dark matter "vacuum" scenario. <i>Journal of Cosmology and Astroparticle Physics</i> , 2023, 2023, 064.	5.5	27
29	Inflationary potential as seen from different angles: model compatibility from multiple CMB missions. <i>Journal of Cosmology and Astroparticle Physics</i> , 2023, 2023, 019.	5.5	24
30	On the dynamics of a dark sector coupling. <i>Journal of High Energy Astrophysics</i> , 2023, 40, 19-40.	8.5	30
31	Finite-time cosmological singularities and the possible fate of the Universe. <i>Physics Reports</i> , 2023, 1034, 1-114.	28.8	81
32	Constraints from high-precision measurements of the cosmic microwave background: the case of disintegrating dark matter with $\chi$ or dynamical dark energy. <i>Journal of Cosmology and Astroparticle Physics</i> , 2022, 2022, 012.	5.5	13
33	Reconstruction of the dark sectors' interaction: A model-independent inference and forecast from GW standard sirens. <i>Monthly Notices of the Royal Astronomical Society</i> , 2022, 512, 4231-4238.	4.7	26
34	Cosmology intertwined: A review of the particle physics, astrophysics, and cosmology associated with the cosmological tensions and anomalies. <i>Journal of High Energy Astrophysics</i> , 2022, 34, 49-211.	8.5	962
35	Minimal dark energy: Key to sterile neutrino and Hubble constant tensions?. <i>Physical Review D</i> , 2022, 105, .	4.7	33
36	Interacting dark energy in curved FLRW spacetime from Weyl Integrable Spacetime. <i>Journal of High Energy Astrophysics</i> , 2022, 36, 141-151.	8.5	14

#	ARTICLE	IF	CITATIONS
37	Theoretical and observational bounds on some interacting vacuum energy scenarios. Physical Review D, 2021, 103, .	4.7	26
38	Touch of neutrinos on the vacuum metamorphosis: Is the H0 solution back?. Physical Review D, 2021, 103, .	4.7	33
39	Interacting quintessence in light of generalized uncertainty principle: cosmological perturbations and dynamics. European Physical Journal C, 2021, 81, .	4.3	24
40	In the realm of the Hubble tension—a review of solutions *. Classical and Quantum Gravity, 2021, 38, 153001.	3.9	1,726
41	Snowmass2021 - Letter of interest cosmology intertwined I: Perspectives for the next decade. Astroparticle Physics, 2021, 131, 102606.	2.3	52
42	Snowmass2021 - Letter of interest cosmology intertwined II: The hubble constant tension. Astroparticle Physics, 2021, 131, 102605.	2.3	402
43	Snowmass2021 - Letter of interest cosmology intertwined IV: The age of the universe and its curvature. Astroparticle Physics, 2021, 131, 102607.	2.3	59
44	Generalized emergent dark energy model and the Hubble constant tension. Physical Review D, 2021, 104, .	4.7	51
45	Cosmology intertwined III: $\Omega_8$ and S8. Astroparticle Physics, 2021, 131, 102604.	2.3	370
46	Dissecting the H0 and S8 tensions with Planck + BAO + supernova type Ia in multi-parameter cosmologies. Journal of High Energy Astrophysics, 2021, 32, 28-64.	8.5	63
47	Interacting dark energy in a closed universe. Monthly Notices of the Royal Astronomical Society: Letters, 2021, 502, L23-L28.	3.9	72
48	Emergent Dark Energy, neutrinos and cosmological tensions. Physics of the Dark Universe, 2021, 31, 100762.	5.7	46
49	Dynamical dark energy after Planck CMB final release and H0 tension. Monthly Notices of the Royal Astronomical Society, 2021, 501, 5845-5858.	4.7	80
50	2021-H0 odyssey: closed, phantom and interacting dark energy cosmologies. Journal of Cosmology and Astroparticle Physics, 2021, 2021, 008.	5.5	78
51	Scaling solutions in quintessential inflation. European Physical Journal C, 2020, 80, .	4.3	17
52	Reconciling H0 tension in a six parameter space?. Journal of Cosmology and Astroparticle Physics, 2020, 2020, 062-062.	5.5	74
53	Cosmological evolution of two-scalar fields cosmology in the Jordan frame. European Physical Journal C, 2020, 80, .	4.3	19
54	Dynamical dark sectors and neutrino masses and abundances. Physical Review D, 2020, 102, .	4.7	38

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55	Dynamics of quintessence in generalized uncertainty principle. European Physical Journal C, 2020, 80, .	4.3	13
56	Forecast constraints on anisotropic stress in dark energy using gravitational waves. Monthly Notices of the Royal Astronomical Society, 2020, 497, 879-893.	4.7	12
57	Metastable dark energy models in light of Planck 2018 data: Alleviating the $H_0$ tension. Physical Review D, 2020, 102, .	4.7	36
58	All-inclusive interacting dark sector cosmologies. Physical Review D, 2020, 101, .	4.7	70
59	Field theoretic interpretations of interacting dark energy scenarios and recent observations. Physical Review D, 2020, 101, .	4.7	78
60	Forecasting interacting vacuum-energy models using gravitational waves. Journal of Cosmology and Astroparticle Physics, 2020, 2020, 050-050.	5.5	38
61	Dark calling dark: interaction in the dark sector in presence of neutrino properties after Planck CMB final release. Journal of Cosmology and Astroparticle Physics, 2020, 2020, 008-008.	5.5	83
62	Understanding the phenomenology of interacting dark energy scenarios and their theoretical bounds. Physical Review D, 2020, 101, .	4.7	37
63	Non-linear interacting cosmological models after Planck 2018 legacy release and the $H_0$ tension. Monthly Notices of the Royal Astronomical Society, 2020, 493, 3114-3131.	4.7	85
64	Imprints of an extended Chevallierâ€“Polarskiâ€“Linder parametrization on the large scale of our universe. European Physical Journal C, 2020, 80, .	4.3	30
65	Dynamics in varying vacuum Finslerâ€“Randers cosmology. European Physical Journal C, 2020, 80, .	4.3	35
66	Cosmological constraints on an exponential interaction in the dark sector. Monthly Notices of the Royal Astronomical Society, 2019, , .	4.7	36
67	Constraints on quintessence scalar field models using cosmological observations. Physical Review D, 2019, 100, .	4.7	39
68	Listening to the sound of dark sector interactions with gravitational wave standard sirens. Journal of Cosmology and Astroparticle Physics, 2019, 2019, 037-037.	5.5	98
69	The Peeblesâ€“Vilenkin quintessential inflation model revisited. European Physical Journal C, 2019, 79, .	4.3	22
70	Understanding gravitational particle production in quintessential inflation. Journal of Cosmology and Astroparticle Physics, 2019, 2019, 056-056.	5.5	20
71	Observational constraints of a new unified dark fluid and the $H_0$ tension. Monthly Notices of the Royal Astronomical Society, 2019, 490, 2071-2085.	4.7	45
72	Observational constraints on sign-changeable interaction models and alleviation of the $H_0$ tension. Physical Review D, 2019, 100, .	4.7	100

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73	Dark sectors with dynamical coupling. <i>Physical Review D</i> , 2019, 100, .	4.7	73
74	Exact solutions in Chiral cosmology. <i>General Relativity and Gravitation</i> , 2019, 51, .	2.5	45
75	Observational constraints on one-parameter dynamical dark-energy parametrizations and the $H_0$ tension. <i>Physical Review D</i> , 2019, 99, .	4.7	138
76	Limiting curvature mimetic gravity and its relation to Loop Quantum Cosmology. <i>General Relativity and Gravitation</i> , 2019, 51, .	2.5	22
77	Two-fluid solutions of particle-creation cosmologies. <i>European Physical Journal C</i> , 2019, 79, .	4.3	27
78	Thermodynamics and phase transition in Shapereâ€™Wilczek fgh model: Cosmological time crystal in quadratic gravity. <i>Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics</i> , 2019, 791, 66-72.	4.1	8
79	Observational Constraints on Dynamical Dark Energy with Pivoting Redshift. <i>Universe</i> , 2019, 5, 219.	2.4	34
80	Dawn of the dark: unified dark sectors and the EDGES Cosmic Dawn 21-cm signal. <i>Journal of Cosmology and Astroparticle Physics</i> , 2019, 2019, 044-044.	5.5	54
81	Challenging bulk viscous unified scenarios with cosmological observations. <i>Physical Review D</i> , 2019, 100, .	4.7	50
82	Reconstructing the dark matter and dark energy interaction scenarios from observations. <i>Physics of the Dark Universe</i> , 2019, 26, 100383.	5.7	51
83	Interacting scenarios with dynamical dark energy: Observational constraints and alleviation of the $H_0$ tension. <i>Physical Review D</i> , 2019, 100, .	4.7	177
84	Future constraints on dynamical dark-energy using gravitational-wave standard sirens. <i>Physical Review D</i> , 2019, 100, .	4.7	48
85	Effects of anisotropic stress in interacting dark matter â€™ dark energy scenarios. <i>Monthly Notices of the Royal Astronomical Society</i> , 2019, 482, 1858-1871.	4.7	72
86	Reheating in quintessential inflation via gravitational production of heavy massive particles: a detailed analysis. <i>Journal of Cosmology and Astroparticle Physics</i> , 2019, 2019, 023-023.	5.5	53
87	Large-scale stability and astronomical constraints for coupled dark-energy models. <i>Physical Review D</i> , 2018, 97, .	4.7	109
88	Astronomical bounds on a cosmological model allowing a general interaction in the dark sector. <i>Monthly Notices of the Royal Astronomical Society</i> , 2018, 477, 1189-1205.	4.7	95
89	Latest astronomical constraints on some non-linear parametric dark energy models. <i>Monthly Notices of the Royal Astronomical Society</i> , 2018, 475, 2605-2613.	4.7	44
90	New observational constraints on $f(T)$ gravity through gravitational-wave astronomy. <i>Physical Review D</i> , 2018, 98, .	4.7	83

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91	Interacting dark energy with time varying equation of state and the $H_0$ tension. Physical Review D, 2018, 98, .	4.7	165
92	Tale of stable interacting dark energy, observational signatures, and the $H_0$ tension. Journal of Cosmology and Astroparticle Physics, 2018, 2018, 019-019.	5.5	330
93	Observational constraints on oscillating dark-energy parametrizations. Physical Review D, 2018, 98, .	4.7	62
94	Note on bouncing backgrounds. Physical Review D, 2018, 97, .	4.7	6
95	Perfect fluid cosmological Universes: One equation of state and the most general solution. Pramana - Journal of Physics, 2018, 90, .	1.3	11
96	Cosmological time crystal: Cyclic universe with a small cosmological constant in a toy model approach. Physical Review D, 2018, 98, .	4.7	27
97	Large-scale (in) stability analysis of an exactly solved coupled dark-energy model. Physical Review D, 2018, 98, .	4.7	48
98	A new interacting two-fluid model and its consequences. Monthly Notices of the Royal Astronomical Society, 2017, 466, 3497-3506.	4.7	95
99	New observational constraints on $f(R)$ gravity from cosmic chronometers. Journal of Cosmology and Astroparticle Physics, 2017, 2017, 005-005.	5.5	103
100	A model with interaction of dark components and recent observational data. Monthly Notices of the Royal Astronomical Society, 2017, 472, 4736-4749.	4.7	77
101	Effects of neutrino mass hierarchies on dynamical dark energy models. Physical Review D, 2017, 95, .	4.7	78
102	Novel approach toward the large-scale stable interacting dark-energy models and their astronomical bounds. Physical Review D, 2017, 96, .	4.7	83
103	Constraining a dark matter and dark energy interaction scenario with a dynamical equation of state. Physical Review D, 2017, 95, .	4.7	62
104	Cosmological solutions with gravitational particle production and nonzero curvature. Physical Review D, 2017, 95, .	4.7	26
105	Observational constraints on $f(T)$ gravity from varying fundamental constants. European Physical Journal C, 2017, 77, .	4.3	66
106	Cosmological consequences of an adiabatic matter creation process. Monthly Notices of the Royal Astronomical Society, 2016, 459, 673-682.	4.7	85
107	New constraints on interacting dark energy from cosmic chronometers. Physical Review D, 2016, 94, .	4.7	146
108	Simple inflationary quintessential model. II. Power law potentials. Physical Review D, 2016, 94, .	4.7	29

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109	New observational constraints on $f(T)$ gravity from cosmic chronometers. <i>Journal of Cosmology and Astroparticle Physics</i> , 2016, 2016, 011-011.	5.5	126
110	Gravitationally induced adiabatic particle production: from big bang to de Sitter. <i>Classical and Quantum Gravity</i> , 2016, 33, 165007.	3.9	41
111	Simple inflationary quintessential model. <i>Physical Review D</i> , 2016, 93, .	4.7	47
112	A New Fate of a Warped 5D FLRW Model with a $U(1)$ Scalar Gauge Field. <i>Foundations of Physics</i> , 2016, 46, 1075-1089.	0.9	17
113	Scalar field cosmology modified by the generalized uncertainty principle. <i>Classical and Quantum Gravity</i> , 2015, 32, 245006.	3.9	47
114	An analytic model for interacting dark energy and its observational constraints. <i>Monthly Notices of the Royal Astronomical Society</i> , 2015, 452, 3038-3046.	4.7	102
115	A cosmological study in massive gravity theory. <i>Annals of Physics</i> , 2015, 360, 180-193.	2.6	9
116	Dynamic wormholes with particle creation mechanism. <i>European Physical Journal C</i> , 2015, 75, .	4.3	29
117	A third alternative to explain recent observations: Future deceleration. <i>Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics</i> , 2014, 738, 424-427.	4.1	57
118	Will there be again a transition from acceleration to deceleration in course of the dark energy evolution of the universe?. <i>European Physical Journal C</i> , 2013, 73, .	4.3	41
119	Matter creation cosmologies and accelerated expansion. <i>General Relativity and Gravitation</i> , 0, 57, .	2.5	1
120	When dark matter heats up: A model-independent search for noncold behavior. <i>Physical Review D</i> , 0, 112, .	4.7	7
121	Is Dark Energy Changing? Probing the Universe's Expansion with Present and Future Astronomical Probes. <i>Astrophysical Journal</i> , 0, 995, 164.	5.2	2
122	Phantom cosmology with arbitrary potential: New accelerating scaling attractors. <i>Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics</i> , 0, 873, 140212.	4.1	1
123	Shape of dark energy: Constraining its evolution with a general parametrization. <i>Physical Review D</i> , 0, 113, .	4.7	5
124	Beyond Two Parameters: Revisiting Dark Energy with the Latest Cosmic Probes. <i>Astrophysical Journal</i> , 0, 999, 190.	5.2	3
125	Joint constraints on neutrinos and dynamical dark energy in minimally modified gravity. <i>Physical Review D</i> , 0, 113, .	4.7	1
126	Accelerating scaling solutions from dark matter particle creation. <i>Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics</i> , 0, , 140483.	4.1	0