

# David F Mota

## List of Publications by Year in descending order

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Version: 2024-02-01

107  
papers

8,915  
citations

41344

49  
h-index

39675

94  
g-index

108  
all docs

108  
docs citations

108  
times ranked

3273  
citing authors

#	ARTICLE	IF	CITATIONS
1	Cosmological direct detection of dark energy: Non-linear structure formation signatures of dark energy scattering with visible matter. Monthly Notices of the Royal Astronomical Society, 2022, 512, 1885-1905.	4.4	21
2	Cosmology intertwined: A review of the particle physics, astrophysics, and cosmology associated with the cosmological tensions and anomalies. Journal of High Energy Astrophysics, 2022, 34, 49-211.	6.7	350
3	No slip gravity in light of LISA standard sirens. Monthly Notices of the Royal Astronomical Society, 2022, 514, 1274-1281.	4.4	5
4	Inflationary constraints in teleparallel gravity theory. International Journal of Geometric Methods in Modern Physics, 2021, 18, 2150027.	2.0	5
5	Cosmology with the Einstein telescope: No Slip Gravity model and redshift specifications. Monthly Notices of the Royal Astronomical Society, 2021, 502, 5563-5575.	4.4	20
6	In the realm of the Hubble tension—a review of solutions $\chi^2$ . Classical and Quantum Gravity, 2021, 38, 153001.	4.0	816
7	Snowmass2021 - Letter of interest cosmology intertwined II: The hubble constant tension. Astroparticle Physics, 2021, 131, 102605.	4.3	228
8	Snowmass2021 - Letter of interest cosmology intertwined IV: The age of the universe and its curvature. Astroparticle Physics, 2021, 131, 102607.	4.3	39
9	Cosmology intertwined III: $f\sigma_8$ and $S_8$ . Astroparticle Physics, 2021, 131, 102604.	4.3	182
10	Non-linear phenomenology of disformally coupled quintessence. Monthly Notices of the Royal Astronomical Society, 2020, 491, 1868-1886.	4.4	2
11	Forecast constraints on anisotropic stress in dark energy using gravitational waves. Monthly Notices of the Royal Astronomical Society, 2020, 497, 879-893.	4.4	11
12	Scalar perturbations in $f(T)$ gravity using the $\chi^2 + 3\chi^2$ covariant approach. European Physical Journal C, 2020, 80, 1.	3.9	20
13	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.	5.4	60
14	Turnaround radius in $\Lambda$ CDM and dark matter cosmologies with shear and vorticity. Physical Review D, 2020, 101, .	4.7	7
15	Do we have any hope of detecting scattering between dark energy and baryons through cosmology?. Monthly Notices of the Royal Astronomical Society, 2020, 493, 1139-1152.	4.4	58
16	Listening to the sound of dark sector interactions with gravitational wave standard sirens. Journal of Cosmology and Astroparticle Physics, 2019, 2019, 037-037.	5.4	77
17	Halo collapse: virialization by shear and rotation in dynamical dark-energy models. Effects on weak-lensing peaks. Journal of Cosmology and Astroparticle Physics, 2019, 2019, 060-060.	5.4	15
18	Breaking cosmic degeneracies: Disentangling neutrinos and modified gravity with kinematic information. Astronomy and Astrophysics, 2019, 629, A46.	5.1	11

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19	On structure formation from a small-scales-interacting dark sector. <i>Journal of Cosmology and Astroparticle Physics</i> , 2019, 2019, 042-042.	5.4	29
20	Screenings in modified gravity: a perturbative approach. <i>Astronomy and Astrophysics</i> , 2019, 622, A62.	5.1	11
21	Cosmic voids in modified gravity scenarios. <i>Astronomy and Astrophysics</i> , 2019, 632, A52.	5.1	31
22	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.	5.4	36
23	Mass-temperature relation in $\Lambda$ CDM and modified gravity. <i>Physical Review D</i> , 2019, 100, .	4.7	15
24	Future constraints on dynamical dark-energy using gravitational-wave standard sirens. <i>Physical Review D</i> , 2019, 100, .	4.7	35
25	Effects of anisotropic stress in interacting dark matter “dark energy” scenarios. <i>Monthly Notices of the Royal Astronomical Society</i> , 2019, 482, 1858-1871.	4.4	58
26	Accelerating universe in modified teleparallel gravity theory. <i>Proceedings of the International Astronomical Union</i> , 2019, 15, 397-399.	0.0	3
27	Probing screened modified gravity with nonlinear structure formation. <i>International Journal of Modern Physics D</i> , 2018, 27, 1830003.	2.1	3
28	Cosmology and fundamental physics with the Euclid satellite. <i>Living Reviews in Relativity</i> , 2018, 21, 2.	26.7	602
29	Probing modified gravity in cosmic filaments. <i>Astronomy and Astrophysics</i> , 2018, 619, A122.	5.1	6
30	Tale of stable interacting dark energy, observational signatures, and the $H_0$ tension. <i>Journal of Cosmology and Astroparticle Physics</i> , 2018, 2018, 019-019.	5.4	237
31	Degeneracies between modified gravity and baryonic physics. <i>Astronomy and Astrophysics</i> , 2018, 615, A134.	5.1	3
32	Spherical collapse and cluster number counts in dark energy models disformally coupled to dark matter. <i>Physical Review D</i> , 2018, 98, .	4.7	7
33	Screening mechanisms in hybrid metric-Palatini gravity. <i>Physical Review D</i> , 2018, 97, .	4.7	6
34	Modeling void abundance in modified gravity. <i>Physical Review D</i> , 2017, 95, .	4.7	36
35	Extrasolar planets as a probe of modified gravity. <i>Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics</i> , 2017, 769, 485-490.	4.1	36
36	Effects of neutrino mass hierarchies on dynamical dark energy models. <i>Physical Review D</i> , 2017, 95, .	4.7	56

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37	Novel approach toward the large-scale stable interacting dark-energy models and their astronomical bounds. <i>Physical Review D</i> , 2017, 96, .	4.7	64
38	Breaking the Vainshtein screening in clusters of galaxies. <i>Physical Review D</i> , 2017, 95, .	4.7	25
39	Dark matter haloes in modified gravity and dark energy: interaction rate, small- and large-scale alignment. <i>Monthly Notices of the Royal Astronomical Society</i> , 2017, 468, 3174-3183.	4.4	19
40	$N$ -body simulations of $\Lambda^3$ gravity. <i>Astronomy and Astrophysics</i> , 2016, 587, A132.	5.1	7
41	Nonlinear structure formation in gravity theories beyond general relativity. <i>Modern Physics Letters A</i> , 2016, 31, 1640007.	1.2	0
42	Nonzero Density-Velocity Consistency Relations for Large Scale Structures. <i>Physical Review Letters</i> , 2016, 117, 081301.	7.8	8
43	Wave propagation in modified gravity. <i>Physical Review D</i> , 2016, 93, .	4.7	5
44	No need for dark matter in galaxy clusters within Galileon theory. <i>Journal of Cosmology and Astroparticle Physics</i> , 2016, 2016, 033-033.	5.4	17
45	Probing scalar tensor theories for gravity in redshift space. <i>Astronomy and Astrophysics</i> , 2016, 592, A38.	5.1	10
46	Hydrodynamic effects in the symmetron and $f(R)$ -gravity models. <i>Monthly Notices of the Royal Astronomical Society</i> , 2015, 449, 3635-3644.	4.4	32
47	Modified gravity $N$ -body code comparison project. <i>Monthly Notices of the Royal Astronomical Society</i> , 2015, 454, 4208-4234.	4.4	104
48	Cosmic microwave background anomalies from imperfect dark energy. <i>Astronomy and Astrophysics</i> , 2014, 564, A113.	5.1	3
49	Cosmological simulations of screened modified gravity out of the static approximation: Effects on matter distribution. <i>Physical Review D</i> , 2014, 89, .	4.7	58
50	Spatial variations of the fine-structure constant in symmetron models. <i>Physical Review D</i> , 2014, 89, .	4.7	15
51	ISIS: a new $N$ -body cosmological code with scalar fields based on RAMSES. <i>Astronomy and Astrophysics</i> , 2014, 562, A78.	5.1	96
52	Gravitational redshift profiles in the $f(R)$ and symmetron models. <i>Astronomy and Astrophysics</i> , 2014, 562, A9.	5.1	24
53	Screening vector field modifications of general relativity. <i>Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics</i> , 2013, 725, 212-217.	4.1	32
54	Shape of Clusters of Galaxies as a Probe of Screening Mechanisms in Modified Gravity. <i>Physical Review Letters</i> , 2013, 110, 151104.	7.8	21

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55	Releasing Scalar Fields: Cosmological Simulations of Scalar-Tensor Theories for Gravity Beyond the Static Approximation. <i>Physical Review Letters</i> , 2013, 110, 161101.	7.8	100
56	DBI Galileons in the Einstein frame: Local gravity and cosmology. <i>Physical Review D</i> , 2013, 87, .	4.7	111
57	Bimetric gravity doubly coupled to matter: theory and cosmological implications. <i>Journal of Cosmology and Astroparticle Physics</i> , 2013, 2013, 046-046.	5.4	104
58	Cosmology and Fundamental Physics with the Euclid Satellite. <i>Living Reviews in Relativity</i> , 2013, 16, 6.	26.7	683
59	STRUCTURE FORMATION IN THE SYMMETRON MODEL. <i>Astrophysical Journal</i> , 2012, 748, 61.	4.5	89
60	ENVIRONMENT DEPENDENCE OF DARK MATTER HALOS IN SYMMETRON MODIFIED GRAVITY. <i>Astrophysical Journal</i> , 2012, 756, 166.	4.5	42
61	Screening Modifications of Gravity Through Disformally Coupled Fields. <i>Physical Review Letters</i> , 2012, 109, 241102.	7.8	161
62	Cosmology of a scalar field coupled to matter and an isotropy-violating Maxwell field. <i>Journal of High Energy Physics</i> , 2012, 2012, 1.	4.7	79
63	Evolution of the chameleon scalar field in the early universe. <i>Physical Review D</i> , 2012, 86, .	4.7	8
64	ISW-LSS CROSS-CORRELATION IN COUPLED DARK ENERGY MODELS WITH MASSIVE NEUTRINOS. <i>Astrophysical Journal</i> , 2012, 744, 3.	4.5	11
65	VARYING ALPHA FROM $N$ -BODY SIMULATIONS. <i>Astrophysical Journal</i> , 2011, 728, 108.	4.5	15
66	$N$ -BODY SIMULATIONS FOR EXTENDED QUINTESSENCE MODELS. <i>Astrophysical Journal</i> , 2011, 728, 109.	4.5	55
67	COSMOLOGY OF CHAMELEONS WITH POWER-LAW COUPLINGS. <i>Astrophysical Journal</i> , 2011, 733, 7.	4.5	15
68	CMB statistics in noncommutative inflation. <i>Journal of High Energy Physics</i> , 2011, 2011, 1.	4.7	29
69	Inflation with stable anisotropic hair: is it cosmologically viable?. <i>Journal of High Energy Physics</i> , 2011, 2011, 1.	4.7	70
70	Possibility of anisotropic curvature in cosmology. <i>Physical Review D</i> , 2011, 83, .	4.7	40
71	Constraining entropic cosmology. <i>Journal of Cosmology and Astroparticle Physics</i> , 2011, 2011, 027-027.	5.4	31
72	Dark spinor models in gravitation and cosmology. <i>Journal of High Energy Physics</i> , 2010, 2010, 1.	4.7	70

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73	Cosmology of the selfaccelerating third order Galileon. Journal of High Energy Physics, 2010, 2010, 1.	4.7	51
74	MATTER INSTABILITIES IN GENERAL GAUSS-BONNET GRAVITY. Modern Physics Letters A, 2010, 25, 885-899.	1.2	5
75	Chameleons with field-dependent couplings. Physical Review D, 2010, 82, .	4.7	75
76	Chameleon dark energy models with characteristic signatures. Physical Review D, 2010, 82, .	4.7	58
77	Matter instabilities in general Gauss-Bonnet gravity. Physical Review D, 2010, 81, .	4.7	62
78	Inflation from N-forms and its stability. Journal of High Energy Physics, 2009, 2009, 092-092.	4.7	81
79	Indistinguishable macroscopic behaviour of Palatini gravities and general relativity. Classical and Quantum Gravity, 2009, 26, 055018.	4.0	20
80	Probing dark energy at galactic and cluster scales. Journal of Cosmology and Astroparticle Physics, 2008, 2008, 006.	5.4	38
81	Vector field models of inflation and dark energy. Journal of Cosmology and Astroparticle Physics, 2008, 2008, 021.	5.4	228
82	Anisotropic dark energy: dynamics of the background and perturbations. Journal of Cosmology and Astroparticle Physics, 2008, 2008, 018.	5.4	151
83	Testing alternative theories of dark matter with the CMB. Physical Review D, 2008, 78, .	4.7	9
84	Microscopic and macroscopic behaviors of Palatini modified gravity theories. Physical Review D, 2008, 78, .	4.7	49
85	Hidden in the light: Magnetically induced afterglow from trapped chameleon fields. Physical Review D, 2008, 77, .	4.7	42
86	An Improved Semianalytical Spherical Collapse Model for Nonlinear Density Evolution. Astrophysical Journal, Supplement Series, 2008, 174, 277-281.	7.7	24
87	Detecting a Lorentz-violating field in cosmology. Physical Review D, 2008, 77, .	4.7	69
88	On the Magnitude of Dark Energy Voids and Overdensities. Astrophysical Journal, 2008, 675, 29-48.	4.5	49
89	Accelerating Cosmologies with an Anisotropic Equation of State. Astrophysical Journal, 2008, 679, 1-5.	4.5	149
90	Neutrino dark energyâ€”revisiting the stability issue. Journal of Cosmology and Astroparticle Physics, 2008, 2008, 026.	5.4	75

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91	Detecting chameleons through Casimir force measurements. <i>Physical Review D</i> , 2007, 76, .	4.7	112
92	Cosmology of modified Gauss-Bonnet gravity. <i>Physical Review D</i> , 2007, 76, .	4.7	247
93	Gauss-Bonnet quintessence: Background evolution, large scale structure, and cosmological constraints. <i>Physical Review D</i> , 2007, 75, .	4.7	174
94	Testing chameleon theories with light propagating through a magnetic field. <i>Physical Review D</i> , 2007, 76, .	4.7	70
95	Cosmology of Ricci-tensor-squared gravity in the Palatini variational approach. <i>Physical Review D</i> , 2007, 76, .	4.7	72
96	Evading equivalence principle violations, cosmological, and other experimental constraints in scalar field theories with a strong coupling to matter. <i>Physical Review D</i> , 2007, 75, .	4.7	308
97	Cosmology and astrophysical constraints of Gauss-Bonnet dark energy. <i>Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics</i> , 2007, 644, 104-108.	4.1	210
98	Constraining dark energy anisotropic stress. <i>Monthly Notices of the Royal Astronomical Society</i> , 2007, 382, 793-800.	4.4	108
99	Strongly Coupled Chameleon Fields: New Horizons in Scalar Field Theory. <i>Physical Review Letters</i> , 2006, 97, 151102.	7.8	174
100	Dark energy anisotropic stress and large scale structure formation. <i>Physical Review D</i> , 2006, 73, .	4.7	242
101	Inhomogeneous gravity. <i>Monthly Notices of the Royal Astronomical Society</i> , 2005, 358, 601-613.	4.4	102
102	Multiple inflation, cosmic string networks and the string landscape. <i>Journal of High Energy Physics</i> , 2005, 2005, 067-067.	4.7	79
103	Local and global variations of the fine-structure constant. <i>Monthly Notices of the Royal Astronomical Society</i> , 2004, 349, 291-302.	4.4	128
104	Varying alpha in a more realistic universe. <i>Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics</i> , 2004, 581, 141-146.	4.1	184
105	Gauge-invariant perturbations of varying-alpha cosmologies. <i>Classical and Quantum Gravity</i> , 2003, 20, 2045-2062.	4.0	45
106	Qualitative analysis of universes with varying alpha. <i>Classical and Quantum Gravity</i> , 2002, 19, 6197-6212.	4.0	30
107	The dynamics of the local group as a probe of Dark Energy and Modified Gravity. <i>Monthly Notices of the Royal Astronomical Society</i> , 0, , stx056.	4.4	5