Joseph D Romano

List of Publications by Year
in descending order

20	1,348	623734 14	794594 19
papers	citations	h-index	g-index

20	20	20	1353
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Detecting a stochastic background of gravitational radiation: Signal processing strategies and sensitivities. Physical Review D, 1999, 59, .	4.7	511
2	Detection methods for stochastic gravitational-wave backgrounds: a unified treatment. Living Reviews in Relativity, 2017, 20, 2.	26.7	296
3	The stochastic background: scaling laws and time to detection for pulsar timing arrays. Classical and Quantum Gravity, 2013, 30, 224015.	4.0	143
4	Mapping gravitational-wave backgrounds using methods from CMB analysis: Application to pulsar timing arrays. Physical Review D, 2014, 90, .	4.7	70
5	Time-domain implementation of the optimal cross-correlation statistic for stochastic gravitational-wave background searches in pulsar timing data. Physical Review D, 2015, 91, .	4.7	53
6	Realistic sensitivity curves for pulsar timing arrays. Physical Review D, 2019, 100, .	4.7	42
7	Estimating the angular power spectrum of the gravitational-wave background in the presence of shot noise. Physical Review D, 2019, 100, .	4.7	34
8	The NANOGrav 12.5-year Data Set: Search for Non-Einsteinian Polarization Modes in the Gravitational-wave Background. Astrophysical Journal Letters, 2021, 923, L22.	8.3	30
9	Robust statistics for deterministic and stochastic gravitational waves in non-Gaussian noise. II. Bayesian analyses. Physical Review D, 2003, 67, .	4.7	26
10	Phase-coherent mapping of gravitational-wave backgrounds using ground-based laser interferometers. Physical Review D, 2015, 92, .	4.7	25
11	Common-spectrum process versus cross-correlation for gravitational-wave searches using pulsar timing arrays. Physical Review D, 2021, 103, .	4.7	24
12	Understanding the gravitational-wave Hellings and Downs curve for pulsar timing arrays in terms of sound and electromagnetic waves. American Journal of Physics, 2015, 83, 635-645.	0.7	20
13	Model Dependence of Bayesian Gravitational-wave Background Statistics for Pulsar Timing Arrays. Astrophysical Journal Letters, 2020, 905, L6.	8.3	20
14	Hasasia: A Python package for Pulsar Timing Array Sensitivity Curves. Journal of Open Source Software, 2019, 4, 1775.	4.6	18
15	Frequentist versus Bayesian analyses: Cross-correlation as an approximate sufficient statistic for LIGO-Virgo stochastic background searches. Physical Review D, 2021, 103, .	4.7	13
16	Mapping the gravitational-wave sky with LISA: a Bayesian spherical harmonic approach. Monthly Notices of the Royal Astronomical Society, 2021, 507, 5451-5462.	4.4	13
17	Comparison of maximum-likelihood mapping methods for gravitational-wave backgrounds. Physical Review D, 2022, 105, .	4.7	7
18	An acoustical analogue of a galactic-scale gravitational-wave detector. American Journal of Physics, 2018, 86, 755-764.	0.7	2

#	Article	IF	Citations
19	A simple graphical method for calculating the standing wave frequencies on a rectangular membrane. American Journal of Physics, 2020, 88, 605-611.	0.7	1
20	10.1119/10.0001299.1. , 2020, , .		0