Gregory Comer

List of Publications by Year
in descending order

54 papers	2,026 citations	257450 24 h-index	243625 44 g-index
54 all docs	54 docs citations	54 times ranked	783 citing authors

#	Article	IF	Citations
1	Formulating bulk viscosity for neutron star simulations. Physical Review D, 2022, 105, .	4.7	5
2	Linearizing a non-linear formulation for general relativistic dissipative fluids. Classical and Quantum Gravity, 2021, 38, 065009.	4.0	6
3	Relativistic fluid dynamics: physics for many different scales. Living Reviews in Relativity, 2021, 24, 1.	26.7	34
4	Covariant approach to relativistic large-eddy simulations: The fibration picture. Physical Review D, 2021, 104, .	4.7	9
5	The physics of non-ideal general relativistic magnetohydrodynamics. Monthly Notices of the Royal Astronomical Society, 2021, 509, 3737-3750.	4.4	5
6	A variational approach to relativistic superfluid vortex elasticity. Classical and Quantum Gravity, 2020, 37, 085014.	4.0	4
7	The dynamics of neutron star crusts: Lagrangian perturbation theory for a relativistic superfluid-elastic system. Classical and Quantum Gravity, 2019, 36, 105004.	4.0	18
8	Beyond ideal magnetohydrodynamics: from fibration to 3‰‰+‰‰1 foliation. Classical and Quantum Gravity, 2017, 34, 125003.	4.0	13
9	Beyond ideal magnetohydrodynamics: resistive, reactive and relativistic plasmas. Classical and Quantum Gravity, 2017, 34, 125002.	4.0	13
10	A variational approach to resistive relativistic plasmas. Classical and Quantum Gravity, 2017, 34, 125001.	4.0	13
11	A covariant action principle for dissipative fluid dynamics: from formalism to fundamental physics. Classical and Quantum Gravity, 2015, 32, 075008.	4.0	28
12	A minimal model for finite temperature superfluid dynamics. Classical and Quantum Gravity, 2013, 30, 235025.	4.0	9
13	The nonlinear development of the relativistic two-stream instability. Classical and Quantum Gravity, 2013, 30, 145007.	4.0	6
14	Dynamics of dissipative multifluid neutron star cores. Physical Review D, 2012, 86, .	4.7	16
15	Multifluid cosmology: An illustration of fundamental principles. Physical Review D, 2012, 85, .	4.7	9
16	ENTROPY ENTRAINMENT AND DISSIPATION IN FINITE TEMPERATURE SUPERFLUIDS. International Journal of Modern Physics D, 2011, 20, 1215-1233.	2.1	15
17	Relativistic two-stream instability. General Relativity and Gravitation, 2010, 42, 413-433.	2.0	21
18	Variational multi-fluid dynamics and causal heat conductivity. Proceedings of the Royal Society A: Mathematical, Physical and Engineering Sciences, 2010, 466, 1373-1387.	2.1	43

#	ARTICLE	IF	CITATIONS
19	r-modes in low temperature color-flavor-locked superconducting quark stars. Physical Review D, 2010, 82, .	4.7	24
20	Oscillations of general relativistic multifluid/multilayer compact stars. Physical Review D, 2008, 78, .	4.7	23
21	Relativistic Fluid Dynamics: Physics for Many Different Scales. Living Reviews in Relativity, 2007, 10, 1.	26.7	245
22	Superfluid neutron star turbulence. Monthly Notices of the Royal Astronomical Society, 2007, 381, 747-756.	4.4	81
23	Mutual friction in superfluid neutron stars. Monthly Notices of the Royal Astronomical Society, 2006, 368, 162-170.	4.4	99
24	A flux-conservative formalism for convective and dissipative multi-fluid systems, with application to Newtonian superfluid neutron stars. Classical and Quantum Gravity, 2006, 23, 5505-5529.	4.0	70
25	How viscous is a superfluid neutron star core?. Nuclear Physics A, 2005, 763, 212-229.	1.5	93
26	Relativistic numerical models for stationary superfluid neutron stars. Physical Review D, 2005, 71, .	4.7	39
27	Slowly rotating general relativistic superfluid neutron stars with relativistic entrainment. Physical Review D, 2004, 69, .	4.7	15
28	Inertial modes of non-stratified superfluid neutron stars. Monthly Notices of the Royal Astronomical Society, 2004, 348, 625-637.	4.4	28
29	The superfluid two-stream instability. Monthly Notices of the Royal Astronomical Society, 2004, 354, 101-110.	4.4	55
30	Lagrangian perturbation theory of non-relativistic rotating superfluid stars. Monthly Notices of the Royal Astronomical Society, 2004, 355, 918-928.	4.4	23
31	Are Pulsar Glitches Triggered by a Superfluid Two-Stream Instability?. Physical Review Letters, 2003, 90, 091101.	7.8	70
32	Relativistic mean field model for entrainment in general relativistic superfluid neutron stars. Physical Review D, 2003, 68, .	4.7	53
33	Oscillations of general relativistic superfluid neutron stars. Physical Review D, 2002, 66, .	4.7	63
34	Slowly rotating superfluid Newtonian neutron star model with entrainment. Astronomy and Astrophysics, 2002, 381, 178-196.	5.1	80
35	Do Neutron Star Gravitational Waves Carry Superfluid Imprints?. Foundations of Physics, 2002, 32, 1903-1942.	1.3	16
36	On the dynamics of superfluid neutron star cores. Monthly Notices of the Royal Astronomical Society, 2001, 328, 1129-1143.	4.4	118

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37	Slowly rotating general relativistic superfluid neutron stars. Classical and Quantum Gravity, 2001, 18, 969-1002.	4.0	80
38	Probing Neutron-Star Superfluidity with Gravitational-Wave Data. Physical Review Letters, 2001, 87, 241101.	7.8	49
39	Quasinormal modes of general relativistic superfluid neutron stars. Physical Review D, 1999, 60, .	4.7	64
40	Dynamical Evolution of Boson Stars. Astrophysics and Space Science Library, 1999, , 289-290.	2.7	0
41	Generation of scalar-tensor gravity effects in equilibrium state boson stars. Classical and Quantum Gravity, 1998, 15, 669-688.	4.0	28
42	3 + 1 approach to the long-wavelength iteration scheme. Classical and Quantum Gravity, 1997, 14, 407-420.	4.0	8
43	Long-wavelength corrections to PPN parameters and. Classical and Quantum Gravity, 1997, 14, 1371-1386.	4.0	5
44	Long-wavelength iteration scheme and scalar-tensor gravity. Physical Review D, 1997, 55, 3497-3504.	4.7	9
45	Relativistic kinetic theory description of thick Einstein shells. General Relativity and Gravitation, 1996, 28, 601-611.	2.0	1
46	Hamiltonian formulation for relativistic superfluids. Classical and Quantum Gravity, 1994, 11, 709-721.	4.0	60
47	Growth or decay of cosmological inhomogeneities as a function of their equation of state. Physical Review D, 1994, 49, 2759-2768.	4.7	70
48	Hamiltonian formulation for multi-constituent relativistic perfect fluids. Classical and Quantum Gravity, 1993, 10, 2317-2327.	4.0	35
49	Thick Einstein shells and their mechanical stability. Classical and Quantum Gravity, 1993, 10, 1751-1765.	4.0	20
50	A brief comment on thick Einstein shells. Classical and Quantum Gravity, 1993, 10, L127-L131.	4.0	6
51	Ensemble dependence of the stability of thermal black holes. Classical and Quantum Gravity, 1992, 9, 947-962.	4.0	10
52	Expectation value of the horizon area for thermal equilibrium black holes. Classical and Quantum Gravity, 1991, 8, L119-L123.	4.0	2
53	Thermodynamic ensembles and gravitation. Classical and Quantum Gravity, 1990, 7, 1433-1444.	4.0	93
54	Waves and instabilities in dissipative rotating superfluid neutron stars. Monthly Notices of the Royal Astronomical Society, 0, 385, 335-348.	4.4	24