Ignazio Bombaci

List of Publications by Year
in descending order

99	4,607	94433 37	98798 67
papers	citations	h-index	g-index

100	100	100	1558
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Isoentropic equations of state of $$eta $$-stable hadronic matter with a quark phase transition. European Physical Journal A, 2022, 58, 1.	2.5	4
2	Benchmark calculations of infinite neutron matter with realistic two- and three-nucleon potentials. Physical Review C, 2022, 105, .	2.9	18
3	Numerical relativity simulations of prompt collapse mergers: Threshold mass and phenomenological constraints on neutron star properties after GW170817. Physical Review D, 2022, 105, .	4.7	22
4	Microscopic equation of state of hot nuclear matter for numerical relativity simulations. Astronomy and Astrophysics, 2021, 646, A55.	5.1	31
5	Was GW190814 a Black Holeâ€“Strange Quark Star System?. Physical Review Letters, 2021, 126, 162702.	7.8	65
6	The Hyperon Puzzle in Neutron Stars. Nuclear Physics News, 2021, 31, 17-21.	0.4	3
7	Signatures of deconfined quark phases in binary neutron star mergers. Physical Review D, 2021, 104, .	4.7	38
8	Accretion-induced prompt black hole formation in asymmetric neutron star mergers, dynamical ejecta, and kilonova signals. Monthly Notices of the Royal Astronomical Society, 2020, 497, 1488-1507.	4.4	79
9	Benchmark calculations of pure neutron matter with realistic nucleon-nucleon interactions. Physical Review C, 2020, 101, .	2.9	45
10	Constraints on Microscopic and Phenomenological Equations of State of Dense Matter from GW170817. Universe, 2019, 5, 204.	2.5	3
11	Impact of chiral hyperonic three-body forces on neutron stars. European Physical Journal A, 2019, 55, 1.	2.5	50
12	Accretion in strong field gravity with eXTP. Science China: Physics, Mechanics and Astronomy, 2019, 62, 1.	5.1	27
13	Dense matter with eXTP. Science China: Physics, Mechanics and Astronomy, 2019, 62, 1.	5.1	81
14	Nuclear matter calculations with chiral interactions. Journal of Physics: Conference Series, 2018, 981, 012009.	0.4	0
15	Neutron star properties from optimised chiral nuclear interactions. Publications of the Astronomical Society of Australia, 2018, 35, .	3.4	2
16	Effects of chiral effective field theory equation of state on binary neutron star mergers. Physical Review D, 2018, 98, .	4.7	37
17	Equation of state of dense nuclear matter and neutron star structure from nuclear chiral interactions. Astronomy and Astrophysics, 2018, 609, A128.	5.1	69
18	Correlations imposed by the unitary limit between few-nucleon systems, nuclear matter, and neutron stars. Physical Review Letters, 2018, 121, 072701.	7.8	38

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19	Millisecond radio pulsars with known masses: Parameter values and equation of state models. New Astronomy, 2017, 54, 61-71.	1.8	14
20	Neutron star structure with chiral interactions. Journal of Physics: Conference Series, 2017, 861, 012013.	0.4	1
21	Two Coexisting Families of Compact Stars: Observational Implications for Millisecond Pulsars. Astrophysical Journal, 2017, 848, 65.	4.5	14
22	The Hyperon Puzzle in Neutron Stars. , 2017, , .		19
23	Quark deconfinement in neutron stars and astrophysical implications. International Journal of Modern Physics D, 2017, 26, 1730004.	2.1	11
24	Neutron stars: Cosmic laboratories for matter under extreme conditions. EPJ Web of Conferences, 2016, 117, 07005.	0.3	5
25	Nuclear matter properties from local chiral interactions with <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mi mathvariant="normal">Î”</mml:mi></mml:math> isobar intermediate states. Physical Review C, 2016, 94, .	2.9	38
26	XIPE: the x-ray imaging polarimetry explorer. , 2016, , .		16
27	Nuclear matter saturation with chiral three-nucleon interactions fitted to light nuclei properties. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 2016, 758, 449-454.	4.1	15
28	Quark matter nucleation in neutron stars and astrophysical implications. European Physical Journal A, 2016, 52, 1.	2.5	66
29	The LOFT mission concept: a status update. Proceedings of SPIE, 2016, , .	0.8	9
30	Fast spinning strange stars: possible ways to constrain interacting quark matter parameters. Monthly Notices of the Royal Astronomical Society, 2016, 457, 3101-3114.	4.4	36
31	Comparative study of three-nucleon force models in nuclear matter. Physical Review C, 2015, 91, .	2.9	27
32	The Large Observatory for x-ray timing. Proceedings of SPIE, 2014, , .	0.8	10
33	Three-body force effect on nuclear symmetry energy and single-particle properties of asymmetric nuclear matter. European Physical Journal A, 2014, 50, 1.	2.5	27
34	Hybrid neutron stars with the field correlator method. Journal of Physics: Conference Series, 2014, 527, 012021.	0.4	1
35	A link between measured neutron star masses and lattice QCD data. Monthly Notices of the Royal Astronomical Society: Letters, 2013, 433, L79-L83.	3.3	20
36	Quark deconfinement transition in neutron stars with the field correlator method. Physical Review D, 2013, 88, .	4.7	38

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37	Quark matter nucleation with a microscopic hadronic equation of state. Physical Review C, 2012, 85, .	2.9	21
38	Effect of hyperonic three-body forces on the maximum mass of neutron stars. Journal of Physics: Conference Series, 2012, 342, 012006.	0.4	16
39	Evolution of proto-neutron stars with hadronâ€“quark phase transition. Journal of Physics: Conference Series, 2012, 342, 012001.	0.4	1
40	Chiral model approach to quark matter nucleation in neutron stars. Physical Review D, 2012, 85, .	4.7	30
41	Evolution of newborn neutron stars: role of quark matter nucleation. Journal of Physics: Conference Series, 2011, 336, 012021.	0.4	0
42	Effects of quark matter nucleation on the evolution of proto-neutron stars. Astronomy and Astrophysics, 2011, 528, A71.	5.1	32
43	Estimation of the effect of hyperonic three-body forces on the maximum mass of neutron stars. Europhysics Letters, 2011, 94, 11002.	2.0	141
44	Nucleation of Quark Matter in Proto-Neutron Stars. Progress of Theoretical Physics Supplement, 2010, 186, 32-38.	0.1	2
45	QUARK MATTER NUCLEATION IN NEUTRON STARS. International Journal of Modern Physics D, 2010, 19, 1491-1498.	2.1	2
46	Quark matter nucleation in hot hadronic matter. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 2009, 680, 448-452.	4.1	59
47	Metastability of hadronic compact stars. Physical Review D, 2008, 77, .	4.7	40
48	Role of color superconductivity on the nucleation of quark matter in neutron stars. Journal of Physics G: Nuclear and Particle Physics, 2008, 35, 014054.	3.6	0
49	QUARK MATTER IN COMPACT STARS: ASTROPHYSICAL IMPLICATIONS AND POSSIBLE SIGNATURES. , 2008, , .		3
50	Neutron stars as cosmic laboratories to explore hadronic matter at ultra-high densities. European Physical Journal A, 2007, 31, 810-815.	2.5	6
51	Effects of color superconductivity on the nucleation of quark matter in neutron stars. Astronomy and Astrophysics, 2007, 462, 1017-1022.	5.1	60
52	Neutron stars as cosmic laboratories to explore hadronic matter at ultra-high densities. , 2007, , 519-524.		0
53	Quark deconfinement in neutron stars and gamma-ray bursts. Journal of Physics: Conference Series, 2006, 50, 208-215.	0.4	1
54	Microscopic calculations of spin polarized neutron matter at finite temperature. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 2006, 632, 638-643.	4.1	50

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55	GAMMA RAY BURSTS AND DELAYED QUARK-DECONFINEMENT. , 2006, , 353-375.		0
56	Spinâ€“orbit and tensor interactions in homogeneous matter of nucleons: accuracy of modern many-body theories. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 2005, 609, 232-240.	4.1	24
57	Strangeness in neutron stars. Nuclear Physics A, 2005, 754, 335-344.	1.5	6
58	Role of hyperons on the hadron-star to quark-star conversion mechanism. Nuclear Physics A, 2005, 754, 345-349.	1.5	2
59	Strange quark matter in neutron stars. Journal of Physics G: Nuclear and Particle Physics, 2005, 31, S825-S832.	3.6	2
60	Deconfinement and color superconductivity in cold neutron stars. Physical Review D, 2005, 72, .	4.7	43
61	Quark deconfinement and neutrino trapping in compact stars. Journal of Physics G: Nuclear and Particle Physics, 2005, 31, S1165-S1169.	3.6	14
62	Quark Deconfinement and Implications for the Radius and the Limiting Mass of Compact Stars. Astrophysical Journal, 2004, 614, 314-325.	4.5	166
63	On the nature of the bimodal initial velocity distribution of neutron stars. Astronomy and Astrophysics, 2004, 424, 627-633.	5.1	16
64	QUARK DECONFINEMENT IN COMPACT STARS AND ASTROPHYSICAL IMPLICATIONS. , 2004, , .		0
65	Neutrino trapping effects on Î²-stable neutron star matter. Nuclear Physics A, 2003, 719, C173-C176.	1.5	3
66	Microscopic calculation of the neutrino mean free path inside hot neutron matter. Physical Review C, 2003, 68, .	2.9	27
67	Microscopic study of neutrino trapping in hyperon stars. Astronomy and Astrophysics, 2003, 399, 687-693.	5.1	38
68	Gammaâ€Ray Bursts from Delayed Collapse of Neutron Stars to Quark Matter Stars. Astrophysical Journal, 2003, 586, 1250-1253.	4.5	155
69	NUCLEAR ASTROPHYSICS. , 2003, , .		1
70	Equation of state and magnetic susceptibility of spin polarized isospin asymmetric nuclear matter. Physical Review C, 2002, 66, .	2.9	87
71	Timing evolution of accreting strange stars. New Astronomy, 2002, 7, 107-112.	1.8	7
72	Gamma Ray Bursts from delayed quark-deconfinement phase transition in neutron stars. Nuclear Physics, Section B, Proceedings Supplements, 2002, 113, 268-274.	0.4	23

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73	Possible signatures for deconfined strange quark matter in compact stars. Nuclear Physics A, 2001, 681, 205-212.	1.5	2
74	Strange Quark Stars: Structural Properties and Possible Signatures for Their Existence. Lecture Notes in Physics, 2001, , 253-284.	0.7	12
75	Temperature profiles of accretion discs around rapidly rotating strange stars in general relativity: A comparison with neutron stars. Astronomy and Astrophysics, 2001, 372, 925-934.	5.1	38
76	Conversion of Neutron Stars to Strange Stars as the Central Engine of Gamma-Ray Bursts. Astrophysical Journal, 2000, 530, L69-L72.	4.5	126
77	Rapidly Rotating Strange Stars for a New Equation of State of Strange Quark Matter. Astrophysical Journal, 2000, 541, L71-L74.	4.5	17
78	QCD â€" MOTIVATED QUARK STARS IN THE LIGHT OF RECENT ASTROPHYSICAL OBSERVATIONS. International Journal of Modern Physics B, 2000, 14, 1939-1952.	2.0	0
79	Do Strange Stars Exist in the Universe?. Astrophysics and Space Science Library, 2000, , 149-160.	2.7	1
80	Neutron Stars' Structure and Nuclear Equation of State. International Review of Nuclear Physics, 1999, , 381-457.	1.0	5
81	Is SAX J1808.4-3658 a Strange Star?. Physical Review Letters, 1999, 83, 3776-3779.	7.8	221
82	Asymmetric nuclear matter from an extended Brueckner-Hartree-Fock approach. Physical Review C, 1999, 60, .	2.9	269
83	On the Nature of the Compact Star in 4U 1728â"34. Astrophysical Journal, 1999, 527, L51-L54.	4.5	84
84	Strange stars with realistic quark vector interaction and phenomenological density-dependent scalar potential. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 1998, 438, 123-128.	4.1	260
85	Observational evidence for strange matter in compact objects from the x-ray burster 4U 1820-30. Physical Review C, 1997, 55, 1587-1590.	2.9	91
86	Composition and structure of protoneutron stars. Physics Reports, 1997, 280, 1-77.	25.6	636
87	Newborn hot neutron stars. Nuclear Physics A, 1995, 583, 623-628.	1.5	27
88	Microscopic theory of the nuclear equation of state. Nuclear Physics A, 1995, 583, 599-606.	1.5	10
89	Temperature and asymmetry dependence of nuclear incompressibility and supernova explosions. Physics Reports, 1994, 242, 165-180.	25.6	63
90	Pairing correlations in nuclear matter with realistic interactions. Physics Reports, 1994, 242, 159-164.	25.6	9

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91	The incompressibility of hot asymmetric nuclear matter. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 1993, 311, 9-14.	4.1	26
92	Off-the-energy-shell properties of the mass operator and spectral functions in nuclear matter. Nuclear Physics A, 1992, 545, 741-784.	1.5	56
93	Nuclear matter within the continuous choice. Physical Review C, 1991, 43, 2605-2609.	2.9	45
94	Asymmetric nuclear matter equation of state. Physical Review C, 1991, 44, 1892-1900.	2.9	329
95	Momentum distribution and hole strength from a separable representation of the argonne v14 interaction. Nuclear Physics A, 1991, 530, 135-148.	1.5	17
96	On the convergence of the hole-line expansion in nuclear matter theory. Journal of Physics G: Nuclear and Particle Physics, 1990, 16, L263-L268.	3.6	13
97	Nuclear matter properties from a separable representation of the Paris interaction. Physical Review C, 1990, 41, 1748-1761.	2.9	98
98	Nuclear matter with single-particle correlations. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 1988, 209, 135-139.	4.1	49
99	Nuclear matter equation of state with single particle correlations. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 1988, 215, 19-23.	4.1	46