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	Composition and structure of protoneutron stars. Physics Reports, 1997, 280, 1-77.	25.6	636
2	Asymmetric nuclear matter equation of state. Physical Review C, 1991, 44, 1892-1900.	2.9	329
3	Asymmetric nuclear matter from an extended Brueckner-Hartree-Fock approach. Physical Review C, 1999, 60, .	2.9	269
4	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
5	Is SAX J1808.4-3658 a Strange Star?. Physical Review Letters, 1999, 83, 3776-3779.	7.8	221
6	Quark Deconfinement and Implications for the Radius and the Limiting Mass of Compact Stars. Astrophysical Journal, 2004, 614, 314-325.	4.5	166
7	Gammaâ€Ray Bursts from Delayed Collapse of Neutron Stars to Quark Matter Stars. Astrophysical Journal, 2003, 586, 1250-1253.	4.5	155
8	Estimation of the effect of hyperonic three-body forces on the maximum mass of neutron stars. Europhysics Letters, 2011, 94, 11002.	2.0	141
9	Conversion of Neutron Stars to Strange Stars as the Central Engine of Gamma-Ray Bursts. Astrophysical Journal, 2000, 530, L69-L72.	4.5	126
10	Nuclear matter properties from a separable representation of the Paris interaction. Physical Review C, 1990, 41, 1748-1761.	2.9	98
11	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
12	Equation of state and magnetic susceptibility of spin polarized isospin asymmetric nuclear matter. Physical Review C, 2002, 66, .	2.9	87
13	On the Nature of the Compact Star in 4U 1728â^'34. Astrophysical Journal, 1999, 527, L51-L54.	4.5	84
14	Dense matter with eXTP. Science China: Physics, Mechanics and Astronomy, 2019, 62, 1.	5.1	81
15	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
16	Equation of state of dense nuclear matter and neutron star structure from nuclear chiral interactions. Astronomy and Astrophysics, 2018, 609, A128.	5.1	69
17	Quark matter nucleation in neutron stars and astrophysical implications. European Physical Journal A, 2016, 52, 1.	2.5	66
18	Was GW190814 a Black Holeâ€"Strange Quark Star System?. Physical Review Letters, 2021, 126, 162702.	7.8	65

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19	Temperature and asymmetry dependence of nuclear incompressibility and supernova explosions. Physics Reports, 1994, 242, 165-180.	25.6	63
20	Effects of color superconductivity on the nucleation of quark matter in neutron stars. Astronomy and Astrophysics, 2007, 462, 1017-1022.	5.1	60
21	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
22	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
23	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
24	Impact of chiral hyperonic three-body forces on neutron stars. European Physical Journal A, 2019, 55, 1.	2.5	50
25	Nuclear matter with single-particle correlations. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 1988, 209, 135-139.	4.1	49
26	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
27	Nuclear matter within the continuous choice. Physical Review C, 1991, 43, 2605-2609.	2.9	45
28	Benchmark calculations of pure neutron matter with realistic nucleon-nucleon interactions. Physical Review C, 2020, 101, .	2.9	45
29	Deconfinement and color superconductivity in cold neutron stars. Physical Review D, 2005, 72, .	4.7	43
30	Metastability of hadronic compact stars. Physical Review D, 2008, 77, .	4.7	40
31	Microscopic study of neutrino trapping in hyperon stars. Astronomy and Astrophysics, 2003, 399, 687-693.	5.1	38
32	Quark deconfinement transition in neutron stars with the field correlator method. Physical Review D, 2013, 88, .	4.7	38
33	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
34	Correlations imposed by the unitary limit between few-nucleon systems, nuclear matter, and neutron stars. Physical Review Letters, 2018, 121, 072701.	7.8	38
35	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
36	Signatures of deconfined quark phases in binary neutron star mergers. Physical Review D, 2021, 104, .	4.7	38

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37	Effects of chiral effective field theory equation of state on binary neutron star mergers. Physical Review D, 2018, 98, .	4.7	37
38	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
39	Effects of quark matter nucleation on the evolution of proto-neutron stars. Astronomy and Astrophysics, 2011, 528, A71.	5.1	32
40	Microscopic equation of state of hot nuclear matter for numerical relativity simulations. Astronomy and Astrophysics, 2021, 646, A55.	5.1	31
41	Chiral model approach to quark matter nucleation in neutron stars. Physical Review D, 2012, 85, .	4.7	30
42	Newborn hot neutron stars. Nuclear Physics A, 1995, 583, 623-628.	1.5	27
43	Microscopic calculation of the neutrino mean free path inside hot neutron matter. Physical Review C, 2003, 68, .	2.9	27
44	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
45	Comparative study of three-nucleon force models in nuclear matter. Physical Review C, 2015, 91, .	2.9	27
46	Accretion in strong field gravity with eXTP. Science China: Physics, Mechanics and Astronomy, 2019, 62, 1.	5.1	27
47	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
48	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
49	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
50	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
51	Quark matter nucleation with a microscopic hadronic equation of state. Physical Review C, 2012, 85, .	2.9	21
52	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
53	The Hyperon Puzzle in Neutron Stars. , 2017, , .		19
54	Benchmark calculations of infinite neutron matter with realistic two- and three-nucleon potentials. Physical Review C, 2022, 105, .	2.9	18

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55	Momentum distribution and hole strength from a separable representation of the argonne v14 interaction. Nuclear Physics A, 1991, 530, 135-148.	1.5	17
56	Rapidly Rotating Strange Stars for a New Equation of State of Strange Quark Matter. Astrophysical Journal, 2000, 541, L71-L74.	4.5	17
57	Effect of hyperonic three-body forces on the maximum mass of neutron stars. Journal of Physics: Conference Series, 2012, 342, 012006.	0.4	16
58	XIPE: the x-ray imaging polarimetry explorer. , 2016, , .		16
59	On the nature of the bimodal initial velocity distribution of neutron stars. Astronomy and Astrophysics, 2004, 424, 627-633.	5.1	16
60	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
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	Millisecond radio pulsars with known masses: Parameter values and equation of state models. New Astronomy, 2017, 54, 61-71.	1.8	14
63	Two Coexisting Families of Compact Stars: Observational Implications for Millisecond Pulsars. Astrophysical Journal, 2017, 848, 65.	4.5	14
64	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
65	Strange Quark Stars: Structural Properties and Possible Signatures for Their Existence. Lecture Notes in Physics, 2001, , 253-284.	0.7	12
66	Quark deconfinement in neutron stars and astrophysical implications. International Journal of Modern Physics D, 2017, 26, 1730004.	2.1	11
67	Microscopic theory of the nuclear equation of state. Nuclear Physics A, 1995, 583, 599-606.	1.5	10
68	The Large Observatory for x-ray timing. Proceedings of SPIE, 2014, , .	0.8	10
69	Pairing correlations in nuclear matter with realistic interactions. Physics Reports, 1994, 242, 159-164.	25.6	9
70	The LOFT mission concept: a status update. Proceedings of SPIE, 2016, , .	0.8	9
71	Timing evolution of accreting strange stars. New Astronomy, 2002, 7, 107-112.	1.8	7
72	Strangeness in neutron stars. Nuclear Physics A, 2005, 754, 335-344.	1.5	6

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73	Neutron stars as cosmic laboratories to explore hadronic matter at ultra-high densities. European Physical Journal A, 2007, 31, 810-815.	2.5	6
74	Neutron Stars' Structure and Nuclear Equation of State. International Review of Nuclear Physics, 1999, , 381-457.	1.0	5
75	Neutron stars: Cosmic laboratories for matter under extreme conditions. EPJ Web of Conferences, 2016, 117, 07005.	0.3	5
76	Isoentropic equations of state of $$eta $$-stable hadronic matter with a quark phase transition. European Physical Journal A, 2022, 58, 1.	2.5	4
77	Neutrino trapping effects on Î²-stable neutron star matter. Nuclear Physics A, 2003, 719, C173-C176.	1.5	3
78	QUARK MATTER IN COMPACT STARS: ASTROPHYSICAL IMPLICATIONS AND POSSIBLE SIGNATURES. , 2008, , .		3
79	Constraints on Microscopic and Phenomenological Equations of State of Dense Matter from GW170817. Universe, 2019, 5, 204.	2.5	3
80	The Hyperon Puzzle in Neutron Stars. Nuclear Physics News, 2021, 31, 17-21.	0.4	3
81	Possible signatures for deconfined strange quark matter in compact stars. Nuclear Physics A, 2001, 681, 205-212.	1.5	2
82	Role of hyperons on the hadron-star to quark-star conversion mechanism. Nuclear Physics A, 2005, 754, 345-349.	1.5	2
83	Strange quark matter in neutron stars. Journal of Physics G: Nuclear and Particle Physics, 2005, 31, S825-S832.	3.6	2
84	Nucleation of Quark Matter in Proto-Neutron Stars. Progress of Theoretical Physics Supplement, 2010, 186, 32-38.	0.1	2
85	QUARK MATTER NUCLEATION IN NEUTRON STARS. International Journal of Modern Physics D, 2010, 19, 1491-1498.	2.1	2
86	Neutron star properties from optimised chiral nuclear interactions. Publications of the Astronomical Society of Australia, 2018, 35, .	3.4	2
87	Quark deconfinement in neutron stars and gamma-ray bursts. Journal of Physics: Conference Series, 2006, 50, 208-215.	0.4	1
88	Evolution of proto-neutron stars with hadronâ€“quark phase transition. Journal of Physics: Conference Series, 2012, 342, 012001.	0.4	1
89	Hybrid neutron stars with the field correlator method. Journal of Physics: Conference Series, 2014, 527, 012021.	0.4	1
90	Neutron star structure with chiral interactions. Journal of Physics: Conference Series, 2017, 861, 012013.	0.4	1

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91	NUCLEAR ASTROPHYSICS. , 2003, , .		1
92	Do Strange Stars Exist in the Universe?. Astrophysics and Space Science Library, 2000, , 149-160.	2.7	1
93	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
94	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
95	Evolution of newborn neutron stars: role of quark matter nucleation. Journal of Physics: Conference Series, 2011, 336, 012021.	0.4	0
96	Nuclear matter calculations with chiral interactions. Journal of Physics: Conference Series, 2018, 981, 012009.	0.4	0
97	QUARK DECONFINEMENT IN COMPACT STARS AND ASTROPHYSICAL IMPLICATIONS. , 2004, , .		0
98	GAMMA RAY BURSTS AND DELAYED QUARK-DECONFINEMENT. , 2006, , 353-375.		0
99	Neutron stars as cosmic laboratories to explore hadronic matter at ultra-high densities. , 2007, , 519-524.		0