

# Julian Leszek Zdunik

## List of Publications by Citations

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48  
papers

1,547  
citations

20  
h-index

39  
g-index

52  
ext. papers

1,761  
ext. citations

5  
avg, IF

4.86  
L-index

#	Paper	IF	Citations
48	Neutron star radii and crusts: Uncertainties and unified equations of state. <i>Physical Review C</i> , <b>2016</b> , 94,	2.7	167
47	Hyperons in neutron-star cores and a 2 M $\odot$ pulsar. <i>Astronomy and Astrophysics</i> , <b>2012</b> , 543, A157	5.1	147
46	Models of crustal heating in accreting neutron stars. <i>Astronomy and Astrophysics</i> , <b>2008</b> , 480, 459-464	5.1	142
45	Nuclear composition and heating in accreting neutron-star crusts. <i>Astronomy and Astrophysics</i> , <b>2003</b> , 404, L33-L36	5.1	120
44	Maximum mass of neutron stars and strange neutron-star cores. <i>Astronomy and Astrophysics</i> , <b>2013</b> , 551, A61	5.1	117
43	A submillisecond pulsar and the equation of state of dense matter. <i>Nature</i> , <b>1989</b> , 340, 617-619	50.4	101
42	Keplerian frequency of uniformly rotating neutron stars and strange stars. <i>Astronomy and Astrophysics</i> , <b>2009</b> , 502, 605-610	5.1	76
41	ON THE MAXIMUM MASS OF NEUTRON STARS. <i>International Journal of Modern Physics E</i> , <b>2013</b> , 22, 1330018	1.8	54
40	Neutron stars with hyperon cores: stellar radii and equation of state near nuclear density. <i>Astronomy and Astrophysics</i> , <b>2015</b> , 576, A68	5.1	51
39	Impact of the nuclear equation of state on the last orbits of binary neutron stars. <i>Astronomy and Astrophysics</i> , <b>2005</b> , 431, 297-306	5.1	47
38	Phase transitions in rotating neutron stars cores: back bending, stability, corequakes, and pulsar timing. <i>Astronomy and Astrophysics</i> , <b>2006</b> , 450, 747-758	5.1	38
37	Neutron drip transition in accreting and nonaccreting neutron star crusts. <i>Physical Review C</i> , <b>2015</b> , 91,	2.7	34
36	Tidal deformability and other global parameters of compact stars with strong phase transitions. <i>Astronomy and Astrophysics</i> , <b>2019</b> , 622, A174	5.1	32
35	Equation of state of dense matter and the minimum mass of cold neutron stars. <i>Astronomy and Astrophysics</i> , <b>2002</b> , 385, 301-307	5.1	32
34	Consequences of a strong phase transition in the dense matter equation of state for the rotational evolution of neutron stars. <i>Astronomy and Astrophysics</i> , <b>2017</b> , 600, A39	5.1	29
33	Neutron star properties and the equation of state for the core. <i>Astronomy and Astrophysics</i> , <b>2017</b> , 599, A119	5.1	25
32	Thermal states of neutron stars with a consistent model of interior. <i>Monthly Notices of the Royal Astronomical Society</i> , <b>2018</b> , 475, 5010-5022	4.3	25

31	Crustal heating in accreting neutron stars from the nuclear energy-density functional theory. <i>Astronomy and Astrophysics</i> , <b>2018</b> , 620, A105	5.1	24
30	Rotation at 1122 Hz and the neutron star structure. <i>Astronomy and Astrophysics</i> , <b>2007</b> , 464, L49-L52	5.1	23
29	The crust of rotating strange quark stars. <i>Astronomy and Astrophysics</i> , <b>2001</b> , 372, 535-543	5.1	20
28	Mixed-phase induced core-quakes and the changes in neutron-star parameters. <i>Monthly Notices of the Royal Astronomical Society</i> , <b>2005</b> , 359, 699-706	4.3	18
27	Hyperon softening of the EOS of dense matter and the spin evolution of isolated neutron stars. <i>Astronomy and Astrophysics</i> , <b>2004</b> , 416, 1013-1022	5.1	18
26	Small strange stars and marginally stable orbit in Newtonian theory. <i>Physical Review D</i> , <b>2001</b> , 63,	4.9	17
25	On the minimum radius of strange stars with crust. <i>Astronomy and Astrophysics</i> , <b>2002</b> , 394, 641-645	5.1	17
24	Thermal structure of neutron stars with very low accretion rates. <i>Astrophysical Journal</i> , <b>1992</b> , 384, 129	4.7	16
23	Recycling strange stars to millisecond periods. <i>Astronomy and Astrophysics</i> , <b>2002</b> , 381, 933-940	5.1	15
22	Cooling of neutron stars with diffusive envelopes. <i>Monthly Notices of the Royal Astronomical Society</i> , <b>2016</b> , 463, 1307-1313	4.3	13
21	Implications of the measured parameters of PSR J1903+0327 for its progenitor neutron star. <i>Astronomy and Astrophysics</i> , <b>2011</b> , 536, A87	5.1	13
20	Compression of matter in the center of accreting neutron stars. <i>Astronomy and Astrophysics</i> , <b>2011</b> , 536, A92	5.1	12
19	Energy release associated with a first-order phase transition in a rotating neutron star core. <i>Astronomy and Astrophysics</i> , <b>2007</b> , 465, 533-539	5.1	12
18	Fundamental physics and the absence of sub-millisecond pulsars. <i>Astronomy and Astrophysics</i> , <b>2018</b> , 620, A69	5.1	12
17	Strong first-order phase transition in a rotating neutron star core and the associated energy release. <i>Astronomy and Astrophysics</i> , <b>2008</b> , 479, 515-522	5.1	11
16	Formation scenarios and mass-radius relation for neutron stars. <i>Astronomy and Astrophysics</i> , <b>2011</b> , 530, A137	5.1	10
15	Approximate analytic expressions for circular orbits around rapidly rotating compact stars. <i>Astronomy and Astrophysics</i> , <b>2010</b> , 520, A16	5.1	10
14	Progenitor neutron stars of the lightest and heaviest millisecond pulsars. <i>Astronomy and Astrophysics</i> , <b>2016</b> , 586, A109	5.1	8

- 13 Spin-up of the hyperon-softened accreting neutron stars. *Astronomy and Astrophysics*, **2005**, 441, 207-211, 1 7
- 12 Maximum rotation frequency of strange stars. *Physical Review D*, **1990**, 42, 710-711 4.9 6
- 11 Experimental constraints on shallow heating in accreting neutron-star crusts. *Physical Review C*, **2020**, 102, 2.7 6
- 10 Magnetic fields in late-stage proto-neutron stars. *Monthly Notices of the Royal Astronomical Society*, **2021**, 503, 875-895 4.3 6
- 9 Influence of the crust on the neutron star macrophysical quantities and universal relations. *Physical Review C*, **2021**, 104, 2.7 6
- 8 Probing Elastic Quark Phases in Hybrid Stars with Radius Measurements. *Astrophysical Journal*, **2021**, 910, 145 4.7 3
- 7 Equation of state of neutron star cores and spin down of isolated pulsars. *Astrophysics and Space Science*, **2007**, 308, 363-369 1.6 2
- 6 Heating in Magnetar Crusts from Electron Captures. *Universe*, **2021**, 7, 193 2.5 1
- 5 Phase transitions in compact stars. Problem of micro and macro stability. *Physics of Particles and Nuclei*, **2015**, 46, 821-825 0.7
- 4 Heat blanketing envelopes vs cooling of neutron stars. *Journal of Physics: Conference Series*, **2017**, 932, 012046 0.3
- 3 The impact of heat blanketing envelopes on neutron stars cooling. *Journal of Physics: Conference Series*, **2017**, 929, 012010 0.3
- 2 Maximum pulsar mass, equation of state and structure of neutron-star cores. *Journal of Physics: Conference Series*, **2016**, 665, 012061 0.3
- 1 Equation of state of neutron star cores and spin down of isolated pulsars **2007**, 363-369