

# Sergei Nayakshin

## List of Publications by Year in descending order

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Version: 2024-02-01

56  
papers

2,334  
citations

279798

23  
h-index

254184

43  
g-index

56  
all docs

56  
docs citations

56  
times ranked

2109  
citing authors

#	ARTICLE	IF	CITATIONS
1	Black hole mergers: can gas discs solve the “final parsec” problem?. Monthly Notices of the Royal Astronomical Society, 2009, 398, 1392-1402.	4.4	152
2	Formation of planets by tidal downsizing of giant planet embryos. Monthly Notices of the Royal Astronomical Society: Letters, 2010, 408, L36-L40.	3.3	139
3	Galactic Centre stellar winds and Sgr A* accretion. Monthly Notices of the Royal Astronomical Society, 2006, 366, 358-372.	4.4	138
4	Simulations of star formation in a gaseous disc around Sgr A* - a failed active galactic nucleus. Monthly Notices of the Royal Astronomical Society, 2007, 379, 21-33.	4.4	138
5	Grain sedimentation inside giant planet embryos. Monthly Notices of the Royal Astronomical Society, 2010, 408, 2381-2396.	4.4	115
6	A numerical simulation of a “Super-Earth” core delivery from $\sim 100$ to $\sim 48$ au. Monthly Notices of the Royal Astronomical Society, 2011, 415, 3319-3334.	4.4	97
7	Sgr A* flares: tidal disruption of asteroids and planets?. Monthly Notices of the Royal Astronomical Society, 2012, 421, 1315-1324.	4.4	82
8	Feeding supermassive black holes through supersonic turbulence and ballistic accretion. Monthly Notices of the Royal Astronomical Society, 2011, 413, 2633-2650.	4.4	79
9	Fermi bubbles in the Milky Way: the closest AGN feedback laboratory courtesy of Sgr A*?. Monthly Notices of the Royal Astronomical Society, 2012, 424, 666-683.	4.4	74
10	Dawes Review 7: The Tidal Downsizing Hypothesis of Planet Formation. Publications of the Astronomical Society of Australia, 2017, 34, .	3.4	72
11	Fu Ori outbursts and the planet-disc mass exchange. Monthly Notices of the Royal Astronomical Society, 2012, 426, 70-90.	4.4	64
12	Formation of terrestrial planet cores inside giant planet embryos. Monthly Notices of the Royal Astronomical Society, 2011, 413, 1462-1478.	4.4	63
13	Quasar feedback: accelerated star formation and chaotic accretion. Monthly Notices of the Royal Astronomical Society, 2012, 427, 372-378.	4.4	63
14	Massive stars in subparsec rings around galactic centres. Monthly Notices of the Royal Astronomical Society, 2006, 372, 143-150.	4.4	60
15	Energy- and momentum-conserving AGN feedback outflows. Monthly Notices of the Royal Astronomical Society, 2014, 440, 2625-2635.	4.4	60
16	Chondrule fragments from Comet Wild2: Evidence for high temperature processing in the outer Solar System. Earth and Planetary Science Letters, 2012, 341-344, 186-194.	4.4	52
17	Tidal Downsizing model “III. Planets from sub-Earths to brown dwarfs: structure and metallicity preferences. Monthly Notices of the Royal Astronomical Society, 2015, 452, 1654-1676.	4.4	51
18	Kelvin-Helmholtz instabilities with Godunov smoothed particle hydrodynamics. Monthly Notices of the Royal Astronomical Society, 2010, 403, 1165-1174.	4.4	49

#	ARTICLE	IF	CITATIONS
19	Giant Planet Formation, Evolution, and Internal Structure. , 2014, , .		48
20	Radiative feedback from protoplanets in self-gravitating protoplanetary discs. Monthly Notices of the Royal Astronomical Society, 2013, 435, 2099-2108.	4.4	45
21	Tidal downsizing model â€“ I. Numerical methods: saving giant planets from tidal disruptions. Monthly Notices of the Royal Astronomical Society, 2015, 454, 64-82.	4.4	44
22	A desert of gas giant planets beyond tens of au: from feast to famine. Monthly Notices of the Royal Astronomical Society, 2017, 470, 2387-2409.	4.4	44
23	Hot Super Earths: disrupted young jupiters?. Monthly Notices of the Royal Astronomical Society, 2011, 416, 2974-2980.	4.4	43
24	The tidal downsizing hypothesis for planet formation and the composition of Solar system comets. Monthly Notices of the Royal Astronomical Society: Letters, 2011, 416, L50-L54.	3.3	39
25	An alternative origin for debris rings of planetesimals. Monthly Notices of the Royal Astronomical Society, 2012, 423, 2104-2119.	4.4	39
26	Tidal Downsizing model â€“ IV. Destructive feedback in planets. Monthly Notices of the Royal Astronomical Society, 2016, 461, 3194-3211.	4.4	36
27	Metal loading of giant gas planets. Monthly Notices of the Royal Astronomical Society, 2015, 446, 459-469.	4.4	35
28	Positive metallicity correlation for coreless giant planets. Monthly Notices of the Royal Astronomical Society: Letters, 2015, 448, L25-L29.	3.3	34
29	Core-assisted gas capture instability: a new mode of giant planet formation by gravitationally unstable discs. Monthly Notices of the Royal Astronomical Society, 2014, 440, 3797-3808.	4.4	33
30	Dynamic Monte Carlo radiation transfer in SPH: radiation pressure force implementation. Monthly Notices of the Royal Astronomical Society, 2009, 397, 1314-1325.	4.4	31
31	Simulations of momentum feedback by black hole winds. Monthly Notices of the Royal Astronomical Society, 2010, 402, 789-802.	4.4	29
32	Modelling supermassive black hole growth: towards an improved sub-grid prescription. Monthly Notices of the Royal Astronomical Society, 2012, 421, 3443-3449.	4.4	28
33	Rotation of the Solar system planets and the origin of the Moon in the context of the tidal downsizing hypothesis. Monthly Notices of the Royal Astronomical Society: Letters, 2011, 410, L1-L5.	3.3	26
34	Black hole feedback in a multiphase interstellar medium. Monthly Notices of the Royal Astronomical Society, 2014, 441, 3055-3064.	4.4	26
35	Planets, debris and their host metallicity correlations. Monthly Notices of the Royal Astronomical Society, 2016, 461, 1850-1861.	4.4	24
36	ALMA observations require slower Core Accretion runaway growth. Monthly Notices of the Royal Astronomical Society: Letters, 2019, 488, L12-L17.	3.3	22

#	ARTICLE	IF	CITATIONS
37	Changes in the metallicity of gas giant planets due to pebble accretion. Monthly Notices of the Royal Astronomical Society, 2018, 477, 593-615.	4.4	18
38	Giant planets and brown dwarfs on wide orbits: a code comparison project. Monthly Notices of the Royal Astronomical Society, 2019, 486, 4398-4413.	4.4	17
39	Are supermassive black holes shrouded by "super-Oort"™ clouds of comets and asteroids?. Monthly Notices of the Royal Astronomical Society, 2012, 419, 1238-1247.	4.4	14
40	Constraining the initial planetary population in the gravitational instability model. Monthly Notices of the Royal Astronomical Society, 2019, 488, 4873-4889.	4.4	12
41	The growth and migration of massive planets under the influence of external photoevaporation. Monthly Notices of the Royal Astronomical Society, 2022, 515, 4287-4301.	4.4	12
42	Differentiation of silicates and iron during formation of Mercury and high-density exoplanets. Monthly Notices of the Royal Astronomical Society, 2014, 441, 1380-1390.	4.4	11
43	TW Hya: an old protoplanetary disc revived by its planet. Monthly Notices of the Royal Astronomical Society, 0, , .	4.4	11
44	A new view on planet formation. Proceedings of the International Astronomical Union, 2010, 6, 101-104.	0.0	10
45	On the origin of wide-orbit ALMA planets: giant protoplanets disrupted by their cores. Monthly Notices of the Royal Astronomical Society, 2019, 489, 5187-5201.	4.4	9
46	Accretion bursts in high-mass protostars: A new test bed for models of episodic accretion. Astronomy and Astrophysics, 2021, 651, L3.	5.1	8
47	ALMA constraints on assembly of core accretion planets. Monthly Notices of the Royal Astronomical Society, 2022, 512, 6038-6053.	4.4	7
48	Anisotropic X-ray emission in active galactic nucleus accretion discs. Monthly Notices of the Royal Astronomical Society: Letters, 2007, 376, L25-L28.	3.3	6
49	Hydrogen-losing planets in transition discs around young protostars. Monthly Notices of the Royal Astronomical Society, 2013, 431, 1432-1438.	4.4	6
50	The paradox of youth for ALMA planet candidates. Monthly Notices of the Royal Astronomical Society, 2020, 493, 2910-2925.	4.4	5
51	Gap opening by planets in discs with magnetized winds. Monthly Notices of the Royal Astronomical Society, 2022, 515, 3113-3125.	4.4	5
52	Searching for wide-orbit gravitational instability protoplanets with ALMA in the dust continuum. Monthly Notices of the Royal Astronomical Society, 2021, 502, 953-968.	4.4	4
53	On fragmentation of turbulent self-gravitating discs in the long cooling time regime. Monthly Notices of the Royal Astronomical Society, 2018, 475, 921-931.	4.4	3
54	Forming young and hypervelocity stars in the Galactic Centre via tidal disruption of a molecular cloud. Monthly Notices of the Royal Astronomical Society, 2022, 512, 4100-4115.	4.4	2

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55	Accretion of stellar winds onto Sgr A*. Proceedings of the International Astronomical Union, 2006, 2, 191-194.	0.0	0
56	The 3 Ms Chandra campaign on Sgr A*: a census of X-ray flaring activity from the Galactic center. Proceedings of the International Astronomical Union, 2013, 9, 374-378.	0.0	0