## Roman R Rafikov

List of Publications by Year in descending order

Source: https://exaly.com/author-pdf/2400221/publications.pdf

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65 papers

3,542 citations

32 h-index 55 g-index

65 all docs 65 does citations

65 times ranked 2336 citing authors

#	Article	IF	CITATIONS
1	Can Giant Planets Form by Direct Gravitational Instability?. Astrophysical Journal, 2005, 621, L69-L72.	4.5	336
2	The Gemini Planet Imager Exoplanet Survey: Giant Planet and Brown Dwarf Demographics from 10 to 100 au. Astronomical Journal, 2019, 158, 13.	4.7	270
3	OBSERVATIONAL SIGNATURES OF PLANETS IN PROTOPLANETARY DISKS: SPIRAL ARMS OBSERVED IN SCATTERED LIGHT IMAGING CAN BE INDUCED BY PLANETS. Astrophysical Journal Letters, 2015, 809, L5.	8.3	198
4	THE STRUCTURE OF SPIRAL SHOCKS EXCITED BY PLANETARY-MASS COMPANIONS. Astrophysical Journal, 2015, 813, 88.	4.5	149
5	PROPERTIES OF GRAVITOTURBULENT ACCRETION DISKS. Astrophysical Journal, 2009, 704, 281-291.	4.5	145
6	Runaway accretion of metals from compact discs of debris on to white dwarfs. Monthly Notices of the Royal Astronomical Society: Letters, 2011, 416, L55-L59.	3.3	130
7	Global models of runaway accretion in white dwarf debris discs. Monthly Notices of the Royal Astronomical Society, 2012, 423, 505-528.	4.4	127
8	METAL ACCRETION ONTO WHITE DWARFS CAUSED BY POYNTING-ROBERTSON DRAG ON THEIR DEBRIS DISKS. Astrophysical Journal Letters, 2011, 732, L3.	8.3	109
9	AN M DWARF COMPANION AND ITS INDUCED SPIRAL ARMS IN THE HD 100453 PROTOPLANETARY DISK. Astrophysical Journal Letters, 2016, 816, L12.	8.3	96
10	SCATTERING OUTCOMES OF CLOSE-IN PLANETS: CONSTRAINTS ON PLANET MIGRATION. Astrophysical Journal, 2014, 786, 101.	4.5	93
11	DENSITY WAVES EXCITED BY LOW-MASS PLANETS IN PROTOPLANETARY DISKS. II. HIGH-RESOLUTION SIMULATIONS OF THE NONLINEAR REGIME. Astrophysical Journal, 2011, 741, 57.	4.5	89
12	INNER EDGES OF COMPACT DEBRIS DISKS AROUND METAL-RICH WHITE DWARFS. Astrophysical Journal, 2012, 760, 123.	4.5	84
13	LOW-MASS PLANETS IN PROTOPLANETARY DISKS WITH NET VERTICAL MAGNETIC FIELDS: THE PLANETARY WAKE AND GAP OPENING. Astrophysical Journal, 2013, 768, 143.	4.5	71
14	BUILDING TATOOINE: SUPPRESSION OF THE DIRECT SECULAR EXCITATION IN <i>KEPLER</i> CIRCUMBINARY PLANET FORMATION. Astrophysical Journal Letters, 2013, 764, L16.	8.3	69
15	DENSITY WAVES EXCITED BY LOW-MASS PLANETS IN PROTOPLANETARY DISKS. I. LINEAR REGIME. Astrophysical Journal, 2011, 741, 56.	4.5	68
16	SEARCH FOR SUPERMASSIVE BLACK HOLE BINARIES IN THE SLOAN DIGITAL SKY SURVEY SPECTROSCOPIC SAMPLE. Astrophysical Journal, 2013, 777, 44.	4.5	68
17	PLANET FORMATION IN BINARIES: DYNAMICS OF PLANETESIMALS PERTURBED BY THE ECCENTRIC PROTOPLANETARY DISK AND THE SECONDARY. Astrophysical Journal, 2015, 798, 71.	4.5	64
18	Protoplanetary Disks as (Possibly) Viscous Disks. Astrophysical Journal, 2017, 837, 163.	4.5	62

#	Article	IF	Citations
19	PLANET FORMATION IN STELLAR BINARIES. II. OVERCOMING THE FRAGMENTATION BARRIER IN α CENTAURI AND CEPHEI-LIKE SYSTEMS. Astrophysical Journal, 2015, 798, 70.	ĵ <sup>3</sup> 4.5	61
20	PLANET FORMATION IN STELLAR BINARIES. I. PLANETESIMAL DYNAMICS IN MASSIVE PROTOPLANETARY DISKS. Astrophysical Journal, 2015, 798, 69.	4.5	61
21	DISCOVERY OF A SUBSTELLAR COMPANION TO THE NEARBY DEBRIS DISK HOST HR 2562. Astrophysical Journal Letters, 2016, 829, L4.	8.3	60
22	PLANET FORMATION IN SMALL SEPARATION BINARIES: NOT SO SECULARLY EXCITED BY THE COMPANION. Astrophysical Journal Letters, 2013, 765, L8.	8.3	56
23	PROTOPLANETARY DISK HEATING AND EVOLUTION DRIVEN BY SPIRAL DENSITY WAVES. Astrophysical Journal, 2016, 831, 122.	4.5	54
24	GLOBAL MODELING OF RADIATIVELY DRIVEN ACCRETION OF METALS FROM COMPACT DEBRIS DISKS ONTO WHITE DWARFS. Astrophysical Journal, 2011, 741, 36.	4.5	52
25	Evidence That the Directly Imaged Planet HD 131399 Ab Is a Background Star. Astronomical Journal, 2017, 154, 218.	4.7	52
26	STRUCTURE AND EVOLUTION OF CIRCUMBINARY DISKS AROUND SUPERMASSIVE BLACK HOLE BINARIES. Astrophysical Journal, 2013, 774, 144.	4.5	48
27	BIRTH LOCATIONS OF THE <i>KEPLER</i> CIRCUMBINARY PLANETS. Astrophysical Journal, 2015, 808, 58.	4.5	48
28	STELLAR PROPER MOTION AND THE TIMING OF PLANETARY TRANSITS. Astrophysical Journal, 2009, 700, 965-970.	4.5	43
29	ANALYSIS OF SPIN-ORBIT MISALIGNMENT IN THE ECLIPSING BINARY DI HERCULIS. Astrophysical Journal, 2013, 768, 112.	4.5	43
30	On the Planetary Interpretation of Multiple Gaps and Rings in Protoplanetary Disks Seen By ALMA. Astrophysical Journal Letters, 2019, 878, L9.	8.3	43
31	11/2017 'Oumuamua-like Interstellar Asteroids as Possible Messengers from Dead Stars. Astrophysical Journal, 2018, 861, 35.	4.5	39
32	SEARCHING FOR BINARY SUPERMASSIVE BLACK HOLES VIA VARIABLE BROAD EMISSION LINE SHIFTS: LOW BINARY FRACTION. Astrophysical Journal, 2017, 834, 129.	4.5	38
33	Planet–Disk Interaction in Disks with Cooling: Basic Theory. Astrophysical Journal, 2020, 892, 65.	4.5	38
34	ANGULAR MOMENTUM TRANSPORT BY ACOUSTIC MODES GENERATED IN THE BOUNDARY LAYER. I. HYDRODYNAMICAL THEORY AND SIMULATIONS. Astrophysical Journal, 2013, 770, 67.	4.5	37
35	VISCOSITY PRESCRIPTION FOR GRAVITATIONALLY UNSTABLE ACCRETION DISKS. Astrophysical Journal, 2015, 804, 62.	4.5	36
36	Spin Evolution and Cometary Interpretation of the Interstellar Minor Object 1I/2017 'Oumuamua. Astrophysical Journal Letters, 2018, 867, L17.	8.3	36

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37	ON THE ECCENTRICITY EXCITATION IN POST-MAIN-SEQUENCE BINARIES. Astrophysical Journal, 2016, 830, 8.	4.5	30
38	TATOOINE NURSERIES: STRUCTURE AND EVOLUTION OF CIRCUMBINARY PROTOPLANETARY DISKS. Astrophysical Journal, 2016, 816, 94.	4.5	29
39	Fast and Slow Precession of Gaseous Debris Disks around Planet-accreting White Dwarfs. Astrophysical Journal, 2018, 857, 135.	4.5	29
40	ACCRETION AND ORBITAL INSPIRAL IN GAS-ASSISTED SUPERMASSIVE BLACK HOLE BINARY MERGERS. Astrophysical Journal, 2016, 827, 111.	4.5	25
41	DISK-SATELLITE INTERACTION IN DISKS WITH DENSITY GAPS. Astrophysical Journal, 2012, 758, 33.	4.5	24
42	THE ORIGIN OF THE NEGATIVE TORQUE DENSITY IN DISK-SATELLITE INTERACTION. Astrophysical Journal, 2012, 747, 24.	4.5	24
43	Secular dynamics of binaries in stellar clusters – II. Dynamical evolution. Monthly Notices of the Royal Astronomical Society, 2019, 488, 5512-5535.	4.4	23
44	Multiple Spiral Arms in Protoplanetary Disks: Linear Theory. Astrophysical Journal, 2019, 875, 37.	4.5	22
45	Gaps and Rings in Protoplanetary Disks with Realistic Thermodynamics: The Critical Role of In-plane Radiation Transport. Astrophysical Journal, 2020, 904, 121.	4.5	22
46	ANGULAR MOMENTUM TRANSPORT AND VARIABILITY IN BOUNDARY LAYERS OF ACCRETION DISKS DRIVEN BY GLOBAL ACOUSTIC MODES. Astrophysical Journal, 2012, 760, 22.	4.5	21
47	ANGULAR MOMENTUM TRANSPORT BY ACOUSTIC MODES GENERATED IN THE BOUNDARY LAYER. II. MAGNETOHYDRODYNAMIC SIMULATIONS. Astrophysical Journal, 2013, 770, 68.	4.5	21
48	Formation of Gaps in Self-gravitating Debris Disks by Secular Resonance in a Single-planet System. I. A Simplified Model. Astrophysical Journal, 2021, 910, 13.	4.5	21
49	GENERALIZED SIMILARITY FOR ACCRETION/DECRETION DISKS. Astrophysical Journal, 2016, 830, 7.	4.5	20
50	Disk Accretion Driven by Spiral Shocks. Astrophysical Journal, 2018, 854, 84.	4.5	17
51	Compact Object Binary Mergers Driven By Cluster Tides: A New Channel for LIGO/Virgo Gravitational-wave Events. Astrophysical Journal Letters, 2019, 881, L13.	8.3	17
52	Radial Transport and Meridional Circulation in Accretion Disks. Astrophysical Journal, 2017, 837, 101.	4.5	14
53	Non-power law behavior in fragmentation cascades. Icarus, 2011, 214, 179-193.	2.5	12
54	NEAR-INFRARED IMAGING POLARIMETRY OF INNER REGION OF GG TAU A DISK. Astronomical Journal, 2017, 153, 7.	4.7	12

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55	Envelopes of embedded super-Earths $\hat{a} \in \mathbb{N}$ I. Two-dimensional simulations. Monthly Notices of the Royal Astronomical Society, 2019, 487, 2319-2334.	4.4	12
56	Planet formation in stellar binaries: global simulations of planetesimal growth. Astronomy and Astrophysics, 2021, 652, A104.	5.1	12
57	Planet-driven density waves in protoplanetary discs: Numerical verification of non-linear evolution theory. Monthly Notices of the Royal Astronomical Society, 2021, 508, 2329-2349.	4.4	11
58	Secular Evolution Driven by Massive Eccentric Disks/Rings: An Apsidally Aligned Case. Astrophysical Journal, 2018, 864, 74.	4.5	9
59	Secular dynamics of binaries in stellar clusters – III. Doubly averaged dynamics in the presence of general-relativistic precession. Monthly Notices of the Royal Astronomical Society, 2021, 505, 4151-4177.	4.4	9
60	Potential softening and eccentricity dynamics in razor-thin, nearly Keplerian discs. Monthly Notices of the Royal Astronomical Society, 2019, 489, 4176-4195.	4.4	8
61	Eclipse Timing the Milky Way's Gravitational Potential. Astrophysical Journal Letters, 2022, 928, L17.	8.3	8
62	Boundary layers of accretion discs: Discovery of vortex-driven modes and other waves. Monthly Notices of the Royal Astronomical Society, 2021, 509, 440-462.	4.4	7
63	Boundary layers of accretion discs: wave-driven transport and disc evolution. Monthly Notices of the Royal Astronomical Society, 2022, 512, 2945-2960.	4.4	5
64	A Fast O(N <sup>2</sup> ) Fragmentation Algorithm. Astrophysical Journal, Supplement Series, 2020, 247, 65.	7.7	3
65	Doppler Boosting of the S-stars in the Galactic Center. Astrophysical Journal Letters, 2020, 905, L35.	8.3	2