

Gravitational Instabilities in Circumstellar Disks

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Citation Report

#	ARTICLE	IF	CITATIONS
1	Spiral arms detected around an infant star. <i>Physics Today</i> , 2016, 69, 22-23.	0.3	1
2	Accretion onto Pre-Main-Sequence Stars. <i>Annual Review of Astronomy and Astrophysics</i> , 2016, 54, 135-180.	8.1	391
3	A triple protostar system formed via fragmentation of a gravitationally unstable disk. <i>Nature</i> , 2016, 538, 483-486.	13.7	188
4	Fragmentation of Kozai-Lidov Disks. <i>Astrophysical Journal Letters</i> , 2017, 835, L29.	3.0	38
5	On the fragmentation boundary in magnetized self-gravitating discs. <i>Monthly Notices of the Royal Astronomical Society</i> , 2017, 466, 3406-3416.	1.6	21
6	HOW BRIGHT ARE PLANET-INDUCED SPIRAL ARMS IN SCATTERED LIGHT?. <i>Astrophysical Journal</i> , 2017, 835, 38.	1.6	68
7	Planet Formation in AB Aurigae: Imaging of the Inner Gaseous Spirals Observed inside the Dust Cavity. <i>Astrophysical Journal</i> , 2017, 840, 32.	1.6	79
8	Time evolution of the water snowline in viscous discs. <i>Monthly Notices of the Royal Astronomical Society</i> , 2017, 467, 2869-2878.	1.6	7
9	ALMA Observations of Starless Core Substructure in Ophiuchus. <i>Astrophysical Journal</i> , 2017, 838, 114.	1.6	32
10	The effect of radiative feedback on disc fragmentation. <i>Monthly Notices of the Royal Astronomical Society</i> , 2017, 465, 2-18.	1.6	29
11	Structure of radiation-dominated gravitoturbulent quasar discs. <i>Monthly Notices of the Royal Astronomical Society</i> , 2017, 464, 4018-4027.	1.6	2
12	Slowly-growing gap-opening planets trigger weaker vortices. <i>Monthly Notices of the Royal Astronomical Society</i> , 2017, 466, 3533-3543.	1.6	45
13	Protoplanetary disc isochrones and the evolution of discs in the M ⁺ -Md plane. <i>Monthly Notices of the Royal Astronomical Society</i> , 2017, 472, 4700-4706.	1.6	62
14	The Fragmentation Criteria in Local Vertically Stratified Self-gravitating Disk Simulations. <i>Astrophysical Journal</i> , 2017, 848, 40.	1.6	42
15	Early formation of planetary building blocks inferred from Pb isotopic ages of chondrules. <i>Science Advances</i> , 2017, 3, e1700407.	4.7	174
16	Constraints from Dust Mass and Mass Accretion Rate Measurements on Angular Momentum Transport in Protoplanetary Disks. <i>Astrophysical Journal</i> , 2017, 847, 31.	1.6	64
17	Mass Transport from the Envelope to the Disk of V346 Nor: A Case Study for the Luminosity Problem in an FUor-type Young Eruptive Star. <i>Astrophysical Journal</i> , 2017, 843, 45.	1.6	20
18	A desert of gas giant planets beyond tens of au: from feast to famine. <i>Monthly Notices of the Royal Astronomical Society</i> , 2017, 470, 2387-2409.	1.6	44

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19	Gravitational instabilities in a protosolar-like disc – II. Continuum emission and mass estimates. Monthly Notices of the Royal Astronomical Society, 2017, 470, 1828-1847.	1.6	12
20	Formation and survival of Population III stellar systems. Monthly Notices of the Royal Astronomical Society, 2017, 470, 898-914.	1.6	74
21	The Young Substellar Companion ROXs 12 B: Near-infrared Spectrum, System Architecture, and Spin-Orbit Misalignment. Astronomical Journal, 2017, 154, 165.	1.9	45
22	Precessing Jet and Large Dust Grains in the V380 Ori NE Star-forming Region. Astrophysical Journal, Supplement Series, 2017, 232, 24.	3.0	11
23	In situ accretion of gaseous envelopes on to planetary cores embedded in evolving protoplanetary discs. Monthly Notices of the Royal Astronomical Society, 2017, 470, 3206-3219.	1.6	29
24	Gravito-turbulence in irradiated protoplanetary discs. Monthly Notices of the Royal Astronomical Society, 2017, 469, 561-578.	1.6	11
25	Protostellar accretion traced with chemistry. Astronomy and Astrophysics, 2017, 602, A120.	2.1	39
26	Changes in the metallicity of gas giant planets due to pebble accretion. Monthly Notices of the Royal Astronomical Society, 2018, 477, 593-615.	1.6	18
27	The Complex Morphology of the Young Disk MWC 758: Spirals and Dust Clumps around a Large Cavity. Astrophysical Journal, 2018, 853, 162.	1.6	71
28	Evolution and Photoevaporation of Protoplanetary Disks in Clusters: The Role of Pre-stellar Core Properties. Astrophysical Journal, 2018, 853, 22.	1.6	5
29	Evidence of an Upper Bound on the Masses of Planets and Its Implications for Giant Planet Formation. Astrophysical Journal, 2018, 853, 37.	1.6	98
30	On fragmentation of turbulent self-gravitating discs in the long cooling time regime. Monthly Notices of the Royal Astronomical Society, 2018, 475, 921-931.	1.6	3
31	Rings and gaps in the disc around Elias 24 revealed by ALMA. Monthly Notices of the Royal Astronomical Society, 2018, 475, 5296-5312.	1.6	79
32	Planetary-like spirals caused by moving shadows in transition discs. Monthly Notices of the Royal Astronomical Society: Letters, 2018, 475, L35-L39.	1.2	44
33	A Brief Overview of Planet Formation. , 2018, , 1-19.		1
34	Formation of Giant Planets. , 2018, , 1-25.		2
35	Giant Planet Formation and Migration. Space Science Reviews, 2018, 214, 1.	3.7	19
36	Spiral Arms in Disks: Planets or Gravitational Instability?. Astrophysical Journal, 2018, 862, 103.	1.6	64

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37	ALMA continuum observations of the protoplanetary disk AS 209. <i>Astronomy and Astrophysics</i> , 2018, 610, A24.	2.1	140
38	The interplay between the viscosity and EUV radiation on the dispersal of protoplanetary discs. <i>Astrophysics and Space Science</i> , 2018, 363, 1.	0.5	1
39	Multiple star systems in the Orion nebula. <i>Astronomy and Astrophysics</i> , 2018, 620, A116.	2.1	23
40	Giant planet migration during FU Orionis outbursts: 1D disc models. <i>Monthly Notices of the Royal Astronomical Society</i> , 2018, 478, 3438-3446.	1.6	1
41	An Ultra Metal-poor Star Near the Hydrogen-burning Limit*. <i>Astrophysical Journal</i> , 2018, 867, 98.	1.6	30
42	A Brief Overview of Planet Formation. , 2018, , 2185-2203.		8
43	Formation of Giant Planets. , 2018, , 2319-2343.		6
44	Occurrence Rates from Direct Imaging Surveys. , 2018, , 1967-1983.		11
45	Circumstellar Discs: What Will Be Next?. , 2018, , 3321-3352.		4
46	Properties and Occurrence Rates for Kepler Exoplanet Candidates as a Function of Host Star Metallicity from the DR25 Catalog. <i>Astronomical Journal</i> , 2018, 156, 221.	1.9	45
47	The Disk Substructures at High Angular Resolution Project (DSHARP). VI. Dust Trapping in Thin-ringed Protoplanetary Disks. <i>Astrophysical Journal Letters</i> , 2018, 869, L46.	3.0	250
48	The Disk Substructures at High Angular Resolution Project (DSHARP). III. Spiral Structures in the Millimeter Continuum of the Elias 27, IM Lup, and WaOph 6 Disks. <i>Astrophysical Journal Letters</i> , 2018, 869, L43.	3.0	121
49	Gas-assisted Growth of Protoplanets in a Turbulent Medium. <i>Astrophysical Journal</i> , 2018, 861, 74.	1.6	11
50	The Maximum Mass Solar Nebula and the early formation of planets. <i>Monthly Notices of the Royal Astronomical Society</i> , 2018, 477, 3273-3278.	1.6	22
51	Fragmentation and disk formation during high-mass star formation. <i>Astronomy and Astrophysics</i> , 2018, 617, A100.	2.1	76
52	Protoplanetary Disk Sizes and Angular Momentum Transport. <i>Astrophysical Journal</i> , 2018, 864, 168.	1.6	41
53	High-resolution Millimeter Imaging of the CI Tau Protoplanetary Disk: A Massive Ensemble of Protoplanets from 0.1 to 100 au. <i>Astrophysical Journal Letters</i> , 2018, 866, L6.	3.0	69
54	FIRE-2 simulations: physics versus numerics in galaxy formation. <i>Monthly Notices of the Royal Astronomical Society</i> , 2018, 480, 800-863.	1.6	676

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56	Evolution of Circumbinary Protoplanetary Disks with Photoevaporative Winds Driven by External Far-ultraviolet Radiation. <i>Astrophysical Journal</i> , 2018, 867, 41.	1.6	5
57	Restrictions on the Growth of Gas Giant Cores via Pebble Accretion. <i>Astrophysical Journal</i> , 2018, 864, 66.	1.6	12
58	The Eccentric Cavity, Triple Rings, Two-armed Spirals, and Double Clumps of the MWC 758 Disk. <i>Astrophysical Journal</i> , 2018, 860, 124.	1.6	126
59	Decoupling of magnetic fields in collapsing protostellar envelopes and disc formation and fragmentation. <i>Monthly Notices of the Royal Astronomical Society</i> , 2018, 473, 4868-4889.	1.6	88
60	On the diversity and statistical properties of protostellar discs. <i>Monthly Notices of the Royal Astronomical Society</i> , 2018, 475, 5618-5658.	1.6	213
61	Occurrence Rates from Direct Imaging Surveys. , 2018, , 1-17.		0
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63	Towards a population synthesis model of self-gravitating disc fragmentation and tidal downsizing II: the effect of fragment–fragment interactions. <i>Monthly Notices of the Royal Astronomical Society</i> , 2018, 474, 5036-5048.	1.6	77
64	From Large-scale to Protostellar Disk Fragmentation into Close Binary Stars. <i>Astrophysical Journal</i> , 2018, 857, 40.	1.6	10
65	Probing Episodic Accretion in Very Low Luminosity Objects. <i>Astrophysical Journal</i> , 2018, 854, 15.	1.6	25
66	Evidence for the start of planet formation in a young circumstellar disk. <i>Nature Astronomy</i> , 2018, 2, 646-651.	4.2	74
67	Formation of Giant Planets. , 2018, , 1-25.		1
68	A Decade of MWC 758 Disk Images: Where Are the Spiral-arm-driving Planets?. <i>Astrophysical Journal Letters</i> , 2018, 857, L9.	3.0	22
69	Transforming Dust to Planets. <i>Space Science Reviews</i> , 2018, 214, 1.	3.7	12
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71	The Envelope Kinematics and a Possible Disk around the Class 0 Protostar within BHR7. <i>Astrophysical Journal</i> , 2018, 856, 164.	1.6	10
72	The route to massive black hole formation via merger-driven direct collapse: a review. <i>Reports on Progress in Physics</i> , 2019, 82, 016901.	8.1	55

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74	Super-Eddington Accretion Disks around Supermassive Black Holes. <i>Astrophysical Journal</i> , 2019, 880, 67.	1.6	128
76	Constraining the initial planetary population in the gravitational instability model. <i>Monthly Notices of the Royal Astronomical Society</i> , 2019, 488, 4873-4889.	1.6	12
77	Heavy Metal Rules. I. Exoplanet Incidence and Metallicity. <i>Geosciences (Switzerland)</i> , 2019, 9, 105.	1.0	51
78	Thermal Infrared Imaging of MWC 758 with the Large Binocular Telescope: Planetary-driven Spiral Arms?. <i>Astrophysical Journal</i> , 2019, 882, 20.	1.6	23
79	The Observability of Vortex-driven Spiral Arms in Protoplanetary Disks: Basic Spiral Properties. <i>Astrophysical Journal Letters</i> , 2019, 883, L39.	3.0	17
80	The Concentration and Growth of Solids in Fragmenting Circumstellar Disks. <i>Astrophysical Journal</i> , 2019, 881, 162.	1.6	13
81	Chronology of Episodic Accretion in Protostars – An ALMA Survey of the CO and H ₂ O Snowlines. <i>Astrophysical Journal</i> , 2019, 884, 149.	1.6	47
82	On the origin of wide-orbit ALMA planets: giant protoplanets disrupted by their cores. <i>Monthly Notices of the Royal Astronomical Society</i> , 2019, 489, 5187-5201.	1.6	9
83	Time-dependent evolution of the protoplanetary discs with magnetic winds. <i>Monthly Notices of the Royal Astronomical Society</i> , 2019, 488, 4623-4637.	1.6	5
84	Angular momentum transport in accretion disks: a hydrodynamical perspective. <i>EAS Publications Series</i> , 2019, 82, 391-413.	0.3	16
85	Forming Pop III binaries in self-gravitating discs: how to keep the orbital angular momentum. <i>Monthly Notices of the Royal Astronomical Society</i> , 2019, 488, 2658-2672.	1.6	25
86	A giant exoplanet orbiting a very-low-mass star challenges planet formation models. <i>Science</i> , 2019, 365, 1441-1445.	6.0	78
87	Gravitoturbulent dynamos in astrophysical discs. <i>Monthly Notices of the Royal Astronomical Society</i> , 2019, 482, 3989-4008.	1.6	19
88	Giant planets and brown dwarfs on wide orbits: a code comparison project. <i>Monthly Notices of the Royal Astronomical Society</i> , 2019, 486, 4398-4413.	1.6	17
89	The Gemini Planet Imager Exoplanet Survey: Giant Planet and Brown Dwarf Demographics from 10 to 100 au. <i>Astronomical Journal</i> , 2019, 158, 13.	1.9	270
90	A dust and gas cavity in the disc around CQ Tau revealed by ALMA. <i>Monthly Notices of the Royal Astronomical Society</i> , 2019, 486, 4638-4654.	1.6	33
91	The Temporal Requirements of Directly Observing Self-gravitating Spiral Waves in Protoplanetary Disks with ALMA. <i>Astrophysical Journal</i> , 2019, 871, 228.	1.6	24

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92	A Fast Poisson Solver of Second-order Accuracy for Isolated Systems in Three-dimensional Cartesian and Cylindrical Coordinates. <i>Astrophysical Journal, Supplement Series</i> , 2019, 241, 24.	3.0	11
93	Diagnosing the Clumpy Protoplanetary Disk of the UXor Type Young Star GM Cephei. <i>Astrophysical Journal</i> , 2019, 871, 183.	1.6	7
94	The Close Binary Fraction of Solar-type Stars Is Strongly Anticorrelated with Metallicity. <i>Astrophysical Journal</i> , 2019, 875, 61.	1.6	140
95	A 3D hydrodynamics study of gravitational instabilities in a young circumbinary disc. <i>Monthly Notices of the Royal Astronomical Society</i> , 2019, 483, 2347-2361.	1.6	4
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97	A Hypothesis for the Rapid Formation of Planets. <i>Astrophysical Journal Letters</i> , 2019, 874, L34.	3.0	22
98	Dusty spirals triggered by shadows in transition discs. <i>Astronomy and Astrophysics</i> , 2019, 622, A43.	2.1	11
99	Flybys in protoplanetary discs: I. Gas and dust dynamics. <i>Monthly Notices of the Royal Astronomical Society</i> , 2019, 483, 4114-4139.	1.6	85
100	Non-linear outcome of gravitational instability in an irradiated protoplanetary disc. <i>Monthly Notices of the Royal Astronomical Society</i> , 2019, 485, 266-285.	1.6	23
101	Super-Earths in the TWÂHya disc. <i>Monthly Notices of the Royal Astronomical Society: Letters</i> , 2019, 484, L130-L135.	1.2	16
102	Structure of a Protobinary System: An Asymmetric Circumbinary Disk and Spiral Arms. <i>Astrophysical Journal</i> , 2019, 871, 36.	1.6	21
103	Precise radial velocities of giant stars. <i>Astronomy and Astrophysics</i> , 2019, 624, A18.	2.1	13
104	On the episodic excursions of massive protostars in the Hertzsprungâ€“Russell diagram. <i>Monthly Notices of the Royal Astronomical Society</i> , 2019, 484, 2482-2498.	1.6	17
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107	Physical Processes in Protoplanetary Disks. <i>Saas-Fee Advanced Course</i> , 2019, , 1-150.	1.1	24
108	Misaligned accretion disc formation via Kozaiâ€“Lidov oscillations. <i>Monthly Notices of the Royal Astronomical Society</i> , 2019, 485, 315-325.	1.6	33
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111	Gravitoviscous protoplanetary disks with a dust component. <i>Astronomy and Astrophysics</i> , 2019, 631, A1.	2.1	16
112	Self-gravitating disks in binary systems: an SPH approach. <i>Astronomy and Astrophysics</i> , 2019, 628, A82.	2.1	2
113	ALMA study of the HD 100453 AB system and the tidal interaction of the companion with the disk. <i>Astronomy and Astrophysics</i> , 2019, 624, A33.	2.1	31
114	Greening of the brown-dwarf desert. <i>Astronomy and Astrophysics</i> , 2019, 628, A64.	2.1	19
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121	Peter Pan discs: finding Neverland’s parameters. <i>Monthly Notices of the Royal Astronomical Society: Letters</i> , 2020, 496, L111-L115.	1.2	11
122	The close binary fraction as a function of stellar parameters in APOGEE: a strong anticorrelation with α abundances. <i>Monthly Notices of the Royal Astronomical Society</i> , 2020, 499, 1607-1626.	1.6	34
123	Massive discs around low-mass stars. <i>Monthly Notices of the Royal Astronomical Society</i> , 2020, 494, 4130-4148.	1.6	26
124	The Physics of Star Cluster Formation and Evolution. <i>Space Science Reviews</i> , 2020, 216, 1.	3.7	65
125	Highlights of exoplanetary science from Spitzer. <i>Nature Astronomy</i> , 2020, 4, 453-466.	4.2	16
126	TOI-503: The First Known Brown-dwarf Am-star Binary from the TESS Mission*. <i>Astronomical Journal</i> , 2020, 159, 151.	1.9	29
127	The Origin of the Stellar Mass Distribution and Multiplicity. <i>Space Science Reviews</i> , 2020, 216, 1.	3.7	29

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131	Obliquity Constraints on an Extrasolar Planetary-mass Companion. <i>Astronomical Journal</i> , 2020, 159, 181.	1.9	37
132	Structure of the self-gravitating accretion discs in the presence of outflow. <i>Monthly Notices of the Royal Astronomical Society</i> , 2020, 496, 434-441.	1.6	0
133	Setting the Stage: Planet Formation and Volatile Delivery. <i>Space Science Reviews</i> , 2020, 216, 1.	3.7	24
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136	The VLA/ALMA Nascent Disk and Multiplicity (VANDAM) Survey of Orion Protostars. II. A Statistical Characterization of Class 0 and Class I Protostellar Disks. <i>Astrophysical Journal</i> , 2020, 890, 130.	1.6	170
137	Do the TRAPPIST-1 Planets Have Hydrogen-rich Atmospheres?. <i>Astrophysical Journal</i> , 2020, 889, 77.	1.6	24
138	Observations of Planetary Systems. , 2020, , 1-48.		0
139	Terrestrial Planet Formation. , 2020, , 181-219.		0
141	Protoplanetary Disk Structure. , 2020, , 49-85.		0
142	Protoplanetary Disk Evolution. , 2020, , 86-140.		0
143	Planetesimal Formation. , 2020, , 141-180.		0
144	Giant Planet Formation. , 2020, , 220-246.		0
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150	Shadowing and multiple rings in the protoplanetary disk of HD 139614. <i>Astronomy and Astrophysics</i> , 2020, 635, A121.	2.1	34

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152	The paradox of youth for ALMA planet candidates. <i>Monthly Notices of the Royal Astronomical Society</i> , 2020, 493, 2910-2925.	1.6	5
153	Constraining planet formation around 6â€“8 M _J stars. <i>Monthly Notices of the Royal Astronomical Society</i> , 2020, 493, 765-775.	1.6	12
154	Global Simulations of Self-gravitating Magnetized Protoplanetary Disks. <i>Astrophysical Journal</i> , 2020, 891, 154.	1.6	24
155	Kinematic Analysis of a Protostellar Multiple System: Measuring the Protostar Masses and Assessing Gravitational Instability in the Disks of L1448 IRS3B and L1448 IRS3A. <i>Astrophysical Journal Letters</i> , 2021, 907, L10.	3.0	13
156	Spiral Arm Pattern Motion in the SAO 206462 Protoplanetary Disk. <i>Astrophysical Journal Letters</i> , 2021, 906, L9.	3.0	16
157	The influence of infall on the properties of protoplanetary discs. <i>Astronomy and Astrophysics</i> , 2021, 645, A43.	2.1	18
158	Comparison of Gaia and Hipparcos parallaxes of close visual binary stars and the impact on determinations of their masses. <i>Publications of the Astronomical Society of Australia</i> , 2021, 38, .	1.3	12
159	Kozaiâ€“Lidov oscillations triggered by a tilt instability of detached circumplanetary discs. <i>Monthly Notices of the Royal Astronomical Society</i> , 2021, 502, 4426-4434.	1.6	3
160	Searching for wide-orbit gravitational instability protoplanets with ALMA in the dust continuum. <i>Monthly Notices of the Royal Astronomical Society</i> , 2021, 502, 953-968.	1.6	4
161	History of the solar nebula from meteorite paleomagnetism. <i>Science Advances</i> , 2021, 7, .	4.7	39
162	Formation and evolution of protostellar accretion discs â€“ I. Angular-momentum budget, gravitational self-regulation, and numerical convergence. <i>Monthly Notices of the Royal Astronomical Society</i> , 2021, 502, 4911-4929.	1.6	21
163	A faint companion around CrA-9: protoplanet or obscured binary?. <i>Monthly Notices of the Royal Astronomical Society</i> , 2021, 502, 6117-6139.	1.6	11
164	A two-step gravitational cascade for the fragmentation of self-gravitating discs. <i>Monthly Notices of the Royal Astronomical Society</i> , 2021, 503, 4192-4207.	1.6	10
165	Ring Formation in Protoplanetary Disks Driven by an Eccentric Instability. <i>Astrophysical Journal</i> , 2021, 910, 79.	1.6	3
166	Stellar Evolution in AGN Disks. <i>Astrophysical Journal</i> , 2021, 910, 94.	1.6	66
167	Eruptive Behavior of Magnetically Layered Protoplanetary Disks in Low-metallicity Environments. <i>Astrophysical Journal</i> , 2021, 909, 31.	1.6	4
168	The asymmetric inner disk of the Herbig Ae star HD 163296 in the eyes of VLT/MATISSE: evidence for a vortex?. <i>Astronomy and Astrophysics</i> , 2021, 647, A56.	2.1	22

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171	A highly non-Keplerian protoplanetary disc. <i>Astronomy and Astrophysics</i> , 2021, 648, A19.	2.1	23
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