Fumitaka Nakamura

List of Publications by Year
in descending order

120	4,307	87888 38	128289 60
papers	citations	h-index	g-index

124	124	124	2073
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	OUTFLOW FEEDBACK REGULATED MASSIVE STAR FORMATION IN PARSEC-SCALE CLUSTER-FORMING CLUMPS. Astrophysical Journal, 2010, 709, 27-41.	4.5	307
2	Protostellar Turbulence Driven by Collimated Outflows. Astrophysical Journal, 2007, 662, 395-412.	4.5	218
3	Cluster Formation in Protostellar Outflow-driven Turbulence. Astrophysical Journal, 2006, 640, L187-L190.	4.5	169
4	Magnetically Regulated Star Formation in Three Dimensions: The Case of the Taurus Molecular Cloud Complex. Astrophysical Journal, 2008, 687, 354-375.	4.5	160
5	On the Hydrodynamic Interaction of Shock Waves with Interstellar Clouds. II. The Effect of Smooth Cloud Boundaries on Cloud Destruction and Cloud Turbulence. Astrophysical Journal, Supplement Series, 2006, 164, 477-505.	7.7	124
6	NEAR-INFRARED-IMAGING POLARIMETRY TOWARD SERPENS SOUTH: REVEALING THE IMPORTANCE OF THE MAGNETIC FIELD. Astrophysical Journal, 2011, 734, 63.	4.5	104
7	The ALMA Survey of 70 Î¼m Dark High-mass Clumps in Early Stages (ASHES). I. Pilot Survey: Clump Fragmentation. Astrophysical Journal, 2019, 886, 102.	4.5	104
8	BALLOON-BORNE SUBMILLIMETER POLARIMETRY OF THE VELA C MOLECULAR CLOUD: SYSTEMATIC DEPENDENCE OF POLARIZATION FRACTION ON COLUMN DENSITY AND LOCAL POLARIZATION-ANGLE DISPERSION. Astrophysical Journal, 2016, 824, 134.	4.5	99
9	Protostellar disc formation enabled by removal of small dust grains. Monthly Notices of the Royal Astronomical Society, 2016, 460, 2050-2076.	4.4	97
10	First Results from BISTRO: A SCUBA-2 Polarimeter Survey of the Gould Belt. Astrophysical Journal, 2017, 842, 66.	4.5	79
11	The Molecular Cloud Lifecycle. Space Science Reviews, 2020, 216, 50.	8.1	77
12	Magnetically Regulated Star Formation in Turbulent Clouds. Astrophysical Journal, 2004, 609, L83-L86.	4.5	74
13	Development of the new multi-beam 100 GHz band SIS receiver FOREST for the Nobeyama 45-m Telescope. Proceedings of SPIE, 2016, , .	0.8	74
14	High abundance ratio of¹³CO to C¹⁸O toward photon-dominated regions in the Orion-A giant molecular cloud. Astronomy and Astrophysics, 2014, 564, A68.	5.1	66
15	Fragmentation of filamentary molecular clouds with longitudinal magnetic fields: Formation of disks and their collapse. Astrophysical Journal, 1995, 444, 770.	4.5	65
16	The CARMA-NRO Orion Survey. Astrophysical Journal, Supplement Series, 2018, 236, 25.	7.7	64
17	EVIDENCE FOR CLOUD-CLOUD COLLISION AND PARSEC-SCALE STELLAR FEEDBACK WITHIN THE L1641-N REGION. Astrophysical Journal, 2012, 746, 25.	4.5	62
18	CLUSTER FORMATION TRIGGERED BY FILAMENT COLLISIONS IN SERPENS SOUTH. Astrophysical Journal Letters, 2014, 791, L23.	8.3	61

#	Article	IF	Citations
19	DENSE CORE PROPERTIES IN THE INFRARED DARK CLOUD G14.225-0.506 REVEALED BY ALMA. Astrophysical Journal, 2016, 833, 209.	4.5	58
20	GMC Collisions as Triggers of Star Formation. II. 3D Turbulent, Magnetized Simulations. Astrophysical Journal, 2017, 835, 137.	4.5	57
21	Filamentary Accretion Flows in the Infrared Dark Cloud G14.225â€“0.506 Revealed by ALMA. Astrophysical Journal, 2019, 875, 24.	4.5	56
22	Infall Signatures in a Prestellar Core Embedded in the High-mass 70 Î¼m Dark IRDC G331.372-00.116. Astrophysical Journal, 2018, 861, 14.	4.5	55
23	GMC Collisions as Triggers of Star Formation. III. Density and Magnetically Regulated Star Formation. Astrophysical Journal, 2017, 841, 88.	4.5	53
24	Magnetized filamentary gas flows feeding the young embedded cluster in Serpens South. Nature Astronomy, 2020, 4, 1195-1201.	10.1	53
25	Magnetic Fields toward Ophiuchus-B Derived from SCUBA-2 Polarization Measurements. Astrophysical Journal, 2018, 861, 65.	4.5	51
26	Gravitational Collapse of Spherical Interstellar Clouds. Publication of the Astronomical Society of Japan, 1999, 51, 637-651.	2.5	50
27	MOLECULAR OUTFLOWS FROM THE PROTOCLUSTER SERPENS SOUTH. Astrophysical Journal, 2011, 737, 56.	4.5	49
28	Relative Alignment between the Magnetic Field and Molecular Gas Structure in the Vela C Giant Molecular Cloud Using Low- and High-density Tracers. Astrophysical Journal, 2019, 878, 110.	4.5	49
29	A First Look at BISTRO Observations of the Ï•Oph-A core. Astrophysical Journal, 2018, 859, 4.	4.5	46
30	THE MOLECULAR OUTFLOWS IN THE Ï•OPHIUCHI MAIN CLOUD: IMPLICATIONS FOR TURBULENCE GENERATION. Astrophysical Journal, 2011, 726, 46.	4.5	44
31	LOWERING THE CHARACTERISTIC MASS OF CLUSTER STARS BY MAGNETIC FIELDS AND OUTFLOW FEEDBACK. Astrophysical Journal Letters, 2010, 720, L26-L30.	8.3	43
32	PHYSICAL PROPERTIES OF DENSE CORES IN THE Ï•OPHIUCHI MAIN CLOUD AND A SIGNIFICANT ROLE OF EXTERNAL PRESSURES IN CLUSTERED STAR FORMATION. Astrophysical Journal, 2010, 714, 680-698.	4.5	43
33	GMC Collisions as Triggers of Star Formation. V. Observational Signatures. Astrophysical Journal, 2017, 850, 23.	4.5	43
34	JCMT BISTRO Survey: Magnetic Fields within the Hub-filament Structure in IC 5146. Astrophysical Journal, 2019, 876, 42.	4.5	42
35	Dust polarized emission observations of NGC 6334. Astronomy and Astrophysics, 2021, 647, A78.	5.1	41
36	Gravity-driven Magnetic Field at â^¼1000 au Scales in High-mass Star Formation. Astrophysical Journal Letters, 2021, 915, L10.	8.3	41

#	Article	IF	Citations
37	CONFRONTING THE OUTFLOW-REGULATED CLUSTER FORMATION MODEL WITH OBSERVATIONS. Astrophysical Journal, 2014, 783, 115.	4.5	40
38	The JCMT BISTRO Survey: Magnetic Fields Associated with a Network of Filaments in NGC 1333. Astrophysical Journal, 2020, 899, 28.	4.5	39
39	The JCMT BISTRO Survey: The Magnetic Field in the Starless Core <i>Ï‹/i> Ophiuchus C. Astrophysical Journal, 2019, 877, 43.	4.5	38
40	From Diffuse Gas to Dense Molecular Cloud Cores. Space Science Reviews, 2020, 216, 1.	8.1	38
41	CLUSTERED STAR FORMATION IN MAGNETIC CLOUDS: PROPERTIES OF DENSE CORES FORMED IN OUTFLOW-DRIVEN TURBULENCE. Astrophysical Journal, 2011, 740, 36.	4.5	37
42	THE DEUTERIUM FRACTION IN MASSIVE STARLESS CORES AND DYNAMICAL IMPLICATIONS. Astrophysical Journal, 2016, 821, 94.	4.5	37
43	The JCMT BISTRO Survey: The Magnetic Field of the Barnard 1 Star-forming Region. Astrophysical Journal, 2019, 877, 88.	4.5	37
44	The ALMA Survey of 70 Î¼m Dark High-mass Clumps in Early Stages (ASHES). II. Molecular Outflows in the Extreme Early Stages of Protocluster Formation. Astrophysical Journal, 2020, 903, 119.	4.5	37
45	NEAR-INFRARED IMAGING POLARIMETRY OF THE SERPENS CLOUD CORE: MAGNETIC FIELD STRUCTURE, OUTFLOWS, AND INFLOWS IN A CLUSTER FORMING CLUMP. Astrophysical Journal, 2010, 716, 299-314.	4.5	35
46	THE DYNAMICAL STATE OF THE SERPENS SOUTH FILAMENTARY INFRARED DARK CLOUD. Astrophysical Journal, 2013, 778, 34.	4.5	33
47	CATALOG OF DENSE CORES IN THE ORION A GIANT MOLECULAR CLOUD. Astrophysical Journal, Supplement Series, 2015, 217, 7.	7.7	33
48	MOLECULAR CLUMPS AND INFRARED CLUSTERS IN THE S247, S252, AND BFS52 REGIONS. Astrophysical Journal, 2013, 768, 72.	4.5	31
49	IMPLICATION OF FORMATION MECHANISMS OF HC₅N IN TMC-1 AS STUDIED BY ¹³C ISOTOPIC FRACTIONATION. Astrophysical Journal, 2016, 817, 147.	4.5	31
50	THE ROTATING OUTFLOW, ENVELOPE, AND DISK OF THE CLASS-0/I PROTOSTAR [BHB2007]#11 IN THE PIPE NEBULA. Astrophysical Journal, 2013, 771, 128.	4.5	30
51	First Observation of the Submillimeter Polarization Spectrum in a Translucent Molecular Cloud. Astrophysical Journal, 2018, 857, 10.	4.5	29
52	SUBMILLIMETER POLARIZATION SPECTRUM IN THE VELA C MOLECULAR CLOUD. Astrophysical Journal, 2016, 824, 84.	4.5	27
53	Cluster formation in the Wâ€‰40 and Serpens South complex triggered by the expanding Hâ€‰<scp>ii</scp> region. Publication of the Astronomical Society of Japan, 2019, 71, .	2.5	27
54	Nobeyama 45â€‰m mapping observations toward the nearby molecular clouds Orionâ€‰A, Aquila Rift, and M17: Project overview. Publication of the Astronomical Society of Japan, 2019, 71, .	2.5	26

#	Article	IF	Citations
55	Cloudâ€“cloud collision in the DR 21 cloud as a trigger of massive star formation. Publication of the Astronomical Society of Japan, 2019, 71, .	2.5	26
56	The CARMAâ€“NRO Orion Survey: Protostellar Outflows, Energetics, and Filamentary Alignment. Astrophysical Journal, 2020, 896, 11.	4.5	24
57	Discovery of CCS Velocity-coherent Substructures in the Taurus Molecular Cloud 1. Astrophysical Journal, 2019, 879, 88.	4.5	24
58	Nobeyama 45â€‰m mapping observations toward Orion A. II. Classification of cloud structures and variation of the 13CO/C18O abundance ratio due to far-UV radiation. Publication of the Astronomical Society of Japan, 2019, 71, .	2.5	23
59	The ALMA Survey of 70 Î¼m Dark High-mass Clumps in Early Stages (ASHES). IV. Star Formation Signatures in G023.477. Astrophysical Journal, 2021, 923, 147.	4.5	23
60	SPECTRAL-LINE SURVEY AT MILLIMETER AND SUBMILLIMETER WAVELENGTHS TOWARD AN OUTFLOW-SHOCKED REGION, OMC 2-FIR 4. Astrophysical Journal, Supplement Series, 2015, 221, 31.	7.7	22
61	Spectral Tomography for the Line-of-sight Structures of the Taurus Molecular Cloud 1. Astrophysical Journal, 2018, 864, 82.	4.5	22
62	SUBSTELLAR-MASS CONDENSATIONS IN PRESTELLAR CORES. Astrophysical Journal Letters, 2012, 758, L25.	8.3	21
63	The JCMT BISTRO Survey: Revealing the Diverse Magnetic Field Morphologies in Taurus Dense Cores with Sensitive Submillimeter Polarimetry. Astrophysical Journal Letters, 2021, 912, L27.	8.3	21
64	ALMA-IMF. Astronomy and Astrophysics, 2022, 662, A8.	5.1	21
65	The JCMT BISTRO Survey: The Distribution of Magnetic Field Strengths toward the OMC-1 Region. Astrophysical Journal, 2021, 913, 85.	4.5	19
66	THE INTRINSIC ABUNDANCE RATIO AND X-FACTOR OF CO ISOTOPOLOGUES IN L 1551 SHIELDED FROM FUV PHOTODISSOCIATION. Astrophysical Journal, 2016, 826, 193.	4.5	18
67	A Statistical Study of Massive Cluster-forming Clumps. Astrophysical Journal, 2018, 855, 45.	4.5	18
68	Chemical Diversity in Three Massive Young Stellar Objects Associated with 6.7 GHz CH₃OH Masers. Astrophysical Journal, 2018, 866, 150.	4.5	18
69	Expanding CO Shells in the Orion A Molecular Cloud. Astrophysical Journal, 2018, 862, 121.	4.5	18
70	Magnetic field structure in Serpens South. Publication of the Astronomical Society of Japan, 2019, 71, .	2.5	18
71	Giant molecular cloud collisions as triggers of star formation. VI. Collision-induced turbulence. Publication of the Astronomical Society of Japan, 2018, 70, .	2.5	17
72	Interaction between the Northern Coalsack in the Cygnus OBÂ7 cloud complex and multiple supernova remnants including HBÂ21. Publication of the Astronomical Society of Japan, 2019, 71, .	2.5	17

#	Article	IF	Citations
73	Digging into the Interior of Hot Cores with ALMA (DIHCA). I. Dissecting the High-mass Star-forming Core G335.579-0.292 MM1. Astrophysical Journal, 2021, 909, 199.	4.5	17
74	Wide-field ¹²CO ( ) and ¹³CO ( ) Observations toward the Aquila Rift and Serpens Molecular Cloud Complexes. I. Molecular Clouds and Their Physical Properties. Astrophysical Journal, 2017, 837, 154.	4.5	16
75	Comparing Submillimeter Polarized Emission with Near-infrared Polarization of Background Stars for the Vela C Molecular Cloud. Astrophysical Journal, 2017, 837, 161.	4.5	16
76	Observations of Magnetic Fields Surrounding LkHÎ± 101 Taken by the BISTRO Survey with JCMT-POL-2. Astrophysical Journal, 2021, 908, 10.	4.5	16
77	B-fields in Star-forming Region Observations (BISTRO): Magnetic Fields in the Filamentary Structures of Serpens Main. Astrophysical Journal, 2022, 926, 163.	4.5	16
78	Z45: A new 45-GHz band dual-polarization HEMT receiver for the NRO 45-m radio telescope. Publication of the Astronomical Society of Japan, 2015, 67, .	2.5	15
79	The Core Mass Function in the Orion Nebula Cluster Region: What Determines the Final Stellar Masses?. Astrophysical Journal Letters, 2021, 910, L6.	8.3	15
80	Misaligned Twin Molecular Outflows from the Class 0 Protostellar Binary System VLA 1623A Unveiled by ALMA. Astrophysical Journal, 2021, 912, 34.	4.5	15
81	The ALMA Survey of 70 Î¼m Dark High-mass Clumps in Early Stages (ASHES). III. A Young Molecular Outflow Driven by a Decelerating Jet. Astrophysical Journal, 2021, 913, 131.	4.5	15
82	Extremely Dense Cores Associated with Chandra Sources in Ophiuchus A: Forming Brown Dwarfs Unveiled?. Astrophysical Journal, 2018, 866, 141.	4.5	14
83	Interferometric Observations of Cyanopolyynes toward the G28.28â€“0.36 High-mass Star-forming Region. Astrophysical Journal, 2018, 866, 32.	4.5	14
84	Large-scale Molecular Gas Distribution in the M17 Cloud Complex: Dense Gas Conditions of Massive Star Formation?. Astrophysical Journal, 2020, 891, 66.	4.5	14
85	GMC Collisions as Triggers of Star Formation. VII. The Effect of Magnetic Field Strength on Star Formation. Astrophysical Journal, 2020, 891, 168.	4.5	14
86	MAGNETIC FIELD OF THE VELA C MOLECULAR CLOUD. Astrophysical Journal Letters, 2016, 830, L23.	8.3	14
87	DENSE CLUMPS AND CANDIDATES FOR MOLECULAR OUTFLOWS IN W40. Astrophysical Journal, 2015, 806, 201.	4.5	13
88	Near-infrared imaging polarimetry toward Mâ€‰17 SWex. Publication of the Astronomical Society of Japan, 2019, 71, .	2.5	13
89	Magnetic Fields in Massive Star-forming Regions (MagMaR). I. Linear Polarized Imaging of the Ultracompact H ii Region G5.89â€“0.39. Astrophysical Journal, 2021, 913, 29.	4.5	13
90	The JCMT BISTRO Survey: An 850/450 Î¼m Polarization Study of NGC 2071IR in Orion B. Astrophysical Journal, 2021, 918, 85.	4.5	13

#	Article	IF	Citations
91	Observations of Cyanopolyynes toward Four High-mass Star-forming Regions Containing Hot Cores. Astrophysical Journal, 2017, 844, 68.	4.5	12
92	Submillimeter Polarization Spectrum of the Carina Nebula. Astrophysical Journal, 2019, 872, 197.	4.5	12
93	The ALMA Survey of 70 Î¼m Dark High-mass Clumps in Early Stages (ASHES). V. Deuterated Molecules in the 70 Î¼m Dark IRDC G14.492-00.139. Astrophysical Journal, 2022, 925, 144.	4.5	12
94	Nobeyama 45 m mapping observations toward Orion A. I. Molecular outflows. Publication of the Astronomical Society of Japan, 2019, 71, .	2.5	11
95	Star cluster formation in Orion A. Publication of the Astronomical Society of Japan, 2021, 73, S239-S255.	2.5	11
96	ALMA-IMF. Astronomy and Astrophysics, 2022, 662, A9.	5.1	11
97	Software Polarization Spectrometer "PolariS". Journal of Astronomical Instrumentation, 2014, 03, .	1.5	10
98	DISCOVERY OF INFALLING MOTION WITH ROTATION OF THE CLUSTER-FORMING CLUMP S235AB AND ITS IMPLICATION TO THE CLUMP STRUCTURES. Astrophysical Journal, 2016, 832, 205.	4.5	10
99	Magnetic Fields in Massive Star-forming Regions (MagMaR). II. Tomography through Dust and Molecular Line Polarization in NGC 6334I(N). Astrophysical Journal, 2021, 923, 204.	4.5	10
100	Nobeyama 45â€‰m mapping observations toward Orion A. III. Multi-line observations toward an outflow-shocked region, Orion Molecular Cloud 2 FIR 4. Publication of the Astronomical Society of Japan, 2019, 71, .	2.5	9
101	First clear detection of the CCS Zeeman splitting toward the pre-stellar core, Taurus Molecular CloudÂ1. Publication of the Astronomical Society of Japan, 2019, 71, .	2.5	8
102	Investigation of chemical differentiation among the NGC 2264 cluster-forming clumps. Monthly Notices of the Royal Astronomical Society, 2020, 493, 2395-2409.	4.4	7
103	ALMA Observations of the Ï•Ophiuchus B2 Region. I. Molecular Outflows and Their Driving Sources. Astrophysical Journal, 2019, 871, 86.	4.5	6
104	The CARMA-NRO Orion Survey: Filament Formation via Collision-induced Magnetic Reconnectionâ€”the Stick in Orion A. Astrophysical Journal, 2021, 906, 80.	4.5	6
105	The APEX Large CO Heterodyne Orion Legacy Survey (ALCOHOLS). Astronomy and Astrophysics, 2022, 658, A178.	5.1	6
106	Cloud structures in MÂ17 SWex : Possible cloudâ€“cloud collision. Publication of the Astronomical Society of Japan, 2021, 73, S300-S320.	2.5	5
107	Carbon Chain Chemistry in Hot-core Regions around Three Massive Young Stellar Objects Associated with 6.7 GHz Methanol Masers. Astrophysical Journal, 2021, 908, 100.	4.5	5
108	What Determines the Typical Mass of Dense Coresin Quiescent, Nonmagnetized Molecular Clouds?. Astrophysical Journal, 1998, 507, L165-L169.	4.5	5

#	Article	IF	Citations
109	Star Formation Triggered by Shocks. Astrophysical Journal, 2021, 921, 150.	4.5	5
110	A survey of molecular cores in Mâ€‰17 SWex. Publication of the Astronomical Society of Japan, 2019, 71, .	2.5	4
111	Magnetic Stability of Massive Star-forming Clumps in RCW 106. Astrophysical Journal Letters, 2019, 875, L16.	8.3	4
112	Chemical Compositions in the Vicinity of Protostars in Ophiuchus. Astrophysical Journal, 2021, 922, 152.	4.5	4
113	ALMA Observations of Layered Structures due to CO Selective Dissociation in the Ï•Ophiuchi A Plane-parallel PDR. Astrophysical Journal, 2019, 875, 62.	4.5	3
114	The C18O core mass function toward Orion A: Single-dish observations. Publication of the Astronomical Society of Japan, 2021, 73, 487-503.	2.5	3
115	Vibrationally Excited Lines of HC₃N Associated with the Molecular Disk around the G24.78+0.08 A1 Hypercompact H ii Region. Astrophysical Journal, 2022, 931, 99.	4.5	3
116	The CARMA-NRO Orion Surveyâ€”Data Release. Research Notes of the AAS, 2021, 5, 55.	0.7	2
117	High-resolution CARMA Observation of Molecular Gas in the North America and Pelican Nebulae. Astronomical Journal, 2021, 161, 229.	4.7	2
118	ALMA View of the Ï•Ophiuchi A PDR with a 360 au Beam: The [C i] Emission Originates from the Plane-parallel PDR and Extended Gas. Astrophysical Journal Letters, 2021, 914, L9.	8.3	2
119	A Detailed Analysis of the Cloud Structure and Dynamics in Aquila Rift. Astrophysical Journal, 2020, 895, 137.	4.5	2
120	Cluster Formation in GGD 12-15: Infall Motion with Rotation of the Natal Clump. Astrophysical Journal, 2022, 928, 76.	4.5	1