Hideko Nomura

List of Publications by Year
in descending order

79 papers	3,624 citations	117625 34 h-index	138484 58 g-index
80 all docs	80 docs citations	80 times ranked	1929 citing authors

#	Article	IF	Citations
1	Detection of HC¹⁸O⁺ in a Protoplanetary Disk: Exploring Oxygen Isotope Fractionation of CO. Astrophysical Journal, 2022, 926, 148.	4.5	5
2	ALMA High-resolution Multiband Analysis for the Protoplanetary Disk around TW Hya. Astrophysical Journal, 2022, 928, 49.	4.5	5
3	Misaligned Rotations of the Envelope, Outflow, and Disks in the Multiple Protostellar System of VLA 1623â€“2417: FAUST. III. Astrophysical Journal, 2022, 927, 54.	4.5	7
4	Superrotation of Titanâ€™s Stratosphere Driven by the Radiative Heating of the Haze Layer. Astrophysical Journal, 2022, 928, 149.	4.5	0
5	Unveiling the outer dust disc of TW Hya with deep ALMA observations. Monthly Notices of the Royal Astronomical Society: Letters, 2022, 515, L23-L28.	3.0	6
6	A New Method for Direct Measurement of Isotopologue Ratios in Protoplanetary Disks: A Case Study of the ¹²CO/¹³CO Ratio in the TW Hya Disk. Astrophysical Journal, 2022, 932, 126.	4.5	6
7	Modeling Nitrogen Fractionation in the Protoplanetary Disk around TW Hya: Model Constraints on Grain Population and Carbon-to-oxygen Elemental Abundance Ratio. Astrophysical Journal, 2021, 908, 82.	4.5	7
8	ALMA Observation of the Protoplanetary Disk around WW Cha: Faint Double-peaked Ring and Asymmetric Structure. Astrophysical Journal, 2021, 909, 212.	4.5	7
9	FAUST. II. Discovery of a Secondary Outflow in IRAS 15398â^’3359: Variability in Outflow Direction during the Earliest Stage of Star Formation?. Astrophysical Journal, 2021, 910, 11.	4.5	19
10	An inherited complex organic molecule reservoir in a warm planet-hosting disk. Nature Astronomy, 2021, 5, 684-690.	10.1	40
11	X-ray-induced chemistry of water and related molecules in low-mass protostellar envelopes. Astronomy and Astrophysics, 2021, 650, A180.	5.1	18
12	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
13	High Spatial Resolution Observations of Molecular Lines toward the Protoplanetary Disk around TW Hya with ALMA. Astrophysical Journal, 2021, 914, 113.	4.5	14
14	Photoevaporation of Grain-depleted Protoplanetary Disks around Intermediate-mass Stars: Investigating the Possibility of Gas-rich Debris Disks as Protoplanetary Remnants. Astrophysical Journal, 2021, 915, 90.	4.5	14
15	Possibility of concentration of nonvolatile species near the surface of comet 67P/Churyumov-Gerasimenko. Astronomy and Astrophysics, 2021, 645, A134.	5.1	2
16	Molecules with ALMA at Planet-forming Scales (MAPS). VII. Substellar O/H and C/H and Superstellar C/O in Planet-feeding Gas. Astrophysical Journal, Supplement Series, 2021, 257, 7.	7.7	40
17	Molecules with ALMA at Planet-forming Scales (MAPS). X. Studying Deuteration at High Angular Resolution toward Protoplanetary Disks. Astrophysical Journal, Supplement Series, 2021, 257, 10.	7.7	15
18	Molecules with ALMA at Planet-forming Scales (MAPS). IX. Distribution and Properties of the Large Organic Molecules HC₃N, CH₃CN, and c-C₃H₂. Astrophysical Journal, Supplement Series, 2021, 257, 9.	7.7	30

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19	Molecules with ALMA at Planet-forming Scales (MAPS). XIX. Spiral Arms, a Tail, and Diffuse Structures Traced by CO around the GM Aur Disk. Astrophysical Journal, Supplement Series, 2021, 257, 19.	7.7	33
20	Molecules with ALMA at Planet-forming Scales (MAPS). IV. Emission Surfaces and Vertical Distribution of Molecules. Astrophysical Journal, Supplement Series, 2021, 257, 4.	7.7	58
21	Molecules with ALMA at Planet-forming Scales (MAPS). XII. Inferring the C/O and S/H Ratios in Protoplanetary Disks with Sulfur Molecules. Astrophysical Journal, Supplement Series, 2021, 257, 12.	7.7	30
22	Molecules with ALMA at Planet-forming Scales (MAPS). XVII. Determining the 2D Thermal Structure of the HD 163296 Disk. Astrophysical Journal, Supplement Series, 2021, 257, 17.	7.7	19
23	Molecules with ALMA at Planet-forming Scales (MAPS). I. Program Overview and Highlights. Astrophysical Journal, Supplement Series, 2021, 257, 1.	7.7	117
24	Molecules with ALMA at Planet-forming Scales (MAPS). XVI. Characterizing the Impact of the Molecular Wind on the Evolution of the HD 163296 System. Astrophysical Journal, Supplement Series, 2021, 257, 16.	7.7	20
25	Molecules with ALMA at Planet-forming Scales (MAPS). V. CO Gas Distributions. Astrophysical Journal, Supplement Series, 2021, 257, 5.	7.7	87
26	Molecules with ALMA at Planet-forming Scales (MAPS). III. Characteristics of Radial Chemical Substructures. Astrophysical Journal, Supplement Series, 2021, 257, 3.	7.7	57
27	Molecules with ALMA at Planet-forming Scales (MAPS). XV. Tracing Protoplanetary Disk Structure within 20 au. Astrophysical Journal, Supplement Series, 2021, 257, 15.	7.7	21
28	Molecules with ALMA at Planet-forming Scales (MAPS). XIII. HCO⁺ and Disk Ionization Structure. Astrophysical Journal, Supplement Series, 2021, 257, 13.	7.7	24
29	Molecules with ALMA at Planet-forming Scales (MAPS). II. CLEAN Strategies for Synthesizing Images of Molecular Line Emission in Protoplanetary Disks. Astrophysical Journal, Supplement Series, 2021, 257, 2.	7.7	58
30	The formation of planetary systems with SPICA. Publications of the Astronomical Society of Australia, 2021, 38, .	3.4	3
31	Molecules with ALMA at Planet-forming Scales (MAPS). XI. CN and HCN as Tracers of Photochemistry in Disks. Astrophysical Journal, Supplement Series, 2021, 257, 11.	7.7	25
32	ALMA Super-resolution Imaging of T Tau: r = 12 au Gap in the Compact Dust Disk around T Tau N. Astrophysical Journal, 2021, 923, 121.	4.5	6
33	The composition of hot Jupiter atmospheres assembled within chemically evolved protoplanetary discs. Monthly Notices of the Royal Astronomical Society, 2020, 499, 2229-2244.	4.4	27
34	Model of a Gap Formed by a Planet with Fast Inward Migration. Astrophysical Journal, 2020, 892, 83.	4.5	7
35	The Detection of Dust Gap-ring Structure in the Outer Region of the CR Cha Protoplanetary Disk. Astrophysical Journal, 2020, 888, 72.	4.5	9
36	Early Evolution of Disk, Outflow, and Magnetic Field of Young Stellar Objects: Impact of Dust Model. Astrophysical Journal, 2020, 896, 158.	4.5	22

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37	GW Ori: Interactions between a Triple-star System and Its Circumtriple Disk in Action. Astrophysical Journal Letters, 2020, 895, L18.	8.3	32
38	Physical Conditions of Gas Components in Debris Disks of 49 Ceti and HD 21997. Astrophysical Journal, 2020, 905, 122.	4.5	4
39	The First Detection of ¹³C¹⁷O in a Protoplanetary Disk: A Robust Tracer of Disk Gas Mass. Astrophysical Journal Letters, 2019, 882, L31.	8.3	54
40	Discovery of An au-scale Excess in Millimeter Emission from the Protoplanetary Disk around TW Hya. Astrophysical Journal Letters, 2019, 878, L8.	8.3	37
41	The Synthetic ALMA Multiband Analysis of the Dust Properties of the TW Hya Protoplanetary Disk. Astrophysical Journal, 2019, 872, 179.	4.5	6
42	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
43	Dust Continuum Emission and the Upper Limit Fluxes of Submillimeter Water Lines of the Protoplanetary Disk around HD 163296 Observed by ALMA. Astrophysical Journal, 2019, 875, 96.	4.5	28
44	Shock-generating Planetesimals Perturbed by a Giant Planet in a Gas Disk. Astrophysical Journal, 2019, 871, 110.	4.5	13
45	The Effect of Carbon Grain Destruction on the Chemical Structure of Protoplanetary Disks. Astrophysical Journal, 2019, 870, 129.	4.5	19
46	Radiation Hydrodynamics Simulations of Photoevaporation of Protoplanetary Disks by Ultraviolet Radiation: Metallicity Dependence. Astrophysical Journal, 2018, 857, 57.	4.5	51
47	Candidate Water Vapor Lines to Locate the H₂O Snowline through High-dispersion Spectroscopic Observations. III. Submillimeter H₂ ¹⁶O and H₂ ¹⁸O Lines. Astrophysical Journal, 2018, 855, 62.	4.5	18
48	Radiation Hydrodynamics Simulations of Photoevaporation of Protoplanetary Disks. II. Metallicity Dependence of UV and X-Ray Photoevaporation. Astrophysical Journal, 2018, 865, 75.	4.5	46
49	Chemistry in carbon-rich protoplanetary disks: Effect of carbon grain destruction. Proceedings of the International Astronomical Union, 2018, 14, 289-290.	0.0	0
50	ALMA observations of sulfur-bearing molecules in protoplanetary disks. Proceedings of the International Astronomical Union, 2018, 14, 360-361.	0.0	0
51	Possibility to locate the position of the H₂O snowline in protoplanetary disks through spectroscopic observations. Proceedings of the International Astronomical Union, 2018, 14, 393-395.	0.0	0
52	Candidate Water Vapor Lines to Locate the H₂O Snowline Through High-dispersion Spectroscopic Observations. II. The Case of a Herbig Ae Star. Astrophysical Journal, 2017, 836, 118.	4.5	34
53	Radiative Grain Alignment in Protoplanetary Disks: Implications for Polarimetric Observations. Astrophysical Journal, 2017, 839, 56.	4.5	96
54	Comprehensive Study of Thermal Desorption of Grain-surface Species by Accretion Shocks around Protostars. Astrophysical Journal, 2017, 839, 47.	4.5	30

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55	Possibility to locate the position of the H₂O snowline in protoplanetary disks through spectroscopic observations. Proceedings of the International Astronomical Union, 2017, 13, 113-120.	0.0	0
56	ALMA REVEALS THE ANATOMY OF THE mm-SIZED DUST AND MOLECULAR GAS IN THE HD 97048 DISK. Astrophysical Journal, 2016, 831, 200.	4.5	42
57	PARAMETRIC STUDY OF THE ROSSBY WAVE INSTABILITY IN A TWO-DIMENSIONAL BAROTROPIC DISK. Astrophysical Journal, 2016, 823, 84.	4.5	46
58	CANDIDATE WATER VAPOR LINES TO LOCATE THE H₂O SNOWLINE THROUGH HIGH-DISPERSION SPECTROSCOPIC OBSERVATIONS. I. THE CASE OF A T TAURI STAR. Astrophysical Journal, 2016, 827, 113.	4.5	58
59	ALMA OBSERVATIONS OF A GAP AND A RING IN THE PROTOPLANETARY DISK AROUND TW HYA. Astrophysical Journal Letters, 2016, 819, L7.	8.3	105
60	A GAP WITH A DEFICIT OF LARGE GRAINS IN THE PROTOPLANETARY DISK AROUND TW Hya. Astrophysical Journal Letters, 2016, 829, L35.	8.3	90
61	LIGHT SCATTERING BY FRACTAL DUST AGGREGATES. I. ANGULAR DEPENDENCE OF SCATTERING. Astrophysical Journal, 2016, 823, 70.	4.5	72
62	FIRST DETECTION OF GAS-PHASE METHANOL IN A PROTOPLANETARY DISK. Astrophysical Journal Letters, 2016, 823, L10.	8.3	166
63	The molecular composition of the planet-forming regions of protoplanetary disks across the luminosity regime. Astronomy and Astrophysics, 2015, 582, A88.	5.1	133
64	ANALYTICAL FORMULAE OF MOLECULAR ION ABUNDANCES AND THE N₂H⁺RING IN PROTOPLANETARY DISKS. Astrophysical Journal, 2015, 807, 120.	4.5	49
65	Opacity of fluffy dust aggregates. Astronomy and Astrophysics, 2014, 568, A42.	5.1	105
66	ALMA HINTS AT THE PRESENCE OF TWO COMPANIONS IN THE DISK AROUND HD 100546. Astrophysical Journal Letters, 2014, 791, L6.	8.3	114
67	ROTATIONAL INSTABILITY IN THE OUTER REGION OF PROTOPLANETARY DISKS. Astrophysical Journal, 2014, 787, 37.	4.5	6
68	Complex organic molecules in protoplanetary disks. Astronomy and Astrophysics, 2014, 563, A33.	5.1	169
69	GASPSâ€"A Herschel Survey of Gas and Dust in Protoplanetary Disks: Summary and Initial Statistics. Publications of the Astronomical Society of the Pacific, 2013, 125, 477-505.	3.1	108
70	Local Enhancement of the Surface Density in the Protoplanetary Ring Surrounding HD 142527. Publication of the Astronomical Society of Japan, 2013, 65, .	2.5	129
71	WATER IN PROTOPLANETARY DISKS: DEUTERATION AND TURBULENT MIXING. Astrophysical Journal, 2013, 779, 11.	4.5	80
72	CHEMICAL PROCESSES IN PROTOPLANETARY DISKS. II. ON THE IMPORTANCE OF PHOTOCHEMISTRY AND X-RAY IONIZATION. Astrophysical Journal, 2012, 747, 114.	4.5	123

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73	CHEMICAL EVOLUTION OF PROTOPLANETARY DISKSâ€"THE EFFECTS OF VISCOUS ACCRETION, TURBULENT MIXING, AND DISK WINDS. Astrophysical Journal, 2011, 731, 115.	4.5	82
74	THE SOLAR NEBULA ON FIRE: A SOLUTION TO THE CARBON DEFICIT IN THE INNER SOLAR SYSTEM. Astrophysical Journal Letters, 2010, 710, L21-L25.	8.3	59
75	CHEMICAL PROCESSES IN PROTOPLANETARY DISKS. Astrophysical Journal, 2010, 722, 1607-1623.	4.5	168
76	Effects of accretion flow on the chemical structure in the inner regions of protoplanetary disks. Astronomy and Astrophysics, 2009, 495, 183-188.	5.1	31
77	Molecular Hydrogen Emission from Protoplanetary Disks. II. Effects of Xâ€Ray Irradiation and Dust Evolution. Astrophysical Journal, 2007, 661, 334-353.	4.5	133
78	Physical and Chemical Structure of Protoplanetary Disks with Grain Growth. Astrophysical Journal, 2006, 642, 1152-1162.	4.5	100
79	Molecular hydrogen emission from protoplanetary disks. Astronomy and Astrophysics, 2005, 438, 923-938.	5.1	125