Kin Long Kelvin Lee

List of Publications by Year
in descending order

45 papers	1,158 citations	471509 17 h-index	414414 32 g-index
45 all docs	45 docs citations	45 times ranked	777 citing authors

#	Article	IF	Citations
1	Detection of two interstellar polycyclic aromatic hydrocarbons via spectral matched filtering. Science, 2021, 371, 1265-1269.	12.6	236
2	Interstellar detection of the highly polar five-membered ring cyanocyclopentadiene. Nature Astronomy, 2021, 5, 176-180.	10.1	96
3	Discovery of the Pure Polycyclic Aromatic Hydrocarbon Indene (c-C9H8) with GOTHAM Observations of TMC-1. Astrophysical Journal Letters, 2021, 913, L18.	8.3	96
4	Early Science from GOTHAM: Project Overview, Methods, and the Detection of Interstellar Propargyl Cyanide (HCCCH₂CN) in TMC-1. Astrophysical Journal Letters, 2020, 900, L10.	8.3	60
5	Two roaming pathways in the photolysis of CH₃CHO between 328 and 308 nm. Chemical Science, 2014, 5, 4633-4638.	7.4	49
6	An investigation of spectral line stacking techniques and application to the detection of HC11N. Nature Astronomy, 2021, 5, 188-196.	10.1	49
7	Ubiquitous aromatic carbon chemistry at the earliest stages of star formation. Nature Astronomy, 2021, 5, 181-187.	10.1	49
8	Exhaustive Product Analysis of Three Benzene Discharges by Microwave Spectroscopy. Journal of Physical Chemistry A, 2020, 124, 5170-5181.	2.5	38
9	Gas-phase synthetic pathways to benzene and benzonitrile: a combined microwave and thermochemical investigation. Physical Chemistry Chemical Physics, 2019, 21, 2946-2956.	2.8	37
10	Interstellar Detection of 2-cyanocyclopentadiene, C₅H₅CN, a Second Five-membered Ring toward TMC-1. Astrophysical Journal Letters, 2021, 910, L2.	8.3	33
11	Detection of Interstellar HC₄NC and an Investigation of Isocyanopolyyne Chemistry under TMC-1 Conditions. Astrophysical Journal Letters, 2020, 900, L9.	8.3	32
12	Study of Benzene Fragmentation, Isomerization, and Growth Using Microwave Spectroscopy. Journal of Physical Chemistry Letters, 2019, 10, 2408-2413.	4.6	25
13	A Search for Heterocycles in GOTHAM Observations of TMC-1. Journal of Physical Chemistry A, 2022, 126, 2716-2728.	2.5	25
14	Bayesian Analysis of Theoretical Rotational Constants from Low-Cost Electronic Structure Methods. Journal of Physical Chemistry A, 2020, 124, 898-910.	2.5	22
15	Molecule Identification with Rotational Spectroscopy and Probabilistic Deep Learning. Journal of Physical Chemistry A, 2020, 124, 3002-3017.	2.5	21
16	Constraints on Metal Oxide and Metal Hydroxide Abundances in the Winds of AGB Stars: Potential Detection of FeO in R Dor. Astrophysical Journal, 2018, 855, 113.	4.5	20
17	Photodissociation of acetone from 266 to 312 nm: Dynamics of CH3 + CH3CO channels on the S and T1 states. Journal of Chemical Physics, 2017, 146, 044304.	3.0	19
18	Detection of interstellar H₂CCCHC₃N. Astronomy and Astrophysics, 2021, 652, L12.	5.1	18

#	Article	IF	Citations
19	Vibrational satellites of C₂S, C₃S, and C₄S: microwave spectral taxonomy as a stepping stone to the millimeter-wave band. Physical Chemistry Chemical Physics, 2018, 20, 13870-13889.	2.8	17
20	Descendant of the X-ogen carrier and a â€˜mass of 69â€™: infrared action spectroscopic detection of HC₃O⁺ and HC₃S⁺. Molecular Physics, 2020, 118, e1776409.	1.7	17
21	Dynamics and quantum yields of H₂ + CH₂CO as a primary photolysis channel in CH₃CHO. Physical Chemistry Chemical Physics, 2019, 21, 14284-14295.	2.8	16
22	Submillimeter spectroscopy and astronomical searches of vinyl mercaptan, C₂H₃SH. Astronomy and Astrophysics, 2019, 623, A167.	5.1	15
23	Triple-Resonance Spectroscopy Reveals the Excitation Spectrum of Very Cold, Isomer-Specific Protonated Naphthalene. Journal of Physical Chemistry Letters, 2013, 4, 3728-3732.	4.6	14
24	Zero-point energy conservation in classical trajectory simulations: Application to H2CO. Journal of Chemical Physics, 2018, 148, 194113.	3.0	13
25	Characterization of the simplest hydroperoxide ester, hydroperoxymethyl formate, a precursor of atmospheric aerosols. Physical Chemistry Chemical Physics, 2019, 21, 18065-18070.	2.8	13
26	Searches for Interstellar HCCSH and H₂CCS. Astrophysical Journal, 2019, 883, 201.	4.5	13
27	Discovery of Interstellar trans-cyanovinylacetylene (HC â‰¡ CCH = CHC â‰¡ N) and vinylcyanoacetylene (H₂C = CHC₃N) in GOTHAM Observations of TMC-1. Astrophysical Journal Letters, 2021, 908, L11.	8.3	13
28	Rotational Spectra of Vibrationally Excited AlO and TiO in Oxygen-rich Stars. Astrophysical Journal, 2020, 904, 110.	4.5	12
29	Machine Learning of Interstellar Chemical Inventories. Astrophysical Journal Letters, 2021, 917, L6.	8.3	11
30	Chirped-Pulse Fourier Transform Millimeter-Wave Spectroscopy of Furan, Isotopologues, and Vibrational Excited States. ACS Earth and Space Chemistry, 2021, 5, 2986-2994.	2.7	11
31	Gas phase detection and rotational spectroscopy of ethynethiol, HCCSH. Molecular Physics, 2019, 117, 1381-1391.	1.7	10
32	A rotational and vibrational investigation of phenylpropiolonitrile (C6H5C3N). Journal of Molecular Spectroscopy, 2021, 377, 111425.	1.2	10
33	CH₃-Terminated Carbon Chains in the GOTHAM Survey of TMC-1: Evidence of Interstellar CH₃C₇N. Astrophysical Journal, 2022, 924, 21.	4.5	9
34	Automated Construction of Potential Energy Surfaces Suitable to Describe van der Waals Complexes with Highly Excited Nascent Molecules: The Rotational Spectra of Arâ€“CS(v) and Arâ€“SiS(v). Journal of Physical Chemistry A, 2020, 124, 4445-4454.	2.5	7
35	Hunting the relatives of benzonitrile: Rotational spectroscopy of dicyanobenzenes. Astronomy and Astrophysics, 2021, 652, A163.	5.1	6
36	Detection and structural characterization of nitrosamide H2NNO: A central intermediate in deNOxprocesses. Journal of Chemical Physics, 2017, 147, 134301.	3.0	5

#	Article	IF	Citations
37	Generation and structural characterization of Ge carbides GeC_n (n = 4, 5, 6) by laser ablation, broadband rotational spectroscopy, and quantum chemistry. Physical Chemistry Chemical Physics, 2019, 21, 18911-18919.	2.8	5
38	Cation States of Ethane: HEAT Calculations and Vibronic Simulations of the Photoelectron Spectrum of Ethane. Journal of Physical Chemistry A, 2016, 120, 7548-7553.	2.5	4
39	Rotational spectroscopy and bound state calculations of deuterated NH3â€“H2 van der Waals complexes. Journal of Molecular Spectroscopy, 2021, 377, 111442.	1.2	3
40	A high speed fitting program for rotational spectroscopy. Journal of Molecular Spectroscopy, 2021, 379, 111467.	1.2	3
41	Detecting Laser-Volatilized Salts with a Miniature 100-GHz Spectrometer. Journal of Physical Chemistry A, 2020, 124, 1429-1436.	2.5	2
42	Laboratory Rotational Spectra of Silyl Isocyanide. Astrophysical Journal, 2018, 860, 63.	4.5	1
43	Carbon-13 studies of sulphur-terminated carbon chains: chemical bonding, molecular structures, and formation pathways. Molecular Physics, 0, , .	1.7	1
44	HSCO+ and DSCO+: a multi-technique approach in the laboratory for the spectroscopy of interstellar ions. Astronomy and Astrophysics, 2018, 620, A184.	5.1	1
45	The dynamics of CO production from the photolysis of acetone across the whole S1 â†•S0 absorption spectrum: Roaming and triple fragmentation pathways.. Journal of Chemical Physics, 2022, 156, 094303.	3.0	1