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Selected Publications:

(1) Xiaohu Li*, Alan N. Heays, Wim Ubachs, Brenton R. Lewis, Ruud Visser, and Ewine F. van Dishoeck, Photodissociation of interstellar N2, **Astronomy & Astrophysics**, 2013, 555, A14

(2) **Xiaohu Li***, Ewine F. van Dishoeck, Marc C. van Hemert and Carina Arasa, Effects of reagent rotation and vibration on H + OH (v, j) -> O + H2, **The Journal of Physical Chemistry A**, 2013, 117, 12889

(3) Xiaohu Li*, Tom J. Millar, Catherine Walsh, Alan N. Heays, Ewine F. van Dishoeck, Photodissociation and chemistry of N2 in the circumstellar envelope of carbon-rich AGB stars, **Astronomy & Astrophysics**, 568, A111 (2014).

(4) **Xiaohu Li*,** Tom J. Millar, Alan N. Heays, Catherine Walsh, Ewine F. van Dishoeck, Isabelle Cherchneff, Chemistry and distribution of daughter species in the circumstellar envelopes of O- rich AGB stars, **Astronomy & Astrophysics**, 588, A4 (2016).

(5) Tao Yang, Luke Bertels, Beni B. Dangi, **Xiaohu Li**, Martin Head-Gordon, and Ralf I. Kaiser，Gas phase formation of c-SiC3 molecules in the circumstellar envelope of carbon stars， **Proceedings of the National Academy of Sciences of the United States of America (PNAS)**，2019，116 (29) ，14471-14478.

(6) Kaiser, Ralf I., Long Zhao, Wenchao Lu, Musahid Ahmed, Mikhail M. Evseev, Valeriy N. Azyazov, Alexander M. Mebel, Rana K. Mohamed, Felix R. Fischer, and Xi**aohu Li*.** "Gas-phase synthesis of racemic helicenes and their potential role in the enantiomeric enrichment of sugars and amino acids in meteorites." **Physical Chemistry Chemical Physics** 24, no. 41 (2022): 25077-25087.

(7) Feng, Yanan and **Li, Xiaohu*** and Millar, Tom J. and Szczerba,Ryszard and Wang, Ke and Quan, Donghui and Qin, Shengli and Fang, Xuan and Tuo, Juan and Miao, Zhenzhen and Ma, Rong and Xu, Fengwei and Sun, Jingfei and Jiang, Biwei and Chang, Qiang and Yang, Jianchao and Hou, Gao-Lei and Li, Fangfang and Zhang, Yong. Photochemical origin of SiC2 in the circumstellar envelope of carbon-rich AGB stars revealed by ALMA. **Frontiers in Astronomy and Space Sciences**. 10, 1215642 (2023).

(8) Zhenghai Yang, Galiya R. Galimova, Chao He, Shane J. Goettl, Dababrata Paul, Wenchao Lu, Musahid Ahmed*, Alexander M. Mebel*, **Xiaohu Li***, Ralf I. Kaiser*, Gas-phase formation of the resonantly stabilized 1-indenyl (C_9H_7•) radical in the interstellar medium, **Science Advances**, 9, eadi5060 (2023).

(9) Juan Tuo, **Xiaohu Li***, Jixian Sun, Tom J. Millar, Yong Zhang, Jianjie Qiu, Donghui Quan, Jarken Esimbek, Jianjun Zhou, Yu Gao, Qiang Chang, Lin Xiao, Yanan Feng, Zhenzhen Miao, Rong Ma, Ryszard Szczerba, Xuan Fang, A λ 3 mm line survey towards the circumstellar envelope of the carbon-rich AGB star IRC +10216 (CW Leo), **Astrophysical Journal Supplement Series**, 271, 45 (2024).

(10) Zhenghai Yang, Chao He, Shane J. Goettl, Alexander M. Mebel,* Paulo F. G. Velloso, Márcio O. Alves, Breno R. L. Galvão,* Jean-Christophe Loison,* Kevin M. Hickson, Michel Dobrijevic, **Xiaohu Li,*** Ralf I. Kaiser1*, Low-temperature formation of pyridine and (iso)quinoline via neutral–neutral reactions, **Nature Astronomy**, 8, 856–864 (2024).