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现任职务：中国科学院新疆天文台天体化学研究团组负责人，学位评定委员会委员，新疆物理学会理事，新疆天文学会理事

简介：主要从事星际分子相关的天体化学和天体物理研究，承担“宇宙生命起源探索”攻关项目。博士毕业于荷兰莱顿大学，曾在中国科学院国家天文台、台湾“中央研究院”天文与天文物理研究所、中国科学院天文大科学研究中心从事研究工作，在《Nature Astronomy》、《Science Advances》、《PNAS》等国际著名期刊已发表论文 50 多篇。

主持、参与科研项目：

1. 在研项目

- (1) 中央组织部、中国科学院，国家高层次人才项目，2021/04 -2025/04, 500 万元，在研，主持
- (2) 国家自然科学基金面上项目，2025/01-2028/12，53 万元，主持
- (3) 自治区自然科学基金杰出青年科学基金项目, 2025/01-2027/12，50 万元，主持

2. 已完成项目

- (1) 濒死恒星星周分子的研究，自治区高层次人才项目，2020/09-2023/04，40 万元，主持
- (2) S 类渐近巨星分支恒星星周分子及其化学性质之系统研究，国家自然科学基金项目，2016/01-2016/12，20.8 万元，主持
- (3) LiH₂ 分子及其离子的激发态势能面和动力学性质研究，国家自然科学基金项目，2011/01-2013/12，36 万元，参与

代表性科研成果（著作、论文、专利等）：

(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 **Xiaohu 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 (C₉H₇•) 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).