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PUBLICATION

Contribution summary: I have 10 first-authored and 44 co-authored peer-reviewed research articles (h-index: 22). My research centers around the climate and chemistry in exoplanet atmospheres. I led a JWST ERS program to explain the first evidence of photochemistry on an exoplanet WASP-39 b. My recent research highlight includes the seasonal variations on HD 80606 b and surface identification of K2-18 b using both general circulation (GCM) and photochemical models. I am the principal creator of the open-source photochemical model VULCAN (+100 citations on ADS and used by JWST Cycle 1 & 2 programs), Mini-chemical scheme for 3D GCM, and a pathway analysis toolkit. I have co-I'ed in 3 JWST proposals and continue to support upcoming JWST and Ariel programs with a first-principles modeling framework.

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