

Abstract Submitted
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Toward Triplet Ground State NaLi Molecules¹ SEPEHR EBADI, ALAN JAMISON, TIMUR RVACHOV, LI JING, HYUNGMOK SON, YIJUN JIANG, MARTIN ZWIERLEIN, WOLFGANG KETTERLE, Massachusetts Inst of Tech-MIT — The NaLi molecule is expected to have a long lifetime in the triplet ground-state due to its fermionic nature, large rotational constant, and weak spin-orbit coupling. The triplet state has both electric and magnetic dipole moments, affording unique opportunities in quantum simulation and ultracold chemistry. We have mapped the excited state NaLi triplet potential by means of photoassociation spectroscopy. We report on this and our further progress toward the creation of the triplet ground-state molecules using STIRAP.

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