

Abstract Submitted
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Strong photoassociation in a degenerate fermi gas¹ TIMUR RVACHOV, ALAN JAMISON, LI JING, HYUNGMOK SON, SEPEHR EBADI, YIJUN JIANG, MARTIN ZWIERLEIN, WOLFGANG KETTERLE, MIT — Despite many studies there remain open questions about strong photoassociation in ultracold gases. We study the effects of strong photoassociation in ultracold fermions. Photoassociation occurs only at short range and thus can be used as a tool to probe and control the two-body correlation function in an interacting many-body system. We study the effects of strong photoassociation in ${}^6\text{Li}$, the onset of saturation, and its effects on spin polarized and interacting spin-mixtures.

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