

Abstract Submitted
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ARPES Studies on the substrate effect on monolayer FeSe
SLAVKO REBEC, Stanford, SIMES, TAO JIA, JAMES LEE, WEI LI, CHAO-FAN ZHANG, SIMES, Stanford, ROBERT MOORE, SSRL, SIMES, Z.X. SHEN, SIMES, Stanford — For 2D films, interface interactions can play a critical role in determining the prevailing physics of the system. In the case of FeSe on SrTiO₃, reducing the FeSe thickness to 1 monolayer (ML) from bulk leads to a significantly increased superconducting transition temperature (T_c). To fully utilize and maximize this approach to increasing T_c in FeSe and potentially apply it to other superconducting materials, the role which the substrate plays in this system must be understood. Here we present recent in-situ angle-resolved photo emission studies of the substrate effect on MBE grown 1 ML FeSe films.

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