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Loading Dynamics and Characteristics of a Far Off-Resonance Optical Dipole Trap¹ P.G. MICKELSON, Y.N. MARTINEZ, S.B. NAGEL, A.J. TRAVERSO, T.C. KILLIAN, Rice University — We implement an optical dipole trap in a crossed beam configuration for experiments with ultracold strontium. Strontium atoms cooled to nearly 1 μ K are loaded into the optical dipole trap from a magneto-optical trap operating on the 689 nm intercombination line. Loading dynamics and characteristics of the far off-resonance dipole trap are explored as part of our group's study of ultracold collisions in strontium.

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