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Side-pumped hollow-core optical fiber for atom guiding FREDRIK FATEMI, MARK BASHKANSKY, SEAN MOORE, Naval Research Laboratory — We demonstrate a side-illumination technique for coupling light into hollow-core optical fibers for evanescent-wave atom guiding. Microprisms embedded into a multimode, double-clad hollow fiber allow light to be coupled efficiently (> 90%) at arbitrary locations along the length of the fiber. The technique offers significant advantages over end-pumped configurations.

Fredrik Fatemi Naval Research Laboratory

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