

Microfabricated alkali vapor cells using local sealing

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We report on a new technique to form and seal micro-fabricated cells. The technique consists in integrating single-use sealing structures actuated through laser irradiation, either to isolate cavities from each other or to connect them. Inspired by the glass-blowing techniques, we demonstrate “make-seals” and “break-seals” cells. This technique opens new venues for atomic devices.