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A spin-flip Zeeman slower controlled by a fast feedback circuit
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Physics, Oklahoma State University, Stillwater, OK 74078 — We present an ef-
fective setup for a spin-flip Zeeman slower controlled by a fast feedback circuit. Our
experimental data demonstrate an efficient method to optimize the Zeeman slower
for trapping more alkali atoms in a magneto-optical trap. In addition, we con-
firm that our feedback circuit can be applied to rapidly and simply control various
magnetic fields used for creating atomic Bose-Einstein condensates and for studies
related to magnetic Feshbach resonances.

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