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## ANALYSIS OF THE ADVANTAGES OF APPLYING HTC SUPERCONDUCTORS IN ELECTROMAGNETIC DRIVES

**ABSTRACT** *The paper discusses the possibilities and advantages of using HTc superconductors in electromagnetic launchers. It addresses launchers of objects like rail guns as well as ones using pulsed magnetic field. The advantages of using superconducting materials in these launchers are discussed, and the possibility of constructing a new type of electromagnetic launcher based on the ideal diamagnetism of superconductors. These devices are compared and found superior to powder launchers.*

**Keywords:** *electromagnetic launcher, HTc superconductivity, ideal diamagnetism*