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(54) **DRAM TRANSISTOR INCLUDING PILLARS
FORMED USING LOW-TEMPERATURE ION
IMPLANT**

(52) **U.S. Cl.**

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ABSTRACT

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Disclosed herein are approaches for forming a dynamic random-access memory device (DRAM). In one approach, a method may include forming a plurality of bridge layers in a substrate by directing first ions into the substrate while the substrate is at a low temperature, wherein the ions are directed into the substrate in a series of implants, and annealing the plurality of bridge layers. The method may further include forming a contact by directing second ions into an upper surface of the plurality of bridge layers while the substrate is at the low temperature, and forming a pillar over the contact.

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