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(54) METHODS OF FORMING MICROELECTRONIC DEVICES WITH NITROGEN-RICH INSULATIVE STRUCTURES, AND RELATED MEMORY DEVICES AND ELECTRONIC SYSTEMS

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(57) **ABSTRACT**

A method of forming a microelectronic device comprises forming a stack structure comprising a vertically alternating sequence of insulative structures and additional insulative structures, at least some of the additional insulative structures comprising silicon nitride having a ratio of nitrogen atoms to silicon atoms greater than about 1.58:1.00, forming openings through the stack structure, and forming cell pillar structures within the openings, the cell pillar structures individually comprising a semiconductor channel material vertically extending through the stack structure. Related methods, microelectronic devices, memory devices, and electronic systems are also described.