



Emerging Memories: Etching Challenges and Solutions

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The pursuit of Storage Class Memories (SCM) and novel embedded memories for SOC produces new devices which require deposition and etching. The leading candidates are STT-RAM, PCRAM, and ReRAM. These devices utilize non-traditional materials which present etching challenges such as non-volatility of the etching products, damage by etching chemistry and ambient gases as well as isotropic and highly selective etching of metals and metal oxides. Novel solutions to these challenges will be presented.