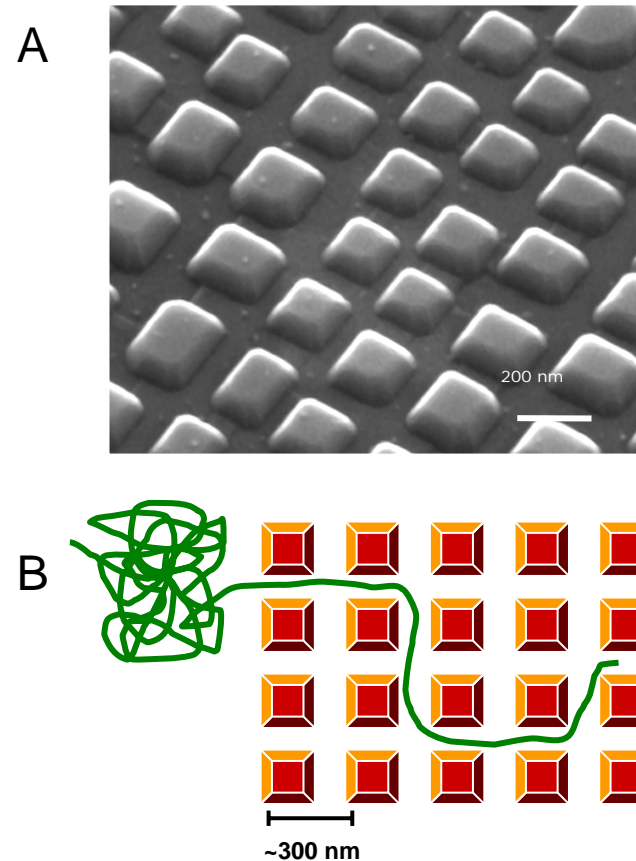


Self-assembling nanoislands for DNA manipulation

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Creating nanoscale features on devices is an important part of nanotechnology research, but the process is often time consuming and expensive. OSU researchers have discovered a fast and inexpensive way to create nanoislands composed of a small amount of gadolinium-doped ceria in yttria-stabilized zirconia that self-assemble on a surface when exposed to heat (Figure A). The nanoislands could potentially be used as microfluidic channels to stretch out DNA strands (Figure B) from their natural, coiled up state. This may allow defective DNA to be stretched, examined and potentially repaired.



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