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Sturdier DNA nanotubes via ligation PATRICK O'NEILL — Self-assembly of DNA nanotubes from double crossover tiles results in cylindrical lattices of tiles joined by overlapping sticky ends. We show that nicks formed at overlapping sticky ends can be successfully ligated in the tube geometry, resulting in increased thermal and mechanical stability of the nanotubes. We compare the melting temperature and persistence length of ligated and unligated nanotubes.

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