Nanohashtag structures based on carbon nanotubes and molecular linkers

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Highlights

- Nanohashtag structures based on carbon nanotubes and molecular linkers
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- A stabilized nanohashtag structure was modeled with molecular mechanics.

- The nanohashtag consisted of four carbon nanotubes and four molecule linkers.

- A $C_{280}H_{96}$ linker was based on a cyclooctatetraene tether with four corannulene arms.

- Other linkers including $C_{276}H_{92}N_8O_8$ were developed that included hydrogen bonding.

- CNTs with these linkers favored perpendicular structures, rather than parallel ones.