

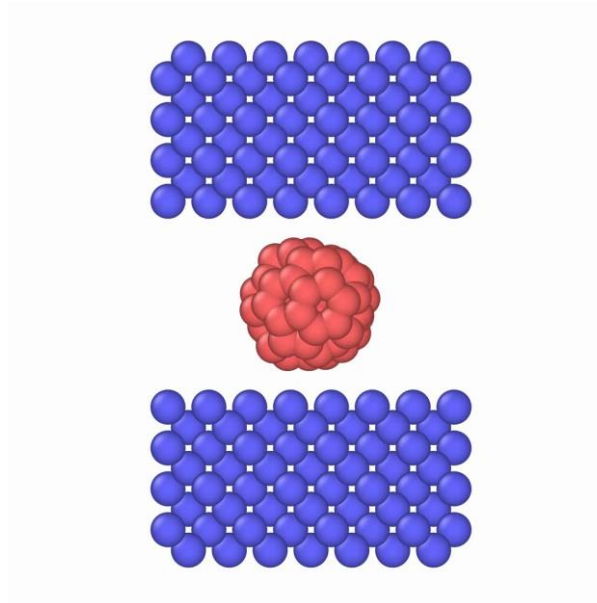
Description of Multimedia Files

for

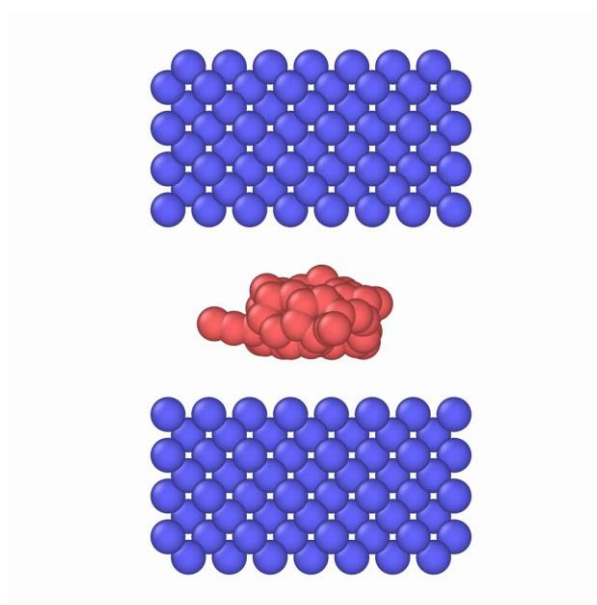
Molecular dynamics investigation on the nano-mechanical behaviour of C₆₀ fullerene and its crystallized structure

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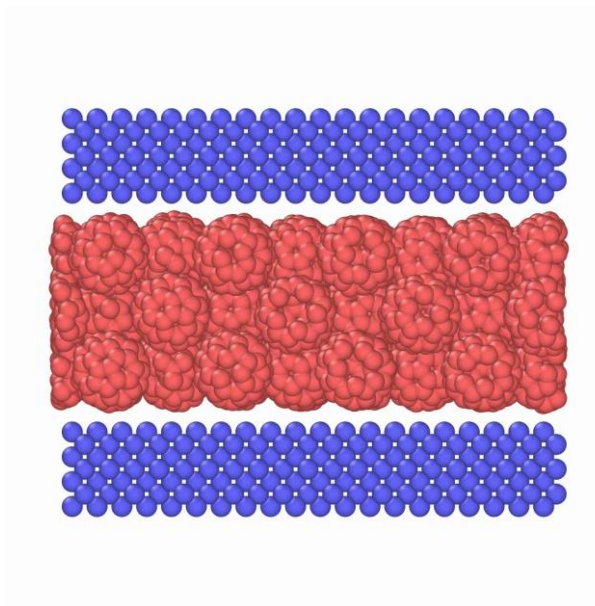
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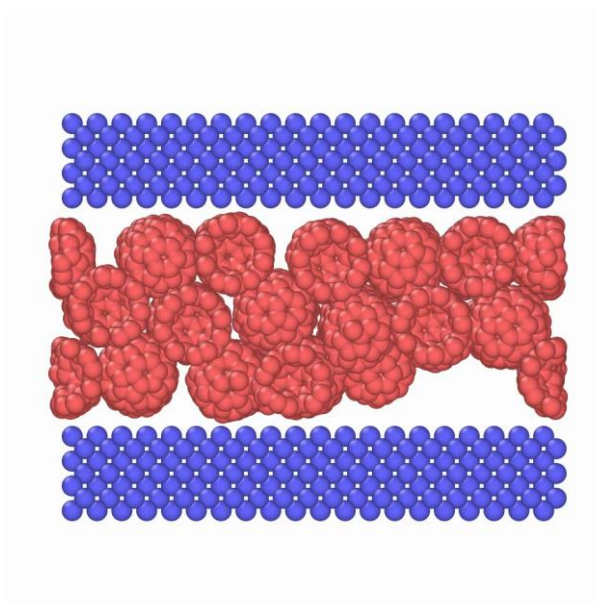
Movie S1. Animation of the compression and unloading simulation of elastically deformed single C_{60} fullerene model. Since the indentation and unloading were conducted at a speed of $0.1 \text{ \AA}/\text{ps}$, simulation time of the animation is approximately 90 ps. The image above is captured at the last moment of the animation.



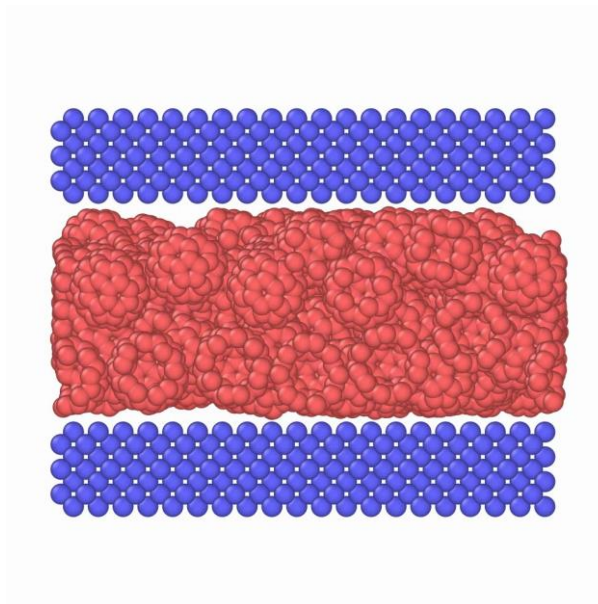
Movie S2. Animation of the compression and unloading simulation of plastically deformed single C_{60} fullerene model. Since the indentation and unloading were conducted at a speed of $0.1 \text{ \AA}/\text{ps}$, simulation time of the animation is approximately 140 ps. The image above is captured at the last moment of the animation.



Movie S3. Animation of the compression and unloading simulation of elastically deformed crystallized C_{60} fullerite model. Since the indentation and unloading were conducted at a speed of $0.1 \text{ \AA}/\text{ps}$, simulation time of the animation is approximately 150 ps. The image above is captured at the last moment of the animation.



Movie S4. Animation of the compression and unloading simulation of semi-elastically deformed crystallized C_{60} fullerite model. Since the indentation and unloading were conducted at a speed of $0.1 \text{ \AA}/\text{ps}$, simulation time of the animation is approximately 230 ps. The image above is captured at the last moment of the animation.



Movie S5. Animation of the compression and unloading simulation of plastically deformed crystallized C_{60} fullerite model. Since the indentation and unloading were conducted at a speed of 0.1 \AA/ps , simulation time of the animation is approximately 240 ps. The image above is captured at the last moment of the animation.