

# Structural Superlubricity: From Mechanics to Nanodevices

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**Abstract:** With the rapid developments of nanotechnology and microfabrication technology, ceaselessly miniaturized sensors and devices are emerging in large numbers of applications in internet of things, sensor networks, big data, personal health systems, artificial intelligence, et al. However, a great challenge is the increasing influence of friction and wear with decreasing size. Structural superlubricity (SSL), a state of nearly zero friction and wear between two directly contacted solid surfaces first realized in microscale in 2012, provides a revolutionary solution. Here we give a brief review of SSL, with particular emphasis on its development route from mechanics to promising SSL nanodevices.

## References:

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