

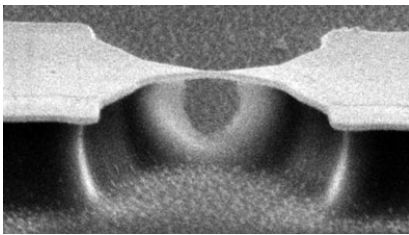
Break junctions

molecular electronics

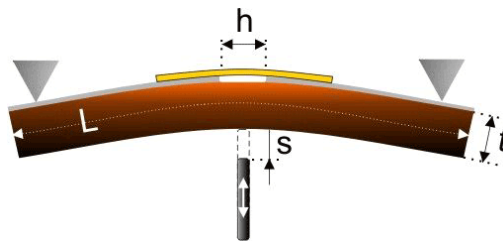
Using lithographic techniques, you will fabricate sub-micrometer metallic bridges in different metals. By breaking these bridges in a three point bending mechanism, you will be able to prepare nanoscale contacts suitable to measure the electrical transport properties of specifically designed molecules. Of particular interest are compounds exhibiting special properties such as intermolecular stacking or switching behavior.

Context: NCCR Nano and European FP7 Marie Curie Training Network.

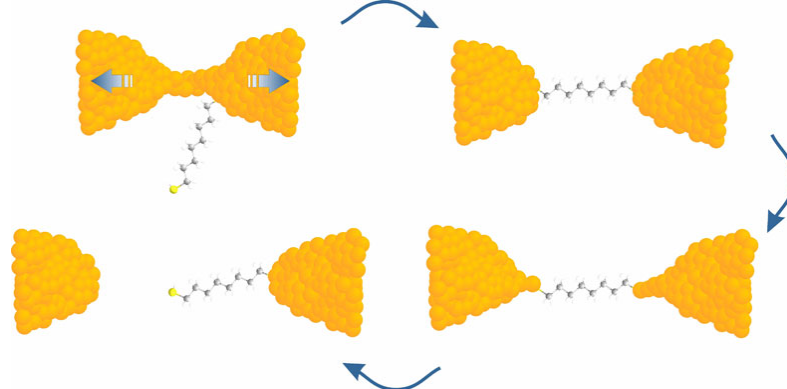
microfabricated metallic bridge



three-point bending mechanism



molecular junction formation upon bridge breaking



Info

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