

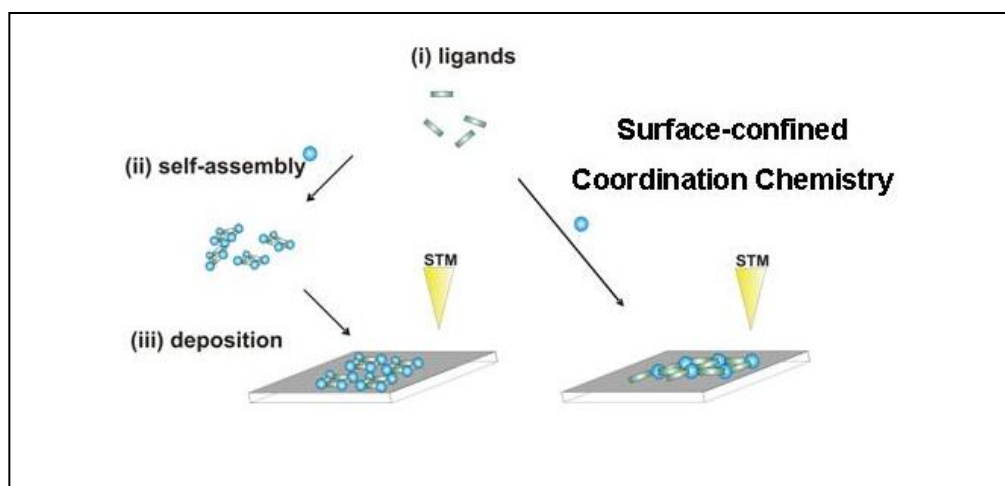
Surface-Confined Organisation of Magnetic Nanostructures

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Abstract

Molecular nanostructures have recently attracted interest in view of their potential to host tuneable functionalities which might be accessed within the few nanometre regimes. We will report on the controlled generation of magnetic molecular nanostructures on surfaces. The obtained molecular networks and single molecules are investigated by means of UHV- and solution-based STM-techniques. A combined self-assembly/deposition approach yields a new protocol for the generation of modular metal-ion arrays on surfaces and adverts features of “surface-confined” coordination chemistry. Alternatively, the deposition of conventionally synthesized coordination compounds onto electrically conducting electrodes will be shown. The controlled design of operable surfaces by the principles of surface-assisted coordination chemistry is a fascinating combination of new scientific perspectives with the aesthetic beauty of the real time observation of the altered interfaces.



References

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