

Dopamine molecule on several substances: SPM study

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Abstract :

Dopamine is very important substance for our body, it works on the exercise, hormone adjustment and positive feeling as neurotransmitter in central nervous system¹. The abnormality of dopamine function causes intractable neurological disease such as Parkinson's disease, ADHD etc. This is an importance to study the dopamine detection, and we hope it's lead to establishment of disease treatment.

For dopamine detection study, knowing about the dopamine adsorption characteristics are essential. In this work, we report about the dopamine on the several substances observed by atomic force microscope (AFM). Figure 1 shows AFM topography dopamine adsorbed on SiO₂, Au, MoS₂².

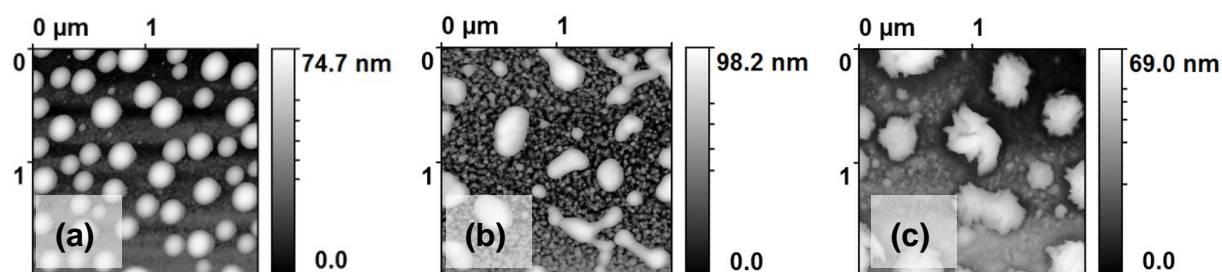


Fig. 1 AFM topography of dopamine adsorbed on (a) SiO₂, (b) Au, (c) MoS₂

Reference:

- ¹⁾ Bjorklund A., Dunnet S. B., "Dopamine neuron systems in the brain: an update", Trends in Neurosciences, **30** 5, 194-202 (2007)
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