

Optical and Photoinduced Processes of Carbon Nanoclusters

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Almost all nanoscale fluorophores exhibit fluorescence intermittency or blinking. Two-dimensional reduced graphene oxide also undergoes blinking phenomena. Quite recently, it has been reported that unexpected blinking during graphene oxide to reduced graphene oxide photoreduction can be attributed to the redistribution of carbon double bond domains and the recluster play an important role in this blinking phenomena [1]. To understand the underlying photoinduced processes, this talk intends to provide a basic view of size dependent absorption, emission and non-radiative processes.

Reference

[1] Anthony Ruth, Michitoshi Hayashi, Peter Zapol, Jixin Si, Matthew P. McDonald, Yurii V. Morozov, Masaru Kuno and Boldizsár Jankó, *Nat. Commun.* 8. 14521 (2016)

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