

Electrical Studies of Individual Colloidal Inorganic Nanocrystals

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It is possible to make colloidal nanocrystals of many different materials with very well controlled size, shape, and topology (branched, nested, etc.). These materials have been studied optically extensively. However, electrical studies of colloidal nanocrystals have been more limited due to the difficulties associated with making good electrical contacts. This task will show new ways of making such electrical contacts reliably and also will discuss the resulting three-terminal electrical device properties.