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(57) Abstract :

Accordingly, embodiments herein disclose a self-assembled nano-materials that can be used in flexible electronics applications. The self-assembled nanomaterial in nucleic acid molecules, aminoglycoside molecule and metal protoporphyrin. The self-assembled nano-material is characterized in that the nucleic acid molecules are DNA or RNA. The nucleic acid molecules are DNA, and molar ratio shared by guanine deoxyribonucleotide is 50%-100%, Guanine deoxyribonucleotide number is 19-24. The self-assembled nano-material is characterized in that the aminoglycoside molecule includes any one in chitosan, paromomycin sulfate, streptomycin, neomycin, amikacin or tobramycin. In the flexible electronics with its good flexibility and mechanical properties can lay a certain foundation for the development of electronic devices in the future.

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