INTEGRATED CIRCUITRY COMPONENTS, SWITCHES, AND MEMORY CELLS

Abstract

A switch includes a graphene structure extending longitudinally between a pair of electrodes and being conductively connected to both electrodes of said pair. First and second electrically conductive structures are laterally outward of the graphene structure and on opposing sides of the graphene structure from one another. Ferroelectric material is laterally between the graphene structure and at least one of the first and second electrically conductive structures. The first and second electrically conductive structures are configured to provide the switch into "on" and "off states by application of an electric field across the graphene structure and the ferroelectric material. Other embodiments are disclosed, including components of integrated circuitry which may not be switches.
Fig.1