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Interfaces in Memristor

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Deadline for manuscript
submissions:

closed (20 October 2022)

Message from the Guest Editor

Dear Colleagues,

Memristor properties are often governed by their interfaces to electrodes. These interfaces determine built-in electrical potentials and barriers, the fundamentals of electrical transport. Resistive switching involves modification of barriers, mainly by changes in intrinsic defect concentrations (valence change mechanism) or by the transport of material from the contacts (electrochemical mechanism). The lack of industrial applications of memristors shows that we are still far from effective memristor design rules. Since “The interface is the device” (Nobel laureate Herbert Kroemer), this Special Issue is focused on novel experimental and theoretic insight into the chemical and electronic nature of interfaces in memristors.

Dr. Jonas Deuermeier

Guest Editor



mdpi.com/si/62830



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Message from the Editor-in-Chief

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