

2014 – Magnus Berggren, Sweden

Description

For his broad and path-breaking contributions to the basic science as well as to several applications of electronics applied on paper. His alternative approach to develop ion-based electrochemical transistors instead of silicon-based is well adapted for printing on paper because they operate at low voltages, do not require extremely thin layers and are easy to apply by traditional printing methods even on rough surfaces such as paper.

Using the same basic technologies Berggren has also been actively developing “organic bio-electronics”, in particular components that can communicate between biological systems (ion communication) and electronics (electrons) – primarily for use in medicine and diagnostic tools, some of which are printed on paper.