World Academy of Science, Engineering and Technology
International Journal of Electronics and Communication Engineering
Vol:17, No:09, 2023

To Investigate the Effects of Potassium Ion Doping and Oxygen Vacancies in Thin-Film Transistors of Gallium Oxide-Indium Oxide on Their Electrical

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Abstract : Thin-film transistors(TFTs) have the advantages of low power consumption, short reaction time, and have high research value in the field of semiconductors, based on this reason, people have focused on gallium oxide-indium oxide thin-film transistors, a relatively common thin-film transistor, elaborated and analyzed his production process, "aqueous solution method", explained the purpose of each step of operation, and finally explored the influence of potassium ions doped in the channel layer on the electrical properties of the device, as well as the effect of oxygen vacancies on its switching ratio and memory, and summarized the conclusions.

Keywords : aqueous solution, oxygen vacancies, switch ratio, thin-film transistor(TFT)
Conference Title : ICSSCT 2023 : International Conference on Semiconductor Silicon Crystal Technology
Conference Location : Paris, France
Conference Dates : September 18-19, 2023