

Purification of indoor air using a novel pseudo PMOS ultraviolet photocatalytic oxidation (PP-UVPCO) sensor

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ABSTRACT

The study describes the performance of a Novel CMOS Integrated Pseudo PMOS UVPCO with 0% static power dissipation. The primary focus is on modeling of power and performance study, as well as comparison with existing devices used for air purification. This method can enhance calibration while avoiding the need for a high-speed digital processor. Traditional gadgets need a lot of electricity and aren't very stable for long-term monitoring. These devices also have a low slew rate, a high power consumption, and nonlinear properties, but this innovative design has virtually zero static power, reduced load capacitance on input signals, faster switching, and fewer transistors, higher circuit density, and the device have better slew rate. This device has a modest architecture and is suitable for Air purification and surface sanitization.

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