A new RADFET dosimeter reader circuit has been developed. The threshold voltage ($V_{th}$) of the RADFET is measured using a “true-zero” method that determines it as the gate voltage for a given drain current. This method is simple and robust, and it can be used to measure the threshold voltage of a single RADFET device. The circuit is designed to be compact and inexpensive, and it can be used in a variety of applications, including dosimetry and radiation monitoring.

**Abstract**

A new microcontroller-based RADFET dosimeter reader has been developed. The reader circuit is designed to be compact and inexpensive, and it can be used in a variety of applications, including dosimetry and radiation monitoring. The circuit is based on a low-cost 8-bit microcontroller (PIC 18F4550) and a low-voltage, high-speed switching matrix (SM) that is capable of measuring the threshold voltage of a single RADFET device. The circuit is easy to use and can be easily modified to suit the needs of different applications.

**A system for gas electrical breakdown time delay measurements based on a microcontroller**

A new switching system based on microcontroller for successive applying of MGT and CPT on MOSFETs has been developed. The system is designed to be compact and inexpensive, and it can be used in a variety of applications, including dosimetry and radiation monitoring. The system is based on a low-cost 8-bit microcontroller (PIC 18F4550) and a low-voltage, high-speed switching matrix (SM) that is capable of measuring the threshold voltage of a single RADFET device. The circuit is easy to use and can be easily modified to suit the needs of different applications.

**Conclusion**

The new microcontroller-based RADFET dosimeter reader circuit is a simple and robust device that can be used to measure the threshold voltage of a single RADFET device. The circuit is easy to use and can be easily modified to suit the needs of different applications. The circuit is designed to be compact and inexpensive, and it can be used in a variety of applications, including dosimetry and radiation monitoring. The circuit is based on a low-cost 8-bit microcontroller (PIC 18F4550) and a low-voltage, high-speed switching matrix (SM) that is capable of measuring the threshold voltage of a single RADFET device. The circuit is easy to use and can be easily modified to suit the needs of different applications.