



Reliability and Application of III-V Solar Cells and Optoelectronic Devices: Recent Development and Future Perspectives

Guest Editor:

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Message from the Guest Editor

Dear Colleagues,

III-V semiconductors have been applied in many different areas, such as space and concentrated terrestrial solar cells, laser diodes, high-brightness LEDs, ultraviolet LEDs, high frequency, high power and the substitution of other cheap technologies in harsh environments. Their inherent reliability and high performance in professional or commercial applications will increase in the coming years with new possibilities for development, with low-cost subtraction and addition of new materials and technologies to the chip, to maintain or improve performance at an affordable cost.

The new electronics markets are being shaped by 5G wireless communications, the Internet of Things (IoT), and artificial intelligence (AI), pushing forward emerging semiconductor technologies with the advances in lithography, new processing methods, the integration in 2D or 3D with other technologies, and the improvement of power efficiency and performance.

This Special Issue of *Applied Sciences* is devoted to recent developments, reliability studies, applications and future perspectives for III-V semiconductors.

Prof. Dr. Neftali Nuñez

Guest Editor





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Message from the Editor-in-Chief

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