Special Issue

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

Message from the Guest Editor

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.

Guest Editor

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As the world of science becomes ever more specialized, researchers may lose themselves in the deep forest of the ever increasing number of subfields being created. This open access journal Applied Sciences has been started to link these subfields, so researchers can cut through the forest and see the surrounding, or quite distant fields and subfields to help develop his/her own research even further with the aid of this multi-dimensional network.

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