Special Issue

Liquid Crystal on Silicon Devices: Modeling and Advanced Spatial Light Modulation Applications

Message from the Guest Editors

Liquid Crystal on Silicon (LCoS) has become one of the most widespread technologies for spatial light modulation in optics and photonics applications. These reflective microdisplays are composed of a highperformance silicon complementary metal oxide semiconductor (CMOS) backplane, which controls the light modulating properties of the liquid crystal layer. These devices may exhibit a number of degradation effects such as limited modulation range for high spatial frequency image content, interpixel cross-talk and fringing field, and time flicker, which may also depend on the analog or digital backplane of the corresponding LCoS device. Appropriate characterization and compensation techniques are then necessary. We hope that you find the content of this call relevant for your research and will consider publication of your work within this Special Issue. State-of-the-art in LCoS device technology, modeling and characterization techniques are also welcome.

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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 multidimensional network.

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