



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

Guest Editors:

Prof. Dr. Andrés Márquez

1. Department of Physics,
Systems Engineering and Theory
of Signal, University of Alicante,
P.O. Box 99, 03080 Alicante,
Spain;
2. University Institute of Physics
Applied to Sciences and
Technologies, University of
Alicante, P.O. Box 99, 03080
Alicante, Spain

Prof. Dr. Ángel Lizana

Department of Physics,
Universitat Autònoma de
Barcelona, 08193 Bellaterra,
Spain

Deadline for manuscript
submissions:
closed (31 March 2019)

Message from the Guest Editors

Dear Colleagues,

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 high-performance 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.

Prof. Dr. Andrés Márquez

Prof. Dr. Ángel Lizana

Guest Editors





an Open Access Journal by MDPI

Editor-in-Chief

Prof. Dr. Giulio Nicola Cerullo
Dipartimento di Fisica,
Politecnico di Milano, Piazza L.
da Vinci 32, 20133 Milano, Italy

Message from the Editor-in-Chief

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.

Author Benefits

Open Access: free for readers, with article processing charges (APC) paid by authors or their institutions.

High Visibility: indexed within Scopus, SCIE (Web of Science), Inspec, CAPlus / SciFinder, and other databases.

Journal Rank: JCR - Q1 (Engineering, Multidisciplinary) / CiteScore - Q1 (General Engineering)

Contact Us

Applied Sciences Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland

Tel: +41 61 683 77 34
www.mdpi.com

mdpi.com/journal/applsci
applsci@mdpi.com
[X@Applsci](#)