

Special Issue

Nanophotonics Pioneer: Prof. Dr. Dieter Bimberg ‘*Green Photonics Networks: From VCSELs to Nanophotonics*’

Message from the Guest Editors

The market of data communication is booming. Compared with the traditional telecommunication market, the required link distances of less than 2 km are much shorter for data communication. Data at the highest bit rates can be transmitted across fiber without serious limitations by chromatic dispersion or propagation loss. This leads to the resurgence of VCSELs emitting in the near infrared and probably for slightly larger distances in the optical windows at 1.3 and 1.55 μm . Further high-power VCSELs and tunable VCSELs are emerging as killer applications for sensing, such as structured light and time-of-flight lidar and optical coherence tomography (OCT). Research areas may include (but are not limited to) the following:

- High-speed VCSELs for data communication;
- High-power and high-speed VCSELs (arrays) for sensing and optical wireless communication;
- Tunable VCSELs;
- Blue/UV VCSELs;
- SWIR/MWIR VCSELs;
- Integration with nanophotonic structures;
- Driver integration.

Guest Editors

Prof. Dr. Jin-wei Shi

Prof. Dr. Tien-Chang Lu

Prof. Dr. Fumio Koyama

Deadline for manuscript submissions

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