Call for Papers - Invitation

Journal

NANOPHOTONICS
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Special collection
Telecom Quantum Dot Non-classical Light Sources for Quantum Communication

Guest Editors
Grzegorz Sęk
Sven Höfling
Stephan Reitzenstein

Submission deadline:
July 31st, 2026

Submit to *Nanophotonics* at
https://submission.wiley.com/journal/NAP2

Dear Colleague,

we cordially invite you to contribute your cutting-edge research to the Special Collection on **'Telecom Quantum Dot Non-classical Light Sources for Quantum Communication'**. The Special Collection will be published in ***Nanophotonics*** (www.nanophotonics-journal.com) with **Grzegorz Sęk, Sven Höfling, and Stephan Reitzenstein as Guest Editors**.

This special project aims to gather work by world-class renowned specialists as well as young researchers with innovative ideas in the field of non-classical light generation using quantum dots. An emphasis will be made on the quantum dots emitting at telecommunication wavelengths and on the prospects of their application in quantum technologies, in particular quantum communication. The topical scope of the special collection includes:

- semiconductor quantum dots emitting at telecommunication wavelengths;
- growth and characterization of quantum dot structures;
- deterministic fabrication of quantum devices;
- structural and optical characterization of quantum dots and quantum dots in photonic structures;
- modelling of photonic structures and photonic integrated circuits with quantum dots as an emitter;
- modelling of electronic structure and optical response of telecom quantum dots;
- external control of quantum emitters;
- non-classical light sources;
- single-photon and photon number resolving detectors;
- quantum technology applications and their implementations;
- field deployment of quantum network links and quantum key distribution.

We believe that the collection will be of particular interest to researchers working in the fields of quantum optics, light-matter interaction, epitaxial growth of nanostructures, physics of nanostructures and photonic structures, optical spectroscopy, quantum communication and cryptography protocols, quantum technologies, as well as to PhD students pursuing degree in quantum technologies and nanoengineering.

You may either write a **Review** (ca. 10-15 journal pages long), a **Perspective** article or submit original results of high significance and novelty as a **Research Article** (ca. 6-8 pages long). For more information on the article formats and submission process, please refer to the journal description on the next page.

We hope to spark your interest and look forward to receiving your manuscript soon. If you have any further questions please do not hesitate to contact us.

Best regards, the Guest Editors

Grzegorz Sęk – *Wrocław University of Science and Technology, Wrocław, Poland*
Sven Höfling – *University of Würzburg, Würzburg, Germany*
Stephan Reitzenstein – *Technical University of Berlin, Berlin, Germany*

More information on submission process and the journal is provided on the next page…

About the Journal
Nanophotonics publishes cutting-edge research on the interaction of photons with nanostructures, including carbon nanotubes, metal nanoparticles, semiconductor nanodots, photonic crystals, metamaterials, tissue, and DNA. All articles are freely available under gold open access, ensuring broad visibility and accessibility for the international photonics community.

Nanophotonics is now part of Wiley! With this addition to physics portfolio, Wiley strengthens its role as a leading publisher of breakthrough research in photonics, engineering, and materials science, placing us at the forefront of emerging photonics applications.

Contact to the Editorial Office: Nadezda Panarina (Editor-in-Chief), nap2.office@wiley.com

Article Formats
Reviews are peer-reviewed and give an overview of recent progress in important fields of research, providing the readers with a guide to the relevant literature, an appreciation of the significance of the work, and an outlook into potential future directions. It is not intended that Reviews are necessarily comprehensive, but rather insightful, selective, critical, opinionated, and even visionary. The reference list should be well-balanced.

Whilst a typical Review is 10 000–20 000 words (in its entirety) including 5–15 display items (figures, schemes, or tables), submitted manuscripts can be any length. However, the scientific contents should justify the length and manuscripts should be divided into appropriate sections. A passport-type photo and a short biography (100 words maximum) that highlights the career to date and current research interests may be included for the main contributing authors.

Perspectives are peer-reviewed and provide a forum to present personal opinions and backgrounds on topics of interest to national and international research communities. They may, for example, discuss the latest developments at the forefront of science to inform non-specialist readers, debate points of controversy within a field of research, offer a historical viewpoint on notable past and present scientific achievements, or even speculate on possible future academic, technological, or societal advancements.

Research Articles should contain original research results of high novelty and significance. The conclusions must be clearly supported by the data. Whilst a typical Research Article is around 3000–8000 words (in its entirety) including 3–8 display items (figures, schemes, or tables), submitted manuscripts can be any length. However, the scientific contents should justify the length.

Author Guidelines
- Please mention the Special collection title in the cover letter and choose the **section/category** "***Telecom Quantum Dot Non-classical Light Sources***" upon submission at https://submission.wiley.com/journal/NAP2
- Optional Word or LaTeX **manuscript templates** and well as detailed guide for authors are available at www.nanophotonics-journal.com→ Author Guidelines.
- Submissions will be subject to an APC, if accepted and published in the journal: Research Article and Review types - $3,500 USD / £2,910GBP / €3,360 EUR; Perspective - $880 USD / £730 GBP / €840 EUR
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- Your submission will be handled with priority by experienced journal Editors, in collaboration with the Guest Editors, and undergo **double peer-review**. Each accepted article will be published online immediately and added to the Special collection upon acceptance.
- **Editorial handling** includes Editorial Office and typesetting service, content promotion (graphical table of contents, cover pictures, newsletters, https://www.advancedsciencenews.com/).