

Journal of Semiconductors

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A Special Issue on

“Quantum Light Sources from Semiconductors”

CALL FOR PAPERS

Thanks to the mature semiconductor technologies, well-developed methods have been applied to generate scalable quantum light sources from different semiconductor materials. Great achievements have been obtained in improving their emission and collection efficiencies. The indistinguishability between different light sources has also been critically improved. These solid-state single photon and entangled photon sources have shown important applications in quantum simulation, quantum communication and quantum metrology. Their interactions with remoted quantum systems show the potentiality to construct a quantum network. More and more flexible semiconductor quantum emitters are generated and integrated, which would simulate novel applications and develop new quantum devices.

This special issue will contain articles on quantum light sources from semiconductors. Topics include but not limited to:

- 1)** Generation and fabrication of light emitters in semiconductors;
- 2)** Methods to enhance emission and collection efficiencies;
- 3)** Integrated photonic and electrical devices based on semiconductor quantum light;
- 4)** Property and application of quantum light sources from semiconductors;
- 5)** Theory and modeling of novel quantum light emitters.

The issue attempts to provide a latest overview of the rapid developing research area of quantum light sources from semiconductors. We hope that this issue can benefit researches on related topics.

GUEST EDITORS:

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Manuscript Submission:

Manuscripts must be prepared according to Journal's guidelines, available at <http://iopscience.iop.org/journal/1674-4926>.

Submit your manuscripts via the online submission address at <https://mc03.manuscriptcentral.com/jos-iop>.

Please notify well in advance for your intention to submit a research paper.

Key timetable dates:

Manuscript due: **April 30, 2019**

Authors' notification: **May 31, 2019**

Publication date: **July 10, 2019**