

Announcing a Call for Proposals on: **Optical Waveguide-Based Sensors**

The IEEE/Optica Journal of Lightwave Technology (JLT) invites proposals for Invited Tutorials and Invited Overviews in the rapidly evolving field of Optical Waveguide-Based Sensors, with a focus on Lightwave technologies and their applications. This call aims to provide comprehensive, high-quality resources that advance the understanding and development of optical sensor technologies for both academic and industry audiences.

Invited Tutorial papers should provide an accessible, comprehensive introduction to a specific topic in waveguide-based sensor technology, suitable for PhD students, early-career researchers, or experienced professionals seeking to deepen their understanding of a particular area. Tutorials must balance technical rigor with pedagogical clarity, ensuring accessibility for readers new to the topic while remaining engaging for those with limited background. They should, for example, include practical examples, case studies, or illustrative applications to enhance comprehension and demonstrate real-world relevance. As per JLT's policies, all submitted papers must contain some new material, either in terms of original research results or in terms of reviewing the field from an interesting new angle, such that our technical readership gains added value by having access to your JLT invited tutorial paper in addition to previously published work. For review purposes, novelty will not be an issue since we seek to improve the understanding of the topic.

Invited Overview papers should provide a comprehensive, critical analysis of the state-of-the-art in a specific area of waveguide-based sensors. Authors are expected to synthesize recent advances, identify research gaps, and propose future directions. Submissions should go beyond a superficial overview or a mere compilation of existing references. A degree of novelty and originality is expected in the manuscript, such as presenting new critical experimental, theoretical or comparative assessments that complement, inter-connect, clarify or otherwise advance the understanding of the specific area covered by the review paper.

JLT is dedicated to advancement of waveguide based optical sensor concepts. Proposed manuscripts shall thus generally cover topics that comply with the JLT scope in the field of sensors. For details, please see this scope description.

Manuscripts will be considered for publication in two steps. In the first step, interested authors are encouraged to submit a 1–2-page manuscript proposal highlighting the proposed topic, explaining its importance, expected content, manuscript structure/concept, authors/group background in the field of the covered topic, and expected original additions in the case of review papers. The initial selection of manuscripts for publication in this category will be performed by JLT editorial board. In the second step, authors of selected proposals will be invited to provide full manuscripts, which will be peer-reviewed. JLT also strongly encourages collaborative proposals from multiple authors in different groups that are active in the proposed topics.

Submissions for manuscript proposals (step one) are due by December 30th, 2025. All authors will be notified of the manuscript selection by February 1st, 2026. Final manuscript submissions are due on the <u>JLT Author Portal</u> by April 1st, 2026.

Email your 1–2-page proposal to <u>iltstaff@ieee.org</u> prior to the December 30th deadline in the JLT double-column format, including figures, tables, and references. If selected, your paper may be up to 16 pages long for a Tutorial and 10 pages long for an Overview without incurring over-length page charges. Guidelines for authors can be found at the <u>JLT website's Author Information page</u>.

Proposal Submission Deadline: December 30th, 2025