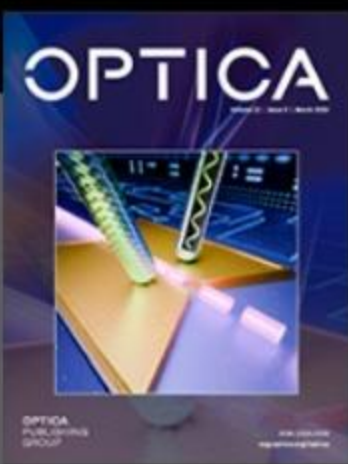


JOURNAL HOME
ABOUT
MEMORANDA
MINI-REVIEWS
ISSUES IN PROGRESS
CURRENT ISSUE
ALL ISSUES



About the cover

Optica

Prem Kumar, Editor-in-Chief
Editorial Board >

Search this Journal

Keyword / Author

Volume Issue Page

SUBMIT A PAPER
SIGN UP FOR ALERTS

20 MARCH 2025, VOLUME 12, ISSUE 3, PP. 296-436

19 ARTICLES

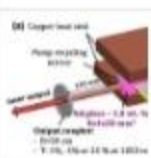
Actions Sort: Topic Page Number

Memoranda

- ☐
- 

Nanofocused attosecond hard x-ray free-electron laser with intensity exceeding 10^{19} W/cm²
Ichiro Inoue, Takahiro Sato, River Robles, Matthew H. Seaberg, Yanwen Sun, Diling Zhu, David Cesar, Yuantao Ding, Vincent Esposito, Paris Franz, Veronica Guo, Aliaksei Halavanau, Nicholas S. Sudar, Zhen Zhang, Yuichi Inubushi, Taito Osaka, Gota Yamaguchi, Yasuhisa Sano, Kazuto Yamauchi, Makina Yabashi, Agostino Marinelli, and Jumpei Yamada
Optica 12(3), 309-310 (2025) View: [HTML](#) | [PDF](#)

Letters

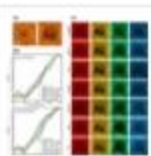
- ☐
- 

Indirectly LED-pumped Nd:glass: potential for high energy laser facilities
Maxime Nourry-Martin, Nicolas Fermon, Catherine Le Blanc, Loïc Meignien, Patrick Audebert, Frédéric Druon, Patrick Georges, and François Balembois
Optica 12(3), 311-314 (2025) View: [HTML](#) | [PDF](#)
- ☐
- 

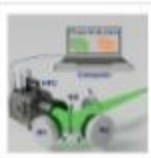
Ultra-wideband MHz to THz plasmonic EO modulator
Yannik Horst, David Moor, Daniel Chelladurai, Tobias Blatter, Sónia Fernandes, Laurenz Kulmer, Michael Baumann, Hande Ibili, Christian Funck, Killian Keller, Marcel Destraz, Wolfgang Heni, Loïc Chérix, Yuqi Liu, Hua Wang, Stefan M. Koepfli, and Juerg Leuthold
Optica 12(3), 325-328 (2025) View: [HTML](#) | [PDF](#) [Suppl. Mat. (1) | Public Reviewer Comments]
- ☐
- 

Laser-driven high-resolution MeV x-ray tomography
Reed Hollinger, Shoujun Wang, Sina Zahedpour Anaraki, James King, Ping Zhang, Ghassan Zeraouli, Alejandro Figueroa Bengoa, Matt Sheats, Shannon Scott, Joel Heidemann, James Hunter, Yong Wang, Ray Edwards, Matt Faulkner, Chris Aedy, Jorge J. Rocca, and Donald C. Gautier
Optica 12(3), 433-436 (2025) View: [HTML](#) | [PDF](#) [Suppl. Mat. (3)]

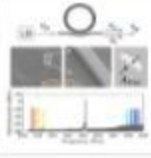
Research Articles

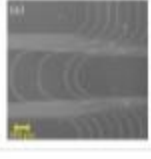
- ☐
- 

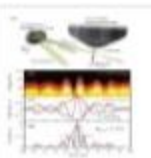
Boosting bacterial detection with hyperspectral mining
Lintao Peng, Chang Li, Wenhui Liu, Siyu Xie, Xue Chen, Fei Xiao, and Liheng Bian
Optica 12(3), 315-324 (2025) View: [HTML](#) | [PDF](#) [Suppl. Mat. (1)]
- ☐
- 

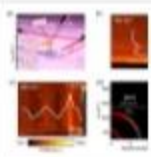
Reflection-mode diffraction tomography of multiple-scattering samples on a reflective substrate from intensity images
Tongyu Li, Jiabei Zhu, Yi Shen, and Lei Tian
Optica 12(3), 406-417 (2025) View: [HTML](#) | [PDF](#) [Suppl. Mat. (1)]
- ☐
- 

Ultra-high-speed non-interferometric quantitative phase and multi-plane imaging
Sudheesh K. Rajput, Yuki Kumon, Kenzo Nishio, Hou Natsu, Akio Sanpei, Osamu Matoba, and Yasuhiro Awatsuji
Optica 12(3), 350-359 (2025) View: [HTML](#) | [PDF](#) [Suppl. Mat. (9)]
- ☐
- 

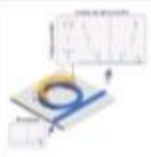
Adaptive reconfiguration and full control of light structures in optical fibers with programmable silicon photonics
Wu Zhou, Zengqi Chen, Kaihang Lu, Hao Chen, Mingyuan Zhang, Wenzhang Tian, and Yeyu Tong
Optica 12(3), 329-336 (2025) View: [HTML](#) | [PDF](#) [Suppl. Mat. (1)]
- ☐
- 

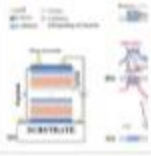
Nanopatterned parametric oscillators for laser conversion beyond an octave
Grant M. Brodnik, Haixin Liu, David R. Carlson, Jennifer A. Black, and Scott B. Papp
Optica 12(3), 337-342 (2025) View: [HTML](#) | [PDF](#) [Suppl. Mat. (1)]
- ☐
- 

Low threshold mid-infrared supercontinuum generation in GaAs_{0.51}Sb_{0.49}/InP waveguides
Edoardo De Toma, Victor Turpaud, Kevin Zhang, Yijun Yang, Laurent Vivien, Gerhard Böhm, Anna Köninger, Delphine Marris-Morini, and Mikhail A. Belkin
Optica 12(3), 399-405 (2025) View: [HTML](#) | [PDF](#)
- ☐
- 

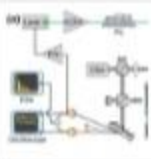
Synthesis of single-cycle pulses based on a Yb:KGW laser amplifier
Z. Pi, H. Y. Kim, and E. Goulielmakis
Optica 12(3), 296-301 (2025) View: [HTML](#) | [PDF](#) [Suppl. Mat. (1)]
- ☐
- 

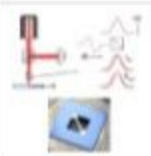
Observation of canalized phonon polaritons in a single α -MoO₃ flake
Kun Wang, Zhongao Huang, Langlang Xiong, Kai Wang, Yihua Bai, Hua Long, Nan Deng, Bing Wang, Guangwei Hu, and Peixiang Lu
Optica 12(3), 343-349 (2025) View: [HTML](#) | [PDF](#) [Suppl. Mat. (1)]
- ☐
- 

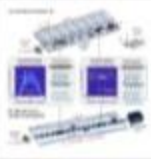
High-space-bandwidth product characterization of metalenses by information fusion of multi-angle illumination
Chuanjian Zheng, Wenli Wang, Yanfang Ji, Yao Hu, Shaohui Zhang, and Qun Hao
Optica 12(3), 374-383 (2025) View: [HTML](#) | [PDF](#) [Suppl. Mat. (1)]
- ☐
- 

Broadband and accurate electric tuning of on-chip efficient nonlinear parametric conversion
Jiaqi Li, Yanfeng Zhang, Jinjie Zeng, and Siyuan Yu
Optica 12(3), 424-432 (2025) View: [HTML](#) | [PDF](#) [Suppl. Mat. (1)]
- ☐
- 

High-speed ultra-broadband detection based on an interfacial work function internal photoemission detector
Siheng Huang, Xin Yuan, Xuhong Ma, Quan Yu, Ying Liu, Chenjie Pan, Cheng Tan, Gangyi Xu, Hua Li, and Yueheng Zhang
Optica 12(3), 384-390 (2025) View: [HTML](#) | [PDF](#)
- ☐
- 

Miniaturized high-efficiency snapshot polarimetric stereoscopic imaging
Boyan Fu, Xuxi Zhou, Tianyue Li, Hao Zhu, Zhen Liu, Shiyu Zheng, Yifan Zhou, Yiwang Yu, Xun Cao, Shuming Wang, Zhenlin Wang, and Shining Zhu
Optica 12(3), 391-398 (2025) View: [HTML](#) | [PDF](#) | [Compressed PDF](#) [Suppl. Mat. (3)]
- ☐
- 

Strong nanophotonic quantum squeezing exceeding 3.5 dB in a foundry-compatible Kerr microresonator
Yichen Shen, Ping-Yen Hsieh, Sashank Kaushik Sridhar, Samantha Feldman, You-Chia Chang, Thomas A. Smith, and Avik Dutt
Optica 12(3), 302-308 (2025) View: [HTML](#) | [PDF](#) | [Compressed PDF](#) [Suppl. Mat. (1)]
- ☐
- 

Quantum-limited optical lever measurement of a torsion oscillator
C. M. Pluchar, A. R. Agrawal, and D. J. Wilson
Optica 12(3), 418-423 (2025) View: [HTML](#) | [PDF](#) [Suppl. Mat. (1)]
- ☐
- 

Toward high-gain laser-driven electron undulators
Amnon Balanov, Ron Ruimy, and Ido Kaminer
Optica 12(3), 360-373 (2025) View: [HTML](#) | [PDF](#) [Suppl. Mat. (1)]

Previous Issue

Top

Publishing Home
Journals
Conferences
Preprints (Optica Open) [↗](#)
INFORMATION FOR
Authors
Reviewers
Librarians

OPEN ACCESS INFORMATION
Open Access Statement and Policy
Terms for Journal Article Reuse
OTHER RESOURCES
[Optica Open](#) [↗](#)
[Optica Publishing Group Bookshelf](#)
[Optics ImageBank](#)
[Optics & Photonics News](#) [↗](#)
[Spotlight on Optics](#)
[Optica Home](#)

ABOUT
[About Optica Publishing Group](#)
[About My Account](#)
[Sign up for Alerts](#)
[Contact Us](#)
[Send Us Feedback](#)

My Favorites

Recent Pages

