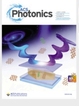

June 2, 2026
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**About the Cover:**

The coupling efficiency and spin-splitting energy of optical spin-orbit coupling can be precisely manipulated in an optical microcavity filled with organic alloy crystals by tuning the anisotropy, i.e., by controlling the proportion of host and guest, of the alloy crystals.

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### Organic Alloy Crystal Microcavity Boosting the Controllable Photonic Spin−Orbit Coupling

Shaoxian Huang, Xiaohong Zhang, Xuekai Ma, Chunling Gu*, Xiaohui Zhan*, Qing Liao*, and Juhuan Nie*

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ABSTRACT

### Metafibers for Simultaneous Generation of Orbital Angular Momentum Beams via On-Fiber 3D Nanoprinted Holograms

Rahaf Ismail, Shahrzad Hosseinabadi, Mohammadhossein Khosravi, Torsten Wieduwilt, and Markus A. Schmidt*

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Alejandro Caballero*, Thomas F. Allard, and Fabrina X. Hualdron*

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ABSTRACT

### Mid-Infrared Sensing and Ultrafast Photoresponse in Silicon-Based Plasmonic Detectors

Mauro Cavorti*, Alicja Dabrowska, Alexei Sirotin, Zirhan Song, Francesco Marangoni, Yirui Ma, Matthiasz Merk, Andreas Fuchsberger, Lilian Vogl, Peter Schweizer, Rolf Sandak, Benedikt Schwarz, Walter Michael Weber, Gottfried Strasser, F. Javier Garcia de Abajo, Jung Dermo, Bernhard Lendl, and Alois Lugstein*

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ABSTRACT

### Positive Aging in Inverted Quantum Dot Light-Emitting Devices and a Double Electron Transport Layer Approach for Achieving >23% External Quantum Efficiency

Mohsen Azadinia* and Hany Aziz

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ABSTRACT

### Efficient Cryogenic Photostimulated Luminescence: Charging and Discharging by Quantum Tunneling

Joseph J. Schupp*, Hellen Nakumuga, and Shen V. Chong

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ABSTRACT

### Strong Coupling to Higher-Order Photon Mode Enhances Emission Yield in Organic Microcavities

Xiaoqing Chu, Kai Schwennicke, Connor Cahill, and Girish Lakhwani*

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ABSTRACT

### Optosynapse Habituation in $WO_3/C_{60}$ Heterojunction for Efficient Human Faces Recognition

Ke Xiang, Jin Li, Yun Xin, Jiahao Guo, Siqi Lao, Guoyao Ouyang, Xiaofang Hu, Ping Li, Bo Wu, Bai Sun, and Guangdong Zhou*

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ABSTRACT

### Light-Driven Topological Relaxation and Dynamic Scaling in Photoresponsive Polymer Films

Michael de Oliveira, Sara Mosqili, Stefano Chiodini, Fabio Borbone, and Antonio Ambrosio*

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ABSTRACT

### Addressing Intramolecular Vibrational Redistribution in a Single Molecule through Pump and Probe Surface-Enhanced Vibrational Spectroscopy

Aurelian Lorette-Pelissier*, Roberto A. Boto, Javier Aizpurua, and Ruben Esteban*

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ABSTRACT

### Ultrabroadband Terahertz Coherent Detection with Organic Polymeric Materials

Hang Zhao, Shiliang Zhao, Xiaodi Ji, Yong Tan, Lei Ge, Lu Rong, Dapeng Wang*, Yongzheng Wen*, and Ji Zhou*

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ABSTRACT

### Background-Free Tracking of Ultrafast Hole and Electron Dynamics in Germanium with NIR-Driven XUV Transient Grating Spectroscopy

Vincent Eggert*, Rafael Quintero-Bermudez, Kevin Gulu Xiong, and Stephen R. Leone

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### A Scalable Platform for High Cooperativity and Multimode Ultrastrong Plasmon−Phonon Coupling

Li Yu, Lei Ma, Zhipeng Tan, Binhu Yao, Junchang Cao, Pingping Chen*, Tianxin Li*, and Wei Lu*

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ABSTRACT

### Fragility of Unidirectional Transport in Weakly Disordered Photonic Chern Insulators

Xiaoxuan Shi, Tianbao Qu, Xiaobin Wu, Mudi Wang, Lei Zhang*, and Jun Chen*

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ABSTRACT

### Tensor-Driven Geometric Phase in Nonlinear AlGaAs Metasurfaces

Giorgio Guercio, Andrea Gerini, Kristina Frizyuk, Martina Morasso, Aristide Lemaître, Costantino De Angelis, Luca Carletti, and Giuseppe Leo*

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Abstract | Full text | PDF

ABSTRACT

### Wavefront Control and Intensity Modulation of Third Harmonic Generation in Nonlocal Metasurfaces

Yu Tian, Nan Wang, Qi Liu, Shuyuan Xiao, Tinghing Liu, Olivier J. F. Martin, and Ying Gu*

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ABSTRACT

### Direct Photolithography of Perovskite Nanocrystals via 365 nm UV-Induced Ligand Cross-Linking

Yong-Hyun Jo, Seunghan Lee, Se Young Park, Yeongcheol Kim, Seul Lee, Ju Young Woo, Hyung-Kyu Lim, and Moon Sung Kang*

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ABSTRACT

### Multibeam Shaping of Laser Diode Arrays via Phase-Functional Decomposition for Monolithic Integration

Jianxu Wang, Xinhong Gao, Ruisheng Wan, Gaofei Xia, Zi Wang, Yongjian Li*, and Bridon Wang

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ABSTRACT

### Field-Resolved Hybrid Coherent Anti-Stokes Raman Scattering for Background-Free Retrieval of Intrinsic Raman Features and Ultrafast Molecular Dynamics

Zhou Li, Tan Cao*, Qi Xu, Kun Chen, Liuyan Yang, Xing-Yao, Jing Li, Jinlong Zheng, Minghui Peng, Jiahui Pengh, and Aileen Y. Sokolov*

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ABSTRACT

### Enhancing In-Plane Thermal Conductivity of Ag and Au Films

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ABSTRACT

### Color-Blind Image Sensors: Toward Digital Twin of Human Retina

Yuehan Meng, Bryce Widdicombe, Dechuan Sun, Paul Beckett, Peter van Wijngaarden, Efstratios Skafidas, Ampalavanapillai Nirmalathas, and Ranjith Rajasekharan Unnithan*

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ABSTRACT

### Single-Step Grayscale Lithography of Multi-Depth Mie Void Metasurfaces

Omer Goldberg*, Nora Maturana, and Uriel Levy

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