



May 20, 2026
Volume 13, Issue 10
Pages 2750-2994

About the Cover:
Extreme spatial confinement of light inside a dielectric cavity. The light is confined to volumes orders-of-magnitude below the free-space diffraction limit material, leading to extreme intensity enhancement facilitating light-matter interaction.
[View the article.](#)
[Download Cover](#)

In this issue:
[» Reviews](#)
[» Letters](#)
[» Mastheads](#)



[Get e-Alerts](#)
[Submit Manuscript](#)

Sort By:

REVIEWS

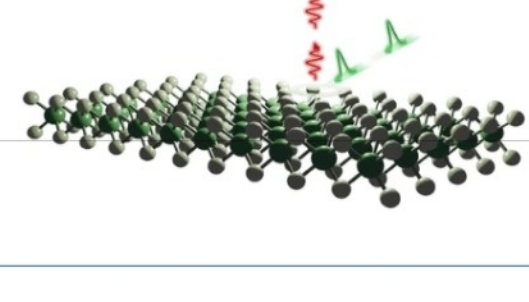
The Origin and Promise of Transition Metal Dichalcogenide-Hosted Single-Photon Emitters for Quantum Technologies

Mayank Chhaparwal, Amartyaj Kumar, and Kausik Majumdar*

ACS Photonics 2026, 13, 10, 2758-2779 (Review)
Publication Date (Web): May 9, 2026

[Abstract](#) [Full text](#) [PDF](#)

ABSTRACT



LETTERS

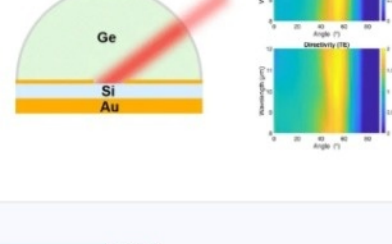
Broadband Directive Thermal Emission with Dual Polarization

Yae-Chan Lim, Komron J. Shayegan, and Harry A. Atwater*

ACS Photonics 2026, 13, 10, 2780-2787 (Letter)
Publication Date (Web): May 11, 2026

[Abstract](#) [Full text](#) [PDF](#)

ABSTRACT



ADVERTISEMENT
Schrodinger **Exploring Off-Target Compound Binding: An In Silico Approach** **c&en** | WEBINAR | **June 15, 8AM PT, 11AM ET** [REGISTER NOW](#)

ARTICLES

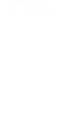
Enhanced Hole Injection in Quantum Dot Light-Emitting Diodes Using Sputtered Co-Coped NiO Layers

Hyu-Jun Lim, Nayoon Lee, Heewon Jang, Van-Khoai Vo, Thi Huong Thao Dang, Jung-A Lee, Dokyum Kim, Dayoung Choi, Minhyung Shin, Hyeemin Lim, Jong-In Woo, Chang-Lyul Lee, Joon-Hyung Lee, Byoung-Seong Jeong, and Young-Woo Heo*

ACS Photonics 2026, 13, 10, 2788-2797 (Article)
Publication Date (Web): May 7, 2026

[Abstract](#) [Full text](#) [PDF](#)

ABSTRACT



Orders of Magnitude Reduction in Photonic Mode Volume by Nanosculpting

Rasmus E. Christensen*, Jesper Mark, and Ole Sigmund

ACS Photonics 2026, 13, 10, 2798-2806 (Article)
Publication Date (Web): January 20, 2026

[Abstract](#) [Full text](#) [PDF](#)

ABSTRACT



Efficient Hyperspectrum and Deep Learning-Based Distributed Optical Fiber Sensing for Mini/Micro-LEDs 3D Spatially Resolved Light Measurement

Jintao Chen, Libong Zhu, Xiongjun Cao, Zhen Li, Honglin Gong, Hongfei Liu, Yujiao Ruan, Ningning Zhang, Weiwei Guo, Tingzhu Wu, Lijun Bao*, Zhong Chen, and Yijun Lu*

ACS Photonics 2026, 13, 10, 2807-2817 (Article)
Publication Date (Web): May 11, 2026

[Abstract](#) [Full text](#) [PDF](#)

ABSTRACT



Compact and Tunable Dense WDM Multiplexer/Demultiplexer on X-Cut Thin-Film Lithium Niobate

Xun Zhang, Meng Ge, Min Sun, Jingchi Li, Pengju Zhao, Yuqi Chen, Wenfeng Zhou, Xin Wang, Qingqing Han, Yahui Zhu, Yikai Su*, and Yong Zhang*

ACS Photonics 2026, 13, 10, 2818-2826 (Article)
Publication Date (Web): May 5, 2026

[Abstract](#) [Full text](#) [PDF](#)

ABSTRACT



Quantitative Cathodoluminescence Mapping of External Radiative Efficiency in LEDs

Corentin Guéret*, Fabrice Donatini, Bruno Daudin, and Grégoire Jacopin*

ACS Photonics 2026, 13, 10, 2844-2854 (Article)
Publication Date (Web): May 8, 2026

[Abstract](#) [Full text](#) [PDF](#)

ABSTRACT



Advantages of Broadband Metalenses for Generalizable Image Classification

Yubo Zhang, Johannes Frösch, Jilin Xiang, Shane Colburn, Myunghoo Lee, Zhihao Zhou, Minho Choi, Eli Shitzerman, and Arka Majumdar*

ACS Photonics 2026, 13, 10, 2853-2863 (Article)
Publication Date (Web): April 28, 2026

[Abstract](#) [Full text](#) [PDF](#)

ABSTRACT



Cathodoluminescence Study of a Quantum Dot in a Nanowire for Single-Photon Emission

Francis Granger, Fabrice Donatini, Edith Bellet-Amalric, Kurtheak Kheng, Gilles Nogues, David Ferrand, and Joël Cibert*

ACS Photonics 2026, 13, 10, 2844-2852 (Article)
Publication Date (Web): May 7, 2026

[Abstract](#) [Full text](#) [PDF](#)

ABSTRACT



Precision Photonic Integrated Circuit for Embodied Perception in Robotic End-Effectors

Jihong Xu, Haojun Huang, Yaoliang Fan, Yu Xu, Zhuoying Wang, Yuhang Wang, Zhenxing Sun*, and Xiangfei Chen

ACS Photonics 2026, 13, 10, 2853-2861 (Article)
Publication Date (Web): April 30, 2026

[Abstract](#) [Full text](#) [PDF](#)

ABSTRACT



Three-Dimensional Heterostructure on the GeSnOI Platform Enables Efficient Si-based Light Emission

Zhenqian Ye, Qinxing Huang, Jiyi Li, Xiangqun Liu, Yuhua Zuo, Zhi Liu, Tao Men, Chuanbo Li, Guangze Zhang, Buwen Cheng, and Jun Zheng*

ACS Photonics 2026, 13, 10, 2870-2879 (Article)
Publication Date (Web): May 4, 2026

[Abstract](#) [Full text](#) [PDF](#)

ABSTRACT



Engineered Mode Coupling in High-Q Microresonators Enables Deterministic Low-Repetition-Rate Soliton Microcombs

Yi Zheng*, Yang Liu, Haoyang Tan, Yanjing Zhao, Andreas Jacobsen, Kirsten Yvind, and Minhao Pu*

ACS Photonics 2026, 13, 10, 2878-2887 (Article)
Publication Date (Web): May 4, 2026

[Abstract](#) [Full text](#) [PDF](#)

ABSTRACT



ADVERTISEMENT
UNIVERSITY OF CALIFORNIA **AI-Powered Formulation and Lab Workflows** **c&en** | WEBINAR | **June 23, 8AM PT, 11AM ET** [REGISTER NOW](#)

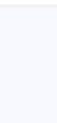
Suppression of Deep-Level Defects Enabled by a Ternary Strategy for Ultralow Dark Current Near-Infrared Organic Photodetectors

Taiyu Li, Qiao Luo, Haihong Guo, Haozhe Liu, Lin Gao, Ding Zheng*, and Junsheng Yu*

ACS Photonics 2026, 13, 10, 2878-2889 (Article)
Publication Date (Web): May 5, 2026

[Abstract](#) [Full text](#) [PDF](#)

ABSTRACT



Reconfigurable and Transferable Liquid Crystal Claddings Enabled by Polymer Network Templates for Tunable Silicon Nitride Microring Resonators

Ting-Han Chen, Yu-Hsuan Chang, Yu-Hong Chen, Wen-Hsien Huang, Shao-Hui Hsu, and Chun-Ta Wang*

ACS Photonics 2026, 13, 10, 2890-2899 (Article) [Open Access](#)
Publication Date (Web): April 27, 2026

[Abstract](#) [Full text](#) [PDF](#)

ABSTRACT



Efficient and Nonsuspended Acousto-Optic Mach-Zehnder Modulators on Silicon Photonic Platform

Chukun Huang, Han Xue, Haotian Shi, Chuanquan Liu, and Junqiang Sun*

ACS Photonics 2026, 13, 10, 2908-2917 (Article)
Publication Date (Web): April 28, 2026

[Abstract](#) [Full text](#) [PDF](#)

ABSTRACT



Broadband GHz Fundamental Mode-Locking with Low-Quenching Highly Er–Ba Nanoparticle Suspension-Doped Silica Fibers

Maojin Dai*, Jennifer Campbell, Mary Ann Cahoon, Bailey Meehan, Thomas W. Hawkins, John Ballato, Peter D. Dragic, Size Yun Set, and Shing Yamashita*

ACS Photonics 2026, 13, 10, 2908-2917 (Article)
Publication Date (Web): April 24, 2026

[Abstract](#) [Full text](#) [PDF](#)

ABSTRACT



Three-Dimensional Imaging of Threading Dislocations in GaN by Multimodal Stimulated Raman Scattering Microscopy

Shun Takahashi, Yusuke Wakamoto, Kazuhiro Kuruma, Takuya Maeda, and Yasuyuki Ozeki*

ACS Photonics 2026, 13, 10, 2918-2927 (Article)
Publication Date (Web): May 5, 2026

[Abstract](#) [Full text](#) [PDF](#)

ABSTRACT



Electro-optic Modulation in Polycrystalline Barium Titanate Metasurfaces Enhanced by Poling

Eleni Prountzou*, Helena C. Weigand, Virginia Falcone, Lilla-Linda Talts, Morgan Trassin, and Rachel Grange

ACS Photonics 2026, 13, 10, 2928-2936 (Article) [Open Access](#)
Publication Date (Web): May 5, 2026

[Abstract](#) [Full text](#) [PDF](#)

ABSTRACT



Three-Dimensional Magneto-Optical Trap Beam Delivery with Scalable Wafer-Level Optics

Zi Wang*, Phillip S. Cloud, Minsuk Lee, Wengji Zhu, Kanghee Worn*, Qian Sun, and Amit Agrawal*

ACS Photonics 2026, 13, 10, 2938-2943 (Article) [Open Access](#)
Publication Date (Web): April 29, 2026

[Abstract](#) [Full text](#) [PDF](#)

ABSTRACT



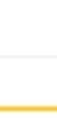
Holographic Projection Display Enlargement via Polarization-Grating Beam Steering with Fast-Response Liquid Crystal Pi-Cells

Qihao Han*, Tianxin Wang, Guansong Zhang, Waqas Kamal, Jing Guo, Zimo Zhao, Chao He, Steve J. Elston, and Stephen M. Morris*

ACS Photonics 2026, 13, 10, 2943-2953 (Article) [Open Access](#)
Publication Date (Web): May 7, 2026

[Abstract](#) [Full text](#) [PDF](#)

ABSTRACT



Refractive Wavefront Engineering for On-Chip Beam Steering

Tao Chen*, Zhenming Ding, Zeyu Deng, Shijie Ke, and Ziyang Zhang*

ACS Photonics 2026, 13, 10, 2954-2965 (Article)
Publication Date (Web): May 7, 2026

[Abstract](#) [Full text](#) [PDF](#)

ABSTRACT



Single-Polarization-Channel Chiral Metasurfaces for Photon Emission Control

Po-Sheng Huang, Ya-Hsin Hsiao, Sheng-Chan Wu, Jia-He Liu, Ping-Sheng Lin, Chang-Hsiao Chen, Kuang-I Lin, and Pin-Chieh Wu*

ACS Photonics 2026, 13, 10, 2967-2974 (Article) [Open Access](#)
Publication Date (Web): May 4, 2026

[Abstract](#) [Full text](#) [PDF](#)

ABSTRACT



Light-Driven Cell Micromotors for T Cell Activation

Chenchen Liu, Benjun Yao, Ran Xiao, Guozel Yang, and Hongxiang Lei*

ACS Photonics 2026, 13, 10, 2976-2984 (Article)
Publication Date (Web): May 11, 2026

[Abstract](#) [Full text](#) [PDF](#)

ABSTRACT



Polarization-Insensitive Wavelength Multiplexer in Thin-Film Lithium Niobate Photonics Using Deep-Ultraviolet Lithography

Xuejie Mu, Binmeng Li, Lianke Cao, Yifei Wang, Weihua Yan, Zhiwen Zheng, Shuxin Wang, Zhonglin Lin*, and Xinlan Wu*

ACS Photonics 2026, 13, 10, 2987-2994 (Article)
Publication Date (Web): April 30, 2026

[Abstract](#) [Full text](#) [PDF](#)

ABSTRACT



MASTHEADS

Issue Editorial Masthead

ACS Photonics 2026, 13, 10, XXX-XXX (Article) [Free to Read](#)
Publication Date (Web): May 20, 2026

[First Page](#) [PDF](#)

Issue Publication Information

ACS Photonics 2026, 13, 10, XXX-XXX (Article) [Free to Read](#)
Publication Date (Web): May 20, 2026

[First Page](#) [PDF](#)

READ Journals Books & References C&EN	PUBLISH Submit a Manuscript Author Resources Peer Review Purchase Author Services Explore Open Access	SUBSCRIBE Librarians & Account Managers Open Science for Institutions Inquire About Access	HELP Support FAQ Live Chat with Agent	RESOURCES About ACS Publications ChemRxiv Blog Events Join ACS For Advertisers
---	---	--	--	---