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Metal-halide perovskite-based edge emitting lasers

Supratim Basak, Ofer Bar-On, and Jacob Scheuer

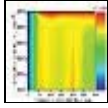
Opt. Mater. Express 12(2) 375-382 (2022)



High-performance β -Ga₂O₃-based solar-blind photodetector with ultralow dark current and fast photoresponse for deep-ultraviolet communication

Shuren Zhou, Xuan Peng, Haowen Liu, Zhengfeng Zhang, Lijuan Ye, Honglin Li, Yuanqiang Xiong, Lianbin Niu, Fanglin Chen, Liang Fang, Chunyang Kong, Wanjun Li, Xun Yang, and Hong Zhang

Opt. Mater. Express 12(1) 327-337 (2022)



Simulating the performance of a high-efficiency SnS-based dual-heterojunction thin film solar cell

Abdul Kuddus, Shaikh Khaled Mostaque, and Jaker Hossain

Opt. Mater. Express 11(11) 3812-3826 (2021)



Influence of different concentrations of SbCl₃ salt on the properties of Sb₂S₃ nanobars prepared by the solvothermal method for solar cell application

E. M. Mkawi, Rahma Almalki, and Y. Al-Hadeethi

Opt. Mater. Express 11(7) 2219-2233 (2021)



Unraveling the degradation process of 2D passivated and Cs stabilized FAPbI₃ by optical pump THz probe spectroscopy

Hao Sun, Hongchuan He, Ming Yin, Hao Cheng, Xiaoxia Lin, Qiuping Huang, and Yalin Lu

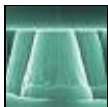
Opt. Mater. Express 11(7) 1874-1884 (2021)



Solar cell simulations based on ab initio methods [Invited]

Alexander Quandt and Robert Warmbier

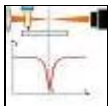
Opt. Mater. Express 11(6) 1763-1779 (2021)



Strain engineering of digitally alloyed AlN/GaN nanorods for far-UVC emission as short as 220 nm

Na Gao, Junxin Chen, Xiang Feng, Shiqiang Lu, Wei Lin, Jinchai Li, Hangyang Chen, Kai Huang, and Junyong Kang

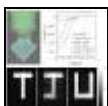
Opt. Mater. Express 11(4) 1282-1291 (2021)



Nonlinear optical properties of 6H-SiC and 4H-SiC in an extensive spectral range

Xiao Guo, Zeyu Peng, Pengbo Ding, Long Li, Xinyi Chen, Haoyun Wei, Zhen Tong, and Liang Guo

Opt. Mater. Express 11(4) 1080-1092 (2021)



Low operating voltage monolithic stacked perovskite photodetectors for imaging applications

Hongliang Zhao, Tengpeng Li, Qingyan Li, Chengqi Ma, Jie Li, Chenglong Zheng, Yating Zhang, and Jianquan Yao

Opt. Mater. Express 11(4) 1004-1013 (2021)

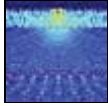


Doping and temperature-dependent UV-Vis optical constants of cubic SrTiO₃: a combined spectroscopic ellipsometry and first-principles study

Wenjie Zhang, Tianhao Fei, Tao Cheng, Chong Zheng, Yanbing Dong, Jia-Yue Yang, and Linhua Liu

Opt. Mater. Express 11(3) 895-904 (2021)

Different scattering effect of nano-patterned sapphire



substrate for TM- and TE-polarized light emitted from AlGaIn-based deep ultraviolet light-emitting diodes

Ji Zhang, Le Chang, Ziqiang Zhao, Kangkai Tian, Chunshuang Chu, Quan Zheng, Yonghui Zhang, Qing Li, and Zi-Hui Zhang

Opt. Mater. Express 11(3) 729-739 (2021)



Recent progress in topological waveguides and nanocavities in a semiconductor photonic crystal platform [Invited]

Satoshi Iwamoto, Yasutomo Ota, and Yasuhiko Arakawa

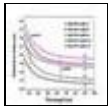
Opt. Mater. Express 11(2) 319-337 (2021)



Epitaxial growth of ϵ -(AlGa)₂O₃ films on sapphire substrate by PLD and the fabrication of photodetectors

Yangyang Gao, Qian Feng, Zhaoqing Feng, Yan Zuo, Yuncong Cai, Yachao Zhang, Jing Ning, Chunfu Zhang, Xiaojuan Sun, Zhitai Jia, Jincheng Zhang, and Yue Hao

Opt. Mater. Express 11(2) 219-230 (2021)

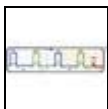


Deep-UV hexagonal boron nitride (hBN)/BAIN distributed Bragg reflectors fabricated by RF-sputtering

Qiang Li, Qifan Zhang, Yunhe Bai, Haoran Zhang, Peng Hu, Yufeng Li, and Feng Yun

Opt. Mater. Express 11(1) 180-188 (2021)

SPOTLIGHT



Al:ZnO as a platform for near-zero-index photonics: enhancing the doping efficiency of atomic layer deposition

D. Fomra, K. Ding, V. Avrutin, Ü. Özgür, and N. Kinsey

Opt. Mater. Express 10(12) 3060-3072 (2020)



Air-stable perovskite photovoltaic cells with low temperature deposited NiOx as an efficient hole-transporting material

A. K. Mahmud Hasan, Itaru Raifuku, N. Amin, Yasuaki Ishikawa, D. K. Sarkar, K. Sobayel, Mohammad R. Karim, Anwar Ul-Hamid, H. Abdullah, Md. Shahiduzzaman, Yukiharu Uraoka, Kamaruzzaman Sopian, and Md. Akhtaruzzaman

Opt. Mater. Express 10(8) 1801-1816 (2020)

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