

Special Topic on Compound Semiconductor Materials and Devices on Si

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100202 Mid-infrared lasers on silicon operating close to room temperature

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100301 Progress in integrating III–V semiconductors on silicon could drive silicon photonics forward

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100401 Silicon polarization switch based on symmetric polarization splitter-rotators

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[1 page] Huiyun Liu, Yikai Su, Chuanbo Li, and Xuhan Guo

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[27 pages] Giorgos Boras, Xuezhe Yu, and Huiyun Liu

101302 Recent progress in epitaxial growth of III–V quantum-dot lasers on silicon substrate

[9 pages] Shujie Pan, Victoria Cao, Mengya Liao, Ying Lu, Zizhuo Liu, Mingchu Tang, Siming Chen, Alwyn Seeds, and Huiyun Liu

101303 Perspective: optically-pumped III–V quantum dot microcavity lasers via CMOS compatible patterned Si (001) substrates

[9 pages] Wenqi Wei, Qi Feng, Zihao Wang, Ting Wang, and Jianjun Zhang

101304 Recent advances of heterogeneously integrated III–V laser on Si

[11 pages] Xuhan Guo, An He, and Yikai Su

101305 III–V compound materials and lasers on silicon

[9 pages] Wenyu Yang, Yaji Lie, Fangyuan Meng, Hongyan Yu, Mengqi Wang, Pengfei Wang, Guangzhen Luo, Xuliang Zhou, and Jiaoqing Pan

- 101306 **Dynamics of InAs/GaAs quantum dot lasers epitaxially grown on Ge or Si substrate**
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- 101801 **Hydride vapor phase epitaxy for gallium nitride substrate**
[10 pages] Jun Hu, Hongyuan Wei, Shaoyan Yang, Chengming Li, Huijie Li, Xianglin Liu, Lianshan Wang, and Zhanguo Wang

■ ARTICLES

- 102301 **Size effect on optical performance of blue light-emitting diodes**
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- 102302 **Simulation of structural design with high coupling efficiency in external cavity semiconductor laser**
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- 102801 **Preparation and characterization of AlN seeds for homogeneous growth**
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