

Publication list (first author)

Journal papers

- **X. Li**, H. Wang, Z. Qiao, Y. Zhang, Z. Niu, C. Tong, and C. Liu, "Design and analysis of 2- μm InGaSb/GaSb quantum well lasers integrated onto silicon-on-insulator (SOI) waveguide circuits through an Al_2O_3 bonding layer," *IEEE J. Sel. Topics Quantum Electron.*, vol. 22, no. 6, p. 1500507, 2016.
- **X. Li**, H. Wang, Z. Qiao, Y. Liao, Y. Zhang, Y. Xu, Z. Niu, C. Tong, and C. Liu, "Temperature- and current-dependent spontaneous emission study on 2 μm InGaSb/AlGaAsSb quantum well lasers," *Jpn. J. Appl. Phys.*, vol. 56, no. 5, p. 050310, 2017.
- **X. Li**, H. Wang, Z. Qiao, X. Guo, G. I. Ng, Y. Zhang, Z. Niu, C. Tong, and C. Liu, "Modal gain characteristics of a 2 μm InGaSb/AlGaAsSb passively mode-locked quantum well laser," *Appl. Phys. Lett.*, vol. 111, no. 25, p. 251105, 2017.
- **X. Li**, H. Wang, Z. Qiao, X. Guo, W. Wang, G. I. Ng, Y. Zhang, Y. Xu, Z. Niu, C. Tong, and C. Liu, "Investigation of regime switching from mode locking to Q-switching in a 2 μm InGaSb/AlGaAsSb quantum well laser," *Opt. Express*, vol. 26, no. 7, p. 8289, 2018.
- **X. Li**, H. Wang, Z. Qiao, Y. Zhang, Y. Xu, Z. Niu, C. Tong, and C. Liu, "Investigation on ideality factor of 2 μm InGaSb/AlGaAsSb quantum well laser," *Infrared Laser Eng.*, vol. 47, no. 5, p. 0503001, 2018. (invited, journal cover page)
- **X. Li**, H. Wang, Z. Qiao, X. Guo, W. Wang, G. I. Ng, Y. Zhang, Y. Xu, Z. Niu, Cunzhu Tong, and C. Liu, "High temperature characteristics of a 2 μm InGaSb/AlGaAsSb passively mode-locked quantum well laser," submitted.

Conference papers

- **X. Li**, C. Liu, Z. Qiao, X. Guo, Q. Meng, H. Wang, "Design and analysis of GaSb-based InGaAsSb quantum well laser at 2 μm for hybrid-integration onto SOI platform," *ICMAT2015*, Singapore, 2015.
- **X. Li**, H. Wang, Z. Qiao, X. Guo, K. S. Ang, C. Liu, "Optimization of semiconductor ridge waveguide lasers for improved temperature characteristics," *CSW2016*, Toyama Japan, 2016.
- **X. Li**, H. Wang, Z. Qiao, Y. Zhang, Z. Niu, C. Tong, and C. Liu, "GaSb Laser with tapered waveguide heterogeneously integrated onto SOI platform using Al_2O_3 bonding layer," *IUMRS-ICEM2016*, Singapore, 2016.
- **X. Li**, H. Wang, Z. Qiao, X. Guo, K. S. Ang, C. Liu, "Investigation of ridge height of semiconductor ridge waveguide lasers to improve their temperature characteristics," *IUMRS-ICEM2016*, Singapore, 2016.
- **X. Li**, H. Wang, Z. Qiao, X. Guo, Y. Liao, Y. Zhang, Y. Xu, Z. Niu, C. Tong, and C. Liu, "Ideality factor of 2 μm InGaSb/AlGaAsSb quantum well lasers," *IPC2017*, Orlando, USA, 2017.
- **X. Li**, H. Wang, Z. Qiao, X. Guo, K. S. Ang, and C. Liu, "Modal gain investigation on the GaAs-based InAs/InGaAs quantum dot mode-locked laser," *IPC2017*, Orlando, USA, 2017.
- **X. Li**, H. Wang, Z. Qiao, X. Guo, W. Wang, G. I. Ng, and C. Liu, "Characteristic temperature of a 2 μm InGaSb/AlGaAsSb mode-locked quantum well laser," *High-brightness Sources and Light-driven Interactions Congress*, Strasbourg, France, 2018.
- **X. Li**, H. Wang, Z. Qiao, X. Guo, W. Wang, G. I. Ng, and C. Liu, "Temperature- and

current-dependent repetition frequency of a 2 μm InGaSb/AlGaAsSb mode-locked quantum well laser,”
High-brightness Sources and Light-driven Interactions Congress, Strasbourg, France, 2018.