

Curriculum Vitae: Rui Lin

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Chalmers University of Technology
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Current employment

11/2022 – present Researcher (Forskare), permanent position, Division of Communications, Antennas, and Optical Networks, Department. of Electrical Engineering, Chalmers University of Technology, Sweden

Previous employments

04/2021 – 01/2022 Researcher (Forskare), Division of Communications, Antennas, and Optical Networks, Department. of Electrical Engineering, Chalmers University of Technology
04/2019 – 02/2021 Postdoctoral researcher, Division of Communications, Antennas, and Optical Networks, Department of Electrical Engineering, Chalmers University of Technology, Sweden
01/2017 – 03/2019 Postdoctoral researcher, School of Information Communication Technology, KTH Royal Institute of Technology, Sweden

Education qualifications

12/2016 PhD in Communication Systems, KTH Royal Institute of Technology, Sweden. Supervised by Prof. Jiajia Chen and Prof. Lena Wosinska
06/2011 Bachelor of Electronic Information Engineering, Huazhong University of Science and Technology, China

Deductible time

11/2022 – 12/2023 Parental Leave

Research grants

01/2023 – 06/2025 National Quantum Communication Infrastructure Sweden, EU CN ECT, co-funded by Vinnova, 10M Euro in total, 12.47M SEK for Chalmers, main applicant at Chalmers
01/2022 – 12/2025 *Scaling Quantum Networks by Multi-dimensional Multiplexing*
Swedish Research Council (VR), 4M SEK, main applicant
01/2020 – 12/2021 *Platform for Gender Initiatives in Distributed Quantum Machine Learning*
Chalmers University of Technology, 1M SEK, co-applicant
06/2020 – 12/2020 *Error Control and Encoding, Multiplexing Enabled Non-Collision Optical Interconnects*
Chalmers University of Technology, 300K SEK, main applicant

Involvement in national and international research projects

2021 – 2024 *Providing Resilient & secure networks [Operating on Trusted Equipment] to Critical infrastructures (PROTECT)*, CELTIC-NEXT project, funded by VINNOVA.
Role: task leader. Task: eavesdropping detection scheme
2018 – 2020 *High-capacity optical interconnects for disaggregated data centers*, 300k SEK, funded by the Swedish Foundation for International Cooperation in Research and Higher Education (STINT).
Role: work package leader. Task: architecture design
2019 – 2020 *Enabling Scalable and Sustainable Data Center Networks*, funded by Swedish Foundation for Strategic Research (SSF).
Role: researcher, task leader. Task: passive optical interconnect design

- 2015 – 2018 *Towards flexible and energy efficient datacenter networks*, Frame Program, funded by Swedish Research Council (VR).
Role: researcher, task leader. Task: high-speed optical transmission systems
- 2012 – 2014 *Theoretical basis and key technology research of high-speed coherent optical communication system, funded by National Natural Science Foundation of China (NSFC)*.
Role: researcher, task leader. Task: optical comb generation scheme

Supervision experience

- PhD students
 - Local students*
 - Lei Xue (Chalmers University of Technology), *graduated in 2021*, co-supervisor
Signal processing for passive optical networks, 2018 – 2021
 - Yuxin Cheng (KTH Royal Institute of Technology), co-supervisor
Control plane design for data center network, 2017 – 2019
 - Visiting students*
 - Haokun Song (Beijing University of Post and Telecommunication, BUPT), main supervisor of the guest student visiting Chalmers.
Eavesdropping detection over fibre network, 2022– present
 - Chao Lei (BUPT), main supervisor of the guest student visiting Chalmers.
Physical-layer key distribution and encryption, 2022– present
 - Yuan Cao (BUPT), co-supervisor of the guest student visiting KTH
Design and provisioning of quantum key distribution network, 2019 – 2020
 - Lin Gan (Huazhong University of Science and Technology, HUST) – main supervisor of the guest student visiting KTH
Crosstalk in spatial division multiplexing transmission, 2018 – 2019,
 - Xi Chen (HUST) – main supervisor of the guest student visiting KTH
Digital equalization in discrete multitone transmission, 2018 – 2019,
 - Tao Jiang (HUST) – main supervisor of the guest student visiting KTH
Switching paradigm in spatial division multiplexing 2018 – 2019
- Master students: co-supervisor of 2 M.Sc. students

Teaching experience

- 03/2022 Guest lecture
Quantum Cryptography for Unhackable Communication

Pedagogical course

- 01/2022 – 12/2022 Supervising research students - CLS905, Chalmers University of Technology, 3.0 credits

Technical visits

- 11/2019 Shanghai Jiaotong University, China. Hosted by Prof. Shilin Xiao
Multicore fibre based self-homodyne low-cost coherent optical interconnect
- 05/2018 University of Bristol, UK. Hosted by Prof. Dimitra Simeonidou
Quantum key distribution co-exists with classical communication
- 08/2017 University of Ghent, Belgium. Hosted by Prof. Scott Yin
Spatial division multiplexing transmission for data center interconnect
- 06/2016 University of Ghent, Belgium. Hosted by Prof. Scott Yin
Real-time optical transmission for data center interconnect
- 06/2015 Chalmers Tekniska Högskola, Sweden. Hosted by Prof. Erik Agrell
Study on scalability of passive optical interconnect for data center

Editorial and review activities

- External evaluator
 - Faculty appointment committee of Huazhong University of Science and Technology,
- Associate editor
 - IEEE Networking Letters, 2022, 2023
- Guest editor

- Special issue: Quantum Communications and Quantum Networks, Applied Sciences, 2021
- Referee assignments for scientific journals
 - IEEE/OSA Journal of Lightwave Technology
 - IEEE/OSA Journal of Optical Communications and Networking
 - IEEE Access
 - IEEE Digital Signal Processing
 - IEEE Optical Fiber Technology
 - IEEE Photonics Journal
 - IEEE Journal on Selected Areas in Communications
 - IEEE Networking Letters
 - IEEE Intelligent Systems
 - OSA Optics Express
 - OSA Optics Letters
 - Elsevier Optics Communications
 - SPIE Optics Engineering
 - ACM Computing Surveys
 - Transactions on Emerging Telecommunications Technologies
 - Photonic Network Communications
- Reviewers for international conferences: IEEE ICC, IEEE GLOBECOM, IEEE ONDM

Conference organization

- Program Chair:
 - IEEE Photonics Global Conference 2023
- Technical Program Committee member:
 - Optical Fiber Communication Conference and Exposition (OFC) 2021, 2022,2023, 2024
 - Asia Communications and Photonics Conference (ACP) 2022, 2023
 - IEEE International Conference on Communications (ICC): Optical Networks and Systems Symposium 2022
 - International Workshop on Trustable, Verifiable and Auditable Federated Learning in Conjunction with AAAI (FL-AAAI) 2022
 - International Workshop on Federated Learning for User Privacy and Data Confidentiality in Conjunction with ICML (FL-ICML) 2021
 - Optics Frontiers 2020, 2021
 - Conference on Neural Information Processing Systems (NeurIPS) 2019
 - IEEE BigData Special Track on Federated Machine Learning (FML) 2019
 - International Conference on Optical Communications and Networks (ICOON) 2019
- Others
 - Local organization committee chair, International Conference on Optical Network Design and Modelling (ONDM) 2021
 - Local organization committee chair, International Conference on Advanced Infocomm Technology (ICAIT) 2018

Invited presentation at international conferences

- *Integrating QKD with the SDM enabled high-capacity optical networks*, IEEE/OSA/SPIE Asia Communications and Photonics Conference (ACP), 2018.
- *Telecom compatibility of QKD in high capacity SDM/WDM systems*, International Conference on Transparent Optical Networks (ICTON), 2018
- *Spatial division multiplexing for optical data center networks*, International Conference on Optical Network Design and Modelling (ONDM), 2018.
- *Physical-layer network coding over passive optical interconnect in datacenter network*, Photonics and Electromagnetics Research Symposium (PIERS), 2017.

Awards and recognitions

- Most educational video award at International Joint conference on Artificial Intelligence (IJCAI), August, 2019

- Best student paper award at Asia Communications and Photonics conference (ACP), Nov, 2014

Peer-reviewed Publications

During my technical career, I authored/co-authored 28 peer review journal papers and 26 conference papers. According to [Google Scholar](#) my work has been cited over 923 times resulting in a h-index of 19 and in a i10-index of 29 (statistics updated on Mar. 29, 2023)

List of Publications

Journal papers

- J1. Haokun Song, **Rui Lin**, Yajie Li, Qing Lei, Yongli Zhao, Lena Wosinska, Paolo Monti, and Jie Zhang, "Machine-learning-based method for fiber-bending eavesdropping detection," in *Opt. Lett.* 48, 3183-3186 (2023).
- J2. C. Lei, **R. Lin**, Y. Li, B. Wang, M. Zhang, Y. Zhao, J. Zhang, "Integration of Self-Adaptive Physical-Layer Key Distribution and Encryption in Optical Coherent Communication," in *Journal of Lightwave Technology*, 41(17), 5599-5606, (2023).
- J3. **R. Lin** and J. Chen, "Modeling and Minimizing Spontaneous Raman Scattering for QKD Secured DWDM Networks," in *IEEE Communications Letters*, 25(12), 3918-3921, (2021).
- J4. L. Xue, L. Yi, **R. Lin**, L. Huang, and J. Chen, "SOA pattern effect mitigation by neural network based pre-equalizer for 50G PON," *Opt. Express* 29, 24714-24722 (2021).
- J5. Y. Cao, Y. Zhao, J. Li, **R. Lin**, J. Zhang, and J. Chen. "Hybrid Trusted/Untrusted Relay Based Quantum Key Distribution over Optical Backbone Networks." In *IEEE Journal on Selected Areas in Communications*, 39(9), 2701-2718, (2021).
- J6. **R. Lin**, A. Udalcovs, O. Ozolins, X. Pang, L. Gan, M. Tang, S. Fu, S. Popov, T. Ferreira Da Silva, G. B. Xavier, J. Chen, "Telecommunication Compatibility Evaluation for Co-existing Quantum Key Distribution in Homogenous Multicore Fiber", in *IEEE Access*, 8, 78836-78846, (2020).
- J7. Y. Cao, Y. Zhao, J. Li, **R. Lin**, J. Zhang and J. Chen, "Multi-Tenant Provisioning for Quantum Key Distribution Networks with Heuristics and Reinforcement Learning: A Comparative Study," in *IEEE Transactions on Network and Service Management*, 17(2), 946-957 (2020).
- J8. Y. Cao, Y. Zhao, **R. Lin**, X. Yu, J. Zhang, and J. Chen, "Multi-tenant secret-key assignment over quantum key distribution networks," *Opt. Express*, 27, 2544-2561 (2019).
- J9. **R. Lin**, Y. Cheng, M. D. Andrade, L. Wosinska and J. Chen, "Disaggregated Data Centers: Challenges and Trade-offs," in *IEEE Communications Magazine*, 58(2), 20-26, (2020).
- J10. X. Pang, O. Ozolins, **R. Lin**, L. Zhang, A. Udalcovs, L. Xue, R. Svhatz, U. Westergren, S. Xiao, W. Hu, G. Jacobsen, S. Popov, J. Chen, "200 Gbps/Lane IM/DD Technologies for Short Reach Optical Interconnects," in *IEEE Journal of Lightwave Technology*, 38(2), 492-503, (2020).
- J11. L. Xue; L. Yi; W. Hu; **R. Lin**, and J. Chen, "Optics-simplified DSP for 50 Gb/s PON downstream transmission using 10 Gb/s optical devices", in *IEEE Journal of Lightwave Technology*, 38(3), 583-589, (2019).
- J12. L. Zhang, J. Chen, E. Agrell, R. Lin and L. Wosinska, "Enabling Technologies for Optical Data Center Networks: Spatial Division Multiplexing," in *IEEE Journal of Lightwave Technology*, 38(1), 18-30, (2020).
- J13. L. Zhang, A. Udalcovs, **R. Lin**, O. Ozolins, X. Pang, L. Gan, et al, "Toward Terabit Digital Radio over Fiber Systems: Architecture and Key Technologies," in *IEEE Communications Magazine*, 57(4),131-137, (2019).
- J14. J. Van Kerrebrouck, X. Pang, O. Ozolins, **R. Lin**, A. Udalcovs, L. Zhang, et al., "High-Speed PAM4-Based Optical SDM Interconnects With Directly Modulated Long-Wavelength VCSEL," in *IEEE Journal of Lightwave Technology*, 37(2),356-362, (2019).
- J15. L. Zhang, J. Van Kerrebrouck, **R. Lin**, X. Pang, A. Udalcovs, O. Ozolins, "Nonlinearity Tolerant High-Speed DMT Transmission With 1.5- μm Single-Mode VCSEL and Multi-Core Fibers for Optical Interconnects," in *IEEE Journal of Lightwave Technology*, 37(2), 380-388 (2019).
- J16. **R. Lin**, J. Van Kerrebrouck, X. Pang, M. Verplaetse, O. Ozolins, A. Udalcovs, L. Zhang, L. Gan, M. Tang, S. Fu, R. Schatz, U. Westergren, S. Popov, D. Liu, W. Tong, T. De Keulenaer, G. Torfs, J. Bauwelinck, X. Yin, J. Chen, "Real-time 100 Gbps/ λ /core NRZ and EDB IM/DD transmission over multicore fiber for intra-datacenter communication networks", in *Optics express*, 26(8), 10519-10526, (2018).
- J17. X. Chen, **R. Lin**, J. Cui, L. Gan, X. Pang, O. Ozolins, A. Udalcovs, T. Jiang, R. Schatz, S. Popov, J. Chen, M. Tang, S. Fu, and D. Liu, "TDHQ Enabling Fine-granularity Adaptive Loading for SSB-DMT Systems", in *IEEE Photonics Technology Letters*, 30(19), 1687 – 1690, (2018)
- J18. T. Jiang, M. Tang, **R. Lin**, Z. Feng, X. Chen, L. Deng, S. Fu, X. Li, W. Liu, and D. Liu, "Investigation of DC-Biased Optical OFDM With Precoding Matrix for Visible Light Communications: Theory, Simulations, and Experiments," in *IEEE Photonics Journal*, 10(5), 1-16, (2018).
- J19. Y. Lu, E. Agrell, X. Pang, O. Ozolins, X. Hong, **R. Lin**, Y. Cheng, A. Udalcovs, S. Popov, G. Jacobsen, and J. Chen, "Multi-channel collision-free reception for optical interconnects", in *Optics Express*, 26, 13214-13222, (2018)
- J20. **R. Lin**, Y. Cheng, X. Guan, M. Tang, D. Liu, C. Chan, and J. Chen, "Physical-layer network coding for passive optical interconnect in datacenter networks," in *Opt. Express* 25, 17788-17797, (2017).

- J21. **R. Lin**, K. Szczerba, E. Agrell, L. Wosinska, M. Tang, D. Liu, and J. Chen, "Scalability Analysis Methodology for Passive Optical Interconnects in Data Center Networks Using PAM", in *Optics Communications*, 403, 283-289, (2017).
- J22. Y. Cheng, M. Fiorani, **R. Lin**, L. Wosinska, and J. Chen, "POTORI: A Passive Optical Top-of-Rack Interconnect Architecture for Data Centers" in *Journal of Optical Communications and Networking*, 9, 401-411, (2017).
- J23. M. Verplaetse, **R. Lin**, J. Van Kerrebrouck, O. Ozolins, T. De Keulenaer, X. Pang, R. Pierco, R. Vaernewyck, A. Vyncke, R. Schatz, U. Westergren, G. Jacobsen, S. Popov, J. Chen, G. Torfs, J. Bauwelinck and X. Yin, "Real-Time 100 Gb/s Transmission using 3-Level Electrical Duobinary Modulation for Short-reach Optical Interconnects", in *Journal of Lightwave Technology*, 35, 1313-1319, (2017). (equal contribution as first authors)
- J24. **R. Lin**, Z. Feng, M. Tang, R. Wang, S. Fu, P. Shum, D. Liu, J. Chen, "Palm-shaped Spectrum Generation for Dual-band Millimeter Wave and Baseband Signals over Fiber", in *Optics Communications*, 367, 137-143, (2016).
- J25. Z. Feng, Q. Wu, M. Tang, **R. Lin**, R. Wang, L. Deng, S. Fu, P. Shum, and D. Liu, "Dispersion-Tolerant DDO-OFDM System and Simplified Adaptive Modulation Scheme Using CAZAC Precoding," in *Journal of Lightwave Technology*, 34, 2743-2751, (2016).
- J26. R. Wang, M. Tang, L. Zhang, H. Zhang, Z. Feng, **R. Lin**, S. Fu, D. Liu, and P. Shum, "Demonstration of Programmable In-band OSNR monitoring using LCFBG with commercial thermal printer head," in *Photonics Journal*, 7(4), 1-8, (2015).
- J27. Z. Feng, M. Tang, S. Fu, L. Deng, Q. Wu, **R. Lin**, R. Wang, P. Shum, and D. Liu, "Performance-Enhanced Direct Detection Optical OFDM Transmission with CAZAC Equalization," in *IEEE Photonics Technology Letters*, 27(14), 1507-1510, (2015).
- J28. Z. Feng, B. Li, M. Tang, L. Gan, R. Wang, **R. Lin**, Z. Xu, S. Fu, L. Deng, W. Tong, S. Long, L. Zhang, H. Zhou, R. Zhang, S. Liu, P. Shum, and D. Liu, "Multicore-Fiber-Enabled WSDM Optical Access Network with Centralized Carrier Delivery and RSOA-Based Adaptive Modulation," in *IEEE Photonics Journal*, 7(4), 1-9, (2015)
- J29. R. Wang, **R. Lin**, M. Tang, H. Zhang, Z. Feng, S. Fu, D. Liu, and P. Shum, "Electrically programmable all-fiber structured second-order optical temporal differentiator", *Photonics Journal* 7(3), 1-10, (2015).

Conference papers

- C1. S. Karlsson, M. Andersson, **R. Lin**, L. Wosinska, and P. Monti, "Detection of abnormal activities on a SM or MM fiber," in *Optical Fiber Communication Conference (OFC) 2023*.
- C2. X. Wei, J. Li, X. Lu, L. Li, G. Wang, **R. Lin**, G. Shen, "Delay-aware Rate Adjusting Scheme in Higher Speed Passive Optical Networks", in *Proc. Asia Communications and Photonics Conference and Exhibition (ACP), 2022*.
- C3. X. Lu, J. Li, X. Lu, L. Li, G. Wang, **R. Lin**, G. Shen, "Fine-Granularity Bandwidth Allocation for Diverse Low-Latency Services in Higher Speed Passive Optical Networks", in *Proc. Asia Communications and Photonics Conference and Exhibition (ACP), 2022*.
- C4. S. Karlsson, R. Lin, L. Wosinska, P. Monti, "Eavesdropping G. 652 vs. G. 657 fibres: a performance comparison", in *Proc. International Conference on Optical Network Design and Modelling (ONDM), 2022*.
- C5. L. Xue, **R. Lin**, J. Kerrebrouck, L. Yi, and J. Chen, "100G PAM-4 PON with 34 dB Power Budget Using Joint Nonlinear Tomlinson-Harashima Precoding and Volterra Equalization", in *Proc. European Conference on Optical Communication (ECOC) 2021*.
- C6. **R. Lin**, and J. Chen, "Minimizing Spontaneous Raman Scattering Noise for Quantum Key Distribution in WDM Networks", in *Proc. Optical Fiber Communication Conference and Exposition (OFC), 2021*.
- C7. Y. Cao, Y. Zhao, J. Li, **R. Lin**, J. Zhang and J. Chen, "Mixed Relay Placement for Quantum Key Distribution Chain Deployment over Optical Networks," in *Proc. European Conference on Optical Communication (ECOC), 2020*.
- C8. **R. Lin**, A. Udalcovs, O. Ozolins, X. Pang, L. Gan, M. Tang, S. Fu, S. Popov, T. Ferreira Da Silva, G. B. Xavier, J. Chen, "Embedding quantum key distribution into optical telecom communication systems", *ICOON, 2019*
- C9. **R. Lin**, L. Gan, A. Udalcovs, O. Ozolins, X. Pang, L. Shen, S. Popov, M. Tang, S. Fu, W. Tong, D. Liu, T. F. da Silva, G. B. Xavier, and J. Chen, "Spontaneous Raman Scattering Effects in Multicore Fibers: Impact on Coexistence of Quantum and Classical Channels," in *Proc. Optical Fiber Communication Conference (OFC), 2019*.

- C10. L. Zhang, A. Udalcovs, **R. Lin**, O. Ozolins, X. Pang, L. Gan, R. Schatz, A. Djupsjöbacka, J. Mårtensson, M. Tang, S. Fu, D. Liu, W. Tong, S. Popov, G. Jacobsen, W. Hu, S. Xiao and J. Chen, "Digital Radioover Multicore-Fiber System with Self-Homodyne Coherent Detection and Entropy Coding for Mobile Fronthaul," in *Proc. European conference and exhibition on optical communication (ECOC)*, 2018.
- C11. **R. Lin**, X. Pang, J. Van Kerrebrouck, M. Verplaetse, O. Ozolins, A. Udalcovs, L. Zhang, L. Gan, M. Tang, S. Fu, R. Schatz, U. Westergren, S. Popov, D. Liu, W. Tong, T. De Keulenaer, G. Torfs, J. Bauwelinck, X. Yin, and J. Chen, "Real-time 100 Gbps/ λ /core NRZ and EDB IM/DD Transmission over 10 km Multicore Fiber," in *Proc. Optical Fiber Communication Conference (OFC)*, 2018.
- C12. T. Jiang, J. Chen, **R. Lin**, and M. Tang, "Network Performance Analysis of Spatial Division Multiplexing enabled Packet Switching Networks", in *Proc. Asia Communications and Photonics Conference and Exhibition (ACP)*, 2018.
- C13. L. Zhang, O. Ozolins, **R. Lin**, A. Udalcovs, X. Pang, L. Gan, R. Schatz, A. Djupsjöbacka, J. Mårtensson, U. Westergren, M. Tang, S. Fu, D. Liu, W. Tong, S. Popov, G. Jacobsen, W. Hu, S. Xiao and J. Chen, "Kernel Adaptive Filtering for Nonlinearity-Tolerant Optical Direct Detection Systems," *European Conference on Optical Communication (ECOC)*, 2018.
- C14. X. Pang, J. Van Kerrebrouck, O. Ozolins, **R. Lin**, A. Udalcovs, L. Zhang, S. Spiga, M. C. Amann, G. Van Steenberge, L. Gan, M. Tang, S. Fu, R. Schatz, G. Jacobsen, S. Popov, D. Liu, W. Tong, G. Torfs, J. Bauwelinck, X. Yin, and J. Chen, "7 \times 100 Gbps PAM-4 Transmission over 1-km and 10-km Single Mode 7-core Fiber using 1.5- μ m SM-VCSEL," in *Proc. Optical Fiber Communication Conference (OFC)*, 2018. **(Top scored)**
- C15. J. Van Kerrebrouck, L. Zhang, **R. Lin**, X. Pang, A. Udalcovs, O. Ozolins, S. Spiga, M. C. Amann, G. Van Steenberge, L. Gan, M. Tang, S. Fu, R. Schatz, S. Popov, D. Liu, W. Tong, S. Xiao, G. Torfs, J. Chen, J. Bauwelinck, and X. Yin, "726.7-Gb/s 1.5- μ m Single-Mode VCSEL Discrete Multi-Tone Transmission over 2.5-km Multicore Fiber," in *Proc. Optical Fiber Communication Conference (OFC)*, 2018. **(Top scored)**
- C16. Y. Lu, E. Agrell, X. Pang, O. Ozolins, X. Hong, **R. Lin**, Y. Cheng, A. Udalcovs, S. Poppv, G. Jacobsen and J. Chen, "Matrix Receiving Scheme Supporting Arbitrary Multiple Wavelength Reception for Optical Interconnects", in *Proc. European Conference on Optical Communication (ECOC)*, 2018.
- C17. **R. Lin**, Y. Lu, X. Pang, O. Ozolins, Y. Cheng, A. Udalcovs, S. Poppv, G. Jacobsen, M. Tang, D. Liu, C. Chan, and J. Chen., "First Experimental Demonstration of Physical-Layer Network Coding in PAM4 System for Passive Optical Interconnects," in *Proc. European Conference on Optical Communication (ECOC)*, 2017
- C18. X. Yin, M. Verplaetse, **R. Lin**, J. V. Kerrebrouck, O. Ozolins, T. D. Keulenaer, X. Pang, R. Pierco, R. Vaernewyce, A. Vyncke, R. Schats, U. Westergren, G. Jacobsen, S. Popov, J. Chen, G. Torf and J. Bauwelinck, "First Demonstration of Real-Time 100 Gbit/s 3-Level Duobinary Transmission for Optical Interconnects," in *Proc. European Conference on Optical Communication (ECOC)*, 2016. **(Post deadline paper)**
- C19. **R. Lin**, K. Szczerba, E. Agrell, L. Wosinska, M. Tang, and J. Chen, "To Overcome the Scalability Limitation of Passive Optical Interconnects in Datacentres", in *Proc. Asia Communications and Photonics Conference and Exhibition (ACP)*, 2016.
- C20. **R. Lin**, X. Pang, O. Ozolins, Z. Feng, A. Djupsjöbacka, U. Westergren, R. Schatz, G. Jacobsen, M. Tang, S. Fu, D. Liu, and J. Chen, "Performance Evaluation of PAM and DMT for Short-range Optical Transmission with High Speed InGaAsP DFB-TWEAM", in *Proc. Optical Fiber Communication Conference (OFC)*, 2016.
- C21. **R. Lin**, X. Pang, O. Ozolins, Z. Feng, A. Djupsjöbacka, U. Westergren, R. Schatz, G. Jacobsen, M. Tang, S. Fu, D. Liu, and J. Chen, "Experimental Validation of Scalability Improvement for Passive Optical Interconnect by Implementing Digital Equalization", in *Proc. European Conference on Optical Communication (ECOC)*, 2016.
- C22. Z. Feng, Q. Wu, M. Tang, **R. Lin**, R. Wang, J. He, S. Fu, L. Deng, and D. Liu, "Power efficient optical OFDM transmission with phase modulation and direct detection", in *Proc. Opto-Electronics and Communications Conference (OECC)*, 2016
- C23. L. Zhang, Z. Feng, R. Wang, R. Lin, L. Xu, X. Wang, C. Zhou, J. Wu, S. Zhou, L. Deng, S. Fu, M. Tang, and D. Liu", "Low-Cost In-Band OSNR Monitoring based on Coherent Hybrid in CO-OFDM System", in *Proc. Conference on Lasers and Electro-Optics (CLEO)*, 2015.
- C24. R. Wang, L. Zhang, M. Tang, Z. Feng, **R. Lin**, S. Fu, P. Shum, "Programmable Fiber-based in-band OSNR Monitoring for Flexgrid Coherent Optical Communication System," in *Proc. Progress in Electromagnetics Research Symposium Proceedings (PIERS)*, 2015.

- C25. **R. Lin**, M. Tang, R. Wang, Z. Feng, So. Fu, D. Liu, J. Chen and P. Shum, "An Ultra-dense Optical Comb Based DWDM-OFDM-PON System", Progress in Electromagnetics Research Symposium (PIERS), 2014.
- C26. **R. Lin**, Z. Feng, M. Tang, R. Wang, S. Fu, P. Shum, and D. Liu, "Palm-Shaped Optical Spectrum Generation for Fiber-Wireless Integrated Communication with Dual-Band Millimeter Wave Capability", in *Proc. Asia Communications and Photonics Conference and Exhibition (ACP)*, 2014 (**Best student paper**).
- C27. **R. Lin**, Z. Feng, M. Tang, S. Fu, P. Shum and D. Liu, "Spacing Switchable Flat Broadband Optical Comb Generation Based on Cascaded Electro-Optical Modulator", in *Proc. Asia Communications and Photonics Conference and Exhibition (ACP)*, 2013.