XIAOLIANG CHEN

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Education	
• Ph. D. in Communication and Information Systems	2016.06
University of Science and Technology of China	
Advisor: Prof. Zuqing Zhu	
• B.S. in Electronic Information Engineering	2011.07
North University of China	
Research Topics	
Optical networks, datacenter networks, machine learning for network automation	
Experience	
Associate Professor	2021.01 - present
Sun Yat-Sen University, Guangzhou, P.R. China	
Postdoctoral Researcher	2016.07 - 2021.01
University of California, Davis, California, United States	2010.01 2021.01
(Advisor: Prof. S. J. Ben Yoo)	
Academic Activities	
• Journal Editorship	
1. Associate Editor, Telecommunication Systems Journal (Springer)	
2. Associate Editor, Photonic Network Communications Journal (Springer)	
3. Guest Editor, IEEE/Optica Journal of Optical Communications and Network	ing: Special Issue
on Advances in Multi-Band Optical Networks, $11/30/2022$	
• Conference TPC and Chairing	
1. OFC 2022-2023	
2. IEEE ICC 2020-2024	
3. ONDM 2020-2024	
4. GLOBECOM 2021-2024	
5. Co-Chair, Globecom 2024, ONS	
Honors	
• The National Scholarship for Ph.D Students	Sept. 2015
Ministry of Education of the People's Republic of China	
	I 0010
• Award for Excellent Graduates in Anhui Province	June. 2016
Department of Education of Anhui Province	
• Special Prize of President Scholarship of Chinese Academy of Scienc	es June. 2016
Chinese Academy of Sciences	
v	
• Outstanding Reviewer	Aug. 2021
Optica (Formerly OSA)	

Publications

Journal Paper

First-Authored

[J21]Xiaoliang Chen, Hanyu Gao, Xin Xiong, Xuefeng Yan, Zuqing Zhu, and Zhaohui Li, "Field Trial of Autonomous Lightpath Provisioning Over an SDM Network Using 7-Core Fibers," J. Lightw. Techn., vol. 42, no. 3, pp. 1151-1158, Feb. 2024 [Postdeadline Paper].

[J20]Xiaoliang Chen, Che-Yu Liu, Roberto Proietti, Zhaohui Li, and S. J. B. Yoo, "Automating Optical Network Fault Management with Machine Learning," *IEEE Commun. Mag.*, vol. 60, no. 12, pp. 88-94, 2022.

[J19]Xiaoliang Chen, Che-Yu Liu, Roberto Proietti, Jie Yin, Zhaohui Li, and S. J. B. Yoo, "On Cooperative Fault Management in Multi-domain Optical Networks Using Hybrid Learning," *IEEE J. Sel. Top. Quantum Electron.*, vol. 28, no. 4, pp. 1-9, July 2022.

 $[\mathcal{J}18]$ Xiaoliang Chen, Roberto Proietti, Che-Yu Liu, and S. J. B. Yoo, "A Multi-Task-Learningbased Transfer Deep Reinforcement Learning Design for Autonomic Optical Networks," *IEEE J. Sel. Areas Commun.*, vol. 39, no. 9, pp. 2878-2889, Sept. 2021.

[J17]Xiaoliang Chen, Roberto Proietti, Marjan Fariborz, Che-Yu Liu, and S. J. B. Yoo, "Machine-Learning-Aided Cognitive Reconfiguration for Flexible-Bandwidth HPC and Data Center Networks," J. Opt. Commun. Netw., vol. 13, no. 6, pp. C10-C20, June 2021. [Invited].

[J16]Che-Yu Liu, Xiaoliang Chen, Roberto Proietti, and S. J. B. Yoo, "Performance Studies of Evolutionary Transfer Learning for End-to-End QoT Estimation in Multi-domain Optical Networks," J. Opt. Commun. Netw., vol. 13, no. 4, pp. B1-B11, April 2021. [Invited] (Corresponding Author).

 $[\mathcal{J}15]$ Xiaoliang Chen, Baojia Li, Roberto Proietti, Che-Yu Liu, Zuqing Zhu and S. J. Ben Yoo, "Demonstration of Distributed Collaborative Learning with End-to-End QoT Estimation in Multi-Domain Elastic Optical Networks," *Opt. Exp.*, vol. 27, no. 24, pp. 35700-35709, Nov. 2019.

[J14]**Xiaoliang Chen**, Roberto Proietti and S. J. Ben Yoo, "Building Autonomic Elastic Optical Networks with Deep Reinforcement Learning," *IEEE Commun. Mag.*, vol. 57, no. 10, pp. 20-26, Oct. 2019.

 $[\mathcal{J}13]$ Xiaoliang Chen, Baojia Li, Roberto Proietti, Hongbo Lu, Zuqing Zhu and S. J. Ben Yoo, "DeepRMSA: A Deep Reinforcement Learning Framework for Routing, Modulation and Spectrum Assignment in Elastic Optical Networks," *J. Lightw. Techn.*, vol. 37, no. 16, pp. 4155-4163, Aug. 2019.

 $[\mathcal{J}12]$ Xiaoliang Chen, Baojia Li, Roberto Proietti, Zuqing Zhu and S. J. Ben Yoo, "Self-Taught Anomaly Detection With Hybrid Unsupervised/Supervised Machine Learning in Optical Networks," *J. Lightw. Techn.*, vol. 37, no. 7, pp. 1742-1749, Apr. 2019 [Highly-scored Paper].

 $[\mathcal{J}11]$ Xiaoliang Chen, Zuqing Zhu, Roberto Proietti and S. J. Ben Yoo, "On Incentive-Driven VNF Service Chaining in Inter-Datacenter Elastic Optical Networks: A Hierarchical Game-Theoretic Mechanism," *IEEE Trans. Netw. Service Manag.*, vol. 16, no. 1, pp. 1-12, Mar. 2019.

 $[\mathcal{J}10]$ Xiaoliang Chen, Roberto Proietti, Hongbo Lu, Alberto Castro and S. J. Ben Yoo, "Knowledgebased Autonomous Service Provisioning in Multi-Domain Elastic Optical Networks," *IEEE Commun. Mag.*, vol. 56, no. 8, pp. 152-158, Aug. 2018.

 $[\mathcal{J}9]$ Xiaoliang Chen, Zuqing Zhu, Jiannan Guo, Sheng Kang, Roberto Proietti, Alberto Castro and S. J. B. Yoo, "Leveraging Mixed-Strategy Gaming to Realize Incentive-Driven VNF Service Chain Provisioning in Broker-Based Elastic Optical Inter-Datacenter Networks," *J. Opt. Commun. Netw.*, vol. 10, no. 2, pp. A232-A240, Feb. 2018 [Invited].

 $[\mathcal{J}8]$ Xiaoliang Chen, Muqing Zhou, Shilin Zhu, Sheng Kang, Lu Sun, and Zuqing Zhu, "Optimizing FIPP-p-Cycle Protection Design to Realize Availability-Aware Elastic Optical Networks," *Commun. Lett.*, vol. 22, no. 1, pp. 65-68, Jan. 2018.

[*J*7]**Xiaoliang Chen**, Zuqing Zhu, Lu Sun, Jie Yin, Shilin Zhu, Alberto Castro and S. J. B. Yoo, "Incentive-Driven Bidding Strategy for Brokers to Compete for Service Provisioning Tasks in Multi-Domain SD-EONs," *J. Lightw. Techn.*, vol. 34, no. 16, pp. 3867-3876, Aug. 2016.

[$\mathcal{J}6$]Xiaoliang Chen, Shilin Zhu, Liu Jiang and Zuqing Zhu, "On Spectrum Efficient Failure-Independent Path Protection p-Cycle Design in Elastic Optical Networks," *J. Lightw. Techn.*, vol. 33, no. 17, pp. 3719-3729, Sept. 2015. $[\mathcal{J}5]$ Xiaoliang Chen, Massimo Tornatore, Shilin Zhu, Fan Ji, Wenshuang Zhou, Cen Chen, Daoyun Hu, Liu Jiang and Zuqing Zhu, "Flexible Availability-Aware Differentiated Protection in Software-Defined Elastic Optical Networks," *J. Lightw. Techn.*, vol. 33, no. 17, pp. 3872-3882, Sept. 2015.

 $[\mathcal{J}4]$ Xiaoliang Chen, Bin Zhao, Shoujiang Ma, Cen Chen, Daoyun Hu, Wenshuang Zhou and Zuqing Zhu, "Leveraging master-slave OpenFlow controller arrangement to improve control plane resiliency in SD-EONs," *Opt. Exp.*, vol. 23, no. 6, pp. 7550-7558, Mar. 2015.

[J3]Xiaoliang Chen, Fan Ji, Shilin Zhu, Qinkun Bao and Zuqing Zhu, "Availability-Aware Service Provisioning in SD-EON based Inter-Datacenter Networks," *Photon. Netw. Commun.*, vol. 31, no. 3, pp. 543-549, Jun. 2016.

[J2]Xiaoliang Chen, Fan Ji, and Zuqing Zhu, "Service Availability Oriented p-Cycle Protection Design in Elastic Optical Networks," J. Opt. Commun. Netw., vol. 6, no. 10, pp. 901-910, Oct. 2014.

[J1]Xiaoliang Chen, Fan Ji and Zuqing Zhu, "Energy-Efficient Resilience in Translucent Optical Networks with Mixed Regenerator Placement," J. Opt. Commun. Netw., vol. 5, no. 7, pp. 741-750, Jul. 2013.

Co-Authored

 $[\mathcal{J}15]$ Che-Yu Liu, **Xiaoliang Chen**, Zhaohui Li, Roberto Proietti, and S. J. Ben Yoo, "SL-Hyper-FleX: a cognitive and flexible-bandwidth optical datacom network by self-supervised learning," *J. Opt. Commun. Netw.*, vol. 14, no. 2, pp. A113-A121, Feb. 2022.

 $[\mathcal{J}14]$ F. Tabatabaeimehr, Marc Ruiz, Che-Yu Liu, **Xiaoliang Chen**, Roberto Proietti, S. J. Ben Yoo and Luis Velasco, "Cooperative Learning for Disaggregated Delay Modeling in MultiDomain Networks," *IEEE Trans. Netw. Service Manag.*, vol. 18, no. 3, pp. 3633-3646, Sept. 2021.

[J13]Hongbo Lu, Roberto Proietti, Gengchen Liu, **Xiaoliang Chen** and S. J. Ben Yoo, "ERON: An Energy-Efficient and Elastic RF-Optical Architecture for mm-Wave 5G Radio Access Networks," J. Opt. Commun. Netw., vol. 12, no. 7, pp. 200-216, July 2020.

[J12]Roberto Proietti, Xiaoliang Chen, Kaiqi Zhang, Gengchen Liu, M. Shamsabardeh, Alberto Castro, Luis Velasco, Zuqing Zhu and S. J. Ben Yoo, "Experimental Demonstration of Machine Learning-aided QoT Estimation in Multi-domain Elastic Optical Networks with Alien Wavelengths," J. Opt. Commun. Netw., vol. 11, no. 1, pp. A1-A10, Oct. 2018 [Invited].

 $[\mathcal{J}11]$ Lu Sun, **Xiaoliang Chen** and Zuqing Zhu, "Multi-Broker based Service Provisioning in Multi-Domain SD-EONs: Why and How Should the Brokers Cooperate with Each Other?," *J. Lightw. Techn.*, vol. 35, no. 17, pp. 3722-3733, Sept. 2017.

 $[\mathcal{J}10]$ Nana Xue, **Xiaoliang Chen**, Long Gong, Suoheng Li, Daoyun Hu, Huibai Huang and Zuqing Zhu, "Demonstration of OpenFlow-Controlled Network Orchestration for Adaptive SVC Video Manycast," *Trans. Multimedia*, vol. 17, no. 9, pp. 1617-1629, Sept. 2015.

[*J*9]Cen Chen, **Xiaoliang Chen**, Mingyang Zhang, Shoujiang Ma, Yan Shao, Suoheng Li, Munir Said Suleiman and Zuqing Zhu, "Demonstrations of Efficient Online Spectrum Defragmentation in Software-Defined Elastic Optical Networks," *J. Lightw. Techn.*, vol. 32, no. 24, pp. 4099-4109, Dec. 2014.

[*J*8]Fan Ji, **Xiaoliang Chen**, Wei Lu, Joel. J. P. C. Rodrigues, and Zuqing Zhu, "Dynamic p-Cycle Protection in Spectrum-Sliced Elastic Optical Networks," *J. Lightw. Techn.*, vol. 32, no. 6, pp. 1190-1199, Mar. 2014.

[*J*7]Zuqing Zhu, **Xiaoliang Chen**, Fan Ji, Liang Zhang, Farid Farahmand and Jason P. Jue, "Energy-Efficient Translucent Optical Transport Networks with Mixed Regenerator Placement," *J. Lightw. Techn.*, vol. 30, no. 19, pp. 3147-3156, Oct. 2012.

[*J*6]Zuqing Zhu, **Xiaoliang Chen**, Cen Chen, Shoujiang Ma, Mingyang Zhang, Lei Liu and S. J. B. Yoo, "OpenFlow-Assisted Online Defragmentation in Single-/Multi-Domain Software-Defined Elastic Optical Networks," *J. Opt. Commun. Netw.*, vol. 7, no. 1, pp. A7-A15, Jan. 2015 [Invited].

 $[\mathcal{J}5]$ Bin Zhao, **Xiaoliang Chen**, Jing Zhu and Zuqing Zhu, "Survivable Control Plane Establishment with Live Control Service Backup and Migration in SD-EONs," *J. Opt. Commun. Netw.*, vol. 8, no. 6, pp. 371-381, Jun. 2016.

 $[\mathcal{J}4]$ Gengchen Liu, Kaiqi Zhang, **Xiaoliang Chen**, Hongbo Lu, Jiannan Guo, Jie Yin, Roberto

Proietti, Zuqing Zhu and S. J. B. Yoo, "Hierarchical Learning for Cognitive End-to-End Service Provisioning in Multi-Domain Autonomous Optical Networks," *J. Lightw. Techn.*, vol. 37, no. 1, pp. 218-225, Jan. 2019 [PostDeadline Paper].

[*J*3]Zuqing Zhu, Cen Chen, **Xiaoliang Chen**, Shoujiang Ma, Lei Liu, Xiaotao Feng and S. J. B. Yoo, "Demonstration of Cooperative Resource Allocation in an OpenFlow-Controlled Multi-Domain and Multinational SD-EON Testbed," *J. Lightw. Techn.*, vol. 33, no. 8, pp. 1508-1514, Jan. 2015 [Invited].

 $[\mathcal{J}2]$ Zuqing Zhu, Suoheng Li, and **Xiaoliang Chen**, "Design QoS-Aware Multi-Path Provisioning Strategies for Efficient Cloud-Assisted SVC Video Streaming to Heterogeneous Clients," *Trans. Multimedia*, vol. 15, no. 4, pp. 758-768, Jun. 2013.

 $[\mathcal{J}1]$ Wei Lu, Shoujiang Ma, Cen Chen, **Xiaoliang Chen** and Zuqing Zhu, "Implementation and Demonstration of Revenue-Driven Provisioning for Advance Reservation Requests in OpenFlow-Controlled SD-EONs," *Commun. Lett.*, vol. 18, no. 10, pp. 1727-1730, Oct. 2014.

Conference Paper

First-Authored

[C23]Wenbang Zheng, Xiaoliang Chen, Zhaohui Li, "Fast and Nondisruptive Reconfiguration Design for Optical Datacom Networks," in Proc. of PSC 2023 (Corresponding Author).

[C22]Hanyu Gao, Liang Zhang, Bin Zhang, Xiaoliang Chen, Zhaohui Li, "On the Generalization of Machine-Learning-aided QoT Estimation in Optical Networks," in Proc. of WOCC 2023 (Corresponding Author).

[C21]Hanyu Gao, Xiaoliang Chen, Wenbang Zheng, Yingyu Chen, Yongguang Xiao, Zhaohui Li, "Demonstration of composable-ML-assisted autonomous lightpath configuration over a field-deployed SDM network with 7-core fibers," in Proc. of OFC 2023 [Postdeadline Paper] (Corresponding Author).

[C20]Hanyu Gao, Xiaoliang Chen, Lu Sun, Zhaohui Li, "CompQoTE: Generalizing QoT estimation with composable ML and end-to-end learning," in Proc. of OFC 2023 (Corresponding Author). [C19]Qian Wang, Hailey Shakespear-Miles, Xiaoliang Chen, Marc Ruiz, Zhaohui Li, Luis Velasco, "On real-time optical subcarrier management in P2MP networks with mixed-strategy gaming," in Proc. of OFC 2023 (Corresponding Author).

[C18]Xiaoliang Chen, Che-Yu Liu, Roberto Proietti, Shaoyi Chen, Zhaohui Li and S. J. B. Yoo, "When Task Scheduling Meets Flexible-bandwidth Optical Interconnects: A Cross-layer Resource Orchestration Design," in Proc. of OFC 2022.

[C17]Che-Yu Liu, **Xiaoliang Chen**, Roberto Proietti, Zhaohui Li and S. J. B. Yoo, "Reconfigurable Optical Datacom Networks by Self-supervised Learning," in Proc. of the ACM SIGCOMM 2021 3rd Workshop on Optical Systems (OptSys 2021) (Corresponding Author).

[C16]Xiaoliang Chen, Roberto Proietti, Che-Yu Liu and S. J. B. Yoo, "Collaborative Learning in Multi-Domain Optical Networks," in Proc. of ACP 2020 [Invited Talk].

[C15]Xiaoliang Chen, Roberto Proietti, Che-Yu Liu and S. J. B. Yoo, "Towards Self-Driving Optical Networking with Reinforcement Learning and Knowledge Transferring," in Proc. of ONDM 2020 [Invited Talk].

[C14] Xiaoliang Chen, Roberto Proietti, Che-Yu Liu, Zuqing Zhu and S. J. B. Yoo, "Exploiting Multi-Task Learning to Achieve Effective Transfer Deep Reinforcement Learning in Elastic Optical Networks," in Proc. of OFC 2020.

[C13]Che-Yu Liu, Xiaoliang Chen, Roberto Proietti and S. J. B. Yoo, "Evol-TL: Evolutionary Transfer Learning for QoT Estimation in Multi-Domain Networks," in Proc. of OFC 2020 (Corresponding Author).

[C12]Xiaoliang Chen, Baojia Li, Roberto Proietti, Zuqing Zhu and S. J. B. Yoo, "Multi-Agent Deep Reinforcement Learning in Cognitive Inter-Domain Networking with Multi-Broker Orchestration," in Proc. of OFC 2019.

[C11]Xiaoliang Chen, Baojia Li, Mohammadsadegh Shamsabardeh, Roberto Proietti, Zuqing Zhu and S. J. B. Yoo, "On Real-time and Self-taught Anomaly Detection in Optical Networks Using Hybrid Unsupervised/Supervised Learning," in Proc. of ECOC 2018 [Top-Score Paper].

[C10]Xiaoliang Chen, Roberto Proietti, Mohammadsadegh Shamsabardeh, Gengchen Liu, Kaiqi

Zhang and S. J. B. Yoo, "Knowledge-based Service Provisioning in Multi-Domain Elastic Optical Networks," in Proc. of IPC 2018 [Invited Talk].

[C9]Xiaoliang Chen, Jiannan Guo, Zuqing Zhu, Roberto Proietti, Alberto Casales and S. J. B. Yoo, "Deep-RMSA: A Deep-Reinforcement-Learning Routing, Modulation and Spectrum Assignment Agent for Elastic Optical Networks," in Proc. of OFC 2018.

[C8]Xiaoliang Chen, Zuqing Zhu, Alberto Casales, Roberto Proietti and S. J. B. Yoo, "Multi-Broker based Software-Defined Optical Networks," in Proc. of IPC 2017 [Invited Talk].

[C7]Xiaoliang Chen and Wei Lu, "Incentive-Driven Service Provisioning in Multi-Broker Orchestrated Multi-Domain SD-EONs," in Proc. of ICCC 2017 [Invited].

[C6]Xiaoliang Chen, Lu Sun, Zuqing Zhu, Hongbo Lu and S. J. B. Yoo, "On Efficient Incentive-Driven VNF Service Chain Provisioning with Mixed-Strategy Gaming in Broker-based EO-IDCNs," in Proc. of OFC 2017.

[C5]Xiaoliang Chen, Jiannan Guo, Zuqing Zhu, Alberto Casales, Roberto Proietti, Hongbo Lu, Mohammadsadegh Shamsabardeh, S. J. B. Yoo, "Leveraging Deep Learning to Achieve Knowledgebased Autonomous Service Provisioning in Broker-based Multi-Domain SD-EONs with Proactive and Intelligent Predictions of Multi-Domain Traffic," in Proc. of ECOC 2017.

[C4] Xiaoliang Chen, Jie Yin, Cen Chen, Zuqing Zhu, Alberto Casales and S. J. B. Yoo, "Multi-Broker based Noncooperative Game for Market-Driven Service Provisioning in Multi-Domain SD-EONs," in Proc. of ECOC 2015.

[C3]Xiaoliang Chen, Shilin Zhu, Di Chen, Shuguang Hu, Chang Li and Zuqing Zhu, "On Efficient Protection Design for Dynamic Multipath Provisioning in Elastic Optical Networks," in Proc. ONDM 2015.

[C2]Xiaoliang Chen, Cen Chen, Daoyun Hu, Shoujiang Ma and Zuqing Zhu, "Multi-Domain Fragmentation-Aware RSA Operations through Cooperative Hierarchical Controllers in SD-EONs," in Proc. ACP 2015.

[C1]Xiaoliang Chen, Fan Ji and Zuqing Zhu, "Energy-efficient protection designs for translucent optical networks using mixed regenerator placement," in Proc. of OFC 2013.

Co-Authored

[C21]Zhiyan Liu, Roberto Proietti, **Xiaoliang Chen** and S. J. B. Yoo, "Performance Studies of 3D-Hyper-FleX-LION for HPC Applications," in Proc. of OFC 2021.

[C20]Roberto Proietti, Che-Yu Liu, **Xiaoliang Chen** and S. J. B. Yoo, "Machine-Learning-Aided Bandwidth and Topology Reconfiguration for Optical Data Center Networks," in Proc. of OFC 2021.

[C19]Roberto Proietti, Gengchen Liu, Xiao Xian, **Xiaoliang Chen** and S. J. B. Yoo, "Energyefficient and Scalable Data Centers with Flexible Bandwidth SiPh All-to-all Fabrics," in Proc. of OFC 2021.

[C18]Roberto Proietti, **Xiaoliang Chen**, Yu Shang and S. J. B. Yoo, "Self-driving Reconfiguration of Data Center Networks by Deep Reinforcement Learning and Silicon Photonic Flex-LION Switches," in Proc. of IPC 2020.

[C17]Shang Yu, Xiaoliang Chen, Roberto Proietti, Bingli Guo, Shanguo Huang and S. J. Ben Yoo, "Self-driving Reconfigurable HPC System with Deep Reinforcement Learning," in Proc. ACP 2019. [C16]Roberto Proietti, Xiaoliang Chen, Gengchen Liu, Hongbo Lu and S. J. Ben Yoo, "Machine-Learning-Aided Service Provisioning in Multi-Domain Optical Networks," in Proc. of Photonic Networks and Devices 2019.

[C15]Gengchen Liu, Kaiqi Zhang, Xiaoliang Chen, Hongbo Lu, Jiannan Guo, Jie Yin, Roberto Proietti, Zuqing Zhu and S. J. B. Yoo, "The First Testbed Demonstration of Cognitive End-to-End Optical Service Provisioning with Hierarchical Learning across Multiple Autonomous Systems," in Proc. of OFC 2018 [PostDeadline Paper].

[C14]Roberto Proietti, Xiaoliang Chen, Alberto Castro, Gengchen Liu, Kaiqi Zhang, Jiannan Guo, Zuqing Zhu, Luis Velasco and S. J. B. Yoo, "Experimental Demonstration of Cognitive Provisioning and Alien Wavelength Monitoring in Multi-domain EON," in Proc. of OFC 2018.

[C13] Alberto Castro, Xiaoliang Chen, Roberto Proietti and S. J. B. Yoo, "Broker-based Orches-

tration for Service Provisioning in Multi-domain Networks," in Proc. of PS 2017.

[C12] Jie Yin, Heqing Yin, Siqi Liu, Zhi Zhou, Xiaoliang Chen and Zuqing Zhu, "On-Demand and Reliable vSD-EON Provisioning with Correlated Data and Control Plane Embedding," in Proc. of GLOBECOM 2016.

[C11]Lu Sun, **Xiaoliang Chen**, Shilin Zhu, Zuqing Zhu, Alberto Castro and S. J. B. Yoo, "Brokerbased Cooperative Game in Multi-Domain SD-EONs: Nash Bargaining for Agreement on Market-Share Partition," in Proc. ECOC 2016.

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[C9]Cen Chen, Xiaoliang Chen, Bin Zhao and Zuqing Zhu, "Service Provisioning in Multi-Domain SD-EONs [Invited]," in Proc. of ICOCN 2015.

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[C5]Shilin Zhu, Siyao Meng, Qinkun Bao, **Xiaoliang Chen** and Zuqing Zhu, "Availability-Aware Service Provisioning in EONs: How Efficient will FIPP-p-Cycles be?," in Proc. OFC 2016.

[C4]A. Castro, A. P. Vela, Ll. Gifre, R. Proietti, C. Chen, J. Yin, **Xiaoliang Chen**, Z. Cao, Z. Zhu, L. Velasco and S. J. B. Yoo, "Experimental Demonstration of Heterogeneous Cross Stratum Broker for Scientific Applications," in Proc. OFC 2016.

[C3]Cen Chen, Shoujiang Ma, **Xiaoliang Chen**, Zuqing Zhu, Lei Liu, Xiaotao Feng and S. J. B. Yoo, "Demonstration of OpenFlow-Controlled Cooperative Resource Allocation in a Multi-Domain SD-EON Testbed across Multiple Nations," in Proc. of ECOC 2014.

[C2]Shoujiang Ma, Wei Lu, Cen Chen, **Xiaoliang Chen** and Zuqing Zhu, "OpenFlow-Controlled Revenue-Driven AR Service Provisioning in Software-Defined Elastic Optical Networks," in Proc. of ACP 2014.

[C1]Lei Liu, Zuqing Zhu, Xiong Wang, Guanghua Song, Cen Chen, **Xiaoliang Chen**, Shoujiang Ma, Xiaotao Feng, Roberto Proietti and S. J. B. Yoo, "Field Trial of Broker-based Multi-domain Software-Defined Heterogeneous Wireline-Wireless-Optical Networks," in Proc. OFC 2015.