

Prof. Guido Maier, Politecnico di Milano

Curriculum Vitae

(16/04/2025)

Guido Maier ha conseguito la laurea in Ingegneria Elettronica (1995) e il dottorato di ricerca in Ingegneria delle Telecomunicazioni (2000) presso il Politecnico di Milano [in breve, PoliMi].

Dal 1995 al febbraio 2006 è stato ricercatore presso il CoreCom (consorzio di ricerca sostenuto da Pirelli e PoliMi), dove ha ricoperto la carica di Responsabile del Laboratorio di Reti Ottiche.

Nel marzo 2006 è entrato a far parte del Dipartimento di Elettronica, Informazione e Bioingegneria (DEIB) del PoliMi in qualità di Ricercatore a Tempo Indeterminato. Nel gennaio 2015 è diventato Professore Associato presso lo stesso dipartimento (dopo aver superato un concorso nazionale di "Abilitazione" nel 2012).

Nel giugno 2021 ha conseguito l'Abilitazione Scientifica Nazionale a Professore Ordinario nelle Università Italiane.

Presso la Scuola di Ingegneria dell'Informazione del PoliMi ha tenuto diversi corsi nell'ambito del networking, sia per studenti di Laurea che per studenti di Laurea Magistrale. Attualmente, insegna "Fondamenti di comunicazione e Internet" (primo livello) e "Network Automation" e "Lab Experience" (magistrale). Nel 2022/2023 Maier ha tenuto il corso di dottorato "Switching Architectures and Forwarding Algorithms" (5 crediti) (in lingua inglese) all'interno del programma di dottorato "INFORMATION TECHNOLOGY" presso il PoliMi. Finora è stato/è relatore di 7 studenti di dottorato (4 negli ultimi 5 anni).

Ha inoltre tenuto e tiene corsi di aggiornamento per dipendenti e dirigenti di diverse aziende ICT, quali: Pirelli, Telecom Italia, Italtel, Nokia Siemens Networks, Sirti, Metroweb, Alcatel, SM Optics, Ericsson, ATM SpA, FiberCop. Gli argomenti di questi corsi sono stati, ad esempio: Metro Ethernet, Reti Ottiche Passive, MPLS, Reti di Trasporto Ottico, Software Defined Networking. E' stato Direttore del corso "Sviluppo delle competenze per i responsabili IT" organizzato da Cefriel e Politecnico di Milano per ATM S.P.A. (2017-2018).

E' stato invited lecturer in diverse sedi e università all'estero, tra cui: Summer School per dottorandi dei progetti europei e-Photon/ONe+ e BONE; Faculté Polytechnique de Mons, Belgio; University College di Londra, Regno Unito; Università del Texas a Dallas, USA; Centre Tecnològic de Telecomunicacions de Catalunya (CTTC), Barcellona, Spagna; Università di Tecnologia di Poznan, Polonia; Université Pierre et Marie Curie - Sorbonne Université, Parigi, Francia.

Ha partecipato a diversi progetti di ricerca congiunti con partner industriali (Pirelli, Telecom Italia, Fastweb, RFI, BTO). È stato principal investigator e responsabile di ricerca per il PoliMi di contratti industriali con ATM (2023-2024 e 2019-2021) ed è stato nella stessa posizione per un contratto di ricerca PoliMi con TIM per due anni (2013-2014).

Ha partecipato ai progetti europei IST-FP6 e FP7: MUPBED, NOBEL2, e-Photon/ONe+, BONE, STRONGEST, (IRSES) MobileCloud. Ha partecipato al progetto EIT-ICT SOFNETS e a diversi progetti di ricerca nazionali (PRIN) finanziati dal Ministero dell'Università e della Ricerca, il più recente dei quali è stato ROAD-NGN. Recentemente ha partecipato come leader del team PoliMi al progetto europeo H2020 METRO-HAUL (2017-2020) ed è il Principal Investigator del progetto WatchEDGE (2023-2025) nell'ambito di RESTART, finanziato da NextGenerationEU.

È autore o co-autore di oltre 100 articoli pubblicati in atti di conferenze internazionali e di oltre 50 articoli pubblicati su riviste internazionali su networking e reti ottiche.

Al 12 maggio 2025, le sue metriche bibliografiche sono le seguenti:

- Google Scholar: 3587 citations, h-index 30
- Scopus: 2288 citations, h-index 23.

È co-inventore di 6 brevetti con estensioni in vari paesi, tra cui Europa e Stati Uniti.

Il 2 agosto 2016 ha co-fondato SWAN networks, spin-off di PoliMi, vincitore del concorso TIM #WCAP nel 2016.

Le sue principali aree di interesse sono: Transport-SDN, orchestrazione, Enterprise Networking e SD-WAN, ottimizzazione delle reti, ingegneria del traffico e predizione tramite machine learning, commutazione ottica.

È/è stato General Chair di IEEE HSPR 2025, IEEE NetSoft 2022, DRCN 2020 e DRCN 2021, è Track TPC Chair di IEEE WCNC 2026 ed è stato TPC Chair di IEEE HPSR 2019 e di NOC 2014, Publicity Chair di ONDM, QoS-IP e ICCCN e membro del TPC per diverse conferenze internazionali, tra cui: IEEE ICC, IEEE GLOBECOM, IEEE Infocom, SPIE APOC, ONDM, HPSR, NOC. È membro dell'editorial board di Optical Switching and Networking (Elsevier, i.f. 1.9) ed è stato guest editor di due numeri speciali della rivista. È il guest editor di uno special issue dell'IEEE Open Journal of the Communications Society. Ha lavorato come reviewer per molte riviste, tra cui: IEEE Transactions on Network Science and Engineering, IEEE Transactions on Communications, IEEE Transactions on Computers, IEEE/OSA Journal of Lightwave Technology, IEEE Transaction on Networking, IEEE Network Magazine, IEEE/LEOS Photonics Technology Letters, IEEE Journal of Selected Areas in Communication, OSA Journal of Optical Communication Networks, European Transaction on Telecommunications, Lettere di elettronica IEE, ecc.

È stato membro della Giunta di Dipartimento del DEIB, in rappresentanza della Sezione Telecomunicazioni (2017 – 2023). Dal 2025 è membro del Collegio dei Docenti del Dottorato di Ricerca in Tecnologie dell'Informazione del PoliMI. È stato membro (2018 – 2025) del Consiglio Scientifico del CoRiTel (Ericsson Research Consortium on Telecommunications), e dal 2025 è membro del Consiglio di Amministrazione dello stesso consorzio. È delegato dell'unità di ricerca PoliMi all'interno dell'associazione "Gruppo Telecomunicazioni e Tecnologie dell'Informazione (GTTI)" (2024-oggi). Nel 2018 l'Agenzia per la scienza e l'istruzione superiore della Croazia lo ha nominato membro del gruppo di esperti per il riaccreditamento della Facoltà di Ingegneria Elettrica e Informatica dell'Università di Zagabria.

È membro della IEEE Communications Society dal 1998. Nel 2008 è stato promosso a IEEE Senior Member.

List of Papers

Journal papers

1. LMM Zorello, L Bliet, S Troia, G Maier, S Verwer (2024). Black-box optimization for anticipated baseband-function placement in 5G networks, in *Elsevier Computer Networks*, Volume 245, May 2024, doi.org/10.1016/j.comnet.2024.110384.
2. G. Maier, A. Albanese, M. Ciavotta, N. Ciulli, S. Giordano, E. Giusti, A. Salvatore, G. Schembra (2024). WatchEDGE: Smart networking for distributed AI-based environmental control, in *Elsevier Computer Networks*, Volume 243, April 2024, doi.org/10.1016/j.comnet.2024.110248.
3. S. Troia, M. Savi, G. Nava, L. M. Moreira Zorello, T. Schneider, G. Maier (2023). "Performance characterization and profiling of chained CPU-bound Virtual Network Functions", in *Elsevier Computer Networks*, Volume 231, July 2023, doi: 10.1016/j.comnet.2023.109815
4. S. Troia, M. Mazzara, M. Savi, L. M. M. Zorello and G. Maier (2022), "Resilience of Delay-sensitive Services with Transport-layer Monitoring in SD-WAN," in *IEEE Transactions on Network and Service Management*, Vol. 19, n. 3, pp. 2652-2663, 2022, doi: 10.1109/TNSM.2022.3191943.
5. L. M. Moreira Zorello, L. Bliet, S. Troia, T. Guns, S. Verwer and G. Maier (2022), "Baseband-Function Placement with Multi-Task Traffic Prediction for 5G Radio Access Networks," in *IEEE Transactions on Network and Service Management*, Vol. 19, n. 4, pp. 5104-5111, 2022, doi: 10.1109/TNSM.2022.3190059.
6. L. M. Moreira Zorello, M. Sodano, S. Troia and G. Maier (2022), "Power-Efficient Baseband-Function Placement in Latency-Constrained 5G Metro Access," in *IEEE Transactions on Green Communications and Networking*, vol. 6, no. 3, pp. 1683-1696, Sept. 2022, doi: 10.1109/TGCN.2022.3152839.
7. S. Troia, A. F. R. Vanegas, L. M. M. Zorello and G. Maier (2022), "Admission Control and Virtual Network Embedding in 5G Networks: A Deep Reinforcement-Learning Approach," in *IEEE Access*, vol. 10, pp. 15860-15875, 2022, doi: 10.1109/ACCESS.2022.3148703.
8. S. Troia, A. Cibari, R. Alvizu, G. Maier (2020). Dynamic programming of network slices in software-defined metro-core optical networks, *Elsevier Optical Switching and Networking*, Vol. 36, 100551, 10pp. 1-13. doi: 10.1016/j.osn.2019.100551
9. S. Troia, F. Sapienza, L. Varé and G. Maier (2021), "On Deep Reinforcement Learning for Traffic Engineering in SD-WAN," in *IEEE Journal on Selected Areas in Communications*, vol. 39, no. 7, pp. 2198-2212, July 2021, doi: 10.1109/JSAC.2020.3041385.
10. T. Ye, J. Ding, T. T. Lee and G. Maier (2020), "AWG-Based Nonblocking Shuffle-Exchange Networks," in *IEEE/ACM Transactions on Networking*, vol. 28, no. 6, pp. 2699-2712, Dec. 2020, doi: 10.1109/TNET.2020.3017500.

11. G. Maier, M. Reisslein (2019). "Transport SDN at the dawn of the 5G era," in *Elsevier Optical Switching and Networking*, Vol. 33, July 2019, Pages 34-40, doi: 10.1016/j.osn.2019.02.001
12. I. Martín, S. Troia, A. Rodríguez, F. Musumeci, G. Maier, R. Alvizu, Ó. González de Dios (2019), "Machine Learning-Based Routing and Wavelength Assignment in Software-Defined Optical Networks," in *IEEE Transactions on Network and Service Management*, vol. 16, no. 3, pp. 871-883, Sept. 2019, doi: 10.1109/TNSM.2019.2927867.
13. U. Paul, J. Liu, S. Troia, O. Falowo and G. Maier (2019), "Traffic-profile and machine learning based regional data center design and operation for 5G network," in *KICS Journal of Communications and Networks*, vol. 21, no. 6, pp. 569-583, Dec. 2019, doi: 10.1109/JCN.2019.000055.
14. S. Troia, R. Alvizu and G. Maier (2019), "Reinforcement Learning for Service Function Chain Reconfiguration in NFV-SDN Metro-Core Optical Networks," in *IEEE Access*, vol. 7, pp. 167944-167957, 2019, doi: 10.1109/ACCESS.2019.2953498.
15. R. Alvizu, S. Troia, G. Maier and A. Pattavina (2017), "Matheuristic with machine-learning-based prediction for software-defined mobile metro-core networks," in *OSA Journal of Optical Communications and Networking*, vol. 9, no. 9, pp. D19-D30, Sept. 2017, doi: 10.1364/JOCN.9.000D19
16. A. S. Muqaddas, P. Giaccone, A. Bianco and G. Maier (2017), "Inter-Controller Traffic to Support Consistency in ONOS Clusters," in *IEEE Transactions on Network and Service Management*, vol. 14, no. 4, pp. 1018-1031, Dec. 2017, doi: 10.1109/TNSM.2017.2723477.
17. R. Alvizu, X. Zhao, G. Maier, Y. Xu and A. Pattavina (2017), "Energy Efficient Dynamic Optical Routing for Mobile Metro-Core Networks Under Tidal Traffic Patterns," in *IEEE/OSA Journal of Lightwave Technology*, vol. 35, no. 2, pp. 325-333, 15 Jan.15, 2017, doi: 10.1109/JLT.2016.2638739..
18. R. Alvizu, G. Maier, N. Kukreja, A. Pattavina, R. Morro, A. Capello and C. Cavazzoni (2017), "Comprehensive Survey on T-SDN: Software-Defined Networking for Transport Networks," in *IEEE Communications Surveys & Tutorials*, vol. 19, no. 4, pp. 2232-2283, Fourth quarter 2017, doi: 10.1109/COMST.2017.2715220.
19. A. Valenti, A. Rufini, S. Penna, G. Verticale, G. Maier and A. S. Michelangeli (2016). FTTx/VDLSL2-Vectoring: prestazioni in una rete di accesso a banda ultra larga multi operatore. *LA COMUNICAZIONE, LX*, 185-204.
20. G. Maier, E. Oki (2016). Special issue on High-speed optical transport systems. *Elsevier Optical Switching and Networking*, 19, 5-6.
21. R. Alvizu, G. Maier, M. Tornatore and M. Pioro, (2016). Differential delay constrained multipath routing for SDN and optical networks. *Elsevier Electronic Notes in Discrete Mathematics*, 52, 277-284.
22. D. G. Garao, G. Maier, A. Pattavina (2015). Multi-stage switching networks for waveguide optical technology. *Revista IEEE America Latina - Transactions*, 13, 3562-3567.

23. A. Pages, A. Buttaboni, G. Maier, D. Siracusa, J. Perella Jordi and S. Spadaro (2014). Techniques and benefits of energy-aware load-distribution in multi-domain translucent wavelength switched optical networks. *Springer Journal of Network and Systems Management*, 22, 462-487.
24. G. Rizzelli, D. Siracusa, G. Maier, M. Magarini, M. Alam and A. I. Melloni (2014). Optical Backplane Based on Ring-Resonators: Scalability and Performance Analysis for 10Gb/s OOK-NRZ. *MDPI Photonics*, 1, 131-145.
25. D. G. Garao, G. Maier and A. Pattavina (2014). Modular architectures of multistage switching networks. *IEEE Transactions on Communications*, 62, 3237-3248.
26. G. Rizzelli, G. Maier, M. Quagliotti, M. Schiano and A. Pattavina (2014). Assessing the scalability of next-generation wavelength switched optical networks. *IEEE/OSA Journal Of Lightwave Technology*, 32, 2263-2270.
27. G. Maier, A. Pattavina (2013). Deflection routing in IP optical networks. *Springer Telecommunication Systems*, 52, 1-10.
28. G. Rizzelli, M. Tornatore, G. Maier, A. Pattavina (2012). Impairment-aware design of translucent DWDM networks based on the k-path connectivity graph. *OSA Journal of Optical Communications and Networking*, 4, 356-365.
29. D. Siracusa, S. Grita, G. Maier, A. Pattavina, F. Paolucci, F. Cugini, and P. Castoldi (2012). Domain Sequence Protocol (DSP) for PCE-Based Multi-Domain Traffic Engineering. *OSA Journal of Optical Communications and Networking*, 4, 876-884.
30. S. Secci, J. L. Rougier, A. Pattavina, F. Patrone and G. Maier (2011). Peering Equilibrium Multipath Routing: A Game Theory Framework for Internet Peering Settlements. *IEEE/ACM Transactions on Networking*, 19, 419-432.
31. S. Secci, J. L. Rougier, A. Pattavina, F. Patrone and G. Maier (2011). Multi-Exit Discriminator Game for BGP Routing Coordination. *Springer Telecommunication Systems*, 48, 1-16.
32. G. Maier, A. Pattavina (2010). Multicast three-stage Clos networks. *Elsevier Computer Communications*, 33, 923-928.
33. J. Spath, G. Maier, S. Naegel Jackson, C. Cavazzoni, H. M. Foisel, M. Popov, H. Wessing, M. Campanella, S. Nicosia, J. Rauschenbach, L. Perez Roldan, M. Sotos, M. Stroyk, P. Szegedi, & J. M. Uze (2009). MUPBED: a pan-European prototype for multidomain research networks. *IEEE Communications Magazine*, 47, 62-71.
34. C. Raffaelli, K. Vlachos, N. Andriolli, D. Apostolopoulos, J. Buron, R. Van Caenegem, G. Danilewicz, J. M. Finochietto, J. Garcia Haro, D. Klonidis, M. O'mahony, Maier Guido Alberto, Pattavina Achille, P. Pavon Marino, S. Ruepp, M. Savi, M. Scaffardi, I. Tomkos, A. Tzanakaki, L. Wosinska, O. Zouraraki, and F. Neri (2008). Photonics in switching: Architectures, systems and enabling technologies. *Elsevier Computer Networks*, 52, 1873-1890.

35. G. Maier, C. Busca, and A. Pattavina (2008). Topology-information periodic updates in multi-domain ASON networks with topology aggregation. *Taylor & Francis Group Fiber and Integrated Optics*, 27, 265-277.
36. G. Maier, A. Pattavina, M. Tornatore (2007). Variable Aggregation in the ILP Design of WDM Networks with Dedicated Protection. *KICS Journal of Communications and Networks*, 9, 419-427.
37. M. Tornatore, G. Maier, A. Pattavina (2007). WDM network design by ILP models based on flow aggregation. *IEEE/ACM Transactions on Networking*, 15, 709-720.
38. M. Tornatore, G. Maier, A. Pattavina (2006). Capacity vs. availability trade-offs for availability-based routing. *OSA Journal of Optical Networking*, 5, 858-869.
39. L. Savastano, G. Maier, M. Artinelli, A. Pattavina (2005). Physical parameter design in 2-D MEMS optical switches. *IEEE/OSA Journal of Lightwave Technology*, 23, 3147-3155.
40. S. De Patre, G. Maier, A. Pattavina (2005). Design of protected WDM wheel networks under various traffic conditions. *Kluwer Photonic Network Communications*, 9, 197-205.
41. G. Maier, M. Tornatore, A. Pattavina (2005). Cost and benefits of survivability in an optical transport network. *TELEDIREKTORATET Teletronikk*, 2, 109-125.
42. M. Tornatore, G. Maier, A. Pattavina (2005). Availability design of optical transport network. *IEEE Journal on Selected Areas in Communications*, 23, 1520-1532.
43. G. Maier, A. Pattavina, L. Barbato, F. Cecini, M. Martinelli (2004). Routing algorithms in WDM networks under mixed static and dynamic lambda traffic. *Kluwer Photonic Network Communications*, 8, 69-87.
44. G. Maier, A. Pattavina, L. Roberti, T. Chich. (2002). A heuristic approach for the design of static multifiber WDM networks: principles and applications. *Kluwer Optical Networks Magazine*, 3, 52-66.
45. G. Maier, A. Pattavina, S. De Patre, M. Martinelli (2002). Optical network survivability: protection techniques in the WDM layer. *Kluwer Photonic Network Communications*, 4, 251-269.
46. G. Maier, A. Pattavina (2001). Design of photonic rearrangeable networks with zero first-order switching-element-crosstalk. *IEEE Transactions on Communications*, 49, 1268-1279.
47. G. Maier, M. Martinelli, A. Pattavina, E. Salvadori (2000). Design and cost performance of the multistage WDM PON access networks. *IEEE/OSA Journal Of Lightwave Technology*, 18, 125-143.
48. P. Boffi, G. Maier, M. Martinelli, R. Melen (2000). Optical implementation of asynchronous-transfer-mode header-error control. *OSA Applied Optics*, 39, 827-834.
49. A. Pattavina, M. Martinelli, G. Maier, P. Boffi (2000). Techniques and technologies towards all-optical switching. *Kluwer Optical Networks Magazine*, 1, 75-93.

50. G. Maier, M. Scappini, M. Martinelli, A. Pattavina (2000). Performance of WDM rings with partial and sparse wavelength conversion under general dynamic traffic. *Wiley-Blackwell European Transactions on Telecommunications*, 11, 91-98.
51. P. Parolari, L. Marazzi, D. Rossetti, G. Maier, M. Martinelli (2000). Coherent-to-Incoherent Light Conversion for Optical Correlators. *IEEE/OSA Journal Of Lightwave Technology*, 18, 1284-1288.

Conference papers

1. S. Troia, E. Gregorini, J. P. Asdikian, M. Li and G. Maier, "Real-time Delay Measurement in SD-WAN based on In-band Network Telemetry," 2024 IEEE 25th International Conference on High Performance Switching and Routing (HPSR), Pisa, Italy, 2024, pp. 149-154, doi: 10.1109/HPSR62440.2024.10635944.
2. J. P. Asdikian, D. Gjeka, A. Pagés, S. Troia, G. Maier and S. Spadaro, "Service Function Chain Resource Allocation and Offloading in Constrained Edge-Cloud Optical Networks," 2024 24th International Conference on Transparent Optical Networks (ICTON), Bari, Italy, 2024, pp. 1-5, doi: 10.1109/ICTON62926.2024.10647990.
3. J. P. H. Asdikian, M. Li and G. Maier, "Performance evaluation of YOLOv8 and YOLOv9 on custom dataset with color space augmentation for Real-time Wildlife detection at the Edge," 2024 IEEE 10th International Conference on Network Softwarization (NetSoft), Saint Louis, MO, USA, 2024, pp. 55-60, doi: 10.1109/NetSoft60951.2024.10588933.
4. N. Ploch, S. Troia, W. Kellerer and G. Maier, "Edge-to-Cloud Federated Learning with Resource-Aware Model Aggregation in MEC," 2024 IEEE International Conference on Communications Workshops (ICC Workshops), Denver, CO, USA, 2024, pp. 347-352, doi: 10.1109/ICCWorkshops59551.2024.10615545.
5. L. Borgianni, S. Troia, D. Adami, G. Maier and S. Giordano, "Assessing the Efficacy of Reinforcement Learning in Enhancing Quality of Service in SD-WANs," GLOBECOM 2023 - 2023 IEEE Global Communications Conference, Kuala Lumpur, Malaysia, 2023, pp. 1765-1770, doi: 10.1109/GLOBECOM54140.2023.10437333.
6. S Troia, G Maier, S Bregni (2023), "Experimental Evaluation of SD-WAN Performance in a Municipal Network Test Bed", 2023 IEEE Latin-American Conference on Communications (LATINCOM), 1-5
7. N. Ellsworth, S. Troia, T. Zhang, M. Tacca, G. Maier, A Fumagalli (2023), "Experimental Demonstration and Results of Cross-layer Monitoring Using OpenNOP: an Open Source Network Observability Platform", 23rd International Conference on Transparent Optical Networks (ICTON), 1-4
8. L. M. Moreira Zorello, K. Eradatmand, S. Troia, A. Pattavina, Y. Zhang, G. Maier (2023). "Auction-based network slicing for 5G RAN", IEEE 9th International Conference on Network Softwarization (NetSoft 2023)
9. L. Borgianni, S. Troia, D. Adami, G. Maier, S. Giordano (2023), "From MPLS to SD-WAN to ensure QoS and QoE in cloud-based applications", IEEE 9th International Conference on Network Softwarization (NetSoft 2023)

10. N Ellsworth, T Zhang, S Troia, G Maier, A Fumagalli (2023), "Enhancing cross layer monitoring on open optical transport networks", Optical Fiber Communication Conference 2023, M3Z. 14
11. L. Galluccio et al., "Reinforcement Learning for Resource Planning in Drone-Based Softwarized Networks," 2022 20th Mediterranean Communication and Computer Networking Conference (MedComNet), 2022, pp. 200-207, doi: 10.1109/MedComNet55087.2022.9810398.
12. Troia S, Moreira Zorello Ligia Maria, & Maier G (2021). SD-WAN: how the control of the network can be shifted from core to edge. In *25th International Conference on Optical Network Design and Modelling, ONDM 2021, Proceedings* (pp. 1-3). IEEE.
13. Sebastian Troia, Marco Mazzara, Ligia Maria Moreira Zorello, & Guido Maier (2021). Performance Evaluation of Overlay Networking for delay-sensitive services in SD-WAN. In *2021 IEEE International Mediterranean Conference on Communications and Networking (MeditCom)* (pp. 1-6).
14. Maier Guido, Askari Leila, Troia Sebastian, Zorello Ligia Maria Moreira, Musumeci Francesco, & Tornatore Massimo (2020). Reconfiguration of VNF Placement in an Optical Metro Network by a Modular Planning Tool. In *Optical Fiber Communication Conference 2020* (pp. 1-3).
15. Ligia Maria Moreira Zorello, Sebastian Troia, Serena Giannotti, Rodolfo Alvizu, Stefano Bregni, & Guido Maier (2020). On the Network Slicing for Enterprise Services with Hybrid SDN. In *2020 IEEE 12th Latin-American Conference on Communications (LATINCOM)* (pp. 1-6).
16. Moreira Zorello L. M., Troia S., Quagliotti M., & Maier G. (2020). Power-aware optimization of baseband-function placement in cloud radio access networks. In *2020 24th International Conference on Optical Network Design and Modeling, ONDM 2020* (pp. 1-6). Institute of Electrical and Electronics Engineers Inc..
17. Troia Sebastian, Moreira Zorello Ligia Maria, Maralit Alvin J., & Maier Guido (2020). SD-WAN: An Open-Source Implementation for Enterprise Networking Services. In *2020 22nd International Conference on Transparent Optical Networks (ICTON)* (pp. 1-4).
18. Troia S., Martinez D. E., Martin I., Ligia Maria Moreira Zorello., Maier G., Hernandez J. A., Gonzalez De Dios O., Garrich M., Romero-Gazquez J. L., Moreno-Muro F. -J., Marino P. P., & Casellas R. (2019). Machine Learning-assisted Planning and Provisioning for SDN/NFV-enabled Metropolitan Networks. In *2019 European Conference on Networks and Communications, EuCNC 2019* (pp. 438-442). Institute of Electrical and Electronics Engineers Inc..
19. D. Andreoletti, S. Troia, F. Musumeci, S. Giordano, G. Maier and M. Tornatore, "Network Traffic Prediction based on Diffusion Convolutional Recurrent Neural Networks," IEEE INFOCOM 2019 - IEEE Conference on Computer Communications Workshops (INFOCOM WKSHPS), 2019, pp. 246-251, doi: 10.1109/INFCOMW.2019.8845132.
20. Troia Sebastian, Giorgetti Alessio, Sgambelluri Andrea, & Maier Guido (2019). Dynamic Virtual Network Function Placement over a Software-Defined Optical Network. In *Optical Fiber Communication Conference 2019* (pp. 1-3).

21. S. Troia, MOREIRA ZORELLO LIGIA MARIA, G. Maier, G. Verticale, & P. Giaccone (2019). Portable MiniLab for Hands-on Experimentation with Software Defined Networking. In *Proceedings of the International Conference on Telecommunications (ConTEL) 2019* (pp. 1-7).
22. Sebastian Troia, Alberto Rodriguez, Rodolfo Alvizu, & Guido Maier (2018). SENATUS: an experimental SDN/NFV Orchestrator. In *Proceedings of Network Function Virtualization and Software Defined Networks (NFV-SDN 2018)* (pp. 1-5). IEEE.
23. I. Martín, J. A. Hernández, S. Troia, F. Musumeci, G. Maier and O. G. de Dios, "Is Machine Learning Suitable for Solving RWA Problems in Optical Networks?," *2018 European Conference on Optical Communication (ECOC)*, 2018, pp. 1-3, doi: 10.1109/ECOC.2018.8535562..
24. S. Troia et al., "Machine-Learning-Assisted Routing in SDN-Based Optical Networks," *2018 European Conference on Optical Communication (ECOC)*, 2018, pp. 1-3, doi: 10.1109/ECOC.2018.8535437.
25. S. Troia, R. Alvizu, ZHOU YOU DUO, G. Maier, & A. Pattavina (2018). Deep Learning-based Traffic Prediction for Network Optimization. In *Proceedings of ICTON 2018* (pp. 1-4).
26. Alvizu Rodolfo, Troia Sebastian, Maier Guido, & Pattavina Achille (2018). Machine-Learning-Based Prediction and Optimization of Mobile Metro-Core Networks. In *2018 IEEE Photonics Society Summer Topical Meeting Series (SUM)* (pp. 155-156).
27. R. Alvizu, V. Soto, S. Troia, & G. Maier (2018). Enabling multipath optical routing with hybrid differential delay compensation. In *Proceedings of ICTON 2018* (pp. 1-4).
28. Rodolfo Alvizu, Sebastian Troia, NGUYEN VAN MINH, Guido Maier, & Achille Pattavina (2018). Network Orchestration for Dynamic Network Slicing for Fixed and Mobile Vertical Services. In *Proceedings of OFC 2018* (pp. 1-2).
29. TROIA SEBASTIAN, G. Sheng, R. Alvizu, G. Maier, & A. Pattavina (2017). Identification of tidal-traffic patterns in metro-area mobile networks via matrix factorization based model. In *International Conference on Pervasive Computing and Communications* (pp. 1-5).
30. R. Alvizu, G. Maier, S. Troia, V. M. Nguyen, & A. Pattavina (2017). SDN-based network orchestration for new dynamic enterprise networking services. In *Proceedings of ICTON 2017* (pp. 1-4).
31. N. Kukreja, G. Maier, R. Alvizu, & A. Pattavina (2016). SDN based automated testbed for evaluating multipath TCP. In *Proceedings of ICC 2016* (pp. 1-6).
32. Attanasio V., Valenti A., Persia F., Rufini A., Penna S., Del Buono D., VERTICALE GIACOMO, & MAIER GUIDO ALBERTO (2016). Evaluation of the hybrid FTTx/VDSL2-Vectoring approach in an access network. In *2016 18th International Conference on Transparent Optical Networks (ICTON)* (pp. 1-5).
33. Attanasio Vincenzo, Penna Stefano, MAIER GUIDO ALBERTO, VERTICALE GIACOMO, Rufini Arianna, & Valenti Alessandro (2016). Ultra broadband access network performance in a multi operator scenario. In *2016 17th International Telecommunications Network Strategy and Planning Symposium (Networks)* (pp. 115-120).

34. BOSCHINI MATERA FRANCESCA, Vari M., Medranda Posada S., Maier G., Giannone F., Valcarenghi L., MAROTTA ANTONIO, & Antonelli C. (2016). Fiber access cost models from road NGN project. In *IET Conference Publications* (pp. 12-12). Institution of Engineering and Technology.
35. Tan SY, Wang XL, Maier G, & Li WZ (2016). Riding Quality Evaluation through Mobile Crowd Sensing. In *Proceedings of PerCom 2016* (pp. 1-6). IEEE.
36. Muqaddas Abubakar Siddique, Bianco Andrea, Giaccone Paolo, & Maier Guido (2016). Inter-controller traffic in ONOS clusters for SDN networks. In *2016 IEEE International Conference on Communications, ICC 2016* (pp. 1-6). Institute of Electrical and Electronics Engineers Inc..
37. Posada S. Medranda, Maier G., Giannone F., Valcarenghi L., Marotta A., & Antonelli C. (2016). Comparison of multi-operator PON technologies beyond NG-PON2: A real greenfield case-study. In *Proceedings of International Conference on Transparent Optical Networks* (pp. 1-4). IEEE Computer Society.
38. Alvizu Rodolfo, Valencia Juan, & Maier Guido (2016). Multipath optical routing with compact fiber delay line-based differential delay compensation. In *2016 21st European Conference on Networks and Optical Communications, NOC 2016* (pp. 58-63). Institute of Electrical and Electronics Engineers Inc..
39. Kukreja Navin, Alvizu Rodolfo, Kos Ana, Maier Guido, Morro Roberto, Capello Alessandro, & Cavazzoni Carlo (2016). Demonstration of SDN-based orchestration for multi-domain Segment Routing networks. In *International Conference on Transparent Optical Networks* (pp. 1-4). IEEE Computer Society.
40. R. Alvizu, X. Zhao, G. Maier, Y. Xu, & A. Pattavina (2016). Energy aware optimization of mobile metro-core network under predictable aggregated traffic patterns. In *Proceedings of ICC 2016* (pp. 1-7).
41. Pastrav Andra, Palade Tudor, Puschita Emanuel, Nebuloni Roberto, Capsoni Carlo, Luini Lorenzo, Maier Guido, & Riva Carlo (2015). TRAFFIC MANAGEMENT IN SMART GATEWAY NETWORKS. In *The 21st Ka and Broadband Communications Conference* (pp. 1-8).
42. Alvizu Gomez Rodolfo Enrique, & Maier Guido Alberto (2015). OpenFlow based Software Defined Optical Networking. In *Proceedings of Fotonica 2015* (pp. 1-1).
43. ALVIZU GOMEZ RODOLFO ENRIQUE, & MAIER GUIDO ALBERTO (2014). Can open flow make transport networks smarter and dynamic? An overview on transport SDN. In *2014 International Conference on Smart Communications in Network Technologies, SaCoNeT 2014* (pp. 1-6). IEEE Computer Society.
44. MAGARINI MAURIZIO, MAIER GUIDO ALBERTO, & M. Alam (2014). Performance Analysis of Ring-Resonator Based Optical Backplane for DPSK Transmission at 10 Gb/s. In *Proceedings of International Conference on Transparent Optical Networks* (pp. 1-4).
45. GARAO DARIO GIUSEPPE, MAIER GUIDO ALBERTO, & PATTAVINA ACHILLE (2014). Multi-stage switching networks for waveguide optical technology. In *Proc. of LATINCOM 2014* (pp. 1-6).

46. G. Rizzelli, G. Maier, & A. Pattavina (2013). WSS requirements in next-Generation wavelength switched optical networks. In *Proc. of OFC 2013* (pp. 1-3).
47. Garao Dario G., Maier Guido, & Pattavina Achille (2013). Modular EGS architectures for optical interconnections. In *Proceedings - International Conference on Computer Communications and Networks, ICCCN* (pp. 1-7).
48. RIZZELLI GIUSEPPE, SIRACUSA DOMENICO, MAIER GUIDO ALBERTO, MAGARINI MAURIZIO, & MELLONI ANDREA IVANO (2013). Performance of ring-resonator based optical backplane in high capacity routers. In *Proc. 15th International Conference on Transparent Optical Networks* (pp. 1-4).
49. G. Cincotti, P. Boffi, G. Maier, E. Ciaramella, L. Valcarengi, R. Gaudino, F. Matera, A. Mecozzi, & M. Santagiustina. F. Vatalaro (2013). The Italian research project ROAD-NGN: Optical frequency/wavelength division multiple access techniques for next generation networks. In *Proc. Fotonica 13 - 15[°] Convegno Nazionale delle Tecnologie Fotoniche* (pp. 1-4).
50. M. Coudron, SECCI STEFANO, MAIER GUIDO ALBERTO, G. Pujolle, & PATTAVINA ACHILLE (2013). Boosting cloud communications through a crosslayer multipath protocol architecture. In *Proc. of SDN4FNS 2013* (pp. 1-7).
51. SIRACUSA DOMENICO, MAIER GUIDO ALBERTO, A. Valenti, & F. Matera (2012). On the design of novel multicasting processes: Carrier Ethernet and WDM. In *In Proceedings of ICTON 2012* (pp. 1-4).
52. G. Notarnicola, RIZZELLI GIUSEPPE, MAIER GUIDO ALBERTO, & PATTAVINA ACHILLE (2012). Scalability analysis of WSS-based ROADMs. In *Proceedings of NOC 2012* (pp. 1-6).
53. D. Siracusa, D. Careglio, G. Maier, A. Pattavina, & J. Sole-Pareta (2011). Multi-layer design of an MPLS-TP based Carrier Ethernet network. In *15th International Conference on Optical Network Design and Modeling (ONDM)* (pp. 1-6).
54. V. Moeyaert, & MAIER GUIDO ALBERTO (2011). Network technologies for broadband access. In *Proceedings of ICTON 2011* (pp. 1-5).
55. RIZZELLI GIUSEPPE, MUSUMECI FRANCESCO, TORNATORE MASSIMO, MAIER GUIDO ALBERTO, & PATTAVINA ACHILLE (2011). Wavelength-aware translucent network Design. In *Proceedings of OFC - NFOEC 2011* (pp. 1-3).
56. LUCERNA DIEGO, MAIER GUIDO ALBERTO, & PATTAVINA ACHILLE (2011). AWG-based architecture for optical interconnection in asynchronous systems. In *High Performance Switching and Routing 2011* (pp. 262-267).
57. SIRACUSA DOMENICO, V. Linzalata, MAIER GUIDO ALBERTO, PATTAVINA ACHILLE, Y. Ye, & M. Chen (2011). Hybrid Architecture for Optical Interconnection Based on Micro Ring Resonators. In *IEEE Global Telecommunications Conference (GLOBECOM 2011)* (pp. 1-5).
58. MAIER GUIDO ALBERTO, P. Valzasina, & PATTAVINA ACHILLE (2011). AWG-based Shuffle-Exchange Optical-Interconnection Architectures. In *20th International Conference on Computer Communications and Networks - ICCCN 2011* (pp. 1-6).

59. D. Siracusa, G. Maier, V. Linzalata, & A. Pattavina (2011). Scalability of optical interconnections based on the Arrayed Waveguide Grating in high capacity routers. In *15th International Conference on Optical Network Design and Modeling (ONDM)* (pp. 1-6).
60. E. Marin Tordera, M. Yannuzzi, X. Masip Bruin, S. Sanchez Lopez, R. Martinez, R. Munoz, R. Casellas, & MAIER GUIDO ALBERTO (2010). The effects of optimized regenerator allocation in translucent networks under inaccurate physical information. In *14th Conference on Optical Network Design and Modeling (ONDM) 2010* (pp. 1-6).
61. SIRACUSA DOMENICO, & MAIER GUIDO ALBERTO (2010). Carrier Grade Ethernet Versus SDH in Optical Networks: Planning Methods and CAPEX Comparisons. In *Proceedings of ICC 2010* (pp. 1-6).
62. RIZZELLI GIUSEPPE, MAIER GUIDO ALBERTO, & PATTAVINA ACHILLE (2010). Translucent Optical Network Design: A Novel Two-Step Method. In *Proceedings of ECOC 2010* (pp. 1-3).
63. L. Buzzi, M. C. Bardellini, SIRACUSA DOMENICO, MAIER GUIDO ALBERTO, F. Paolucci, F. Cugini, L. Valcarenghi, & P. Castoldi (2010). Hierarchical Border Gateway Protocol (HBGP) for PCE-Based Multi-Domain Traffic Engineering. In *Proceedings of ICC 2010* (pp. 1-6).
64. SECCI STEFANO, J.L. ROUGIER, PATTAVINA ACHILLE, F. PATRONE, & MAIER GUIDO ALBERTO (2009). ClubMED: Coordinated Multi-Exit Discriminator Strategies for Peering Carriers. In *Proc. of 2009 5th Euro-NGI Conference on Next Generation Internet Networks (NGI 2009)* (pp. 1-8).
65. SECCI STEFANO, J.L. ROUGIER, PATTAVINA ACHILLE, F. PATRONE, & MAIER GUIDO ALBERTO (2009). PEMP: Peering Equilibrium MultiPath routing. In *Proc. of GLOBECOM 2009* (pp. 1-5).
66. S. SECCI, J.L. ROUGIER, A. PATTAVINA, F. PATRONE, & G. MAIER (2009). Peering Games for Critical Internet Flows. In *Proc. of 2009 EuroNF 5th Int. Workshop on Traffic Management and Engineering for the Future Internet* (pp. 1-2).
67. LUCERNA DIEGO, GATTI NICOLA, MAIER GUIDO ALBERTO, & PATTAVINA ACHILLE (2009). On the Efficiency of a game theoretic approach to sparse regenerator placement in WDM networks. In *Proceedings of the IEEE Global Communications Conference* (pp. 1-6).
68. W. Kabacinski, J. Kleban, M. Michalski, M. Zal, PATTAVINA ACHILLE, & MAIER GUIDO ALBERTO (2009). Rearranging algorithms for $\log_2(N, 0, p)$ switching networks with even number of stages. In *Proc. of HPSR 2009* (pp. 1-6).
69. Annuzzi M., Quagliotti M., MAIER GUIDO ALBERTO, Marin Tordera E., MASIP BRUIN X., SÁNCHEZ LÁPEZ S., SOLE PARETA J., ERANGOLI WALTER, & Tamiri G. (2009). Performance of translucent optical networks under dynamic traffic and uncertain physical-layer information. In *Proceedings of ONDM 2009* (pp. 1-6).
70. D. CUDA, R. GAUDINO, G. GAVILANES CASTILLO, MAIER GUIDO ALBERTO, F. NERI, C. RAFFAELLI, & M. SAVI (2009). Capacity/Cost Tradeoffs in Optical Switching Fabrics for Terabit Packet Switches. In *ONDM 2009* (pp. 1-6).

71. MAIER GUIDO ALBERTO, L. COLOMBO, D. G. COSTANTINO, PATTAVINA ACHILLE, & P. SZEGEDI (2008). Quality of provisioning as an OPEX-related issue in research networks. In *IT-NEWS 2008* (pp. 33-39).
72. MAIER GUIDO ALBERTO, C. BUSCA, & PATTAVINA ACHILLE (2008). Multi-Domain Routing Techniques with Topology Aggregation in ASON Networks. In *ONDM 2008* (pp. 1-6).
73. MAIER G., A. DI GIGLIO, G. FERRARIS, M. QUAGLIOTTI, S. DE PATRE, & L. SAVASTANO (2007). Pianificazione ed analisi di reti di trasporto ottiche dinamiche. (pp. 1-4).
74. Marin E., Sanchez S., Masip X., Sole J., MAIER GUIDO ALBERTO, ERANGOLI WALTER, Santoni S., & Quagliotti M. (2007). MINCOD-MTD: a RWA algorithm in semi-transparent optical networks. In *Proceedings of ECOC 2007* (pp. 853-853).
75. N. Andriolli, F. Callegati, P. Castoldi, W. Kabacinski, MAIER GUIDO ALBERTO, PATTAVINA ACHILLE, C. Raffaelli, L. Valcarenghi, & L. Wosinska (2007). Photonics in switching in NoE e-Photon/One+. In *Proceedings of ICTON 2007* (pp. 1-4).
76. MAIER GUIDO ALBERTO, PATTAVINA ACHILLE, & L. Savastano (2007). Low-crossover extended generalized shuffle. In *Proc. of HPSR 2007* (pp. 1-6).
77. MAIER GUIDO ALBERTO, F. Mizzotti, & PATTAVINA ACHILLE (2007). Multi-domain routing techniques in ASON networks. In *Proceedings of ECOC 2007* (pp. 1-2).
78. E. MARIN, S. SANCHEZ, X. MASIP, J. SOLE', MAIER G., W. ERANGOLI, S. SANTONI, & M. QUAGLIOTTI (2007). Applying prediction concepts to routing on semi-transparent optical transport networks. (pp. 32-36).
79. BREGNI STEFANO, SAVASTANO L, PATTAVINA ACHILLE, MAIER GUIDO ALBERTO, & MARTINELLI MARIO (2006). Optical-Switch Benes Architecture based on 2-D MEMS. In *IEEE 2006 Workshop on High Performance Switching and Routing (HPSR 2006)* (pp. 1-6).
80. F. Losego, MAIER GUIDO ALBERTO, PATTAVINA ACHILLE, & TORNATORE MASSIMO (2005). Time constraints in an OTN semi-automatic control system. In *Proceedings of DRCN 2005* (pp. 7-14).
81. MAIER GUIDO ALBERTO, R. GIRARDI, & G. FERRARIS (2005). Towards the Future European Research Network: the MUPBED Project. In *Proceedings of ONDM 2005* (pp. 105-114).
82. A. CONCARO, S. DE PATRE, MAIER GUIDO ALBERTO, & TORNATORE MASSIMO (2005). Optimization algorithms for WDM optical network dimensioning. In *Proceedings of ONDM* (pp. 141-152).
83. MAIER GUIDO ALBERTO, A. DI GIGLIO, G. FERRARIS, M. QUAGLIOTTI, S. DE PATRE, & L. SAVASTANO (2005). An approach for dynamic optical transport network planning and analysis. In *Proceedings of DRCN 2005* (pp. 1-8).
84. L. Savastano, MAIER GUIDO ALBERTO, MARTINELLI MARIO, & PATTAVINA ACHILLE (2004). Performance comparison of guided-wave architectures for space-division photonic switching. In *Proc. of Broadnets 2004* (pp. 202-211).

85. M. VILLA, T. TOMASI, M. ROCCA, TORNATORE MASSIMO, MAIER GUIDO ALBERTO, & A. RIGHETTI (2004). Service availability: from sensitivity studies to performance improvement. In *[Suboptics 2004]* (pp. 1-2).
86. D. Arci, MAIER GUIDO ALBERTO, PATTAVINA ACHILLE, D. Petecchi, & TORNATORE MASSIMO (2003). Availability models for protection techniques in WDM networks. In *Proceedings of DRCN* (pp. 158-166).
87. MAIER GUIDO ALBERTO, R. Gibellini, PATTAVINA ACHILLE, & MARTINELLI MARIO (2003). OTN network design and optimization under the optical amplifier noise constraint. In *Proceedings of OPTICOMM 2003* (pp. 392-403).
88. TORNATORE MASSIMO, MAIER GUIDO ALBERTO, PATTAVINA ACHILLE, M. VILLA, A. RIGHETTI, R. CLEMENTE, & MARTINELLI MARIO (2003). Availability optimization of static path-protected WDM networks. In *Proceedings of OFC* (pp. 621-622).
89. L. BARBATO, MAIER G., & A. PATTAVINA (2003). Maximum traffic scaling in WDM networks optimized for an initial static load. (pp. 41-59).
90. MAIER GUIDO ALBERTO, PATTAVINA ACHILLE, & TORNATORE MASSIMO (2002). WDM network optimization by ILP based on source formulation. In *Proceedings of IEEE Infocom 2002* (pp. 1813-1821).
91. A. Dacomo, S. De Patre, MAIER GUIDO ALBERTO, PATTAVINA ACHILLE, & MARTINELLI MARIO (2002). Design of static resilient WDM mesh networks with multiple heuristic criteria. In *Proceedings of IEEE Infocom 2002* (pp. 1793-1802).
92. S. DE PATRE, MAIER G., M. MARTINELLI, & A. PATTAVINA (2002). Design of static WDM mesh networks with dedicated path-protection. (pp. 1-2).
93. MAIER GUIDO ALBERTO, & PATTAVINA ACHILLE (2001). Generalized Space-Equivalent Analysis of optical Cross-Connect Architectures. In *Proc. of INFOCOM 2001* (pp. 159-168).
94. MAIER G., A. PATTAVINA, & M. PIERPAOLI (2001). Valutazione di prestazioni di reti di trasporto WDM con traffico dinamico. (pp. 183-186).
95. S. De Patre, G. Maier, A. Martinelli, & A. Pattavina (2001). Tecniche di Protezione per la Rete WDM. In - (pp. 37-45).
96. MAIER G., A. PATTAVINA, & L. ROBERTI (2001). Ottimizzazione euristica di reti WDM multifibra. (pp. 171-174).
97. C. GRILLI, MAIER G., & A. PATTAVINA (2001). Progetto di optical-cross-connect con crosstalk del primo ordine controllato. (pp. 435-438).
98. C. Grilli, G. Maier, & A. Pattavina (2000). Control of non filterable crosstalk in optical-cross-onnect banyan architectures. In - (pp. 1228-1232).
99. MAIER GUIDO ALBERTO (2000). Performance issues in WDM networks. In *Proceedings of LEOS Summer Topical Meetings 2000* (pp. IV13-IV14).

100. MAIER GUIDO ALBERTO, PAROLARI PAOLA, MARAZZI LUCIA, A. SGUAZZOTTI, & MARTINELLI MARIO (2000). Delay line optical recognizer based on coherent-to-chaotic light conversion. In *OSA Trends in Optics and Photonic Series (TOPS) - Photonics in Switching* (pp. 41-48). Optical Society of America.
101. T. Chich, MAIER GUIDO ALBERTO, PATTAVINA ACHILLE, & L. Roberti (2000). Static-lightpath design by heuristic methods in multifiber WDM networks. In *Proceedings of OPTICOMM 2000* (pp. 64-75).
102. GHIONI L., MAIER G., MARTINELLI M., & PATTAVINA A (1999). An optical subsystem for peak-cell-rate policing in ATM networks. In *Proc. of IFIP 3rd Working Conference on Optical Network Design and Modeling* (pp. 195-207).
103. G. MAIER, M. MARTINELLI, A. PATTAVINA, & M. SCAPPINI (1999). Fairness nelle reti WDM ad anello con conversione di lunghezza d'onda e traffico non piossoniano. In - (pp. 441-444).
104. G. MAIER, M. MARTINELLI, A. PATTAVINA, & M. SCAPPINI (1999). Performance of WDM rings with wavelength conversion under non-Poisson traffic. In - (pp. 2037-2041).
105. G. MAIER, M. MARTINELLI, A. PATTAVINA, & E. SALVADORI (1999). Multistage WDM passive optical networks design and cost issues. In - (pp. 1707-1713).
106. MAIER GUIDO ALBERTO, & PATTAVINA ACHILLE (1999). Photonic rearrangeable networks with zero switching-element crosstalk. In *Proc. of INFOCOM 99* (pp. 337-344).
107. MAIER GUIDO ALBERTO, BOFFI PIERPAOLO, MELEN R, & MARTINELLI MARIO (1998). Free-space architecture for an ATM header processing function. In *SPIE Proc. OC&E™98 - International Topical Meeting on Optics in Computing* (pp. 127-130).
108. G. GIROLA, MAIER GUIDO ALBERTO, MARTINELLI MARIO, & PATTAVINA ACHILLE (1998). Upstream traffic multiplexing in photonic ATM access networks. In *Proc. SPIE 3531* (pp. 130-143).

Book Chapters

1. L. M. Moreira Zorello, S. Troia, G. Maier (2021). Machine-learning-aided resource allocation in 5G metro networks. In: *MACHINE LEARNING AND 5G/6G NETWORKS: INTERPLAY AND SYNERGIES*, S. Barbarossa A. Zanello. pp. 113-125, Publisher: TexMat, ISBN: 9788894982480
2. S. Troia, G. Maier. (2020). Software Defined Wide Area Networking (SD-WAN). In *NETWORK PROGRAMMABILITY: A (R)EVOLUTIONARY APPROACH*, G. Bianchi, W. Cerroni, S. Palazzo, pp. 253-268, publisher: TexMat, ISBN 9788894982428
3. F. Matera, R. Chandy, V. Carrozzo, K. Ennsner, Maier Guido Alberto, Pattavina Achille, M. Zannin. (2011). Simulations of High-Capacity Long-Haul Optical Transmission Systems. In A. Teixeira G. M. Tosi Beleffi (Ed), *Optical Transmission, The FP7 BONE Project Experience* (bll 123–184). Springer.

4. C. Raffaelli, S. Aleksic, F. Callegati, W. Cerroni, G. Maier, A. Pattavina, & M. Savi. (2009). Optical Packet Switching. In *Enabling Optical Internet with Advanced Network Technologies* (bll 31–85). Springer.
5. George N. Rouskas, Fabio Neri, Pattavina Achille, Bregni Stefano, & Maier Guido Alberto. (2005). Selected papers from Optical Network Design and Modeling (ONDM) 2005 conference. In *Selected papers from Optical Network Design and Modeling (ONDM) 2005 conference* (Vol 2, Issue 4, bll 199–200).
6. Pattavina Achille, Tornatore Massimo, A. De Fazio, Maier Guido Alberto, & Martinelli Mario. (2004). Static WDM network planning with TDM channel partitioning. In *Mitrou N.;Kontovasilis K.;Rouskas G. Iliadis;I. Merakos (Red), Networking 2004* (Vol 3052, bll 162–173). Springer.
7. S. De Patre, Maier Guido Alberto, Martinelli Mario, & Pattavina Achille. (2003). Design of Static WDM mesh networks with dedicated path protection. In *Next Generation Optical Network Design and Modelling* (bll 281–294). Kluwer Academic Publisher.
8. Concaro A., Maier Guido Alberto, Martinelli Mario, Pattavina Achille, & Tornatore Massimo. (2003). QoS provision in optical networks by shared protection: an exact approach. In *Proc. of QoS-IP 2003* (bll 419–432).
9. Maier Guido Alberto, Martinelli Mario, Pattavina Achille, & M. Pierpaoli. (1999). Performance analysis of wavelength division multiplexing mesh networks. In *Optical Networking* (bll 52–63).
10. Boffi Pierpaolo, Maier Guido Alberto, Martinelli Mario, & Pattavina Achille. (1999). ATM and Optics. In *Optical Networks – Design and Modelling* (bll 149–165). NORWELL, MASSACHUSETTS - USA: Kluwer Academic Publishers.

Patents

1. Ferraris Giuseppe, Maier Guido, & De PATRE Simone. (2005). Method for configuring an optical network.
2. Maier Guido Alberto, De Patre Simone, & Ferraris Giuseppe. (2005). Method for configuring an optical network.
3. S. De Patre, G. Maier, & A. Pattavina. (2004). Methods for planning or provisioning data transport networks.
4. M. Martinelli, G. Maier, L. Ghioni, & A. Pattavina. (2000). Optical device for processing a sequence of bits.
5. P. Boffi, Maier G, Marazzi L, Martinelli M, Parolari P, Piccinin D, & Sguazzotti A. (2000). OPTICAL APPARATUS FOR SELECTING A PREDETERMINATED ITEM OF INFORMATION FROM A COHERENT OPTICAL SIGNAL.

6. Martinelli Mario, G. Maier, Ghioni Lorenzo, & Pattavina Achille. (2000). Optical device for processing an optical impulse.
7. Boffi Pierpaolo, G. Maier, & Martinelli Mario. (1998). Optical device for processing an optical digital signal.