Optical Access Networks and Advanced Photonics: Technologies and Deployment Strategies

Edited by: Ioannis P. Chochliouros and George A. Heliotis, Hellenic Telecommunications Organization S.A., Greece

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With the growing demand for increased bandwidth, conventional broadband access solutions will quickly become a hindrance in terms of bandwidth provision for network access.

Optical Access Networks and Advanced Photonics: Technologies and Deployment Strategies presents a comprehensive overview of emerging optical access network solutions to efficiently meet the anticipated growth in bandwidth demand. Covering topics such as next-generation networking, communication networks, and photonics, this book provides the latest technology trends in order to grasp the expected beneficial use of optical access infrastructures.

Subject:
Networking/Telecommunications; Mobile/Wireless Computing; Electrical Engineering; Web Technologies

Market:
This essential publication will be invaluable to academic, research, and engineering libraries as well as those interested in scientific advances in fiber-optic networks. Network engineers, LAN administrators, network architects, telecommunications specialists, and administrators at Internet service provider organizations will find this cutting-edge publication provides the latest research in optics, networks, and next-generation network services. Students, researchers, and educators in the fields of networking and telecommunications will also benefit.

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About the Editors:
Ioannis P. Chochliouros is a telecommunications electrical engineer. He graduated from the Polytechnic School of the Aristotle University of Thessaloniki (Greece), and also holds an MSc (DEA) and a PhD from the University Pierre et Marie Curie, Paris VI (France). He worked as a research and teaching assistant in the University Paris VI, in cooperation with other European countries. His practical experience as an engineer has been mainly in telecommunications, as well as in various construction projects in Greece and the wider Balkan area. Since 1997 he has been working at the Competition Department and then as an engineer-consultant of the Chief Technical Officer of OTE (Hellenic Telecommunications Organization S.A.), for regulatory and technical matters. He currently works as the head of the research programs section of the Labs and New Technologies Division. Under his supervision, the section has received several awards by the European Commission, for the successful realization of European research activities. He is author or co-author of more than 125 distinct scientific and business works including books, book chapters, papers, articles, studies, and reports in the international literature. He has also worked as a lecturer in the Hellenic Academic Sector, in specific areas of modern technologies and/or business and/or regulatory-oriented issues. He has participated in many conferences, workshops, and other events, in most of which as an invited speaker. He is also an active participant of various international and national associations, both of scientific and business nature.

George A. Heliotis is a telecommunications engineer at the Division of Labs and New Technologies (R&D department) of the Hellenic Telecommunications Organization (OTE) S.A. and Deputy Head of its Access Networks Lab. He graduated from the University of Crete (Greece) with a BSc in physics and also holds an MSc and a PhD in opto-electronics/photonics from Imperial College London (UK). Prior to joining OTE S.A. he held positions in a variety of academic and industrial institutions, where he was mainly engaged on the design, development, and testing of novel opto-electronic devices and systems targeting a wide range of optical communication applications. His current work focuses on the design and evaluation of next-generation access network systems and architectures, mainly involving FTTH and FTTN+VDSL2 implementations. His research interests include photonics devices and systems, all-optical ultrafast networks, FTTx technologies, NGN architectures and services, and xDSL networks. He has participated in several academic and industrial international projects relating to novel optical- and copper-based network systems and infrastructures, and has authored or co-authored more than 60 publications in high-profile scientific journals and conferences.

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