

- | | |
|-------------------------|---|
| 1. Record Nr. | UNIORUON00058051 |
| Autore | SEBR 'Abd Allah |
| Titolo | Haqq al-yaqin fi ma'rifat usul al-din / 'Abd Allah Sebr |
| Pubbl/distr/stampa | Sayda, : Matba'a al-'irfan, 1352h [1974] |
| Descrizione fisica | 2 v. in 1 tomo ; 25 cm |
| Classificazione | ARA VII Dd |
| Lingua di pubblicazione | Arabo |
| Formato | Materiale a stampa |
| Livello bibliografico | Monografia |
-
- | | |
|-------------------------|--|
| 2. Record Nr. | UNINA9910821371003321 |
| Autore | Bouchet Olivier |
| Titolo | Wireless optical telecommunications / / Olivier Bouchet ; series editor
Pierre-Noel Favennec |
| Pubbl/distr/stampa | London, : ISTE Ltd.
Hoboken, N.J., : John Wiley & Sons, 2012 |
| ISBN | 9781118562635
1118562631
9781118563274
1118563271
9781118562710
1118562712
9781299188914
1299188915 |
| Edizione | [1st edition] |
| Descrizione fisica | 1 online resource (310 p.) |
| Collana | ISTE |
| Altri autori (Persone) | FavennecPierre-Noel |
| Disciplina | 621.382/7 |
| Soggetti | Wireless communication systems
Optical communications |
| Lingua di pubblicazione | Inglese |
| Formato | Materiale a stampa |
| Livello bibliografico | Monografia |
| Note generali | Description based upon print version of record. |

Nota di bibliografia	Includes bibliographical references (p. [261]-272) and index.
Nota di contenuto	Cover; Wireless Optical Communications; Title Page; Copyright Page; Table of Contents; Foreword; Acronyms; Introduction; Chapter 1. Light; Chapter 2. History of Optical Telecommunications; 2.1. Some definitions; 2.1.1. Communicate; 2.1.2. Telecommunication; 2.1.3. Optical telecommunication; 2.1.4. Radio frequency or Hertzian waves; 2.2. The prehistory of telecommunications; 2.3. The optical aerial telegraph; 2.4. The code; 2.5. The optical telegraph; 2.5.1. The heliograph or solar telegraph; 2.5.2. The night and day optical telegraph; 2.6. Alexander Graham Bell's photophone Chapter 3. The Contemporary and the Everyday Life of Wireless Optical Communication 3.1. Basic principles; 3.1.1. Operating principle; 3.1.1.1. Block diagram; 3.1.2. The optical propagation; 3.1.2.1. Line of sight propagation - LOS; 3.1.2.2. Wide line of sight - WLOS; 3.1.2.3. Diffusion propagation (DIF) and controlled diffusion; 3.1.3. Elements of electromagnetics; 3.1.3.1. Maxwell's equations in an unspecified medium; 3.1.3.2. Propagation of electromagnetic waves in an isotropic medium; 3.1.3.3. Energy associated to a wave; 3.1.3.4. Propagation of a wave in a non-homogeneous medium 3.1.3.5. Coherent and incoherent waves 3.1.3.6. Relations between electromagnetism and geometrical optics; 3.1.3.7. The electromagnetic spectrum; 3.1.3.8. Units and scales; 3.1.3.9. Examples of sources in the visible and near visible light; 3.1.3.10. Conclusion; 3.1.4. Models for data exchange; 3.1.4.1. The OSI model; 3.1.4.2. The DoD model; 3.2. Wireless optical communication; 3.2.1. Outdoor wireless optical communication; 3.2.1.1. Earth-satellite wireless optical communication; 3.2.1.2. Intersatellite wireless optical communication; 3.2.1.3. Free-space optic 3.2.2. Indoor wireless optical communication 3.2.2.1. The remote controller; 3.2.2.2. The visible light communication; 3.2.2.3. The IrDA solutions; 3.2.2.4. The indoor wireless optical network (WON); 3.2.3. The institutional and technical ecosystem; Chapter 4. Propagation Model; 4.1. Introduction; 4.2. Baseband equivalent model; 4.2.1. Radio propagation model; 4.2.2. Model of free-space optical propagation; 4.2.3. The signal-to-noise ratio; 4.3. Diffuse propagation link budget in a confined environment; 4.3.1. Intersymbol interference; 4.3.2. Reflection models; 4.3.2.1. Specular reflection 4.3.2.2. Diffuse reflection 4.3.2.3. Lambert's model; 4.3.2.4. Phong's model; 4.3.3. Modeling; Chapter 5. Propagation in the Atmosphere; 5.1. Introduction; 5.2. The atmosphere; 5.2.1. The atmospheric gaseous composition; 5.2.2. Aerosols; 5.3. The propagation of light in the atmosphere; 5.3.1. Molecular absorption; 5.3.2. Molecular scattering; 5.3.3. Aerosol absorption; 5.3.4. Aerosol scattering; 5.4. Models; 5.4.1. Kruse and Kim models; 5.4.2. Bataille's model; 5.4.2.1. Molecular extinction; 5.4.2.2. Aerosol extinction; 5.4.3. Al Naboulsi's model; 5.4.4. Rain attenuation 5.4.5. Snow attenuation
Sommario/riassunto	Wireless optical communication refers to communication based on the unguided propagation of optical waves. The past 30 years have seen significant improvements in this technique - a wireless communication solution for the current millennium - that offers an alternative to radio systems; a technique that could gain attractiveness due to recent concerns regarding the potential effects of radiofrequency waves on human health. The aim of this book is to look at the free space optics that are already used for the exchange of current information; its many benefits, such as incorporating chan

