1. Record Nr. UNINA9911020051703321 Autore Hottinen Ari Titolo Multi-antenna transceiver techniques for 3G and beyond / / Ari Hottinen, Olav Tirkkonen, Risto Wichman West Sussex, England;; Hoboken, NJ,: J. Wiley, c2003 Pubbl/distr/stampa **ISBN** 9786610268870 9781280268878 1280268875 9780470024805 0470024801 9780470014080 0470014083 Descrizione fisica 1 online resource (344 p.) Altri autori (Persone) TirkkonenOlav WichmanRisto Disciplina 621.3845/6 Soggetti Radio - Transmitter-receivers - Design and construction Radio circuits Modulation (Electronics) Antennas (Electronics) Signal processing Wireless communication systems - Equipment and supplies - Design and construction Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Description based upon print version of record. Note generali Nota di bibliografia Includes bibliographical references (p. [305]-322) and index. Nota di contenuto Contents; Preface; Acronyms; Part I: Introduction; 1 Background; 1.1 Modular System Design; 1.2 Diversity Techniques in 3G Systems; 1.3 GSM/EDGE; 1.4 Multi-antenna Modems for 3G and Beyond; 1.5 Summary; 2 Diversity Gain, SNR Gain and Rate Increase; 2.1 Channel Models; 2.2 Performance Limits of Transmit Diversity; 2.3 Theoretical MIMO Channel Capacity; 2.4 MIMO Capacity in Correlated Channels; 2.5 Performance Measures for Closed-loop Transmit Diversity: 2.6

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Sommario/riassunto

Multi-antenna techniques are widely considered to be the most promising avenue for significantly increasing the bandwidth efficiency of wireless data transmission systems. In so called MIMO (multiple input multiple output) systems, multiple antennas are deployed both at the transmitter and the receiver. In MISO (multiple input single output) systems, the receiver has only one antenna, and the multiple transmit antennas are used for transmit diversity. The key aspects of multiple antenna transceiver techniques for evolving 3G systems and beyond are presented. MIMO and MISO (transmit dive