Institutional Sign In

- BROWSE
- MY SETTINGS
- GET HELP
- WHAT CAN I ACCESS?
- SUBSCRIBE

Browse Conference Publications > Personal, Indoor and Mobile R ...

Interference cancellation with combined pre-distortion filtering and transmit diversity

Full Text
Sign-In or Purchase

Need Full-Text?

Request a free trial to IEEE Xplore for your organization.

FREE TRIAL

2
Author(s)

Marques da Silva, M. ; Inst. for Telecommun., Lisboa, Portugal ; Correia, A.M.C.

Abstract	Authors	References	Cited By	Keywords	Metrics	Similar
----------	---------	------------	----------	----------	---------	---------

It is intended to specify a new pre-distortion (PD) filtering technique, which can be used to combat the multiple access interference (MAI), combined with two kinds of transmit diversity (TD), namely the selective transmit diversity (STD) and the space-time transmit diversity (STTD) for high data rate transmissions over frequency selective Rayleigh fading channels. By pre-distorting the signals to be transmitted by the base station (BS) with a minimum variance (MV) algorithm, the orthogonality between the desired signal and all interfering signals can be improved. We combine the PD with STD and with STTD, allowing a reduction in the MAI and combating the fading. The increase in performance is achieved with a small increase in power processing in the BS, avoiding any need to increase complexity in the mobile station (MS).

Published in:
Personal, Indoor and Mobile Radio Communications, 2003. PIMRC 2003. 14th IEEE Proceedings on (Volume:2)

Date of Conference:
7-10 Sept. 2003

Page(s):
1598 - 1602 vol.2

Print ISBN:
0-7803-7822-9

INSPEC Accession Number:
8015378

DOI:
10.1109/PIMRC.2003.1260384

Publisher:
IEEE

Build and Run Simulation Apps with COMSOL 5.0

SEE HOW

Personal Sign In | Create Account

IEEE Account

» Change Username/Password

» Update Address

Purchase Details

» Payment Options

» Order History

» Access Purchased Documents

Profile Information

» Communications Preferences

» Profession and Education

» Technical Interests

Need Help?

» US & Canada: +1 800 678 4333

» Worldwide: +1 732 981 0060

» Contact & Support

About IEEE Xplore | Contact Us | Help | Terms of Use | Nondiscrimination Policy | Sitemap | Privacy & Opting Out of Cookies

A not-for-profit organization, IEEE is the world's largest professional association for the advancement of technology.
© Copyright 2015 IEEE - All rights reserved. Use of this web site signifies your agreement to the terms and conditions.

http://ieeexplore.ieee.org/xpl/articleDetails.jsp?arnumber=12603841/1