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โดย จีรวัตน์ พรหมพร

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- **CrossRef Search**
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**IEEE Xplore : เป็นเครื่องมือที่ใช้ในการสืบค้น  
สารนิเทศจากแหล่งข้อมูล The Institute of Electrical  
and Electronics Engineers (IEEE) และ The  
Institution of Electrical Engineers (IEE) ซึ่งใน  
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ประเภทของสิ่งพิมพ์ได้ดังนี้**



- **Journals, Transactions, และ Magazines ของ IEEE** ย้อนหลังถึงมกราคม 1988 และเนื้อหาบางฉบับย้อนหลังถึงปี 1952
- **Conference Proceedings ของ IEEE** ให้ข้อมูลย้อนหลังถึงมกราคม 1988 และเนื้อหาบางเรื่องย้อนหลังถึงปี 1953
- **IEEE Standards** ให้ข้อมูลย้อนหลังถึงมกราคม 1988 รวมถึงมาตรฐานเก่าที่ยกเลิกไปแล้ว
- **IEE Journals, Letters, Magazines และ Conference Proceedings** ให้ข้อมูลตั้งแต่ปี 1988



## เนื้อหาที่ครอบคลุม

- **Acoustics**
- **Biomedical Eng**
- **Computing**
- **Electrical Eng**
- **Industrial Eng**
- **Info Systems**
- **Nuclear Science**
- **Physics**
- **Remote Sensing**
- **Storage**
- **Web Applications**
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- **Biometrics**
- **Cybernetics**
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IEL

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A B C D E F G H I J K L M N O P Q R S T U V W X Y Z

Select the [+] symbol to view a publication's title history:

- Acoustics, Speech, and Signal Processing Newsletter, IEEE
- Advanced Packaging, IEEE Transactions on [see also Component Packaging and Manufacturing Technology, Part B: Advanced Packaging, IEEE Transactions on]
- Aerospace and Electronic Systems Magazine, IEEE
- Aerospace and Electronic Systems, IEEE Transactions on
- Annals of the History of Computing, IEEE
- Antennas and Propagation Magazine, IEEE
- Antennas and Propagation, IEEE Transactions on
- Antennas and Wireless Propagation Letters
- Applied Superconductivity, IEEE Transactions on
- Automatic Control, IEEE Transactions on
- Automation Science and Engineering, IEEE Transactions on [see also Robotics and Automation, IEEE Transactions on]

## Journals &amp; Magazines

1. พิมพ์คำเพียงบางส่วนจากชื่อวารสาร และคลิกปุ่ม Go
2. หรือไล่เรียงดูรายชื่อวารสารตามลำดับตัวอักษร
3. คลิกเลือกจากรายชื่อวารสาร



Publication Information

Editorial Board

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Content Announcements

## IEEE TRANSACTIONS ON ADVANCED PACKAGING

## Journals & Magazines

1

Year: 2005

Issue: Volume 28, Issue 1

Go To Issue

Search This Publication

2

All Fields

>>

3

Frequency: 4

ISSN: 1521-3323

Subject Category: Packaging

Published by: IEEE Components, Packaging, and Manufacturing Technology Society  
IEEE Lasers and ElectroOptics Society

Visit the Website: IEEE Transactions on Advanced Packaging

Title History

(1994 - 1998) Components, Packaging, and Manufacturing Technology, Part B: Advanced Packaging, IEEE Transactions on [see also Components, Hybrids, and Manufacturing Technology, IEEE Transactions on]  
(1978 - 1993) Components, Hybrids, and Manufacturing Technology, IEEE Transactions on [see also IEEE Trans. on Components, Packaging, and Manufacturing Technology, Part A, B, C]  
(1971 - 1977) Parts, Hybrids, and Packaging, IEEE Transactions on  
(1965 - 1971) Parts, Materials and Packaging, IEEE Transactions on

Aims and Scope

IEEE Transactions on Advanced Packaging was the number two most-cited journal in manufacturing engineering in 2003, according to the annual Journal Citation Report (2003 edition) published by the Institute for Scientific Information. This publication has its focus on the design, modeling, and application of interconnection systems and packaging: device packages, wafer-scale and multichip modules, TAB/BGA/SMT, electrical and thermal analysis, opto-electronic packaging, and package reliability.

Contacts

Editor-in-Chief  
Ganesh Subbarayan

1. เลือกปีที่ตีพิมพ์และฉบับที่ต้องการ

3. รายละเอียดข้อมูลวารสาร

2. สืบค้นเนื้อหาทั้งหมดจากวารสารชื่อที่เปิดอยู่

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BROWSE

SEARCH

## Journals & Magazines



### IEEE TRANSACTIONS ON ADVANCED PACKAGING

Volume: 28 Issue: 1 Date: Feb. 2005

printer friendly

Other Years:

Other Issues:

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#### Publication Information

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- Editorial Board

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- Additional Information
- Instructions

#### Society Information

#### Article Information

##### Foreword

Rahal-Arabi, T.

Page(s): 2-3

[Abstract](#) | [Full Text: PDF \(144 KB\)](#)

##### Extraction of $\epsilon_{\text{eff}}$ and $\tan \delta$ for printed circuit board insulators up to 30 GHz using the short-pulse propagation technique

Debnath, A.; Winkel, <sup>1</sup>; Kopcsay, G.V.; Surovic, C.W.; Rubin, B.J.; Katopis, G.A.; Chamberlin, B.J.; Krabbenhoft, R.S.  
Page(s): 4-12

[Abstract](#) | [Full Text: PDF \(1224 KB\)](#)

1. เรียกดูสาระสังเขป

2. เรียกดูบทความฉบับเต็มรูปแบบ PDF

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 **>>**

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**A B C D E F G H I J K L M N O P Q **2** R S T U V W X Y Z**

**Conference Proceedings**

Select the **[+]** symbol to view a publication's title history:

- 100 Years of Radio, 1995., International Conference on
- [+]** 3-D Digital Imaging and Modeling, International Conference on
- 3-D Imaging Techniques for Medicine, IEE Colloquium on
- [+]** 3D Data Processing Visualization and Transmission International Symposium on
- 3D Imaging and Analysis of Depth/Range Images, IEE Colloquium on
- 3G Mobile Communication Technologies, 2000. First International Conference on (IEE Conf. Publ. No. 471)
- 3G Mobile Communication Technologies, 2001. Second International Conference on (Conf. Publ. No. 477)
- 3G Mobile Communication Technologies, 2002. Third International Conference on (Conf. Publ. No. 489)
- 3G Mobile Communication Technologies, 2003. 3G 2003. 4th International Conference on (Conf. Publ. No. 494)
- 50kV Autotransformer Traction Supply Systems - the French Experience, IEE Colloquium on
- A Practical Approach to the Protection of Industrial Power Systems Networks up to 11kV (Ref. No. 1999/062), IEE Colloquium on
- A Systems Approach to Manufacturing (Digest No: 1996/171), IEE Colloquium on

**1. พิมพ์คำเพียงบางส่วนของการประชุม และคลิกปุ่ม Go**

**2. หรือไล่เรียงดูรายชื่อการประชุมตามลำดับตัวอักษร**

**3. คลิกเลือกตามชื่อการประชุม**

## Browse by keyword

Enter a standard number or one or more keywords in the order they appear in the standard title.

## Standards

## Standard Number

IEEE Std 1002-1987  
IEEE Std 1003.0-1995  
IEEE 1076-CONC-1990  
IEEE 1070-1995  
  
IEEE 730-1989  
IEEE C37.09g-1991 (Supplement to IEEE C37.09-1979)  
IEEE C62.31-1987  
IEEE C57.12.26-1992  
  
IEEE C37.09a-1991 (Supplement to IEEE C37.09-1979)  
IEEE C37.04h-1990 (Supplement to IEEE C37.04-1979)  
IEEE C37.04f-1990 (Supplement to IEEE C37.04-1979)  
IEEE C62.92.1-1987  
  
IEEE C62.92.2-1989  
  
IEEE Std 1-2000  
  
IEEE 802.5v-2001

## Standard Title

IEEE standard taxonomy for software engineering standards  
IEEE guide to the POSIX Open System Environment (OSE)  
The Sense of VASG  
IEEE Guide For The Design And Testing Of Transmission Modular Restoration Structure Components  
IEEE Standard for Software Quality Assurance Plans  
Supplement To IEEE Standard Test Procedure For AC High-voltage Circuit Breakers Rated On A Symmetrical Current Basis  
IEEE Standard Test Specifications For Gas-Tube Surge-protective Devices  
IEEE Standard for Pad-mounted, Compartmental-Type, Self-cooled, Three-phase Distribution Transformers for Use with Separable Insulated High-voltage Connectors (34 500 Grd Y/19 920 V and Below, 2500 Kva and Smaller)  
Supplement To IEEE Standard Test Procedure For Ac High-voltage Circuit Breakers Rated On A Symmetrical Current Basis  
Supplement To IEEE Standard Rating Structure For AC High-Voltage Circuit Breakers Rated On A Symmetrical Current Basis  
Supplement To IEEE Standard Rating Structure For AC High-Voltage Circuit Breakers Rated On A Symmetrical Current Basis  
An American National Standard IEEE Guide For The Application Of Neutral Grounding In Electrical Utility Systems  
IEEE Guide For The Application of Neutral Grounding In Electrical Utility Systems Part II- grounding Of Synchronous Generator Systems  
IEEE recommended practice - general principles for temperature limits in the rating of electrical equipment and for the evaluation of electrical insulation  
IEEE standard for information technology - telecommunications and information exchange between systems - Local and metropolitan area networks - Specific requirements. Part 5: token ring access method and physical layer specifications. Amendment 5: gigabit token ring operation

1. พิมพ์หมายเลขมาตรฐานหรือคำสำคัญในชื่อมาตรฐานแล้วคลิกปุ่ม Go
2. คลิกเลือกมาตรฐานที่ต้องการ

» Recently Published Books

Modern Antenna Design

by Milligan, T. A.

Hardcover, Edition: 2

Negative-Refractive Metamaterials

by Eleftheriades, G. V. Balmain, K.

Hardcover, Edition: 1

Fourier Analysis on Finite Groups  
with Applications in Signal

Processing and System Design  
by Stankovic, R. S. Moraga, C.  
Astola, J.

Hardcover, Edition: 1

Practical Design of Power Supplies

by Lenk, R.

Hardcover, Edition: 1

Digital Transmission Engineering

by Anderson, J. B.

Hardcover, Edition: 2

Books



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A B C D E F G H I J K L M N O P Q R S T U V W X Y Z

**A Field Guide to Dynamical Recurrent Networks**

by Kolen, J. F. Kremer, S. C.

Hardcover, Edition: 1, ISBN: 0780353692

**A History of Computing Technology**

by Williams, M. R.

Paperback, Edition: 2, ISBN: 0818677392

**Accelerated Stress Testing Handbook**

by Chan, H. A.

Hardcover, Edition: 1, ISBN: 0780360257

คลิกเลือกรายชื่อหนังสือที่สนใจ

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K.  
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Fourier Analysis on Finite Groups  
with Applications in Signal  
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by Stankovic, R. S. Moraga, C.  
Astola, J.  
Hardcover, Edition: 1

Practical Design of Power Supplies  
by Lenk, R.  
Hardcover, Edition: 1

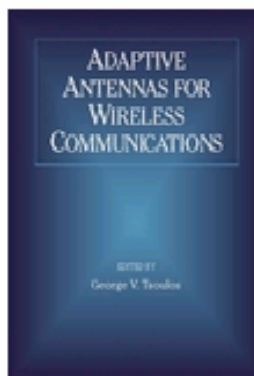
Digital Transmission Engineering  
by Anderson, J. B.  
Hardcover, Edition: 2

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Citation ▼

EndNote, ProCite, RefMan ▼ >>

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Adaptive Antennas for Wireless Communications

Tsoulos, G. V.

Sponsored by the IEEE Antennas and Propagation Society  
Publication Date: January 2001  
Wiley-IEEE Press  
Paperback  
Number of Pages: 776  
Edition: 1  
ISBN: 0780360168

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IEEE ANTENNAS &  
PROPAGATION SOCIETY

Abstract

Electrical Engineering Adaptive Antennas for Wireless Communications In the past decade, the wireless communications community recognized adaptive antennas as a core technology that would help existing systems overcome problems related to spectrum efficiency and provide a vehicle to achieve the ambitious requirements of next-generation networks. The communications industry has already begun to develop adaptive antenna systems for commercial use and at the same time is working with standardization institutes around the world to produce adaptive antenna-friendly standards. Adaptive Antennas for Wireless Communications is a concise, detailed resource of information for all critical issues related to this technology and is compiled from the original published work of experts in the field. The extensive literature covers:

Books


หน้าแสดงรายการบรรณานุกรมพร้อมสาระสังเขปของหนังสือ



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**1** fiber optics **2**

(All Fields)

- » Advanced Search
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1. พิมพ์คำค้น

2. คลิกปุ่ม GO เพื่อทำการสืบค้น

# Basic Search

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Search Results BROWSE SEARCH IEEE XPLORE GUIDE SUPPORT

Results for "**((fiber optic)<in>metadata)**"  
Your search matched **6220** of **1142142** documents.  
A maximum of **100** results are displayed, **25** to a page, sorted by **Relevance** in **Descending** order.

» View Session History  
» New Search

» Key

- IEEE JNL IEEE Journal or Magazine
- IEE JNL IEE Journal or Magazine
- IEEE CNF IEEE Conference Proceeding
- IEE CNF IEE Conference Proceeding
- IEEE STD IEEE Standard

**Modify Search**

>>

Check to search only within this results set

**Display Format:**  Citation  Citation & Abstract

Select Article Information View: 1-25 | 26-50 | 51-75 | 76-100

- 1. Optical pressure measurement: using fiber optic transducers in hypersonic flight vehicles**  
Land, H.B., III; Eddins, C.L.;  
Implementation & Measurement Magazine, IEEE  
Volume 7, Issue 3, Sept. 2004 Page(s): 38 - 45  
AbstractPlus | References | Full Text: PDF(3528 KB) IEEE JNL
- 2. Fiber optic "air-blown" solutions**  
Gorrell, P.;  
WESCON/96  
22-24 Oct. 1996 Page(s):189 - 193  
AbstractPlus | Full Text: PDF(376 KB) IEEE CNF

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2. เรียกดูรายการที่ใช้อ้างอิง

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**OPTION 1**

**Quick Find an Author:**

Enter a name to locate articles written by that author.

1

Example: Enter Lockett S to obtain a list of authors with the last name Lockett and the first initial S.



**OPTION 2**

**Browse alphabetically**

Select a letter from the list.

2

A B C D E F G H I J K L M N O P Q R S T U V W X Y  
Z

Select a name to view articles written by that author

A Min Tjoa	A Tavora A. S.	A'Hearn K.
A'Ortendahl D.	A'ain A. K. B.	A-Buraiky S.
A-Chang Hsu	A-Cheng Wu	A-Firna T.
A-Khatib M. M.	A-Ning Du	A-Ping Zhang
A-Rahim A. A.	A-Rum Jun	A-Shamsi S.
A-Xin Nie	A. C. Tsoi	A. Fung
A. H. You	A. L. Y. Low	A. LaRiviere H. J.
A. T. S. Wee	A. Twumasi Y.	Aa Johannessen E.
Aa'lam N.	Aaberg I. A.	Aabo T.
Aabo Y.	Aaby A. A.	Aaccardo A.
Aach T.	Aad I.	Aadahl P.
Aadland O.	Aadrul Islam A. K. M.	Aadsen D.
Aadsen D. R.	Aaen I.	Aaen P. H.
Aagaah M. R.	Aagaard E.	Aagaard J.
Aagaard M.	Aagaard M. D.	Aagard E. G. R.
Aagard R.	Aage C.	Aagedal H.
Aagedal J. O.	Aagesen F. A.	

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Next 50

1. พิมพ์ชื่อสกุลผู้แต่ง แล้วคลิก Go

2. ไล่เรียงดูรายชื่อผู้แต่งตามลำดับตัวอักษร

3. คลิกเลือกชื่อผู้แต่งที่ต้องการ

# Advanced Search

## OPTION 1

Enter keywords or phrases, select fields, and select operators

1 "fiber optics" in 2 All Fields

3 AND communication in All Fields

AND

OR

NOT

Full Text & All Fields

Document Title

Author

Publication Title

Abstract

Index Terms

Affiliation

Run Search Reset

» Note: If you use all three search boxes, the take precedence over the entry in the third box

## OPTION 2

Enter keywords, phrases, or a Boolean expression

7 (Internet <and> network)<in> ti

8 Run Search Reset

» Note: You may use the search operators <and> or <or> without the start and end brackets <>.

» Learn more about Field Codes, Search Examples, and Search Operators

## Publications

- 4
- Select publications
  - IEEE Periodicals
  - IEE Periodicals
  - IEEE Conference Proceedings
  - IEE Conference Proceedings
  - IEEE Standards

## Other Resources (Available for Purchase)

- IEEE Books

## Select date range

- 5
- Search latest content update (19 Dec 2005)
  - From year All to Present

## Display Format

- 6
- Citation
  - Citation & Abstract

## Organize results

- Maximum 100
- Display 25 results per page
- Sort by Relevance
- In Descending order

1. พิมพ์คำค้น
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3. ใช้คำเชื่อมหากมีคำค้นมากกว่า 1 ช่อง
4. กำหนดประเภทสิ่งพิมพ์
5. กำหนดช่วงระยะเวลา
6. เลือกรูปแบบการแสดงผล
7. หรือใส่ชุดคำสั่ง
8. คลิก Run Search



## ▶ Operators

### Logical Operators

<and>, <or>, <not>

### Proximity Operators

<in>, <paragraph>, <sentence>, <phrase>, <near>

## ▶ Wildcards and truncations

? = แทนที่ตัวอักษรหนึ่งตัวอักษร เช่น

wom?n = women หรือ woman

\* = ละตัวอักษรตั้งแต่ศูนย์ตัวอักษรขึ้นไป เช่น

child! = child, children, childish

Search Results

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IEEE XPLORE GUIDE

SUPPORT

Results for "( 'fiber optics'<in>metadata ) <and> ( communication<in>metadata )"

Your search matched 263 of 1142142 documents.

A maximum of 100 results are displayed, 25 to a page, sorted by Relevance in Descending order.

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» View Session History

» New Search

» Key

**IEEE JNL** IEEE Journal or Magazine

**IEE JNL** IEE Journal or Magazine

**IEEE CNF** IEEE Conference Proceeding

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# Personal **communications** access networks multiplexed optical links

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## Abstract

One of the major challenges for future personal **communication** systems (PCS) and personal **communication** networks (PCN) is the capacity needed to meet the growing demand. In this paper, **fiber optics** and wavelength division multiplexing (WDM) technology is proposed, and shown to be a cost-effective solution to this problem. In particular, it is shown that the mature **fiber-optics** and WDM technology could be used in conjunction with subcarrier multiplexing in microcells in order to transmit messages from subscribers to central base station (uplink) and in the opposite direction too. The access backbone network architecture of such a PCN is also investigated and key problems associated with it are highlighted

## Index Terms

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#### Controlled Indexing

optical fibre subscriber loops personal **communication** networks subcarrier multiplexing wavelength division multiplexing

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WDM access backbone network architecture central base station **fiber optics** mature **fiber-optics** microcells personal **communication** networks personal **communication** systems personal **communications** access networks subcarrier multiplexed optical links subcarrier multiplexing subscribers transmit messages uplink wavelength division multiplexing

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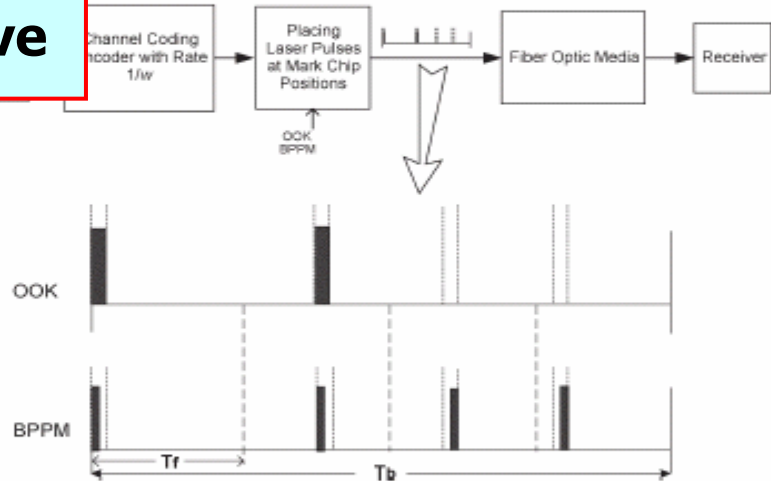
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OOK

BPPM

$T_r$   $T_b$

Fig. 1. Block diagram of the internally coded FTH FO-CDMA system. In this figure, the arrangements of the optical pulses for coded symbols {1,1,0,0} at an internally coded FTH FO-CDMA system are also shown for OOK and BPPM schemes.

system. By using the FTH technique in conjunction with internal coding, the number of users drastically increases, thereby enhancing the bandwidth efficiency of an optical CDMA system with respect to that of a WDM system.

**B. Internally Channel-Coded FTH FO-CDMA System**

In an internal channel-coding scheme, the input data are channel coded with an easily implementable code with a rate

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