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Edited by P.M. Anderson, Power Math Associates, B.L. Agrawal, Arizona Public Service Company, and J.E. Van Ness, Northwestern University. 1989. 288 pages. ISBN—0-87942-258-0 Sponsored by the IEEE Power Engineering Society.

This book, the first of its kind, provides the engineer with essential technical information on subsynchronous resonance (SSR), and aids in the computation of eigenvalues for the study of SSR in an interconnected power system. This book will be of primary use to engineers working in the field of electric power systems as well as applied mathematicians interested in applications of eigen analysis of physical systems.

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Edited by Birendra Prasada, Bell-Northern Research, and Arun N. Netravali, AT&T Bell Laboratories. 1989. 552 pages. ISBN—0-87942-250-5. A Book of Selected Reprints sponsored by the IEEE Communications Society.

Communications of pictorial information has been increasing over the last several decades, and many systems are now available for a variety of applications. This volume brings together discussion of the technology, as well as specific applications, and experiences of the users. Those involved in image coding, television, image and video services will find this book to be a much needed collection for their library Even the generalist interested in visual communications and research workers entering the field can quickly come to an understanding of the subject.

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Radar Cross Sections of Complex Objects

Edited by W. Ross Stone, Stoneware Ltd. 1990. 544 pages approx. ISBN—0-87942-254-8 Sponsored by the IEEE Antennas and Propagation Society

The various papers in this volume demonstrate that the radar cross section of objects is an active field of research, and that the usage of the term "radar cross section" and the degree to which it can characterize a target has changed radically in the past few years and still continues to change today. The radar cross section is usually only a starting point for engineering radar systems, and for engineering systems which are potential radar targets. A complete understanding of the scattering of rather general electromagnetic fields by an object is generally needed. This requirement and the complexities involved with it are addressed in this book.

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Edited by Roberto Sorrentino, Tor Vergata University of Rome, Italy. 1989. 496 pages. ISBN—0-87942-249-1. A Book of Selected Reprints sponsored by the IEEE Microwave Theory and Techniques Society.

Recent advances in microwave technology, such as monolithic circuits and the use of millimeter waves, require highly sophisticated numerical techniques, which have thus become an indispensable tool for the modern microwave engineer Many different methods have been developed since the advent of computers, each having its own advantages and disadvantages as well as ranges of applicability. This book introduces the reader to ten representative numerical techniques, ranging from finite differences to spectral domain methods.

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