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A BIBLIOGRAPHY OF THE NBS ELECTROMAGNETIC FIELDS DIVISION PUBLICATIONS

Reference

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National Bureau of Standards
U.S. Department of Commerce
Boulder, Colorado 80303

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National Bureau of Standards
Boulder, Colorado 80303

February 1986

(Supersedes NBSIR 80-1635, NBSIR 82-1673, and NBSIR 85-3022)



U.S. DEPARTMENT OF COMMERCE, Malcolm Baldrige, Secretary

NATIONAL BUREAU OF STANDARDS, Ernest Ambler, Director

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A BIBLIOGRAPHY OF THE NBS ELECTROMAGNETIC FIELDS DIVISION PUBLICATIONS

Edited by
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This bibliography lists the publications of the personnel of the National Bureau of Standards Electromagnetic Fields Division in the period from January 1970 through September 1985 with selected earlier publications from the Division's predecessor organizations.

Key words: antennas; electromagnetic interference; electromagnetic metrology; microwaves; noise; non-ionizing radiation; radiation hazards; waveform metrology.

Introduction

This bibliography supersedes NBSIR 80-1635 which listed the publications of the Electromagnetic Fields Division from January 1970 through December 1979, NBSIR 82-1673 which listed publications from January 1980 through December 1981, and NBSIR 85-3022 which listed publications from January 1982 through December 1983. This publication updates the bibliography through September 1985.

The Electromagnetic Fields Division was formed during the reorganization of NBS in April 1978. The Division develops measurement methods and standards and provides metrological support for: antenna systems, noise measurement equipment, electromagnetic interference, electromagnetic environmental characterization equipment especially for fields near sources or a near-field-like condition, electromagnetic emission and immunity (or susceptibility) testing equipment, and waveform metrology. In April 1985, microwave and millimeter wave metrology was added to the Division. The editors have attempted to include all work published by the staff members of the Division in the period from January 1970 through September 1985. Relevant work performed by authors prior to joining this Division or work by authors who have left this Division has been included because of its special significance. A miscellaneous category includes general publications. A few references are listed in more than one category where appropriate.

There are several other information sources that may be useful to the reader who is interested in activities at NBS connected with electromagnetic metrology. A companion bibliography, NBSIR 85-3029, lists publications of the Electromagnetic Technology Division in the period from January 1970 through December 1984. Topics include metrology for: laser systems, optical communication equipment, cryoelectronics, superconductors and other unusual electrical engineering materials. Three additional bibliographies list publications of the former Electromagnetics Division: NBSIR 73-320 (July 1972-June 1973); NBSIR 74-395 (July 1973-June 1974); NBSIR 75-818 (July 1974-June 1975). These were preceded by a series of unpublished reports (edited by H. M. Altschuler) that cover the period back to 1956. An excellent summary of the whole field of electromagnetic metrology as it stood in 1967 was published as a special issue of the IEEE Proceedings (volume 55, June 1967). Advances

in the following decade were described in another special issue of the same journal (volume 66, April 1978).

Abbreviations

Most readers will be familiar with the commonly used abbreviations for the names of the various professional journals that appear in this bibliography. There are also several publication series that are peculiar to NBS and call for explanation. They are:

NBSIR	NBS Interagency/Internal Report
NBS Tech. Note	NBS Technical Note
NBS SP	NBS Special Publication
NBS MN	NBS Monograph

Purchase Procedures and Document Availability

NBS Technical Notes, Special Publications, and Monographs may be purchased from the Superintendent of Documents, U.S. Government Printing Office, Washington, DC 20402. Orders must be accompanied by postal money order, express money order, or check made out to the Superintendent of Documents. Also, these documents may be available from libraries designated as depositories for Government publications.

NBS Interagency/Internal Reports (NBSIRs) may be purchased from the National Technical Information Service, Springfield, VA 22161. Order must be accompanied by postal money order, express money order, or check made out to the NTIS.

Reprints of papers published in non-NBS media may be available in limited quantities from the authors.

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