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EILEEN A. PICKENPAUGH ALICE B. COX RICHARD W. PEACOCK KENNETH L. THOENES

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#### INTRODUCTION

This report lists Naval Research Laboratory papers published in periodicals, books, and proceedings and Naval Research Laboratory in-house publications including formal and memorandum reports, which became available in 1989. Patents received by Naval Research Laboratory personnel in the years of 1988 and 1989 are also listed as they appeared in *Patent Issue Report* published by the Naval Research Laboratory Patent Office.

The papers are listed in the following broad subject categories: acoustics; artificial intelligence; atmospheric sciences; biosciences; ceramics, glasses, and plastics; chemistry; communications; computer sciences; cosmic rays; electronics and electricity; fluid mechanics; geosciences; information; instrumentation; laser science; magnetism; mathematics; mechanics; metallurgy; nuclear science; ocean science and technology; optical sciences; physics; plasma physics; radar; radiation technology; solid state; space science and technology; structure research; and warfare. Within each subject category, papers are listed alphabetically by title as are the in-house publications and patents appearing after the listing of papers. An \* following an author's name indicates that author was not credited as being a member of the Naval Research Laboratory's staff. An author index is included.

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