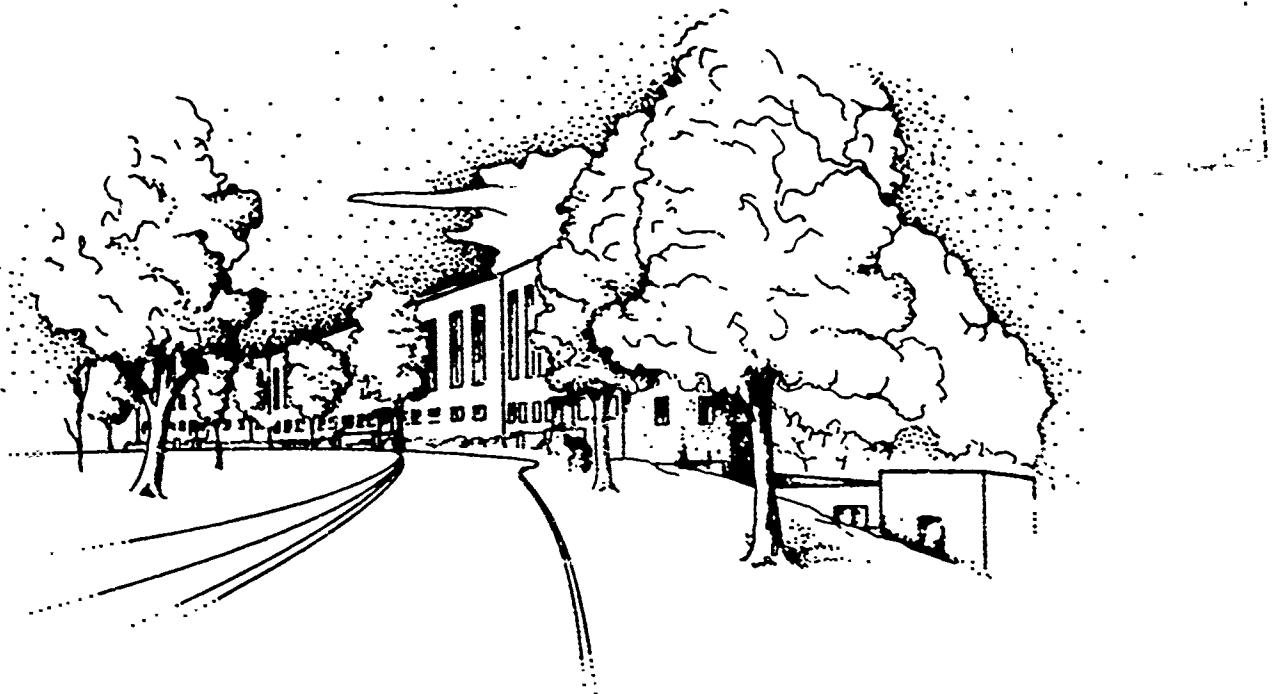


AD750271

NMRI

NAVAL MEDICAL RESEARCH INSTITUTE



BIBLIOGRAPHY OF REPORTED BIOLOGICAL PHENOMENA ('EFFECTS') AND CLINICAL
MANIFESTATIONS ATTRIBUTED TO MICROWAVE AND RADIO-FREQUENCY RADIATION

RESEARCH REPORT

MF12.524.015-0004B

REPORT NO. 2
REVISED

Prepared by
**NATIONAL TECHNICAL
INFORMATION SERVICE**
U.S. Department of Commerce
Springfield VA 22151

BIBLIOGRAPHY OF REPORTED BIOLOGICAL PHENOMENA ('EFFECTS') AND CLINICAL
MANIFESTATIONS ATTRIBUTED TO MICROWAVE AND RADIO-FREQUENCY RADIATION

Zorach R. Glaser, Ph.D.
LT, MSC, USNR

Research Report

Project MF12.524.015-0004B, Report No. 2

Naval Medical Research Institute
National Naval Medical Center
Bethesda, Maryland 20014, U.S.A.

4 October 1971

Second Printing, with Revisions,
Corrections, and Additions: 20 April 1972
(Supersedes AD No. 734391)

ABSTRACT

More than 2000 references on the biological responses to radio frequency and microwave radiation, published up to June 1971, are included in the bibliography.* Particular attention has been paid to the effects on man of non-ionizing radiation at these frequencies. The citations are arranged alphabetically by author, and contain as much information as possible so as to assure effective retrieval of the original documents. An outline of the effects which have been attributed to radio frequency and microwave radiation is also part of the report.

*Three supplementary listings bring the number of citations to more than 2300.

Key Words

Biological Effects
Non-Ionizing Radiation
Radar Hazards
Radio Frequency Radiation
Microwave Radiation
Health Hazards
Bibliography
Electromagnetic Radiation Injury

The comments upon and criticisms of the literature made in this report, and the recommendations and inferences suggested, are those of the author, and do not necessarily reflect the views of the Navy Department or of the Naval Service.

Security Classification		
DOCUMENT CONTROL DATA - R & D		
(Security classification of title, body or abstract and indexing annotation must be entered when the overall report is classified)		
<p>ORIGINATING ACTIVITY (Corporate author) NAVAL MEDICAL RESEARCH INSTITUTE NATIONAL NAVAL MEDICAL CENTER BETHESDA, MARYLAND 20014</p> <p>REPORT TITLE</p> <p>BIBLIOGRAPHY OF REPORTED BIOLOGICAL PHENOMENA ('EFFECTS') AND CLINICAL MANIFESTATIONS ATTRIBUTED TO MICROWAVE AND RADIO-FREQUENCY RADIATION</p>		<p>2a. REPORT SECURITY CLASSIFICATION UNCLASSIFIED</p> <p>2b. GROUP</p>
<p>4. DESCRIPTIVE NOTES (Type of report and inclusive dates) Medical research interim report, bibliographic (Current to April 1972)</p> <p>5. AUTHOR(S) (First name, middle initial, last name) Zorach R. GLASER, Ph.D. LT, MSC, USN</p>		
<p>6. REPORT DATE Revised 20 April 1972 (4 October 1971, Original)</p> <p>5a. CONTRACT OR GRANT NO.</p>		<p>7a. TOTAL NO. OF PAGES 163 10 4</p> <p>7b. NO. OF REFS 2,311</p> <p>8a. ORIGINATOR'S REPORT NUMBER(S) MF12.524.015-0004B, Report No. 2, Revised</p>
<p>8. PROJECT NO</p> <p>c.</p> <p>d.</p>		<p>9b. OTHER REPORT NO(S) (Any other numbers that may be assigned this report)</p>
<p>10. DISTRIBUTION STATEMENT THIS DOCUMENT HAS BEEN APPROVED FOR PUBLIC RELEASE AND SALE; ITS DISTRIBUTION IS UNLIMITED.</p>		
<p>11. SUPPLEMENTARY NOTES</p>		<p>12. SPONSORING MILITARY ACTIVITY BUREAU OF MEDICINE AND SURGERY (NAVY) WASHINGTON, D.C. 20390</p>
<p>13. ABSTRACT</p> <p>More than 2300 references on the biological responses to radio frequency and microwave radiation, published up to April 1972, are included in this bibliography of the world literature. Particular attention has been paid to the effects on man of non-ionizing radiation at these frequencies. The citations are arranged alphabetically by author, and contain as much information as possible so as to assure effective retrieval of the original documents. Soviet and East European literature is included in detail. An outline of the effects which have been attributed to radio frequency and microwave radiation is included as Chapter 1. The revised report (which supersedes DDC report AD#734391) is updated with the inclusion of three supplementary listings, and has incorporated many corrections and additions to the original 2100 citations.</p>		

DD FORM 1 NOV 65 1473

UNCLASSIFIED

Security Classification

UNCLASSIFIED

Security Classification

14	KEY WORDS	LINK A		LINK B		LINK C	
		ROLE	WT	ROLE	WT	ROLE	WT
	Biological effects Non-ionizing radiation Kadar hazards Radio frequency radiation Microwave radiation Health hazards Bibliography Electromagnetic radiation injury Radiation adverse effects						

TABLE OF CONTENTS

	<u>PAGE</u>
Abstract	2
Table of Contents	3
Foreword	4
Acknowledgments	5
Chapter 1, Outline of Reported Biological Phenomena ('Effects') and Some Clinical Manifestations Attributed to Microwave and Radio-Frequency Radiation	7
Chapter 2, Bibliography, Alphabetical Listing	12
Unsigned Reports and Articles	83
Addenda, Alphabetical by Author	87
Addenda, Unsigned Reports and Articles	89
First Supplementary Listing (5 October 1971)	91
Appendix A, Accession Numbers and Sources	92
Second Supplementary Listing (21 November 1971)	93
Third Supplementary Listing (17 April 1972)	95

Foreword

It is the hope of the author that this bibliography will provide guidance to the diffuse and conflicting literature on the biological responses to electromagnetic radiation at radio- and microwave-frequencies, with particular reference to the effects of concern to man. Such guidance is needed in the formulation and appraisal of criteria and limits of human exposure to "non-ionizing" radiation, and in the planning and conduct of future research.

The original plans were to categorize and key the literature citations to the "outline of biological and clinical effects" (Chapter 1). This proved to be a much more difficult and time-consuming task than anticipated, and was actually completed only for about 400 papers. Thus, the letter-number combinations given in square brackets for some of the "A" through "C" citations refer to the outline. [NV] indicates the citation was "not verified".

The standard format used throughout the bibliography is: author, (date), journal, volume, (issue): page, "title". The authors are alphabetized, and in chronological order. Multiple authors are also alphabetically ordered according to the second, third, etc., author. Inclusive pagination is given where possible, as is the original language of the citation. Report accession and translation numbers (some of which are cited in Appendix A), and alternate sources are listed when known. The title of books is underlined. When the title of the report was not available (or not given), a short (one line) description of the paper is listed whenever possible. Reports in which the name of the author was not given are listed chronologically using the format, "title", reference, source, (date). In many cases the citation was obtained from secondary (and tertiary) sources. For this reason it was impossible to put every citation into a consistent format.

In a few cases, papers have been cited which were presented at symposia or meetings devoted to the present topic, even when the report title suggests that it does not pertain directly to the topic. This has been done to show the wide range of items considered relevant (at least at the time of the meeting, and by the organizing chairman) in past years. An example is "electroanesthesia".

A few citations of marginal and/or peripheral relationship have also been included so that the reader may judge the applicability to his individual research needs. Examples are reports dealing with the biological effects of static and alternating magnetic fields, experimental techniques using radio frequency and microwave radiation (e.g., electron spin resonance, and nuclear magnetic resonance spectroscopy), and microwave exposure limits, regulations, and standards.

References for a few limited-distribution government reports are available upon request.

The author welcomes information which will correct errors and omissions (both of which no doubt exist). Copies of new papers would be greatly appreciated, and would encourage updating and revising the bibliography periodically.

ACKNOWLEDGMENTS

The assistance and support received during the preparation of this bibliography have been considerable, and I am happy to acknowledge my indebtedness and gratitude. Drs. John Keesey and Dennis Heffner, former and present Heads of the Biophysics Division, and Dr. Seymour Friess, Director of the Environmental Biosciences Department of the Naval Medical Research Institute, permitted me the opportunity to work on the bibliography, and offered frequent encouragement.

Acknowledgment is also due to many friends and associates for their helpful suggestions, comments, and loans and/or gifts of reports or other material, which have been invaluable in the course of the work. Mr. Glenn Heimer of the Naval Ship Engineering Center contributed an extensive collection of government reports and documents, many of which had not previously been cited in the open literature.

Special help in tracing and in the acquisition of relevant papers has been received from the librarians and staff members of the NMRI library: Mrs. Thelma Robinson, Mrs. Ernestine Gendlemen, Mrs. Eleanor Capps, and Miss Deborah Grove. Their diligence and resourcefulness in tracing and obtaining copies of a large number of papers and reports, often in spite of incomplete and/or inaccurate citations given in other sources, enabled me to include many relevant items in the bibliography.

Mr. Christopher Dodge of the Scientific and Technical Center, Department of the Navy, provided much of the Soviet Bloc literature, linguistic and other technical assistance, and in addition offered valuable comments and encouragement throughout the preparation of this report. Especially noteworthy were the corrections and improvements suggested by Chris following his reading of the entire manuscript.

Helpful also in locating some of the Soviet literature was Mr. E. S. Serebrennikov, of the Science and Technology Division, The Library of Congress.

Credit is due Mrs. Anna Woke (of this Institute) for translating many of the German papers; to Dr. Emilio Weiss, who translated from the Italian, and to Mrs. Edith Pugh who typed many "first drafts"; also to Mrs. Rhoda Glaser for her help in many aspects of the work.

Mrs. Fannie Epstein deserves special mention for her outstanding editorial assistance, and especially for the heroic typing, organization, and checking of the entire report.

The Outline of Reported Biological Phenomena ('Effects') and Clinical Manifestations Attributed to Microwave and Radio-Frequency Radiation, is patterned after that given by R. Murray, et al., in an article entitled, "How safe are microwaves", which appeared in Non-Ionizing Radiation 1(1):7-8 (1969). Some of the "effects" were listed in the report by S. F. Cleary and W. T. Ham, Jr., entitled, "Considerations in the evaluation of the biological effects on exposure to microwave radiation", (Background document, Part I, 1969, for the Task Force on Research Planning in Environmental Health, Subtask Force on Physical Factors in the Environment). The discussion and suggestions offered by Byron McLees, Edward Finch, Lewis Gershman, and Christopher Dodge relating to the Outline are also gratefully acknowledged.

Preparation of the bibliography was supported by the Bureau of Medicine and Surgery, Department of the Navy, under work unit MF12.524. 015-0074B.

CHAPTER 1

Reported Biological Phenomena ("Effects") and Some Clinical Manifestations Attributed to Microwave and Radio-Frequency Radiation (See Note)

A. Heating of Organs* (Applications: Diathermy, Electrosurgery, Electro-coagulation, Electrodesiccation, Electrotomy)

1. Whole Body (temperature regulation defects), Hyperpyrexia
2. Skin
3. Bone and Bone Marrow
4. (a) Lens of Eye (cataractous lesions - due to the avascular nature of the lens which prevents adequate heat dissipation.)
(b) Corneal damage also possible at extremely high frequencies.
5. Genitalia (tubular degeneration of testicles)
6. Brain
7. Sinuses
8. Metal Implants (burns near hip pins, etc.)

The effects are generally reversible except for 4a.

B. Changes in Physiologic Function

1. Striated Muscle Contraction
2. Alteration of Diameter of Blood Vessels (increased vascular elasticity), Dilation
3. Changes in the Oxidative Processes in Tissues and Organs
4. Liver Enlargement
5. Altered Sensitivity to Drug Stimuli
6. Decreased Spermatogenesis (decreased fertility, to sterility)
7. Altered Sex Ratio of Births (more girls!)
8. Altered Menstrual Activity
9. Altered Fetal Development
10. Decreased Lactation in Nursing Mothers
11. Reduction in Diuresis (Na^+ excretion, via urine output)
12. Altered Renal Function (decreased filtration in tubules.)
13. Changes in Conditioned Reflexes
14. Decreased Electrical Resistance of Skin
15. Changes in the Structure of Skin Receptors of the (a) Cutaneous, and (b) Blood-Carrying Systems
16. Altered Blood Flow Rate

* It is also reported that low levels of irradiation produce a cooling effect - "hypercompensation".

Note: These effects are listed without comment or endorsement since the literature abounds with conflicting reports. In some cases the basis for reporting an "effect" was a single or a non-statistical observation which may have been drawn from a poorly conceived (and poorly executed) experiment.

17. Alterations in the Biocurrents (EEG?) of the Cerebral Cortex (in animals)
18. Changes in the Rate of Clearance of Tagged Ions from Tissue
19. Reversible Structural Changes in the Cerebral Cortex and the Diencephalon
20. Electrocardiographic (EKG) Changes
21. Alterations in Sensitivity to Light, Sound, and Olfactory Stimuli
22. Functional (a) and Pathological (b) Changes in the Eyes:
(a) decrease in size of blind spot, altered color recognition, changes in intraocular pressure, lacrimation, trembling of eyelids; (b) lens opacity and coagulation, altered tissue respiration, and altered reduction-oxidation processes
23. Myocardial Necrosis
24. Hemorrhage in Lungs, Liver, Gut, and Brain } At Fatal Levels
25. Generalized Degeneration of all Body Tissue } of Radiation
26. Loss of Anatomical Parts
27. Death
28. Dehydration
29. Altered Rate of Calcification of Certain Tissue

C. Central Nervous System Effects

1. Headaches
2. Insomnia
3. Restlessness (Awake and During Sleep)
4. Electroencephalographic (EEG) Changes
5. Cranial Nerve Disorders
6. Pyramidal Tract Lesions
7. Conditioned Reflex Disorders
8. Vagomimetic Action of the Heart; Sympaticomimetic Action
9. Seizures, Convulsions

D. Autonomic Nervous System Effects

1. Neuro-vegetative Disorders (e.g., alteration of heart rhythm)
2. Fatigue
3. Structural Alterations in the Synapses of the Vagus Nerve
4. Stimulation of Parasympathetic Nervous System (Bradycardia), and Inhibition of the Sympathetic Nervous System

E. Peripheral Nervous System Effects

Effects on Locomotor Nerves

F. Psychological Disorders ("Human Behavioral Studies") - the so-called "Psychophysiologic (and Psychosomatic) Responses"

1. Neurasthenia - (general "bad" feeling)
2. Depression
3. Impotence
4. Anxiety
5. Lack of Concentration
6. Hypochondria
7. Dizziness
8. Hallucinations
9. Sleepiness
10. Insomnia
11. Increased Irritability
12. Decreased Appetite
13. Loss of Memory
14. Scalp Sensations
15. Increased Fatigability
16. Chest Pain
17. Tremor of the Hands

G. Behavioral Changes (Animal Studies)

Reflexive, Operant, Avoidance, and Discrimination Behaviors

ii. Blood Disorders

(V = in vivo)
(v = in vitro)

Changes in:

1. Blood and Bone Marrow
2. Phagocytic (polymorphs) and Bactericidal Functions of Blood (V, v)
3. Hemolysis Rate (increase), (a shortened lifespan of cell)
4. Sedimentation Rate (increase), (due to changes in serum not in levels or amount of fibrinogen (?))
5. Number of Erythrocytes (decrease), also number of lymphocytes
6. Blood Glucose Concentration (increase)
7. Blood Histamine Content
8. Cholesterol and Lipids
9. Gamma (also α and β) Globulin, and Total Protein Concentration
10. Number of Eosinophils
11. Albumin/Globulin Ratio (decrease)
12. Hemopoiesis (rate of formation of blood corpuscles)

13. Leukopenia (increase in number of white cells), and Leukocytosis
14. Reticulocytosis

I. Vascular Disorders

1. Thrombosis
2. Hypertension

J. Enzyme and Other Biochemical Changes

Changes in activity of:

1. Cholinesterase (V,v)
2. Phosphatase (v)
3. Transaminase (v)
4. Amylase (v)
5. Carboxydismutase
6. Protein Denaturation
7. Toxin, Fungus, and Virus Inactivation (at high radiation dose levels), Bacteriostatic Effect
8. Tissue Cultures Killed
9. Alteration in Rate of Cell Division
10. Increased Concentration of RNA in Lymphocytes, and Decreased Concentration in Brain, Liver, and Spleen
11. Changes in Pyruvic Acid, Lactic Acid, and Creatinine Excretions
12. Change in Concentration of Glycogen in Liver (Hyperglycemia)
13. Alteration in Concentration of 17-Ketosteroids in Urine

K. Metabolic Disorders

1. Glycosuria (sugar in urine; related with blood sugar?)
2. Increase in Urinary Phenol (derivatives? DOPA?)
3. Alteration of Rate of Metabolic Enzymatic Processes
4. Altered Carbohydrate Metabolism

L. Gastro-Intestinal Disorders

1. Anorexia (loss of appetite)
2. Epigastric Pain
3. Constipation
4. Altered Secretion of Stomach "Digestive Juices"

M. Endocrine Gland Changes

1. Altered Pituitary Function
2. Hyperthyroidism
3. Thyroid Enlargement
4. Increased Uptake of Radioactive Iodine by Thyroid Gland
5. Altered Adrenal Cortex Activity
6. Decreased Corticosteroids in Blood
7. Decreased Glucocorticoidal Activity
8. Hypogonadism (usually decreased testosterone production)

N. Histological Changes

1. Changes in Tubular Epithelium of Testicles
2. Gross Changes

O. Genetic and Chromosomal Changes

1. Chromosome Aberrations (e.g., linear shortening, pseudochiasm, diploid structures, amitotic division, bridging, "sticky" chromosomes, irregularities in chromosomal envelope)
 2. Mutations
 3. Mongolism
 4. Somatic Alterations (changes in cell not involving nucleus or chromosomes, cellular transformation)
 5. Neoplastic Diseases (e.g., tumors)
- P. Pearl Chain Effect (Intracellular orientation of subcellular particles, and orientation of cellular and other (non-biologic) particles)

Also, orientation of animals, birds, and fish in electromagnetic fields

Q. Miscellaneous Effects

1. Sparking between dental fillings
2. Peculiar metallic taste in mouth
3. Changes in Optical Activity of Colloidal Solutions
4. Treatment for Syphilis, Poliomyelitis, Skin Diseases
5. Loss of Hair
6. Brittleness of Hair
7. Sensations of Buzzing Vibrations, Pulsations, and Tickling About the Head and Ears
8. Copious Perspiration, Salivation, and Protrusion of Tongue
9. Changes in the Operation of Implanted Cardiac Pacemakers
10. Changes in Circadian Rhythms

CHAPTER 2

BIBLIOGRAPHY OF REPORTED BIOLOGICAL PHENOMENA ('EFFECTS') AND CLINICAL MANIFESTATIONS ATTRIBUTED TO MICROWAVE AND RADIO-FREQUENCY RADIATION

1. AARONSON, T. (1970) Environment 12(4):2-10, "Mystery" [A good review article]
2. ABRAMSON, E. I., BELL, Y., REJAL, H., TUCK, S., BURNETT, C., & FLEISCHER, C. J. (1960) Amer. J. of Physical Med. 39:87-95, "Change in blood flow, oxygen uptake, and tissue temperatures produced by therapeutic physical agents, II. Effect of shortwave diathermy" [A2, B2, B3, 316]
3. ABRAMSON, D. I., HARRIS, A. J., BEACONSFIELD, P., & SCHROEDER, J. M. (1957) Arch. of Physical Med. 38:369-376, "Changes in peripheral blood flow produced by shortwave diathermy" (I) [B16, 12]
4. ABRIKOSOV, I. A. (1954) Dissertation, Moscow, "The Impulse UHF Field in Experimental and Clinical Practice" (NV)
5. ABRIKOSOV, I. A. (1955) Theses of Reports of the Scientific Session of the State Sci. Res. Inst. of Physiotherapy, Moscow, pp. 28-29, "The Action of a Pulsed Electric UHF Field on the Organism" (NV)
6. ADDINGTON, C. H., FISCHER, F. P., NEUBAUER, R. A., OSBORN, C., SARKEES, Y. T., & SWARTZ, G. (1958) Proc. 2nd Tri-service Conf. on Biological Effects of Microwave Energy (Pattishall, E. G., & Banghart, F. W., eds.) 2:189-201, "Review of the work at University of Buffalo - Studies of the biological effects of 200 megacycles: I. Electrical facilities and instrumentation; II. Ophthalmological studies"
7. ADDINGTON, C. H., NEUBAUER, R. A., OSBORN, C., SWARTZ, G., FISCHER, F. P., & SARKEES, Y. T. (1959) Proc. 3rd Tri-service Conf. on Biological Effects of Microwave Radiating Equipments (Susskind, C., ed.) 3:1-9, "Biological effects of microwave energy at 200 megacycles upon the eyes of selected mammals" [A4, B22]
8. ADDINGTON, C. H., OSBORN, C., SWARTZ, G., FISCHER, F. P., & SARKEES, Y. T. (1959) Proc. 3rd Tri-service Conf. on Biological Effects of Microwave Radiating Equipments (Susskind, C., ed.) 3:10-14, "Thermal effects of 200 megacycles (cw) irradiation as related to shape, location, and orientation in the field"
9. ADDINGTON, C. H., OSBORN, C., SWARTZ, G., FISCHER, F. P., NEUBAUER, R. A., & SARKEES, Y. T. (1961) Proc. 4th Tri-service Conf. on the Biological Effects of Microwave Radiation, Vol. 1 (Peyton, H. F., ed.) pp. 177-186, "Biological effects of microwave energy at 200 mc"
10. ADLER, E., & MAGORA, A. (1955) Amer. J. of Physical Med. 36:521-, "Experiments on the relation between shortwave irradiation and the pituitary cortical adrenal system" [H1]
11. AFANAS'YEV, B. G., (1968) Voyenno-Meditsinskiy Zh. (1):73-74, "The functional condition of the adrenal cortex in ship specialists who are subjected to the action of a super-high frequency EM field" [MS]
12. AKYUNOGLOU, G. (1964) Nature (London) 202(4931):452-, "Effect of a magnetic field on carboxydismutase" [J]
13. ALBRECHT, W. (1935) Arch. of Physical Therapy 16:634 only, (Abstr. from: Zeitschrift fur Gesamte Experimentale Med. 93:816-, (Jun 1934)), "Development and form of shortwave thermal zones in an agar body" [A]
14. ALEKSEYENKO, N. YU. (1956) In: Materialy po evolyutsionnoy fiziologii. Simposium (Materials on evolutionary physiology. Symposium), Moscow, Leningrad, 1:7-, [title not given] [A UHF field evoked changes in muscle function of frogs]
15. ALEYEV, A. M., YELANTSEVA, V. R., & DZHUMAGALIYEV, M. (1961) Zdravookhraneniye Kazakhstana (Public Health of Kazakhstan) (4):75-78, (JPRS 9713), "Effect of a VHF-HF field on the course of experimental echinococcus" [B, J]
16. ALLAM, D. S. (1969) J. Microwave Power 4(2):108-114, "Conference Report: Radio and microwave radiations, applications, and potential hazards"
17. ALM, H. (1958) (In German) Berliner Medizinische Verlagsanstalt G.m.b.H., Berlin, 174 pages, Introduction to Microwave Therapy
18. ALTABASHEVA, V. P., & IL'YASHEVICH, M. I. (1934) Biulleten Gosudarstvennogo Tsentral'nogo Instituta Sechenova (Bull. of the State Central Institute of Sechenova) (4-5), "The effects of the action of short waves on the morphology and the physical and chemical behavior of the blood of the rabbit"
19. ALTMAN, C. (1969) Zoologische Anzeiger, Germany, 32(Suppl):416-436, (in German) "The physiological effect of electric fields on animals"
20. AMER, N. (1956) Proc. Institute of Radio Engineers 44:2A-, "An observation on the detection by the ear of microwave signals" [Q7]
21. ANDRIYASHEVA, N. N. (1937) In: The Biological Action of VHF-HF-Ultrashort Waves (Kupalov, P. S., & Frenkel, G. L., eds.), All Union Institute of Experimental Medicine, Moscow, pp. 373-379, "Occupational hazard of VHF-HF and the preventive measures"
22. ANIKIN, M. M., & KIRYAKTSOVA-RUSSKIKH, M. V. (1961) J. of Neuropathology and Psychiatry imeni S.S. Korsakov 61(8):1122-1126, "High frequency currents in the treatment of poliomyelitis in adults" [Q4]
23. ARNE, A., SAITO, M., SALATI, O. M., & SCHWAN, H. P. (1961) Proc. 4th Tri-service Conf. on the Biological Effects of Microwave Radiation, Vol. 1 (Peyton, H. F., ed.) pp. 153-176, "Relative microwave absorption cross sections of biological significance"
24. ARNE, A., SAITO, M., SALATI, O. M., & SCHWAN, H. P. (1962), Univ. of Penna. Rpt. No. 62-13, 125 pages, RAUC-IDR-62-244, (AD 284981), "Penetration and thermal dissipation of microwaves in tissues" [A]
25. ARNE, A., SALATI, O. M., & SCHWAN, H. P. (1961) Digest of the 4th Internat. Conf. on Medical Electronics, Biological Effects of Microwaves I (Athermal Aspects), (Frommer, F. L., ed.) Plenum Press, New York, p. 153, "Relative microwave absorption cross section of mankind"

26. ANNE, A., & SCHWAM, H. P. (1963) (From: Ph.D. Dissertation of A. Anne, Univ. of Penna., "Scattering and absorption of microwaves by dissipative dielectric objects: The biological significance and hazards to mankind"
27. ANTONOV, G. S. (1964) Voprosy Kurortologii, Fizioterapii, i Lechebnoy Fizicheskoy Kul'tury (Problems in Health Resort Science, Physiotherapy and Medical Physical Culture) Moscow, (6):513-518, (JPRS 29384), "Combined treatment of pustulous skin diseases with ultra-high frequency electric field and staphylococcal anti-phagin electrophoresis" [B2, B16, B28, H2, H10, H13, H14, J6, Q6]
28. ARONOVA, S. B. (1955) Theses of Reports, Sci. Session of the State Sci. Res. Inst. of Physiotherapy, Moscow, "Comparative action of a pulse and continuous UHF field on the arterial pressure" [B16, I2] (NV)
29. ASANOVA, T. P., et al. (1963) Materials of the Sci. Session Concerned with the Work of the Institute of Industrial Hygiene and Occupational Diseases for 1962-1962, Leningrad, pp. 52-54, "The problem of the effect of high voltage industrial frequency electric field on the organism of workers" (NV)
30. ASANOVA, T. P., & RAKOV, A. N. (1966) Gigiena Truda i Professional'nye Zabolevaniya, USSR, (5):50-53, "The health of workers exposed to high voltage (400 to 500 KV) electric fields" (NV)
31. ASCHOFF, J. (1969) Aerospace Med. 40(8):844-849, "Desynchronization and resynchronization of human circadian rhythms" [Q10]
32. ASTANIN, P. P. (1937) In: The Biological Action of VHF-HF-Ultrashort Waves, (Kupalov, P. S., & Frenkel, G. L., eds.), All Union Institute of Experimental Medicine, Moscow, [Title not given] (NV)
33. ATANELISHVILLI, E. V. (1965) Soobshcheniya Akademii nauk Gruzinskoi SSR 37(2):453-458, "Changes in the functional state of the CNS in patients with resected stomachs during various physiotherapeutic procedures" [B, C] (NV)
34. AUSTIN, G. N., & HORVATH, S. M. (1949) Amer. J. Medical Sci. 218:115-, "Production of convulsions in rats by exposure to ultralow frequency electrical currents (radar)" [C9]
35. AUSTIN, G. N., & HORVATH, S. M. (1954) Amer. J. of Physical Med. 33:141-149, "Production of convulsions in rats by high frequency electrical currents" [A6, C9]
36. BABAKHANOV, F. V. (1948) Sbornik Voprosy Eksperimental'noi Fizioterapii (Tashkent) 10:95-, "Influence of various dosages of electrical fields of UHF on the isolated rabbit's heart" [B20, D1] (NV)
37. BABITSKII, E. L. (1966) Vrachебное Delo 1:143-, "Ultra high frequency therapy of patients with peptic ulcer" (NV)
38. BACH, S. A. (1965) Federation Proceedings, Supp. #14, S22-, "Biological sensitivity to radio-frequency and microwave energy" [K9, J4, J6]
39. BACH, S. A. (1961) Digest of the 4th Internat. Conf. on Medical Electronics, Biological Effects of Microwaves I (Athermal Aspects), (Frommer, P. L., ed.) "Changes in macromolecules produced by alternating electrical fields" [J4, J6]
40. BACH, S. A., BALDWIN, M., & LEWIS, S. A. (1959) Proc. 3rd Tri-service Conf. on Biological Effects of Microwave Radiating Equipments (Susskind, C., ed.) 3:82-93, "Some effects of ultrahigh frequency energy on primate cerebral activity" [C]
41. BACH, S. A., BROWNELL, A. S., LUZZIO, A. J., & SPOERL, E. S. (1960) U. S. Army Medical Res. Lab., Ft. Knox, Ky., Progress Rpt. CSCRD, 16 July 1959 to June 1960, pp. 12-16, (AD 239186), "Biomedical effects of microwave radiation" [H9, J6]
42. BACH, S. A., LUZZIO, A. J., & BROWNELL, A. S. (1961) Proc. 4th Tri-service Conf. on the Biological Effects of Microwave Radiation, Vol. 1 (Peyton, M. P., ed.) pp. 117-133, "Effects of radio frequency energy on human gamma globulin" [R9]
43. BACH, S. A., LUZZIO, A. J., & BROWNELL, A. S. (1961) J. of Medical Electronics 1(1):9-14, "Effects of RF energy on human gamma globulin" [R9]
44. BACH, S. A., & ROSENRAUM, J. C. (1965) In: U. S. Army Medical Res. Lab. Progress Rpt., (AD 470368), pp. 31-32, "Radio frequency effects on enzyme systems" [J5]
45. BACHEM, A. (1935) Arch. of Physical Therapy 16:645-650, "A selective heat production by ultrashort (Hertzian) waves" [A1, A2, A3]
46. BADENOCH, A. W. (1945) British Medical J. 2:601-603, "Descent of the testes in relation to temperature" [A]
47. BAGBY, R. B. (1960) Prepared by Bell Telephone Labs., N. Y., N. Y., Case #27675-2, (AD 244137), "Improved NIKE-HERCULES - personnel safety - microwave radiation", Memorandum for File
48. BAILEY, P. (1959) Aviation Week 29-30 (May 4), (Q10) "High intensity radiation produces convulsions, death in monkey" [A1; B27, C3, C9]
49. BAILLIE, H. D. (1970) In: Proc. of the "Biological Effects and Health Implications of Microwave Radiation" Symposium, (Cleary, S. P., ed.), Bur. of Rad. Health, Div. of Bio. Effects, Rept. No. 70-2, pp. 59-65, "Thermal and nonthermal cataractogenesis by microwaves" (Also: Non-Ionizing Rad. 1(4):159-163 (1970))
50. BAILLIE, H. D., HEATON, A. C., & PAL, D. K. (1970) In: Proc. of the "Biological Effects and Health Implications of Microwave Radiation" Symposium, (Cleary, S. P., ed.), Bur. of Rad. Health, Div. of Bio. Effects, Rept. No. 70-2, pp. 65-89, "The dissipation of microwaves as heat in the eye" (Also: Non-Ionizing Rad. 1(4):164-168 (1970))
51. BAKER, V. H., WIANT, D. E., & TANOWADA, O. (1956) J. of Economic Entomology 49(1):33-37, "Some effects of microwaves on certain insects which infect wheat and flour"
52. BALDWIN, B. R., CONSTANT, P. C., Jr., JONES, B. L., RENGE, L., & WAIDELICH, D. L. (1961) U. S. Navy, Bureau of Ships Contract with Midwest Res. Inst., Kansas City, Mo., Interim Rpt. #1, Oct. 1960; Rpt. #2 (AD #427612), 20 June 1961, Survey of radio frequency radiation hazards" (Rpt. #2, P. 1)

53. BALDWIN, M. S., BACH, S. A., & LEWIS, S. A. (1960) *Neurology* 10(2):178-187, "Effects of radio-frequency energy on primate cerebral activity" [C3, C4, C9, P9]
54. BALUTINA, A. P. (1965) *Bulletin of Experimental Biology and Med.* 60(12):1385-1386, "Experimental injury to the eye with UHF electromagnetic fields" [A4, B22]
55. BALUTINA, A. P., & KOROBKOVA, T. L. (1969) *Gigiena Truda i Professional'nye Zabolevaniya USSR* 13(4):57-58, "Pathohistological alterations in the eyes of rabbits exposed to SHF-UHF radiation" [A4, B22]
56. BARANSKI, S. (1964) *Military Inst. of Aviation Med.* 5:pp.-, "Histochemical investigations on the microwave effect on the central nervous system" [C, N] (NV)
57. BARANSKI, S., CZEKALINSKI, L., CZERSKI, P., & HADUCH, S. (1963) *Revue de medecine aeronautique (Paris)* 2:108-111, "Experimental research on the fatal effect of micrometric wave electromagnetic radiation"
58. BARANSKI, S., & CZERSKI, P. (1966) *Lekarz Wojskowy (Poland)* 10(9):903-909, (In Polish) "Investigation of the behavior of corpuscular blood constituents in persons exposed to microwaves" [H1]
59. BARANSKI, S., & EDELWEIJN, Z. (1968) *Acta Physiologica Polonica* 19(1):31-41, "Studies on the combined effect of microwaves and some drugs on bioelectric activity of the rabbit CNS" [B5, B19, C4]
60. BARANSKI, S., & EDELWEIJN, Z. (1967) *ACTA Physiologica Polonica* 18(4):517-532 (423-436 Eng. Transl.), "Electroencephalographical and morphological investigation upon the influence of microwaves on the central nervous system"
61. BARBER, D. E. (1962) *Institute of Radio Engineers Trans. on Biomedical Electronics* 9(2):77-80, "The reaction of luminous bacteria to microwave radiation exposures in the frequency range of 2608.7 to 3082.3 Mc" [J6]
62. BARLOW, H. M. (1962) *Institute of Radio Engineers Trans. on Instrumentation* 1-2:257-, "Microwave power measurements"
63. BARNUTHY, M. F. (ed.) (1964, Vol. 1) (1969, Vol. 2) Plenum Press, New York, Biological Effects of Magnetic Fields
64. BARONENKO, V. A., & TIMOFEVA, K. F. (1958) *Zashchita ot deystviya elektrom. poloy i elektr. toka v prom.*, Leningrad, pp. 48-59, "The effect of high and ultrahigh frequency EMF on the organism of man and animal" (NV)
65. BARONENKO, V. A., & TIMOFEVA, K. F. (1959) *Fiziologicheskiy Zh. SSSR Sechenov* 45:184-188, "Effects of high frequency electromagnetic fields on the conditioned reflex activity and certain unconditioned functions of animals and men" [B13, C7] (NV)
66. BARRON, C. I., & BARAFF, A. A. (1958) *J. of the Amer. Medical Assoc.* 168(9):1194-1199 (Also U. S. Navy Medical News Letter 24(7):35-40, 1959), "Medical considerations of exposure to microwaves (radar)" [A, B, C, F, H, J, K]
67. BARRON, C. I., & BARAFF, A. A. (1958) *Proc. 2nd Tri-service Conf. on Biological Effects of Microwave Energy* (Pattishall, E. G., & Banghart, P. W., eds.) 2:112-117, "Medical considerations of exposure to microwaves (radar)" [A, B, C, F, H, J, K]
68. BARRON, C. I., LOVE, A. A., & BARAFF, A. A. (1955) *J. of Aviation Med.* 26:442-452, (Also *Institute of Radio Engineers Trans. on Medical Electronics*, PGME-4:44 only, Feb. 1956) (AD #63851), "Physical evaluation of personnel exposed to microwave emanations" [A4, C, F, H, I, J, K, L]
69. BARTONICEK, V., & KLIMKOVA-DEUTCHOVA, E. (1964) *Casopis Lekaru Ceskych* CZ 103(1):26-30, (AD Transl. U-64-95, AD #460106), (Also in: Biological Effects of Microwaves, AD P-65-68, Sept. 1965, pp. 13-14, "Effect of centimeter waves on human biochemistry"), "Some biochemical changes in workers exposed to centimeter waves"
70. BASS, D. E., KLEEMAN, C. R., QUINN, M., HENSCHEL, A., & HECHAUER, A. H. (1955) *Medicine (Analytical Reviews of Gen. Med., Neurology, and Pediatrics)* 34:323-380, "Mechanisms of acclimatization to heat in man"
71. BASSETT, H. L., ECKER, H. A., JOHNSON, R. C., & SHEPPARD, A. P. (1971) *IEEE Trans. on Microwave Theory and Techniques (Special Issue on Biological Effects of Microwaves)* MTT-19(2):197-204, "New techniques for implementing microwave biological-exposure systems"
72. BAUER, J., & GUTMAN, G. (1940) *Urologic and Cutaneous Review* 44(1):64-66, "The effect of diathermy on testicular function"
73. BAUS, R., & FLEMING, J. D. (1959) *Proc. 3rd Tri-service Conf. on Biological Effects of Microwave Radiating Equipments* (Susskind, C., ed.) 3:291-313, "Biologic effect of microwave radiation with limited body heating"
74. BAVRO, G. V., & KHOLODOV, YU. A. (1962) In: *Summaries of reports, Questions of the Biological Effect of a SHF-UHF Electromagnetic Field*. Kirov Order of Lenin Military Medical Academy, Leningrad, pp. 3-4, "The character of bioelectric reactions of the rabbit cerebral cortex during the influence of a SHF-UHF field"
75. BAVRO, G. V., & KHOLODOV, YU. A. (1963) *Gigiena Truda i Biol. Deyst. Elektron. Poloy Radiochastot* (Trudy, Inst. of Industrial Hygiene & Occupational Diseases, Acad. Medical Sci., Moscow). Occupational hygiene & biological effects of RF fields, p. 108-, [Title not given]
76. BAZETT, H. C. (1949) In: Physiology of Heat Regulation and the Science of Clothing, (Newburgh, ed.), U. S. Saunders, Philadelphia, Pa., pp. 109-192, "The regulation of body temperatures"
77. BEISCHER, D. E. (1962) Naval School of Aviation Med., and NASA Rpt, "Survival of animals in magnetic fields of 120,000 Gausse"
78. BEISCHER, D. E. (1964) In: Biological Effects of Magnetic Fields, Vol. 1, (Barothy, M. F., ed.), Plenum Press, New York, Chapt. 11, pp. 201-, "Survival of animals in magnetic fields of 140,000 Gc"
79. BEISCHER, D. E., & COMART, G. S. (1970) Naval Aerospace Medical Institute Rpt NAMI-1105, "Growth of Staphylococcus aureus in a null magnetic field environment"
80. BEISCHER, D. E., & KREPTON, J. C., JR. (1964) Naval School of Aviation Med. and NASA Rpt, "Influence of strong magnetic fields on the electrocardiogram of squirrel monkeys (Sciurus sciureus)"

81. BEISCHER, D. E., & KNEPTON, J. C., JR. (1966) Naval Aerospace Medical Institute (and NASA) Rpt NAMI-972, "The electro-encephalogram of the squirrel monkey (*Saimiri sciureus*) in a very high magnetic field"
82. BEISCHER, D. E., & MILLER, E. F. II (1962) Research Rpt, Bureau of Med. & Surg. (Navy), "Exposure of man to low intensity magnetic fields"
83. BEISCHER, D. E., MILLER, E. F. II, & KNEPTON, J. C., JR. (1967) Naval Aerospace Medical Institute (and NASA) Rpt No. 1018, AD #662672, "Exposure of man to low intensity magnetic fields in a coil system"
84. BELAURI, N. V. (1941) Fiziologicheskiy Zh. SSSR 30(2):173-, "The effect of ultrashort waves on the reflex excitability of frogs"
85. BEKKER, D. B., & MOGENDOVICH, M. R. (1948) In: Biological and Therapeutic Effect of a Magnetic Field and Strictly Periodic Vibrations, pp. 93-, "The effect of a magnetic field on osmotic processes in mice"
86. BELDING, H. S., & HATCH, T. F. (1955) Heating, Piping and Air Conditioning 27(8):129-136, "Index for evaluating heat stress in terms of resulting physiological strains"
87. BELITSKII, B. M., & KNORRE, K. G. (1959) In: Summaries of reports, Labor Hygiene and the Biological Effect of Radio Frequency Electromagnetic Waves, Moscow, [Title not given]
88. BELITSKII, B. M., & KNORRE, K. G. (1960) Trudy NII Gigiena Truda i Profzabolochniya USSR, (1):107-117, (Also in: The Biological Action of Ultrahigh Frequencies, (Letavet, A. A., & Gordon, Z. V., eds.), Acad. of Med. Sci., USSR, Moscow, (JPRS 12471, 1962, pp. 110-122), "Protection from radiation in work with SHF-UHF Generators"
89. BELL, R. L., BLOCK, A. F., MERVIN, R. L., & GRAY, L. B. (1969) Goddard Space Flight Center, Greenbelt, Maryland, Rpt -205-69-405, "Microwave radiation - its potential health hazards and their control"
90. BILL, W. H., & PERGUSON, D. (1931) U. S. Navy Medical Bulletin 29:525-551, "Effects of super-high frequency radio current on health of men exposed under service conditions" (Also Arch. of Physical Therapy (12):pp.-, (1932))
91. BELOVA, S. F. (1957) In: Summaries of Reports, Part 2, Moscow, Jubilee Sci. Session of the Institute of Labor Hygiene & Occupational Diseases, dedicated to the 40th Anniv. of the Great October Socialist Revolution, pp. 66-, "State of the organ of sight in persons subjected to the influence of ultrahigh frequency fields"
92. BELOVA, S. F. (1950) In: Physical Factors of the External Environment, Moscow, pp. 184-, "The state of the visual organ in persons exposed to superhigh frequency fields"
93. BELOVA, S. F. (1960) Trudy NII Gigiena Truda i Profzabolochniya, (1):86-89, (Abstr. in: The Biological Action of Ultrahigh Frequencies, (Letavet, A. A., & Gordon, Z. V., eds.), Acad. of Med. Sci., USSR, Moscow, (JPRS 12471, pp. 89-93, 1962)), "Change in the electrotocometric curve in rabbits under the influence of SHF-UHF"
94. BELOVA, S. F. (1962) In: The Biological Action of Ultrahigh Frequencies, (Letavet, A. A. & Gordon, Z. V., eds.), Moscow, (JPRS 12471, pp. 36-38, 1962), "Influence of UHF on the organ of sight"
95. BELOVA, S. F. (1964) Trudy NII Gigiena Truda i Profzabolochniya USSR, (2):119-121, "Results of sight organ examination in workers associated with HF-LF generators (150-600KC)"
96. BELOVA, S. F. (1964) Trudy NII Gigiena Truda i Profzabolochniya USSR, (2):140-143, "Functional state of the visual analyzer under the action of microwaves"
97. BELOVA, S. F. (1960) In: Mezhdunarodovatel'skiy Institut Gigiena Truda i Prosvabolevaniya, Trudy (1):36-38 (Abstr. in: The Biological Action of Ultrahigh Frequencies, (Letavet, A. A., & Gordon, Z. V., eds.), Acad. of Med. Sci., USSR, Moscow, (JPRS 12471, 1962)), (AD Rpt. F-65-17 (1965)), "The effect of UHF on the eye"
98. BELOVA, S. F., & GORDON, Z. V. (1956) Bulletin Experimental Biology & Med. 41:327-330, "The effect of centimeter waves on the eye"
99. BENEDICT, W. L., DAILY, L., HERRICK, J. F., & MAKIM, H. J. (1951) Amer. J. of Ophthalmology, Series 3, 34:1301-, "The effects of microwave diathermy on the eye of a rabbit"
100. BENYO, I., FUST, F., & IMASZ, M. (1965) Kiszerletes Orvostudomany 7(5):454-458, "Effect of shortwave irradiation of the liver on the elimination of bromsulphalein from the blood"
101. BEREZHITSKAYA, A. N. (1968) Gigiena Truda i Professional'nye Zabolevaniya, Moscow, USSR, 12(9):33-37, "Some indicators of the fecundity in female mice irradiated with 10 cm waves"
102. BERG, A. I. (ed.) (1960) Gosenergoizdat, Moscow, Proc. Moscow Conf. Jan. 1959, 392 pages (see especially pages 60, 77, 92, & 123) (In Russian), (Abstr. in: The Biological Effects of Electromagnetic Fields - Annotated Bibliography, AD Rpt. F-65-17, Apr. 1965), Electronics in Medicine
103. BERGMAN, W. (1965) Transl. (from German) by Tech. Lib. Res. Serv., Ford Motor Co., Copyright by author, The Effect of Microwaves on the Central Nervous System
104. BERLIN, L. B., & ZHUPEN, V. F. (1952) (AD #400015), "Mistological changes in skin following homoplasty to burns of irradiated rabbits."
105. BERLINER, M. L. (1951) AMA Arch. of Ophthalmology, Annual Reviews, 45(2):196-213, "Cornea and sclera"
106. BERNAL, E., & KEPLINGER, M. (1959) Industrial Med. & Surgery 28:535-538, "Effects of environmental temperature and air volume exchange on survival of rats exposed to microwave radiation of 24,000 megacycles"
107. BICKFORD, R. C., & FREMING, B. D. (1965) Digest of 6th Internat. Conf. on Medical Electronics and Biological Engineering, (Iwei, Y., Chm.) p. 112 only, "Neuronal stimulation by pulsed magnetic fields in animals and man"

108. BIERMAN, W. (1934) Amer. J. of Medical Science 187:545-552, "The effect of hyperpyrexia induced by radiation upon the leukocyte count"
109. BIERMAN, W. (1948) Arch. of Physical Med. 29:408-415, "Present status of fever therapy"
110. BIERMAN, W., HOROWITZ, W. A., & LEVISON, C. L. (1935) Arch. of Physical Therapy 16:520-522, "Fever therapy in pelvic conditions: Results of experimental and clinical studies"
111. BILOKRYNTS'KYI, V. S. (1966) Fiziologicheskiy Zh. 12(1):70-78, (AD Rpt 67-3, Jan. 1967), "Changes in the thyroid substance of neurons under the effect of radio waves"
112. BILOKRYNTS'KYI, V. S. (1968) Fiziologicheskiy Zh. 14(3):376-381, (Ukr. with English summary), "Morphological changes in the sciatic nerve of dogs affected with SHF electromagnetic fields"
113. BIRENBAUM, L., GROSOF, G. M., HAMMOND, A. H., ROSENTHAL, S. W., SCHMIDT, H., & ZARET, M. M. (1965, 1966) In: Progress Rpt. No. 28, AD 476288, Apr. 1965 - Sept. 1965; Progress Rpt. No. 29, AD 482303, Oct. 1965 - Mar. 1966. Summary of Current Research in the Microwave Research Institute Programs, Polytech. Inst., Brooklyn, N. Y., "Effects of microwave radiation on the eye"
114. BIRENBAUM, L., GROSOF, G. M., ROSENTHAL, S. W., & ZARET, M. (1969) IEEE Trans. on Biomedical Engineering BME-16(1): 7-14, "Effect of microwaves on the eye"
115. BIRENBAUM, L., KAPLAN, I., ROSENTHAL, S. W., SCHMIDT, H., & ZARET, M. M. (1967) In: Progress Rpt. No. 32, AD 662885 (W68-16938), Mar. 1966 - Sept. 1967. A Summary of Current Research in the microwave Research Institute Programs, Polytech. Inst., Brooklyn, N. Y., pp. 50-51, "Effects of microwave radiations on the eye" [of the rabbit]
116. BIRENBAUM, L., ROSENTHAL, S., KAPLAN, I., METLAY, W., SCHMIDT, H., & ZARET, M. (1968) Paper presented at meeting of . . ? p. 68, "Effect of microwaves on the rabbit eye"
117. BIRNBAUM, G., & FRANEAU, J. (1949) J. of Applied Physics 20:817-, "Measurement of the Dielectric constant and loss of solids and liquids by a cavity perturbation method"
118. BLACKSMITH, P., & MACK, R. B. (1965) Air Force Cambridge Res. Lab., Hanscom Field, Mass., AD 625163, "On measuring the radar cross sections of ducks and chickens"
119. BLAGOVIDOVA, L. A., BELEKHOVA, N. G., & ZAGORULKO, T. M. (1962) Biulleten Èksperimental'noi Biologii i Meditsiny, Moscow, 55:8-13, (AD 294524, FTD-TT-62-1482/1+2) "Changes in electrical activity of the diencephalic area and cortex of the rabbit's cerebral hemispheres under the effect of bitemporal diathermy"
120. BL'EDEN, L., YERUSHALMI, S., FREI, E. H., RABE, I. M., & NEUFELD, H. M. (1968) J. of Cardiovascular Surgery (Torino) 9:49-53, "Environmental hazards associated with a radio frequency pacemaker"
121. BLINKOVA, T. P., BOGDAROV, O. V., & YAKOVLEVVA, M. I. (1967) Zh. Evolyutsionnoi Biokhimii i Fiziol. 3(2):178-181, "Effect of superhigh frequency electromagnetic field on the pulse rate of chick embryos"
122. BLOIS, S. (1956) Institute of Radio Engineers Trans. on Medical Electronics PGME-6:35-37 (from Symposium on Physiologic and Pathologic Effects of Microwaves, Krusen, P. H., Chm., Sept. 1955), "Paramagnetic resonance methods in biological research"
123. BLUDOVA, P. A., KURIOLOVA, L. M., & TIKHONNOVA, N. A. (1953) Zh. Nevropat. Psichiatr./Korsakov 53(10):790-, "The effect of shortwave diathermy on the function of the visual analyzer"
124. BODEN, C., & POMPE, H. J. (1962) Elektromatische Rundschau 16(11):517-518, (in German) "The effect of HF-radiation on living organisms"
125. BODROVA, N. V., & KRAYUENIN, B. V. (1965) In: Bionics, Nauka, Moscow, pp. 264-, "The lateral line of fish as an apparatus for the perception of an electric field"
126. BOITEAU, H. (1960) Revue des Corps de Santé des Armées 1:637-652, (In French) "Biological effects of radar waves"
127. BOITEAU, H. (1963) Le Médecin de l'Armée 1:1-9, (In French) "Biological action of radar waves"
128. BOLSHUKIN, I. D. (1959) In: Summaries of reports, Labor Hygiene and Biological Effect of Radio Frequency Electromagnetic Waves, Moscow, "Results of shielding of certain kinds of HF-LF generators"
129. BORDIER, H. (1935) Arch. of Physical Therapy 16:263-267, "Radiotherapy combined with diathermy and galvanization in infantile paralysis: Bordier method"
130. BOURGEOIS, A. E., JR. (1967) Ph.D. Thesis (in Experimental Psychology), Baylor Univ., 117 pages, "The effect of microwave exposure upon the auditory threshold of humans"
131. BOVILL, C. B. (1960) British Communications and Electronics 7:363-365, "Are radar radiations dangerous? A survey of possible hazards"
132. BOYD, R. R. (1970) In: Proc. of the "Biological Effects and Health Implications of Microwave Radiation" Symposium, (Cleary, S. P., ed.) Bur. of Radiat. Health, Div. of Bio. Effects, Rept. No. 70-2, pp. 204-209, "Quantifying hazardous microwave fields: practical considerations"
133. BOYD, G. A. (1947) Biophysics Seminar, School of Med. & Dentistry, Univ. of Rochester, (unpublished report), (Dec.), "Athermal biological effects of microwaves"
134. BOYKOV, I. D. (1963) In: Interoceptors and the Neural Control of System Functions Under Normal and Pathological Conditions, Tsel'skij dokladov. Ivanovo-Frankovsk, "Some general features of the effect of energy of electromagnetic oscillations of varied frequency and intensity on the quality of interoceptive reflexes"

2179. HIRSCH, F. G. (1970) Lovelace Foundation for Medical Education and Research, Albuquerque, N. M., 17 pages, "Microwave cataracts - A case report reevaluation"
2180. HODGE, D. M. (ed.) (1970) for Jan-Dec 1969, Div. of Biological Effects, Bur. Rad. Health, DHEW (Rept. No. DBE 70-1), (NTIS Rept. No. PB-190-110), 213 pages, Radiation Bio-Effects Summary Report
2181. HODGE, D. M. (ed.) (1970) for Jan-Dec 1970, Div. of Biological Effects, Bur. Rad. Health, DHEW (Rept. No. DBE 70-7), 267 pages, Radiation Bio-Effects Summary Report
2182. HOOD, O. C., KESHISHIAN, J. M., SMITH, W. F. D., PODOLAK, E., HOFFMAN, A. A., & RAVIN, S. S. (1972) Aerospace Med. 43(3):314-322, "Anti-nijacking efforts and cardiac pacemakers - Report of a clinical study" [using an external electromagnetic field (at 239 MHz) from a weapons detector]
2183. HOROWSKI, J., & MARKS, E. (1968) Neurological i neurochirurgia Polska 2:25-29, (In Pol.), (Abstr. A62-1126), "Clinical observations concerning the effect of microwaves on the nervous system"
2184. HOWK, W. (1972) Presented at: Aerospace Medical Assoc., 43rd Ann. Meeting, 8-11 May, Mai Harbour, Fla., "Human responses to microwave irradiation - A review of and evaluation of published reports"
2185. HOWLAND, J. L., & MICHAELSON, S. M. (1966) Blood 28:157-162, (Abstr. A66-32395), "Leukocyte response following simultaneous ionizing and microwave (radar) irradiation"
2186. HOWLAND, J. L., MICHAELSON, S. M., & THOMPSON, R. A. E. (1965) Aerospace Medicine 36:1059-1064, "Comparative studies on 1285 and 2690 Mc/sec pulsed microwaves" [dogs]
2187. IKEDA, H. (1966) Nippon Acta Radiol. 2b:284-288, (A67-81094), "Studies on biological effects of microwave radiation (second report). Investigation of shielding effect of concrete, Lauan, and glass against microwave radiation"
2188. INGLIS, I. P. (1969) In: Record, 11th Electromagnetic Compatibility Symposium, Inst. of Electrical and Electronics Engineers, Asbury Park, N. J., pp. 7-11, (Abstr. F469-42216), "The compatibility of man in the microwave environment" [human responses; thermal & nonthermal effects, eye damage, & information storage]
2189. INGLIS, I. P. (1970) In: IEEE Record of Internat. Sympos. on Electromagnetic Compatibility, Anaheim, Calif., pp. 168-172, (Abstr. EA71-38442), "Whv the double standard? - A critical review of Russian work on the hazards of microwave radiation"
2190. IRWIN, D. B., RUSH, S., EVERING, R., LEVESCHIEF, E., MCINTOSH, D. B., & WIGGILL, R. J. (1970) IEEE Trans. on Magnetics, MAG-6(2):321-322, "Stimulation of cardiac muscle by a time-varying magnetic field"
2191. JACOBS, S. E., THORLEY, M. J., & MAURICE, P. (1959) Proc. of the Soc. for Applied Bacteriology (2):161-169, "The survival of bacteria in high-frequency electric fields"
2192. KADOURI, A. M., HALL, H. J., & NELSON, S. O. (1967) Ann. of the Entomol. Soc. of Amer. 60:889-892, "Morphological abnormalities resulting from radio-frequency treatment of larvae of Tenebrio molitor"
2193. KADOURI, A. M., HALL, H. J., & STETSON, L. E. (1967) Ann. of the Entomol. Soc. of Amer. 60:1195-1199, "Metabolism in the yellow mealworm, Tenebrio molitor (Coleoptera: Tenebrionidae), following exposure to radiofrequency electric fields"
2194. KADOURI, A. M., NELSON, S. O., & STETSON, L. E. (1967) Ann. of the Entomol. Soc. of Amer. 60:885-889, "Mortality and internal heating in radio-frequency-treated larvae of Tenebrio molitor"
2195. KEMAL, G. P. (1970) In: Radiation Bio-Effects Summary Report, Hodge, D. M., (ed.), Jan-Dec 1969, Div. of Biological Effects, Bur. Rad. Health, DHEW, (Rept. No. DBE 70-1), pp. 106-110, "Studies on the biological and physico-chemical properties of 2450 MHz microwave irradiated human immunoglobulin G (IgG)"
2196. KEMAL, G. P. (1970) In: Radiation Bio-Effects Summary Report, Hodge, D. M., (ed.) for Jan-Dec 1970, Div. of Biological Effects, Bur. Rad. Health, DHEW, (Rept. No. DBE 70-7), pp. 137-141, "Some preliminary observations on autoimmune response in rats exposed to 2450 MHz microwaves"; pp. 142-146, "Absence of immunoglobulin accelerates in human plasma warmed with 2450 MHz microwaves"; and (with LASKEY, J. W.) pp. 146-153, "Enzyme inactivation in vitro with 2450 MHz microwaves"
2197. KEMAL, G. P., & JANES, D. E. (1970) In: Radiation Bio-Effects Summary Report, Hodge, D. M., (ed.), Jan-Dec 1969, Div. of Biological Effects, Bur. Rad. Health, DHEW (Rept. No. DBE 70-1), pp. 95-105, "Studies on the effect of 1450 Hz microwave on human immunoglobulin G"
2198. KERN, R. (1935) Klin. Wschr. 19:108 (July/Dec), (In Ger.), (Abstr. in: Zentralbl. f. d. ges. Physiol. 35(3):127-128 (1936)), "Experimental investigations on the effects of short waves on the eye"
2199. KERN, P. S., & RUCKES, S. J. (1970) Non-Ionizing Radiation 1(4):178-189, (Abstr. A71-1550), "Radio hazards [to humans] in the 1.F.H.I. band"
2200. KITZ, J. M. (1970) In: Radiation Bio-Effects Summary Report, Hodge, D. M., (ed.), for Jan-Dec 1970, Div. of Biological Effects, Bur. Rad. Health, DHEW, (Rept. No. DBE 70-7), pp. 83-84, "Measurement of absorbed microwave energy in biologically equivalent phantom models"
2201. KITTEL, T. (1969) Ann. Rev. of Sci. 16:510-536, "The effect of an electromagnetic field on early embryochisis in man?"
2202. KRAKOVSKII, V. A., & YANGULOV, V. A. (1971) Biophysics 16(2):265-269, (In Russ.), "Dielectric parameters of human blood serum in the range of 1-1000 sec/sec"
2203. KRITIKOS, C. G., & SPANOS, L. P. (1972) Inst. of Electrical & Electronics Engineers, Trans. on Biomed. Eng. 19(1): 53-58, "Heat spots generated in conducting spheres by electromagnetic waves and biological implications"

2204. KURZ, G. H., & EININGER, R. B. (1968) Amer. J. of Ophthalm. 66:866-869, (A69-80371), "Cataract secondary to microwave radiation"
2205. LABES, M. M. (1970) Final Report on NASA Grant NGL 39-004-015, June 1967 - Sept. 1970, (N71-12313 to N71-12324), (CR-111582), 83 pages, Drexel Univ., Chemistry Dept., Philadelphia, Pa., "Mechanisms for the effect of electric and magnetic fields on biological systems" (collection of papers by LABES, et al.)
2206. LASKEY, J. (1970) In: Radiation Bio-Effects Summary Report, Hodge, D. M., (ed.), for Jan-Dec 1970, Div. of Biological Effects, Bur. Rad. Health, DHEW, (Rept. No. BRH/DDE 70-7), p. 167 only, "Lethal dose of 2450 MHz microwave irradiation at various power densities in the Sprague-Dawley rat (A preliminary report)"
2207. LASKEY, J., DAWES, D., & HOWLS, M. (1970) In: Radiation Bio-Effects Summary Report, Hodge, D. M., (ed.), for Jan-Dec 1970, Div. of Biological Effects, Bur. Rad. Health, DHEW, (Rept. No. BRH/DDE 70-7), pp. 167-173, "Progress report on 2450 MHz irradiation of pregnant rats and the effect on the fetus"
2208. LATTES, R. C., & BRECHER, S. (1970) In: Radiation Bio-Effects Summary Report, Hodge, D. M., (ed.), for Jan-Dec 1970, Div. of Biological Effects, Bur. Rad. Health, DHEW, (Rept. No. BRH/DDE 70-7), pp. 229-232, "Microwave irradiation of peripheral leukocyte cultures without average temperature rise of culture medium"
2209. LAZARUS, H. D., & LEVEDAHL, B. H. (1962) U. S. Atomic Energy Commission, Rept. No. TID-3912 (Biol. & Med.), Esp. section 10. (Microwaves, pp. 431-451), Effects of Radiation on the Mammalian Eye: A Literature Survey
2210. LEYTES, F. L., & SKURIKHINA, L. A. (1961) Biull. Eksp. Biol. Med. 52(12):47-50, "The effect of microwaves on the hormonal activity of the adrenal cortex"
2211. LIBEZHNI, P. (1936) Biology and Therapy, Moscow, "Short and ultrashort waves"
2212. v. LUCOSSY, G. (1942) Klin. Mbl. Augenh. 108:319-328 (May/June), (In Ger.), "Effect of diathermy on the eye"
2213. LUKOFF, L., & LOWERS, G. (1960) Klin. Mbl. Augenh. 137:232-238, (In Ger.), (Abstr. in: Zentralbl. f. d. ges. Ophth. 61(5):295 (Mar 1961)), "The sclera after non-perforating electro-coagulation"
2214. MacGREGOR, R. J. (1970), (Abstr. #N71-14482; AD 712644), "A brief survey of literature relating to the influence of low intensity microwaves on nervous function"
2215. MacGREGOR, R. J. (1970) The Rand Corp. Rept. P-4398, "A direct mechanism for the influence of microwave radiation on neuroelectric potentials"
2216. MAJERSKA, K. (1968) Polish Medical J. VII:989-994, "Investigations on the effect of microwaves on the eye"
2217. MARGUTTI, V. M. (1972) J. of the Amer. Inst. of Homeopathy 65(1):7-20, ("to be cont'd in June '72 issue"), "The minima, max., and biomagnetism: Some contemporary concepts" ("interesting" (?) reading)
2218. MEZEROVA, V., & SYNEK, V. (1970) Pracovni lekarstvi 22(1):1-5, "Evaluation of important factors influencing EEG findings in persons with a long-term exposure to electromagnetic radiation in the meter wave band"
2219. MEZEROVA, V., SYNEK, V., & VOLAVKA, J. (1970) Pracovni lekarstvi 21(1):5-7, "The effect of the electromagnetic radiation in meter wave band on the EEG frequency spectrum of exposed patients"
2220. MICHAELSON, S. M. (1969) Presented at Ind. Neurol. Congr., Prague, (Abstr. #N70-12450), "Microwave standards - a comparative analysis" [between U. S. & Russia of quantification of biological responses]
2221. MICHAELSON, S. M. (1971?) American Industrial Hygiene Assoc. J. 32:338-345, "Biomedical aspects of microwave exposure"
2222. MICHAELSON, S. M., & SETH, H. S. (1965) J. of Occupational Medicine 7:439-442, (Abstr. #A65-82061), "Microwave cataractogenesis"
2223. MILROY, W. C. (1972) Presented at: Aerospace Medical Assoc., 43rd Ann. Meeting, S-11 Nav, Bal Harbour, Fla., "Neuroendocrine effects of microwave radiation"
2224. MILROY, W. C., & MICHAELSON, S. M. (1972) Aerospace Med. 43(1):67-75, "Microwave cataractogenesis: A critical review of the literature"
2225. MILROY, W. C., & MICHAELSON, S. M. (1972) Internat. J. of Environmental Studies (In Press, Spring 1972), "The microwave controversy"
2226. MILLS, L. F. (1970) In: Radiation Bio-Effects Summary Report, Hodge, D. M., (ed.), for Jan-Dec 1970, Div. of Biological Effects, Bur. Rad. Health, DHEW, (Rept. No. BRH/DDE 70-7), pp. 50-52, "Biological effects of diathermy"
2227. MILLS, L. F., & SEGAL, P. (1970) Div. of Biological Effects, Bur. Rad. Health, DHEW, (Rept. No. BRH/DDE 70-6), 55 nps., "Radiation incidents registry report 1970" [approx. 15% of the total number of incidents reported (133) involved microwave and/or radio frequency equipment]
2228. MIROCKI, L. (1959) Medycyna Pracy 10(1):57-68, (In Pol.), "Hygienic importance of electrical currents of high and ultrahigh frequencies"
2229. MIROCKI, L. (1961) Medycyna Pracy (Poland) 12:337-344, (FTD-TT-61-380), "The health of persons exposed to the effect of high frequency electromagnetic fields"
2230. NIRIMASOFF, A. (1927) Revue Gen. Optique. 51:97-119, (In Fr.), "Diathermy in ophthalmology"

2231. MIRUTENKO, V. I. (1964) In: Problems of the Biophysics and Mechanism of Action of Ionizing Radiation, Kiev, Zdorov'ya, pp. 79-82, "Heat distribution in the organs and tissues of animals exposed to UHF electromagnetic field"
2232. MOHR, C. C., & CASHIN, J. L. (1970) Aerospace Med. Res. Lab., Wright-Patterson AFB, Rept. AMRL-TR-68-32, "Biomagnetic response of simple biological systems and the implications for long duration space missions" [results indicated no significant effect on the two biologic systems studied]
2233. MONBRUN, A., & CASTERAN, H. (1927) J. d'Ophth. Med. Franc. 16:136 (April), (In Fr.), "Diathermy in ophthalmology"
2234. MONCREIFF, W. F., COULTER, J. S., & HOLHOUST, H. J. (1932) Amer. J. of Ophth. 15(3):194-205, (Abstr. in: Zentralbl. f. d. ges. Ophth. 27(7):406-407 (1932)), "Experimental studies in diathermy applied to the eye and orbit. A. Thermal effect of diathermy"
2235. MONCREIFF, W. F., COULTER, J. S., & HOLHOUST, H. J. (1933) Amer. J. of Ophth. 16(3):193-199, (Abstr. in: Zentralbl. f. d. ges. Ophth. 29(6):347 (1933)), "Experimental studies in diathermy applied to the eye and orbit. B. Comparison of thermal effects of diathermy, infrared radiation, and an electric heating pad"
2236. MUSIL, J. (1970) Ceskoslovenska hygiena 15(9-10):315-320, (In Czech.), "Values of field intensity in the surroundings of high frequency industrial generators"
2237. NELSON, S. O. (1966) Farm, Ranch, & Home Quart., No. 132, pp. 15-16, (Summer), "New ways to control insects" [including use of r-f radiation]
2238. NOVITSKIY, Yu. I., GORDON, Z. V., PRESMAN, A. S., & KHOLODOV, Yu. A. (1971), (Transl. from Russ.), Radio Frequencies and Microwaves: Magnetic and Electrical Fields
2239. OLSIKI, C. M. (1965) Food Engineering 37:51-54, "Microwaves inhibit bread mold"
2240. OLSIKI, C. M., DRAY, C. L., & BUNCH, S. L. (1966) J. of Microwave Power 1:45-56, "Some biological effects of microwave energy"
2241. OSLEPEK, J. W. (1971?) Raytheon Co. Report, (Abstr. #A72-14032), "Comparison of potential device interference and biological exposure hazards in microwave leakage fields"
2242. PASCHI, N. (1934) Studi Saccar., Sec. 2, 12:807-812, (In Ital.), (Abstr. in: Zentralbl. f. d. ges. Ophth. 14(1):137 (1934)), "Research on the possibility of producing a cataract by trans-scleral diathermy"
2243. PAZDREK, J. (1968) Pracovni lekarstvi 20(10):447-457, (In Czech.), (Transl. by A. "areti", (ed. by F. G. Tirsch), Loveland Found. for Ed. Education and Res., Albuquerque, "Effects of electromagnetic radiation of the order of centimeter and meter wavelength on human's health"
2244. PEGOLES, S. (1966) Cisivenskaya Truda i Professional'nyye Zaholevaniva, Moscow, (7):18-21, (#TP-66-123, #67-14373), "Hemodynamic indices during the action of superhigh frequency electromagnetic fields"
2245. PETROV, I. N. (1968) Transl. (from Russ.) of citation #1218 (this Biblio.), (Rept. No. N70-30464, NLL-Transl-2629-(9022.SI)), "Aetiology of ultra-high frequency exposure" [combined effects of microwave radiation and rarified atmosphere on immunization reactions of human organisms]
2246. PETROV, I. N., (ed.), (1970) (In Russ.), "Meditina" Press, Leningrad, (NASA Transl. No. TT-F-708, (1971)), Influence of microwave Radiation on the Organism of Man and Animals
2247. PLITAS, P. S. (1935) Sovet. Vestn. Oftal. 7(4):442-447, (In Russ.), (Abstr. in: Zentralbl. f. d. ges. Ophth. 36(1):23-24, and Ann. J. of Ophth. 19(5):449 (May 1936)), "Modification of the visual organ under the influence of ultrashort radio waves"
2248. POSCH, H. A. (6 KOLIN, A.), (1970) Ph.D. Dissertation, U. of Calif., 165 pp. (N71-36484), "Studies on magnetic field exposures of Drosophila melanogaster and Pelvetia fastigiata"
2249. PUGLISI-DURANTI, G. (1935) Rend. Ocul. 16:383-445, (In Ital.), (Abstr. in: Zentralbl. f. d. ges. Ophth. 34(3):177-178), "Lesions due to the diathermic coagulation of the vitreous humor"
2250. PURTECHKE, I., & OSBORNE, S. L. (1939) Arch. Ophth. (Chicago) 22(2):211-227, (Abstr. in: Zentralbl. f. d. ges. Ophth. 45(3):148 (Apr 30, 1940)), "Temperature changes and changes in caliber of retinal blood vessels after short wave diathermy"
2251. RAFATLA, E., LINCRAJAS, I., PREDA, N., POPESCU, V., ROVENTA, A., & TEORULESCU, D. (1970) In: Ergonomics and Physical Environmental Factors, (Vol. 21 of the Occupational Safety and Health Series), Internat. Labour Office, Geneva, (In Fr.), pp. 175-177, "Researches concerning changes in the organism in personnel employed in radar installations"
2252. REMARK, B. C. (1971) USDOHEW/PHS, Bur. of Rad. Health, (Pub. No. BPH/MERHL 71-1), 38 pages, "Survey of diathermy equipment use in Pinellas County, Florida"
2253. RHEIN, R. L. (1972) U. S. Medicine 8(5): pp. 1 & 23 (Mar 1), (Describes work of D. E. Justesen on rats and mice), "Microwaves inhibit tumor induction"
2254. RIFFLEBURN, R. S. (1953) U. S. Armed Forces Med. J. 4(1):71-72, "Ocular fatigue in the radar operator"
2255. ROBB, R. (1966) Food Processing and Marketing 27:84-86, "Improved flavor of pasteurized products [cooked with microwave radiation]"
2256. ROSE, V. E., GELLMAN, G. A., & POWELL, C. H. (1970) In: Ergonomics and Physical Environmental Factors, (Vol. 21 of the Occupational Safety and Health Series), Internat. Labour Office, Geneva, pp. 178-185, "Evaluation and control of exposures in repairing microwave ovens"

2257. ROSE, V. E., POWELL, C. H., LANIER, M. E., & SWANSON, J. R. (1970) In: Ergonomics and Physical Environmental Factors, (Vol. 21 of the Occupational Safety and Health Series), Internat. Labour Office, Geneva, pp. 186-, "A review of U. S. microwave exposure criteria"
2258. ROSENTHAL, S. W. (1970) In: Proc. of Hungarian Acad. of Sci., & Sci. Soc. for Telecommunication, Colloq. on "Microwave Communication, 4th, Budapest, (Apr. 21-24, 1970), (Abstr. #70-43790), "Safety standards and biological effects of microwave radiation"
2259. ROSENTHAL, D. S., & BERRING, S. C. (1968) J. of the Amer. Medical Assoc. 205(4):105-108, "Hyperonadism after microwave radiation"
2260. RUGGIERI, P. S., & FIDER, R. L. (1971) USPHM/PHS, Bur. of Ind. Health (Pub. No. BRH/DER 71-5), 25 pages, "Electromagnetic radiation interference with cardiac pacemakers"
2261. RUSSO, F., & CALIMILLI, W. F. (1971) Genetic Psychology Monographs 84:177-243, "Biometrical phenomena: Some implication for the behavioral and neurophysiological sciences"
2262. SARICKI, W., & OSTROWSKI, K. (1968) Amer. J. of Physical Medicine 47:225-234, (A69-80117), "Non-thermal effect of microwave radiation *in vitro* on peritoneal mast cells of the rat"
2263. SCHLESINGER, J. U. (1933) Public Health Reports 48:844-858 (July), "Heating effect of very high frequency condenser fields on organic fluids and tissues"
2264. SCHLEIPER, I. (1939) Dissertation, Frankfurt a. M., 18 pages, (In Ger.), (Abstr. in: Zentralbl. f. d. ges. Ophth. 46(11): 336 (Feb 18, 1941)), "Results of histological studies using short wave radiation"
2265. SCHMITT, M. J., SCHMITT, D. E., & ROBISON, G. A. (1971) Science 173:1142-1143 (17 Sept), "Cyclic adenosine monophosphate in brain areas: Microwave irradiation as a means of tissue fixation"
2266. SCHWAB, H. P. (1952) Abstr. in Federation Proceedings 11:142 only, "Electrical properties of blood at ultrahigh frequencies"
2267. SCHWAB, H. P. (1965) Technical Progress Report (AD #615661, N65-28329), "Non-thermal effects of alternating electrical fields on biological structures"
2268. SCHWAB, H. P. (1971) Naval Weapons Lab. (Dahlgren, Va.), Tech. Rept. TR-2713, "Hazards from exposure to electrical fields and potentials"
2269. SELDON, L. (1944) Bureau of Med. (U. S. Navy) News Letter 3(10):30-31, "Radar operation not harmful to the eyes"
2270. SHIVILY, J. W. (1970) In: Radiation Bio-Effects Summary Report, Hodge, D. M., (ed.), for Jan-Dec 1970, Div. of Biological Effects, Bur. Rad. Health, DHEW, (Rept. No. BRH/DRE 70-7), pp. 201-203, "A pilot study of effects of microwave exposure on ontogeny" [using 2 - 3 day old dogs]
2271. SICELMAN, S., & FRIEDENWALD, J. S. (1954) A.M.A. Arch. of Ophth. 52(1):46-57, (Abstr. in: Ophth. Lit. 8(3):356 (Mar 1955)), "Mitotic and wound healing activities of the corneal epithelium. Effect of sensory denervation"
2272. SILVERMAN, C. (1970) In: Radiation Bio-Effects Summary Report, Hodge, D. M., (ed.), for Jan-Dec 1969, Div. of Biological Effects, Eur. Rad. Health, DHEW, (Rept. No. DBE 70-1), p. 22 only, "Parental radiation exposure and Down's syndrome (mongolism)"
2273. SILVERMAN, C. (1970) In: Radiation Bio-Effects Summary Report, Hodge, D. M., (ed.), for Jan-Dec 1970, Div. of Biological Effects, Bur. Rad. Health, DHEW, (Rept. No. BRH/DRE 70-7), pp. 22-23, "Parental radiation exposure and Down's syndrome (mongolism)"; and pp. 45-46, "Follow-up study of radar workers"
2274. SIMONELLI, N., & RIZZINI, V. (1952) Giorn. Ital. Oftal. 5(3):190-196 (May/June), (In Ital., with Fr., Eng., & Ger. summaries), (Abstr. in: Zentralbl. f. d. ges. Ophth. 59(1):55 (Mar 1953), and Ophth. Lit. 6(3):263 (Dec 1952)), "Further contribution to the study of the effect of microwaves on the eye"
2275. SLINKEY, D. H., & PALMIERI, W. A. (1967) Army Environmental Hygiene Agency Rept. (N67-32384, AD 65270F), "Microwave hazards bibliography"
2276. STOCKER, E. (1951) Arch. of Physical Medicine 32:408-416, "The effect of microwave radiation on the peripheral pulse volume, digital skin temperature, and digital blood flow in man"
2277. STECHTER, H., & THOT, H. (1955) Ber. dtsch. Ophthalm. Ges. 59:361-363, (In Ger.), (Abstr. in: Zentralbl. f. d. ges. Ophth. 63(6):358-359 (Oct 1955)), "Eye alterations in rabbits due to microwaves and eddy currents"
2278. STERN, J. E., ROSE, V. E., & POWELL, C. L. (1970) Amer. Indust. Hygiene Assoc. T. 31:623-641, "Review of international microwave exposure guides"
2279. STILTON, H. L. (1971) USPHM/PHS, Bur. of Ind. Health (Pub. No. BRH/DER 71-1), 13 pages, "Microwave measurements and new types of detectors for evaluation of health hazards"
2280. TAPIE, R. L. (1969) Pacific Missile Range (Pt. Mugu, Calif.), Rept. PDR-T-69-1-(1), "A study of personnel radiation hazards created by selected high-power radar sets"
2281. TATE, K. A. (1971) In: Radiation Bio-Effects Summary Report, Hodge, D. M., (ed.), for Jan-Dec 1970, Div. of Biological Effects, Bur. Rad. Health, DHEW, (Rept. No. BRH/DRE 70-7), pp. 75-77, "Radio frequency and microwave energy absorption in tissue"; and (with RITT, I. B.), pp. 78-79, "Heating with diathermy"
2282. TESSUTI, C. F. (1963) Military Medicine 128:334-344, (63-18601), "The effect of electromagnetic radiation on tissue"

2283. THOMPSON, W. D., & BOURCHOIS, A. E. (1971) In: Pharmacological and Biophysical Agents and Behavior, Furchtgott, R., (ed.), Academic Press, N. Y., pp. 65-93, "Non-ionizing radiations"
2284. TIKHONOV, F. D. (1970) Vopr. Meditsinskii Zhurnal :44-46, (In Russ.), (Abstr. #A71-21955), "Functional disturbances of the gastrointestinal tract in human subjects working in a microwave field"
2285. TOLSKAYA, N. S., & GORDON, Z. V. (1971) Meditsina Pub. House, Moscow, 135 pages, (in Russ.), Morphophysiological Changes During the Action of Radio-Frequency Electromagnetic Waves
2286. VALTONEN, T. J. (1967) Z. Zellforsch. Mikroskop. Anat. 80:322-328, "Observations on the fine structure of giant mast cells produced by microwave radiation on the peritoneal fluid"
2287. VALTONEN, T. J. (1968) Amer. J. of Physical Medicine 47:75-83, "Effect of treatment with short wave diathermy on the histamine content of various organs"
2288. VANZI, H. I., & JOHNSON, S. K. (1970) J. of the Amer. Dietetic Assoc. 56:133-135, "Effect of electronic cookery on thiamine and riboflavin in buffered solutions"
2289. VELLA, S. G. (1961) Dissertation Abstr. 23(2):1174-1175, "The effects of temperature, light, and 300 radio waves upon the gonadal development of Tilapia macrocephala"
2290. VONK, A. (1912) Arch. Ophth. 83(1):99-113 (et), (In Ger.), "Some measurements on the diathermy of the human eyeball, its media, and the lower eyelid, in addition to observations of the biological effects of infrared (radiation)"
2291. VON TIELER, C. (1947) Acta Physiologica Scandinavica 14, Supplement 45, pp. 1-75, "Selective responses to thermal stimulation of mammalian nerves"
2292. WILLETT, R. L., & BOOMER, R. B. (1959) Am. J. of Ophth. 48(3)II:336-337, "Changes in corneal astigmatism observed following surface diathermy to rabbit corneas"
2293. YAGI, K. (1970) Nippon Acta Radiol. (Jan.) 30:184-204, (In Jap., with Eng. abstr., fig. titles, and biblio.), "Local aplastic bone marrow induced by microwave irradiation in rabbits; especially histological and histochemical studies"
2294. YAU, K. . . ., & JILES, M. M. (1970) In: Radiation Bio-Effects Summary Report, Hodge, D. M., (ed.), Jan-Dec 1969, Div. of Biological Effects, Bur. Radiat. Health, DHEW (Rept. No. DHEW-DBE 70-1), pp. 185-187, "Effects of 2450 MHz microwave radiation on cultivated rat kangaroo cells"
2295. YAU, K. . . ., & JILES, M. M. (1970) In: Radiation Bio-Effects Summary Report, Hodge, D. M., (ed.), Jan-Dec 1969, Div. of Biological Effects, Bur. Radiat. Health, DHEW, (Rept. No. DHEW-DBE 70-7), pp. 233-235, "Mortality patterns of microwave irradiated rat kangaroo cells in culture"
2296. ZABIT, M. (1969) 40th Annual Sci. Meeting of the Aerospace Med. Assoc., San Francisco, "Ophthalmic hazards of microwaves and laser environments"
2297. ZALOGA, A. . . ., CORTEAU, M., VOICU, A., SPATARIU, I., & POLSHAN, I. (1967) Cercet Balneari Fiziologie 5:615-621, (AGB-80778), "Histochemical studies on some alterations of the animal organism under the action of microwaves" (or Tzitologia)
2298. ZUFAROV, R. A., & SEMAIVAIIS, V. B. (1970) Zytologia 12(2):146-151, (In Russ.), "Reactions of the mitochondria of the liver of white mice to the action of electromagnetic fields" (swelling, lysis, and appearance of giant cells, at 1-10-100
2299. "Important areas of electronic research: Compilation of statements by leaders in the field", (C-29341), (1971)
2300. "In biological action of radio frequency electromagnetic fields and magnetic fields: Summary report" of the Task on Magnetic, Radio Frequency, and Other Field Effects, Environmental Safety Committee, Space Science Board, "C-293-23563", (C-29341)
2301. "Navigation & Radio-Frequency Hazards Problems", Chief of Naval Operations Instruction (OPNAVINST 5700.1E) of 20 Nov. 1968, ("To promulgate policy pertaining to the resolution of radio frequency hazard problems involving ordnance, personnel, and volatile materials, and to assign responsibilities in connection therewith")
2302. "Agencies react to electromagnetic radiation risks," Electronics :15-36, (Apr. 16, 1971)
2303. "A study of information currently available on electromagnetic side effects," Rep. by Interference Consultants, Inc., Boston, for Office of Telecommunications Management, Office of Emergency Preparedness, Executive Office of the White House, Vol. I, 66 pp. (OPI 203145), Oct. 1968; Vol. II, 60 pp. (OPI 203145) containing bibliography and historic documents, Ser. 136
2304. "Electromagnetism to induce abortion? Experiments show exposure to microwave radiation can cause resorption of rat fetuses," Medical World News, p. 489 only, [describes work of R. L. Great] (April 9, 1971)
2305. "Electrosleep' held aid in depression, anxiety," U. S. Medicine 2(22): pp. 10 and 33, (15 Nov. 1971)
2306. "Limb regeneration in mammals: Research indicates that electricity stimulates partial rerowth of amputated limbs of rat," Science News 1:322-323 (Nov. 13, 1971)
2307. "Microwave safety," Circular No. 4,601, Div. of Radiological Health, Bur. of Environmental Health, Illinois Dept. of Public Health (1971)
2308. "Radar radiation riles residents," Industrial Research, p. 29 only, (Mar. 1972)

Reproduced from
best available copy.

2309. "Radiation hazards," [Including RF and microwave frequencies], from Interference Technology Engineers' Master, (R & B Enterprises, P. O. Box 328, Plymouth Meeting, Pa.), pp. 102-104 (1972).
2310. "Effects of microwave irradiation - USSR," Rept. (JPRS 51238 & N70-39484), containing articles by Glotova & Sadchikova, and by Dyackenko (numbers 2166 and 2148, respectively, this Bibliography), from Gigiyen. Truda i Professional'nyye Zabolevaniya. Moscow, (1970)
2311. "Annual Report on the Administration of the Radiation Control for Health and Safety Act of 1968". Message from the President of the United States Transmitting the Annual Report on the Administration of the Radiation Control for Health and Safety Act of 1968 (Public Law 90-602), covering 1970. 92nd Congress, 1st Session, House Document No. 92-113, U. S. Government Printing Office, Washington, D. C., 1971