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Robert Katz

EDUCATION

1937 B.A. Brooklyn College, Brooklyn, New York
1938 M.A. Columbia University, New York City
1949 Ph.D. University of Illinois, Urbana, IL

PROFESSIONAL EXPERIENCE

1939-1943 Radiologist, U.S. Army Air Force
1943-1946 Physicist, U.S. Army Air Force
1946-1949 Research Associate, University of Illinois
1949-1951 Assistant Professor of Physics, Kansas State University
1951-1956 Associate Professor of Physics, Kansas State University
1956-1966 Professor of Physics, Kansas State University
1958 (Summer) Professor of Physics, University of Illinois
1959 (Summer) Professor of Physics, Columbia University
1961 (Summer) Professor of Physics, University of Connecticut
1962 (Summer) Professor of Physics, Harvard University
1963 (Summer) Professor of Physics, Harvard University
1964-1965 Project Physics, Harvard University
1966-1995 Professor of Physics, University of Nebraska (Emeritus 1996-)
1968-1973 Vice-Chairman of Physics, University of Nebraska
1972 Experimental Radiopathology Unit, Medical Research Council, and
Department of Medical Physics, Royal Postgraduate Medical School,
Hammersmith Hospital London. (On research leave Jan.-July 1972)

Sigma Xi (President, UNL Chapter 1975-76)

Phi Kappa Phi, Phi Eta Sigma, Pi Mu Upsilon, Gamma Sigma Delta

American Physical Society (Fellow)

Radiation Research Society

A.E.C. Predoctoral Fellow 1948

Faculty Lectureship Award, Kansas State University 1962

Alexander Von Humboldt Senior U.S. Scientists Award 1975 (declined)

Editorial Board "Nuclear Track Detection," Pergamon Press, Oxford, retired

CURRENT RESEARCH INTERESTS

Structure of Particle Tracks, Radiation Physics, Theory of RBE

BIBLIOGRAPHY

I. REFEREED JOURNALS

1. R. Katz, X-RAY INSPECTION OF CASTINGS. Metal Progress, p. 89-94, June 1943.
2. R. Katz, R.D. Hill, and M. Goldhaber, DISINTEGRATION OF Tl^{21} AND Te^{123} ISOMERS. Phys. Rev. 78, p. 9-11 (1950).
3. R. Katz, EXPERIMENT ON HEAT. Am. J. Phys. 18, p. 534 (1950).
4. R. Katz, M.R. Lee, and M. Milner, X-RAY INSPECTION OF WHEAT. Non-Destructive Testing, Fall (1950).
5. R. Katz, RADIOACTIVE DISINTEGRATION. Am. J. Phys. 19, p. 389 (1951).
6. M. Milner, M.R. Lee, and R. Katz, APPLICATION OF X-RAY TECHNIQUE TO THE DETECTION OF INTERNAL INFESTATION IN GRAIN. Economic Entomology 43, p. 933-935 (1951).
7. R. Katz and M.R. Lee, RADIOACTIVITY OF Eu^{152} , Eu^{154} . Phys. Rev., 85, p. 1038 (1952).
8. M. Milner, M.R. Lee, and R. Katz, RADIOGRAPHY APPLIED TO GRAIN AND SEEDS. Food Technology 6, p. 44-45 (1952).
9. M. Milner, J.A. Shellenberger, M.R. Lee, and R. Katz, INTERNAL FISSURING OF WHEAT. Nature 170. p. 533-534 (1952).
10. R. Katz/ PAIRING EFFECT IN NUCLEI AND ISOMERISM. Phys. Rev. 91, p. 1487 (1953).
11. R. Katz, GROUP PHASE VELOCITY DEMONSTRATOR. Am. J. Phys. 21, p. 388 (1953).
12. M. Milner, R. Katz, M.R. Lee, and W.B. Pyle, APPLICATION OF POLAROID PROCESS TO RADIOGRAPHIC INSPECTION OF WHEAT. Cereal Chemistry 30, p. 169-170 (1953).
13. M. Milner, E.P. Farrell, and R. Katz. USE OF A SIMPLE BLOWING DEVICE TO FACILITATE INSPECTION OF WHEAT FOR INTERNAL INFESTATION. J. Official Agri. Chem. 36, p. 1065-1070 (1953).

14. M.R. Lee and R. Katz, RADIOACTIVITY OF Sm 153 AND Eu 155. Phys. Rev. 93, p. 155-159 (1954).
15. R. Katz and M.R. Lee, VARIABLE FIELD BETA RAY SPECTROMETER. Rev. Sci. Instr. 25, p. 58-62 (1954).
16. M. Milner, E.P. Farrell, and R. Katz. BLOWING DEVICE FOR INSPECTION OF WHEAT. Bull. Assn. of Operative Millers, p. 2095-2098 (June 1954).
17. R. Katz, E.P. Farrell, and M. Milner, SEPARATION OF GRAIN BY PROJECTION. Cereal Chem. 31, p. 316-325 (1954).
18. M. Milner, E.P. Farrell, and R. Katz, SEPARATION OF GRAIN BY PROJECTION II. Cereal Chem. 31, p. 326-332 (1954).
19. E.P. Farrell, M. Milner, and R. Katz, SEPARATION OF GRAIN BY PROJECTION INTO STILL AIR. Northwestern Miller (October 1954).
20. M. Milner, E.P. Farrell, and R. Katz, PROJECTION PRINCIPLES APPLIED TO GRAIN SEPARATION. Third Int'l Bread Congress, Hamburg (1955).
21. R. Katz, FLIGHT PATH OF LEAST TIME. Am. J. Phys. 24, p. 117 (1956).
22. D. Hoyt, L.D. Ellsworth, and R. Katz, CORRELATION BETWEEN GRADES IN ENGINEERING PHYSICS AND PERFORMANCE IN ENGINEERING CURRICULA. Am. J. Phys. 24, p. 605-610 (1956).
23. R. Katz, A.B. Cardwell, N.D. Collins. and A.E. Hostetter, NEW GRAIN HARDNESS TESTER. Cereal Chem. 36, p. 393-101 (1959).
24. R. Katz and D.R. Parnell, TWO PROPOSED EXPERIMENTS FOR THE DETECTION OF THE DIRAC MONOPOLE. Phys. Rev. 116. p. 236-238 (1959).
25. R. Katz, THE VORTEX TUBE AND THE TORNADO. Geofisica Pura E. Applicata, Milano, III, 47, p. 191-194 (1960).
26. R. Katz. N.D. Collins, and A.B. Cardwell, HARDNESS AND MOISTURE CONTENT OF WHEAT KERNELS. Cereal Chem. 38, p. 364-368 (1961).
27. R. Katz, TRANSVERSE MASS AND GRAVITATIONAL MASS. Am. J. Phys. 29, p. 786 (1961).
28. R. Katz, THE MAGNETIC POLE IN THE FORMULATION OF ELECTRICITY AND MAGNETISM. Am. J. Phys. 30, p. 41-44 (1962).
29. W.R. Peters and R. Katz, USING A DENSITY GRADIENT COLUMN TO DETERMINE WHEAT DENSITY. Cereal Chem. 39, p. 487-494 (1962).
30. R. Katz, ON SCIENCE AND SOCIAL SCIENCE. The Kansas Magazine 10 (1963).

31. R. Katz and B. Curnutte, Jr., PHASE SPACE OCCUPATION OF ELECTRON, PROTON, AND PHOTON BEAMS. *Am. J. Phys.* 32. p. 617-618 (1964).
32. R. Katz, PHYSICS-MATHEMATICS BUILDING AT KANSAS STATE UNIVERSITY. *Am. J. Phys.* 33, p. 45-50 (1965).
33. R. Katz and J.J. Butts, WIDTH OF ION AND MONOPOLE TRACKS IN EMULSION. *Phys. Rev.* 137. p. B198-B203 (1965).
34. R. Katz and M.R. Querry, CALCIUM CONTENT OF WHEAT KERNEL SECTION BY CRITICAL MICRORADIOGRAPHY. *Cereal Chem.* 42, p. 187-198 (1965).
35. R. Katz and J.J. Butts, SIMULATED RADIOACTIVITY. *Am. J. Phys.* 34, p. 986 (1966).
36. R. Katz, MAGNETICALLY GEARED MICROSCOPE STAGES. *Rev. Sci. Instr.* 37. p. 1601 (1966).
37. J.J. Butts and R. Katz, THEORY OF RBE FOR HEAVY ION BOMBARDMENT OF DRY ENZYMES AND VIRUSES. *Radiation Research* 30. p. 855-871 (1967).
38. E.J. Kobetich and R. Katz, ENERGY DEPOSITION BY ELECTRON BEAMS AND DELTA RAYS. *Phys. Rev.* 170. p. 391-396 (1968).
39. R. Katz and E.J. Kobetich, RESPONSE OF NAI(T10) TO ENERGETIC HEAVY IONS. *Phys. Rev.* 170. p. 397-400 (1968).
40. R. Katz and E.J. Kobetich, FORMATION OF ETCHABLE TRACKS IN DIELECTRICS. *Phys. Rev.* 170. P. 401-405 (1968).
41. E.J. Kobetich and R. Katz, WIDTH OF HEAVY ION TRACKS IN EMULSION. *Phys. Rev.* 170, p. 405-411(1968).
42. E.J. Kobetich and R. Katz, ELECTRON ENERGY DISSIPATION. *Nuclear Instr. and Meth.* 71, P. 226-230 (1969).
43. R. Katz and E.J. Kobetich, FORMATION OF PARTICLE TRACKS. *Radiation Effects* 3, p. 169-174 (1970).
44. R. Katz and E.J. Kobetich, PARTICLE TRACKS IN EMULSION. *Phys. Rev.* 186. p. 344-351 (1969).
45. L.T. Chadderton, F.C. Krajenbrink, R. Katz, and A. Poveda, STANDING WAVES ON THE MOON. *Nature* 223, p. 259-263 (1969).
46. R. Katz and E.J. Kobetich, RESPONSE ON NUCLEAR EMULSION TO ELECTRON BEAMS. *Nuclear Instr. and Meth.* 79, p. 320-324 (1970).
47. R. Katz, RBE, LET AND Z/β^{α} , *Health Physics* 18,175 (1970)

48. B. Ackerson, C.M. Sorenson. and R. Katz, ANALYSIS OF A BREAKUP USING MEAN TRACK WIDTH AND BLOB MEASUREMENTS. Nuclear Instr. and Meth. 92. p. 81-83 (1971).
49. R. Katz, B. Ackerson, M. Homayoonfar, and S.C. Sharma, INACTIVATION OF CELLS BY HEAVY ION BOMBARDMENT. Radiation Research 47, p. 402-405 (1971).
50. T.E. Furtak and R. Katz, SIMULATION OF PARTICLE TRACKS IN EMULSION. Radiation Effects 11, p. 195-199 (1971).
51. R. Katz, S.C. Sharma, and M. Homayoonfar, IRRADIATION EQUIVALENCE. Health Physics 23, p. 740-742 (1972).
52. R. Katz, S.C. Sharma, and M. Homayoonfar, DETECTION OF ENERGETIC HEAVY IONS. Nuclear Instr. and Meth. 100. p. 13-22 (1972).
53. R. Katz and S.C. Sharma, RESPONSE OF CELLS TO FAST NEUTRONS, STOPPED PIONS AND HEAVY ION BEAMS. Nuclear Instr. and Meth. 111, p. 93-116 (1973).
54. R. Katz and S.C. Sharma, HEAVY PARTICLES IN THERAPY, AN APPLICATION OF TRACK THEORY. Physics in Medicine and Biology 19, 413-435 (1974).
55. R. Katz and S. C. Sharma, CELLULAR SURVIVAL IN A MIXED RADIATION ENVIRONMENT. International Journal of Radiation Biology 26, 143-146 (1974).
56. R. Katz and S.C. Sharma. OER FOR MIXED NEUTRONS AND GAMMA-RAYS. British Journal of Radiology 47, 823 (1974).
57. R. Katz and S.C. Sharma, RBE-DOSE RELATIONS FOR NEUTRONS AND PIONS. Physics in Medicine and Biology 20, 410-419 (1975).
58. R.A. Roth, S.C. Sharma, and R. Katz, SYSTEMATIC EVALUATION OF CELLULAR RADIOSENSITIVITY PARAMETERS. Physics in Medicine and Biology 21, 491-503 (1976).
59. R. Katz and F.E. Pinkerton. RESPONSE OF NUCLEAR EMULSIONS TO IONIZING RADIATIONS. Nuclear Instruments and Methods 130. p. 105-119 (1975).
60. R. Katz, B.G. Fullerton, Jr., R.A. Roth, and S.C. Sharma, SIMPLIFIED RBE-DOSE CALCULATIONS FOR MIXED RADIATION FIELDS. Health Physics 30, p. 148-150 (1976).
61. L. Larsson and R. Katz, SUPRALINEARITY OF THERMOLUMINESCENT DOSIMETERS. Nuclear Instruments and Methods 138. 631-636 (1976).
62. R. Katz, on the Remarks of K. Gunther, ON THE APPLICATION OF TRACK THEORY TO NEUTRON IRRADIATIONS. Int. J. Radiat. Biol. 30, 499-50 (1976).

63. R. Katz, L. Larsson, F.E. Pinkerton, and E.V. Benton, SUPRALINEARITY AND PARTICLE DISCRIMINATION IN NUCLEAR EMULSION. *Nuclear Track Detection* 1, 49-61 (1977).
64. L. Larsson, F.E. Pinkerton, and R. Katz, SUPRALINEARITY IN NUCLEAR RESEARCH EMULSIONS. *Radiation Effects* 34, 15-24(1977).
65. R. Katz, TRACK STRUCTURE IN RADIOBIOLOGY AND IN RADIATION DETECTION. *Nuclear Track Detection* 2, 1-28(1978).
66. R. Katz, HIGH LET CONSTRAINTS ON LOW LET SURVIVAL. *Phys. Med. Biol.* 23, 909-916 (1978).
67. R. Katz and E.C. Pennington, RADIOBIOLOGICAL ASPECTS OF SUPRALINEAR PHOTOGRAPHIC EMULSION. *Phys. Med. Biol.* 23. 1115-1123 (1978).
68. R.N. Hamm, H.A. Wright, R. Katz, J.E. Turner, and R.H. Ritchie, CALCULATED YIELDS AND SLOWING-DOWN SPECTRA FOR ELECTRONS IN LIQUID WATER -IMPLICATIONS FOR ELECTRON AND PHOTON RBE. *Phys Med. Biol.* 23, 1149-1161(1978).
69. R.A. Roth and R. Katz, HEAVY ION BEAM MODEL FOR RADIOBIOLOGY. *Radiation Research*, 38, 499-510 (1980).
70. R. Katz. PHOTOMETRIC MEASUREMENTS OF THIN TRACKS IN NUCLEAR EMULSION, *Nucl. Instr. Meth.* 163, 257-259 (1979).
71. R. Katz, REPLY TO HASEGAN et al. *Nuclear Tracks* 3, 1327-1328 (1979).
72. M.P.R. Waligorski and R. Katz, SUPRALINEARITY OF PEAK 5 AND PEAK 6 IN TLD-700, *Nucl. Instr. Meth.* 172, 463 (1980); 48-50 (1980).
73. R. Katz and W. Hofmann, BIOLOGICAL EFFECTS OF LOW DOSES OF IONIZING RADIATIONS; PARTICLE TRACKS IN RADIOBIOLOGY, *Nuclear Instruments and Methods* 203, 433-442 (1982).
74. R. Katz and W. Hofmann, THRESHOLDS IN RADIOBIOLOGY, *Physics in Medicine and Biology* 27, 1187-1192 (1982).
75. W. Hofmann and R. Katz, QUALITY FACTOR FOR LOW DOSES OF HIGH LET RADIATIONS, *Health Physics* 44, 174-175 (1983).
76. R. Katz, TRACK FORMATION IN PLASTICS, *Nuclear Tracks* 7, 31-34 (1983).
77. R. Katz. A. SiF Li, Y.-L. Chang R.L. Rosman and E.V. Benton, TRACKS OF ARGON IONS IN ILFORD K-SERIES NUCLEAR EMULSIONS, *The Nucleus* 20, 17-20 (1983) (Quarterly Journal of the Pakistan Atomic Energy Commission).

78. R. Katz and W. Hofmann, SOME COMMENTS ON DOSE AND DOSE EQUIVALENT, Health Physics 47, 603-611 (1984).
79. R. Katz, FORMATION OF ETCHABLE TRACKS IN PLASTICS, Nuclear Tracks and Radiation Measurements 8, 1-8 (1984).
80. W. Hofmann, R. Katz and Zhang Chunxiang, LUNG CANCER RISK AT LOW DOSES OF ALPHA PARTICLES (in Chinese). Chinese Journal of Radiological Medicine and Protection 5, 140-143 (1985).
81. W. Hofmann, R. Katz, and Zhang Chunxiang, LUNG CANCER INCIDENCE IN A CHINESE HIGH BACKGROUND AREA - EPIDEMIOLOGICAL RESULTS AND THEORETICAL INTERPRETATION, The Science of the Total Environment 45, 527-534 (1985).
82. R. Katz, D.E. Dunn and G.L. Sinclair, THINDOWN IN RADIOBIOLOGY. Radiation Protection Dosimetry, 13, 281-284 (1985).
83. Zhang Chunxiang, D.E. Dunn and R. Katz, RADIAL DISTRIBUTION OF DOSE AND CROSS SECTIONS FOR THE INACTIVATION OF DRY ENZYMES AND VIRUSES, Radiation Protection Dosimetry, 13, 215-218 (1985).
84. R. Katz, D.E. Dunn and G.L. Sinclair, THINDOWN IN RADIOBIOLOGY, Nuclear Tracks and Radiation Measurements, Inti J. Radiat. Appl. Instrum. Part D, 12, 21-24 (1986).
85. W. Hofmann, R. Katz, and Zhang Chunxiang, LUNG CANCER RISK AT LOW DOSES OF ALPHA PARTICLES, Health Physics 51, 457-468 (1986).
86. M.P.R. Waligorski, R.N. Hamm and R. Katz, RADIAL DISTRIBUTION OF DOSE IN LIQUID WATER. Nuclear Tracks and Radiation Measurements 11, 309-319 (1986).
87. R. Katz, G.L. Sinclair and M.P.R. Waligorski, THE FRICKE DOSIMETER AS A 1-HIT DETECTOR. Nuclear Tracks and Radiation Measurements, 11, 301-307 (1986).
88. R. KATZ, BIOLOGICAL EFFECTS OF HEAVY IONS FROM THE STANDPOINT OF TRACK THEORY. Adv. Space Research 6, 191-198 (1986).
89. M.P.R. Waligorski, K.S. Loh, and R. Katz, INACTIVATION OF DRY ENZYMES AND VIRUSES BY ENERGETIC HEAVY IONS, Radiat. Phys. and Chem. 30, 201-208 (1987).
90. W. Hofmann, R. Katz and Zhang Chunxiang, REPLY TO LUNG CANCER RISK FROM Rn IN CHINESE STUDY, Health Physics 54, 221-227 (1988).

91. M.P.R. Waligorski, G.L. Sinclair and R. Katz, RADIOSENSITIVITY PARAMETERS FOR NEOPLASTIC TRANSFORMATION IN C3H10T1/2 CELLS. Radiation Research 111,424-437(1987).
92. R. Katz, PARTICLE TRACKS IN DIVERSE MEDIA, Nuclear Instruments and Measurements in Physics Research B40/41 1271-1274 (1989).
93. R. Katz. PERSPECTIVES IN THE DEVELOPMENT OF TRACK PHYSICS, Nuclear Tracks and Radiation Measurements, 16, 221-224 (1989).
94. M.P.R. Waligorski, G. Danialy. Kim Sum Loh, and R. Katz, RESPONSE OF THE ALANINE DOSIMETER TO CHARGED PARTICLE AND NEUTRON IRRADIATIONS, Journal of Applied Radiation and Isotopes, 40, 923-933 (1989).
95. R. Katz, Kim Sum Loh, Daling Luo, and Guo-Rong Huang, AN ANALYTIC REPRESENTATION OF THE RADIAL DISTRIBUTION OF DOSE FROM HEAVY IONS IN WATER, Si, LiF AND NaI AND Si_{0²}, Radiation Effects and Defects in Solids 114, 15-20 (1990).
96. R. Katz and Guo-Rong Huang, TRACK "CORE" EFFECTS IN HEAVY ION RADIOLYSIS, Radiation Physics and Chemistry 33, 345-349 (1989).
97. R. Katz, DETECTOR RESPONSE TO SWIFT HEAVY IONS, Radiation Effects, and Defection in Solids 110, 177-180 (1989).
98. R. Katz. CROSS SECTION, Applied Radiation and Isotope 41, 563-567 (1990).
99. R. Katz, A TRACK PHYSICS MODEL OF RADIATION ACTION - Radiation Physics and Chemistry 37, 125-129 (1991).
100. R. Katz and G. Huang, RADIO SENSITIVITY PARAMETERS FOR CELL SURVIVAL IN TRADESCANTRA AND FOR CHROMOSOME ABERRATIONS IN CHINESE HAMSTER CELLS, Radiation Protection Dosimetry 31, 261-263 (1990).
- 100a. R. Katz, Detector Response to Swift Heavy Ions, Radiation Effects and Detection in solids 110,125-129 (1991).
101. R. Katz, ON THE NORMALIZED YIELD (events/rad/Dalton) OF BIOLOGICAL MOLECULES IRRADIATED WITH ENERGETIC HEAVY IONS. Radiation Physics and Chemistry 37, 372-374 (1991).
102. R. Katz and S. Wesely, CROSS SECTIONS FOR SINGLE AND DOUBLE STRAND BREAKS IN SV-40 VIRUS IN EO BUFFER AFTER HEAVY ION IRRADIATION: EXPERIMENT AND THEORY, Radiation and Environmental Biophysics 30, 81-85 (1991).

103. R. Katz and F.A. Cucinotta, RBE VS. DOSE FOR LOW DOSES OF HIGH LET RADIATIONS, *Health Physics* 5, 717-718 (1991).
104. F.A. Cucinotta, R. Katz, J.W. Wilson, L.H. Townsend, J. Shinn, and F. Hajnal, BIOLOGICAL EFFECTIVENESS OF HIGH ENERGY PROTONS: TARGET FRAGMENTATION. *Radiation Research* 127, 130-137 (1991).
105. R. Katz, Book Review. ION TRACKS AND MICROTECHNOLOGY, PRINCIPLES AND APPLICATIONS by Spohr. *Radiat. Res.* 126, 111-112 (1991).
106. R. Katz, Letter to the Editor. COMMENT ON "MICRODOSIMETRY AND KATZ'S TRACK STRUCTURE THEORY, by Marco Zaider, in *Radiat. Res.* 124, S16-S22 (1990)". *Radiat. Res.* 126, 629 (1991).
- 106a Luo Daling and R. Katz, THINDOWN IN LITHIUM FLUORIDE (TLD-100). *Nuclear Science and Techniques (China, in English)* 2,147-152 (1991).
107. F.A. Cucinotta, J.W. Wilson, L.W. Townsend, J.L. Shinn and R. Katz, TRACK STRUCTURE MODEL FOR DAMAGE TO MAMMALIAN CELL CULTURES DURING SOLAR PROTON EVENTS, *Nucl Tracks and Radiat. Meas.* 20 (177-184) (1992).
108. R. Katz and M.P.R. Waligorski, COMMENT ON NCRP REPORT NO 104, "THE RELATIVE BIOLOGICAL EFFECTIVENESS OF RADIATIONS OF DIFFERENT QUALITY. *Health Physics* 63, 465 (1992).
- 109 R. Katz, A. TRACK PHYSICS RETROSPECTIVE, *Radiation Protection Dosimetry* 47, 65-68 (1993).
110. R. Katz. RELATIVE EFFECTIVENESS OF MIXED RADIATION FIELDS, *Radiat. Res.* 133, 390 (1993).
111. R. Katz and R. Zachariah, EXPERIMENTAL AND THEORETICAL CROSS SECTIONS FOR E. COLI MUTANTS B, B/r and B_{s-1} AFTER HEAVY ION IRRADIATION, *Radiat. Res.* 134, 261-264 (1993).
112. R. Katz, F. A. Cucinotta, J. W. Wilson, J. L. Shinn and Duc M. Ngo, A MODEL OF CELL DAMAGE IN SPACE FLIGHT, in *Biological Effects and Physics of Solar and Galactic Cosmic Radiation, Part A*. Eds. C. E. Swenberg, G. Homeck and E. G. Stassinopoulos. Plenum Press, New York 1993, pps. 235-268
- 113 F.A. Cucinotta, J.W. Wilson and R. Katz, RADIOSENSITIVITY PARAMETERS FOR LETHAL MUTATIONS IN C. ELEGANS, *Radiation Protection Dosimetry* 52, (1994).
114. R. Katz and M.P.R. Waligorski, ON THE LINEAR EXTRAPOLATION TO LOW DOSES, *Radiation Protection Dosimetry* 52, 197-199 (1994).

115. R. Katz, DOSE, Radiat. Res. 137, 410-413 (1994).
116. R. Katz, REPLY TO D. E. WATT, A. S. ALKAHARAM, M. B. CHILD AND M. S. SALIKIN; DOSE AS A DAMAGE SPECIFIER FOR RADIATION PROTECTION, a comment on DOSE by R. Katz. Radiat. Res. 139, 251-253 (1994)
117. R. Katz, R. Zachariah, F. A. Cucinotta and C. X. Zhang. A SURVEY OF CELLULAR RADIOSENSITIVITY PARAMETERS, Radiat. Res. 140, 356-365 (1994)
118. R. Katz, R. Zachariah, C. X. Zhang, and F. A. Cucinotta, TRACK THEORY IN RADIATION PROTECTION AND THERAPY, "Heavy Ions Research" Sofia Antipolis. France, March 1994. (unpublished)
119. R. Katz, M. N. Varma and C. X. Zhang, RADIAL DOSE DISTRIBUTION: THE FOUNDATION OF TRACK THEORY. India, 1994 (unpublished)
120. F. A. Cucinotta, R. Katz, J. W. Wilson and R. R. Dubey, RADIAL DOSE DISTRIBUTIONS IN THE DELTA RAY THEORY OF TRACK STRUCTURE, in Two Center Effects in Ion Atom Collisions, American Institute of Physics, conference proceedings 362 , 1996. (M.E. Rudd symposium Lincoln NE 1994) Editors T. J. Gay and A. F. Starace, pp. 245-265.
121. C. X. Zhang and R. Katz, THINDOWN IN BIOLOGICAL 1-HIT DETECTORS: E. COLI B/r, AND B_{s1}. Chinese Science Bulletin, 40,1479-1482 (1995).
122. C. X. Zhang and R. Katz, THINDOWN IN RADIOBIOLOGY: V-79 CHINESE HAMSTER CELLS. Acta Scientiarum Naturalium Universitatis Sunyatseni, China, in Chinese, 34, No. 1, 30-34 (Jan 1995).
123. C. X. Zhang and R. Katz, Thindown in Radiobiology: E. Coli B/r, Bs-1, B. Subtilis Spores and V-79 Chinese Hamster Cells, Nuclear Science and Techniques (China) 6, 65-70 (1995).
124. R. Katz and F. A. Cucinotta, Low Dose, Letter to Editor, Health Physics. 68,859 (1995)
125. F. A. Cucinotta, J. W. Wilson, R. Katz, W. Atwell, G. D. Badhwar, and M. R. Shavers, Track Structure and Radiation Transport Model for Space Radiobiology Studies, Adv. Space Research. Adv. Space Res. 18, (12) 183-194 (1996)
126. F. A. Cucinotta, J W. Wilson, M. R. Shavers, and R. Katz. Effects of Track Structure and Cell Inactivation on the Calculation of Heavy Ion Mutation Rates in Mammalian Cells. Int J. Radiat. Biol. 69, 593-600 (1996).
127. R. Katz, F. A Cucinotta, and C.X. Zhang. The Calculation of Radial Dose from Heavy Ions: Predictions of Biological Action Cross Sections. Nucl. Instr. Meth. B. 107, 287-291 (1996)

128. J. W. Wilson, F. A. Cucinotta, M. Kim, J. L. Shinn, and R. Katz. Impact of Biological Models on Radiation Physics Requirements in Space Radiation Protection. *J. Adv. Space Research*. Cospar. to be published.
- 128a. F. A. Cucinotta, H. Nikjoo, J. W. Wilson, R. Katz and D.T. Goodhead, Radial Dose Model of SSB, DSB, Deletions and Comparisons to Monte Carlo Track Structure Simulations, in : D. T. Goodhead, P. O'Neill, H. G. Menzel, eds. *Microdosimetry an Interdisciplinary Approach*, Royal Society of Chemistry, Cambridge, 1997 pp 35-38.
129. F. A. Cucinotta, R. Katz. and J. W. Wilson, RADIAL DISTRIBUTION OF ELECTRON SPECTRA FROM HIGH ENERGY IONS. *Radiation and Environmental Biophysics*, 37, 259-265 (1998).
130. R. Katz and F. A. Cucinotta, TRACK STRUCTURE MODELS; APPLICATION TO RADIOBIOLOGY AND HIGH LET THERAPY. Invited Paper. Gianfranco Grossi, Univ of Naples. 1998 to be published.
131. J. W. Wilson, F.A. Cucinotta, M. Kim, J. L. Shinn and R. Katz, Impact of Biological Models an Radiation Physics Requirements in Space Radiation Protection, (41) F.A. Cucinotta, R. Katz, and J. W. Wilson, Radial Distribution of Electron Spectra from High Energy Ions, *Radiation and Environmental Biophysics*. 37, 259-265 (1998).
132. R. Katz and F. A. Cucinotta, Tracks to Therapy, *Radiation Measurements* 31,379-388,(1999).
133. R. Katz and F. A. Cucinotta, Track Theory Predictions for Single-Hit Cell Survival, *Radiat. Res.* 153, 225-226 (2000).
134. R. Katz and F.A. Cucinotta, Low Fluence, *Advances in Space Research* 31, 1553 (2003)
135. R. Katz, The Parameter Free Track Structure Model of Scholz and Kraft for Heavy Ion Cross Sections, *Radiation Research* 160, 724-728 (2003).

II. ABSTRACTS AND PROCEEDINGS

1. R. Katz and M.R. Lee, RADIOACTIVITY OF Sm 153. *Phys. Rev.* 92, p. 848a (1953).
2. R. Katz, R.G. McFadden, and E. Obi, APPLICATION OF PHASE MICROSCOPY TO THE STUDY OF HEAVY ION TRACKS IN NUCLEAR EMULSIONS. *Bull. Am. Phys. Soc.* 7, p. 430 (1962).
3. R. Katz and J.J. Butts, WIDTH OF THE TRACKS OF HEAVY IONS IN EMULSION. *Bull. Am. Phys. Soc.* 9, P. 153 (1964).
4. R. Katz and J.J. Butts, SIGNATURE OF THE DIRAC MONOPOLE IN EMULSION. *Bull. Am. Phys. Soc.* 9, p. 399 (1964).

5. R. Katz and J.J. Butts, ON THE WIDTH OF HEAVY ION TRACKS IN EMULSION. Proceedings of the Vth Int'l. Conf. on Nuclear Photography, CERN 65-4, Vol. II, IX-48 (1965).
6. E.J. Kobetich, J.J. Butts, and R. Katz. WIDTH OF ION TRACKS IN EMULSION. Bull. Am. Phys. Soc. 10, p. 379 (1965).
7. J.J. Butts and R. Katz, BIOLOGICAL EFFECT OF HEAVY ION IRRADIATION. Bull. Am. Phys. Soc. 10, p. 378 (1965).
8. R. Katz. RANDOMNESS. Bull. Am. Phys. Soc. 11, p. 113 (1966).
9. R. Katz and J.J. Butts, SIMULATED RADIOACTIVITY. Am. J. Phys. 34, p. 720 (1966).
10. R. Katz and J.J. Butts, THEORY OF RELATIVE BIOLOGICAL EFFECTIVENESS FOR HEAVY ION BOMBARDMENT OF DRY ENZYMES AND VIRUSES. Third Int'l Congress of Radiation Research, Cortina d'Ampezzo, Italy (1966).
11. E.J. Kobetich and R. Katz, TRANSVERSE DISTRIBUTION OF IONIZATION ENERGY. Bull. Am. Phys. Soc. 12, p. 27 (1967).
12. E.J. Kobetich, M.R. Query, and R. Katz, MEASUREMENT OF HEAVY ION TRACKS IN EMULSION. Bull. Am. Phys. Soc. 12, p. 27 (1967).
13. R. Katz, E.J. Kobetich and M.R. Query THEORY OF THE WIDTH OF HEAVY ION TRACKS IN EMULSION. Bull. Am. Phys. Soc. 12, p. 27 (1967).
14. J.J. Butts and R. Katz. RADIATION DAMAGE BY HEAVY IONS IN BIOLOGICAL MOLECULES. Bull. Am. Phys. Soc. 12, p. 133 (1967).
15. R. Katz, THEORY OF RBE FOR HEAVY ION BOMBARDMENT OF DRY ENZYMES AND VIRUSES. Radiation Research Society, Abstracts of Papers for the Fifteenth Annual Meeting, 27 (1967).
16. R. Katz, TRACKS OF HEAVY IONS IN NUCLEAR EMULSIONS. Society of Photographic Engineers, Preprints of Paper Summaries 26, Annual Conference (1967). (Invited Paper).
17. E.J. Kobetich and R. Katz, THE ION EXPLOSION SPIKE. Bull, Am. Phys. Soc. 12, p. 689 (1967).
18. R. Katz and E.J. Kobetich, TRACK FORMATION IN DIELECTRICS. Bull. Am. Phys. Soc. 12, p. 689 (1967).
19. R. Katz and E.J. Kobetich, TRACKS OF HEAVY IONS IN EMULSION AND DIELECTRICS. Tenth Int'l Conf. on Cosmic Rays, Paper Tech. 17a (1967).

20. R. Katz and E.J. Kobetich, TRACK FORMATION IN DIELECTRICS. Conf. on Electrical Insulation and Dielectric Phenomena, 1967 Annual Report, Publication 1578, 122, National Academy of Sciences (1968).
21. E.J. Kobetich and R. Katz, ENERGY DEPOSITION BY ELECTRON BEAMS AND DELTA RAYS. Bull. Am. Phys. Soc. 13, p. 75 (1968).
22. R. Katz and E.J. Kobetich, RESPONSE OF NAI(Tl) TO ENERGETIC HEAVY IONS. Bull. Am. Phys. Soc. 13, p. 75 (1968).
23. R. Katz and E.J. Kobetich. FORMATION OF ETCHABLE TRACKS IN DIELECTRICS. Bull. Am. Phys. Soc. 13, p. 130 (1968).
24. E.J. Kobetich and R. Katz, WIDTH OF HEAVY ION TRACKS IN EMULSION. Bull. Am. Phys. Soc. 13, p. 130 (1968).
25. E.J. Kobetich and R. Katz, ENERGY DISSIPATION OF ELECTRON BEAMS AND THE SPATIAL DISTRIBUTION OF IONIZATION ENERGY. Preprints of the 16th Annual Meeting, Radiation Research Society (1968).
26. R. Katz and E.J. Kobetich. HEAVY ION INTERACTIONS IN MATTER. Preprints of 16th Annual Meeting, Radiation Research Society (1968).
27. R. Katz and A. Poveda, COSMIC RAY DAMAGE TO LUNAR SOIL. Bull. Am. Phys. Soc. 13, p. 1399 (1968).
28. R. Katz and E.J. Kobetich, PARTICLE TRACKS IN EMULSION AND RELATED PHENOMENA. Bull. Am. Phys. Soc. 14, p. 598 (1969). (Invited Paper, Washington Meeting of APS, May 1, 1969, published in "Penetration of Charged Particles in Matter," A symposium NAS-NRC Report (1970).
29. R. Katz and E.J. Kobetich, PARTICLE TRACKS IN CONDENSED MATTER, CHARGED PARTICLE TRACKS OF SOLIDS AND LIQUIDS. Second L.H. Gray Conference, Cambridge, England, Conference Series #8, The Institute of Physics, London, England (1969).
30. R. Katz and E.J. Kobetich, RESPONSE OF NUCLEAR EMULSION TO ELECTRON BEAMS. Bull. Am. Phys. Soc 15, p. 600 (1970).
31. R. Katz, RANDOMNESS. Proc. Second Symposium on Microdosimetry, Stresa, Italy, Euratom (1969).
32. R. Katz. PARTICLE TRACKS IN EMULSION. Proc. Second Symposium on Microdosimetry, Stresa, Italy, Euratom (1969).
33. R. Katz, TRACK EFFECTS. The Delta Ray Theory, Abstract Fourth International Congress of Radiation Research, Evian, France (1970).

34. R. Katz. UNIFIED TRACK THEORY. Proc. Seventh International Colloquium on Corpuscular Photography and Visual Track Detectors, Barcelona, Spain (1970). Invited paper.
35. R. Katz, TRACK THEORY AND RADIATION QUALITY. Symposium on the Biophysical Aspects of Radiation Quality, International Atomic Energy Agency, Lucas Heights, Australia (1971).
36. R. Katz, S.C. Sharma, and M. Homayoonfar. APPLICATION OF RBE THEORY TO RADIATION CHEMISTRY. Third Symposium of Radiation Chemistry, Tihany, Hungary (1971).
37. R. Katz, B. Ackerson, M. Homayoonfar, and S.C. Sharma, INACTIVATION OF CELLS BY HEAVY ION BOMBARDMENT. Radiation Research Society, Boston (1971).
38. R. Katz, M. Homayoonfar, and S.C. Sharma, RBE, LET, ETC. Radiation Research Society, Boston (1971).
39. S.C. Sharma, M. Homayoonfar, and R. Katz, RESPONSE OF HUMAN KIDNEY CELLS TO 14 MEV NEUTRONS. Radiation Research Society, Boston (1971).
40. R. Katz, S.C. Sharma and M. Homayoonfar, LET EFFECTS IN 1-HIT DETECTORS. Third Symposium on Microdosimetry, Stresa, Italy (1971).
41. R. Katz, S.C. Sharma, and M. Homayoonfar. CELLULAR INACTIVATION BY HEAVY IONS, NEUTRONS, AND PIONS. Third Symposium on Microdosimetry, Stresa, Italy (1971).
42. S.C. Sharma, R. Katz. and M. Homayoonfar, RESPONSE OF CELLS TO ENERGETIC IONS. Bull. Am. Phys. Soc. 17. p. 329 (1972).
43. R. Katz, S.C. Sharma, and M. Homayoonfar, RESPONSE OF CELLS TO A MIXED RADIATION ENVIRONMENT. Bull. Am. Phys. Soc., p. 329 (1972).
44. R. Katz, TRACK STRUCTURE IN DOSIMETRY. Symposium of Dosimetry Techniques Applied to Agriculture, Industry, Biology, and Medicine, Vienna (1972) IAEA. Invited Paper.
45. R. Katz and S.C. Sharma, RESPONSE OF DETECTORS TO A MIXED RADIATION ENVIRONMENT. International Symposium on Neutron Dosimetry in Biology and Medicine, Euratom, Luxemburg (March 1972).
46. R. Katz, PARTICLE DETECTION AND CELLULAR INACTIVATION, A UNIFIED THEORY OF TRACK STRUCTURE. Regional Conference on Radiation Protection, Jerusalem (1973). Invited Paper.

47. R. Katz, DOSIMETRIC IMPLICATIONS OF THE 1-HIT DETECTOR. Regional Conference on Radiation Protection, Jerusalem (1973).
48. R. KATZ AND S.C. Sharma. 1-HIT DETECTORS. Radiation Research 55, p. 523 (1973).
49. R. Katz and S.C. Sharma, CELL SURVIVAL AFTER HEAVY ION IRRADIATION, Radiation Research 55., p. 523 (1973). Nebraska Academy of Science, Lincoln (1973).
50. S.C. Sharma and R. Katz, CELL SURVIVAL IN A MIXED RADIATION ENVIRONMENT. Radiation Research 55, p. 523 (1973). Nebraska Academy of Science, Lincoln (1973).
51. R. Katz, TRACK STRUCTURE. 13th International Cosmic Ray Conference, Denver (August 1973).
52. R. Katz and S.C. Sharma. RADIOBIOLOGICAL MODELING FOR HIGH LET THERAPY. 4th Symposium on Microdosimetry, Verbania, Italy (Sept. 1973).
53. S.C. Sharma and R. Katz, THE 1-HIT DETECTOR IN THE MEASUREMENT OF RADIATION QUALITY. 4th Symposium on Microdosimetry, Verbania, Italy (Sept. 1973).
54. R. Katz and S.C. Sharma, THE TWO COMPONENT MODEL IN THE THEORY OF RBE. 4th Symposium on Microdosimetry, Verbania, Italy (Sept. 1973).
55. R. Katz, PARTICLE DETECTION AND CELLULAR INACTIVATION. Round Table Conference on Nouveau Aspects du Passage des Particules dans la Matiere, Fontenay aux Roses. (Oct. 4-6, 1973). Invited Paper.
56. R. Katz, BEVALAC EXPERIMENTS SUGGESTED BY TRACK THEORY. Round Table Conference on Heavy Ion Research in Radiological Physics and Radiation Chemistry with BEVALAC Ions, Berkeley (Nov. 1-2, 1973). Invited Paper.
57. R. Katz and S.C. Sharma, RBE AND OER AFTER NEUTRON IRRADIATION. 5th International Congress of Radiation Research, Seattle, July 1974.
58. S.C. Sharma and R. Katz, THE 2-COMPONENT MODEL IN THE THEORY RBE. 5th International Congress of Radiation Research, Seattle, July 1974.
59. R. Katz and S.C. Sharma, THE INITIAL SLOPE OF THE SURVIVAL CURVE AFTER GAMMA-RAY IRRADIATION IN THE THEORY OF RBE. 6th L.H. Gray Conference, London, September 1974.
60. R. Katz and S.C. Sharma, RBE-DOSE RELATIONS FOR NEUTRONS AND PIONS. 2nd Symposium on Neutron Dosimetry in Biology and Medicine, Euratom, Neuherberg-Munich, October 1974.

61. S.C. Sharma and R. Katz, TRACK THEORY APPLIED TO PHYSICS, CHEMICAL, AND BIOLOGICAL SYSTEMS. Int. Symp. on Radiat. Phys., Calcutta, Dec. 1974. In Radiation Physics, Special Publication of NBS #461, 188-192 (1972). Eds. A.M. Ghose, D.V. Gopinath, J.H. Hubbell, and S.C. Roy.
62. S.C. Sharma and R. Katz, THEORY OF RBE. First Asian Regional Congress on Radiation Protection. Bombay, 1974.
63. R. Katz and F.E. Pinkerton, PARTICLE TRACKS IN A SPECIAL NUCLEAR EMULSION. Second Symposium on Neutron Dosimetry in Biology and Medicine, Euratom, Neuherberg-Munich, October 1974.
64. R. Katz and F.E. Pinkerton, ILFORD K-2 EMULSION REVISITED. Bull. American Physical Society 19, 1108 (1974).
65. S.C. Sharma and R. Katz, SYSTEMATIC EVALUATION OF CELLULAR RADIOSENSITIVITY PARAMETERS. Radiation Research Society, Miami Beach (1975).
66. R. Katz and F.E. Pinkerton, PHOTOGRAPHIC EMULSION DOSIMETRY. Radiation Research Society, Miami Beach (1975).
67. R. Katz, TRACK STRUCTURE. Bull. American Astronomical Society 6, 214 (1974).
68. R. Katz and F.E. Pinkerton, RESPONSE OF NUCLEAR EMULSIONS TO IONIZING RADIATIONS. Fifth Symposium on Microdosimetry, Verbania-Pallanza Italy. September 1975.
69. R.A. Roth, S.C. Sharma, and R. Katz, SYSTEMATIC EVALUATION OF CELLULAR RADIOSENSITIVITY PARAMETERS. Fifth Symposium on Microdosimetry, Verbania-Pallanza, Italy, September 1975.
70. R. Katz, LOW LEVEL EFFECTS IN RELATION TO TRACK STRUCTURE THEORY. Symposium on Biological Effects of Low Level Radiation, Chicago, 3-7 November 1975.
71. R. Katz and F. Bermann. UN DOSIMETRE A LARGE GAMME, PEU SENSIBLE A LA QUALITE DU RAYONNEMENT: L'Alanine, VIII Congres International De La Societe Francaise De Radio Protection, Saclay du 23 and 26 March 1976.
72. L. Larsson, F.E. Pinkerton, R. Katz and E.V. Benton, PARTICLE TRACKS IN SUPRALINEAR NUCLEAR RESEARCH EMULSIONS. Radiation Res. Society. San Francisco, June 1976.
73. R. Katz, L. Larsson, F.E. Pinkerton, SUPRALINEAR RESPONSE OF NUCLEAR RESEARCH EMULSIONS. Radiation Res. Society, San Francisco, June 1976.

74. R. Katz, TRACK STRUCTURE THEORY IN RADIOBIOLOGY AND RADIATION DETECTION. 9th Int. Conf. on Solid State Nuclear Track Detectors, Neuherberg, Germany, 30 September 1976 (Invited Paper).
75. L. Larsson, F.E. Pinkerton, R. Katz, and E.V. Benton, PARTICLE TRACKS IN SUPRALINEAR NUCLEAR RESEARCH EMULSIONS. 9th Int. Conf. on Solid State Nuclear Track Detectors, Neuherberg, Germany, 30 September 1976.
76. L. Larsson, F.E. Pinkerton, R. Katz, SUPRALINEARITY OF NUCLEAR RESEARCH EMULSIONS. 9th Int. Conf. on Solid State Nuclear Track Detectors, Neuherberg, Germany, 30 September 1976.
77. H.A. Wright, R.N. Hamm, J.E. Turner, R.H. Ritchie, and R. Katz, SLOWING DOWN SPECTRA FROM ELECTRONS IN LIQUID WATER. Radiat. Res. Soc., Puerto Rico (1977).
78. L. Larsson, R.A. Roth, and R. Katz. SUPRALINEAR NUCLEAR RESEARCH EMULSIONS. Radiat. Res. Soc., Puerto Rico (1977).
79. L. Larsson, R.A. Roth, and R. Katz, SUPRALINEAR DETECTORS IN NEUTRON DOSIMETRY. Third Symposium on Neutron Dosimetry in Biology and Medicine, Neuherberg/Munchen (1977).
80. L. Larsson, R.A. Roth, and R. Katz, SUPRALINEAR DETECTORS FOR RADIOTHERAPEUTIC DOSIMETRY. Nordisk Forening for Klinisk Fysik, Goteborg, Sweden (1977).
81. R. Katz and E.C. Pennington, RADIOBIOLOGICAL ASPECTS OF NUCLEAR RESEARCH EMULSIONS. Radiat. Res. Soc., Toronto (1978).
82. R.N. Hamm, R.H. Ritchie, H.A. Wright, J.E. Turner, and R. Katz, CALCULATIONS OF ELECTRON AND PHOTON TRANSPORT IN LIQUID WATER. Radiat. Res. Soc., Toronto (1978).
83. R. Katz, HIGH LET CONSTRAINTS ON LOW LET SURVIVAL. Sixth Symposium on Microdosimetry, Brussels (1978).
84. R. Katz, RAPPORTEUR, POSTER SESSION I - PARTICLE TRACK STRUCTURE AND SLOWING DOWN. Sixth Symposium on Microdosimetry, Brussels (1978).
85. J.E. Turner, R.N. Hamm, H.A. Wright, R.H. Ritchie, and R. Katz, CALCULATED ELECTRON SLOWING DOWN SPECTRA FOR LIQUID WATER IRRADIATED BY ELECTRONS, X- AND GAMMA-RAYS - IMPLICATIONS FOR PHOTON RBE. Sixth Symposium on Microdosimetry, Brussels (1978).

86. R. Katz and E.C. Pennington, RADIOBIOLOGICAL ASPECTS OF SUPRALINEAR PHOTOGRAPHIC EMULSIONS. Sixth Symposium on Microdosimetry, Brussels (1978).
87. R.A. Roth and R. Katz, HEAVY ION BEAM MODEL FOR RADIOBIOLOGY. Sixth Symposium on Microdosimetry, Brussels (1978).
88. R. Katz and E.C. Pennington, RESPONSE OF PHOTOGRAPHIC EMULSIONS TO LOW ENERGY X-RAYS. International Congress of Photographic Science, Rochester (1978).
89. R.A. Roth and R. Katz. HEAVY ION BEAM MODEL FOR RADIOBIOLOGY, 20th Annual Scientific Meeting of the Am. Soc. for Therapeutic Radiologists, Los Angeles (1978).
90. R. Katz, RADIOBIOLOGICAL ANALOGUES IN NUCLEAR RESEARCH EMULSIONS, Sixth International Congress of Radiation Research, Tokyo (1979).
91. R. Katz. A. S-F. Li, Y-L Chang, R.L. Rosman, and E.V. Benton, TRACKS OF ARGON IONS IN ILFORD K-SERIES NUCLEAR TRACK DETECTORS. Tenth International Conference on Solid State Nuclear Track Detectors, Lyon France, (1980). pp 101-109 Pergoman Press, NY, Eds. H. Francois, J.P. Massue, R. Schmitt, N. Kurtz, M. Monnin, S.A. Durrani.
92. R. Katz, R.L. Rosman, A. S-F. Li and Y-L. Chang, SUPRALINEARITY AND LET DISCRIMINATION IN RADIATION MEASUREMENTS, Tenth International Conference on Solid State Nuclear Track Detectors, Lyon, France (1979).
93. R. Katz, TRACK MEASUREMENTS VS. TRACK THEORY IN EMULSION, Tenth International Conference on Solid State Nuclear Track Detectors, Lyon France (1979).
94. M.P.R. Waligorski and R. Katz, SUPRALINEARITY OF PEAK 5 AND PEAK 6 IN TLD-700, SIXTH International Conference on Solid State Dosimetry, Toulouse, France (1980).
95. R. Katz and R.A. Roth, THEORETICAL PREDICTION OF BEVALAC RADIOBIOLOGY, Radiation Research Society, New Orleans (1980).
96. R. Katz, PARTICLE TRACKS IN EMULSION, A MESSAGE FOR MICRODOSIMETRY, Seventh Symposium on Microdosimetry, Oxford, England (1980).
97. R. Katz, TWO CALCULATIONS FROM TRACK THEORY, Seventh Symposium on Microdosimetry, Oxford, England (1980).
98. R.A. Roth and R. Katz, PREDICTIONS OF BEVALAC RADIOBIOLOGY. Seventh Symposium on Microdosimetry, Oxford, England (1980).

99. J.W. Hansen, M. Jensen, and R. Katz, THE RADIOCHROMIC DYE FILM DOSIMETER AS A TEST OF PARTICLE TRACK THEORY, Seventh Symposium on Microdosimetry, Oxford, England (1980).
100. R. Katz, MICRODOSIMETRIC PARAMETERS (2), Seventh Symposium on Microdosimetry, Oxford, England (1980).
101. R. Katz, BIOLOGICAL EFFECTS OF LOW DOSES OF IONIZING RADIATIONS; PARTICLE TRACKS IN RADIOBIOLOGY. Radiation Research Society, Minneapolis (1981).
102. M.P.R. Waligorski, R. Katz, E. Byrski, R. Sarna, M. Pasenkiewicz-Gierula and J. Knapczyk, MIXED FIELD DOSIMETRY IN A CYCLOTRON PRODUCED FAST NEUTRON RADIOTHERAPY BEAM, WITH SPECIAL EMPHASIS ON A NEWLY DEVELOPED ALANINE SYSTEM. Fourth Symposium on Neutron Dosimetry. Munich (1981).
103. W. Hofmann and R. Katz, TRACK STRUCTURE INTERPRETATION OF CELL TRANSFORMATION AND CARCINOGENESIS, Radiation Research Society, Salt Lake City (1982).
104. R. Katz, TRACK STRUCTURE INTERPRETATION OF HEAVY ION LITHOGRAPHY, Radiation Research Society, Salt Lake City (1982).
105. R. Katz and W. Hofmann, TRACK STRUCTURE INTERPRETATION OF EPIDEMIOLOGICAL DATA FOR CANCER INDUCTION. Health Physics Society, Las Vegas(1982).
106. R. Katz, THE DELTA RAY THEORY OF TRACK STRUCTURE: RADIATION DOSIMETRY AND BIOLOGICAL RESPONSE, Radiological Physics Contractors Meeting (DOE) Gettysburg, PA (1982).
107. R. Katz, THE STRUCTURE OF PARTICLE TRACKS IN PHYSICAL AND BIOLOGICAL SYSTEMS, AAPT, Ashland, Oregon (1982).
108. R. Katz, TRACK FORMATION IN PLASTICS, Fifth Meeting of Pacific Northwest Working Group on Nuclear Track Registration, Hanford, Washington (1982).
109. R. Katz. TRACK STRUCTURE INTERPRETATION OF HEAVY ION LITHOGRAPHY IN RELATION TO RADIOBIOLOGY AND TO THE STRUCTURE OF ETCHABLE TRACKS IN SOLID STATE NUCLEAR TRACK DETECTORS, 8th Symposium in Microdosimetry, Julich, Germany (1982).
110. W. Hofmann and R. Katz, TRACK STRUCTURE ANALYSIS OF RADIATION CARCINOGENESIS AT LOW DOSES, 8th Symposium in Microdosimetry, Julich, Germany (1982).

111. R. Katz, IS THE FRICKE DOSIMETER A 1-HIT DETECTOR, Workshop on the Interface Between Radiation Chemistry and Radiation Physics, Argonne National Laboratory, Report ANL-82-88, pp. 144-142, March 1983.
112. R. Katz, DETECTOR MODELS, Informal Workshop on Ion Induced Tracks in Matter, Oak Ridge National Laboratory, (January, 1983). Summary Report by Stanley Stern, New York University, Department of Physics, August 1984.
113. W. Hofmann and R. Katz, LET WINDOW FOR MUTATION INDUCTION, Radiation Research Society San Antonio (1983).
114. R. Katz, TRACK FORMATION IN PLASTICS, Radiation Research Society, San Antonio (1983).
115. R. Katz, THE STRUCTURE OF HEAVY PARTICLE TRACKS, (Invited paper) XI Nordic Meeting on Clinical Physics, Copenhagen 1983.
116. R. Katz and W. Hofmann, THE PREDICTION OF DOSE-EFFECT RELATIONSHIPS, COMMENTS ON THE DECOMPOSITION OF A RADIATION FIELD, Seventh Int. Conf. on Radiation Research, Amsterdam 1983.
117. W. Hofmann and R. Katz, PARTICLE FLUENCE AND RADIATION CARCINOGENESIS, Seventh Int. Conf. on Radiation Research, Amsterdam 1983.
118. W. Hofmann and R. Katz, SOME THEORETICAL CONSIDERATIONS IN REGARD TO THE EFFECTS OF LOW DOSES OF IONIZING RADIATIONS MOTIVATED BY TRACK THEORY. IAEA-SM-266. Symposium on the Biological Effects of Low Level Radiations, Venice 1983.
119. R. Katz. FORMATION OF ETCHABLE TRACKS IN PLASTICS. (Invited Paper), 12th Int. Conference on Solid State Nuclear Track Detectors, Acapulco 1983. Nuclear, Tracks and Radiation Measures 8, 1-8 (1984).
120. R. Katz, THIN DOWN IN RADIOBIOLOGY, Radiat. Res. Soc., Orlando 1984.
121. W. Hofmann, Zhang Chunxiang, R. Katz, LUNG CANCER RISK FROM LOW DOSES OF ALPHA PARTICLES, Radiat. Res. Soc., Orlando 1984.
122. R. Katz, TRACK STRUCTURE AND DOSE; ALTERNATE CONCEPTUAL BASES FOR NUCLEAR THERAPY, IAEA Advisory Group Meeting on Nuclear and Atomic Data for Radiotherapy and Radiobiology, Sept. 1985.
123. Zhang Chunxiang and R. Katz, RADIAL DOSE DISTRIBUTION, Radiation Research Society. Los Angeles, 1985
124. Zhang Chunxiang, D.E. Dunn and R. Katz, CROSS SECTIONS FOR DRY ENZYME AND VIRUS INACTIVATION, Radiation Research Society, Los Angeles, 1985.

125. R. Katz, D.E. Dunn and G.L. Sinclair. TARGET SIZE IN RADIOBIOLOGY, Radiation Research Society, Los Angeles, 1985.
126. R. Katz, THINDOWN IN RADIOBIOLOGY, 13th International Conference on Solid State Nuclear Track Detectors, Rome 1985.
127. M.P.R. Waligorski. G.L. Sinclair and R. Katz, NEOPLASTIC CELL TRANSFORMATIONS BY ENERGETIC HEAVY IONS AND FUSION NEUTRONS, Radiation Research Society, Las Vegas 1986.
128. M.P.R. Waligorski, R.N. Hamm, A. Hosseini, G.L. Sinclair and R. Katz, A CORRECTED FORMULA FOR THE DISTRIBUTION OF RADIAL DOSE AROUND THE PATH OF A HEAVY ION, Radiation Research Society, Las Vegas 1986.
129. R. Katz, BIOLOGICAL EFFECTS OF HEAVY IONS FROM THE STANDPOINT OF TARGET THEORY, Invited Paper COSPAR, Toulouse, France 1986.
130. R. Katz. TRACK STRUCTURE AVERAGES AND FLUCTUATIONS, at 10th Werner Brandt Workshop on Penetration Phenomena, Alicante, Spain, January 1987.
131. R. Katz, G.L. Sinclair, and M.P.R. Waligorski, THE FRICKE DOSIMETER AS A 1-HIT DETECTOR, Radiation Research Society Atlanta, February 1987.
132. M.P.R. Waligorski and R. Katz, THE 1-HIT DETECTOR AS A TEST OF THE RADIAL DOSE DISTRIBUTION, 8th International Congress on Radiation Research, Edinburgh, July 1987.
133. R. Katz and Guo-Rong Huang, CHROMOSOME ABERRATIONS BY ENERGETIC HEAVY IONS, 8th International Congress of Radiation Research, Edinburgh, July 1987.
134. W. Hofmann, R. Katz, and C.X. Zhang, RISK ASSESSMENT OF LUNG CANCER AT LOW DOSES OF ALPHA PARTICLES, Proceedings of Workshop on Occupational and Environmental Radiation Protection. Hong Kong 7-9 December 1987.
135. R. Katz, Kim Sum Loh, and Guo-Rong Huang, AN APPROXIMATION TO THE RADIAL DISTRIBUTION OF DOSE IN ARBITRARY MEDIA, Radiation Research Society, Philadelphia 1988.
136. R. Katz and Guo-Rong Huang. TRACK CORE EFFECTS ACCORDING TO TRACK THEORY, Radiation Research Society, Philadelphia 1988.
137. R. Katz, TRACK CORE EFFECTS AND RADIAL DOSE DISTRIBUTION, Werner Brandt Conference, Oak Ridge 1988.

138. R. Katz, PHYSICAL AND BIOLOGICAL DATA USED IN TRACK THEORY, DOE/CEC Workshop in Critical Evaluation of Radiobiological Data used in Biophysical Modeling, Oak Ridge 1988.
139. M.P.R. Waligorski and R. Katz, RESPONSE OF THE ALANINE DOSIMETER AFTER HEAVY ION AND FAST NEUTRON IRRADIATIONS, Second International Symposium on ESR Dosimetry, Munich 1988.
140. R. Katz, PARTICLE TRACKS IN DIVERSE MEDIA, 10th Conference on the Application of Accelerators in Research and Industry, Denton, Texas 1988. (invited paper).
141. R. Katz, MICRODOSIMETRY, International Course in Medical Physics, Bariloche, Argentina 1988. (invited paper).
142. R. Katz and Guo-Rong Huang, RADIOSENSITIVITY PARAMETERS FOR A) CELL SURVIVAL IN TRADESCANTIA AND B) CHROMOSOME ABERRATIONS IN CHINESE HAMSTER CELLS, Radiation Research Society, Seattle 1989.
143. R. Katz, DETECTOR RESPONSE TO SWIFT HEAVY IONS, First International Symposium on Swift Heavy Ions in Matter, Caen, France, May 1989.
144. R. Katz, TRACK STRUCTURE: PERSPECTIVES, PROGRESS, PROBLEMS, 12 Werner Brandt Workshop on Charged Particle Penetration Phenomena, San Sebastian, Spain Sept. 1989.
145. R. Katz, TRACK PHYSICS MODEL OF RADIATION ACTION. Conference on Radiation Chemistry of Polymers, March 1989, Tokyo.
146. R. Katz and Guo-Rong Huang, RADIOSENSITIVITY PARAMETERS FOR CELL SURVIVAL IN TRADESCANTIA AND FOR CHROMOSOME ABERRATIONS IN CHINESE HAMSTER CELLS, Symposium on Microdosimetry, Rome 21-26 May 1989
147. R. Katz and S. Wesely, TRACK THEORY CALCULATION OF CROSS SECTIONS FOR SINGLE AND DOUBLE STRAND BREAKS IN SV-40 VIRUS IN E₀ BUFFER AS 1-HIT DETECTORS, Radiation Research Society, New Orleans, April 1990.
148. F.A. Cucinotta, J.W. Wilson, L.W. Townsend, J.L. Shinn and R. Katz, LET ANALYSES OF BIOLOGICAL DAMAGE DURING SOLAR PARTICLE EVENTS, 21st International Conference on Environmental Systems, July 15-18, 1991 San Francisco.
149. R. Katz and R. Zachariah, E. COLI B MODELED AS A 1-HIT DETECTOR, International Congress of Radiation Research, Toronto 1991.

150. R. Katz, TRACK PHYSICS MODEL OF RADIATION EFFECTS, RADECS 91, First European Conference on High LET Radiation and its effects on devices and systems. Montpellier, France, 1991).
151. R. Katz, D. Ngo, F.A. Cucinotta and J.W. Wilson, CELLULAR TRACK MODEL FOR HEAVY ION BEAM STUDIES, Radiation Research Society, Salt Lake City (1992).
152. R. Katz. TRACK THEORY: A BASIS FOR EXTRAPOLATIONS TO LOW DOSES AND MIXED RADIATIONS FROM HIGH DOSE MEASUREMENTS WITH GAMMA RAYS AND HZE PARTICLES, in Biophysical Modeling of Radiation Effects, Eds. K.H. Chadwick, G. Moschini and M.N. Varma, Adam Hilger, Bristol 1992, pp. 137-144.
153. R. Katz and M.P.R. Waligorski, ON THE LINEAR EXTRAPOLATION TO LOW DOSES, 11th Symposium on Microdosimetry, Gatlinburg, TN 1992. Also, Radiation Research Society, Dallas, March 1993.
154. F.A. Cucinotta, J.W. Wilson and R. Katz, RADIO SENSITIVITY PARAMETERS FOR LETHAL MUTATIONS IN C. ELEGANS. Symposium on Microdosimetry, Gatlinburg, TN 1992.
155. R. Katz, D. Ngo, F.A. Cucinotta and J.W. Wilson, CELLULAR TRACK MODEL FOR HEAVY ION BEAM STUDIES, Radiation Research Society, Salt Lake City, March 1992.
156. R. Katz and M. P. R. Waligorski, ON THE LINEAR EXTRAPOLATION TO LOW DOSES. Radiat. Res. Soc. Dallas, March 1993.
- 156a. R. Katz, F.A. Cucinotta, J.W. Wilson, J. L. Shinn, and Due M. Ngo, A Model of Cell Damage in Space Flight, pp.235-268, in Biological Effects and Physics of Solar and Galactic Cosmic Radiation, Part A, Eds. C.E. Swenberg, G. Homeck and E.G. Stassinopoulos, Plenum Press, New York (1993).
157. R. Katz. DOSE VS. FLUENCE, Radiat. Res. Society, Nashville, May 1994.
158. C. X. Zhang and R. Katz, THINDOWN IN RADIOBIOLOGY. Radiat. Res. Soc. Nashville, May 1994.
159. R. Katz, R. Zachariah, F. A. Cucinotta and C. X. Zhang, RADIO SENSITIVITY PARAMETERS FOR CELL INJURY, Radiat. Res. Society, Nashville, May 1994.
160. R. Katz, Invited Lecture, Prof. Guy Lemaire, CEA, Bruyeres le Chatel, France, September 1994.
161. R. Katz and F. A. Cucinotta, Target Molecular Weight, Energy Absorbed VS. Cross Section. Radiation Research Society, San Jose, April 1995

162. F. A. Cucinotta, J. W. Wilson and R. Katz, Biological Effectiveness of Medium energy Protons Along the Bragg Ionization Curve. Radiation Research Society, San Jose, April 1995.
163. R. Katz, F. A. Cucinotta and Chunxiang Zhang, The Calculation of Radial Dose from Heavy Ions: Effects on the Prediction of Biological Action Cross Sections. Sixth Annual Space Radiation Health Investigators' Workshop. Brookhaven, May 1995.
164. R. Katz, Heavy Ion Track Structure in Radiobiology and Dosimetry, Lecture, DOE/EML, New York City.
165. Same title as 163. Conference on Swift Heavy Ions in Matter, Caen, France, May 1995
166. R. Katz, Lectures on Track Theory, University of Franche Comte, Besancon, France, May 1995
167. R. Katz, Lectures on Track Theory, DLR Institute of Aerospace Medicine, Cologne, Germany, 1995
168. R. Katz and F. A. Cucinotta, Track Theory Update. 10th International Congress of Radiation Research, Wurzburg
169. R. Katz, Track Theories in Radiobiology, Fifth Workshop on Heavy Charged Particles, G.S.I Report 95-10 Darmstadt August 1995 see extended abstract.
170. F.A. Cucinotta, J.W. Wilson and R. Katz, Calculations of Action Cross Sections for Inactivation and Mutation, Fifth Workshop on Heavy Charged Particles, G.S.I. Report 95-10 Darmstadt August 1995
171. R. Katz, Radiobiology and Track Structure, Invited Paper, XIV ISIAC, Seattle, 1995
172. R. Katz, Lectures on Track Theory University of Franch Comte, Besancon, France 1996
173. J. W. Wilson, F. A. Cucinotta, M. Kim, J. L. Shinn and R. Katz, Impact of Biological Models on Radiation Physics Requirements in Space Radiation Protection, Space Radiation Workshop 1996. also, COSPAR
174. F. A. Cucinotta, J. W. Wilson, R. Katz, H. Nikjoo and D. T. Goodhead, Radial Dose Model of SSB, DSB, and Deletions and Comparisons to Monte-Carlo Track Structure Calculations, 12th Symposium on Microdosimetry, Oxford U.K. 1996
175. R. Katz, Gamma-Kill, Ion-Kill; Core-Penumbra Confusion, 12th Symposium on Microdosimetry, Oxford 1996
176. P. Meyer, J.E. Groetz, R. Katz, M. Fromm, and A. Chambaudet, Simulation of a Microdosimetry Problem: Behavior of a Pseudorandom Series at Low Probability. 12 Symposium on Microdosimetry, Oxford 1996.

- 176a. P. Meyer, J.E. Groetz, R. Katz, M. Fromm, and A. Chambaudet, Simulation of a Microdosimetry Problem: Behavior of a Pseudorandom Series at Low Probability, pp. 282-285, in *Microdosimetry, An Interdisciplinary Approach*, Eds. D. T. Goodhead, P. O'Neill and H.G. Menzel, The Royal Society of Chemistry, Cambridge, (1997).
177. R. Katz, F.A. Cucinotta and J. W. Wilson, Calculation of the Microdosimetric Quantity, Mean Specific Energy Squared Z^2 as a function of Radial Distance from Heavy Ions. NASA Workshop, Brookhaven April 1997.
178. R. Katz, *Track (Katz) Theory: Predictions and Innovations*. Radiation Research Society, Providence May 1997.
179. R. Katz and F. A. Cucinotta, Estimates of Microbeam Modulated Cellular Effects. Third International Workshop: Microbeam Probes of Radiation Response, Columbia University, New York May 1997.
180. R. Katz and F.A. Cucinotta, Treatment Planning for High LET Therapy. Radiat. Res. Society. Louisville KY April 1998
181. R. Katz and F.A. Cucinotta, APPLICATIONS OF TRACK THEORY FOR STUDY OF UNIQUE EFFECTS OF HEAVY IONS IN THERAPY AND CNS DAMAGE. 9th Annual Investigators Workshop in Space Radiation Research, Loma Linda, June 1998
182. R. Katz and F.A. Cucinotta, IMPLICATIONS OF TRACK STRUCTURE FOR HIGH LET DOSIMETRY. 12 International Conference on Solid State Dosimetry. Burgos, Spain July 5-10, 1998
183. R. Katz and F.A. Cucinotta, TRACKS TO THERAPY 19th International Conference on Nuclear Tracks in Solids. Besancon, France Aug 31-Sept 4, 1998
184. R. Katz and F.A. Cucinotta. PREDICTIONS AND CONCEPTUAL INNOVATIONS IN RADIOBIOLOGY, RADIATION PROTECTION AND ONCOLOGY FROM TRACK THEORY. L.H. Gray Conference on Track Physics.
185. R. Barillon, M. Fromm, A. Chambaudet, R. Katz, J.P. Stoquert, and A. Pape, Bond Scission Cross Sections for α Particles in Cellulose Nitrate (LR115), *Radiation Measurements* 31, 71-75 (1999).
186. R. Barillon, M. Fromm, R. Katz and A. Chambaudet, Chemical Bonds Broken in Latent Tracks of Light Ions in Plastic Track Detectors. *Radiation Protection Dosimetry* 9, 359-362 (2002).

III. BOOKS, CHAPTERS, NASA REPORTS

1. PHYSICS, Henry Semat and Robert Katz, Holt, Rinehart, and Winston, New York 1958.
2. AN INTRODUCTION TO THE SPECIAL THEORY OF RELATIVITY, Robert Katz, Van Nostrand and Momentum Book, Princeton, 1964. 123 pages.
3. THE STRUCTURE OF PARTICLE TRACKS. R. Katz, S.C. Sharma, and M. Homayoonfar, in Topics in Radiation Dosimetry, Supplement 1, F.H. Attix ed.. Academic Press, New York 1972.
4. Calculation of Heavy Ion Inactivation and Mutation Rates in Radial Dose Model of Track Structure. NASA Technical Paper 3630, July 1977. Francis A. Cucinotta, John W. Wilson, Mark R. Shavers and Robert Katz.
5. RADIOBIOLOGICAL MODELING BASED ON TRACK STRUCTURE, R. Katz, in Quantitative Mathematical Models in Radiation Biology J. Keefer, Ed., Springer Verlag, Berlin 1988.
6. F.A. Cucinotta, W. Atwell, M.J. Golightly, A.C. Hardy, J.W. Wilson, L.W. Townsend, J.L. Shinn, J.E. Nealy and R. Katz, PREDICTION OF CELL DAMAGE RATES FOR LIFESAT MISSIONS, NASA T.M. #102170 (1990).
7. F.A. Cucinotta, R. Katz, J.W. Wilson, L.W. Townsend, J.E. Nealy and J.. Shinn, CELLULAR TRACK MODEL OF BIOLOGICAL DAMAGE TO MAMMALIAN CELL CULTURES FROM GALACTIC COSMIC RAYS. NASA Technical Paper 3055 (1991)
8. F.A. Cucinotta, W. Atwell, M. Weyland, A.C. Hardy, J.W. Wilson, L.W. Townsend, J.L. Shinn, and R. Katz. RADIATION RISK PREDICTIONS FOR SPACE STATION FREEDOM ORBITS. NASA Technical Paper 3098, June 1991.
9. R. Katz and M.L. Varma, RADIAL DISTRIBUTION OF DOSE, in "Physical and Chemical Mechanisms in Molecular Radiation Biology", edited by W.A. Glass and M.N. Varma, Plenum Press, New York (1991).
10. R. Katz, F.A. Cucinotta, J.W. Wilson and Due M. Ngo, TRACK STRUCTURE MODEL OF CELL DAMAGE IN SPACE FLIGHT. NASA Technical Paper 3235, October 1992.
11. F.A. Cucinotta, J.W. Wilson, R. Katz and G.D. Badhwar, KATZ MODEL PREDICTION OF CAENORHABDITIS ELEGANS MUTAGENESIS ON STS-42. NASA Technical Memorandum 4383, November 1992.
12. J. L. Shinn, R. Katz, F. A. Cucinotta, J. W. Wilson and Duc M. Ngo. CELLULAR TRACK MODEL FOR STUDY OF HEAVY ION BEAMS. NASA Technical Paper 3351, August 1993

13. F. A. Cucinotta, R. Katz, J. W. Wilson, R.R. Dubey, HEAVY ION TRACK STRUCTURE CALCULATIONS FOR RADIAL DOSE IN ARBITRARY MATERIALS, NASA Technical Paper 3497, February 1995.
14. F.A. Cucinotta, J.W. Wilson, M. R. Shavers, and R. Katz. CALCULATION OF HEAVY ION INACTIVATION AND MUTATION RATES IN RADIAL DOSE MODEL OF TRACK STRUCTURE, NASA Technical Paper 3630, July 1997
15. Track Structure Model for Radial Distributions of Electron Spectra and Event Spectra from High-Energy Ions. NASA/TP-1998-208707, September 1998. F.A. Cucinotta, R. Katz, and J. W. Wilson.

IV. PATENTS

1. Antenna Strain Insulator, R. Katz, Patent No. 2434658 (1948).
2. Antenna Guy Fitting, R. Katz, Patent No. 2635072 (1950).
3. X-ray Grain Inspection Apparatus, R. Katz, M. Milner, and M.R. Lee, Patent No. 2737594 (1956).