APPENDIX H. BIBLIOGRAPHY OF JOURNAL ARTICLES AND MEETING AND CONFERENCE PROCEEDINGS

In the bibliography that follows, JA designates a journal article, PA designates a proceedings article, and P designates complete proceedings for which individual article listings have been omitted in this bibliography. The JA, PA, and P groupings follow in succession. Items are listed chronologically within each JA, PA, and P grouping. Except for H-JA001 and H-JA002, all journal articles can be found in either *Nuclear Science and Engineering* or *Nuclear Technology* (formerly *Nuclear Applications* or *Nuclear Applications Technology*).

H-JA001. Gerald Goertzel, "Minimum Critical Mass and Flat Flux," *J. Nucl. Energy*, **2**, 193 (1956).

H-JA002. Dixon Callihan, "Homogeneous Critical Assemblies," *Progress in Nuclear Energy*, Series I, Physics and Mathematics (ed. R.A. Charpie, J. Horowitz, D.J. Hughes, and D.J. Littler), p. 227, McGraw-Hill, New York (1956).

H-JA003. Roger H. White, "Topsy, A Remotely Controlled Critical Assembly Machine," *Nucl. Sci. Eng.*, **1**, 53 (Mar. 1956).

H-JA004. R.E. Peterson and G.A. Newby, "An Unreflected U-235 Critical Assembly," *Nucl. Sci. Eng.*, **1**, 112 (May 1956).

H-JA005. Richard N. Olcott, "Homogeneous Heavy Water Moderated Critical Assemblies. Part 1. Experimental," *Nucl. Sci. Eng.*, **1**, 327 (Aug. 1956).

H-JA006. John D. Orndoff, "Prompt Neutron Periods of Metal Critical Assemblies," *Nucl. Sci. Eng.*, **2**, 450 (Jul. 1957).

H-JA007. J.K. Fox, L.W. Gilley, and J.H. Marable, "Critical Parameters of a Proton-Moderated and Proton-Reflected Slab of U^{235}," *Nucl. Sci. Eng.*, **3**, 694 (Jun. 1958).

H-JA008. A. Sauer, "Optimum Control and Flat Flux," *Nucl. Sci. Eng.*, **5**, 71 (Jan. 1959).

H-JA009. J. Devooght, "Restricted Minimum Critical Mass," *Nucl. Sci. Eng.*, **5**, 190 (Mar. 1959).

H-JA010. W. Goad and R. Johnston, "A Monte Carlo Method for Criticality Problems," *Nucl. Sci. Eng.*, **5**, 371 (Jun. 1959).

H-JA011. Norman Ketzlach, "Nuclear Safety of Iron-Encased Fuel Elements," *Nucl. Sci. Eng.*, **6**, 187 (Sep. 1959).

H-JA012. J. Ernest Wilkins, Jr., "Minimum Total Mass," *Nucl. Sci. Eng.*, **6**, 229 (Sep. 1959).

H-JA013. G.A. Linenberger, J.D. Orndoff, and H.C. Paxton, "Enriched-Uranium Hydride Critical Assemblies," *Nucl. Sci. Eng.*, **7**, 44 (Jan. 1960).

H-JA014. G.A. Jarvis, G.A. Linenberger, J.D. Orndoff, and H.C. Paxton, "Two Plutonium-Metal Critical Assemblies," *Nucl. Sci. Eng.*, **8**, 525 (Dec. 1960).

H-JA015. L.B. Engle, G.E. Hansen, and H.C. Paxton, "Reactivity Contributions of Various Materials in Topsy," *Nucl. Sci. Eng.*, **8**, 543 (Dec. 1960).

H-JA016. G.E. Hansen, H.C. Paxton, and D.P. Wood, "Critical Plutonium and Enriched-Uranium-Metal Cylinders of Extreme Shape," *Nucl. Sci. Eng.*, **8**, 570 (Dec. 1960).

H-JA017. D.P. Wood, C.C. Byers, and L.C. Osborn, "Critical Masses of Cylinders of Plutonium Diluted with Other Metals," *Nucl. Sci. Eng.*, **8**, 578 (Dec. 1960).

H-JA018. G.E. Hansen, D.P. Wood, and W.U. Geer, "Critical Masses of Enriched- Uranium Cylinders with Multiple Reflectors of Medium-Z Elements," *Nucl. Sci. Eng.*, **8**, 588 (Dec. 1960).

H-JA019. Leona Stewart, "Leakage Neutron Spectrum from a Bare Pu^{239} Critical Assembly," *Nucl. Sci. Eng.*, **8**, 595 (Dec. 1960).

H-JA020. E.A. Plassmann and D.P. Wood, "Critical Reflector Thicknesses of Spherical U^{233} and Pu^{239} Systems," *Nucl. Sci. Eng.*, **8**, 615 (Dec. 1960).

H-JA021. C.B. Mills, "Minimum Critical Dimensions for Water Solutions," *Nucl. Sci. Eng.*, **9**, 377 (Mar. 1961).

H-JA022. Mathew M. Shapiro, "Minimum Critical Mass in Variable Density and Epithermal Reactors," *Nucl. Sci. Eng.*, **10**, 159 (Jun. 1961).

H-JA023. John Mihalczo and C.B. Mills, "Criticality of Low Enrichment U^{236} in Hydrogen," *Nucl. Sci. Eng.*, **11**, 95 (Sep. 1961).

H-JA024. J.R. Knight, "Calculation of the Neutron Leakage Spectra and Neutron Doses from Bare Critical Systems," *Nucl. Sci. Eng.*, **11**, 239 (Nov. 1961).

H-JA025. C.B. Mills and G.I. Bell, "Criticality of Low Enrichment Uranium in Hydrogen," *Nucl. Sci. Eng.*, **12**, 469 (Apr. 1962).

H-JA026. Hugh K. Clark, "Interaction of Fissionable Units," *Nucl. Sci. Eng.*, **15**, 20 (Jan. 1963).

H-JA027. W.B. Rogers, Jr. and F.E. Kinard, "Material Buckling and Critical Masses of Uranium Rods Containing 3 wt $\%U^{235}$ in H_2O," *Nucl. Sci. Eng.*, **20**, 266 (Nov. 1964).

H-JA028. C.R. Richey, R.C. Lloyd, and E.D. Clayton, "Criticality of Slightly Enriched Uranium in Water-Moderated Lattices," *Nucl. Sci. Eng.*, **21**, 217 (Feb. 1965).

H-JA029. C.R. Richey, J.D. White, E.D. Clayton, and R.C. Lloyd, "Criticality of Homogeneous Plutonium Oxide-Plastic Compacts at H:Pu = 15," *Nucl. Sci. Eng.*, **23**, 150 (Oct. 1965).

H-JA030. H.K. Clark, "Effect of Distribution of Fissile Material on Critical Mass," *Nucl. Sci. Eng.*, **24**, 133 (Feb. 1966).

H-JA031. R.C. Lloyd, C.R. Richey, E.D. Clayton, and D.R. Skeen, "Criticality Studies with Plutonium Solutions," *Nucl. Sci. Eng.*, **25**, 165 (Jun. 1966).

H-JA032. Dale E. Hankins, "Effect of Reactivity Addition Rate and of Weak Neutron Source on the Fission Yield of Uranium Solutions," *Nucl. Sci. Eng.*, **26**, 110 (Sep. 1966).

H-JA033. L.E. Hansen and E.D. Clayton, "Criticality of Plutonium Compounds in the Undermoderated Range, H:Pu $\leq$ 20," *Nucl. Appl.*, **3**, 481 (Aug. 1967).

H-JA034. Carroll B. Mills, "Low Critical Mass," *Nucl. Appl.*, **4**, 17 (Jan. 1968).

H-JA035. C.R. Richey, "Theoretical Analyses of Homogeneous Plutonium Critical Experiments," *Nucl. Sci. Eng.*, **31**, 32 (Jan. 1968).

H-JA036. C.R. Richey, "Criticality of Heterogeneous Arrays Undergoing Dissolution," *Nucl. Sci. Eng.*, **31**, 40 (Jan. 1968).

H-JA037. Thomas Gutman, "A Surface Density Evaluation of Critical Array Data," *Nucl. Appl.*, **4**, 121 (Feb. 1968).

H-JA038. R.C. Lloyd, E.D. Clayton, and J.H. Chalmers, "Criticality of Arrays of ^{233}U Solution," *Nucl. Appl.*, **4**, 136 (Mar. 1968).

H-JA039. J. Wallace Webster, "Minimum Thickness of a Water-Reflected Infinite Slab of an Aqueous Solution of $^{235}UO_2F_2$ at Optimum Concentration," *Nucl. Sci. Eng.*, **32**, 133 (Apr. 1968).

H-JA040. S.R. Bierman and G.M. Hess, "Minimum Critical ^{235}U Enrichment of Homogeneous, Hydrogenous Uranyl Nitrate Systems," *Nucl. Sci. Eng.*, **32**, 135 (Apr. 1968).

H-JA041. C.G. Chezem and E.J. Lozito, "Investigation of the Criticality of Low-Enrichment Uranium Cylinders," *Nucl. Sci. Eng.*, **33**, 139 (Jul. 1968).

H-JA042. R.C. Kispert, *et al.*, "Crystallization Characteristics of Acidic Uranyl Nitrate Solutions," *Nucl. Appl.*, **5**, 224 (Oct. 1968).

H-JA043. S.R. Bierman, L.E. Hansen, R.C. Lloyd, and E.D. Clayton, "Critical Experiments with Homogeneous PuO_2-Polystyrene at 5H/Pu," *Nucl. Appl.*, **6**, 23 (Jan. 1969).

H-JA044. Robert E. Rothe, "Critical Measurements on an Enriched Uranium Solution System," *Nucl. Sci. Eng.*, **35**, 267 (Feb. 1969).

H-JA045. L.E. Hansen, E.D. Clayton, R.C. Lloyd, and S.R. Bierman, "Critical Parameters of Plutonium Systems. Part I: Analysis of Experiments," *Nucl. Appl.*, **6**, 371 (Apr. 1969).

H-JA046. L.E. Hansen and E.D. Clayton, "Critical Parameters of Plutonium Systems. Part II: Interpretation," *Nucl. Appl.*, **6**, 381 (Apr. 1969).

H-JA047. David R. Smith and William U. Geer, "Critical Mass of a Water-Reflected Plutonium Sphere," *Nucl. Appl. Technol.*, **7**, 405 (Nov. 1969).

H-JA048. Robert E. Rothe, C.L. Schuske, and E.E. Hicks, "The Criticality of a Uranium-Solution Slab Under Various Reflector Conditions," *Nucl. Appl. Technol.*, **7**, 505 (Dec. 1969).

H-JA049. William Bradley Lewis, "A Practical Approach to Nuclear Critical Safety," *Nucl. Appl. Technol.*, **7**, 523 (Dec. 1969).

H-JA050. Donald C. Coonfield, Grover Tuck, Harold E. Clark, and Bruce B. Ernst, "Critical Mass Irregularity of Steel-Moderated Enriched Uranium Metal Assemblies with Composite Steel-Oil Reflectors," *Nucl. Sci. Eng.*, **39**, 320 (Mar. 1970).

H-JA051. Grover Tuck and Harold E. Clark, "Critical Parameters of a Uranium Solution Slab-Cylinder System," *Nucl. Sci. Eng.*, **40**, 407 (Jun. 1970).

H-JA052. Richard A. Wolfe, "The Nuclear Criticality Safety Aspects of Plutonium-238," *Nucl. Appl. Technol.*, **9**, 218 (Aug. 1970).

H-JA053. Harold E. Clark and Grover Tuck, "An Empirical Formula which Predicts the Critical Parameters of a Planar Array of Uranium-Solution-Filled Cylinders," *Nucl. Appl. Technol.*, **9**, 814 (Dec. 1970).

H-JA054. Deanne Dickinson and C.L. Schuske, "An Empirical Model for Safe Pipe Intersections for Containing Fissile Solution," *Nucl. Technol.*, **10**, 179 (Feb. 1971).

H-JA055. S.R. Bierman and E.D. Clayton, "Critical Experiments with Unmoderated Plutonium Oxide," *Nucl. Technol.*, **11**, 185 (Jun. 1971).

H-JA056. D.C. Hunt and Robert E. Rothe, "Criticality Measurements on Uranium Metal Spheres Immersed in Uranium Solution," *Nucl. Sci. Eng.*, **46**, 76 (Oct. 1971).

H-JA057. Thomas Gutman, "Anomalies in the Analysis of Air-Spaced Arrays," *Nucl. Technol.*, **12**, 162 (Oct. 1971).

H-JA058. William Bradley Lewis, "A Practical Approach to Nuclear Critical Safety II -- Critique of a Model," *Nucl. Technol.*, **12**, 276 (Nov. 1971).

H-JA059. R.L. Currie, P.B. Parks, and J.L. Jarriel, "Static and Pulsed Reactivity Measurements on Large Uranium-235 Fuel Forms in Water," *Nucl. Technol.*, **12**, 356 (Dec. 1971).

H-JA060. S.J. Altschuler and C.L. Schuske, "Models for the Safe Storage of Fissile Metal," *Nucl. Technol.*, **13**, 131 (Feb. 1972).

H-JA061. Harold E. Clark and Grover Tuck, "An Empirical Formula that Predicts the Critical Parameters of a Uranium Solution Slab-Cylinder System," *Nucl. Technol.*, **13**, 257 (Mar. 1972).

H-JA062. G.R. Handley, "Some Effects of Water Sprinklers on Array Criticality Safety Analyses," *Nucl. Technol.*, **13**, 71 (Apr. 1972).

H-JA063. R.C. Lloyd, E.D. Clayton, and L.E. Hansen, "Criticality of Plutonium Nitrate Solution Containing Soluble Gadolinium," *Nucl. Sci. Eng.*, **48**, 300 (Jul. 1972).

H-JA064. S.R. Bierman and E.D. Clayton, "Critical Experiments with Homogeneous PuO_2-Polystyrene at 50 H/Pu," *Nucl. Technol.*, **15**, 5 (Jul. 1972).

H-JA065. S.J. Raffety, "Homogeneous Critical Assemblies of 2 and 3% Uranium-235-Enriched Uranium in Paraffin," *Nucl. Sci. Eng.*, **48**, 433 (Aug. 1972).

H-JA066. J.T. Mihalczo, "Criticality of Graphite- and Polyethylene-Reflected Uranium (93.2%)-Metal Cylinders and Annuli," *Nucl. Sci. Eng.*, **49**, 489 (Dec. 1972).

H-JA067. C.L. Schuske and D.C. Hunt, "A Storage Container for Fissile Materials," *Nucl. Technol.*, **16**, 562 (Dec. 1972).

H-JA068. S.R. Bierman, E.D. Clayton, and L.E. Hansen, "Critical Experiments with Homogeneous Mixtures of Plutonium and Uranium Oxides Containing 8, 15, and 30 wt% Plutonium," *Nucl. Sci. Eng.*, **50**, 115 (Feb. 1973).

H-JA069. R.C. Lloyd, S.R. Bierman and E.D. Clayton, "Criticality of Plutonium Nitrate Solutions Containing Borated Raschig Rings," *Nucl. Sci. Eng.*, **50**, 127 (Feb. 1973).

H-JA070. S.J. Altschuler and C.L. Schuske, "A Model for the Safe Storage of Fissile Solutions," *Nucl. Technol.*, **17**, 110 (Feb. 1973).

H-JA071. S.J. Altschuler and C.L. Schuske, "A Study of Criticality Parameters Affecting the Handling and Storage of Fissile Metal," *Nucl. Technol.*, **18**, 55 (Apr. 1973).

H-JA072. C.L. Brown, L.C. Davenport, and D.P. Oden, "Plutonium Fuel Technology Part III: Nuclear Criticality Safety Considerations in LWR $(Pu,U)O_2$ Fuel Fabrication," *Nucl. Technol.*, **18**, 109 (May 1973).

H-JA073. Grover Tuck, Harold E. Clark, and Donald L. Alvarez, "Enriched Uranium Metal-Solution Systems Separated by Neutron Poisons," *Nucl. Technol.*, **18**, 216 (Jun. 1973).

H-JA074. R.C. Lloyd, E.D. Clayton, L.E. Hansen, and S.R. Bierman, "Criticality of Plutonium Nitrate Solutions in Slab Geometry," *Nucl. Technol.*, **18**, 225 (Jun. 1973).

H-JA075. C.L. Schuske and S.J. Altschuler, "A Storage Vessel for Fissile Solutions," *Nucl. Technol.*, **18**, 305 (Jun. 1973).

H-JA076. Ricardo Artigas, "Criticality Safety Evaluation of a Shipping Container for Moderated Low-Enriched Uranium Compounds," *Nucl. Technol.*, **19**, 16 (Jul. 1973).

H-JA077. C.L. Schuske and S.J. Altschuler, "Models for the Safe Storage of Dry and Wet Fissile Oxides," *Nucl. Technol.*, **19**, 84 (Aug. 1973).

H-JA078. R.C. Lloyd and E.D. Clayton, "The Criticality of High Burnup Plutonium," *Nucl. Sci. Eng.*, **52**, 73 (Sep. 1973).

H-JA079. J.T. Thomas, "Critical Three-Dimensional Arrays of U(93.2)-Metal Cylinders," *Nucl. Sci. Eng.*, **52**, 350 (Nov. 1973).

H-JA080. E.D. Clayton, "Fissionability and Criticality: From Protactinium to Californium and Beyond," *Nucl. Sci. Eng.*, **52**, 417 (Nov. 1973).

H-JA081. C.L. Schuske and S.J. Altschuler, "Storage Capacity for Fissile Material as a Function of Facility Size," *Nucl. Technol.*, **20**, 179 (Dec. 1973).

H-JA082. D.C. Hunt and Robert E. Rothe, "A Criticality Study of Fissile-Metal and Fissile-Solution Combinations," *Nucl. Sci. Eng.*, **53**, 79 (Jan. 1974).

H-JA083. D.C. Hunt and C.L. Schuske, "Minimum Critical Masses of Arrays of Fissile Oxide and Metal Elements in Water," *Nucl. Technol.*, **22**, 263 (May 1974).

H-JA084. Robert E. Rothe and D.C. Hunt, "The Effect of Position on the Criticality of Uranium Spheres in Uranium Solution Cylinders," *Nucl. Sci. Eng.*, **54**, 360 (Jul. 1974).

H-JA085. D. Dickinson, "Calculations on Raschig-Ring-Poisoned Plutonium Solution Systems Using Hansen-Roach Cross Sections," *Nucl. Sci. Eng.*, **54**, 367 (Jul. 1974).

H-JA086. E.D. Clayton, "Anomalies of Criticality," *Nucl. Technol.*, **23**, 14 (Jul. 1974).

H-JA087. C.L. Schuske, D. Dickinson, and S.J. Altschuler, "Surface Density Method Employing Unit Shape Factor (s/v) for the Storage of Fissile Materials," *Nucl. Technol.*, **23**, 157 (Aug. 1974).

H-JA088. Grover Tuck, "Simplified Methods of Estimating the Results of Accidental Solution Excursions," *Nucl. Technol.*, **23**, 177 (Aug. 1974).

H-JA089. R.C. Lloyd, S.R. Bierman, and E.D. Clayton, "Criticality of Plutonium-Uranium Mixtures Containing 5 to 8 wt% Plutonium," *Nucl. Sci. Eng.*, **55**, 51 (Sep. 1974).

H-JA090. S.R. Bierman and E.D. Clayton, "Critical Experiments to Measure the Neutron Poisoning Effects of Copper and Copper-Cadmium Plates," *Nucl. Sci. Eng.*, **55**, 58 (Sep. 1974).

H-JA091. C.R. Richey, "Reexamination of the Value for the Minimum Critical Concentration of Plutonuim-239 (sic) in Water," *Nucl. Sci. Eng.*, **55**, 244 (Oct. 1974).

H-JA092. Robert E. Rothe, "The Influence of Neutron Poisons on High-Concentration Plutonium Solutions," *Nucl. Sci. Eng.*, **55**, 482 (Dec. 1974).

H-JA093. C.L. Schuske and D. Dickinson, "Criticality Design of a Large-Capacity Plutonium Melting Crucible," *Nucl. Technol.*, **25**, 72 (Jan. 1975).

H-JA094. Robert E. Rothe, Donald L. Alvarez, and Harold E. Clark, "The Criticality of Periodically Boron-Poisoned Enriched Uranium Solution Systems," *Nucl. Technol.*, **25**, 502 (Mar. 1975).

H-JA095. S.J. Altschuler and C.L. Schuske, "Fissile-Solution Storage in Pipes Isolated by Concrete or Water," *Nucl. Technol.*, **26**, 23 (May 1975).

H-JA096. C.L. Schuske and J.D. McCarthy, "Rocky Flats Experience with Borosilicate Glass Rings for Criticality Control," *Nucl. Technol.*, **26**, 254 (Jul. 1975).

H-JA097. Deanne Dickinson, "Nominally Reflected Pipe Intersections Containing Fissile Solution," *Nucl. Technol.*, **26**, 265 (Jul. 1975).

H-JA098. S.R. Bierman, "Critical Experiments-Benchmarks (Pu-U Systems)," *Nucl. Technol.*, **26**, 352 (Jul. 1975).

H-JA099. V. Drüke, *et al.*, "Experimental and Theoretical Studies of Criticality Safety by Ingress of Water in Systems with Pebble-Bed High-Temperature Gas-Cooled Reactor Fuel," *Nucl. Sci. Eng.*, **57**, 328 (Aug. 1975).

H-JA100. R.C. Lloyd and E.D. Clayton, "Criticality Safety Data Applicable to Processing Liquid-Metal Fast Breeder Reactor Fuel," *Nucl. Sci. Eng.*, **59**, 21 (Jan. 1976).

H-JA101. O.C. Kolar, H.F. Finn, and N.L. Pruvost, "Livermore Plutonium Array Program: Experiments and Calculations," *Nucl. Technol.*, **29**, 57 (Apr. 1976).

H-JA102. R.C. Lloyd and E.D. Clayton, "Criticality of Plutonium-Uranium Nitrate Solutions," *Nucl. Sci. Eng.*, **60**, 143 (Jun. 1976).

H-JA103. C.L. Schuske and Hugh C. Paxton, "History of Fissile Array Measurements in the United States," *Nucl. Technol.*, **30**, 101 (Aug. 1976).

H-JA104. Douglas C. Hunt, "A Review of Criticality Safety Models Used in Evaluating Arrays of Fissile Materials," *Nucl. Technol.*, **30**, 138 (Aug. 1976).

H-JA105. Deanne Dickinson and G. Elliott Whitesides, "The Monte Carlo Method for Array Criticality Calculations," *Nucl. Technol.*, **30**, 166 (Aug. 1976).

H-JA106. Douglas C. Hunt and Deanne Dickinson, "Comparative Calculational Evaluation of Array Criticality Models," *Nucl. Technol.*, **30**, 190 (Aug. 1976).

H-JA107. S.R. Bierman and E.D. Clayton, "Critical Experiments with Low-Moderated Homogeneous Mixtures of Plutonium and Uranium Oxides Containing 8, 15, and 30 wt% Plutonium," *Nucl. Sci. Eng.*, **61**, 370 (Nov. 1976).

H-JA108. S.R. Bierman, "Reactivity Measurements under Conditions Typical to Fuel Element Dissolution," *Nucl. Technol.*, **31**, 339 (Dec. 1976).

H-JA109. J.T. Thomas, "Surface Density and Density Analog Models for Criticality in Arrays of Fissile Materials," *Nucl. Sci. Eng.*, **62**, 424 (Mar. 1977).

H-JA110. R.C. Lloyd and E.D. Clayton, "Effect of Fixed and Soluble Neutron Absorbers on the Criticality of Uranium-Plutonium Systems," *Nucl. Sci. Eng.*, **62**, 726 (Apr. 1977).

H-JA111. E.D. Clayton and B.M. Durst, "Comment on the Interpretation and Application of Limiting Critical Concentrations of Fissile Nuclides in Water," *Nucl. Technol.*, **33**, 110 (Apr. 1977).

H-JA112. Jack K. Thompson, "Minimum Critical Mass of Plutonium-Polyethylene System Found To Be Significantly Lower than Plutonium-Water System," *Nucl. Technol.*, **33**, 235 (mid-Apr. 1977).

H-JA113. B.L. Koponen, "Reactivity Enhancement in Transportation and Storage Arrays Due to Fissile Material Density Reductions," *Nucl. Technol.*, **34**, 242 (Jul. 1977).

H-JA114. E.D. Clayton, H.K. Clark, D.W. Magnuson, J.H. Chalmers, Gordon Walker, N. Ketzlach, Ryohei Kiyose, C.L. Brown, D.R. Smith, and R. Artigas, "Basis for Subcritical Limits in Proposed Criticality Safety Standard for Mixed Oxides," *Nucl. Technol.*, **35**, 97 (mid-Aug. 1977).

H-JA115. C. Devillers and P. Blum, "Neutron Multiplication and Shielding Problems in Pressurized Water Reactor Spent Fuel Shipping Casks," *Nucl. Technol.*, **35**, 112 (mid-Aug. 1977).

H-JA116. J.J. Koelling, G.E. Hansen, and C.C. Byers, "Fission and Explosive Energy Releases of PuO_2, PuO_2-UO_2, UO_2, and UO_3 Assemblies," *Nucl. Technol.*, **35**, 611 (Oct. 1977).

H-JA117. G. Schulze and H. Würz, "In-Line Determination of Fissile Material in High-Activity Solutions," *Nucl. Technol.*, **35**, 663 (Oct. 1977).

H-JA118. S.R. McNeany and J.D. Jenkins, "An Evaluation of ENDF/B-IV and Hansen-Roach Uranium-233 Cross Sections for Use in Criticality Calculations," *Nucl. Sci. Eng.*, **65**, 441 (Mar. 1978).

H-JA119. Charles R. Marotta, "A Simple Relationship of Maximum Δk Due to Compaction of Unmoderated Fissile Materials," *Nucl. Technol.*, **39**, 323 (Aug. 1978).

H-JA120. J.T. Thomas, "Reflectors, Infinite Cylinders, Intersecting Cylinders, and Nuclear Criticality," *Nucl. Sci. Eng.*, **67**, 279 (Sep. 1978).

H-JA121. Francis H. Lewis and Patrick D. Soran, "Calculations of UH_3 Critical Masses for Various Uranium Enrichments," *Nucl. Sci. Eng.*, **68**, 116 (Oct. 1978).

H-JA122. J.S. Philbin and S.A. Dupree, "Subcriticality Guidelines for Liquid-Metal Fast Breeder Reactor Spent Fuel Shipping Cask Designs," *Nucl. Technol.*, **40**, 284 (Oct. 1978).

H-JA123. George C. Wu and Lawrence Ruby, "Possible Criticality of Protactinium-231," *Nucl. Sci. Eng.*, **68**, 349 (Dec. 1978).

H-JA124. Robert E. Rothe and Inki Oh, "Benchmark Critical Experiments on High-Enriched Uranyl Nitrate Solution Systems," *Nucl. Technol.*, **41**, 207 (Dec. 1978).

H-JA125. Inki Oh and Robert E. Rothe, "A Calculational Study of Benchmark Critical Experiments on High-Enriched Uranyl Nitrate Solution Systems," *Nucl. Technol.*, **41**, 226 (Dec. 1978).

H-JA126. William D. Bromley and James S. Olszewski, "Safety Calculations and Benchmarking of Babcock and Wilcox Designed Close Spaced Fuel Storage Racks," *Nucl. Technol.*, **41**, 341 (mid-Dec. 1978).

H-JA127. R.C. Lloyd, S.W. Heaberlin, E.D. Clayton, and R.D. Carter, "Assessment of Criticality Safety," *Nucl. Technol.*, **42**, 13 (Jan. 1979).

H-JA128. Shi-Ping and Duaine G. Lindstrom, "A Random Geometry Model in Criticality Calculations of Solutions Containing Raschig Rings," *Nucl. Sci. Eng.*, **69**, 363 (Mar. 1979).

H-JA129. S.R. Bierman, B.M. Durst, and E.D. Clayton, "Critical Separation Between Subcritical Clusters of Low Enriched UO_2 Rods in Water with Fixed Neutron Poisons," *Nucl. Technol.*, **42**, 237 (Mar. 1979).

H-JA130. S.R. Bierman, B.M. Durst, E.D. Clayton, R.I. Scherpelz, and Howard T. Kerr, "Critical Experiments with Fast Test Reactor Fuel Pins in Water," *Nucl. Technol.*, **44**, 141 (Jun. 1979).

H-JA131. Anil Kumar and M. Srinivasan, "Comments on 'A Simple Relationship of Maximum Δk Due to Compaction of Unmoderated Fissile Materials' and the Use of the Trombay Criticality Formula for the Same," *Nucl. Technol.*, **44**, 322 (Jul. 1979).

H-JA132. J.C. Manaranche, *et al.*, "Critical Experiments with Lattices of 4.75-wt%-^{235}U-Enriched UO_2 Rods in Water," *Nucl. Sci. Eng.*, **71**, 154 (Aug. 1979).

H-JA133. R.C. Lloyd, B.M. Durst, and E.D. Clayton, "Effect of Soluble Neutron Absorbers on the Criticality of Low-Uranium-235-Enriched UO_2 Lattices," *Nucl. Sci. Eng.*, **71**, 154 (Aug. 1979).

H-JA134. G.E. Hansen and H.C. Paxton, "Thor, A Thorium-Reflected Plutonium-Metal Critical Assembly," *Nucl. Sci. Eng.*, **71**, 287 (Sep. 1979).

H-JA135. G.E. Hansen and H.C. Paxton, "A Critical Assembly of Uranium Enriched to 10% in Uranium-235," *Nucl. Sci. Eng.*, **72**, 230 (Nov. 1979).

H-JA136. W. Seifritz and P. Wydler, "Criticality of Neptunium-237 and Its Possible Utilization in Nuclear Reactors," *Nucl. Sci. Eng.*, **72**, 272 (Nov. 1979).

H-JA137. S.R. Bierman, B.M. Durst, and E.D. Clayton, "Criticality Experiments with Subcritical Clusters of Low Enriched UO_2 Rods in Water with Uranium or Lead Reflecting Walls," *Nucl. Technol.*, **47**, 51 (Jan. 1980).

H-JA138. B.M. Durst, S.R. Bierman, E.D. Clayton, and J.F. Mincey, "Critical Experiments with Solid Neutron Absorbers and Water-Moderated Fast Test Reactor Fuel Pins," *Nucl. Technol.*, **48**, 128 (mid-Apr. 1980).

H-JA139. H.K. Clark, "Subcritical Limits for Special Fissile Actinides," *Nucl. Technol.*, **48**, 164 (mid-Apr. 1980).

H-JA140. Allen S. Benjamin and David J. McCloskey, "Spent Fuel Heatup Following Loss of Water During Storage," *Nucl. Technol.*, **49**, 274 (Jul. 1980).

H-JA141. K. Subba Rao and M. Srinivasan, "BeH_2 as a Moderator in Minimum Critical Mass Systems," *Nucl. Technol.*, **49**, 315 (Jul. 1980).

H-JA142. J.C. Manaranche, *et al.*, "Dissolution and Storage Experiment with 4.75-wt%-^{235}U-Enriched UO_2 Rods," *Nucl. Technol.*, **50**, 148 (Sep. 1980).

H-JA143. P.K. Job, M. Srinivasan, and V.R. Nargundkar, "Analysis of the BeO-Reflected Uranium-233 Nitrate Solution Subcritical Multiplication Experiments Conducted at Purnima Laboratories," *Nucl. Technol.*, **51**, 87 (Nov. 1980).

H-JA144. Gary S. Hoovler, *et al.*, "Critical Experiments Supporting Close Proximity Water Storage of Power Reactor Fuel," *Nucl. Technol.*, **51**, 217 (Dec. 1980).

H-JA145. S.R. Bierman and E.D. Clayton, "Criticality Experiments with Subcritical Clusters of Light Water Reactor Type Fuel Separated by a Flux Trap," *Nucl. Technol.*, **51**, 342 (Mar. 1981).

H-JA146. R.C. Lloyd, S.R. Bierman, E.D. Clayton, and B.M. Durst, "Criticality of 4.3 wt% Uranium-235 Enriched UO_2 Rods in Uranyl Nitrate Solution Containing Gadolinium," *Nucl. Sci. Eng.*, **78**, 121 (Jun. 1981).

H-JA147. S.R. Bierman and E.D. Clayton, "Criticality Experiments with Subcritical Clusters of 2.35 and 4.31 wt% ^{235}U-Enriched UO_2 Rods in Water with Steel Reflecting Walls," *Nucl. Technol.*, **54**, 131 (Aug. 1981).

H-JA148. H.K. Clark, "Subcritical Limits for Plutonium Systems," *Nucl. Sci. Eng.*, **79**, 65 (Sep. 1981).

H-JA149. R.M. Westfall, "Critical Masses for the Even-Neutron-Numbered Transuranium Actinides," *Nucl. Sci. Eng.*, **79**, 237 (Oct. 1981).

H-JA150. J. Ernest Wilkins, Jr. and Keshav N. Srivastava, "Minimum Critical Mass Nuclear Reactors. Part I," *Nucl. Sci. Eng.*, **82**, 307 (Nov. 1982).

H-JA151. J. Ernest Wilkins, Jr. and Keshav N. Srivastava, "Minimum Critical Mass Nuclear Reactors. Part II," *Nucl. Sci. Eng.*, **82**, 316 (Nov. 1982).

H-JA152. R.C. Lloyd, R.A. Libby and E.D. Clayton, "The Measurement of Eta and the Limiting Concentration of ^{239}Pu in Critical Aqueous Solutions," *Nucl. Sci. Eng.*, **82**, 325 (Nov. 1982).

H-JA153. Anil Kumar, M. Srinivasan, and K. Subba Rao, "Characterization of Neutron Leakage Probability, k_{eff}, and Critical Core Surface Mass Density of Small Reactor Assemblies Through the Trombay Criticality Formula," *Nucl. Sci. Eng.*, **84**, 155 (Jun. 1983).

H-JA154. P.K. Job, K. Subba Rao, and M. Srinivasan, "Additional Remarks on BeH_2 as a Moderator in Minimum Critical Mass Systems," *Nucl. Sci. Eng.*, **84**, 293 (Jul. 1983).

H-JA155. Edward T. Tomlinson and C.L. Brown, "Nuclear Criticality Safety Considerations in Design of Dry Fuel Assembly Storage Arrays," *Nucl. Technol.*, **63**, 347 (Nov. 1984).

H-JA156. Yasushi Nomura and Takanori Shimooke, "A Multiple Regression Equation for Calculated k_{eff} Bias Errors by Criticality Code System," *Nucl. Technol.*, **65**, 340 (May 1984).

H-JA157. R.E. Kelley and E.D. Clayton, "Fissible: A Proposed New Term in Nuclear Engineering," *Nucl. Sci. Eng.*, **91**, 481 (Dec. 1985).

H-JA158. Philip F. Rose, "Monte Carlo Analysis of Aqueous ^{235}U Critical Assemblies with ENDF/B-V Data," *Nucl. Sci. Eng.*, **94**, 36 (Sep. 1986).

H-JA159. Eugene D. Clayton, Hugh K. Clark, Gordon Walker, and Richard A. Libby, "Basis for Extending Limits in ANSI Standard for Mixed Oxides to Heterogeneous Systems," *Nucl. Technol.*, **75**, 225 (Nov. 1986).

H-JA160. Francis Barbry and Raymond Prigent, "The EDAC System and New Developments under Consideration at the Commissariat A L'Energie Atomique for Criticality Accident Detection," *Nucl. Technol.*, **78**, 320 (Sep. 1987).

H-JA161. Raymond C. Lloyd, E. Duane Clayton, Robert E. Wilson, Robert C. McBroom, and Robert R. Jones, "Critical Experiments Using High-Enriched Uranyl Nitrate with Cadmium Absorber," *Nucl. Technol.*, **79**, 82 (Oct. 1987).

H-JA162. Tsuyoshi Misawa, Seiji Shiroya, and Keiji Kanda, "Study on Criticality of a Light Water Moderated and Reflected Coupled Core with Highly Enriched Uranium Fuel," *Nucl. Technol.*, **83**, 162 (Nov. 1988).

H-JA163. Masaki Suwa and Atsuyuki Suzuki, "An Inference Model for Predicting a Pinching Effect in the Co-Decontamination Extraction Process in a Purex Fuel Reprocessing Plant," *Nucl. Technol.*, **85**, 187 (May 1989).

H-JA164. M. Srinivasan, K. Subba Rao, S.B. Garg, and G.V. Acharya, "Systematics of Criticality Data of Special Actinide Nuclides Deduced through the Trombay Critical Formula," *Nucl. Sci. Eng.*, **102**, 295 (Jul. 1989).

H-JA165. Cecil V. Parks, Robert M. Westfall, and B.L. Broadhead, "Criticality Analysis Support for the Three Mile Island Unit 2 Fuel Removal Operations," *Nucl. Technol.*, **87**, 660 (Nov. 1989).

H-JA166. Gerald L. Palau, "Criticality Prevention during Postaccident Decontamination of Three Mile Island Unit 2 Plant Systems," *Nucl. Technol.*, **87**, 679 (Nov. 1989).

H-JA167. Bernard R. Bandini and Anthony J. Baratta, "Potential for Recriticality of the Relocated Core," *Nucl. Technol.*, **87**, 926 (Dec. 1989).

H-JA168. Daniel S. Williams, John C. Rommel, and Raymond L. Murray, "An Overview of Nuclear Criticality Safety Analyses Performed to Support Three Mile Island Unit 2 Defueling," *Nucl. Technol.*, **87**, 1134 (Dec. 1989).

H-JA169. János Gadó and István Vidovszky, "Influence of Water Density Change on the Criticality in Special Fuel Lattices," *Nucl. Sci. Eng.*, **104**, 217 (Mar. 1990).

H-JA170. William A. Boyd and Mark W. Fecteau, "Criticality Safety of Transuranic Storage Arrays at the Waste Isolation Pilot Plant," *Nucl. Technol.*, **104**, 207 (Nov. 1993).

H-JA171. C.F. Haught, B. Basoglu, R.W. Brewer, D.F Hollenbach, A.D. Wilkinson, H.L. Dodds, and R.L. Oxenham, "Criticality Safety Analysis of a Calciner Exit Chute," *Nucl. Technol.*, **105**, 3 (Jan. 1994).

H-JA172. B. Basoglu, R.W. Brewer, C.F. Haught, D.F Hollenbach, A.D. Wilkinson, H.L. Dodds, and P.F. Pasqua, "Simulation of Hypothetical Criticality Accidents Involving Homogeneous Damp Low-Enriched UO_2 Powder Systems," *Nucl. Technol.*, **105**, 14 (Jan. 1994).

H-JA173. Tracy R. Wenz and Robert D. Busch, "Modeling of Central Reactivity Worth Measurements in Lady Godiva," *Nucl. Technol.*, **105**, 31 (Jan. 1994).

H-JA174. D.F Hollenbach and L.M. Petrie, "Vectorization Methods Development for a New Version of the KENO-V.a Criticality Safety Code," *Nucl. Sci. Eng.*, **116**, 147 (Mar. 1994).

H-JA175. Edward P. Ficaro and David K. Wehe, "KENO-NR: A Monte Carlo Code for Simulating ^{252}Cf-Source-Driven Noise Measurements to Determine Subcriticality," *Nucl. Sci. Eng.*, **117**, 158 (Jul. 1994).

H-JA176. Gary R. Smolen, Sidney R. Bierman, and Nubuo Fukumura, "Criticality Data and Validation Studies of Arrays of Mixed-Oxide Fuel Pins in Aqueous and Organic Solutions," *Nucl. Technol.*, **107**, 285 (Sep. 1994).

H-JA177. Gary R. Smolen, Raymond C. Lloyd, and Hideyuki Funabashi, "Criticality Data and Validation Studies of Plutonium-Uranium Nitrate Solutions in Cylindrical and Slab Geometry," *Nucl. Technol.*, **107**, 304 (Sep. 1994).

H-JA178. Gary R. Smolen, Raymond C. Lloyd, and Tomozo Koyama, "Criticality Data and Validation Studies of Plutonium-Uranium Nitrate Solutions in Annular Geometry," *Nucl. Technol.*, **107**, 326 (Sep. 1994).

H-JA179. Gary R. Smolen, Raymond C. Lloyd, and Tadakuni Matsumoto, "Criticality Data and Validation Studies of Mixed-Oxide Fuel Pin Arrays in Pu + U + Gd Nitrate," *Nucl. Technol.*, **107**, 340 (Sep. 1994).

H-JA180. S. Das, "Comment on 'Reactivity Feedback Mechanisms in Aqueous Fissile Solutions,'" *Nucl. Sci. Eng.*, **118**, 127 (Oct. 1994).

H-JA181. Yasushi Nomura and Hiroshi Okuno, "Simplified Evaluation Models for Total Fission Number in a Criticality Accident," *Nucl. Technol.*, **109**, 142 (Jan. 1995).

H-JA182. Bryan L. Broadhead, "Feasibility Assessment of Burnup Credit in the Criticality Analysis of Shipping Casks with Boiling Water Reactor Spent Fuel," *Nucl. Technol.*, **110**, 1 (Apr. 1995).

H-JA183. José M. Conde and Manuel Recio, "Evaluation of Burnup Credit for Fuel Storage Analysis -- Experience in Spain," *Nucl. Technol.*, **110**, 22 (Apr. 1995).

H-JA184. Jack K. Boshoven, "Burnup Credit Experiences with the GA-4 Cask," *Nucl. Technol.*, **110**, 33 (Apr. 1995).

H-JA185. Yoshitaka Naito, Makoto Takano, Masayoshi Kurosawa, and Takenori Suzaki, "Study on the Criticality Safety Evaluation Method for Burnup Credit in JAERI," *Nucl. Technol.*, **110**, 40 (Apr. 1995).

H-JA186. Stephen M. Bowman, Mark D. DeHart, and Cecil V. Parks, "Validation of SCALE-4 for Burnup Credit Applications," *Nucl. Technol.*, **110**, 53 (Apr. 1995).

H-JA187. R.H. Kimpland and D.E. Kornreich, "A Two-Dimensional Multiregion Computer Model for Predicting Nuclear Excursions in Aqueous Homogeneous Solution Assemblies," *Nucl. Sci. Eng.*, **122**, 204 (Feb. 1996).

H-JA188. Matjaz Ravnik and Bogdan Glumac, "TRIGA Spent Fuel Storage Criticality Analysis," *Nucl. Technol.*, **114**, 365 (Jun. 1996).

H-JA189. William E. Kastenberg, Per F. Peterson, Joonhong Ahn, J. Burch, G. Casher, Paul L. Cambré, Ehud Greenspan, Donald R. Olander, and Jasmina L. Vujic; B. Bessinger, Neville G. W. Cook, Fiona M. Doyle, and L. Brun Hilbert, Jr., "Considerations of Autocatalytic Criticality of Fissile Materials in Geologic Repositories, " *Nucl. Technol.*, **115**, 298 (Sep. 1996).

***

H-PA001. A.Santamarina, "Experimental Qualification of the Calculated Subcriticality in High Density Fuel Storage," *Proc. of the Topical Meeting on Advances in Reactor Physics and Core Thermal Hydraulics*, NUREG/CP-0034, **2**, 937, U.S. Nuclear Regulatory Commission (September 22-24, 1982).

H-PA002. J.T. Mihalczo, V.K. Paré, and E.D. Blakeman, "Fission Chain Length Effects on Californium-Source-Driven Subcriticality Measurements," *Proc. of the International Topical Meeting: Advances in Mathematics, Computations, and Reactor Physics*, **1**, 5.1 1-1, Pittsburgh (Apr. 28 - May 2, 1991).

H-PA003. W.B. Doub and T.M. Sutton, "Analysis of the ^{252}Cf Noise Technique to Measure Subcriticality by the Method of Probability Generating Functions," *Proc. of the International Topical Meeting: Advances in Mathematics, Computations, and Reactor Physics*, **1**, 5.1 2-1, Pittsburgh (Apr. 28 - May 2, 1991).

H-PA004. T.M. Sutton and W.B. Doub, "Stochastic Transport Theory Analysis of the ^{252}Cf Source Driven Noise Technique," *Proc. of the International Topical Meeting: Advances in Mathematics, Computations, and Reactor Physics*, **1**, 5.1 3-1, Pittsburgh (Apr. 28 - May 2, 1991).

H-PA005. J.P. Weinman, M.R. Mendelson, and T.M. Sutton, "KAPL Analysis of Oak Ridge Subcritical Reactivity Measurements for Uranyl Nitrate Solutions," *Proc. of the International Topical Meeting: Advances in Mathematics, Computations, and Reactor Physics*, **1**, 5.1 4-1, Pittsburgh (Apr. 28 - May 2, 1991).

H-PA006. Edward P. Ficaro and David K. Wehe, "Monte Carlo Simulations of the Cf-252-Source-Driven Noise Analysis Measurements for Determining Subcriticality," *Proc. of the International Topical Meeting: Advances in Mathematics, Computations, and Reactor Physics*, **1**, 5.2 2-1, Pittsburgh (Apr. 28 - May 2, 1991).

H-PA007. W.G. Winn and R.C. Hochel, "Confirming Criticality Safety od TRU Waste with Neutron Measurements and Risk Analyses," *Proc. of the 1992 Topical Meeting on Advances in Reactor Physics*, 1-135, Charleston (Mar. 8-11, 1992).

H-PA008. S.C. Chay, "Probabilistic Risk Assessment of Drum and Culvert Containing Suspect FB-Line TRU Waste," *Proc. of the 1992 Topical Meeting on Advances in Reactor Physics*, 1-147, Charleston (Mar. 8-11, 1992).

***

H-P001. *Proc. of the 1993 Topical Meeting on Physics and Methods in Criticality Safety*, 38 papers, 260pp, Nashville (Sep. 19-23, 1993).

H-P002. *Proc. of the Fifth International Conference of Nuclear Criticality Safety*, 141 papers, 2 vols., Albuquerque (Sep. 17-21, 1995).