

## **Bryan Hobson Wildenthal - Curriculum Vita**

09/13/02

### **Educational History**

Ph. D., Major in Physics, University of Kansas, Lawrence, Kansas, 1964  
Thesis title: The Mechanism of the Si(d,p) Reaction Below 3 MeV  
Advisors: R. W. Krone and F. W. Prosser

B. A., Mathematics/English, Sul Ross State College, Alpine, Texas, 1958  
High School Diploma, Alpine, Texas, Public Schools, 1955

### **Principal Employment History**

Executive Vice President and Provost, The University of Texas at Dallas,  
Dallas, Texas 1999-

Vice President for Academic Affairs and Provost, The University of Texas at Dallas,  
Dallas, Texas, 1994-99

Vice President for Academic Affairs, The University of Texas at Dallas,  
Dallas, Texas, 1992-94

Dean, College of Arts and Sciences, and Professor, Department of Physics and Astronomy,  
The University of New Mexico, Albuquerque, New Mexico, 1987-1992

Professor and Head, Department of Physics and Atmospheric Science,  
Drexel University, Philadelphia, Pennsylvania, 1983-1987

Professor of Physics,  
Michigan State University, East Lansing, Michigan, 1972-1983

Associate Professor of Physics,  
Michigan State University, East Lansing, Michigan, 1969-1972

Assistant Professor of Physics,  
Texas A and M University, College Station, Texas, 1968-1969

AEC Postdoctoral Fellow,  
Oak Ridge National Laboratory, Oak Ridge, Tennessee, 1966-1968

Research Associate and Lecturer in Physics,  
Rice University, Houston, Texas, 1964-1966

Teaching Assistant and Research Assistant  
University of Kansas, Lawrence, Kansas, 1958-63

## **Secondary and Visiting Appointment History**

Consultant,  
Los Alamos National Laboratory, Los Alamos, New Mexico, 1987-1993

Guest Professor of Physics,  
University of Sao Paulo, Sao Paulo, Brazil, March, 1985

Adjunct Professor of Physics,  
University of Pennsylvania, Philadelphia, Pennsylvania, 1984-1988

Guest Lecturer in Physics,  
University of Manchester, Manchester, England, June-August, 1980

Consultant,  
Los Alamos National Laboratory, Los Alamos, New Mexico, June-August, 1979

Senior Visiting Fellow,  
University of Oxford, Oxford, England, April-May, 1979

Executive Secretary, DOE/NSF Nuclear Science Advisory Committee,  
National Science Foundation, Washington, D. C., 1978

Visiting Professor of Nuclear Physics,  
University of Paris, Orsay, France, 1977

Visiting Scientist,  
Institute for Heavy-ion Research, Darmstadt, West Germany, 1977

Visiting Scientist,  
Max-Plank-Institute for Nuclear Physics, Heidelberg, West Germany, March, 1976

Visiting Scientist,  
Brookhaven National Laboratory, Upton, New York, October, 1974

Senior U.S. Fellow of the Alexander von Humboldt Foundation,  
University of Munich, Munich, West Germany, 1973

## **Honors, Awards, Activities**

Cecil H. Green Distinguished Chair of Academic Leadership, The University of Texas at Dallas, 2001

LAMPF Program Advisory Committee,  
Los Alamos National Laboratory, Los Alamos, New Mexico, 1989-1992

Editorial Advisor,  
Modern Physics Letters A and International Journal of Modern Physics A, 1987-1990

T. W. Bonner Prize Award Committee,  
Division of Nuclear Physics, American Physical Society, 1981  
Junior Research Award,  
Michigan State University Chapter of Sigma Xi, 1978

Fellow,  
John Simon Guggenheim Memorial Foundation, 1977

Vice Chairman/Chairman,  
Gordon Research Conference, Nuclear Structure Physics, 1976/1977

T. W. Bonner Prize Award Committee,  
Division of Nuclear Physics, American Physical Society, 1975

Program Committee,  
Division of Nuclear Physics, American Physical Society, 1974-1975

Elected Fellow,  
American Physical Society, 1973

Senior U.S. Fellowship,  
Alexander von Humboldt Foundation of West Germany, 1973

AEC Postdoctoral Fellowship,  
Oak Ridge National Laboratory, Oak Ridge, Tennessee, 1966

Phi Beta Kappa, 1962

## **Extramural Funding**

Shell-Model Calculations and Experimental Frontiers in Nuclear Spectroscopy

B. H. Wildenthal

National Science Foundation, Physics Division

PHY-91-23332, February 1, 1992 - January 31, 1993; \$28,000

PHY-91-23332, February 1, 1993 - January 31, 1994; \$28,800

PHY-91-23332, February 1, 1994 - January 31, 1995; \$29,700

Nuclear Physics in the 1990's; International Conference in Santa Fe, New Mexico, May 1-5, 1990

B. H. Wildenthal

National Science Foundation, Physics Division (Group Travel Award)

PHY-89-22287, March 15 - August 31, 1990- \$4,983

Realistic Shell-Model Calculations and Medium-Energy Experiments

B. H. Wildenthal

National Science Foundation, Physics Division

PHY-87-18772, October 1, 1989 - August 31, 1990; \$44,000

PHY-87-18772, October 1, 1988 - August 31, 1989; \$44,000

PHY-87-18772, October 1, 1987 - August 31, 1988; \$52,041

U.S. - Brazil Cooperative Research on Collective and Statistical Properties of Large-Basis

Shell-Model Wave Functions

B. H. Wildenthal

National Science Foundation, International Programs

INT-86-02642, July 15, 1986 - June 30, 1988; \$4,200

Shell-Model Calculations and Medium-Energy Experiments

B. H. Wildenthal

National Science Foundation, Physics Division

PHY-85-09736, October 15, 1986 - October 14, 1987; \$51,000

PHY-85-09736, October 15, 1985 - October 14, 1986; \$51,000

Research supported under the block-grant funding of the MSU Cyclotron Laboratory (later, MSU National Superconducting Cyclotron Laboratory) by the National Science Foundation, 1969-1983

## **Bryan Hobson Wildenthal**

### **Articles in Refereed Journals:**

- J181. Structure of  $^{32}\text{S}$   
J. Brenneisen, B. Erhardt, F. Glatz, T. Kern, R. Ott, H. Röpke, J. Schmälzlin, P. Siedle and B. H. Wildenthal to be published
- J180. Quantum numbers of  $^{26}\text{Al}$  levels above 6 MeV excitation energy  
J. Brenneisen, D. Grathwohl, B. Ehrhard, P. M. Endt, S. Fischer, M. Lickert, R. Ott, H. Röpke, J. Schmälzlin, P. Siedle, and B. H. Wildenthal  
*Zeitschrift für Physik A* 354 (1996) 301-310
- J179. Absence of M3 quenching in  $^{26}\text{Mg}$   
K. K. Seth, S. Soundranayagam, A. Saha, C. W. de Jager, H. de Vries, B. A. Brown and B. H. Wildenthal  
*Physical Review Letters* 74 (1995) 642-645
- J178. Structure of  $^{28}\text{Si}$  above 10 MeV excitation energy III: level scheme and shell model interpretation  
J. Brenneisen, D. Grathwohl, M. Lickert, R. Ott, H. Röpke, J. Schmälzlin, P. Siedle and B. H. Wildenthal  
*Zeitschrift für Physik A* 352 (1995) 403-415
- J177. Structure of  $^{28}\text{Si}$  above 10 MeV excitation energy II: assignments of quantum numbers  
J. Brenneisen, D. Grathwohl, M. Lickert, R. Ott, H. Röpke, J. Schmälzlin, P. Siedle and B. H. Wildenthal  
*Zeitschrift für Physik A* 352 (1995) 279-291
- J176. Structure of  $^{28}\text{Si}$  above 10 MeV excitation energy I: gamma-decay modes and radiative widths of levels  
J. Brenneisen, D. Grathwohl, M. Lickert, R. Ott, H. Röpke, J. Schmälzlin, P. Siedle and B. H. Wildenthal  
*Zeitschrift für Physik A* 352 (1995) 149-159
- J175. Spectroscopic factors from one-proton stripping reactions on sd-shell nuclei: experimental measurements and shell-model calculations  
J. Vernotte, G. Berrier-Ronsin, J. Kalifa, R. Tamisier and B. H. Wildenthal  
*Nuclear Physics A* 571 (1994) 1-42
- J174.  $^{27}\text{Al}(\text{d},^3\text{He})^{26}\text{Mg}$  reaction at 29 MeV  
J. Vernotte, G. Berrier-Ronsin, S. Fortier, E. Hourani, J. Kalifa, J. M. Maison, L. H. Rosier, G. Rotbard and B. H. Wildenthal  
*Physical Review C* 48 (1993) 205-220
- J173. Beta-delayed proton decay of  $^{25}\text{Si}$   
J. D. Robertson, D. M. Moltz, T. F. Lang, J. E. Reiff, J. Cerny and B. H. Wildenthal  
*Physical Review C* 47 (1993) 1455-1465

- J172. Pion scattering to  $6^-$  stretched states in  $^{24}\text{Mg}$  and  $^{26}\text{Mg}$   
 R. A. Lindgren, B. L. Clausen, G. S. Blanpied, J. Hernandez, C. S. Mishra, W. K. Mize, C. S. Whisnant, B. G. Ritchie, C. L. Morris, S. J. Seestrom-Morris, C. Fred Moore, P. A. Seidl, B. H. Wildenthal, R. Gilman and J. A. Carr  
*Physical Review C44* (1991) 2413-2418
- J171. The structure of  $^{25}\text{Mg}$   
 F. Heidinger, P. Betz, W. Brendler, F. Glatz, A. Hoffmann, H. Röpke and B. H. Wildenthal  
*Zeitschrift für Physik A338* (1991) 23-49
- J170. Short lifetimes in  $^{29}\text{Si}$ - $^{29}\text{P}$  for the test of shell-model wave functions  
 P. Tikkanen, J. Keinonen, A. Kuronen, A. Z. Kiss, E. Koltay, E. Pintye and B. H. Wildenthal  
*Nuclear Physics A517* (1990) 176-192
- J169. Lifetimes of the lowest  $5/2^+$  and  $9/2^+$  states in the mirror nuclei  $^{23}\text{Na}$  -  $^{23}\text{Mg}$   
 P. Tikkanen, J. Keinonen , K. Arstila, A. Kuronen and B. H. Wildenthal  
*Physical Review C42* (1990) 581-587
- J168.  $^{30}\text{Si}(\text{He},\text{d})^{31}\text{P}$  reaction at  $^{25}\text{MeV}$   
 J. Vernotte, A. Khendriche, G. Berrier-Ronsin, S. Geraud, J. Kalifa, G. Rotbard, R. Tamisier and B. H. Wildenthal  
*Physical Review C41* (1990) 1956-1974
- J167. Pion elastic and inelastic scattering from  $^{24}\text{Mg}$  and  $^{26}\text{Mg}$   
 G.S. Blanpied, J. Hernandez, C. S. Mishra, W. K. Mize, C. S. Whisnant, B. G. Ritchie, C. L. Morris, S. J. Seestrom-Morris, C. Fred Moore, P. A. Seidl, R. A. Lindgren, B. H. Wildenthal and R. Gilman  
*Physical Review C41* (1990) 1625-1636
- J166. Shell-model calculations for the energy levels of the  $N=50$  isotones with  $A = 80-87$   
 Xiangdong Ji and B. H. Wildenthal  
*Physical Review C40* (1989) 389-398
- J165. Chaotic behaviour of the nuclear shell-model Hamiltonian  
 H. Dias, M. S. Hussein, N. A. de Oliveira, and B. H. Wildenthal  
*Journal of Physics G 15* (1989) L79-L84
- J164. Short lifetimes in  $^{24}\text{Mg}$  for test of rotational collectivity in shell-model wave functions  
 J. Keinonen, P. Tikkanen, A. Kuronen, Á. Z. Kiss, E. Somorjai and B. H. Wildenthal  
*Nuclear Physics A493* (1989) 124-144
- J163. A generalized LS-coupling scheme for shell-model calculations and related truncation schemes  
 Xiangdong Ji, B. H. Wildenthal, and M. Vallieres  
*Nuclear Physics A492* (1989) 215-236
- J162. Structure of the mirror nuclei  $^{21}\text{Ne}$  and  $^{21}\text{Na}$   
 A. Hoffman, P. Betz, H. Röpke, and B. H. Wildenthal  
*Zeitschrift für Physik A332* (1989) 289-304

- J161. Shell-model calculations of the neutron-rich  $^{40}\text{Cl}$  nucleus  
 Xiangdong Ji and B. H. Wildenthal  
 Physical Review C39 (1989) 701-703
- J160. Neutron-proton weak coupling: Reducing shell-model dimensions by truncations in the neutron and proton subspaces  
 A. Etchegoyen, M. C. Etchegoyen and B. H. Wildenthal  
 Physical Review C39 (1989) 680-686
- J159. The Structure of  $^{27}\text{Al}$   
 M. Lickert, J. Brenneisen, F. Glatz, D. Grathwohl, A. Martinez v. Remisowski, H. Röpke, J. Siefert and B. H. Wildenthal  
*Zeitschrift für Physik* A331 (1988) 409-432
- J158. Spins, parities and isospins of  $^{26}\text{Al}$  levels: Shell-Model aspects  
 P. M. Endt, P. de Wit, C. Alderliesten and B. H. Wildenthal  
*Nuclear Physics* A487 (1988) 221-250.
- J157. Comparisons between shell-model calculations, seniority truncation, and quasi-particle approximations: Application to the odd Ni isotopes and odd N = 82 isotones  
 L. Losano, H. Dias, F. Krmpotic and B. H. Wildenthal  
 Physical Review C38 (1988) 2902-2920
- J156. Shell-model predictions for electromagnetic properties of N = 50 nuclei  
 Xiangdong Ji and B. H. Wildenthal  
 Physical Review C38 (1988) 2849-2859
- J155. Elastic and inelastic scattering of 0.8 GeV protons from  $^{20}\text{Ne}$  and  $^{22}\text{Ne}$   
 G. S. Blanpied, B. G. Ritchie, M. L. Barlett, R. W. Fergerson, G. W. Hoffmann, J. A. McGill and B. H. Wildenthal  
 Physical Review C38 (1988) 2180-2186
- J154. Gamma decay of high spin states in  $^{25}\text{Mg}$  above 6.1 MeV  
 D. M. Headly, R. K. Sheline, S. L. Tabor, U. J. Hüttmeier, C. J. Gross, E. F. Moore, B. H. Wildenthal, H. R. Weller, R. M. Whitton and I. Ragnarsson  
 Physical Review C38 (1988) 1698-1721
- J153. Analysis of magnetic dipole transitions between *sd*-shell states  
 M. C. Etchegoyen, A. Etchegoyen, B. H. Wildenthal, B. A. Brown and J. Keinonen  
 Physical Review C38 (1988) 1382-1391
- J152. Test of the singly magic character of the N=50 isotope  $^{83}\text{As}$  populated in  $^{83}\text{Ge}$  decay  
 J. A. Winger, J. C. Hill, F. K. Wohn, R. L. Gill, X. Ji and B. H. Wildenthal  
 Physical Review C38 (1988) 285-294
- J151. Ground state M1 strengths of  $d_{5/2}^{-1}$  levels in  $^{39}\text{K}$   
 R. Moreh, W. M. Sandefur, W. C. Sellyey, D. C. Sutton and B. H. Wildenthal  
 Physical Review C37 (1988) 2428-2434

- J150. Rotational collectivity in shell-model wave functions for  $A = 20\text{-}28$  nuclei  
 M. Carchidi and B. H. Wildenthal  
 Physical Review C37 (1988) 1681-1696
- J149. Elastic and inelastic scattering of 0.8 GeV protons from  $^{40}\text{Ar}$   
 G. S. Blanpied, B. G. Ritchie, M. L. Barlett, R. W. Fergerson, J. A. McGill and B. H. Wildenthal  
 Physical Review C37 (1988) 1304-1306
- J148. Effective Interaction for N=50 isotones  
 X. Ji and B. H. Wildenthal  
 Physical Review C37 (1988) 1256-1266
- J147. Status of the nuclear shell model  
 B. A. Brown and B. H. Wildenthal  
 Annual Review of Nuclear and Particle Science 38 (1988) 29-65
- J146. Semi-empirical effective interactions for the ls-0d shell  
 B. A. Brown, W. A. Richter, R. E. Julies and B. H. Wildenthal  
 Annals of Physics 182 (1988) 191-236
- J145. Beta decay rates of sd-shell nuclei in stellar interiors  
 T. Kajino, E. Shiino, H. Toki, B. A. Brown and B. H. Wildenthal  
 Nuclear Physics A480 (1988) 175-187
- J144. Empirically optimum MI operator for sd-shell nuclei  
 B. A. Brown and B. H. Wildenthal  
 Nuclear Physics A474 (1987) 290-306
- J143. High-spin states and rotational coexistence in  $^{25}\text{Mg}$   
 D. M. Headly, R. K. Sheline, S. L. Tabor, U. J. Hüttmeier, C. J. Gross, E. F. Moore, B. H. Wildenthal, H. R. Weller, R. M. Whitton and I. Ragnarsson  
 Physics Letters B198 (1987) 433-437
- J142. Prediction of a new high-spin mode of transverse excitation in electron scattering from nuclei  
 B. A. Brown and B. H. Wildenthal  
 Physics Letters B198 (1987) 29-32
- J141. Gamow-Teller and MI Strength in the  $^{32}\text{S}(\text{p},\text{n})^{32}\text{Cl}$  Reaction at 135 MeV  
 B. D. Anderson, T. C. Chitrakarn, A. R. Baldwin, C. Lebo, R. Madey, P. C. Tandy, J. W. Watson, C. C. Foster, B. A. Brown and B. H. Wildenthal  
 Physical Review C36 (1987) 2195-2205
- J140. Gamow-Teller beta decay of  $^{29}\text{Na}$ : Comparison with shell-model predictions  
 P. Baumann, Ph. Dessagne, A. Huck, G. Klotz, A. Knipper, G. Marguier, C. Miehe, M. Ramdane, C. Richard-Serre, G. Walter and B. H. Wildenthal  
 Physical Review C36 (1987) 765-773

- J139. Short lifetimes in  $^{30}\text{P}$   
 P. Tikkanen, J. Keinonen and R. Lappalainen and B. H. Wildenthal  
 Physical Review C36 (1987) 32-43
- J138. Gamow-Teller Strength in the  $^{26}\text{Mg}(\text{p},\text{n})^{26}\text{Al}$  Reaction at 135 MeV and its Fractionation into T= 0, 1, and 2 Isospin Channels  
 R. Madey, B. S. Flanders, B. D. Anderson, A. R. Baldwin, C. Lebo, J. W. Watson, S. M. Austin, A. Galonsky, B. H. Wildenthal and C. C. Foster  
 Physical Review C35 (1987) 2011-2022
- J137. Study of ( $\pi,\text{p}$ ) reactions at low excitation energy  
 G. S. Blanpied, C. S. Mishra, G. S. Adams, B. M. Freedman, C. S. Whisnant, J. P. Egger, C. L. Morris, H. Breur, N. S. Chant, B. G. Richie, B. H. Wildenthal, B. Hoistad and B. A. Brown  
 Physical Review C35 (1987) 1567-1569
- J136. MI radiation widths in  $^{27}\text{Al}$   
 R. Vodhanel, R. Mørch, W. C. Sellyey, M. K. Brussel and B. H. Wildenthal  
 Physical Review C35 (1987) 921-930
- J135. Lifetime of the lowest  $0^+$ , T=l state of  $^{22}\text{Na}$   
 B. T. Neyer, D. L. Clark, J. S. Dunham, W. A. Seale, J. L. Thornton, R. T. Westervelt, S. S. Hanna, B. A. Brown and B. H. Wildenthal  
 Physical Review C35 (1987) 890-893
- J134. Core Polarization Effects on Transition Densities in Medium-Heavy Nuclei  
 H. Sagawa, O. Scholten, B. A. Brown and B. H. Wildenthal  
 Nuclear Physics A462 (1987) 1-25
- J133. Quadrupole moments of sd-shell nuclei  
 M. Carchidi, B. H. Wildenthal and B. A. Brown  
 Physical Review C34 (1986) 2280-2297
- J132. Structure of  $^{22}\text{Mg}$ ,  $^{26}\text{Si}$ , Ar and  $^{38}\text{Ca}$  via the ( $^3\text{He},\text{n}$ ) reaction  
 W. P. Alford, P. Craig, D. A. Lind, R. S. Raymond, J. Ullman, C. D. Zafiratos and B. H. Wildenthal  
 Nuclear Physics A457 (1986) 317-336
- J131. Two-neutron excitations in  $^{26}\text{Mg}$  and  $^{30}\text{Si}$   
 W. P. Alford, J. A. Cameron, E. Habib and B. H. Wildenthal  
 Nuclear Physics A454 (1986) 189-212
- J130. High-spin states in  $^{26}\text{Mg}$   
 F. Glatz, S. Norbert, E. Bitterwolf, A. Burkard, F. Heidinger, Th. Kern, R. Lehmann, H. Röpke, J. Siefert, C. Schneider and B. H. Wildenthal  
 Zeitschrift für Physik A324 (1986) 187-204

- J129. Search for predicted high-spin states in  $^{28}\text{Si}$   
 F. Glatz, M. Lickert, A. Bunkard, Th. Kern, R. Lehmann, S. Norbert, H. Röpke, J. Siefert and  
 B. H. Wildenthal  
*Zeitschrift für Physik* A324 (1986) 173-186
- J128. Electric hexadecupole strength in  $^{32}\text{S}$  and shell-model predictions for systematics in the sd shell  
 B. H. Wildenthal, B. A. Brown and I. Sick  
*Physical Review* C32 (1985) 2185-2188
- J127. Beta-delayed proton decays of  $^{27}\text{P}$  and  $^{31}\text{Cl}$ : A study of Gamow-Teller decays with large Q-values  
 J. Aysto, X. J. Xu, D. M. Moltz, J. E. Reiff, J. Cerny and B. H. Wildenthal  
*Physical Review* C32 (1985) 1700-1706
- J126. Shell-model analysis of high-resolution data for elastic and inelastic electron scattering on  $^{19}\text{F}$   
 B. A. Brown, B. H. Wildenthal, C. F. Williamson, F. N. Rad, S. Kowalski, J. Heisenberg, H. Crannell and J. T. O'Brien  
*Physical Review* C32 (1985) 1127-1156
- J125. Spin-tensor analysis of effective nuclear interactions in the ls-0d shell  
 B. A. Brown, W. A. Richter and B. H. Wildenthal  
*Journal of Physics G* 11 (1985) 1191-1198
- J124. Experimental and theoretical Gamow-Teller beta-decay observables for the sd-shell nuclei  
 B. A. Brown and B. H. Wildenthal  
*Atomic Data and Nuclear Data Tables* 33 (1985) 347-404
- J123. Relationship between Gamow-Teller transition probabilities and (p,n) cross sections at small momentum transfers  
 J. W. Watson, W. Pairsuwan, B. D. Anderson, A. R. Baldwin, B. S. Flanders, R. Madey, R. J. McCarthy, B. A. Brown and B. H. Wildenthal  
*Physical Review Letters* 55 (1985) 1369-1372
- J122. The g-factor of  $4^+$  states in the N=82 isotones  $^{136}\text{Xe}$  and  $^{138}\text{Ba}$   
 Z. Berant, A. Wolf, John C. Hill, F. K. Wohn, R. L. Gill, H. Mach, M. Rafailovich, H. Kruse, B. H. Wildenthal, G. Peaslee, A. Aprahamian, J. Goulden and C. Chung  
*Physical Review* C31 (1985) 570-574
- J121. The  $^{27}\text{Al}(\text{t},\text{p})^{29}\text{Al}$  reaction at  $E_{\text{t}} = 15$  MeV  
 C. Bland, H. T. Fortune, D. L. Watson, M. A. Abouzeid and B. H. Wildenthal  
*Nuclear Physics* A431 (1984) 237-255
- J120. Excitation of the ground state rotational band in  $^{20}\text{Ne}$  by 0.8 GeV protons  
 G. S. Blanpied, G. A. Balchin, G. E. Langston, B. G. Ritchie, M. L. Bartlett, G. W. Hoffman, J. A. McGill, M. A. Franey, M. Gazzaly and B. H. Wildenthal  
*Physical Review* C30 (1984) 1233-1237

- J119. Level densities in  $^{20}\text{F}$ : Experimental, shell model and weak-coupling results  
 H. T. Fortune and B. H. Wildenthal  
 Physical Review C30 (1984) 1063-1065
- J118. Bound state M1 transitions in sd-shell nuclei  
 U. E. P. Berg, K. Ackermann, K. Bangert, C. Blasing, W. Naatz, R. Stock, K. Wienhard, M. K. Brussel, T. E. Chapuran and B. H. Wildenthal  
 Physics Letters 140B (1984) 191-196
- J117. Observation of quenching in isoscalar and isovector  $0^+ \rightarrow 1^+$  transitions in  $^{28}\text{Si}(\text{p},\text{p})$   
 N. Anantaraman, B. A. Brown, G. M. Crawley, A. Galonsky, C. Djalali, N. Marty, M. Morlet, A. Willis, J. C. Jourdain and B. H. Wildenthal  
 Physical Review Letters 52 (1984) 1409-1412
- J116. Simultaneous analysis of magnetic moments and elastic magnetic electron scattering form factors  
 B. A. Brown, R. Radhi and B. H. Wildenthal  
 Physics Letters 133B (1983) 5-8
- J115. Corrections to the free-nucleon values of the single-particle matrix elements of the M1 and Gamow-Teller operators, from a comparison of shell-model predictions with sd-shell data  
 B. A. Brown and B. H. Wildenthal  
 Physical Review C28 (1983) 2397-2413
- J114. Predicted features of the beta decay of neutron-rich sd-shell nuclei  
 B. H. Wildenthal, M. S. Curtin and B. A. Brown  
 Physical Review C28 (1983) 1343-1366
- J113. Electric quadrupole and hexadecupole nuclear excitations from the perspectives of electron scattering and modern shell-model theory  
 B. A. Brown, R. Radhi and B. H. Wildenthal  
 Physics Reports 101 (1983) 314-358
- J112. Gamow-Teller strength in the  $^{18}\text{O}(\text{p},\text{n})^{18}\text{F}$  reaction at 135 MeV  
 B. D. Anderson, A. Fazely, R. J. McCarthy, P. C. Tandy, J. W. Watson, R. Madey, W. Bertozzi, T.N. Buti, J. M. Finn, J. Kelly, M. A. Kovash, B. Pugh, B. H. Wildenthal and C. C. Foster  
 Physical Review C27 (1983) 1387-1393
- J111. Strengths of transitions between  $0^+$  and  $1^+$  states and their relationship to inelastic electron scattering form factors: the example of  $^{24}\text{Mg}$   
 B. A. Brown and B. H. Wildenthal,  
 Physical Review C27 (1983) 1296-1301
- J110. The  $^{26}\text{Mg}(^3\text{He},\text{n})^{28}\text{Si}$  reaction  
 W. K. D. Bohne, H. Buchs, K. Fuchs, D. Grabisch, U. Hilscher, U. Janke, T. G. Kenge, H. Masterson, H. Morgenstern and B. H. Wildenthal  
 Nuclear Physics A378 (1982) 525

- J109. Isovector E2 matrix elements from electromagnetic transitions in the sd-shell: experiment and shell model calculations  
 B. A. Brown, B. H. Wildenthal, W. Chung, S. E. Massen, M. Bernas, A. M. Bernstein, R. Miskimen, V. R. Brown and V. A. Madsen  
*Physical Review C26* (1982) 2247-2272
- J108. ( $d, ^2He$ ) reaction at  $E_d = 99$  MeV  
 K. B. Beard, J. Kasagi, E. Kashy, B. H. Wildenthal, D. L. Freisel, H. Nann and R. E. Warner  
*Physical Review C26* (1982) 720-722
- J107. Shell-model calculation of M1 scattering strengths in  $^{42,44,48}Ca$   
 J. B. McGrory and B. H. Wildenthal  
*Physics Letters 103B* (1981) 173-176
- J106. Energy levels in  $^{23}Mg$  from the  $^{25}Mg(p,t)^{23}Mg$  reaction  
 H. Nann, A. Saha and B. H. Wildenthal  
*Physical Review C23* (1981) 606-615
- J105. Collapse of the conventional shell-model ordering in the very-neutron-rich isotopes of Na and Mg  
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**Invited Talks - 1976 and later (duplicates listing above when proceedings were published):**

- T22. Large-scale shell model calculations  
 4<sup>th</sup> International Spring Seminar on Nuclear Physics: The Building Blocks of Nuclear Structure,  
 Amalfi, Italy, May 18-22, 1992

- T21. Shell structure in multi-orbit, identical-particle spaces: the  $N = 82$  isotones  
3<sup>rd</sup> International Spring Seminar on Nuclear Physics: Understanding the Variety of Nuclear Excitations Ischia, Italy, May 21-25, 1990
- T20. Shell-model calculations for exotic nuclei, II  
Nuclear Structure of Light Nuclei Far From Stability - Experiment and Theory  
Obernai, France, November 27-24, 1989
- T19. Shell-model predictions and Gamow-Teller Data  
XXIII Yamada Conference on Nuclear Weak Processes and Nuclear Structure  
Osaka, Japan, June 12-15, 1989
- T18. Shell-model Calculations  
2<sup>nd</sup> International Spring Seminar on Nuclear Physics, Capri, May 16-20, 1988
- T17. Shell-model analyses of weak and electromagnetic data: The interplay of many-body and single-nucleonic features  
International Symposium on Weak and Electromagnetic Interactions in Nuclei  
Heidelberg, July 1-5, 1986
- T16. Application of a  $d_{3/2}$ - $f_{7/2}$  shell model to selected structural features of nuclei in the  $A=34-48$  region  
1985 Workshop, Indiana University Cyclotron Facility  
Bloomington, Indiana, October 21-23, 1985
- T15. Shell-model extrapolations from stable to far-from stable nuclei  
Recent Advances in the Study of Nuclei off the Line of Stability, A Symposium of the Division of Nuclear Chemistry and Technology, American Chemical Society  
Chicago, Illinois, September 8-13, 1985
- T14. Understanding the strengths of magnetic dipole translations  
Transition Moments in Nuclei - A Symposium in Honor of Dieter Kurath  
Argonne, Illinois, June 6-8, 1985
- T13. The common genesis of energy eigenstates in the  $1s,0d$  shell  
International Symposium on Nuclear Shell Models,  
Drexel University, October 31-November 3, 1984
- T12. Shell model predictions for the broad trends and fine details of electromagnetic matrix elements in nuclei  
Fifth International Symposium on Capture Gamma-ray Spectroscopy and Related Topics,  
Knoxville, Tennessee, September 10-14, 1984
- T11. Modern Experiments and the 'Neo-Classical Shell Model'  
187th National Meeting of the American Chemical Society, St. Louis, Missouri, April 8-13, 1984
- T10. Electromagnetic and Weak Observables in the Context of the Shell Model  
International Symposium on Electromagnetic Properties of Atomic Nuclei,  
Tokyo, Japan, November 9-12, 1983

- T9. Calculation of all sd-shell Nuclear States from a Single, A-dependent Hamiltonian  
Fall meeting of the Division of Nuclear Physics, Notre Dame, Indiana, October 13-15, 1983,  
Bulletin of the American Physical Society 28 (1983) 987
- T8. Analysis of Data on Nuclear Spin Excitations  
International School of Nuclear Physics, Erice, Sicily, April 6-18, 1983
- T7. A Critique of Nuclear Spectroscopy  
Annual Conference of the Institute of Physics on Nuclear Structure and Particle Physics  
Oxford, April 6-8, 1981
- T6. Ml and Gamow-Teller Transition Rates in Light Nuclei  
Annual Meeting of the American Physical Society, New York, N. Y., January 26-29, 1981  
Bulletin of the American Physical Society 26 (1981) 12
- T5. Analysis of Nuclear Spectroscopic Data with the Shell Model  
Summer School on Nuclear Physics of the University of Warsaw,  
Mikolakji, Poland, September 1-10, 1977
- T4. The Nuclear Shell Model  
International Summer School on Nuclear Physics,  
Nijenrode, The Netherlands, August 14-28, 1977
- T3. Extraction of the Fundamental Paramenters of Nuclear Structure from Nuclear Data via the Shell  
Model  
International Winter School on Nuclear Physics of the  
University of Milan, Bormio, Italy, January 15-20, 1977
- T2. Shell-Model Calculations in the sd-shell  
Gordon Research Conference on Photonuclear Reactions  
Plymouth, New Hampshire, August 9-13, 1976
- T1. Shell-model Calculations in Large Dimensioned Spaces  
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