

## Curriculum Vitae of Dr. Khalifeh Abusaleem

**Name:** Khalifeh Abusaleem

**Academic Position:** Assistant Professor of Nuclear Physics, University of Jordan

**Date of Birth:** December 1, 1958

**Nationality:** Jordanian

**Address:** University of Jordan,  
Amman 11942, Jordan

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**Education:** **Ph.D. (Nuclear physics)**, Illinois Institute of Technology, Chicago-USA, 2002.

**M. Sc. (Nuclear Physics)**, Banaras Hindu University, Banaras-India, 1991.

**B.Sc. (Physics)**, King Sa'ud University, Riyadh-Saudi Arabia, 1982.

**Ph.D. Project:** Nucleon Alignments and Collective Degrees of Freedom in Actinide Nuclei

**Ms. Project:** Semi Classical Approach to Heavy Ions Fusion.

## **Experience:**

### **September 2007 – present**

I hold the rank of assistant professor of nuclear physics at the Department of Physics of the University of Jordan. Responsibilities include:

- Teaching Physics and specialized courses in nuclear physics (undergraduate and graduate)
- Establishing nuclear physics labs (undergraduate and graduate) and supervising the labs.
- Developing syllabi for the Masters and Ph.D. programs
- Supervising theses at M.Sc. and Ph.D. levels
- Conducting research in the fields of interest

### **February 2007 – September 2007**

As an advisor for the Minister of Energy and Mineral Resources I have been working on deciding the suitable power reactor to satisfy the national needs of electric power and potable water. In addition, issues related to the national uranium reserve have been a major interest.

### **January 2003 – January 2006:**

In a Post-doctoral position at the Advanced Photon Source of Argonne National Laboratory, I have been working on developing a new kind of gamma/x-ray lens (using crystal diffraction technique) that has an improved resolving power and detection efficiency. Several experiments have been carried out using synchrotron radiation covering the energy range of 90–150 keV. In addition to the x-rays experiments, gamma rays from Co<sup>57</sup> source have been used to explore the response of the crystals under investigation. The results of these experiments are being published in the refereed journals. The new technique will have impact on diagnostic medical technique. In addition to the medical applications, the new

technique can serve other fields such as astrophysics where the signal caused by the high-energy gamma rays is very weak compared to the background.

**June 1999 - December 2002:**

I have been a research assistant in the Physics Division of ANL in the field of low energy nuclear physics emphasizing on the nuclear structure of the heaviest stable nuclei (the actinide region). The actinide nuclei (targets) have been prepared on site with enrichment of more than 90%. Several experiments have been carried out where the actinide targets have been bombarded with the heavy, odd-even nucleus (Bismuth 209) from the Argonne Tandem Linac Accelerator System (ATLAS facility). The projectile nuclei excite the target nuclei to levels of high energy and angular momentum using the long range Coulomb force. In addition, the projectile energy allowed the exchange of nucleon(s) between the projectile and the target nuclei. The excited nuclei can then deexcite by emitting successive gamma rays. The emitted gamma rays have been sorted and interrogated according to several criteria set to achieve a specific goal. Thus, the nuclear structure of most of the actinide nuclei has been investigated.

**October 1997 – March 1998:**

In a fellowship sponsored by the IAEA I had been training on safety code of a zero power research reactor at the Ohio State University. In addition, I attended courses on Nuclear Reactor Theory and Neutron Diffusion and Moderation

**October 91 - September 97:**

Section Head/Nuclear Energy Department of Ministry of Energy and Mineral Resources/Amman-Jordan.

**Responsibilities:**

- Planning, Designing and running nuclear projects at national and regional levels. Designing a project to use a zero power reactor for training purposes is an example.
- Organizing, conducting, and lecturing in training courses, workshops, seminars, meetings, and conferences related to peaceful applications of radiation and radioisotopes in Medicine, Agriculture, Industry, etc.
- Collaborating with the national organizations in planning the related

activities of nuclear techniques.

- Collaborating with the International Atomic Energy Agency, IAEA, in planning activities at national and regional levels.
- Receiving and transmitting bibliographic information through the International Nuclear Information System, INIS, of the IAEA.

**April 82 – October 91:**

Teacher of physics, Ministry of Education, Amman-Jordan.

- Teaching physics and supervising science labs.

**Research of Interest:**

- **Nuclear Data Evaluation:** This project aims to precisely evaluate nuclear structure properties of isotopes
- **Nuclear structure of heavy and super heavy ions:** The project targets the actinide nuclei ( Thorium, Uranium, Neptunium, Plutonium, Americium, Curium ...etc) in addition to the recently synthesized isotopes with  $A > 250$
- **Steering of nuclear radiation:** The research will be focused on using crystal diffraction technique for the steering and focusing of nuclear radiation. In addition, applications of Synchrotron light in physics and materials science are of major interest

**Memberships:**

- American Physical Society
- ATLAS facility of Argonne National Lab.
- Assistant chairman : SESAME Jordanian National Committees

**Partial List of Scientific Activities:**

- Organizer of the 6<sup>th</sup> National JNC Workshop on SESAME, the University of Jordan-Amman, May 6, 2010
- Scientific Visit to the Physics Group at McMaster University-Canada,

January 22-29, 2010

- Organizer (local organizing and scientific committees) of the 8<sup>th</sup> SESAME Users' Meeting, 19-21/11/2009, Petra- Jordan
- International Forum on Nuclear Energy and Nuclear Proliferation, 22-24/6/2009, Amman-Jordan
- Meeting with IAEA, 5/28-31/2007, JAEC, Amman-Jordan. To discuss the feasibility of using nuclear energy for power generation and water desalination
- *Advanced Photon Source User Meeting, Argonne National Laboratory, Chicago /IL, May 05*
- *Conference on Nuclear Structure 2000, Michigan State University, East Lansing-MI, 8/15-19/2000*
- *Gordon Research Conference on Nuclear Chemistry, New London-NH, 6/18-22/01*
- *Mini Course on Experimental Techniques for Rare Isotopes, Michigan State University, East Lansing-MI, 7/30-8/10/01*
- *APS Spring Meeting, Albuquerque-NM, 4/19-24/02*
- *Workshop on safe use of industrial facilities, Prague, 08/24 – 09/04, 1992*
- *Training Course on nuclear instrumentation, Istanbul, 10/30-12/9/1996*
- *Fellowship on Reactor Safety Analysis, Ohio State University, Columbus, Ohio, Oct.97 –March 98.*
- *Seminars, training courses and meetings at the national, regional and international levels.*

## **Publications:**

1. Evaluation of A=71 mass chain nuclear data  
**K. Abusaleem** and Balraj Singh  
Submitted to Nuclear Data Sheets

2. Rotational alignments in  $^{235}\text{Np}$  and the possible role of  $j_{15/2}$  neutrons  
**K. Abu Saleem et al.**  
 PRC81, 014312 (2010)
3. Evaluation of A=249 mass chain nuclear data  
**K. Abusaleem**  
 In preparation for Nuclear Data Sheets

### Nuclear Data Evaluation

1.  $^{63}\text{Cu}(e,e')$  Nuclear data Nuclear  
**K. Abusaleem** and B.Singh  
 XUNDL, ENSDF, NNDC, May 20, 2010
2.  $^{65}\text{Cu}(e,e')$  Nuclear data  
**K. Abusaleem** and B.Singh  
 XUNDL, ENSDF, NNDC, May 20, 2010
3.  $^{105}\text{Rh}$  Nuclear Data from Beta Decay of 4.44 Hour Level in  $^{105}\text{Ru}$   
**K. Abusaleem** and B.Singh  
 XUNDL, ENSDF, NNDC, May 1, 2010
4.  $^{96}\text{Mo}$  Nuclear Data from Beta Decay of 4.28 Day Level in  $^{96}\text{Tc}$   
**K. Abusaleem** and B.Singh  
 XUNDL, ENSDF, NNDC, May 1, 2010
5. Beta Decay of 35.3 Hour Level in  $^{105}\text{Rh}$  into  $^{105}\text{Ru}$   
**K. Abusaleem** and B.Singh  
 XUNDL, ENSDF, NNDC, May 1, 2010
6. 39.2 Day Level of  $^{103}\text{Ru}$  Beta Decay to  $^{103}\text{Rh}$   
**K. Abusaleem** and B.Singh  
 XUNDL, ENSDF, NNDC, May 1, 2010
7.  $^{97}\text{Tc}$  Nuclear Data from 2.83 Day  $^{97}\text{Ru}$  Electron Capture Decay  
**K. Abusaleem** and B.Singh  
 XUNDL, ENSDF, NNDC, April 25, 2010
8.  $^{257}\text{Db}$  Nuclear Data from Alpha Decay of  $^{11.8}\text{ms}$  Level  $^{261}\text{Bh}$   
 B. Singh and **K. Abusaleem**  
 XUNDL, ENSDF, NNDC, April 15, 2010
9.  $^{261}\text{Bh}$  Nuclear Data from  $^{209}\text{Bi}(^{54}\text{Cr},2n)$  Reaction  
 B. Singh and **K. Abusaleem**

- XUNDL, ENSDF, NNDC, April 15, 2010
10.  $^{177}\text{Hg}$  data from Alpha Decay of the 36 ms Level in  $^{181}\text{Pb}$   
**B. Singh and K. Abusaleem**  
XUNDL, ENSDF, NNDC, April 7, 2010
  11.  $^{176}\text{Hg}$  data from Alpha Decay of the 4.2 ms Level in  $^{180}\text{Pb}$   
**B. Singh and K. Abusaleem**  
XUNDL, ENSDF, NNDC, April 7, 2010
  12.  $^{172}\text{Pt}$  data from Alpha Decay of the 20 ms Level in  $^{172}\text{Pt}$   
**K. Abusaleem and B. Singh**  
XUNDL, ENSDF, NNDC, April 7, 2010
  13.  $^{168}\text{Os}$  data from Alpha Decay of the 100 ms Level in  $^{172}\text{Pt}$   
**K. Abusaleem and B. Singh**  
XUNDL, ENSDF, NNDC, April 7, 2010
  14.  $^{140}\text{Cs}$  data from Spontaneous Fission of  $^{252}\text{Cf}$   
**K. Abusaleem et al.**  
XUNDL, ENSDF, NNDC, March 20, 2010
  15. Alpha decay of  $^{243}\text{Es}$  23 second level  
**K. Abusaleem and B. Singh**  
XUNDL, ENSDF, NNDC, March 18, 2010
  16. Electron capture of 17.8 S  $^{242}\text{Es}$  level to  $^{242}\text{Cf}$   
**K. Abusaleem and B. Singh**  
XUNDL, ENSDF, NNDC, March 18, 2010
  17.  $^{243}\text{Es}$  data from Alpha decay of 1.2 S level of  $^{247}\text{Md}$   
**K. Abusaleem and B. Singh**  
XUNDL, ENSDF, NNDC, March 18, 2010
  18.  $^{246}\text{Fm}$  data from electron capture of 4.4 S level of  
**K. Abusaleem and B. Singh**  
XUNDL, ENSDF, NNDC, March 18, 2010
  19. Alpha decay of 0.9 second  $^{246}\text{Md}$  level to  $^{242}\text{Es}$  ground state  
**K. Abusaleem and B. Singh**  
XUNDL, ENSDF, NNDC, March 18, 2010
  20.  $^{168}\text{Ir}$  Data from  $^{172}\text{Au}$  Alpha Decay  
**B. Singh and K. Abusaleem**  
XUNDL, ENSDF, NNDC, March 7, 2010

21.  $^{96}\text{Ru}$ ( $^{78}\text{Kr}$ ,PNG)  
B. Singh and **K. Abusaleem**  
XUNDL, ENSDF, NNDC, March 7, 2010
22.  $^{168}\text{Ir}$  Data from  $^{172}\text{Au}$  Alpha Decay  
B. Singh and **K. Abusaleem**  
XUNDL, NNDC, March 7, 2010
23.  $^{164}\text{Re}$  Data from  $^{168}\text{Ir}$  0.22 s Level Alpha Decay  
B. Singh and **K. Abusaleem**  
XUNDL, NNDC, March 7, 2010
24.  $^{164}\text{Re}$  Data from  $^{168}\text{Ir}$  160 ms Level Alpha Decay  
B. Singh and **K. Abusaleem**  
XUNDL, NNDC, March 7, 2010
25.  $^{168}\text{Ir}$  Data from  $^{172}\text{Au}$  Alpha Decay  
B. Singh and **K. Abusaleem**  
XUNDL, NNDC, March 7, 2010
26.  $^{144}\text{Cs}$  data from spontaneous fission of  $^{248}\text{Cm}$   
**K. Abusaleem** and B. Singh  
XUNDL, ENSDF, NNDC, January 12, 2010
27.  $^{181}\text{Ta}$ ( $^{18}\text{O}$ , $^{16}\text{O}$ ) Reaction Evaluation  
**K. Abusaleem** and B. Singh  
XUNDL, ENSDF, NNDC, March 3, 2010
28.  $^{127}\text{Sb}$  data from  $^{176}\text{Yb}$ ( $^{136}\text{Xe}$ ,XG) reaction  
**K. Abusaleem** and B. Singh  
XUNDL, ENSDF, NNDC, January 6, 2010
29.  $^{142}\text{Cs}$  data from spontaneous fission of  $^{248}\text{Cm}$   
**K. Abusaleem** and B. Singh  
XUNDL, ENSDF, NNDC, January 12, 2010
30.  $^{127}\text{Sb}$  data from  $^{176}\text{Yb}$ ( $^{136}\text{Xe}$ ,XG) reaction  
**K. Abusaleem** and B. Singh  
XUNDL, ENSDF, NNDC, January 6, 2010
31.  $^{251}\text{Cf}$  from  $^{250}\text{Cf}$ (D,P)  
**K. Abusaleem** and B. Singh  
XUNDL, ENSDF, NNDC, December 27, 2009
32.  $^{249}\text{Cm}$  from  $^{248}\text{Cm}$ ( $^4\text{He}$ , $^3\text{He}$ )  
**K. Abusaleem** and B. Singh



- XUNDL, ENSDF, NNDC, December 27, 2009
33.  $^{40}\text{K}$  data from  $^{40}\text{Ar}(\text{P},\text{N})$  reaction  
**K. Abusaleem** and B. Singh  
XUNDL, ENSDF, NNDC, December 17, 2009
  34.  $^{24}\text{Mg}(\text{P},\text{T})$  Nuclear data  
**K. Abusaleem** and B. Singh  
XUNDL, ENSDF, NNDC, November 27, 2009
  35. Nuclear data of  $^{125}\text{Te}$  isotope from Coulomb excitation  
**K. Abusaleem** and B. Singh  
XUNDL, ENSDF, NNDC, November 16, 2009
  36.  $^{95}\text{Mo}(\text{T},\text{P})$  Reaction data  
**K. Abusaleem** and B. Singh  
XUNDL, ENSDF, NNDC, November 11, 2009
  37.  $^{140}\text{Ce}(\text{A},\text{A}'\text{G})$  Reaction data  
**K. Abusaleem** and B. Singh  
XUNDL, ENSDF, NNDC, October 8, 2009
  38.  $^{138}\text{Ba}(\text{A},\text{A}'\text{G})$  Reaction data  
**K. Abusaleem** and B. Singh  
XUNDL, ENSDF, NNDC, October 8, 2009
  39.  $^{181}\text{Ta}(\text{}^{18}\text{O}, \text{}^{16}\text{O}\gamma)$  Reaction Evaluation  
**K. Abusaleem** and B. Singh  
XUNDL, ENSDF, NNDC, March 3, 2009
  40.  $^{99}\text{Ru}(\text{}^3\text{He}, 2\text{N}\Gamma)^{100}\text{Pd}$  Reaction Evaluation  
**K. Abusaleem** and B. Singh  
XUNDL, ENSDF, NNDC, February 18, 2009
  41.  $^{231}\text{Ac}$  Nuclear Structure from  $^{231}\text{Ra}$  Beta Decay  
**K. Abusaleem** and B. Singh  
XUNDL, ENSDF, NNDC, September 10, 2008
  42.  $^{41}\text{Ar}$  Data from  $^{44}\text{Ar}(\text{D},\text{P})^{45}\text{Ar}$  Reaction  
**K. Abusaleem** and B. Singh  
XUNDL, ENSDF, NNDC, September 18, 2008
  43.  $^{44}\text{Ar}(\text{D},\text{P})^{45}\text{Ar}$  Reaction Evaluation  
**K. Abusaleem** and B. Singh  
XUNDL, ENSDF, NNDC, September 18, 2008

44.  $^{142}\text{Gd}$  Data Evaluation from  $^{99}\text{Ru}(^{48}\text{Tl},2\text{P}3\text{NG})$  Reaction  
**K. Abusaleem**  
 XUNDL, ENSDF, NNDC, September 2008
45.  $^{51}\text{V}(^{20}\text{Ne},\text{XG})$  Reaction Evaluation  
**K. Abusaleem**  
 XUNDL, ENSDF, NNDC, August 21, 2008
46.  $^{100}\text{Mn}(^{40}\text{Ar},4\text{NG})^{136}\text{Nd}$  Reaction Evaluation  
**K. Abusaleem** and B. Singh  
 XUNDL, ENSDF, NNDC, September 29, 2008
47.  $^{35}\text{P}$  Data Evaluation  $^{208}\text{Pb}(^{36}\text{S},\text{XG})$  Reaction  
**K. Abusaleem** and B. Singh  
 XUNDL, ENSDF, NNDC, September 29, 2008
48.  $^{136}\text{Pm}$  Data from  $^{54}\text{Fe}(^{92}\text{Mo},\text{XG})$  Reaction  
**K. Abusaleem** and B. Singh  
 XUNDL, ENSDF, NNDC, September 18, 2008
49.  $^{100}\text{Mo}(^{20}\text{Ne},\alpha5\text{NG})^{111}\text{Sn}$  Reaction Evaluation  
**K. Abusaleem** and B. Singh  
 XUNDL, ENSDF, NNDC, September 18, 2008
50.  $^{198}\text{Tl}$  Nuclear Data from  $^{197}\text{Au}(\alpha,3\text{NG})$  Reaction  
**K. Abusaleem**  
 XUNDL, ENSDF, NNDC, August 22, 2008

### OLD JOURNAL ARTICLES

- 1) INTERPLAY BETWEEN OCTUPOLE AND QUASIPARTICLE EXCITATIONS IN  $^{178}\text{Hg}$  AND  $^{180}\text{Hg}$   
 F. G. Kondev, R. V. F. Janssens, M. P. Carpenter, **K. Abu Saleem**, I. Ahmad, M. Alcorta, H. Amro, P. Bhattacharyya, L. T. Brown, J. Caggiano, C. N. Davids, S. M. Fischer, A. Heinz, B. Herskind, R. A. Kaye, T. L. Khoo, T. Lauritsen, C. J. Lister, W. C. Ma, R. Nouicer, J. Ressler, W. Reviol, L. L. Riedinger, D. G. Sarantites, D. Seweryniak, S. Siem, A. A. Sonzogni, J. Uusitalo, P. G. Varrette, and I. Wiedenhover  
*Phys. Rev. C 62, 044305 (2000)*
- 2) SYSTEMATIC STUDY OF ENERGY--SPIN ENTRY DISTRIBUTIONS AT THE PROTON DRIPLINE IN THE  $A \sim 170$  REGION  
 M.B. Smith, J. A. Cizewski, M. P. Carpenter, F. G. Kondev, R. V. F. Janssens, **K. Abu Saleem**, I. Ahmad, H. Amro, M. Danchev, C. N. Davids, D. J. Hartley, A.

- Heinz, T.L. Khoo, T. Lauritsen, C. J. Lister, W. C. Ma, G. L. Poli, J. J. Ressler, W. Reviol, L. L. Riedinger, D. Seweryniak and I. Wiedenhover  
*Nucl. Phys. A 682, 433c (2001)*
- 3) FIRST OBSERVATION OF EXCITED STRUCTURES IN NEUTRON DEFICIENT, ODD-MASS Pt, Au AND Hg NUCLEI  
F. G. Kondev, M. P. Carpenter, R. V. F. Janssens, **K. Abu Saleem**, I. Ahmad, M. Alcorta, H. Amro, J. Caggiano, J. A. Cizewski, M. Danchev, C. N. Davids, D. J. Hartley, A. Heinz, B. Herskind, R. A. Kaye, T. L. Khoo, T. Lauritsen, C. J. Lister, W.C. Ma, G.L. Poli, J. Ressler, W. Reviol, L.L. Riedinger, D. Seweryniak, S. Siem, M. B. Smith, A. A. Sonzogni, P. G. Varmette and I. Wiedenhover  
*Nucl. Phys. A 682, 487c (2001)*
- 4) IDENTIFICATION OF EXCITED STRUCTURES IN PROTON UNBOUND NUCLEI  $^{173,175,177}\text{Au}$ : SHAPE CO--EXISTENCE AND INTRUDER BANDS  
F. G. Kondev, M. P. Carpenter, R. V. F. Janssens, **K. Abu Saleem**, I. Ahmad, H. Amro, J. A. Cizewski, M. Danchev, C. N. Davids, D. J. Hartley, A. Heinz, T. L. Khoo, T. Lauritsen, C. J. Lister, W. C. Ma, G. L. Poli, J. Ressler, W. Reviol, L. L. Riedinger, D. Seweryniak, M. B. Smith, and I. Wiedenhover  
*Phys. Lett. B 512, 268 (2001)*
- 5) DIRECT DECAY FROM THE SUPERDEFORMED BAND TO THE YRAST LINE IN  $^{152}_{66}\text{Dy}^{86}$   
T. Lauritsen, M. P. Carpenter, T. Dossing, P. Fallon, B. Herskind, R. V. F. Janssens, D. G. Jenkins, T. L. Khoo, F. G. Kondev, A. Lopez-Martens, A. O. Machiavelli, D. Ward, **K. Abu Saleem**, I. Ahmad, R. Clark, M. Cromaz, J. P. Greene, F. Hannachi, A. M. Heinz, A. Korichi, G. Lane, C. J. Lister, P. Reiter, D. Seweryniak, R. C. Vondrasek, and I. Wiedenhover  
*Phys. Rev. Lett. 88, 042501 (2002)*
- 6) FIRST OBSERVATION OF EXCITED STRUCTURES IN NEUTRON-DEFICIENT  $^{179}\text{Hg}$ : EVIDENCE FOR MULTIPLE SHAPE COEXISTENCE  
F. G. Kondev, M. P. Carpenter, R. V. F. Janssens, C. J. Lister, **K. Abu Saleem**, I. Ahmad, H. Amro, J. Caggiano, C. N. Davids, A. Heinz, B. Herskind, T. L. Khoo, T. Lauritsen, W. C. Ma, J. J. Ressler, W. Reviol, L. L. Riedinger, D. G. Sarantites, D. Seweryniak, S. Siem, A. A. Sonzogni, and I. Wiedenhover  
*Phys. Lett. B 528, 221 (2002)*
- 7) IDENTIFICATION OF EXCITED STATES IN  $^{140}\text{Dy}$   
D. M. Cullen, M. P. Carpenter, C. N. Davids, A. M. Fletcher, S. J. Freeman, R. V. F. Janssens, F. G. Kondev, C. J. Lister, L. K. Pattison, D. Seweryniak, J. F. Smith, A. M. Bruce, **K. Abu Saleem**, I. Ahmad, A. Heinz, T. L. Khoo, E. F. Moore, G. Mukherjee, C. Wheldon, A. Woehr  
*Phys. Lett. B 529, 42 (2002)*
- 8) OCTUPOLE VIBRATION IN SUPERDEFORMED  $^{152}_{66}\text{Dy}^{86}$

- T. Lauritsen, R. V. F. Janssens, M. P. Carpenter, P. Fallon, B. Herskind, D. G. Jenkins, T. L. Khoo, F. G. Kondev, A. Lopez-Martens, A. O. Macchiavelli, D. Ward, **K. Abu Saleem**, I. Ahmad, R. M. Clark, M. Cromaz, T. Dossing, A. M. Heinz, A. Korichi, G. Lane, C. J. Lister, D. Seweryniak  
*Phys. Rev. Lett.* 89, 282501 (2002)
- 9) LIMITS OF THE ENERGY-SPIN PHASE SPACE BEYOND THE PROTON DRIP LINE: ENTRY DISTRIBUTIONS OF Pt AND Au ISOBARS  
M. B. Smith, J. A. Cizewski, M. P. Carpenter, F. G. Kondev, T. L. Khoo, T. Lauritsen, R. V. F. Janssens, **K. Abu Saleem**, I. Ahmad, H. Amro, M. Danchev, C. N. Davids, D. J. Hartley, A. Heinz, C. J. Lister, W. C. Ma, G. L. Poli, J. J. Ressler, W. Reviol, L. L. Riedinger, D. Seweryniak, and I. Wiedenhover  
*Phys. Lett. B* 551, 262 (2003)
- 10) IN-BEAM gamma-RAY SPECTROSCOPY OF  $^{172}\text{Pt}$   
M. Danchev, D. J. Hartley, F. G. Kondev, M. P. Carpenter, R. V. F. Janssens, L. L. Riedinger, **K. Abu Saleem**, I. Ahmad, H. Amro, D. L. Balabanski, J. A. Cizewski, C. N. Davids, A. Heinz, T. L. Khoo, T. Lauritsen, C. J. Lister, W. C. Ma, G. L. Poli, J. Ressler, W. Reviol, M. B. Smith, D. Seweryniak, and I. Wiedenhover  
*Phys. Rev. C* 67, 014312 (2003)
- 11) EXTENDING THE REGION OF TRIAXIAL SUPERDEFORMATION: CANDIDATE TSD BANDS IN  $^{174}\text{Hf}$   
M. Djongolov, D. J. Hartley, L. L. Riedinger, F. G. Kondev, R. V. F. Janssens, **K. Abu Saleem**, I. Ahmad, D. L. Balabanski, M. P. Carpenter, P. Chowdhury, D. M. Cullen, M. Danchev, G. D. Dracoulis, H. El-Masri, J. Goon, A. Heinz, R. A. Kaye, T. L. Khoo, T. Lauritsen, C. J. Lister, E. F. Moore, M. A. Riley, D. Seweryniak, I. Shestakova, G. Sletten, P. M. Walker, C. Wheldon, I. Wiedenhoefer, O. Zeidan, and Jing-ye Zhang  
*Phys. Lett. B* 560, 24 (2003)
- 12) RECOIL-GATED PLUNGER LIFETIME MEASUREMENTS IN  $^{188}\text{Pb}$   
A. Dewald, R. Peusquens, B. Saha, P. von Brentano, A. Fitzler, T. Klug, I. Wiedenhover, M. P. Carpenter, A. Heinz, R. V. F. Janssens, F. G. Kondev, C. J. Lister, D. Seweryniak, **K. Abu Saleem**, R. Krucken, J. R. Cooper, C. J. Barton, K. Zyromski, C. W. Beausang, Z. Wang, P. Petkov, A. M. Oros-Peusquens, U. Garg, and S. Zhu  
*Phys. Rev. C* 68, 034314 (2003)
- 13) HIGH-SPIN STATES IN  $^{179}\text{Au}$  - SPECTROSCOPY OF SHAPE-DRIVING ORBITALS BEYOND THE NEUTRON MIDSHELL  
W. F. Mueller, W. Reviol, M. P. Carpenter, R. V. F. Janssens, F. G. Kondev, **K. Abu Saleem**, I. Ahmad, H. Amro, C. R. Bingham, J. Caggiano, C. N. Davids, D. Hartley, A. Heinz, B. Herskind, D. Jenkins, T. L. Khoo, T. Lauritsen, W. C. Ma,

- J. Ressler, L. L. Riedinger, D. G. Sarantites, D. Seweryniak, S. Siem, A. A. Sonzogni, J. Uusitalo, P. G. Varmette, I. Wiedenhover, and R. Wadsworth
- 14) ALIGNMENTS IN THE ODD-PROTON ACTINIDES  $^{237}\text{Np}$  AND  $^{241}\text{Am}$   
**K. Abu Saleem**, R. V. F. Janssens, M. P. Carpenter, F. G. Kondev, I. Wiedenhover, I. Ahmad, J. Caggiano, P. Chowdhury, J. A. Cizewski, D. Cline, M. Devlin, N. Fotiades, J. P. Greene, G. Hackman, A. Heinz, T. L. Khoo, T. Lauritsen, C. J. Lister, A. O. Macchiavelli, E. H. Seabury, D. Seweryniak, A. Sonzogni, and C. Y. Wu  
*Phys. Rev. C* 70, 024310 (2004)
- 15) SHAPE COEXISTENCE AND BAND CROSSINGS IN  $^{174}\text{Pt}$   
T. M. Goon, D. J. Hartley, L. L. Riedinger, M. P. Carpenter, F. G. Kondev, R. V. F. Janssens, **K. Abu Saleem**, I. Ahmad, H. Amro, J. A. Cizewski, C. N. Davids, M. Danchev, T. L. Khoo, A. Heinz, T. Lauritsen, W. C. Ma, G. L. Poli, J. Ressler, W. Reviol, D. Seweryniak, M. B. Smith, I. Wiedenhover, and Jing-ye Zhang  
*Phys. Rev. C* 70, 014309 (2004)
- 16) HIGHLY-DEFORMED BANDS IN  $^{175}\text{Hf}$   
D. T. Scholes, D. M. Cullen, F. G. Kondev, R. V. F. Janssens, M. P. Carpenter, D. J. Hartley, M. K. Djongolov, G. Sletten, G. Hagemann, C. Wheldon, P. M. Walker, **K. Abu Saleem**, I. Ahmad, D. L. Balabanski, P. Chowdhury, M. Danchev, G. D. Dracoulis, H. M. El-Masri, J. Goon, A. Heinz, R. A. Kaye, T. L. Khoo, T. Lauritsen, C. J. Lister, E. F. Moore, L. L. Riedinger, M. A. Riley, D. Seweryniak, I. Shestakova, I. Wiedenhover, O. Zeidan, and Jing-Ye Zhang  
*Phys. Rev. C* (2004)
- 17) PERFORMANCE OF A Be REFRACTIVE LENS  
R. K. Smither, A. M. Khounsary, D.C. Mancini, and **K. Abu Saleem**  
*Synchrotron Radiation Instrumentation: Eighth International Conference, 2004 American Institute of Physics*
- 18) DIFFRACTION EFFICIENCY AND DIFFRACTION BANDWIDTH OF THERMAL GRADIENT AND COMPOSITION GRADIENT CRYSTALS  
R. Smither, **K. Abu Saleem**, M. Beno, C. Kurtz, A. Khounsary and N. Abrosimov  
*Review of Scientific Journal*, 2005
- 19) HIGH DIFFRACTION EFFICIENCY, BROADBAND, DIFFRACTION CRYSTALS FOR USE IN CRYSTAL DIFFRACTION LENSES  
Robert K. Smither, **Khaliefeh Abu Saleem**, Dante E. Roa, Mark Beno, Peter von Ballmoos and Gerry Skinner  
*Experimental Astronomy* (2006), 201-210

#### CONTRIBUTED PAPERS AT MEETINGS AND OTHER PUBLICATIONS

- 1) INTERPLAY BETWEEN OCTUPOLE AND QUASIPARTICLE EXCITATIONS IN NEUTRON DEFICIENT Pt AND Hg NUCLEI  
F. G. Kondev, M. P. Carpenter, R. V. F. Janssens, **K. Abu Saleem**, I. Ahmad, M. Alcorta, H. Amro, P. Bhattacharyya, L. T. Brown, J. Caggiano, C. N. Davids, S. M. Fischer, A. Heinz, B. Herskind, R. A. Kaye, T. L. Khoo, T. Lauritsen, C. J. Lister, W. C. Ma, R. Nouicer, J. Ressler, W. Reviol, L. L. Riedinger, D. Seweryniak, S. Siem, A. A. Sonzogni, J. Uusitalo, P. G. Varmette, and I. Wiedenhover  
*Nuclear Structure 2000 Conference, East Lansing, MI, August 15-19, 2000, Book of Abstracts*
- 2) ENTRY DISTRIBUTIONS AND FUSION DYNAMICS IN THE RADIATIVE CAPTURE REACTION OF  $^{90}\text{Zr} + ^{90}\text{Zr}$   
F. G. Kondev, M. P. Carpenter, C. J. Lister, R. V. F. Janssens, **K. Abu Saleem**, I. Ahmad, H. Amro, J. Caggiano, C. N. Davids, A. Heinz, B. Herskind, R. A. Kaye, T. L. Khoo, T. Lauritsen, W. C. Ma, J. Ressler, W. Reviol, L. L. Riedinger, D. G. Sarantites, D. Seweryniak, S. Siem, A. A. Sonzogni, P. G. Varmette, and I. Wiedenhover  
*Nuclear Structure 2000 Conference, East Lansing, MI, August 15-19, 2000, Book of Abstracts*
- 3) FIRST OBSERVATION OF EXCITED STRUCTURES IN NEUTRON DEFICIENT, ODD-MASS Pt, Au AND Hg NUCLEI  
F. G. Kondev, M. P. Carpenter, R. V. F. Janssens, **K. Abu Saleem**, I. Ahmad, M. Alcorta, H. Amro, P. Bhattacharyya, L. T. Brown, J. Caggiano, J. A. Cizewski, M. Danchev, C. N. Davids, S. M. Fischer, D. J. Hartley, A. Heinz, B. Herskind, R. A. Kaye, T. L. Khoo, T. Lauritsen, C. J. Lister, W. C. Ma, R. Nouicer, G. L. Poli, J. Ressler, W. Reviol, L. L. Riedinger, D. Seweryniak, S. Siem, M. B. Smith, A. A. Sonzogni, J. Uusitalo, P. G. Varmette, and I. Wiedenhover  
*Nuclear Structure 2000 Conference, East Lansing, MI, August 15-19, 2000, Book of Abstracts*
- 4) COMPETITION BETWEEN INTRINSIC AND COLLECTIVE STRUCTURES AT THE EXTREME OF SENIORITY IN  $^{175}\text{Hf}$   
F. G. Kondev, R. V. F. Janssens, D. J. Hartley, M. P. Carpenter, C. J. Lister, **K. Abu Saleem**, I. Ahmad, D. L. Balabanski, P. Chowdhury, D. M. Cullen, M. Danchev, G. D. Dracoulis, H. El-Masri, T. M. Goon, A. Heinz, R. A. Kaye, T. L. Khoo, T. Lauritsen, L. L. Riedinger, M. A. Riley, D. Seweryniak, I. Shestakova, G. Sletten, P. M. Walker, C. Wheldon, I. Wiedenhover, and O. Zeidan  
*Nuclear Structure 2000 Conference, East Lansing, MI, August 15-19, 2000, Book of Abstracts*
- 5) SYSTEMATIC STUDY OF ENERGY-SPIN ENTRY DISTRIBUTIONS AT THE PROTON DRIPLINE IN THE  $A \sim 170$  REGION  
M. B. Smith, J. A. Cizewski, M. P. Carpenter, **K. Abu Saleem**, I. Ahmad, H. Amro, M. Danchev, C. N. Davids, D. J. Hartley, A. Heinz, R. V. F. Janssens, T.

- L. Khoo, F. G. Kondev, G. J. Lane, T. Lauritsen, C. J. Lister, W. C. Ma, G. L. Poli, J. Ressler, W. Reviol, L. L. Riedinger, D. Seweryniak, and I. Wiedenhover  
*Nuclear Structure 2000 Conference, East Lansing, MI, August 15-19, 2000, Book of Abstracts*
- 6) TOWARD THE EXTREMES OF SPIN AND SENIORITY IN  $^{174}\text{Hf}$   
D. J. Hartley, F. G. Kondev, R. V. F. Janssens, L. L. Riedinger, M. P. Carpenter, **K. Abu Saleem**, I. Ahmad, D. L. Balbanski, P. Chowdhury, D. M. Cullen, M. Danchev, G. D. Dracoulis, H. El-Masri, T. M. Goon, A. Heinz, R. A. Kaye, T. L. Khoo, T. Lauritsen, M. A. Riley, D. Seweryniak, I. Shestakova, G. Sletten, P. M. Walker, C. Wheldon, I. Wiedenhover, and O. Zeidan  
*Nuclear Structure 2000 Conference, East Lansing, MI, August 15-19, 2000, Book of Abstracts*
- 7) HIGH-SENIORITY INTRINSIC AND COLLECTIVE STRUCTURES IN  $^{175}\text{Hf}$   
F. G. Kondev, R. V. F. Janssens, M. P. Carpenter, C. J. Lister, **K. Abu Saleem**, I. Ahmad, A. Heinz, T. L. Khoo, T. Lauritsen, D. Seweryniak, I. Wiedenhover, D. J. Hartley, D. L. Balabanski, M. Danchev, T. M. Goon, L. L. Riedinger, O. Zeidan, M. A. Riley, P. Chowdhury, I. Shestakova, R. Kaye, H. El-Masri, P. M. Walker, G. D. Dracoulis, G. Sletten, D. M. Cullen, and C. Wheldon  
*Bull. Am. Phys. Soc. 45, 92 (2000)*
- 8) ENTRY DISTRIBUTIONS AND FUSION DYNAMICS IN THE RADIATIVE CAPTURE REACTION OF  $^{90}\text{Zr} + ^{90}\text{Zr}$   
M. P. Carpenter, F. G. Kondev, C. J. Lister, R. V. F. Janssens, **K. Abu Saleem**, I. Ahmad, J. Caggiano, C. N. Davids, A. Heinz, R. A. Kaye, T. L. Khoo, T. Lauritsen, J. Ressler, D. Seweryniak, S. Siem, A. A. Sonzogni, I. Wiedenhover, L. L. Riedinger, W. Reviol, D. G. Sarantites, H. Amro, W. C. Ma, P. Varmette, and B. Herskind  
*Bull. Am. Phys. Soc. 45, 94 (2000)*
- 9) SYSTEMATIC STUDY OF ENERGY-SPIN ENTRY DISTRIBUTIONS AT THE PROTON DRIPLINE  
M. B. Smith, J. A. Cizewski, M. P. Carpenter, **K. Abu Saleem**, I. Ahmad, C. N. Davids, A. Heinz, R. V. F. Janssens, T. L. Khoo, F. G. Kondev, T. Lauritsen, C. J. Lister, G. L. Poli, J. J. Ressler, D. Seweryniak, I. Wiedenhover, H. Amro, W. C. Ma, M. Danchev, D. J. Hartley, L. L. Riedinger, and W. Reviol  
*Bull. Am. Phys. Soc. 45, 94 (2000)*
- 10) HIGH-SPIN STATES IN  $^{174}\text{Pt}$   
T. M. Goon, L. L. Riedinger, D. J. Hartley, M. Danchev, F. G. Kondev, M. P. Carpenter, R. V. F. Janssens, **K. Abu Saleem**, I. Ahmad, M. Alcorta, P. Bhattacharyya, L. T. Brown, J. Caggiano, C. N. Davids, S. M. Fischer, A. Heinz, R. A. Kaye, T. L. Khoo, T. Lauritsen, C. J. Lister, G. L. Poli, J. Ressler, D. Seweryniak, S. Siem, A. A. Sonzogni, J. Uusitalo, I. Wiedenhover, H. Amro, W. C. Ma, P. G. Varmette, J. A. Cizewski, M. B. Smith, B. Herskind, and R. Nouicer

*April Meeting of the American Physical Society, Washington, DC, April 28-May 1, 2001; Bull. Am. Phys. Soc. 46, 37(2001)*

- 11) ANOMALOUS REDUCED HINDRANCE IN  $^{176}\text{Hf}$   
G. Mukherjee, P. Chowdhury, I. Shestakova, R. D'Alarcao, H. El-Masri, P. M. Walker, C. Wheldon, D. M. Cullen, D. L. Balabanski, M. Danchev, T. M. Goon, D. J. Hartley, L. L. Riedinger, O. Zeidan, M. A. Riley, R. Kaye, G. D. Dracoulis, G. Sletten, **K. Abu Saleem**, I. Ahmad, M. P. Carpenter, A. Heinz, R. V. F. Janssens, T. L. Khoo, F. G. Kondev, T. Lauritsen, C. J. Lister, D. Seweryniak  
*DC, April 28-May 1, 2001; Bull. Am. Phys. Soc. 46, 52 (2001)*
  
- 12) A RECOIL-GATED PLUNGER LIFETIME MEASUREMENT OF  $^{188}\text{Pb}$  WITH GAMMASPHERE AND THE FMA  
A. M. Oros-Peusquens, A. Dewald, R. Peusquens, P. Petkov, B. Saha, P. von Brentano, I. Wiedenhover, M. Carpenter, A. Heinz, R. V. F. Janssens, F. Kondev, C. J. Lister, D. Seweryniak, **K. Abu Saleem**, J. R. Cooper, C. J. Barton, R. Krucken, K. Zyromski, C. W. Beausang, Z. Wang, U. Garg, S. Zhu, and P. F. Mantica and I. Wiedenhover  
*3rd International Conference on Exotic Nuclei and Atomic Masses (ENAM2001), July 2-7, 2001, Hameenlinna, Finland, Book of Abstracts, p. PH-24 (2001)*  
*April Meeting of the American Physical Society, Washington, DC, April 28-May 1, 2001; Bull. Am. Phys. Soc. 46, 52(2001)*
  
- 13) A RECOIL-GATED PLUNGER LIFETIME MEASUREMENT OF  $^{188}\text{Pb}$  WITH GAMMASPHERE AND THE FMA  
A. M. Oros-Peusquens, A. Dewald, R. Peusquens, P. Petkov, B. Saha, P. von Brentano, I. Wiedenhover, M. Carpenter, A. Heinz, R. V. F. Janssens, F. Kondev, C. J. Lister, D. Seweryniak, **K. Abu Saleem**, J. R. Cooper, C. J. Barton, R. Krucken, K. Zyromski, C. W. Beausang, Z. Wang, U. Garg, S. Zhu, and P. F. Mantica  
*3rd International Conference on Exotic Nuclei and Atomic Masses (ENAM2001), July 2-7, 2001, Hameenlinna, Finland, Book of Abstracts, p. PH-24 (2001)*
  
- 14) NEW EVIDENCE FOR K-HINDERED DECAY OF A 6-qp ISOMER IN  $^{176}\text{Hf}$   
G. Mukherjee, P. Chowdhury, I. Shestakova, R. D'Alarcao, **K. Abu Saleem**, I. Ahmad, M. P. Carpenter, A. Heinz, R. V. F. Janssens, T. L. Khoo, F. G. Kondev, T. Lauritsen, C. J. Lister, D. Seweryniak, I. Wiedenhover, H. El-Masri, P. M. Walker, D. M. Cullen, C. Wheldon, D. L. Balabanski, M. Danchev, T. M. Goon, D. J. Hartley, L. L. Riedinger, O. Zeidan, M. A. Riley, R. Kaye, G. Sletten, and G. D. Dracoulis  
*International Nuclear Physics Conference on Nuclear Physics in the 21st Century (INPC2001), Berkeley, CA, July 30-August 3, 2001, Book of Abstracts, p. 627 (2001)*
  
- 15) LIMITS OF THE ENERGY-SPIN PHASE SPACE AT THE PROTON DRIP LINE



- M. B. Smith, J. A. Cizewski, M. P. Carpenter, F. G. Kondev, R. V. F. Janssens, T. L. Khoo, **K. Abu Saleem**, I. Ahmad, H. Amro, M. Danchev, C. N. Davids, D. J. Hartley, A. Heinz, T. Lauritsen, C. J. Lister, W. C. Ma, G. L. Poli, J. J. Ressler, W. Reviol, L. L. Riedinger, D. Seweryniak, and I. Wiedenhover  
*International Nuclear Physics Conference on Nuclear Physics in the 21st Century (INPC2001), Berkeley, CA, July 30-August 3, 2001, Book of Abstracts, p. 774 (2001)*
- 16) LIMITS OF THE ENERGY-SPIN PHASE SPACE BEYOND THE PROTON DRIP LINE**  
J. A. Cizewski, M. B. Smith, M. P. Carpenter, F. G. Kondev, T. L. Khoo, T. Lauritsen, R. V. F. Janssens, **K. Abu Saleem**, I. Ahmad, C. N. Davids, A. Heinz, C. J. Lister, G. L. Poli, J. J. Ressler, D. Seweryniak, I. Wiedenhover, H. Amro, W. C. Ma, M. Danchev, D. J. Hartley, L. L. Riedinger, and W. Reviol  
*First Joint Meeting of the Nuclear Physics Divisions of APS and JPS, Wailea, Maui, HI, October 17-20, 2001; Bull. Am. Phys. Soc. 46, 71 (2001)*
- 17) A RECOIL-GATED PLUNGER LIFETIME MEASUREMENT OF  $^{188}\text{Pb}$  WITH GAMMASPHERE AND THE FMA**  
A. M. Oros-Peusquens, A. Dewald, R. Peusquens, P. Petkov, B. Saha, P. Von Brentano, I. Wiedenhover, M. Carpenter, A. Heinz, R. V. F. Janssens, F. Kondev, D. Seweryniak, **K. Abu Saleem**, J. R. Cooper, C. J. Barton, R. Krucken, U. Garg, S. Zhu, and P. F. Mantica  
*First Joint Meeting of the Nuclear Physics Divisions of APS and JPS, Wailea, Maui, HI, October 17-20, 2001; Bull. Am. Phys. Soc. 46, 94 (2001)*
- 18) IDENTIFICATION OF EXCITED STATES IN  $^{140}\text{Dy}$**   
M. P. Carpenter, C. N. Davids, R. V. F. Janssens, F. G. Kondev, C. J. Lister, D. Seweryniak, **K. Abu Saleem**, I. Ahmad, A. Heinz, T. L. Khoo, E. F. Moore, D. M. Cullen, A. M. Fletcher, S. J. Freeman, L. K. Pattison, J. F. Smith, A. M. Bruce, G. Mukherjee, C. Wheldon, and A. Woehr  
*April 2002 Meeting of the American Physical Society, Albuquerque, NM, April 20-23, 2002; Bull. Am. Phys. Soc. 47, 70 (2002)*
- 19) PRODUCTION AND DECAY OF  $^{257}\text{Rf}$**   
A. Heinz, R. V. F. Janssens, D. Seweryniak, **K. Abu Saleem**, B. Back, M. P. Carpenter, C. N. Davids, J. P. Greene, D. J. Henderson, C.-L. Jiang, T. L. Khoo, F. G. Kondev, T. Lauritsen, C. J. Lister, E. F. Moore, R. C. Pardo, T. Pennington, G. Savard, J. P. Schiffer, A. Woehr, J. Shergur, P. Collon, and M. B. Smith  
*April 2002 Meeting of the American Physical Society, Albuquerque, NM, April 20-23, 2002; Bull. Am. Phys. Soc. 47, 72 (2002)*
- 20) HIGH SPIN STATES IN  $^{237}\text{Np}$  AND  $^{241}\text{Am}$**

- K. Abu Saleem**, R. V. F. Janssens, F. G. Kondev, I. Ahmad, J. Caggiano, M. P. Carpenter, J. P. Greene, A. Heinz, T. L. Khoo, T. Lauritsen, C. J. Lister, D. Seweryniak, I. Wiedenhover, G. Hackman, P. Chowdhury, D. Cline, C. Wu, M. Devlin, N. Fotiades, E. H. Seabury, and A. O. Macchiavelli  
*April 2002 Meeting of the American Physical Society, Albuquerque, NM, April 20-23, 2002;*  
*Bull. Am. Phys. Soc. 47, 72 (2002)*
- 21) HIGH-K BANDS AT HIGH SPIN IN  $^{174}\text{Hf}$**   
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*April 2002 Meeting of the American Physical Society, Albuquerque, NM, April 20-23, 2002;*  
*Bull. Am. Phys. Soc. 47, 71 (2002)*
- 22) TRIAXIAL SUPERDEFORMED BANDS IN  $^{174}\text{Hf}$**   
M. Djongolov, D. J. Hartley, L. L. Riedinger, D. L. Balabanski, M. Danchev, J. Goon, O. Zeidan, F. G. Kondev, R. V. F. Janssens, **K. Abu Saleem**, I. Ahmad, M. P. Carpenter, A. Heinz, T. L. Khoo, T. Lauritsen, C. J. Lister, D. Seweryniak, I. Wiedenhover, P. Chowdhury, I. Shestakova, D. M. Cullen, C. Wheldon, G. D. Dracoulis, H. El-Masri, P. M. Walker, R. A. Kaye, M. A. Riley, and G. Sletten  
*April 2002 Meeting of the American Physical Society, Albuquerque, NM, April 20-23, 2002;*  
*Bull. Am. Phys. Soc. 47, 71 (2002)*
- 23) EVIDENCE OF FINE STRUCTURE  $\alpha$  PEAKS IN  $^{174,176}\text{Au}$**   
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*April 2002 Meeting of the American Physical Society, Albuquerque, NM, April 20-23, 2002;*  
*Bull. Am. Phys. Soc. 47, 71 (2002)*
- 24) POSSIBLE TRIAXIAL SUPERDEFORMED BANDS IN  $^{174}\text{Hf}$**   
M. Djongolov, D. J. Hartley, L. L. Riedinger, F. G. Kondev, R. V. F. Janssens, E. F. Moore, **K. Abu Saleem**, I. Ahmad, D. L. Balabanski, M. P. Carpenter, P. Chowdhury, D. M. Cullen, M. Danchev, G. D. Dracoulis, H. El-Masri, J. Goon, A. Heinz, R. A. Kaye, T. L. Khoo, T. Lauritsen, C. J. Lister, M. A. Riley, D. Seweryniak, I. Shestakova, G. Sletten, P. M. Walker, C. Wheldon, I. Wiedenhover, and O. Zeidan

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- 25) COULOMB EXCITATION AND FEW NUCLEON TRANSFER REACTIONS WITH  $^{209}\text{Bi}$  BEAMS ON  $^{237}\text{Np}$  AND  $^{241}\text{Am}$  TARGETS  
**K. Abu Saleem**, R. V. F. Janssens, M. P. Carpenter, F. G. Kondev, I. Wiedenhover, G. Hackman, I. Ahmad, J. P. Greene, J. Caggiano, P. Chowdhury, D. Cline, A. Heinz, T. L. Khoo, T. Lauritsen, C. J. Lister, A. O. Macchiavelli, D. Seweryniak, and A. Sonzogni  
*Conference on Frontiers of Nuclear Structure, Berkeley, CA, July 29-August 2, 2002, LBNL-50598 Abs., Book of Abstracts, p. 65 (2002)*
- 26) SHAPE CO-EXISTENCE AT THE OUTER EDGES OF STABILITY  
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*Conference on Frontiers of Nuclear Structure, Berkeley, CA, July 29-August 2, 2002, LBNL-50598 Abs., Book of Abstracts, p. 6 (2002)*
- 27) LINKING OF YRAST AND EXCITED SUPERDEFORMED BANDS IN  $^{152}_{66}\text{Dy}_{86}$   
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*Conference on Frontiers of Nuclear Structure, Berkeley, CA, July 29-August 2, 2002, LBNL-50598 Abs., Book of Abstracts, p. 33 (2002)*
- 28) LIMITS OF THE ENERGY-SPIN PHASE SPACE BEYOND THE PROTON DRIP LINE: ENTRY DISTRIBUTIONS OF Pt AND Au ISOBARS  
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*Conference on Frontiers of Nuclear Structure, Berkeley, CA, July 29-August 2, 2002, LBNL-50598 Abs., Book of Abstracts, p. 54 (2002)*
- 29) IDENTIFICATION OF EXCITED STATES IN  $^{140}\text{Dy}$   
D. M. Cullen, M. P. Carpenter, C. N. Davids, A. M. Fletcher, S. J. Freeman, R. V. F. Janssens, F. G. Kondev, C. J. Lister, L. K. Pattison, D. Seweryniak, J. F. Smith, A. M. Bruce, **K. Abu Saleem**, I. Ahmad, A. Heinz, T. L. Khoo, E. F. Moore, G. Mukherjee, C. Wheldon, and A. Woehr

*Conference on Frontiers of Nuclear Structure, Berkeley, CA, July 29-August 2, 2002, LBNL-50598 Abs., Book of Abstracts, p. 85 (2002)*

- 30)** POSSIBLE TRIAXIAL SUPERDEFORMATION IN  $^{174}\text{Hf}$   
D. J. Hartley, M. Djongolov, L. L. Riedinger, F. G. Kondev, R. V. F. Janssens, **K. Abu Saleem**, I. Ahmad, D. Balabanski, M. P. Carpenter, P. Chowdhury, D. M. Cullen, M. Danchev, G. D. Dracoulis, H. El-Masri, J. Goon, A. Heinz, R. Kaye, T. L. Khoo, T. Lauritsen, C. J. Lister, E. F. Moore, M. A. Riley, D. Seweryniak, I. Shestakova, G. Sletten, P. M. Walker, C. Wheldon, I. Wiedenhover, O. Zeidan, and J.-Y. Zhang  
*International Conference on Nuclear Structure "Mapping the Triangle", Grand Teton National Park, May 22 - 25 2002, Jackson Hole, Wyoming, U.S.A., eds. A. Arahamian, J. A. Cizewski, S. Pittel, and V. Zamfir*
- 31)** SHAPE CO--EXISTENCE IN  $^{174}\text{Pt}$   
J. Tm. Goon, D. J. Hartley, M. Danchev, L. L. Riedinger, O. Zeidan, F. G. Kondev, M. P. Carpenter, R. V. F. Janssens, **K. S. Abu Saleem**, I. Ahmad, C. N. Davids, A. Heinz, T. L. Khoo, T. Lauritsen, C. J. Lister, G. L. Poli, J. Ressler, D. Seweryniak, I. Wiedenhover, W. C. Ma, H. Amro, W. Reviol, J. A. Cizewski, and M. Smith  
*2002 Fall Meeting of the Division of Nuclear Physics of the American Physical Society, East Lansing, MI, October 9-12, 2002; Bull. Am. Phys. Soc. 47, 79 (2002)*
- 32)** LOW-K ROTATIONAL STRUCTURES IN  $^{174}\text{Hf}$   
M. K. Djongolov, D. J. Hartley, D. L. Balabanski, M. Danchev, J. Tm. Goon, L. L. Riedinger, O. Zeidan, E. F. Moore, R. V. F. Janssens, F. G. Kondev, T. Lauritsen, M. P. Carpenter, C. J. Lister, **K. Abu Saleem**, I. Ahmad, A. Heinz, T. L. Khoo, D. Seweryniak, I. Wiedenhover, M. A. Riley, P. Chowdhury, I. Shestakova, R. Kaye, H. El-Masri, P. M. Walker, G. D. Dracoulis, G. Sletten, D. M. Cullen, and C. Wheldon  
*2002 Fall Meeting of the Division of Nuclear Physics of the American Physical Society, East Lansing, MI, October 9-12, 2002; Bull. Am. Phys. Soc. 47, 94 (2002)*
- 33)** COULOMB EXCITATION AND FEW NUCLEON TRANSFER REACTIONS WITH  $^{209}\text{Bi}$  BEAMS ON  $^{237}\text{Np}$  AND  $^{241}\text{Am}$  TARGETS  
**K. Abu Saleem**, R. V. F. Janssens, M. P. Carpenter, F. G. Kondev, I. Ahmad, J. P. Greene, J. Caggiano, A. Heinz, T. L. Khoo, T. Lauritsen, C. J. Lister, D. Seweryniak, A. Sonzogni, I. Wiedenhover, G. Hackman, P. Chowdhury, D. Cline, C. Wu, A. O. Machiavelli, M. Devlin, N. Fotiades, and E. H. Seabury  
*2002 Fall Meeting of the Division of Nuclear Physics of the American Physical Society, East Lansing, MI, October 9-12, 2002; Bull. Am. Phys. Soc. 47, 94 (2002)*

- 34) EXTENDING THE REGION OF TRIAXIAL SUPERDEFORMATION: CANDIDATE TSD BANDS IN  $^{174}\text{Hf}$   
D. J. Hartley, M. Djongolov, L. L. Riedinger, D. L. Balabanski, M. Danchev, J. Goon, O. Zeidan, Jing-Ye Zhang, F. G. Kondev, R. V. F. Janssens, **K. Abu Saleem**, A. Ahmad, M. P. Carpenter, A. Heinz, T. L. Khoo, T. Lauritsen, C. J. Lister, E. F. Moore, D. Seweryniak, I. Wiedenhover, M. A. Riley, D. M. Cullen, C. Wheldon, P. Chowdhury, I. Shestakova, G. D. Dracoulis, H. El-Masri, P. M. Walker, R. Kaye, and G. Sletten  
*2002 Fall Meeting of the Division of Nuclear Physics of the American Physical Society, East Lansing, MI, October 9-12, 2002; Bull. Am. Phys. Soc. 47, 95 (2002)*
- 35) LINKING OF YRAST AND EXCITED SUPERDEFORMED BANDS IN  $^{152}\text{Dy}$   
T. Lauritsen, M. P. Carpenter, R. V. F. Janssens, T. L. Khoo, P. Fallon, B. Herskind, D. G. Jenkins, F. G. Kondev, A. Lopez-Martens, A. O. Macchiavelli, D. Ward, **K. S. Abu Saleem**, I. Ahmad, R. Clark, M. Cromaz, T. Dossing, J. P. Greene, F. Hannachi, A. M. Heinz, A. Korichi, G. Lane, C. J. Lister, P. Reiter, D. Seweryniak, S. Siem, R. C. Vondrasek, and I. Wiedenhover  
*Proceedings of the Conference on Frontiers of Nuclear Structure, Berkeley, CA, July 29-August 2, 2002, eds. Paul Fallon and Rod Clark, AIP Conference Proceedings 656, 9-16 (2003)*
- 36) SHAPE COEXISTENCE AT THE OUTER EDGES OF STABILITY  
M. P. Carpenter, F. G. Kondev, R. V. F. Janssens, D. Jenkins, **K. Abu Saleem**, I. Ahmad, H. Amro, A. N. Andreyev, J. Caggiano, J. A. Cizewski, M. Danchev, C. N. Davids, T. Enqvist, P. T. Greenlees, A. Heinz, B. Herskind, P. M. Jones, D. T. Joss, R. Julin, S. Juutinen, H. Kettunen, T. L. Khoo, P. Kuusiniemi, T. Lauritsen, M. Leino, A.-P. Leppanen, C. J. Lister, W. C. Ma, P. Nieminen, R. D. Page, J. Pakarinen, C. D. O'Leary, P. Raddon, P. Rahkila, J. Ressler, W. Reviol, L. L. Riedinger, D. G. Sarantites, D. Seweryniak, S. Siem, A. Simons, A. A. Sonzogni, J. Uusitalo, P. G. Varmette, R. Wadsworth, and I. Wiedenhover  
*Proceedings of the Conference on Frontiers of Nuclear Structure, Berkeley, CA, July 29-August 2, 2002, eds. Paul Fallon and Rod Clark, AIP Conference Proceedings 656, 55-62 (2003)*
- 37) POSSIBLE TRIAXIAL SUPERDEFORMATION IN  $^{174}\text{Hf}$   
D. J. Hartley, M. Djongolov, L. L. Riedinger, F. G. Kondev, R. V. F. Janssens, **K. Abu Saleem**, I. Ahmad, D. L. Balabanski, M. P. Carpenter, P. Chowdhury, D. M. Cullen, M. Danchev, G. D. Dracoulis, H. El-Masri, J. Goon, A. Heinz, R. A. Kaye, T. L. Khoo, T. Lauritsen, C. J. Lister, E. F. Moore, M. A. Riley, D. Seweryniak, I. Shestakova, G. Sletten, P. M. Walker, C. Wheldon, I. Wiedenhover, O. Zeidan, and Jing-ye Zhang  
*Proceedings of the Conference on Frontiers of Nuclear Structure, Berkeley, CA, July 29-August 2, 2002, eds. Paul Fallon and Rod Clark, AIP Conference Proceedings 656, 77-82 (2003)*

- 38) LIMITS OF THE ENERGY-SPIN PHASE SPACE BEYOND THE PROTON DRIP LINE: ENTRY DISTRIBUTIONS OF Pt AND Au ISOBARS  
 J. A. Cizewski, M. B. Smith, M. P. Carpenter, F. G. Kondev, T. L. Khoo, T. Lauritsen, R. V. F. Janssens, **K. Abu Saleem**, I. Ahmad, H. Amro, M. Danchev, C. N. Davids, D. J. Hartley, A. Heinz, C. J. Lister, W. C. Ma, G. L. Poli, J. J. Ressler, W. Reviol, L. L. Riedinger, D. Seweryniak, and I. Wiedenhover  
*Proceedings of the Conference on Frontiers of Nuclear Structure, Berkeley, CA, July 29-August 2, 2002, eds. Paul Fallon and Rod Clark, AIP Conference Proceedings 656, 91-97 (2003)*
- 39) NUCLEAR STRUCTURE STUDIES FROM Hg AND Au Alpha Decay Chains  
 J. T. M. Goon, C. R. Bingham, D. J. Hartley, Jing-ye Zhang, L. L. Riedinger, M. Danchev, F. G. Kondev, M. P. Carpenter, R. V. F. Janssens, **K. S. Abu Saleem**, I. Ahmad, C. N. Davids, A. Heinz, T. L. Khoo, T. Lauritsen, C. J. Lister, G. L. Poli, D. Seweryniak, I. Wiedenhover, W. C. Ma, H. Amro, W. Reviol, J. A. Cizewski, and M. Smith  
*April 2003 Meeting of the American Physical Society, Philadelphia, PA, April 5-8, 2003; Bull. Am. Phys. Soc. 48, 187 (2003)*
- 40) CONFIGURATION AND DECAY OF A 9-QUASIPARTICLE ISOMER IN  $^{175}\text{Hf}$   
 F. G. Kondev, R. V. F. Janssens, M. P. Carpenter, C. J. Lister, **K. Abu Saleem**, I. Ahmad, A. Heinz, T. L. Khoo, T. Lauritsen, D. Seweryniak, I. Wiedenhover, D. J. Hartley, D. L. Balabanski, M. Danchev, T. M. Goon, L. L. Riedinger, O. Zeidan, M. A. Riley, P. Chowdhury, I. Shestakova, R. Kaye, H. El-Masri, P. M. Walker, G. D. Dracoulis, G. Sletten, D. M. Cullen, and C. Wheldon 2003 Fall Meeting of the Division of Nuclear Physics of the American Physical Society, Tucson, AZ, October 29-November 1, 2003;
- 41) TRIAXIAL SUPERDEFORMED BANDS IN  $^{175}\text{Hf}$   
 D. T. Scholes, D. M. Cullen, F. G. Kondev, R. V. F. Janssens, M. P. Carpenter, D. J. Hartley, M. K. Djongolov, G. Sletten, G. Hagemann, C. Wheldon, P. M. Walker, **K. Abu Saleem**, I. Ahmad, D. L. Balabanski, P. Chowdhury, M. Danchev, G. D. Dracoulis, H. M. El-Masri, J. Goon, A. Heinz, R. A. Kaye, T. L. Khoo, T. Lauritsen, C. J. Lister, E. F. Moore, L. L. Riedinger, M. A. Riley, D. Seweryniak, I. Shestakova, I. Wiedenhover, O. Zeidan, and Jing-Ye Zhang  
*Conference on "Nuclei at the Limits", Argonne National Laboratory, Argonne, IL, July 23-26, 2004; Book of Abstracts, 132 (2004)*