George Bradley Armen

Educational Publications:

*Physics lecture demonstrations*

*Data analysis: A UT Primer.*

*Infrared spectrum of acetone: FTIR spectroscopy.*

*Phase-sensitive detection: The lock-in amplifier.*

*The Hall Effect in metals and semiconductors.*

Research Publications:

*Auger resonant-Raman study at the Ar K edge as probe of electronic-state-lifetime interferences*

*Spectator-electron behavior during cascade decay in krypton*

*Double K-shell photoionization of neon*

*Threshold krypton charge-state distributions coincident with K-shell fluorescence*
G. B. Armen, E. P. Kanter, B. Krässig, J. C. Levin, S. H. Southworth, and L. Young,

*Inner-Shell Photoionization: Teijo Åberg’s Concept of RRRRS*

*Topical Review: The resonant Auger effect*

*Effective potentials for high Rydberg states in a magnetic field*

*Radiationless resonant Raman scattering at the Ar K edge*
T. LeBrun, S. H. Southworth, G. B. Armen, M. A. MacDonald and Y. Azuma


Interchannel interaction in the K-shell photoionization of lithium

Spectator excitation accompanying radiative decay in atoms: a quantum defect model

Valence Auger and x-ray participator and spectator processes for neon and argon atoms

Photoionization cross-section calculations for atomic lithium

Angle dependence of post-collision-interaction Auger line shapes

Vacancy multiplication following Ni L-shell photoionization

Quantum theory of post-collision interaction in inner-shell photoionization

Quantum theory of post-collision interaction in inner-shell photoionization: final-state interaction between two continuum electrons

Quantum theory of post-collision interaction in inner-shell photoionization

Vanishing post-collision interaction during photon-excited Coster-Kronig decay

Threshold excitation of short-lived atomic inner-shell hole states with synchrotron radiation

Threshold double photoionization of argon with synchrotron radiation

PCI effects on Auger spectra in argon and xenon

Dissertation:
Threshold double photoionization of atoms with synchrotron radiation
University of Oregon (1985).
Invited Talks:


Workshop on Atomic Physics with Hard X-Rays from High Brilliance Synchrotron Light Sources, Argonne National Laboratory, Argonne, IL May 1996.


Workshop on Atomic Physics with Synchrotron Radiation, University of Melbourne, Melbourne, VIC Australia, August 1991.

Conferences with contributed material:


APS Division of Atomic and Molecular Physics (DAMOP), May 1998, Santa Fe, NM.

APS Division of Atomic and Molecular Physics (DAMOP), April 1997, Washington D.C.

International conference on x-ray and inner-shell physics (X-96), September 1996, Hamburg, Germany.

Workshop on Raman Emission by X-Rays (REX), December 1995, New Orleans, LA, USA.


APS Division of Atomic and Molecular Physics, joint meeting with Canadian Physical Society (DAMOP), April 1995, Toronto, Canada.

Joint April Meeting of the American Physical Society and the American Association of Physics Teachers (DAMOP) April 1994, Crystal City, VA, USA.
