PT J

TI Atomic quadrupolar photoemission asymmetry parameters from a solid state measurement

AU Jackson, GJ Cowie, BCC Woodruff, DP Jones, RG Kariapper, MS Fisher, C Chan, ASY Butterfield, M

SO PHYSICAL REVIEW LETTERS

VL 84

IS 11

AP ISSN 0031-9007

AP ISSN 0031-9007

BP 2346

EP 2349

PY 2000

TC 32

AB A method for measuring the asymmetry parameter gamma arising from dipole-quadrupole interference in core-level photoemission is proposed which is based on condensed thin films and exploits the influence of this asymmetry in photoemission monitoring of x-ray standing wave field absorption. The high density of material in this method offers some advantages over a conventional gas-phase measurement. Results are presented for C, O, and F Is photoemission at photon energies around 3 keV. The combined nondipole asymmetry factor (delta + gamma/3) for non-s-states can be determined in a similar way.

UT WOS:000085791900016

ER