
 ERRATUM

OBSERVATION OF $Z = 70$ QUASIATOMIC K X RAYS FROM 30- AND 60-MeV $^{35}\text{Br} + ^{35}\text{Br}$ COLLISIONS. W. E. Meyerhof, T. K. Saylor, S. M. Lazarus, W. A. Little, B. B. Triplett, and L. F. Chase, Jr. [Phys. Rev. Lett. **30**, 1279 (1973)].

Because of the use of incorrect absorption and detection efficiency factors, the K x-ray yields in Fig. 3 and Table I are in error. Corrected versions are given here. Meanwhile it has been found¹ that nucleus-nucleus bremsstrahlung² can form an important background under the molecular-orbital K x-ray spectra, particularly for asymmetric collisions. Calculated bremsstrahlung yields are given below, and must be subtracted before comparing the yields with theory. The last column in the table below gives the separated-atom beam K x-ray yield per projectile, so that the molecular-orbital yield per projectile can be computed.

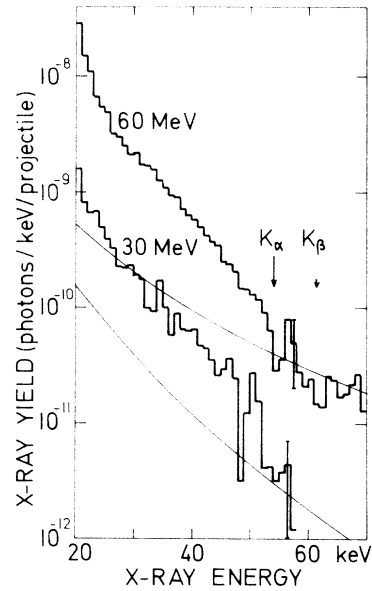


FIG. 3. Continuum x-ray spectra from 30- and 60-MeV Br + KBr collisions. The drawn curves represent calculated nucleus-nucleus bremsstrahlung spectra. The arrows indicate the $Z = 70$ united-atom K_{α} and K_{β} limits for the molecular-orbital spectra. Fluctuations are statistical, enhanced by the line-shape unfolding procedure.

¹W. E. Meyerhof, in Proceedings of the Third International Seminar on Ion-Atom Collisions, Gif-sur-Yvette, France, July 1973 (unpublished); C. K. Davis *et al.*, Bull. Amer. Phys. Soc. **18**, 1408 (1973).

²K. Alder *et al.*, Rev. Mod. Phys. **28**, 432 (1952), Eq. (II.E.13).

TABLE I. Continuum K x-ray yields for ^{79}Br beam ($E_x = 22$ to 60 keV).

| E (MeV) | Target | Total yield per 10^9 proj. ^a | Bremsstrahlung yield per 10^9 proj. | Beam K vacancies per 10^6 proj. ^a |
|--------------|--------|--|--|---|
| 30 | KBr | 4.7 | 0.8 | 1300 |
| 60 | KBr | 55 | 4.4 | 7300 |
| 30 | Ti | 0.6 | 0.5 | 1.2 |
| 30 | Fe | 1.8 | 0.8 | 13 |
| 30 | Zr | 0.5 ^b | 0.05 ^b | 1700 ^c |

^aMaximum error = $\pm 30\%$.

^bFor $E_x = 30$ to 60 keV.

^cZr K vacancies per 10^6 projectiles = 20.