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Image formation in the electron microscope I and II

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1972 J. Phys. A: Gen. Phys. 5 916

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Addendum

Image formation in the electron microscope I and II

Misell D L 1971 J. Phys. A: Gen. Phys. 4 782-97, 798-812

Due to an oversight by the author the following references by K Kanaya and co-workers were omitted from the above papers on image formation in the electron microscope. Although these papers appeared in print almost twenty years ago acknowledgment of the major contribution of K Kanaya to the subject is absent from the literature. As may be judged by the titles of the papers, the analysis of these papers considers a wave-optical analysis of image formation by the elastic and inelastic components of the transmitted electron beam and discusses the relevance of electron energy losses to image formation in the electron microscope.

It should be noted that some of the approximations made by Kanaya in these papers would not now be necessary with the use of a computer in the evaluation of certain integrals.

K Kanaya 'Image formation in the electron microscope from the viewpoint of waveoptics'

'I. Effect of spherical aberration, chromatic aberration and defocusing on elastic scattering'

'II. Effects of chromatic aberration and defocusing on inelastic scattering'

(1953 Bull. electrotech. Lab., Japan 17 679-85, 756-63 in Japanese)

K Kanaya, Y Inoue and A Ishikawa 'Image formation in the electron microscope from the viewpoint of wave-optics'

(1954 J. Electron Microsc., Japan 2 1–7)

(1954 Bull. electrotech. Lab., Japan 18 517–26)

K Kanaya 'Image formation by crystalline specimens in the electron microscope'

'I. Image Contrast' (1956 Bull. electrotech. Lab. 20 610-24)

'II. Image Contours' (1956 Bull. electrotech. Lab. 20 801–15)

'III. Fresnel diffraction fringes' (1957 Bull. electrotech. Lab. 21 455-74)