1 Introduction

There are many different methods which involve backscattered electrons (BSE) for internal structure analysis of solids: the collecting of electron beam induced characteristic x-ray [1], using BSE coefficient changes [2], BSE energy spectra analysis by the means of additional spectrometer [3, 4, 5] and others.

The general suppose of all these methods is what the signal of interest depends on primary beam electron's maximum penetration range and connected BSE escape depth. A commonly used expression which associates penetration depth with scattering material parameters were offered by *Kanaya* and *Okayama* [6].

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