Investigation of the Focal and Zoom Properties for Three-Element Cylindrical Electrostatic Lens

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ABSTRACT

In the present work, the focal properties of electrostatic lens consist of three cylindrical electrodes were intensively investigated. Each electrode spaced of (0.1) diameter apart. Special case such as a zoom lens is considered and the results are obtained as a function of the final-to-initial voltage ratios. It is found that the three-element lens could be operated with the whole focus properties in a useful mode. The calculations are carried out by using the LENSYS software package.

Keywords: Three-element electrostatic lens, Focal properties, Zoom lens, LENSYS.

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