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Automation of analysis of electronic microscope images GAGIK SHMAVONYAN, State Engineering University of Armenia — Many-sided analysis of multiple images of electronic microscope is a hard and time-consuming process. Besides, the analyses become more actual in the case of distorted, not high quality images of electronic microscopes, i.e. images of scanning tunneling microscope. To increase the accuracy and velocity of analyses a method is suggested, which allows analyzing the surface of semiconductor crystal. The method allows to get information on the position of the atoms of the 1^{st}, 2^{nd} and 3^{rd} crystallographic planes, analyze surface defects and dislocations, differentiate two and more materials on the surface, determine surface reconstruction or atomic structure, etc.

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