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Features of spontaneous short-wave radiation during channeling of weakly relativistic electrons in the main crystallographic planes of tetrafluoroaluminates

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In this work, the interaction potentials of electrons with the main crystallographic planes (100), (110), (101), (001) and (111) in crystals of tetrafluoroal uminates KAlF4, TlAlF4, RbAlF4 and NH4AlF4 were calculated. For beams of weakly relativistic electrons with Lorentz factors γ = 10, 20, 30 and with different angular dispersions, the features of spontaneous short-wave radiation were studied.

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