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Coulomb Breakup of Nucleus ^{6} Li on Ion ^{208}Pb

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Abstract: In the framework of the three-body approach the A(a,bc)A Coulomb breakup has been investigated. The three-body Coulomb dynamic is taken into account to derive the expression for the reaction matrix element. The mechanism of the breakup includes the direct process and the excitation of resonance state of the particle a. The calculation of the triple differential cross section of the ^{208}Pb(^{6}Li, α d)^{208}Pb Coulomb dissociation have been performed in the energy region $E_{\alpha\, d} < 1$MeV. Calculations for the Coulomb dissociation ^{208}Pb(^{6}Li, α d)^{208}Pb, including consideration of the triple cross section going through the first resonance of ^{6}Li have been performed. The results of the calculations are compared with experimental data.

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