Abstract Submitted
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Depth of origin of sputtered atoms and isotopic angular distribution of atoms sputtered from metal alloys NARESH DEOLI, KARL HASENSTEIN, LOUIS HOUSTON, Univ of Louisiana, DUNCAN WEATHERS, Univ of North Texas, LOUISIANA ACCELERATOR CENTER TEAM, ION BEAM MODIFICATION AND ANALYSIS LABORATORY COLLABORATION — Angular distribution of atoms sputtered from the surface and the near surface region under ion bombardment provides critical information about the sputtering mechanism. In the present study Monte-Carlo based SRIM simulation is used to explore the depth dependent energy and angular distribution of the sputtered atoms from liquid metal alloys, Ga:In and Ga:Bi; using normally incident keV Ar ions. These alloys are known to exhibit Gibbsian segregation where lightly bound species tends to segregate on the top of the alloy. The isotopic distributions of sputtered atoms from the alloy are also presented.

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