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Low velocity ion stopping in multicomponent plasmas for WDM production BEKBOLAT TASHEV, kazNu Almaty, CLAUDE DEUTSCH, LPGP UParis, TASHEV COLLABORATION — In order to comply with several converging international endeavors (Berkeley, Darmstadt, Princeton...) aiming at heating thin solid foils into warm dense matter(solid density and eV temperature range)through the impact of intense and low velocity ion beams we focus our attention on multispecies target.Collisional and dielectric approaches are contrasted in the Bragg peak region of current operational interest.We evidence a critical ion projectile velocity Vp such as target electron stopping turns comparable to target ion stopping.Various simplifying approximations qualifying target ion stopping are thus thoroughly compared. The given critical velocity being somewhat reminiscent of an equivalent one in MFE associated with tokamak anomalous heating,we extend our investigation to the heating of magnetized targets as well.

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