

Answer to the Reviewer 1

Thank you for your comments and many kind advices again. I appreciate all comments.

To focus on the hydride formation and trapping(de-trapping) processes of hydrogen , Introduction was changed.

Because the hydrogen centration exceeds the solid solubility of the metal, some hydrogen atoms are precipitate as hydride and cause hydride embrittlement. (Line;29-31)

Hydrogen diffusivity under neuron irradiation is generally controlled by trapping and de-trapping processes of hydrogen on the material. (Line;33-35)

“Trapping” is changed (Line;46)

“In this figure, the total desorption of deuterium after 30keV ion irradiation was much higher than that of the sample after 5.0 keV ion irradiation. Since the implanted deuterium atoms do not stay at the same position which is calculated in Figure 2. They diffuse to the thick region of the sample during irradiation and hydrides are formed. In the case of 5.0 keV irradiation, more deuterium atoms were released from the specimen surface than 30 keV irradiation. Detailed estimation of deuterium atom diffusion during irradiation and also desorption is needed. ” (Line;111-117)

Thank you again for your comments and reviewing

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