

Behavior of the implanted ions in solid oxide electrolyte

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Abstract : The behavior of ion trapping and migration in the yttria-stabilized zirconia pellets following high dose ion beam irradiation have been studied using SEM, EDX, and TGA. The ion beam was irradiated at room and higher temperatures and the differences in their results were interpreted in terms of dynamic annealing effects. The SRIM calculation was also performed to explain the cross sectional SEM image of the electrolytes.