

Fig.7.1 Porosity dependence of Young's Modulus values for  $\text{Li}_4\text{SiO}_4$ ,  $\text{Li}_2\text{O}$  and  $\text{Li}_2\text{ZrO}_3$ .<sup>50) 6) 17)</sup>

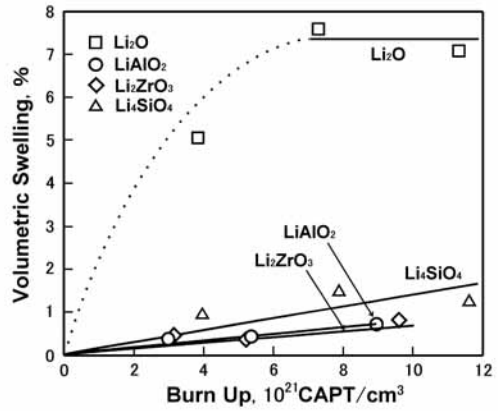


Fig.7.2 Volumetric swelling of  $\text{Li}_4\text{SiO}_4$ ,  $\text{Li}_2\text{O}$  and at  $\text{Li}_2\text{ZrO}_3$  at 700 °C.<sup>49)</sup>

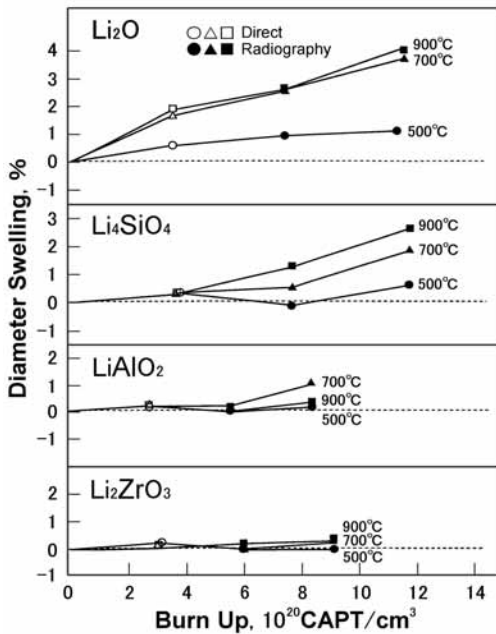


Fig.7.3 Diameter Swelling of  $\text{Li}_4\text{SiO}_4$ ,  $\text{Li}_2\text{O}$  and  $\text{Li}_2\text{ZrO}_3$  at 500, 700, 900 °C.<sup>70)</sup>

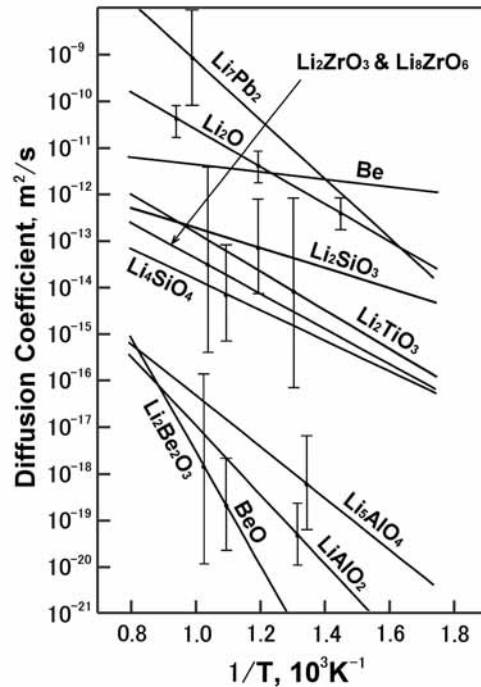


Fig.7.4 Summary of tritium diffusion coefficient in  $\text{Li}_4\text{SiO}_4$ ,  $\text{Li}_2\text{O}$ ,  $\text{Li}_2\text{TiO}_3$  and  $\text{Li}_2\text{ZrO}_3$ .<sup>18)</sup>

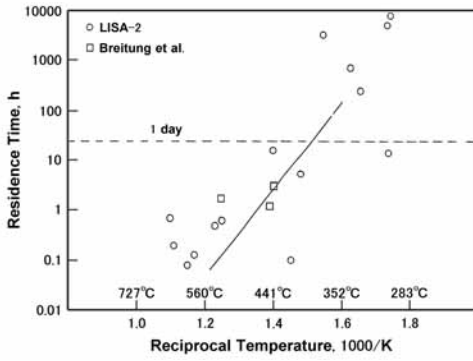


Fig.7.5 Tritium residence times for  $\text{Li}_4\text{SiO}_4$ .<sup>12) 29)</sup>

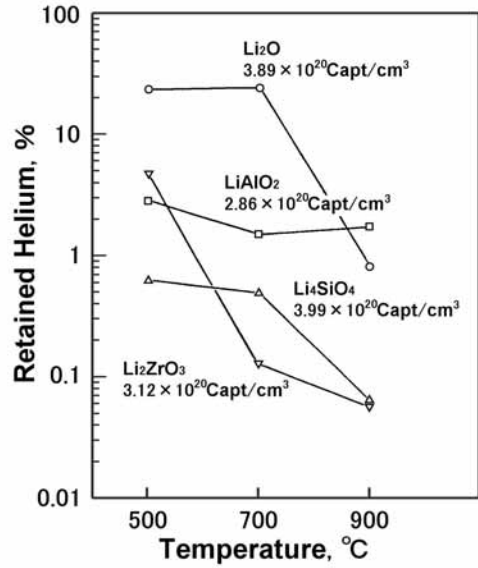


Fig.7.6 Helium retention in  $\text{Li}_4\text{SiO}_4$ ,  $\text{Li}_2\text{O}$  and  $\text{Li}_2\text{ZrO}_3$  after irradiation.<sup>48)</sup>

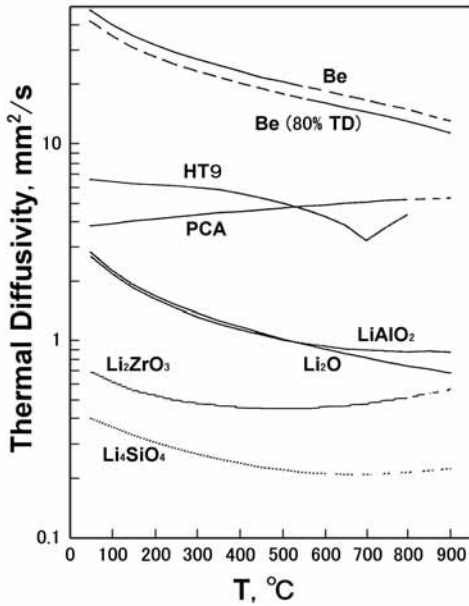


Fig.7.7 Thermal diffusivity of  $\text{Li}_4\text{SiO}_4$ ,  $\text{Li}_2\text{O}$ ,  $\text{Li}_2\text{TiO}_3$  and  $\text{Li}_2\text{ZrO}_3$  (80% TD).<sup>12)</sup>