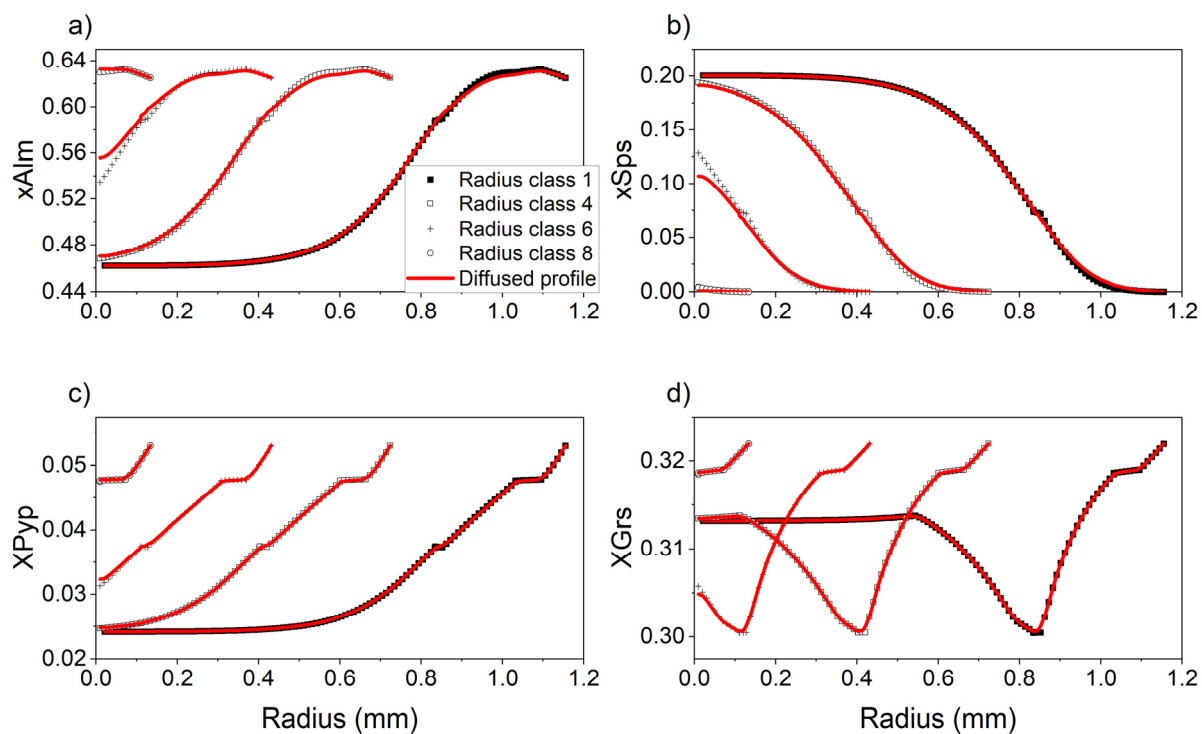
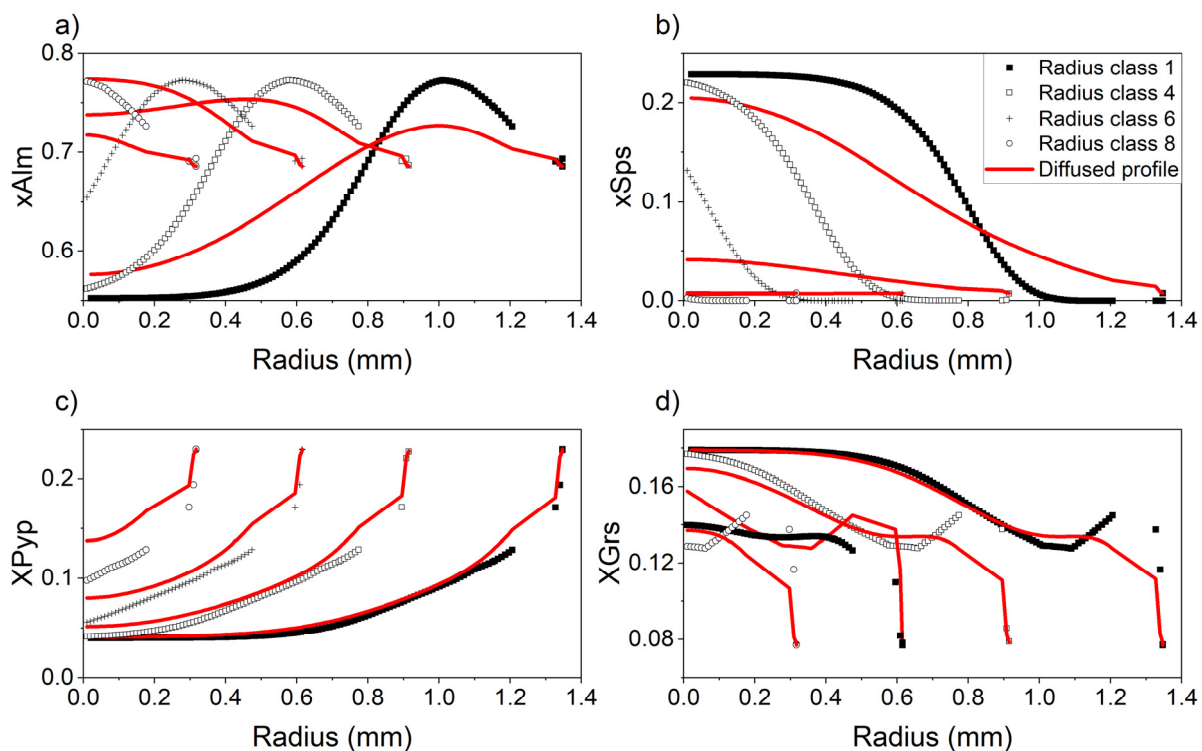


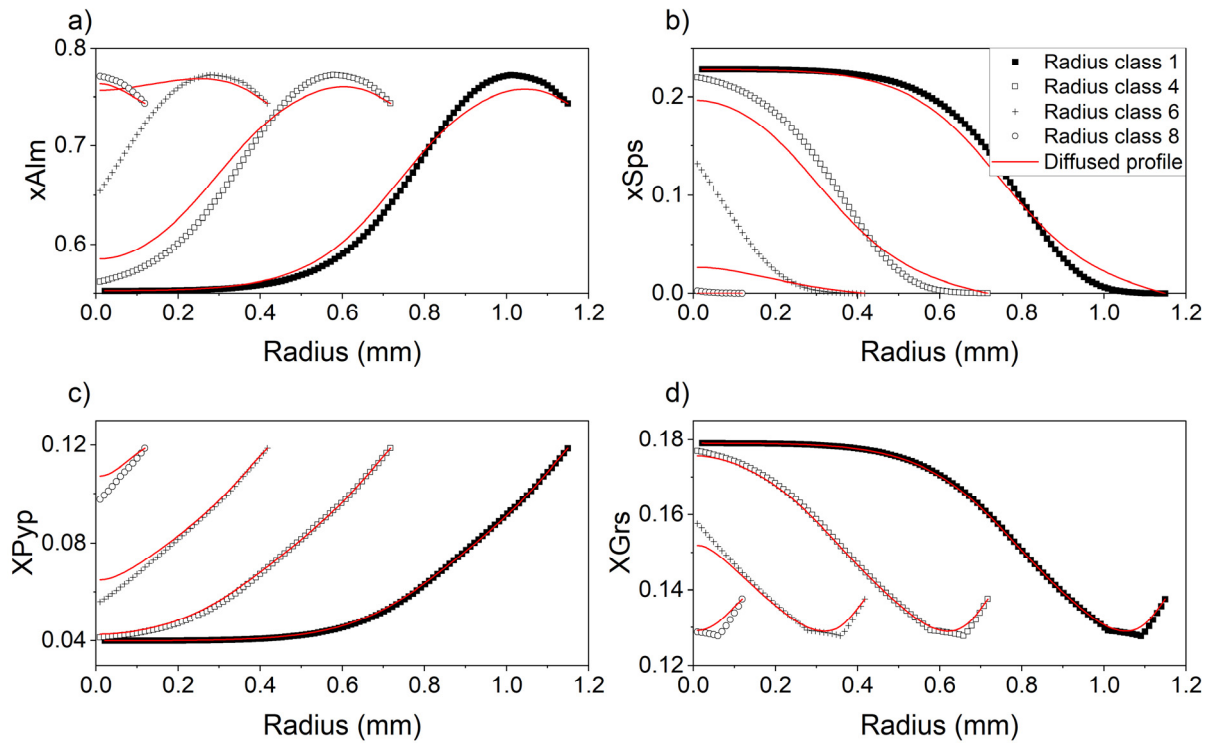
**Figure S2.1.** Theria\_G predicted garnet compositions for an average metapelitic schist (Caddick and Thompson, 2008) grown along Path B at a heating/cooling rate of 5°C/my. Primary compositions for radii classes 1, 4, 6, and 8 and marked by symbols and their corresponding diffused profiles are indicated by the solid red line. **(a)** Mole fraction almandine. **(b)** Mole fraction spessartine. **(c)** Mole fraction pyrope. **(d)** Mole fraction grossular.



**Figure S2.2.** Theria\_G predicted garnet compositions for an average metapelitic schist (Caddick and Thompson, 2008) grown along Path B at a heating/cooling rate of 50°C/my. Primary compositions for radii classes 1, 4, 6, and 8 and marked by symbols and their corresponding diffused profiles are indicated by the solid red line. (a) Mole fraction almandine. (b) Mole fraction spessartine. (c) Mole fraction pyrope. (d) Mole fraction grossular.



**Figure S2.3.** Theria\_G predicted garnet compositions for an average metapelitic schist (Caddick and Thompson, 2008) grown along Path hiT at a heating/cooling rate of 5°C/my. Primary compositions for radii classes 1, 4, 6, and 8 and marked by symbols and their corresponding diffused profiles are indicated by the solid red line. **(a)** Mole fraction almandine. **(b)** Mole fraction spessartine. **(c)** Mole fraction pyrope. **(d)** Mole fraction grossular.



**Figure S2.4.** Theria\_G predicted garnet compositions for an average metapelitic schist (Caddick and Thompson, 2008) grown along Path hiT at a heating/cooling rate of 50°C/my. Primary compositions for radii classes 1, 4, 6, and 8 and marked by symbols and their corresponding diffused profiles are indicated by the solid red line. **(a)** Mole fraction almandine. **(b)** Mole fraction spessartine. **(c)** Mole fraction pyrope. **(d)** Mole fraction grossular.