

ABSTRACT**Filler Materials for Glass Ionomer Cements**

An ionic polymer matrix which comprises a filler material having one or more ionic polymers grafted thereto. In particular, a glass ionomer cement which comprises a filler material having one or more acid polymers grafted thereto, and a resin-modified glass ionomer cement which comprises a filler material having a silanised surface and one or more acid polymers grafted on to the silanised surface. Also disclosed are methods of reinforcing an ionic polymer matrix, materials comprising reinforced ionic polymer matrixes, including glass ionomer and resin-modified glass ionomer cements, kits for preparing glass ionomer and resin-modified glass ionomer cements, and uses of these materials in the dental industry.

[Figure 1].