

Download Polymer Composite Matrix Science Morgan

Nanocomposite is a multiphase solid material where one of the phases has one, two or three dimensions of less than 100 nanometers (nm), or structures having nano-scale repeat distances between the different phases that make up the material. During the resorbable-polymer-boom of the 1970s and 1980s, polycaprolactone (PCL) was used extensively in the biomaterials field and a number of drug-delivery devices. ABSTRACT.

Nanocomposites, a high performance material exhibit unusual property combinations and unique design possibilities. With an estimated annual growth rate of about 25% and fastest demand to be in engineering plastics and elastomers, their potential is so striking that they are useful in several areas ranging from packaging to ... A review is presented of the recent developments concerning the use of polyhedral oligomeric silsesquioxane (POSS) for designing polymer nanocomposites endowed with enhanced fire retardancy.