

non-linear optical polymer

Polymer that exhibits an optical effect brought about by electromagnetic radiation such that the magnitude of the effect is not proportional to the irradiance.

Note 1: See also non-linear optical effect.

Note 2: An example of non-linear optical effects is the generation of higher harmonics of the incident light wave.

Note 3: A polymer that exhibits a non-linear optical effect due to anisotropic electric susceptibilities when subjected to electric field together with light irradiation is called an electro-optical polymer. A polymer that exhibits electro-optical behavior combined with photoconductivity is called a photo-refractive polymer.

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