

Holographic data storage is considered as the one of the next generation information storage technologies because of its potential in high storage capacity and fast read out speed. Holographic recording makes it possible to store several gratings in the same position by multiplexing. Progress in the last few years has been very impressive, in the field of photopolymers that offer a wide variety of recording mechanisms including both write-once and rewritable media. Optimization and further development of photopolymer media will be the key to success of this and other advanced optical storage technologies. Photopolymer materials are interesting because of their large refractive index, high photosensitivity, low energetic exposures and they can be easily synthesized to have different compositions. This area of research brings together different fields of science (polymer science, physics and chemistry) that have, until recently, interacted only relatively rarely. Few dye doped photopolymers which have the advantage of good shelf life/spectral sensitivity, low noise, good photosensitivity, low cost, absence of dark room storage, good thermal/environmental stability are discussed.

Photopolymers for Optical Recording



Ushamani Mythili

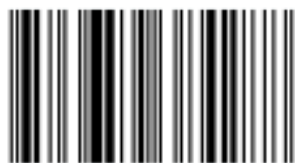


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Photosensitive Polymers for Optical Recording

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