

Recombination Processes and Light-Induced Defect Creation in Hydrogenated Amorphous Silicon

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Recombination processes and light-induced defect creation in hydrogenated amorphous silicon (a-Si:H) are reviewed with emphasis on their models and key experiments elucidating them until now. The kinetics of light-induced defect creation in a-Si:H being expressed by a stretched exponential function has been investigated theoretically and experimentally. The results are discussed in terms of our model of light-induced defect creation in a-Si:H [1].

[1] K. Morigaki and H. Hikita, *Phys. Rev. B*, 76, 085201 (2007).