photochemical equivalence

According to the principle of photochemical equivalence, there is a one-to-one relationship between the number of photons absorbed by a system and the number of excited species produced. The principle often fails for light of high intensity (e.g. laser beams), when molecules may absorb more than one photon.

Source:

PAC, 1996, 68, 149 (A glossary of terms used in chemical kinetics, including reaction dynamics (IUPAC Recommendations 1996)) on page 176