

**annihilation**

1. (in radiochemistry) An interaction between a particle and its antiparticle in which they both disappear.

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2. (in photochemistry) Two atoms or molecular entities both in an excited electronic state interact often (usually upon collision) to produce one atom or molecular entity in an excited electronic state and another in its ground electronic state. This phenomenon (annihilation) is sometimes referred to as energy pooling.

See *singlet-singlet annihilation*, *spin-conservation rule*, *triplet-triplet annihilation*.

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