

oxidized species

A term used to characterize the degree of oxidation (or reduction) in atoms, molecules and ions. It can be applied to an atom in a molecule or an ion which has a high oxidation state. An element or atom in a compound can be oxidized by reaction with oxygen, while it can be reduced by reaction with hydrogen. An oxidized species may be formed also through the loss of electrons (either to the positive electrode in a cell, or through transfer to another atom or group of atoms). For example, the sulfur in H₂S is reduced sulfur relative to elementary sulfur, while SO₂ and SO₃ are oxidized. Metallic iron (Fe) is a reduced state of iron, while the Fe²⁺ ion (ferrous ion) and Fe³⁺ ion (ferric ion) are oxidized states of iron. Fe³⁺ is in a higher oxidation state than Fe²⁺ which is in a higher oxidation state than Fe.

See: oxidation state

Source:

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