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## Schiff Base Metal Complexes Precursor for Metal Oxide Nanomaterials: A Review

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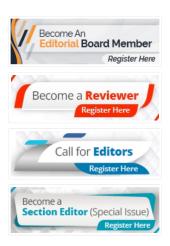
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## Abstract

Schiff bases and their complexes are versatile compounds, which have been synthesized from the condensation of carbonyl compounds with amino compounds and exhibit a broad range of applications in biological, medicinal, catalysis, and industrial purposes. Furthermore, Schiff basemetal complexes have been used as a precursors for the synthesis of different metal oxides, which include oxides of iron, cobalt, copper, nickel, manganese, vanadium, cadmium, zinc, mercury, etc. and ferrites such as Fe<sub>3</sub>O<sub>4</sub>, ZnFe<sub>2</sub>O<sub>4</sub>, and ZnCo<sub>2</sub>O<sub>4</sub>. These metal oxides have been utilized for several applications as a catalyst for several organic transformations and for biological activity. This review encompasses different methods of synthesis of metal oxides using Schiff base metal complexes precursor, their characterization, and various applications in detail.

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 $\textbf{Keywords:} \ \underline{Schiff\ base}, \underline{metal\ complexes}, \underline{metal\ oxide}, \underline{nanomaterial}, \underline{synthesis}, \underline{characterization}, \underline{applications}.$ « Previous Next » **Graphical Abstract** > Antioxidant and antimicrobial agents > Antibacterial activity > Hydrogenation of nitrobenzene Applications Oxidation of alcohols > Photocatalytic degradation (Metal oxide) ➤ Reduction of 4-nitrophenol ➤ Electrocatalytic oxidation of acetylcholine + = Hg<sup>2+</sup>, Cd<sup>2+</sup>, Zn<sup>2+</sup>, Cu<sup>2+</sup>, Ni<sup>2+</sup>, Fe<sup>3+</sup>, Mn<sup>3+</sup>, Pd<sup>2+</sup>, Ru<sup>3+</sup>, Co<sup>2+</sup>, V<sup>4+</sup> etc. (Schiff base Metal Complex) > C-C coupling reactions Method of synthesis of metal oxides using Schiff base metal complexes precursor. References Mark Item Purchase PDF Rights & Permissions Print Cite **Article Metrics** </> **PDF** HTML 46 1 Total citations Recent citations 1.81 Field Citation Ratio n/a Relative Citation Ratio FIND YOUR INSTITUTION **Journal Information** > About Journal > Editorial Board > Current Issue > Volumes /Issues For Authors For Editors For Reviewers

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