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# **ACCEPTED MANUSCRIPT**

## Electroluminescent materials: Metal complexes of 8-hydroxyquinoline- A review

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#### **Abstract**

Organic metal complexes are used as the potential light emitting materials for the fabrication of light emitting devices, due to their fine color gamut and better emission properties. 8-hydroxyquinoline ligand based metal complexes have been broadly used for this function; this review highlights the uses of metal complexes with 8-hydroxyquinoline and their derivatives, as optical materials. Such materials are widely applicable in fabrication of optoelectronic devices which show opportunities to overcome energy relevant issues. Oxine ligands are well known for their utilization in analysis of several metals and their complexes with lighter metals show better photo-physical properties. Electroluminescence properties of these metal ligand products and the new opportunities for development of energy efficient materials are presented here.

*Keywords:* Solid state lighting, 8-hydroxyquinoline, OLEDs, Electroluminescence, Energy efficient display devices.

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