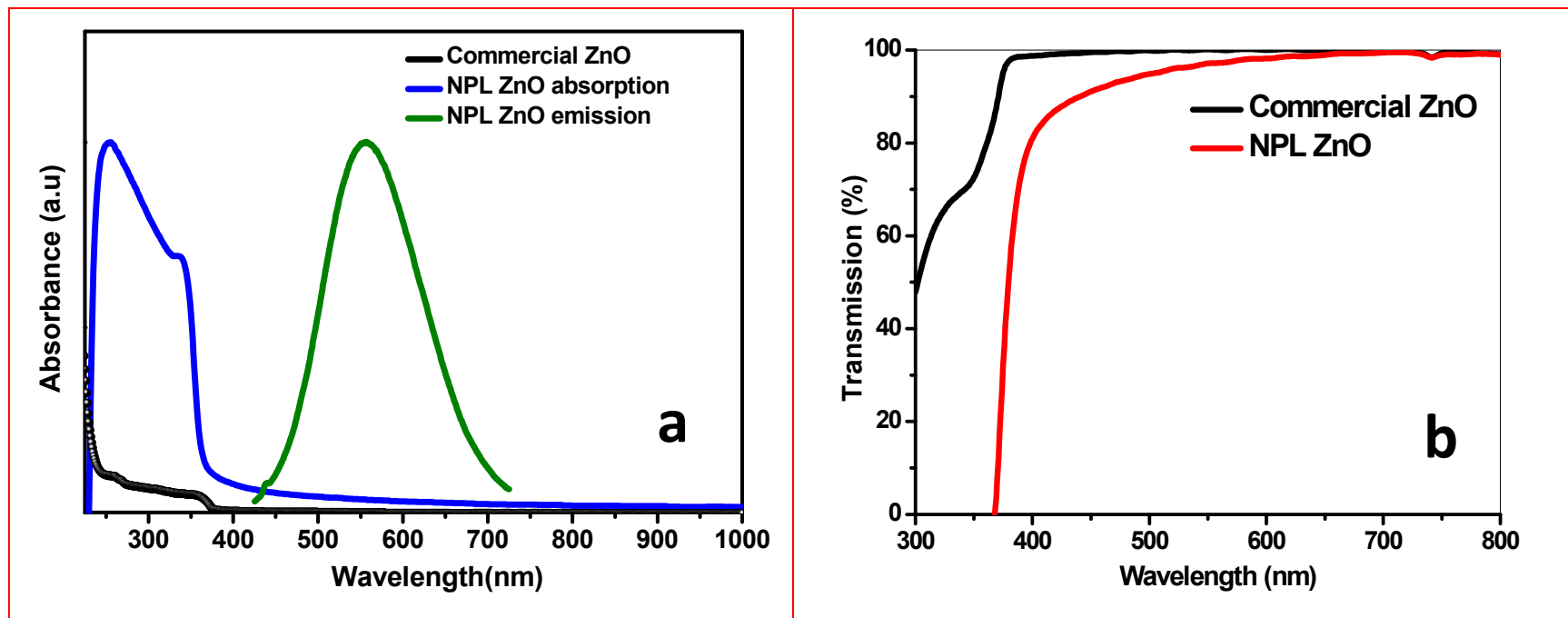




**Name of the Technology:** Smart anti-UV coating

**Summary:** Our innovation relates to the preparation of smart coatings of modified inorganic ZnO nanoparticles which can be used for UV protection. The aim of the innovation was to develop a UV protection material that can convert the absorbed UV to visible range so that light intensity is also increased (Figure a). The transmittance of the commercial as well as NPL ZnO is also shown in Figure b.



**Specifications:**

- Transparent (~85% at 500 nm) coating under room lights
- Smart coating with UV light protection



**Applications:** In glass industry

**Advantages:**

- UV protection and at the same time no loss of UV light as the protective layer converts UV into visible range.

**Choose the Readiness level of the Technology:**

Idea	Concept Definition	Proof of Concept	Prototype	Lab Validation	Technology Development	Technology Demonstration	Technology Integrated	Market Launch

**Related Patents:** Know-how

**Year of Introduction:** 2016

**Broad Area/Category:** Energy

**User Industries:**

- Glass Industry
- Coating industries etc.

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