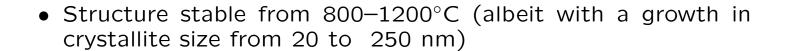
Colour Performance of Ceramic Nano-pigments*

- CoAl₂4, Cyan
 Au, Yellow
 (Ti,Cr,Sb)O₂, Yellow
 CoFe₂O₄, Black
- Black CoFe₂O₄ a spinel (inverse) structure with Co²⁺ in **both** tetrahedral and octahedral sites
- "Extensive Co-O and Fe-O charge transfers, together with d-d electron transitions of Co²⁺ and Fe³⁺ in multiple coordination, ensure the full absorption of the visible spectrum"



- Fast growth in size in glassy coatings but prevented in glazes (persists in 20-40 nm range)
- Black colour gets darker (without regular trend) with temperature (expressed in CIELAB color space by L* parameter)

Transition Metal Oxides; Rao & Raveau