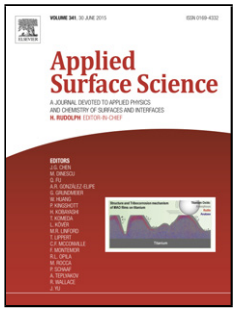


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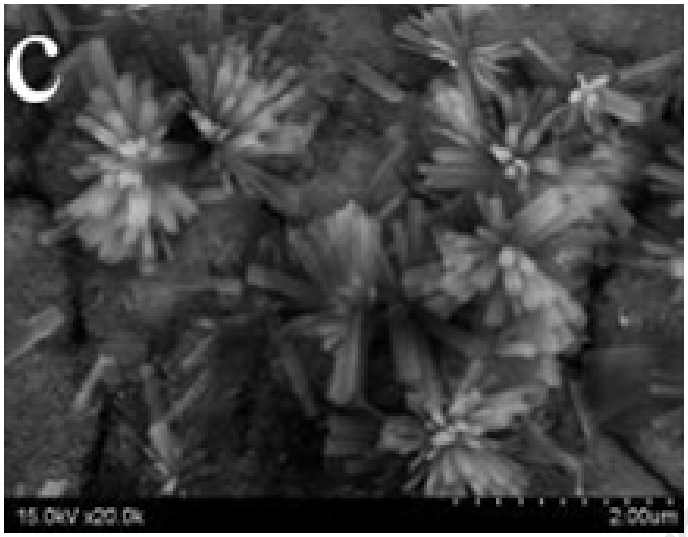
Graphical abstract




Unique ZnSe nanoflowers have been succesfully synthesized by reaction of Se powder with Zn substrates.>> Characterized by XRD, SEM, TEM, XPS, EDS and Raman spectroscopy .>> Were single crystals with cubic zinc blende (ZB) structure>>Have excellent field emission properties and optical properties.

Novel ZnSe nanoflowers are grown on Zn foils.
ZnSe nanoflowers are characterized by XRD, SEM, TEM, XPS and Raman spectra.
ZnSe nanoflowers on Zn foils as cathodes possess good FE properties.

# Synthesis, field emission properties and optical properties of ZnSe nanoflowers

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## Abstract

ZnSe nanoflowers have been synthesized by reaction of Se powder with Zn substrates at low temperature. The as-prepared ZnSe nanoflowers were characterized by X-ray diffraction (XRD), scanning electron microscope (SEM), transmission electron microscopy (TEM), high-resolution