

Special Issue

**PRODUCTION AND CHARACTERIZATION OF SEMICONDUCTOR
QUANTUM DOTS FOR VERSATIL APPLICATIONS**Dr. Linrui Hou^{1*}**AIM AND SCOPE**

Colloidal nanocrystals, commonly known as quantum dots (QDots), have received much attention due to their strong size- and shape-dependent optical and electronic properties, thus they give rise to their potential applications in versatile fields including light-emitting devices, photovoltaic devices, bio-labeling, and so forth. The study on the fluorescent quantum dots will help to alleviate the energy and environmental issues. To this end, the original papers and reviews on such subjects as, light induced energy, energy transport, electron and proton transfer, luminescence microscopy, radiative and non-radiative recombination, synthesis and characterization of quantum dots, new techniques, devices or applications of QDots, etc, are welcome. This list is not intended to be exhaustive. Papers in the areas and applications about luminescent sensors, atmospheric photochemistry, solar energy conversion, environmental remediation, and related photocatalytic chemistry are also welcome.

Keywords: *colloidal nanocrystals, quantum dots, photoluminescence, synthesis of quantum dots, nanotechnology*

SUBTOPICS

1	Synthesis and characterization of semiconductor quantum dots	4	The development of quantum dots
2	Light induced energy, energy transport, electron and proton transfer	5	Luminescence microscopy, radiative and non-radiative recombination
3	The applications of quantum dots in light-emitting devices, photovoltaic devices, bio-labeling, and so forth.	6	Any other related areas of applications for quantum dots, such as luminescent sensors, atmospheric photochemistry, solar energy conversion, etc.

SCHEDULE

Manuscript submission deadline	31st May 2014
Peer Review Due	20th June 2014
Revision Due	20th August 2014
Notification of acceptance by the Guest Editor	5th September 2014
Final manuscripts due	25th September 2014

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