

**SiO<sub>2</sub>, TiO<sub>2</sub> ELECTRON TRANSPORT LAYER FOR SOLAR CELL**

Dissertation submitted to

**RAJAH SERFOJI GOVERNMENT COLLEGE (AUTONOMOUS),  
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Affiliated to **BHARATHIDASAN UNIVERSITY**, Thiruchirappalli-24

In partial fulfillment of the requirements for the award of the degree of

**MASTER OF SCIENCE**

**IN PHYSICS**

Submitted By

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**MAY-2022**

**GROWTH AND CHARACTERIZATION OF THREONINE  
OF SINGLE CRYSTAL**

Dissertation submitted to  
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**MAY-2022**

**INVESTIGATION OF STRUCTURAL AND AN OPTICAL  
STUDIES OF TM DOPED CeO<sub>2</sub> NANOPARTICLES**

Dissertation Submitted to

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In partial fulfillment of the requirements for the award of the degree of

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**MAY-2022**

**REVIEW OF BIOMATERIALS-BIOCERAMICS- PAST,  
PRESENT AND FUTURE**

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**MAY-2022**



**GROWTH AND CHARACTERIZATION OF  
SODIUM BIS(2-METHYLLACTATO) BORATE  
SINGLE CRYSTALS**

A project Work Submitted to

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**SYNTHESIS AND CHARACTERIZATION OF ZnS AND Ce (2  
AND 4 wt.%) DOPED ZnS NANOPARTICLES**

Dissertation submitted to  
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**MAY – 2022**

STUDY ON OPTICAL PROPERTIES AND FUNCTIONAL GROUP OF THE  
CHARACTERIZATION ON Co, Cu Co-DOPPED ZnO NANOPOWDER BY CO  
PRECIPITATION METHOD

Dissertation Submitted to

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MAY-2022

**Synthesis of Molybdenum (1,3 and 5 wt. %) doped ZnO Nanoparticles  
and their Microstructural, Optical Studies**

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STUDY ON MORPHOLOGICAL AND FUNCTIONAL GROUP  
CHARACTERISTICS OF Cr, Cu CO-DOPPED ZnO NANOPARTICLES

Dissertation Submitted to

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MAY-2022

**GROWTH AND CHARACTERIZATION OF  
LITHIUM BIS (2-METHYLLACTATO) BORATE  
MONOHYDRATE SINGLE CRYSTALS**

A project Work Submitted to  
Rajah Serfoji Government College (Autonomous), Thanjavur-613 005  
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**JUNE 2022**

**SYNTHESIS AND CHARACTERIZATION OF Ce (1, 3 and 5 wt. %) DOPED  
ZnO NANOPARTICLES**

Dissertation Submitted to  
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**MAY - 2022**

**SYNTHESIS AND CHARACTERIZATION OF Sn DOPED V<sub>2</sub>O<sub>5</sub> THIN FILMS BY SIMPLIFIED SPRAY PYROLYSIS METHOD**

Project report submitted to

**RAJAH SERFOJI GOVERNMENT COLLEGE (AUTONOMOUS),**

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**SYNTHESIS AND CHARACTERIZATION OF ZnS AND Ce (1  
AND 3 wt.%) DOPED ZnS NANOPARTICLES**

Dissertation submitted to

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**MAY – 2022**

**STUDY ON STRUCTURAL AND AN OPTICAL CHARACTERISTIC OF Mo DOPPED ZnS  
NANO POWDER BY CO- PRECIPITATION METHOD**

**Dissertation Submitted to**

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**MAY-2022**

**GROWTH AND CHARACTERIZATION OF  
L-PROLINE CADMIUM CHLORIDE MONOHYDRATE  
SINGLE CRYSTALS**

A project Work Submitted to

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**GROWTH AND CHARACTERIZATION OF  
BIS(2-METHYL LACTATO) BORATE TETRAHYDRATE  
SINGLE CRYSTALS**

A project Work Submitted to  
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**JUNE 2022**



**ENHANCEMENT OF STRUCTURAL, AND ELECTRICAL PROPERTIES  
OF Sn DOPED V<sub>2</sub>O<sub>5</sub> THIN FILMS DEPOSITED BY SIMPLIFIED SPRAY  
PYROLYSIS TECHNIQUE**

Dissertation Submitted to

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**MAY-2022**

**STRUCTURAL AND FUNCTIONAL GROUP STUDIES OF  
Nd DOPED CeO<sub>2</sub> NANOPARTICLES**

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**ELECTRICAL PROPERTIES OF ZIRCONIUM TITANATE**

**PREPARED VIA SOL-GEL METHOD**

Dissertation submitted to

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THE STRUCTURAL STUDIES AND AN OPTICAL PROPERTIES OF Cr,Cu CO-DOPPED  
ZnO NANOPARTICLES BY CO-PRECIPTATION METHOD

Dissertation Submitted to

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# **GROWTH AND CHARACTERIZATION OF ALANINE SINGLE CRYSTALS**

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**INVESTIGATION ON THE PURE AND ALUMINIUM DOPED  
VANADIUM OXIDE THIN FILMS DEPOSITED BY SPRAY PYROLYSIS  
TECHNIQUE**

Project report submitted to

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