

001

NANOSIZE Tm³⁺:Lu₂O₃ @ SiO₂ CORE-SHELL PARTICLES: SYNTHESIS AND CHARACTERIZATION

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002

EPITAXIAL LAYERS OF KY_{1-x-y}Gd_xLu_y(WO₄)₂ DOPED WITH Er³⁺ AND Tm³⁺ FOR PLANAR WAVEGUIDE LASERS

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003

OPTICAL TRANSITION PROBABILITIES IN Er³⁺- AND Tm³⁺-DOPED LiLa₉(SiO₄)₆O₂ CRYSTALS

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004

MAGNETORESISTIVE BEHAVIOUR OF NANO-PARTICLE Fe_{1-x}Mn_xFe₂O₄

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005

OPTICAL AND LUMINESCENCE PROPERTIES OF Si NANOCRYSTALS ENSEMBLES IN SILICON DIOXIDE STUDIED IN EXTENDED SPECTRAL RANGE

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006

WAVEGUIDING DEMONSTRATION ON Yb:Nb:RbTiOPO₄ / RbTiOPO₄ LAYERS GROWN BY LIQUID PHASE EPITAXY

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007

OPTICAL AND PHYSICAL PROPERTIES OF SODA GLASS BASED ON THAILAND QUARTZ SANDS DOPED WITH IRON OXIDE

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008

ZnO NANOMATERIALS: OPTICAL PROPERTIES AND DEVICE APPLICATIONS

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009

TAILORING OPTICAL PROPERTIES OF HYBRID MATERIALS FOR OPTOELECTRONIC APPLICATIONS

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010

SYNTHESIS AND CHARACTERIZATION OF Ho_x:Lu_{2-x}O₃ NANOCRYSTALS TO PERFORM LASER CERAMICS

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011

THE KERR EFFECT IN 1-D PHOTONIC CRYSTALS WITH A THIN TbFeCo MAGNETIC LAYER

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012

THE MORPHOLOGY AND MOLECULAR STRUCTURE OF POLYFLUORENE THIN FILMS SYNTHESIZED BY A NOVEL PLASMA POLYMERIZATION METHOD

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013

CRYSTAL GROWTH AND CHARACTERIZATION OF Ho³⁺:KRE(WO₄)₂ (RE = Y, Gd, Lu)

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014

INTRINSIC EXCITATIONS IN THE PERFORMANCE OF OPTICAL FUNCTIONAL MATERIALS BASED ON YAG

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015

ENERGY STORAGE AND TRANSFER IN RARE GAS SOLIDS

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016

OPTICAL PROPERTIES OF CdTe/ZnTe CORE/SHELL QUANTUM DOTS SUITABLE FOR TARGETED BIOIMAGING

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017

SPECTROSCOPIC PROPERTIES OF ZnWO₄:Li, F CRYSTALS

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018

**FABRICATION AND CHARACTERIZATION OF ONE DIMENSIONAL
DIFFRACTION GRATINGS ON THE NONLINEAR OPTICAL CRYSTAL RbTiOPO4
BY ULTRA FAST LASER ABLATION**

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019

**Yb/Er CO-DOPED GADOLINIUM OXIDE UPCONVERSION MULTI WAVELENGTH
FLUORESCENT NANOCRYSTALS**

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020

**3,4,9,10-PERYLENETETRACARBOXYLICDIIMIDE/ZnO HYBRID
NANOMATERIALS**

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021

**SPATIAL LASER BEAM PROFILE DETERMINATION BY PULSED
PHOTOACOUSTICS: DETECTION RADIUS/WAVELENGTH APPROXIMATION**

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022

QUANTUM EFFICIENCY OF BROAD-BAND EMISSION IN VANADIUM OXIDES

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023

RADIATIVE TRANSITIONS IN NANOCRYSTALS

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024

LOW-COST EXPERIMENTAL APPARATUS FOR SOLID STATE PHOTOACOUSTIC MEASUREMENTS

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025

IN VIVO MICROVASCULAR BLOOD PERFUSION MAPPING USING THE SELF-MIXING EFFECT IN A PROTON-IMPLANTED VCSEL

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026

HIGH Tm³⁺ DOPING IN KLu_{1-x}Tm_x(WO₄)₂/KLu(WO₄)₂ COMPOSITES FOR THIN-DISK LASERS

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027

THE CONTROL OF SPONTANEOUS PATTERN FORMATION ON AZO POLYMER FILM

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028

VACUUM MULTIPHOTON UPCONVERSION FOR LANTHANIDE OXIDES

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029

PROPERTIES OF SnS THIN FILMS OBTAINED BY ELECTROCHEMICAL DEPOSITION AND THEIR APPLICATION IN SOLAR CELLS

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030

PHOTOACOUSTIC ELASTIC BENDING METHOD: STUDY OF THE ION-IMPLANTED Au-Si SYSTEM

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031

PREPARATION OF THE NEW SPHERICAL NANO-SIZED X-RAY PHOSPHORS ON THE BASIS OF Lu₂O₃:Eu³⁺

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032

MULTISCALE MODELLING OF EXCITON DYNAMICS IN POLYMERIC SYSTEMS CONCERNING THE EFFECT OF POLYMER MOLECULAR PROPERTIES AND MORFOLOGY

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033

FORSTER-LIKE NONEXPONENTIAL ENERGY TRANSFER DECAY IN DOPED NANOPARTICLES

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034

NONEQUIVALENT Yb³⁺ CENTERS IN R_xYb_{1-x}Al₃(BO₃)₄, R=Y, Tm, Lu, Yb SINGLE CRYSTALS

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035

INTERVALENCE CHARGE TRANSFER IN Pr³⁺ AND Tb³⁺-DOPED DOUBLE TUNGSTATE CRYSTALS KRE(WO₄)₂ (RE = Y, Gd, Yb, Lu)

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036

AB-INITIO CALCULATIONS OF THE OPTICAL PROPERTIES OF PURE AND Sm³⁺-DOPED ANATASE AND RUTILE TiO₂

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037

NEW APPROACHES FOR THE SYNTHESIS OF Eu³⁺:La₂O₃ NANOPARTICLES AND THEIR SPECTROSCOPIC CHARACTERIZATION

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SPECTROSCOPIC STUDIES OF THE MIXED SYSTEM Nd_xGd_{1-x}Fe₃(BO₃)₄

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039

THEORETICAL STUDY OF THE INFLUENCE OF DEFECTS ON EXCITON FORMATION IN SEMICONDUCTING POLYMERS

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040

METAMATERIALS BASED ON QUANTUM CASCADE LASER STRUCTURES IN STRONG MAGNETIC FIELD

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041

OPTOMAGNETIC FINGERPRINT OF CONTACT LENSES: LIGHT INFLUENCE ON BRAIN ACTIVITY

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MAGNETIC PROPERTIES OF CONTACT LENSES: CHARACTERISATION BY MAGNETIC FORCE MICROSCOPY

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043

UPCONVERTING LiNbO₃:Er/Yb NANOPARTICLES

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044

LANTHANIDE LEVEL LOCATION IN TRANSITION METAL COMPLEX COMPOUNDS

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045

INVESTIGATION OF RARE-EARTH-DOPED AND DYE-DOPED LUMINESCENT SILICA NANOPARTICLES FOR DNA-MICROARRAY LABELING

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046

NEW SYNTHESIS AND STRUCTURES OF Na₂Mo₂O₇ AND Na₂W₂O₇ USING THERMODYNAMICALLY STABLE MOLYBDENUM AND TUNGSTEN (VI) OXIDE CLUSTERS AS PRECURSORS

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047

EPR AND VIBRATIONAL STUDIES OF SOME TUGSTATES AND MOLYBDATES SINGLE CRYSTALS

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048

EFFECTS RELATED WITH PHOTOCONDUCTIVITY AND MOBILITY IN TlBr

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049

CHARGE CARRIER MOBILITY AND AGEING OF ZnPc/C60 SOLAR CELLS

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050

OPTIMIZING ALL OPTICAL SWITCHES IN SEMICONDUCTOR MICRORESONATORS USING CARRIER BEHAVIOR

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051

DISORDERING EFFECT OF PERIODICALLY POLEDNONLINEAR CRYSTALS ON PARAMETRIC DOWN CONVERSION

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052

MODIFICATION OF WTi/Si SYSTEM BY 1064 nm PICOSECOND Nd:YAG LASER PULSES

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053

CAVITY SOLITONS IN VCSEL'S BEYOND THE RATE EQUATION APPROXIMATION

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EXPERIMENTAL INVESTIGATION OF DYNAMIC BEHAVIOR OF HOLOGRAPHIC GRATING IN AZO-DYE DOPED NEMATIC LIQUID CRYSTAL

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055

CHARACTERIZATION OF OPTICAL NONLINEARITY IN AZO DYE DOPED NOVEL NEMATIC LIQUID CRYSTAL

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POSSIBILITIES OFFERED BY HIGH-RESOLUTION FOURIER SPECTROSCOPY IN CHARACTERIZING OPTICAL MATERIALS: EXAMPLE OF $\text{LiYF}_4 - \text{Tm}^{3+}$

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TEMPERATURE DEPENDENCE OF THE THRESHOLD CURRENT DENSITY OF A GaN BASED QUANTUM DOT LASER

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CHARGE TRANSPORT MODEL OF GATE SOLUTION AlGaIn/GaN HIGH ELECTRON MOBILITY

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DESIGN OF LANTHANIDE-DOPED NANOMATERIALS FOR APPLICATION IN OPTICS AND CERAMICS

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LUMINESCENT PROPERTIES OF SILVER COMPLEXES IN SOLID SOLUTIONS OF INORGANIC COMPOUNDS

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THE SCATTERING OF HOT ELECTRONS BY PHONONS IN AlGaIn/GaN QUANTUM WELLS

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MECHANOLUMINESCENT SMART MATERIALS AND THEIR APPLICATIONS

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SYNTHESIS OF TRANSITION METAL AND RARE EARTH DOPED MIXED OXIDE NANOPOWDERS

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CLEAVAGE MECHANOLUMINESCENCE IN POLYMERS

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LIGHT EMISSION PRODUCED DURING IMPULSIVE DEFORMATION OF POLYMERS

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STRUCTURAL, ELECTRONIC AND OPTICAL ASPECTS OF THE CHROMIUM DOPING OF THE BGO: AB-INITIO STUDY

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CRYSTALLOGRAPHIC ORIENTATION OF SUBSTRATE AS THE KEY POINT FOR ZnO@Si, ZnO@SiO₂ MORPHOLOGY AND LASING CHARACTERISTICS

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MORPHOLOGY AND PROPERTIES OF SOL-GEL PREPARED LDPE-SILICA NANOCOMPOSITES

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CORRELATION OF STRUCTURAL AND OPTICAL PROPERTIES OF SPUTTERED $FeSi_2$ THIN FILMS

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IMPROVING SOLAR CELL EFFICIENCY: A CHALLENGE FOR THE TWENTY-FIRST CENTURY

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OPTICAL PROPERTIES OF BETANIN SENSITIZED GELATIN FILM

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LUMINESCENT ANALYSIS OF LILAC ALPHA SPODUMENE

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OUT OF EQUILIBRIUM SYNTHESIS OF MODEL UNCAPPED ZnO NANOPARTICLES

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ESR STUDY OF Mn²⁺ RED EMISSION IN CaGa₂S₄ CODOPED WITH A REE

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THERMO-OPTICAL INVESTIGATIONS OF MULTILAYER BST/PZT THIN FILMS BY SPECTROSCOPIC ELLIPSOMETRY

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DEPENDENCE OF CRYSTAL FIELD EFFECTS ON VARIATION OF INTERIONIC DISTANCES IN ZnS:V²⁺ AND MgO:Cr³⁺

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PHOTOLUMINESCENT PROPERTIES OF Zn-Mn-O

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OPTICAL SPECTRA OF FLUX GROWN Cr-DOPED SILICATE CRYSTALS

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LIF SINGLE CRYSTAL FOR YAG:ND LASER Q-SWITCH

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Fe- AND Co-DOPED SnO₂ THIN FILMS PREPARED BY ELECTRON BEAM EVAPORATION

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CHANGES OF PROPERTIES OF CURED AND UNCURED DISILOXANE BISBENZOCYCLOBUTENE THIN FILMS UNDER IRRADIATION

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CZOCHELSKI GROWTH OF β-Na_xV₂O₅ SINGLE CRYSTALS

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DATA RECORDING BY FLUORESCENT PHOTOSENSITIVE NANOCRYSTALS

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X-CHROMIC MATERIALS WITH POTENTIAL APPLICATIONS AS FRIENDLY INDICATORS FOR TEMPERATURE, PRESSURE AND UV DOSE

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SYNTHESIS AND CHARACTERIZATION OF BISMUTH SULPHIDE NANOSTRUCTURES IN W/O MICROEMULSIONS

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DYNAMICAL ANDERSON LOCALIZATION OF COUNTERPROPAGATING BEAMS IN OPTICALLY INDUCED PHOTONIC LATTICES

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STRUCTURAL CHARACTERIZATION OF ULTRA-THIN P(VDF-TrFE) FILMS

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NONLINEAR OPTICAL PROPERTIES OF P(VDF-TrFE) COPOLYMER FILMS

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NEW CADMIUM AND RARE-EARTH METAL MOLYBDATES WITH SCHEELITE TYPE STRUCTURE

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ELECTRICAL AND OPTICAL PROPERTIES OF THIN FILMS OF DNA:PEDOT

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STUDYING THE DIFFRACTION EFFICIENCY VARIATIONS OF HOLOGRAPHIC GRATINGS DUE TO SUCCESSIVE WRITE-ERASE PROCESSES IN AZO-DYE-DOPED POLYMER FILMS

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FABRICATION OF LOW-TEMPERATURE PASSIVATION OF SI WITH AL₂O₃ FILMS AND ITS APPLICATION TO MIS SOLAR CELLS

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OPTICAL STUDY OF NANOCOMPOSITES BASED ON CHALCOGENIDE IMPREGNATED WITH ORGANIC DYE

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LOCALIZED VIBRATIONS OF SILICON DEFECTS IN QUARTZ

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SPECTROSCOPIC INVESTIGATION OF Er-Yb CODOPED MATERIALS FOR 1.6 MICRONS LASER APPLICATIONS

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OPTICAL PROPERTIES OF LANGASITE FAMILY CRYSTALS AND THEIR CONNECTION WITH GROWTH CONDITIONS

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FIRST-PRINCIPLES STUDY OF THE ELECTRONIC STRUCTURE AND OPTICAL PROPERTIES OF THE PURE BaY_2F_8

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AB-INITIO STUDY OF STRUCTURAL, ELECTRONIC AND OPTICAL PROPERTIES OF THE BTO SILLENITE CRYSTAL

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THULIUM DOPED SILICON LIGHT EMITTING DIODES

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SHIFT AND BROADENING OF SAPPHIRE SURFACE POLARITON BY QUASICRYSTALLINE FILM

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HIGH-RESOLUTION SPECTROSCOPY OF $\text{LiLuF}_4:\text{Pr}^{3+}$ CRYSTALS

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MICRO-RAMAN CHARACTERIZATION OF Zn-DIFFUSED LiNbO_3 CHANNEL WAVEGUIDES

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COPRECIPITATION STUDY OF GOLD AND HYDROXYAPATITE NANOPARTICLES

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OPTICAL PROPERTIES OF ONE-DIMENSIONAL PHOTONIC CRYSTALS IN DICHROMATED PULLULAN

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MANUFACTURING OF SOLID-STATE WHITE LIGHT EMISSION MATRIX USING YAG:Ce PHOSPHOR

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PE-MOCVD GROWTH AND CHARACTERIZATION OF ZnO AND ZnO:Al THIN FILMS

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APPLICATION OF FOURIER-PADE APPROXIMATION IN ANALYSIS OF MATERIALS FOR OPTICAL APPLICATIONS

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MEASUREMENT OF LASER-INDUCED FLUORESCENCE OF OPTICAL MATERIALS USING A TIME-RESOLVED SPECTROMETER

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INVESTIGATING THE INSERTION LOSS DUE TO FRESNEL REFLECTION AT THE LITHIUM NIOBATE-AIR INTERFACES

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INTRINSIC LUMINESCENCE OF ZrO₂ NANOPOWDER AND ITS POSSIBLE APPLICATIONS

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SELECTIVE IC ABSORPTION IN MOLECULAR NANOFILMS

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**OBTAINED MESOPOROUS ALUMINA FROM ALUMINA HYDROXIDE
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**DYNAMIC-MECHANICAL AND OPTICAL PROPERTIES OF PMMA-Gd₂O₃ (Er³⁺)
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**RECONSTRUCTION OF THE OPTICAL DEPTH STRUCTURE FROM
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KINETICS OF EXCITATION IN TL AND OSL DETECTORS

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RARE EARTH DOPED FLUORIDE NANOPARTICLES FOR BIOLOGICAL LABELING AND IMAGING

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STRUCTURAL AND MAGNETIC PROPERTIES OF MECHANOCHEMICALLY SYNTHESIZED NANOCRYSTALLINE TITANIUM MONOXIDE

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POLYMER COMPLEX SOLUTION SYNTHESIS OF (Y_xLu_{1-x})₂O₃:Eu³⁺ NANOPOWDERS

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POLYMER COMPLEX SOLUTION SYNTHESIS TECHNIQUE FOR RARE-EARTH-DOPED Lu₂O₃ NANOPOWDERS

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FABRICATION AND CHARACTERIZATION OF SAMARIUM AND TERBIUM ACTIVATED TiO₂ ANATASE NANOPARTICLES

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INFLUENCE OF Mg-DOPING ON SYNTHESIS OF SOL-GEL DERIVED BST THIN FILMS

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PHOTOLUMINESCENCE OF NANOCRYSTALLINE SOL-GEL-DERIVED (Ba,Sr)TiO₃ THIN FILMS

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CHARACTERIZATION OF NORMAL AND INCLINED GaSb NANOCONES BY MUELLER MATRIX ELLIPSOMETRY

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THE STRUCTURING OF SEALING COMPOSITE MATERIALS BASED ON ETHYLENE DIENE TERPOLYMER

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