

Integrating III-V, Si, and polymer waveguides for optical interconnects
RAPIDO

Frequency Comb Generation in a Continuous-Wave Pumped Second-Order Nonlinear Waveguide Resonator

Adaptive multiresolution method for MAP reconstruction in electron tomography

Surface topography studied by off-axis digital holography

Finite element method incorporating coupled magneto-elastic model for magneto-mechanical energy harvester

Composition dependent growth dynamics in molecular beam epitaxy of GaInNAs solar cells
Julkaisun otsikon käännös: : Composition dependent growth dynamics in molecular beam epitaxy of GaInNAs solar cells

Dilute nitride triple junction solar cells for space applications
Progress towards highest AM0 efficiency

Back Reflector with Diffractive Gratings for Light-Trapping in Thin-Film III-V Solar Cells

High-Power 1.5 μm Tapered Distributed Bragg Reflector Laser Diodes for Eye-Safe LIDAR

Polymer stabilization enhances the orientational optical nonlinearity of oligothiophene-doped nematic liquid crystals

Toward Graphene-Based Passive UHF RFID Textile Tags
A Reliability Study

Roadmap on optical rogue waves and extreme events

Soliton enhancement of spontaneous symmetry breaking

The red, purple and blue modifications of polymeric unsymmetrical hydroxyalkadiynyl-N-arylcarbamate derivatives in Langmuir-Schaefer films

Stable blue phase polymeric Langmuir-Schaefer films based on unsymmetrical hydroxyalkadiynyl N-arylcarbamate derivatives

Ambient-Pressure XPS Study of a Ni-Fe Electrocatalyst for the Oxygen Evolution Reaction

Laser angle-resolved photoemission as a probe of initial state k_z dispersion, final-state band gaps, and spin texture of Dirac states in the Bi₂Te₃ topological insulator

Persistent luminescent glasses prepared using the direct doping method

Electro-optic steering of nematicons

Liquid crystal light valves
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Nonlinear optics applications
In memory of George I. Stegeman

Nonlinear guided waves
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Refraction of nonlinear light beams in nematic liquid crystals

Electro-optic steering of random laser emission in liquid crystals

Rapid and sensitive detection of norovirus antibodies in human serum with a bilayer interferometry biosensor

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Cold test results of the LARP HQ Nb₃Sn quadrupole magnet at 1.9 K

Compatibilization of natural rubber/nitrile rubber blends by sol-gel nano-silica generated by in situ method

Mechanical characterization of pore-graded bioactive glass scaffolds produced by robocasting

Localization of light at vanishingly small disorder-levels with heavy photons

A perceptual quality metric for high-definition stereoscopic 3D video

A multi-band WCDMA SAW-less receivers with frequency selective feedback loop

A 0.5-6MHz Active-RC LPF with Fine Gain Steps Using Binary Interpolated Resistor Banks

A new power-consumption optimization technique for two-stage operational amplifiers

Anisotropic and strain-dependent model of magnetostriction in electrical steel sheets

Segregation of iron losses from rotational field measurements and application to electrical machine

Advancements in Solution Processable Devices using Metal Oxides For Printed Internet-of-Things Objects

Construction of an Interconnected Nanostructured Carbon Black Network
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2-volt Solution-Processed, Indium Oxide (In_2O_3) Thin Film Transistors on flexible Kapton

Investigating solvent effects on aggregation behaviour, linear and nonlinear optical properties of silver nanoclusters

Sub-microwatt direct laser writing of fluorescent gold nanoclusters in polymer films

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A toolbox to promote lasers, amplifiers and sensors

1.3 μm InAs quantum dot semiconductor disk laser

Soft graphoepitaxy for large area directed self-assembly of polystyrene-block-poly(dimethylsiloxane) block copolymer on nanopatterned poss substrates fabricated by nanoimprint lithography

The sensitivity of random polymer brush-lamellar polystyrene-b-polymethylmethacrylate block copolymer systems to process conditions

Plasma etch technologies for the development of ultra-small feature size transistor devices

Pipeline for effective denoising of digital mammography and digital breast tomosynthesis

Strand and cable R&D for fast cycled magnets at CERN

Influence of the $\text{P}_2\text{O}_5/\text{Al}_2\text{O}_3$ co-doping on the local environment of erbium ions and on the 1.5 μm quantum efficiency of Er^{3+} -borosilicate glasses

High-dimensional quantum gates using full-field spatial modes of photons

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Radiation properties of sources inside photonic crystals

Parametric conversion in micrometer and submicrometer structured ferroelectric crystals by surface poling

Observation of cavity structures in composite metamaterials

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Observation of off-axis directional beaming via subwavelength asymmetric metallic gratings

Cavity formation in split ring resonators

Directional selectivity through the subwavelength slit in metallic gratings

Light-trapping enhanced thin-film III-V quantum dot solar cells fabricated by epitaxial lift-off

Cascaded crystalline raman lasers for extended wavelength coverage
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Continuous-wave, cascaded raman laser at 1.3, 1.5, and 1.7 μm

Near-threshold high spin amplification in a 1300 nm GaInNAs spin laser

Self-alignment of RFID dies on four-pad patterns with water droplet for sparse self-assembly

Self-alignment in the stacking of microchips with mist-induced water droplets

Two-part stretchable passive UHF RFID textile tags

Fabrication and reliability evaluation of passive UHF RFID T-shirts

Design, Fabrication, and Wireless Evaluation of a Passive 3D-printed Moisture Sensor on a Textile Substrate

Maintenance-free moisture sensor on dishcloth substrate

Compressive strain measurement using RFID patch antenna sensors

A near-infrared optoelectronic approach to detection of road conditions

Noise characterization of Ge/Si photodetectors

Germanium-on-glass solar cells

Optical power monitors in Ge monolithically integrated on SOI chips

Inkjet catalyst printing and electroless copper deposition for low-cost patterned microwave passive devices on paper

Novel oxyfluorophosphate glasses and glass-ceramics

Development of a new illumination procedure for photodynamic therapy of the abdominal cavity

Novel highly-efficient and misalignment insensitive wireless power transfer systems utilizing Strongly Coupled Magnetic Resonance principles

Performance enhancement of the RFID EPC Gen2 protocol by exploiting collision re-recovery

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A wireless authentication system on flexible substrates

Processing and Characterization of Bioactive Borosilicate Glasses and Scaffolds with Persistent Luminescence

Novel borosilicate bioactive scaffolds with persistent luminescence

Test Results of the LARP Nb₃Sn Quadrupole HQ03a

First principles prediction of the solar cell efficiency of chalcopyrite materials AgMX₂(M=In, Al; X=S, Se, Te)

Electronic transport in n-type modulation-doped AlGaAs/GaAsBi quantum well structures
Influence of Bi and thermal annealing on electron effective mass and electron mobility

Power loss mechanisms in n-type modulation-doped AlGaAs/GaAsBi quantum well heterostructures

Real-time measurements of ultrafast instabilities in nonlinear fiber optics
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Simulation of photon-photon resonance enhanced direct modulation bandwidth of DFB lasers

Efficient photon upconversion at remarkably low annihilator concentrations in a liquid polymer matrix: when less is more

Two-time coherence of pulse trains and the integrated degree of temporal coherence

Deformation of lamellar γ -TiAl below the general yield stress

Transverse deformation of a lamellar TiAl alloy at high temperature by in situ microcompression

3-D Numerical Modeling of AC Losses in Multifilamentary MgB₂ Wires

Development of efficient electrically pumped nanolasers based on InAlGaAs tunnel junction

Evaluating transparent liquid screen overlay as a haptic conductor
Method of enhancing touchscreen based user interaction by a transparent deformable liquid screen overlay

Development of MQXF
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Full-field mode sorter using two optimized phase transformations for high-dimensional quantum cryptography

Picosecond MOPA with ytterbium doped tapered double clad fiber

Anisotropic ultra-large mode area Yb-doped tapered double clad fiber for ultrafast amplifiers

FEM for directly coupled magneto-mechanical phenomena in electrical machines

Optical fiber amplifier with spectral compression elements for high-power laser pulse generation

Simultaneous binary hash and features learning for image retrieval

Reliability of ACA interconnections on microvia HDI PCBs in thermal cycling conditions

Machine learning for adaptive bilateral filtering

Single-source multibattery solar charger
Case study and implementation issues

Coherence of Supercontinuum Light

Luminescent (Er,Ho)₂O₃ thin films by ALD to enhance the performance of silicon solar cells

Towards universal enrichment nanocoating for IR-ATR waveguides

Dilute nitride SOAs for high-speed data processing in variable temperature conditions

Bringing High-Performance GaInNAsSb/GaAs SOAs to True Data Applications

Better understanding of the role of SiO₂, P₂O₅ and Al₂O₃ on the spectroscopic properties of Yb³⁺ doped silica sol-gel glasses

Silver sulfide nanoclusters and the superatom model

Superatom Model for Ag-S Nanocluster with Delocalized Electrons

Geometric Structure and Chemical Ordering of Large AuCu Clusters
A Computational Study

The effects of laser patterning 10CeTZP-Al₂O₃ nanocomposite disc surfaces
Osseous differentiation and cellular arrangement in vitro

Fundamental gaps of quantum dots on the cheap

Quantum-well Laser Emitting at 1.2 μm-1.3 μm Window Monolithically Integrated on Ge Substrate

All-fiber, high-power, picosecond Yb double clad tapered fiber amplifier

New multisoliton complex in Bi-doped fiber laser operated at 1450 nm

Optical properties of GaAs_{1-x}Bi_x/GaAs quantum well structures grown by molecular beam epitaxy on (100) and (311)B GaAs substrates

Interfacial design and structure of protein/polymer films on oxidized AlGaN surfaces

On the limit of superhydrophobicity
Defining the minimum amount of TiO₂ nanoparticle coating

Graphene-based tunable plasmon induced transparency in gold strips

Tunable Reflection Type Plasmon Induced Transparency with Graphene

Controlling the plasmon resonance via epsilon-near-zero multilayer metamaterials

Site-controlled InAs Quantum Dots for Plasmonics

Effect of Hole Transporting Material on Charge Transfer Processes in Zinc Phthalocyanine Sensitized ZnO Nanorods

Double-asymmetric-structure 1.5 μm high power laser diodes

Highly efficient charge separation in model Z-scheme $\text{TiO}_2/\text{TiSi}_2/\text{Si}$ photoanode by micropatterned titanium silicide interlayer

Hot spot temperature in an HTS Coil
Simulations with MIITs and finite element method

A Novel Enhanced-Performance Flexible RFID-Enabled Embroidered Wireless Integrated Module for Sensing Applications

Local Mechanical Properties at the Dendrite Scale of Ni-Based Superalloys Studied by Advanced High Temperature Indentation Creep and Micropillar Compression Tests

Fabrication and performance evaluation of 3D-printed graphene passive UHF RFID tags on cardboard

Power and wavelength scaling using semiconductor disk laser - bismuth fiber MOPA systems

Printable and flexible macroporous organosilica film with high protein adsorption capacity

Photocatalytic and antibacterial properties of ZnO films with different surface topographies on stainless steel substrate

Investigation of long-term chemical stability of structured ZnO films in aqueous solutions of varying conditions

Aryl end-capped quaterthiophenes applied as anode interfacial layers in inverted organic solar cells

Teaching for virtual work

Wetting hysteresis induced by temperature changes
Supercooled water on hydrophobic surfaces

Transparent Yb^{3+} doped phosphate glass-ceramics

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Tuneable topological domain wall states in engineered atomic chains

Dissolution behavior of the bioactive glass S53P4 when sodium is replaced by potassium, and calcium with magnesium or strontium

Multistep Bloch-line-mediated Walker breakdown in ferromagnetic strips

Nonlinear optical activity effects in complex anisotropic three-dimensional media

Investigating human skin using deep learning enhanced multiphoton microscopy

Towards efficient nonlinear plasmonic metasurfaces

Third order nonlinear optical response of TTF-based molecular corners

Photovoltaic properties of low-bandgap (0.7–0.9eV) lattice-matched GaInNAsSb solar junctions grown by molecular beam epitaxy on GaAs

Narrow Bandgap Dilute Nitride Materials for 6-junction Space Solar Cells

Measuring optical anisotropy in poly(3,4-ethylene dioxythiophene) poly(styrene sulfonate) films with added graphene

Dots-on-the-fly electron beam lithography

Vortex stabilization by means of spatial solitons in nonlocal media

Artificial intelligence yesterday, today and tomorrow

Design, fabrication, and testing of a low AC-loss conduction-cooled cryostat for magnetization loss measurement apparatus

A Two-Stage LNA Design for 28GHz Band of 5G on 45nm CMOS

Two cations, two mechanisms
Interactions of sodium and calcium with zwitterionic lipid membranes

Paraxial light beams in structured anisotropic media

Reversible photodoping of TiO₂ nanoparticles

Superfluid weight and Berezinskii-Kosterlitz-Thouless transition temperature of twisted bilayer graphene

Broadband finite-Difference Time-Domain modeling of plasmonic organic photovoltaics

MECSELs with direct emission in the 760 nm to 810 nm spectral range
A single- and double-side pumping comparison and high-power continuous-wave operation

Double-side pumped membrane external-cavity surface-emitting laser (MECSEL) with increased efficiency emitting > 3 W in the 780 nm region

Crystallization processes in the phase change material Ge₂ Sb₂ Te₅
Unbiased density functional/molecular dynamics simulations

Are coarse-grained models apt to detect protein thermal stability? the case of OPEP force field

Narrow-linewidth operation of folded VECSEL cavity with twist-mode configuration

Evaluation of crushing strength of spray-dried MgAl₂O₄ granule beds

Pulsed high-power yellow-orange VECSEL

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1180nm VECSEL with 50 W output power

Molecular dynamics simulations for Xe absorbed in zeolites

Frequency-doubled VECSEL employing a Volume Bragg Grating for linewidth narrowing

Frequency-doubled wafer-fused 638 nm VECSEL with an output power of 5.6 W

Effect of sol-gel derived in situ silica on the morphology and mechanical behavior of natural rubber and acrylonitrile butadiene rubber blends

Mining tailings as raw materials for reaction-sintered aluminosilicate ceramics

Effect of mineralogical composition on microstructure and properties

ATM switch for 2.488 Gbit/s CATV network on FPGA with a high-throughput buffering architecture

Integrated multi-wavelength mid-IR light source for gas sensing

Computational super-resolution phase retrieval from multiple phase-coded diffraction patterns

Simulation study and experiments

Computational wavelength resolution for in-line lensless holography

Phase-coded diffraction patterns and wavefront group-sparsity

Multiwavelength surface contouring from phase-coded diffraction patterns

The effect of carbon and nickel additions on the precursor synthesis of Cr₃C₂-Ni nanopowder

Alpha radiation induced luminescence in solar blind spectral region

Fabrication of ssDNA/oligo(ethylene glycol) monolayers by promoted exchange reaction with thiol and disulfide substituents

Fabrication of ssDNA/Oligo(ethylene glycol) monolayers and patterns by exchange reaction promoted by ultraviolet light irradiation

Irradiation promoted exchange reaction with disulfide substituents

Fabrication Challenges in Embedding of Components and Embroidered Conductors into 3D-printed Textile Electronics Structures

Embroidered and e-textile conductors embedded inside 3D-printed structures

Electrical Contacts in SOI MEMS Using Aerosol Jet Printing

Accelerator-quality HTS dipole magnet demonstrator designs for the EuCARD-2 5-T 40-mm clear aperture magnet

Status of the Demonstrator Magnets for the EuCARD-2 Future Magnets Project

First Cold Powering Test of REBCO Roebel Wound Coil for the EuCARD2 Future Magnet Development Project

Observation of PT-symmetric quantum interference

Precipitate formation in aluminium alloys
Multi-scale modelling approach

Single exposure lensless subpixel phase imaging

Calculated electronic density of states and structural properties of tetrahedral amorphous carbon

Solar Irradiation Independent Expression for Photovoltaic Generator Maximum Power Line

Multisoliton complexes in fiber lasers

Advanced scheme of amplifier similariton laser

Harmonic mode-locking fiber ring laser with a pulse repetition rate up to 12 GHz

Monolithic GaInNAsSb/GaAs VECSEL emitting at 1550 nm

Surface-relief gratings and stable birefringence inscribed using light of broad spectral range in supramolecular polymer-bisazobenzene complexes

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Influence of temperature-induced copper diffusion on degradation of selective chromium oxy-nitride solar absorber coatings

Hafnium oxide thin films as a barrier against copper diffusion in solar absorbers

Architectures and codecs for real-time light field streaming

Localized surface plasmon resonance in silver nanoparticles
Atomistic first-principles time-dependent density-functional theory calculations

Tuning electronic properties of graphene heterostructures by amorphous-to-crystalline phase transitions

Fluid flow simulations meet high-speed video
Computer vision comparison of droplet dynamics

Propagation dynamics of ultrabroadband terahertz beams with orbital angular momentum for wireless data transfer

Complex-domain sparse imaging in terahertz pulse time-domain holography with balance detection

Features of correlation measurements of the parameters of pulsed hyperspectral optical fields using an asymmetric interferometer

Direct measurement of vapour-metal shifts in photo- and Auger electron spectra of Zn and Cd

GaInAsSb/AlGa(In)AsSb type I quantum wells emitting in 3 μ m range for application in superluminescent diodes

Observation of unusual metal-semiconductor interaction and metal-induced gap states at an oxide-semiconductor interface
The case of epitaxial BaO/Ge(100) junction

Properties of nematicons in low-birefringence nematic liquid crystals

Thermal effects on the Wigner localization and Friedel oscillations in many-electron nanowires

A Finite Element Simulation Tool for Predicting Hysteresis Losses in Superconductors Using an H-Oriented Formulation with Cohomology Basis Functions

Semantics of HTS AC Loss Modeling
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Optimization of convectively cooled heat sinks

Unveiling and controlling the electronic structure of oxidized semiconductor surfaces: Crystalline oxidized InSb(100)(1 \times 2)-O
Crystalline oxidized InSb(100)(1 \times 2)-O
Julkaisun otsikon käännös: : Unveiling and controlling the electronic structure of oxidized semiconductor surfaces:
Crystalline oxidized InSb(100)(1 \times 2)-O

Linear and nonlinear light beam propagation in chiral nematic liquid crystal waveguides

Three-color vector nematicon

Inkjet printed single layer high-density circuitry for a MEMS device

Combination of E-jet and inkjet printing for additive fabrication of multilayer high-density RDL of silicon interposer

Statistical analysis of E-jet print parameter effects on Ag-nanoparticle ink droplet size

A novel strain sensor based on 3D printing technology and 3D antenna design

Enhanced-performance wireless conformal "smart skins" utilizing inkjet-printed carbon-nanostructures

Novel enhancement techniques for ultra-high-performance conformal wireless sensors and 'smart skins' utilizing inkjet-printed graphene

Inkjet printing of radio frequency electronics
Design methodologies and application of novel nanotechnologies

Inkjet-printed graphene-based wireless gas sensor modules

Green (In,Ga,Al)P-GaP light-emitting diodes grown on high-index GaAs surfaces

>8W GaInNAs VECSEL emitting at 615 nm

Electrospun Black Titania Nanofibers
Influence of Hydrogen Plasma-Induced Disorder on the Electronic Structure and Photoelectrochemical Performance

Interstitial photodynamic therapy and glioblastoma
Light fractionation study on a preclinical model: Preliminary results

Rational design of a printable, highly conductive silicone-based electrically conductive adhesive for stretchable radio-frequency antennas

Preparation of water-based carbon nanotube inks and application in the inkjet printing of carbon nanotube gas sensors

Intelligent data service for farmers

An integrated "sense-and-communicate" broad-/narrow-band optically controlled reconfigurable antenna for cognitive radio systems

Effect of the addition of Al_2O_3 , TiO_2 and ZnO on the thermal, structural and luminescence properties of Er^{3+} -doped phosphate glasses

Design of a Nb₃Sn 400 T/m quadrupole for the Future Circular Collider

Exploration of Two Layer Nb₃Sn Designs of the Future Circular Collider Main Quadrupoles

Combining full-reference image visual quality metrics by neural network

Special Issue: Novel Optical and Photonic Devices based on 2D Materials

Novel optical and photonic devices based on 2D materials
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Investigating the metallic behavior of Na clusters using site-specific polarizabilities

An ab initio study of $\text{PuO}_{2\pm 0.25}$, $\text{UO}_{2\pm 0.25}$, and $\text{U}_{0.5}\text{Pu}_{0.5}\text{O}_{2\pm 0.25}$

Catalytic Activity of AuCu Clusters on MgO(100)
Effect of Alloy Composition for CO Oxidation

Membrane bound COMT isoform is an interfacial enzyme
General mechanism and new drug design paradigm

Effects of thinning and heating for TiO₂/AlInP junctions

Protection Heater Design Validation for the LARP Magnets Using Thermal Imaging

Quench Protection Study of the Updated MQXF for the LHC Luminosity Upgrade (HiLumi LHC)

Quench Protection Study of the Eurocircol 16 T cos θ Dipole for the Future Circular Collider (FCC)

Study of quench protection for the Nb₃Sn low- β quadrupole for the LHC luminosity upgrade (HiLumi-LHC)

Evaluation of Aerosol, Superfine Inkjet, and Photolithography Printing Techniques for Metallization of Application Specific Printed Electronic Circuits

Chip-by-chip configurable interconnection using digital printing techniques

Effect of the glass melting condition on the processing of phosphate-based glass-ceramics with persistent luminescence properties

Highly-efficient Ho:KY(WO₄)₂ thin-disk lasers at 2.06 μm

Study of second-harmonic generation from CdS nanostructured thin film

Eco-friendly flexible wireless platforms by 3D printing pen

Passive UHF RFID-based user interface on a wooden surface

1.55- μm wavelength wafer-fused OP-VECSELs in flip-chip configuration

Evaluation of screen printed silver trace performance and long-term reliability against environmental stress on a low surface energy substrate

Processing of printed silver patterns on an ETFE substrate

Resolving unoccupied electronic states with laser ARPES in bismuth-based cuprate superconductors

Engineering of Chern insulators and circuits of topological edge states

Hot pen and laser writable photonic polymer films

Comparative Analysis of Injection Microdisk Lasers Based on InGaAsN Quantum Wells and InAs/InGaAs Quantum Dots

High-resolution coded-aperture design for compressive X-ray tomography using low resolution detectors

Antenna design considerations for far field and near field wireless body-centric systems

Advances in implantable and wearable antennas for wireless brain-machine interface systems

Geometry Analysis in Screen-Printed Stretchable Interconnects

Improvements in the electromechanical properties of stretchable interconnects by locally tuning the stiffness

Effect of Epoxy Flux Underfill on Thermal Cycling Reliability of Sn-8Zn-3Bi Lead-Free Solder in a Sensor Application

Ultrahigh-pressure form of Si O₂ glass with dense pyrite-type crystalline homology

10 kA Joints for HTS Roebel Cables

Mechanical Effects of the Nonuniform Current Distribution on HTS Coils for Accelerators Wound With REBCO Roebel Cable

Investigation of REBCO Roebel Cable Irreversible Critical Current Degradation Under Transverse Pressure

ICED - Inductively Coupled Energy Dissipater for Future High Field Accelerator Magnets

3-D mechanical modeling of 20 T HTS clover leaf end coils - Good practices and lessons learned

Comparison of the optical, thermal and structural properties of Ge-Sb-S thin films deposited using thermal evaporation and pulsed laser deposition techniques

RF measurements to pinpoint defects in inkjet-printed, thermally and mechanically stressed coplanar waveguides

Sensitivity Analysis of Inverse Thermal Modeling to Determine Power Losses in Electrical Machines

A novel 3-D printed loop antenna using flexible NinjaFlex material for wearable and IoT applications

AlGaAs/AlGaInP VECSELs with Direct Emission at 740-770 nm

Experimental realization of wave-packet dynamics in cyclic quantum walks

Cyclic quantum walks
Photonic realization and decoherence analysis

Goos-Hänchen and Imbert-Fedorov shifts for epsilon-near-zero materials

Sub-100 ps monolithic diamond Raman laser emitting at 573 nm

Generation of Sub-100 ps Pulses at 532, 355, and 266 nm Using a SESAM Q-Switched Microchip Laser

Ultrafast picosecond MOPA with Yb-doped tapered double clad fiber

Ultra-large mode area single frequency anisotropic MOPA with double clad Yb-doped tapered fiber

Phosphate glasses with blue persistent luminescence prepared using the direct doping method

Influence of the phosphate glass melt on the corrosion of functional particles occurring during the preparation of glass-ceramics

Effect of heat-treatment on the upconversion of $\text{NaYF}_4:\text{Yb}^{3+}, \text{Er}^{3+}$ nanocrystals containing silver phosphate glass

Influence of environmental conditions on EMF levels in a span of overhead transmission lines

Supercontinuum generation as a signal amplifier

Self-orienting liquid crystal doped with polymer-azo-dye complex

Labyrinth based left-handed metamaterials and sub-wavelength focusing of electromagnetic waves

Physics and applications of photonic crystals

Transmission, refraction, and focusing properties of labyrinth based left-handed metamaterials

High performance corrosion resistant coatings by novel coaxial cold- and hot-wire laser cladding methods

Modification of Surface States of Hematite-Based Photoanodes by Submonolayer of TiO_2 for Enhanced Solar Water Splitting

How well can we predict cluster fragmentation inside a mass spectrometer?

Effects of insertion of strain-engineering Ga(In)NAs layers on optical properties of InAs/GaAs quantum dots for high-efficiency solar cells

Very high dose electron irradiation effects on photoluminescence from GaInNAs/GaAs quantum wells grown by molecular beam epitaxy

Walking anisotropic spatial solitons and their steering in nematic liquid crystals

Directional random laser by combining cavity-less lasing and spatial solitons in liquid crystals

Absorption profile and femtosecond intraband relaxation of the intense upper Davydov component in oligothiophenes

Novel Er³⁺ doped phosphate glass-ceramics for photonics

A membrane external-cavity surface-emitting laser (MECSEL) with emission around 825 nm

Bistable optical propagation in nematic liquid crystals

Nonlocal soliton scattering in random potentials

Development of dust test method for motor drives

Decreasing the extremely low-frequency electric field exposure with a Faraday cage during work tasks from a man hoist at a 400 kV substation

Influence of As/group-III flux ratio on defects formation and photovoltaic performance of GaInNAs solar cells

Essential Measurements for Finite Element Simulations of Magnetostrictive Materials

Exciton localization and structural disorder of GaAs_{1-x}Bi_x/GaAs quantum wells grown by molecular beam epitaxy on (311)B GaAs substrates

Halogen bonding versus hydrogen bonding in driving self-assembly and performance of light-responsive supramolecular polymers

Capability assessment of inkjet printing for reliable RFID applications

3GPP LTE-assisted Wi-Fi-direct
Trial implementation of live D2D technology

A genetic algorithm for scheduling tasks onto dynamically reconfigurable hardware

System-level design for partially reconfigurable hardware

Performance of Solar Cell Grids based on Ag, Au, and Al for Cost-Effective Manufacturing

Observation of local electroluminescent cooling and identifying the remaining challenges

Generalized slip transformations and air-gap harmonics in field models of electrical machines

Structural and Electrical Characterization of Solution-Processed Electrodes for Piezoelectric Polymer Film Sensors

Boron delta-doping dependence on Si/SiGe resonant interband tunneling diodes grown by chemical vapor deposition

Block copolymer lithography
Feature size control and extension by an over-etch technique

Morphology evolution of PS-b-PDMS block copolymer and its hierarchical directed self-assembly on block copolymer templates

Identification of synchronous machine magnetization characteristics from calorimetric core-loss and no-load curve measurements

Iron losses, magnetoelasticity and magnetostriction in ferromagnetic steel laminations

Importance of iron-loss modeling in simulation of wound-field synchronous machines

Magnetic non-contact friction from domain wall dynamics actuated by oscillatory mechanical motion

Bursty magnetic friction between polycrystalline thin films with domain walls

Surface-induced charge state conversion of nitrogen-vacancy defects in nanodiamonds

Crystallization of supercooled liquid antimony
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The EuCARD-2 future magnets European collaboration for accelerator-quality HTS magnets

The EuCARD2 Future Magnets Program for particle accelerator high field dipoles
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A method for predicting DCT-based denoising efficiency for grayscale images corrupted by AWGN and additive spatially correlated noise

Utilizing triangular mesh with MMEV to study hysteresis losses of round superconductors obeying critical state model

Optimization of an E3SPreSSO Energy-Extraction System for High-Field Superconducting Magnets

Ghost imaging in the time domain

Real-time full-field characterization of transient dissipative soliton dynamics in a mode-locked laser

Real-time measurements of nonlinear instabilities in optical fibers

High-Q resonance train in a plasmonic metasurface

Halogen bonding stabilizes a cis-azobenzene derivative in the solid state
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Optical Frequency Comb Photoacoustic Spectroscopy

Demonstration of optical nonlinearity in InGaAsP/InP passive waveguides

Phase-coded computational imaging for depth of field extension

Calculation of the scalar diffraction field from curved surfaces by decomposing the three-dimensional field into a sum of Gaussian beams

Scalar diffraction field calculation from curved surfaces via Gaussian beam decomposition

Rapid and facile synthesis of graphene oxide quantum dots with good linear and nonlinear optical properties

Short-range supercontinuum based lidar for combustion diagnostics

Analysis of uncertainties in protection heater delay time measurements and simulations in Nb₃Sn high-field accelerator magnets

The Impact of Protection Heater Delays Distribution on the Hotspot Temperature in a High-Field Accelerator Magnet

Suitability of Different Quench Protection Methods for a 16 T Block-Type Nb₃Sn Accelerator Dipole Magnet

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An approach for a quick estimation of quench temperatures in high-field accelerator magnets

A Database for Storing Magnet Parameters and Analysis of Quench Test Results in HL-LHC Nb₃Sn Short Model Magnets

Passive resonance sensor based method for monitoring particle suspensions

Non-destructive and wireless monitoring of biodegradable polymers

A hand-held immaterial volumetric display

Multicolor nonlinear pulse compression by consecutive optical parametric amplification in quasi-phase matched structures

A study of electric transport in n- and p-type modulation-doped GaInNAs/GaAs quantum well structures under a high electric field

Tailoring directional scattering of second-harmonic generation from (111)-GaAs nanoantennas

Considerations on a Cost Model for High-Field Dipole Arc Magnets for FCC

The effects of I/Q imbalance on wireless communications

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Piezoresistive natural rubber-multiwall carbon nanotube nanocomposite for sensor applications

Effect of incorporation of CdS NPs on performance of PTB7 PCBM organic solar cells

Hyperspectral phase imaging based on denoising in complex-valued eigensubspace

Photoinduced bending upon pulsed irradiation in azobenzene-containing crosslinked liquid-crystalline polymers

Computation of torque of an electrical machine with different types of finite element mesh in the air gap

Dynamics of photovoltaic-generator-interfacing voltage-controlled buck power stage

Analytical computation of the demagnetizing energy of thin-film domain walls

Single KTiOPO₄ nanocrystals for nonlinear probing of local optical fields and interaction with a metallic nanostructure

Real-time depth image-based rendering with layered dis-occlusion compensation and aliasing-free composition

Thermal, structural and optical properties of Er³⁺ doped phosphate glasses containing silver nanoparticles

Near-infrared photodetectors in evaporated Ge
Characterization and TCAD simulations

Germanium-on-glass solar cells
Fabrication and characterization

Thermally evaporated single-crystal Germanium on Silicon

Low-temperature germanium thin films on silicon

Micro-Raman characterization of Germanium thin films evaporated on various substrates

Thermal evaporation of Ge on Si for near infrared detectors
Material and device characterization

Open Material Property Library With Native Simulation Tool Integrations - MASTO

Dynamic speckle analysis with smoothed intensity-based activity maps

Dynamic laser speckle metrology with binarization of speckle patterns

Stimuli-Responsive Materials Based on Interpenetrating Polymer Liquid Crystal Hydrogels

Optical and topographic changes in water-responsive patterned cholesteric liquid crystalline polymer coatings

An Optical Sensor for Volatile Amines Based on an Inkjet-Printed, Hydrogen-Bonded, Cholesteric Liquid Crystalline Film

Stimuli-responsive photonic polymer coatings

Inkjet-printed dual microfluidic-based sensor integrated system

Residual stress development in cold sprayed Al, Cu and Ti coatings

Screen-Printed Stretchable Interconnects

Preserving natural scene lighting by strobe-lit video

Structure and in vitro dissolution of Mg and Sr containing borosilicate bioactive glasses for bone tissue engineering

ESD qualification data used as the basis for building electrostatic discharge protected areas

Progress on HL-LHC Nb₃Sn Magnets

Hematite Surface Modification toward Efficient Sunlight-Driven Water Splitting Activity
The Role of Gold Nanoparticle Addition

Sub-parts-per-trillion sensitivity in trace gas detection by cantilever-enhanced photo-acoustic spectroscopy

The 16 T Dipole Development Program for FCC

Magnetic and mechanical design of a 16 T common coil dipole for FCC

Restoring Integral Images from Focal Stacks Using Compressed Sensing Techniques

Screen printed temporary tattoos for skin-mounted electronics

Backscattering-based wireless communication and power transfer to small biomedical implants

State of polarization in anisotropic tapered fiber with extremely large core diameter

Transverse structure optimization of laterally-coupled ridge waveguide DFB lasers

Continuous-wave optical parametric oscillators for mid-infrared spectroscopy

Perfect magnetic mirror and simple perfect absorber in the visible spectrum

Fluorimetric oxygen sensor with an efficient optical read-out for in vitro cell models

Diffusion on aluminum-cluster surfaces and the cluster growth

Simulation of cluster growth using a lattice gas model

Instability of cuboctahedral copper clusters

Theoretical studies of structural properties of the high- T_c superconductor $Y_1Ba_2Cu_3O_{7-x}$

Towards REBCO 20T+ Dipoles for Accelerators

A Fast Quench Protection System for High-Temperature Superconducting Magnets

Photoinduced surface patterning of azobenzene-containing supramolecular dendrons, dendrimers and dendronized polymers

Relaxation behavior of densified sodium aluminoborate glass

Near-surface defect profiling with slow positrons
Argon-sputtered Al(110)

Processor core for 32 kbit/s G.726 ADPCM codecs

Realization of Free-Space Long-Distance Self-Healing Bessel Beams

Comparison of three light doses in the photodynamic treatment of actinic keratosis using mathematical modeling

High-power 1550 nm tapered DBR lasers fabricated using soft UV-nanoimprint lithography

1180 nm GaInNAs quantum well based high power DBR laser diodes

1.3 μ m U-bend traveling wave SOA devices for high efficiency coupling to silicon photonics

Physisorption of benzene on a tin dioxide surface
Van der Waals interaction

Julkaisun otsikon käännös: : Physisorption of benzene on a tin dioxide surface: van der Waals interaction

Cysteine-tagged chimeric avidin forms high binding capacity layers directly on gold

Detection of 3,4-methylenedioxymethamphetamine (MDMA, ecstasy) by displacement of antibodies

Noise measurements from reconstructed digital breast tomosynthesis

Photoinduced Electron Transfer in CdSe/ZnS Quantum Dot-Fullerene Hybrids

Photoinduced Electron Injection from Zinc Phthalocyanines into Zinc Oxide Nanorods
Aggregation Effects

Simulation studies of DFB laser longitudinal structures for narrow linewidth emission

Simulation studies of DFB laser longitudinal structures for narrow linewidth emission

Narrow-linewidth 780 nm DFB lasers fabricated using nanoimprint lithography

No-reference visual quality assessment for image inpainting

Depth map occlusion filling and scene reconstruction using modified exemplar-based inpainting

Action recognition using the 3D dense microblock difference

Determination of beam incidence conditions based on the analysis of laser interference patterns

SESAM mode-locked Tm
CALGO laser at 2 μm

Symmetry-broken electronic structure and uniaxial Fermi surface nesting of untwinned CaFe_2As_2

Adsorption and dissociation of molecular oxygen on $\alpha\text{-Pu}(0\ 2\ 0)$ surface
A density functional study

Sub-10 optical-cycle mode-locked Tm:(Lu₂/3Sc₁/3)₂O₃ mixed ceramic laser at 2057 nm

73-fs SESAM mode-locked Tm,Ho:CNGG laser at 2061 nm

Programming Photoresponse in Liquid Crystal Polymer Actuators with Laser Projector

Light propagation analysis in nervous tissue for wireless optogenetic nanonetworks

Temporal ghost imaging using wavelength conversion and two-color detection

Switchable unidirectional second-harmonic emission through GaAs nanoantennas

Fluorescence bandwidth of 280nm from broadband Ce^{3+} -doped silica fiber pumped with blue laser diode

405-nm pumped Ce^{3+} -doped silica fiber for broadband fluorescence from cyan to red

Measuring bend losses in large-mode-area fibers

Mode coupling in few-mode large-mode-area fibers

Design and simulation of a slotted patch antenna sensor for wireless strain sensing

Thermal effects on a passive wireless antenna sensor for strain and crack sensing

Thickness variation study of RFID-based folded patch antennas for strain sensing

Plasmon lifetime enhancement in a bright-dark mode coupled system

Benchmarking of several disparity estimation algorithms for light field processing

Strong localization in unintentional disordered photonics crystal waveguides

Mechanical behavior of a 16 T FCC dipole magnet during a quench

Mechanical stress analysis during a quench in CLIQ protected 16 T dipole magnets designed for the future circular collider

Sub-100 fs pulse generation from a Tm,Ho
CALYO laser mode-locked by a GaSb-based SESAM at ~2043 nm

Analytical and Numerical Methods to Estimate the Effective Mechanical Properties of Rutherford Cables

Fabrication and characterization of broadband superluminescent diodes for 2 μm wavelength

High performance GaSb superluminescent diodes for tunable light source at 2 μm and 2.55 μm

Generation of bound states of pulses in a soliton laser with complex relaxation of a saturable absorber

Generation of a broad IR spectrum and N-soliton compression in a longitudinally inhomogeneous dispersion-shifted fibre

Frequency modulation of semiconductor disk laser pulses