

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

Fabrication and characterization of broadband superluminescent diodes for 2  $\mu\text{m}$  wavelength

High performance GaSb superluminescent diodes for tunable light source at 2  $\mu\text{m}$  and 2.55  $\mu\text{m}$

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

Strong localization in unintentional disordered photonics crystal waveguides

Benchmarking of several disparity estimation algorithms for light field processing

Plasmon lifetime enhancement in a bright-dark mode coupled system

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

Measuring bend losses in large-mode-area fibers

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

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

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

Switchable unidirectional second-harmonic emission through GaAs nanoantennas

Temporal ghost imaging using wavelength conversion and two-color detection

Light propagation analysis in nervous tissue for wireless optogenetic nanonetworks

Programming Photoresponse in Liquid Crystal Polymer Actuators with Laser Projector

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

SESAM mode-locked Tm  
CALGO laser at 2  $\mu\text{m}$

Symmetry-broken electronic structure and uniaxial Fermi surface nesting of untwinned  $\text{CaFe}_2\text{As}_2$

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:(Lu<sub>2</sub>/3Sc<sub>1</sub>/3)<sub>2</sub>O<sub>3</sub> mixed ceramic laser at 2057 nm

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

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

Simulation studies of DFB laser longitudinal structures for narrow linewidth emission

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Narrow-linewidth 780 nm DFB lasers fabricated using nanoimprint lithography

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

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

Noise measurements from reconstructed digital breast tomosynthesis

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

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

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

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 $\mu$ m U-bend traveling wave SOA devices for high efficiency coupling to silicon photonics

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

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

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

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

Relaxation behavior of densified sodium aluminoborate glass

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

Towards REBCO 20T+ Dipoles for Accelerators

A Fast Quench Protection System for High-Temperature Superconducting Magnets

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  $Y_1Ba_2Cu_3O_{7-x}$

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

Perfect magnetic mirror and simple perfect absorber in the visible spectrum

Continuous-wave optical parametric oscillators for mid-infrared spectroscopy

Transverse structure optimization of laterally-coupled ridge waveguide DFB lasers

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

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

Screen printed temporary tattoos for skin-mounted electronics

Restoring Integral Images from Focal Stacks Using Compressed Sensing Techniques

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

The 16 T Dipole Development Program for FCC

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

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

Progress on HL-LHC Nb<sub>3</sub>Sn Magnets

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

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

Preserving natural scene lighting by strobe-lit video

Screen-Printed Stretchable Interconnects

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

Inkjet-printed dual microfluidic-based sensor integrated system

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

Dynamic speckle analysis with smoothed intensity-based activity maps

Dynamic laser speckle metrology with binarization of speckle patterns

Open Material Property Library With Native Simulation Tool Integrations - MASTO

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

Thermal, structural and optical properties of Er<sup>3+</sup> doped phosphate glasses containing silver nanoparticles

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

Single KTiOPO<sub>4</sub> nanocrystals for nonlinear probing of local optical fields and interaction with a metallic nanostructure

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

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

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

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

Hyperspectral phase imaging based on denoising in complex-valued eigensubspace

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

Piezoresistive natural rubber-multiwall carbon nanotube nanocomposite for sensor applications

The effects of I/Q imbalance on wireless communications  
A survey

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

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

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

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

A hand-held immaterial volumetric display

Passive resonance sensor based method for monitoring particle suspensions

Non-destructive and wireless monitoring of biodegradable polymers

Analysis of uncertainties in protection heater delay time measurements and simulations in Nb<sub>3</sub>Sn 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 Nb<sub>3</sub>Sn Accelerator Dipole Magnet

Energy density-method

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 Nb<sub>3</sub>Sn Short Model Magnets

Short-range supercontinuum based lidar for combustion diagnostics

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

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

Phase-coded computational imaging for depth of field extension

Demonstration of optical nonlinearity in InGaAsP/InP passive waveguides

Optical Frequency Comb Photoacoustic Spectroscopy

Halogen bonding stabilizes a cis-azobenzene derivative in the solid state

A crystallographic study

High-Q resonance train in a plasmonic metasurface

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

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

A method for predicting DCT-based denoising efficiency for grayscale images corrupted by AWGN and additive spatially correlated noise

The EuCARD-2 future magnets European collaboration for accelerator-quality HTS magnets

The EuCARD2 Future Magnets Program for particle accelerator high field dipoles  
review of results and next steps

Crystallization of supercooled liquid antimony  
A density functional study

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

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

Bursty magnetic friction between polycrystalline thin films with domain walls

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

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

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

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

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

Observation of local electroluminescent cooling and identifying the remaining challenges

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

A genetic algorithm for scheduling tasks onto dynamically reconfigurable hardware

System-level design for partially reconfigurable hardware

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

Capability assessment of inkjet printing for reliable RFID applications

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

Exciton localization and structural disorder of GaAs<sub>1-x</sub>Bi<sub>x</sub>/GaAs quantum wells grown by molecular beam epitaxy on (311)B GaAs substrates

Essential Measurements for Finite Element Simulations of Magnetostrictive Materials

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

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

Development of dust test method for motor drives

Bistable optical propagation in nematic liquid crystals

Nonlocal soliton scattering in random potentials

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

Novel Er<sup>3+</sup> doped phosphate glass-ceramics for photonics

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

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

Walking anisotropic spatial solitons and their steering in nematic liquid crystals

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

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

Modification of Surface States of Hematite-Based Photoanodes by Submonolayer of TiO<sub>2</sub> for Enhanced Solar Water Splitting

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

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

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

Physics and applications of photonic crystals

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

Supercontinuum generation as a signal amplifier

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

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

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

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

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

Experimental realization of wave-packet dynamics in cyclic quantum walks

Cyclic quantum walks

Photonic realization and decoherence analysis

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

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

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

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

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

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

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

10 kA Joints for HTS Roebel Cables

Ultrahigh-pressure form of Si O<sub>2</sub> glass with dense pyrite-type crystalline homology

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

Geometry Analysis in Screen-Printed Stretchable Interconnects

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

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

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

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

Hot pen and laser writable photonic polymer films

Engineering of Chern insulators and circuits of topological edge states

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

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

1.55- $\mu\text{m}$  wavelength wafer-fused OP-VECSELs in flip-chip configuration

Eco-friendly flexible wireless platforms by 3D printing pen

Passive UHF RFID-based user interface on a wooden surface

Study of second-harmonic generation from CdS nanostructured thin film

Highly-efficient Ho:KY(WO<sub>4</sub>)<sub>2</sub> thin-disk lasers at 2.06  $\mu\text{m}$

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

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

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

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

Study of quench protection for the Nb<sub>3</sub>Sn low- $\beta$  quadrupole for the LHC luminosity upgrade (HiLumi-LHC)

Protection Heater Design Validation for the LARP Magnets Using Thermal Imaging

Effects of thinning and heating for TiO<sub>2</sub>/AlInP junctions

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

Investigating the metallic behavior of Na clusters using site-specific polarizabilities

An ab initio study of PuO<sub>2±0.25</sub>, UO<sub>2±0.25</sub>, and U<sub>0.5</sub>Pu<sub>0.5</sub>O<sub>2±0.25</sub>

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

Suitability of bundle approximation in AC loss analysis of NbTi wires  
Simulations and experiment

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

Novel optical and photonic devices based on 2D materials  
Feature issue introduction

Combining full-reference image visual quality metrics by neural network

Design of a Nb<sub>3</sub>Sn 400 T/m quadrupole for the Future Circular Collider

Exploration of Two Layer Nb<sub>3</sub>Sn Designs of the Future Circular Collider Main Quadrupoles

Effect of the addition of Al<sub>2</sub>O<sub>3</sub>, TiO<sub>2</sub> and ZnO on the thermal, structural and luminescence properties of Er<sup>3+</sup>-doped phosphate glasses

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

Intelligent data service for farmers

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

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

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

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

>8W GaInNAs VECSEL emitting at 615 nm

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

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

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

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

Three-color vector nematicon

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

Optimization of convectively cooled heat sinks

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  
Theories, Models, and Experiments

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

Properties of nematicons in low-birefringence nematic liquid crystals

Observation of unusual metal-semiconductor interaction and metal-induced gap states at an oxide-semiconductor interface

The case of epitaxial BaO/Ge(100) junction

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

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

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

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

Localized surface plasmon resonance in silver nanoparticles

Atomistic first-principles time-dependent density-functional theory calculations

Architectures and codecs for real-time light field streaming

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

13.5 A 0.35-to-2.6GHz multilevel outphasing transmitter with a digital interpolating phase modulator enabling up to 400MHz instantaneous bandwidth

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

Monolithic GaInNAsSb/GaAs VECSEL emitting at 1550 nm

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

Solar Irradiation Independent Expression for Photovoltaic Generator Maximum Power Line

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

Single exposure lensless subpixel phase imaging

Precipitate formation in aluminium alloys  
Multi-scale modelling approach

Observation of PT-symmetric quantum interference

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

Electrical Contacts in SOI MEMS Using Aerosol Jet Printing

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

Alpha radiation induced luminescence in solar blind spectral region

The effect of carbon and nickel additions on the precursor synthesis of  $\text{Cr}_3\text{C}_2$ -Ni nanopowder

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

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

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

Mining tailings as raw materials for reaction-sintered aluminosilicate ceramics  
Effect of mineralogical composition on microstructure and properties

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

Pulsed high-power yellow-orange VECSEL

Julkaisun otsikon käännös: : Pulsed high-power yellow-orange VECSEL

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

Evaluation of crushing strength of spray-dried MgAl<sub>2</sub>O<sub>4</sub> granule beds

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

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

Crystallization processes in the phase change material Ge<sub>2</sub> Sb<sub>2</sub> Te<sub>5</sub>

Unbiased density functional/molecular dynamics simulations

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

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

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

Reversible photodoping of TiO<sub>2</sub> nanoparticles

Paraxial light beams in structured anisotropic media

Two cations, two mechanisms

Interactions of sodium and calcium with zwitterionic lipid membranes

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

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

Artificial intelligence yesterday, today and tomorrow

Vortex stabilization by means of spatial solitons in nonlocal media

Dots-on-the-fly electron beam lithography

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

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

Third order nonlinear optical response of TTF-based molecular corners

Nonlinear optical activity effects in complex anisotropic three-dimensional media

Investigating human skin using deep learning enhanced multiphoton microscopy

Towards efficient nonlinear plasmonic metasurfaces

Multistep Bloch-line-mediated Walker breakdown in ferromagnetic strips

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

Tuneable topological domain wall states in engineered atomic chains

Special Issue: Mid-infrared optical materials and their device applications

Transparent Yb<sup>3+</sup> doped phosphate glass-ceramics

Wetting hysteresis induced by temperature changes  
Supercooled water on hydrophobic surfaces

Teaching for virtual work

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

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

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

Printable and flexible macroporous organosilica film with high protein adsorption capacity

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

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

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

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

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

Double-asymmetric-structure 1.5  $\mu\text{m}$  high power laser diodes

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

Site-controlled InAs Quantum Dots for Plasmonics

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

On the limit of superhydrophobicity  
Defining the minimum amount of  $\text{TiO}_2$  nanoparticle coating

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

Optical properties of  $\text{GaAs}_{1-x}\text{Bi}_x/\text{GaAs}$  quantum well structures grown by molecular beam epitaxy on (100) and (311)B GaAs substrates

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

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

Quantum-well Laser Emitting at 1.2  $\mu\text{m}$ -1.3  $\mu\text{m}$  Window Monolithically Integrated on Ge Substrate

Fundamental gaps of quantum dots on the cheap

The effects of laser patterning 10CeTZP- $\text{Al}_2\text{O}_3$  nanocomposite disc surfaces  
Osseous differentiation and cellular arrangement in vitro

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

Better understanding of the role of  $\text{SiO}_2$ ,  $\text{P}_2\text{O}_5$  and  $\text{Al}_2\text{O}_3$  on the spectroscopic properties of  $\text{Yb}^{3+}$  doped silica sol-gel glasses

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

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

Towards universal enrichment nanocoating for IR-ATR waveguides

Luminescent  $(\text{Er,Ho})_2\text{O}_3$  thin films by ALD to enhance the performance of silicon solar cells

Coherence of Supercontinuum Light

Single-source multibattery solar charger  
Case study and implementation issues

Machine learning for adaptive bilateral filtering

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

Simultaneous binary hash and features learning for image retrieval

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

FEM for directly coupled magneto-mechanical phenomena in electrical machines

Picosecond MOPA with ytterbium doped tapered double clad fiber

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

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

Development of MQXF  
The  $\text{Nb}_3\text{Sn}$  Low- $\beta$  Quadrupole for the HiLumi LHC

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 efficient electrically pumped nanolasers based on InAlGaAs tunnel junction

3-D Numerical Modeling of AC Losses in Multifilamentary  $\text{MgB}_2$  Wires

Deformation of lamellar  $\gamma$ -TiAl below the general yield stress

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

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

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

Simulation of photon-photon resonance enhanced direct modulation bandwidth of DFB lasers

Real-time measurements of ultrafast instabilities in nonlinear fiber optics  
Recent advances

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

First principles prediction of the solar cell efficiency of chalcopyrite materials  $\text{AgMX}_2$  (M=In, Al; X=S, Se, Te)

Test Results of the LARP  $\text{Nb}_3\text{Sn}$  Quadrupole HQ03a

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

Novel borosilicate bioactive scaffolds with persistent luminescence

RFDNA  
A wireless authentication system on flexible substrates

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

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

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

Novel oxyfluorophosphate glasses and glass-ceramics

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

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

Compressive strain measurement using RFID patch antenna sensors

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

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

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

Cascaded crystalline raman lasers for extended wavelength coverage  
Continuous-wave, third-stokes operation

Continuous-wave, cascaded raman laser at 1.3, 1.5, and 1.7  $\mu\text{m}$

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

Directional selectivity through the subwavelength slit in metallic gratings

Observation of cavity structures in composite metamaterials

The magical world of metamaterials

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

Cavity formation in split ring resonators

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

Designing materials with desired electromagnetic properties

Radiation properties of sources inside photonic crystals

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

Influence of the P<sub>2</sub>O<sub>5</sub>/Al<sub>2</sub>O<sub>3</sub> co-doping on the local environment of erbium ions and on the 1.5  $\mu\text{m}$  quantum efficiency of Er<sup>3+</sup>-borosilicate glasses

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

Pipeline for effective denoising of digital mammography and digital breast tomosynthesis

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

1.3  $\mu\text{m}$  InAs quantum dot semiconductor disk laser

Nanoparticles in optical waveguides  
A toolbox to promote lasers, amplifiers and sensors

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

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

0.6V threshold voltage thin film transistors with solution processable indium oxide ( $\text{In}_2\text{O}_3$ ) Channel and Anodized High-k  $\text{Al}_2\text{O}_3$  Dielectric

2-volt Solution-Processed, Indium Oxide ( $\text{In}_2\text{O}_3$ ) Thin Film Transistors on flexible Kapton

Construction of an Interconnected Nanostructured Carbon Black Network  
Development of Highly Stretchable and Robust Elastomeric Conductors

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

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

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

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

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

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

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

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

Test results of the LARP HQ02b magnet at 1.9 K

Cold test results of the LARP HQ Nb<sub>3</sub>Sn quadrupole magnet at 1.9 K

Long-Range Observation of Exciplex Formation and Decay Mediated by One-Dimensional Bridges

Photophysical properties of porphyrin dimer-single-walled carbon nanotube linked systems

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

Electro-optic steering of nematicons

Liquid crystal light valves  
A versatile platform for nematicons

Nonlinear optics applications  
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Nonlinear guided waves  
Preface

Refraction of nonlinear light beams in nematic liquid crystals

Electro-optic steering of random laser emission in liquid crystals

Persistent luminescent glasses prepared using the direct doping method

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 Bi<sub>2</sub>Te<sub>3</sub> topological insulator

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

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

Soliton enhancement of spontaneous symmetry breaking

Roadmap on optical rogue waves and extreme events

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

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

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  $\mu\text{m}$  Tapered Distributed Bragg Reflector Laser Diodes for Eye-Safe LIDAR

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

Surface topography studied by off-axis digital holography

Adaptive multiresolution method for MAP reconstruction in electron tomography

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

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

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