

AOP 2019		Scientific Program		
	#	Title	Author	Type
FRIDAY, May 31				
14:30 - 16:45 (2:15 h)				
Plenary P1				
	178	Polarisation-sensitive optical coherence tomography – what's changed?	Sampson, David	Plenary (45 min=40+5)
Plenary P2				
	8	Designing instrumentation: the astronomers perspective	Santos, Nuno	Plenary (45 min=40+5)
Plenary P3				
	253	Axions: Search for Dark Matter using Ultra-Intense Lasers	Mendonça, José Tito	Plenary (45 min=40+5)
Chair(s): José Manuel Rebordão				
António Lobo				
SATURDAY, June 1				
Plenary P4				
	239	Laser spectroscopy to meet challenges in medicine	Svanberg, Katarina	Plenary (45 min=40+5)
8:55 - 9:40 (45 min)				
Chair(s): António Lobo				
Parallel Sessions Sa.1.a				
9:45 - 10:45 (1 h)				
Chair(s): Gonçalo Figueira				
	244	Controlling light to the limit with the dispersion-scan technique: from single-cycle pulses to biomedical imaging	Crespo, Helder	Keynote (30 min=25+5)
	26	New ultrashort OPCPA petawatt class beamline for Vulcan laser facility	Galimberti, Marco	Oral (15 min=12+3)
	151	VEGA laser facility beamlines management for pump-probe experiments.	Mendez, Cruz	Oral (15 min=12+3)
Parallel Sessions Sa.1.b				
9:45 - 10:45 (1 h)				
Chair(s): Manuel Abreu				
	68	ESPRESSO Coudé-Train: ESO's VLT working as 16-metre telescope	Cabral, Alexandre	Invited (20 min=15+5)
	121	The PESIT-IIA Observatory for the Night Sky (PIONS): Assembly and ground calibration results	Suresh, Ambily	Oral (15 min=12+3)
	154	Solar coherence instrument based on digital micromirror devices, to measure spatial coherence of solar granules	Magalhães, Tiago	Oral (15 min=12+3)
	10	Ray tracing in stressed lenses in dynamical-optical systems	Hahn, Luzia	Oral (15 min=12+3)
Parallel Sessions Sa.1.c				
9:45 - 10:45 (1 h)				
Chair(s): Mikhail Vasilevskiy				
	33	Stable and strong light-emitters based on colloidal quantum dots encapsulated in robust and processable matrices	Gaponik, Nikolai	Keynote (30 min=25+5)
	260	Tamm polaritons in a J-Aggregates/PVA-DBR structure: potential for environmental sensing	Silva, Jorge	Oral (15 min=12+3)
	27	Developing tunable optical analogues using nematic liquid crystals	Ferreira, Tiago	Oral (15 min=12+3)
Parallel Sessions Sa.2.a				
11:15-12:30 (1h15m)				
Chair(s): António Lobo				
	176	Multimodal optical coherence tomography	Drexler, Wolfgang	Keynote (30 min=25+5)
	80	Fast OCT image enhancement using deep learning for smart laser surgery	Bayhaqi, Yakub Agib	Oral (15 min=12+3)
	89	Laser speckle rheology for evaluating mechanical properties of biomaterials: a pilot study	Ruiz-López, Javier	Oral (15 min=12+3)
	28	A simulation analysis for dimensioning of an amorphous silicon planar waveguide structure suitable to be used as a surface plasmon resonator	Fantoni, Alessandro	Invited (20 min=15+5)
Parallel Sessions Sa.2.b				
11:15-12:30 (1h15m)				
Chair(s): José A. Rodrigues				
	181	Lidar imagers for automated vehicles: an overview	Royo, Santiago	Keynote (30 min=25+5)
	217	The LiDAR hop-on-hop-off route: visiting the LiDARs past, present, and future landscapes	Nunes-Pereira, Eduardo	Invited (20 min=17+3)
	257	Optical phased arrays for enabling solid-state LiDAR systems	Dahlem, Marcus	Invited (20 min=17+3)
Parallel Sessions Sa.2.c				
11:15-12:30 (1h15m)				
Chair(s): Nikolai Gaponik				
	115	Carbon-based nanomaterials in suspensions far beyond the nonlinear optical threshold	Eberle, Bernd	Keynote (30 min=25+5)
	189	Engineering of fluorescent biomaging tools based on quantum dot-encoded polyelectrolyte microcapsules and their cancer cell targeting applications	Nifontova, Galina	Oral (15 min=12+3)
	49	We play with chemistry to design colloidal semiconductor nanocrystals	Lesnyak, Vladimir	Invited (20 min=15+5)
	203	New collective modes in twisted bilayer graphene	Stauber, Tobias	Invited (20 min=15+5)
Special Session PL5				
18:35-19:05 (30 min)				
Chair(s): Manuel F. Costa				
	247	Open access to European photonics prototyping platforms for innovation-driven researchers: "ACTPHAST4R"	Thienpont, Hugo	Keynote (45 min=30+15)
Parallel Sessions Sa.3.a				
14:45-16:00 (1h15m)				
Chair(s): Jorge Ojeda-Castaneda Fabian Hartmann				
	198	Reliability of ridge waveguide distributed feedback lasers for communications applications: from device specification and failure analysis to	Cantu, Horacio	Invited (20 min=15+5)
	137	Quantum dots/azo-dyes hybrid structures for sensing	Annas, Kirill	Oral (15 min=12+3)
	212	Functionalizing glass by inducing local compositional changes with ultrafast lasers	Solis, Javier	Invited (20 min=15+5)
	156	Quantum dot particles as anisotropic emitters for luminescent solar concentrator	Zawacka, Natalia	Oral (15 min=12+3)
Parallel Sessions Sa.3.b				
14:45-16:00 (1h15m)				
Chair(s): José M. Baptista José Figueiredo				
	174	"Unipolar photonics": cross-gap, self-oscillating light emission in GaN/AlN and InGaAs/AlAs RTDs at room temperature	Brown, Elliott	Keynote (30 min=25+5)
	11	Nanoscale vertical-emitting nanopillars for efficient sub-wavelength LEDs	Romeira, Bruno	Invited (20 min=15+5)
	54	GaN-based distributed feedback laser diodes for optical communications	Gwyn, Steffan	Oral (15 min=12+3)
	36	Spike-free pulse generation in semiconductor injection seeding laser	Grzes, Pawel	Oral (15 min=12+3)
Parallel Sessions Sa.3.c				
14:45-16:00 (1h15m)				
Chair(s): Tobias Stauber				
	2	Nonlinear optical properties of a new inorganic-organic nanocomposite material highly dispersed with semiconductor CdSe quantum dots	Tomita, Yasuo	Keynote (30 min=25+5)
	133	Nonlinear electrostatics of two-dimensional crystals	Mikhailov, Sergey	Invited (20 min=15+5)
	169	Harmonic generation in 2D materials	Rodrigues, Manuel J. L. F.	Oral (15 min=12+3)
	188	Polariton-assisted emission of strongly coupled organic dye excitons in a tunable optical microcavity	Dovzhenko, Dmitry	Oral (15 min=12+3)
Poster Sessions Sa.T				
16:00-17:00 (1h)				
Chair(s): João Coelho Alexandre Cabral				
	55	The development of an optical design tool for atmospheric dispersion correction	Wehbe, Bachar	Poster
	159	A compact optical polarimeter for portable telescopes used for teaching astronomy	Topasna, Gregory	Poster
	220	Performance analysis of image motion compensation system for one meter class telescope	Vallapureddy, Reddy	Poster
	102	Image encryption system based on a nonlinear joint transform correlator for the simultaneous authentication of two users	Vilardy Ortiz, Juan	Poster
	103	Experimental optical encryption scheme for the double random phase encoding using a nonlinear joint transform correlator	Vilardy Ortiz, Juan	Poster
	104	Image authentication using a joint transform correlator-based encryption and decryption systems and the photon counting imaging technique	Vilardy Ortiz, Juan	Poster
	106	Optical image encryption using a nonlinear joint transform correlator and the Collins diffraction transform	Herrera, Alvaro	Poster
	107	Uncertainty principle in the gyrator domain	Perez, Ronal	Poster
	108	Image processing operators based on the Gyrator transform: generalized shift, convolution and correlation	Perez, Ronal	Poster
	109	Optical image encryption system using several tilted planes	Vilardy Ortiz, Juan	Poster
	110	Mathematical modelling of the digital holography using the fractional Fourier transform	Jimenez, Carlos	Poster
	114	On how thick diffusers can contribute to the design of optical security systems	Carnicer, Artur	Poster
	134	Temperature dependence of the drying process in polymer solutions observed by dynamic speckle detection	Stoykova, Elena	Poster
	153	Evaluation of photometer stability for illuminance interlaboratory comparison	Gentil Ferreira, Antonio	Poster
	162	Estimation of the germination percentage of coffee seeds by means of dynamic speckle image processing	Benjumea, Eberto	Poster
	163	Image filtering using the discrete cosine transform and symmetric convolution over finite field	Vilardy Ortiz, Juan	Poster
	164	Image encryption based on the discrete sine transform over finite field	Vilardy Ortiz, Juan	Poster
	12	Control of population inversion and coherence generation in rubidium and cesium atoms	Afa, Iduabo John	Poster
	25	Solid-state harmonic generation near IR driving field	Hussain, Mukhtar	Poster
	42	Development of soft X-ray Ar+8 lasers excited by low-current capillary Z-pinch discharges	Kukhlevsky, Sergei	Poster
	53	Numerical modelling for a 3 µm OPCPA laser pumped at 1 µm	Alves, Ioana	Poster
	77	Experimental characterization of thermal lensing in a diode-pumped 10 Hz 100 mJ Yb:YAG amplifier	Hariton, Victor	Poster
	85	Ultrashort optical parametric amplifier and oscillator up to the near-infrared	Galletti, Mario	Poster
	210	Development of a compact and portable SHG FROG	Ribeiro, Ana	Poster
	29	Pump-and-probe dark plane illumination diagnostic for ultra-cold gas density imaging	Giampaoli, Ruggero	Poster
	35	Spectral dependence of aerosol light absorption over Camaguey, obtained from an integrating sphere spectral system	Mogo, Sandra	Poster
	39	A proposal for parametrical characterization of induced electric fields in materials	Martínez-Herrero, Rosario	Poster
	56	Paraxial propagation and kurtosis of fields generated by pseudo-Schell vortex sources	Martínez-Herrero, Rosario	Poster
	123	Development of thin films composed of plasmonic nanoparticles (Au, Ag) dispersed in a CuO oxide matrix for optical (gas) sensing	Proença, Maria Manuela	Poster
	1	Basic holography for optometry	Costa, Manuel Filipe	Poster
	16	Assessment of the accommodative facility training with flippers between sessions	Peña-Verdeal, Hugo	Poster
	81	Simulating n-body systems under alternative theories of gravity using solvers from nonlocal optics	Ferreira, Tiago	Poster
	86	High-performance solver of the multidimensional generalized nonlinear Schrödinger equation with coupled fields	Ferreira, Tiago	Poster
	93	A hardware-independent solution for high-performance simulations of the Maxwell-Bloch system	Azevedo Silva, Nuno	Poster
	94	Exploring dissipative optical solitons controlling gain and loss in atomic systems	Azevedo Silva, Nuno	Poster

	135	Quantum fluid equations for atomic gases	Guerreiro, Ariel	Poster
	136	HiLight: a new simulation platform for advanced photonics	Guerreiro, Ariel	Poster
	139	A new approach to generating entangled light in integrated optics using ring resonators	Guerreiro, Ariel	Poster
	140	Rogue waves in nonlinear optical media	Guerreiro, Ariel	Poster
	141	Artificial intelligence assisted nonlinear Fourier transform	Guerreiro, Ariel	Poster
	143	How many neurons does it take to solve the nonlinear Schrödinger equation?	Guerreiro, Ariel	Poster
	168	FIR Tamm polaritons in a microcavity with an incorporated graphene sheet	Silva, Jorge	Poster
	175	Simulating particle influence on silicon nitride strip waveguide single-mode parameters	Baumgart, Marcus	Poster
	208	Synthesis and optical properties of Sc2O3 nanoparticles doped with lanthanide ions	Antoniak, Magda	Poster
	218	Monitoring of Mn ions incorporation into quantum dots by EPR and Luminescence spectroscopy	Galyametdinov, Yuiriy	Poster
	30	Weighted average of the Gouy phase shift for paraxial surface plasmon polaritons packets in lossy media	Martínez-Herrero, Rosario	Poster
	75	Analyzing the electrical parameters of photovoltaic devices based on PbS nanocrystals to optimize their architecture	Onishchuk, Dmitry	Poster
	19	Fabrication and characterization of edge-emitting heterojunction bipolar light-emitting transistors (HBLETs)	Tsai, Chia-Lung	Poster
Parallel Sessions Sa.4.a 17:00-18:30 (1h30m) Chair(s): Pedro Andrés José A. Rodrigues	216	Computational imaging with structured light and single-pixel detection	Lancis, Jesus	Keynote (30 min=25+5)
	177	Lidar techniques for atmospheric aerosol remote sensing	Comerón, Adolfo	Keynote (30 min=25+5)
	242	Inspection of virtual images in an AR-HUD from "Innovative Car HMI" project	Duarte, Moisés	Oral (15 min=12+3)
	37	Up/down link data transmission for indoor navigation based on visible light communication	Louro, Paula	Oral (15 min=12+3)
Parallel Sessions Sa.4.b 17:00-18:30 (1h30m) Chair(s): Bruno Romeira José Figueiredo	248	Mid-infrared photodetectors based on resonant tunneling diodes and interband cascade structures	Hartmann, Fabian	Invited (20 min=15+5)
	31	Bidirectional communication between Infrastructures and vehicles through visible light	Vieira, Manuel Augusto	Oral (15 min=12+3)
	4	Resonant tunneling diode photodetectors: state of the art and future prospects	Pfenning, Andreas	Invited (20 min=15+5)
	170	Functional metamaterials for optical sensing of hydrogen	Guerreiro, Ariel	Invited (20 min=15+5)
	222	Plasma control by pattern recognition in laser induced breakdown spectroscopy	Ferreira, Miguel	Oral (15 min=12+3)
Parallel Sessions Sa.4.c 17:00-18:30 (1h30m) Chair(s): Paulo Tavares Mª. del Mar Pérez Gómez	22	Wavelength-tuning Fizeau interferometry with a laser diode	Ishii, Yukihiko	Keynote (30 min=25+5)
	41	White-light interferometer with tunable lens	Pavlicek, Pavel	Oral (15 min=12+3)
	14	Evanescence wave amplification applied to scattering of particles on surfaces	Kolenov, Dmytro	Oral (15 min=12+3)
	34	Hyperspectral quantitative phase imaging using lens-in-lens common-path interferometer	Machikhin, Alexander	Oral (15 min=12+3)
	101	Determination of the optical properties in transparent conductive electrodes based on an indium-tin oxide coating using the IAD method.	Rodríguez-Aguila, Ana Belén	Oral (15 min=12+3)
SUNDAY, June 2				
Plenary P16 8:55 - 9:40 (45 min) Chair(s): António Baptista	245	Light diagnostics and light treatments in the eye	Marcos, Susana	Plenary (45 min=40+5)
Parallel Sessions Su.1.a 9:45 - 10:45 (1 h) Chair(s): Pedro Serra	116	Amblyopia treatment: what we know and what we don't know!	Barrett, Brendan	Keynote (30 min=25+5)
	83	Transcranial magnetic stimulation in adults with asymmetric visual acuity	Tuna, Ana Rita	Oral (15 min=12+3)
	112	Vision as a predictor of expertise in high demanding visual tasks	Baptista, António	Invited (20 min=15+5)
Parallel Sessions Su.1.b 9:45 - 10:45 (1 h) Chair(s): Giulio Cerullo	43	Diode-pumped solid-state lasers at 1 µm for optical parametric pumping	João, Celso	Invited (20 min=15+5)
	46	Few-cycle, CEP stable, high power mid-infrared laser system	Pires, Hugo	Oral (15 min=12+3)
	172	Double trace autocorrelator for precise measurement of pulse front tilt in a high power laser system	Figueira, Gonçalo	Oral (15 min=12+3)
Parallel Sessions Su.1.c 9:45 - 10:45 (1 h) Chair(s): Sergey Mikhailov	179	THz frequency combs in graphene field-effect transistors	Terças, Hugo	Keynote (30 min=25+5)
	223	Wavepacket diffraction on a metal film with a single slit covered by graphene	Bludov, Yuliy	Oral (15 min=12+3)
	152	Photoinduced increase of electron transfer efficiency of QDs based hybrid structures	Orlova, Anna	Oral (15 min=12+3)
Parallel Sessions Su.2.a 11:15-12:30 (1h30m) Chair(s): Brendan Barret António Baptista	129	Ocular optical quality dynamics during accommodation in subjects with accommodative dysfunctions	Franco, Sandra	Invited (20 min=15+5)
	160	Short-review about the safety and effectiveness of implantable collamer lenses for the correction of refractive errors	Serra, Pedro	Invited (20 min=15+5)
	128	Evaluation of the optical properties of two different types of soft contact lenses: hydrogel and silicone-hydrogel	Ionescu, Ana Maria	Oral (15 min=12+3)
	130	Variations of the optical properties of two types of contact lenses with dehydration	Ionescu, Ana Maria	Oral (15 min=12+3)
	127	Epidemiology of vision problems in Europe: a Portuguese perspective	Teixeira, Eduardo	Invited (20 min=15+5)
Parallel Sessions Su.2.b 11:15-12:30 (1h30m) Chair(s): Orlando Frazão Susana Silva	249	Structural health monitoring with fiber Bragg grating sensors: challenges on optical interrogators	Araújo, Francisco	Invited (20 min=15+5)
	145	Simultaneous measurement of refractive index and temperature using a double antiresonant hollow core fiber	Ferreira, Marta	Oral (15 min=12+3)
	117	Enhanced temperature sensing with Vernier effect on fiber probe based on multimode Fabry-Perot interferometer	Gomes, André	Oral (15 min=12+3)
	73	Fibre-integrated phase-change devices	Martins, Tiago J.	Oral (15 min=12+3)
	47	Use and validation of fiber optic gratings for planetary exploration: new challenges	López Heredero, Raquel	Oral (15 min=12+3)
	15	Unveiling the potential of fused polymer optical fibers: emergence of magnetic field sensitivity	Paixão, Tiago	Oral (15 min=12+3)
Parallel Sessions Su.2.c 11:15-12:30 (1h30m) Chair(s): Manuel F. Costa Alessandro Fantoni	200	Fundamentals of neutron waveguides: a proposal for slow neutron beams confinement and applications	Calvo Padilla, Maria Luisa	Keynote (30 min=25+5)
	91	Fluids of Light in atomic systems: from superfluidity to quantum simulations	Azevedo Silva, Nuno	Oral (15 min=12+3)
	166	Unscrambling complex sample composition, variability and multi-scale interference in optical spectroscopy	Costa Martins, Rui	Oral (15 min=12+3)
	144	Analysis of Fizeau wedge with a non-air gap by plane wave expansion	Deneva, Margarita	Oral (15 min=12+3)
	40	Simulation analysis of a thin film semiconductor MMI 3 dB splitter operating in the visible range	Lourenço, Paulo	Oral (15 min=12+3)
MONDAY, June 3				
Plenary P17 8:55 - 9:40 (45 min) Chair(s): Paulo Fiadeiro	194	Optical techniques for improved vision	Artal, Pablo	Plenary (45 min=40+5)
Parallel Sessions Mo.1.a 9:45 - 10:45 (1 h) Chair(s): Sandra Franco	58	Modelling effect of time on visual acuity for vanishing and conventional optotypes	Fiadeiro, Paulo	Invited (20 min=15+5)
	79	Limitation of tables indicating the relation between age and reading addition for presbyopia correction	Panke, Karola	Oral (15 min=12+3)
	124	Influence of pupil function in pseudophakia	Fonseca, Elsa	Oral (15 min=12+3)
	88	Smartphone viewing distance during active or passive tasks and relation to heterophoria	Panke, Karola	Oral (15 min=12+3)
Parallel Sessions Mo.1.b 9:45 - 10:45 (1 h) Chair(s): Jürgen Jahns	17	Seeing around corners: using the light field to extract information from scattered light	Leger, James	Keynote (30 min=25+5)
	7	Three-dimensional surface reconstruction for evaluation of wrinkling on textile fabrics	de Oliveira Mendes, António	Oral (15 min=12+3)
	9	Optics-computer vision combination for object detection and marking	Handelman, Amir	Oral (15 min=12+3)
Parallel Sessions Mo.1.c 9:45 - 10:55 (1:10 h) Chair(s): Igor' Nabiev	105	Influence of morphology on the exciton fine structure of single colloidal nanoplatelets	Goupalov, Serguei	Invited (20 min=15+5)
	119	Quantitative imaging of advanced nanostructured materials with scattering-type scanning near field optical microscopy	Stanciu, Stefan	Oral (15 min=12+3)
	51	Mueller matrix measurements of self-assembled gold nanoparticles in chiral structure	Battie, Yann	Invited (20 min=15+5)
	62	Electric-field effect on the optical activity of helical semiconductor nanoribbons	Tatiana Perezabova	Oral (15 min=12+3)
Parallel Sessions Mo.2.a 11:15-12:30 (1h15m) Chair(s): Paulo Tavares	207	Scattering killed the (light) sheet... or did it?	Ripoll, Jorge	Keynote (30 min=25+5)
	125	Spatially variant retarders used as geometric phase diffractive elements	Moreno, Ignacio	Invited (20 min=15+5)
	52	Meta-surface diffractive optics based on the resonance-domain diffraction phenomena	Golub, Michael	Oral (15 min=12+3)
	113	On the behavior of vector light needles using modulation functions with topological charge	Carnicer, Artur	Oral (15 min=12+3)
Parallel Sessions Mo.2.b 11:15-12:30 (1h15m) Chair(s): António Lobo	161	Optical fiber tools for single cell trapping and manipulation	Rodrigues Ribeiro, Ana Rita	Invited (20 min=15+5)
	132	Development of drug-loaded magneto-sensitive liposomes investigated by fluorescence techniques	Cardoso, Beatriz	Oral (15 min=12+3)
	235	Cross-validation of EEG data for Cognitive Workload Evaluation using an Eye-tracker in Imaging System Tasks	Mendonça, Pedro	Oral (15 min=12+3)
	225	Holographic optical tweezers at the tip of a multimode fibre	Leite, Ivo	Oral (15 min=12+3)

Parallel Sessions Mo.2.c 11:15-12:35 (1h20m) Chair(s): Yann Battie	171	Photorealistic ray-traced visualization of the compound insect eyes	Lee, Hocheol	Oral (15 min=12+3)
	186	Nanophotonic tools based on the conjugates of nanoparticles with the single-domain antibodies for multi-photon micrometastases detection	Nabiev, Igor	Invited (20 min=15+5)
	87	Towards optically-detected high-speed magnetic resonance spectrum measurements	Mignon, Charles	Oral (15 min=12+3)
	187	The crucial role of surface ligands in photostability of colloidal quantum dots	Zvaigzne, Mariya	Oral (15 min=12+3)
	184	Collective modes of self-assembled supercluster metamaterials: towards label-free sensing	Rakovich, Aliaksandra	Oral (15 min=12+3)
	146	Studying the optical properties of carbon dots depending on the solvent type	Stepanidenko, Evgeniia	Oral (15 min=12+3)
Plenary P18 13:55 - 14:40 (45 min) Chair(s): Mikhail Vasilevskiy	13	Nanoplasmonics for energy conversion: generation of hot electrons and of acoustic surface waves	Meier, Stefan	Plenary (45 min=40+5)
Parallel Sessions Mo.3.a 14:45-16:00 (1h15m) Chair(s): Stefan Maier	23	2D Materials for Polaritons	Peres, Nuno	Invited (20 min=17+3)
	180	Tuning the properties of surface magnon-polaritons on a ferromagnet using a graphene sheet	Costa, António	Oral (15 min=12+3)
	44	Manipulations of light emission through defect engineering in 2D materials	Woon, Wei-Yen	Invited (20 min=17+3)
	82	Enhancing nanoplasmonic sensing with metallic nanowires: from D-type to suspended core fibres	Santos, Diego	Oral (15 min=12+3)
Parallel Sessions Mo.3.b 14:45-16:00 (1h15m) Chair(s): Rogério Nogueira	240	Laser Spectroscopy Applied to Environmental, Ecological, Agricultural and Food Safety Research	Svanberg, Sune	Keynote (30 min=25+5)
	48	Effect of hepatic vein on gold-nanoparticle-mediated-hyperthermia in liver cancer	Jalali, Mandana	Invited (20 min=17+3)
	59	Core-shell magnetic-plasmonic nanoparticles enclosed in biocompatible hydrogels for multimodal cancer therapy	Veloso, Sérgio	Oral (15 min=12+3)
	126	Development of magnetic/plasmonic nickel ferrite/gold nanoparticles covered with lipid bilayers for applications in combined cancer therapy	Rodrigues, Rita	Oral (15 min=12+3)
Parallel Sessions Mo.3.c 14:45-16:00 (1h15m) Chair(s): Manuel Abreu	224	Optical fibres in astronomical spectrographs	Avila, Gerardo	Keynote (30 min=25+5)
		Study on creating an aspheric primary mirror of a large telescope using spherical mirror segments	Annu, Jacob	Oral (15 min=12+3)
	241	Ultra-low noise optoelectronic sensor in white light source for CCD calibrations instrument	Alves, David	Oral (15 min=12+3)
	65	Atmospheric dispersion correction: model requirements and impact on radial velocity measurements	Wehbe, Bachar	Oral (15 min=12+3)
Poster Sessions Mo.T 16:00-17:00 (1h) Chair(s): João Coelho Alexandre Cabral	74	Ultra-fast DNA sequence alignment utilizing optical 1D Fourier transform	Sadeghzadeh Bahnamiri, Hoda	Poster
	76	Optical pattern generator for efficient bio-data encoding in a photonic sequence alignment architecture	Akbari Rokn-Abadi, Saeedeh	Poster
	138	Fiber optic sensor for monitoring tangential and vertical forces for wheelchair application	Antunes Pereira, Luis Miguel	Poster
	147	A Hermite-based approach to bone segmentation in CT images	Vargas-Quintero, Lorena	Poster
	149	An image fusion scheme based on the hermite transform for nuclear medicine and magnetic resonance analysis	Barba Jimenez, Leiner	Poster
	157	Magnetic circular dichroism spectroscopy of QDs/SPIONs nanosystems	Orlova, Anna	Poster
	165	Raman spectroscopy and diffuse reflectance of biomass soot samples	Peña-Gornar, Mary Carmen	Poster
	197	Assessment of light's dazzling effect on the EEG signal of subjects performing tasks that require concentration	Santos, João	Poster
	230	Designing fibre probes for holographic microendoscopy	Silveira, Beatriz	Poster
	236	Electrophoretic light scattering for study mixed saliva studies	Savchenko, Ekaterina	Poster
	238	Hardware/software co-design for structural analysis of biosubstrate	Savchenko, Ekaterina	Poster
	24	Visual search in three-dimensional non-medical images: visual-motor performance of radiologists	Pladerer, Tatjana	Poster
	16	Assessment of the accommodative facility training with flippers between sessions	Calo-Santiago, Rosa	Poster
	18	Study of the ocular biometric changes and stray light on diabetic patients	Teixeira dos Reis, Clarisse	Poster
	57	The impact of keratoconus apex's localization on eye aberrations	Liduma, Sanita	Poster
	66	Jacobi-Fourier polynomials phase masks for high resolution imaging of the retina	Olvera-Angeles, Miguel	Poster
	63	Experimental performance of Jacobi-Fourier polynomials phase masks for wavefront coding	Gonzalez-Amador, Enrique	Poster
	70	Improving slit lamp managing skills with low cost spy wifi cameras	Arines, Justo	Poster
	90	Using FVSQ to identify functional indicators of visual problems among older people residing in nursing homes: a study in Santiago de Compostela	Vázquez Sánchez, Covadonga	Poster
	95	Analysis of the relationship of the central tear meniscus area with the tear film symptomatology and stability	Garcia-Resua, Carlos	Poster
	96	Meibomian gland loss area and its relationship with age and ocular surface disease index	García-Queiruga, Jacobo	Poster
	97	Relationship between visual therapy vectograms and accommodative parameters in young healthy subjects	Pena-Verdeal, Hugo	Poster
	98	Evaluation of the relationship between symptomatic assessment, corneal staining and tear meniscus by image analysis	García-Montero, Silvia	Poster
	111	Assessment of Van Herick Technique by using ImageJ software	Ferreiro, Dolores	Poster
	120	The influence of coloured lighting on ocular accommodation	Moreira, Raquel	Poster
	122	Compensative effect between corneal and internal ocular aberrations during a near vision task	Jéssica, Gomes	Poster
	131	The influence of coloured lighting on visual acuity and visual contrast sensitivity	Gil, Marta	Poster
	148	Astigmatism correction in direct ophthalmoscopy	Arines, Justo	Poster
	150	Prevalence of accommodative and binocular vision dysfunctions in a Portuguese clinical population	Franco, Sandra	Poster
	196	In line Fabry-Pérot cavities manufactured by electric arc fusion of NIR-laser micro-drilled optical fiber flat tips	Nespreira, Marta	Poster
	182	3D prototyping of a fiber Bragg grating vibration sensor for power transformers	Monteiro, Catarina	Poster
	211	In-plane wavelength multiplexing of fibre Bragg gratings in a multicore optical fibre	Idrisov, Ravil	Poster
	221	Interrogation methods for functionalized optical microbubble resonators aimed at water microcontaminants	Santos, Paulo	Poster
	227	Measurement of the temperature using an optical fiber with nanoparticles on the surface	Avila Padilla, Duber	Poster
	229	Sensitivity of TiO ₂ -coated optical microfibers for temperature measurement	Horta, Sindi	Poster
	233	Optical fiber cavity coated with polyvinylidene fluoride (PVDF) for humidity sensing	Vaz Rodrigues, António	Poster
	234	Luminescent materials based on anisometric lanthanide complexes	Knyazev, Andrey	Poster
	60	Optical thermometer based on surface plasmon resonance	Coello, Victor	Poster
	67	Recent developments on fiber-based ring-down technique for remote sensing	Silva, Susana	Poster
	155	Response of optically transparent pH sensing films to environmental conditions	Topasna, Daniela	Poster
	84	Femtosecond laser micromachining of Fabry-Pérot interferometers in fused silica for refractive index sensing	Maia, João	Poster
	190	Electrodynamics model of a hydrogen sensor based on a special photonic crystal fiber taper coated with a nano-scale palladium film	Minkovich, Vladimir	Poster
	226	Polycaprolactone as a biomaterial host for second-harmonic generation	Bernardo, Cesar	Poster
	173	Application of a novel LIBS prototype as an analytical grade tool for Li quantification in pegmatite samples	Ferreira, Miguel	Poster
	202	Efficient and stable holographic gratings stored in an environmentally friendly photopolymer	Morales-Vidal, Marta	Poster
	215	Measurement of the refractive index of glass by optical metrology	Leite, Inês	Poster
	237	Studies of biological liquid films for preliminary diagnostics	Savchenko, Ekaterina	Poster
	195	Compositional optical and electrical characteristics of SiO _x thin films deposited by reactive pulsed DC magnetron sputtering	Carneiro, Joaquim	Poster
Parallel Sessions Mo.4.a 17:00-18:30 (1h30m) Chair(s): James Leger	3	Symmetries in optical wavefields	Jahns, Jürgen	Keynote (30 min=25+5)
	219	Neuromorphic photonics for future ultrafast brain-inspired computing systems	Hurtado, Antonio	Keynote (30 min=25+5)
	45	Optically trapped micro-paddle for measuring piconewton forces	Lamperska, Weronika	Oral (15 min=12+3)
	71	Graphene oxide as a tunable platform for microsphere-based optical fiber sensors	Monteiro, Catarina	Oral (15 min=12+3)
Parallel Sessions Mo.4.b 17:00-18:30 (1h30m) Chair(s): Celso João Hugo Pires	6	Preparing to be dazzled: experiments in laser eye dazzle	Williamson, Craig	Keynote (30 min=25+5)
	254	Development and application of laser hologram production techniques for the teaching of Physics and the public awareness of science	Chibaca, José Caiongo	Oral (15 min=12+3)
	32	Bi-directional VLC LED-assisted navigation system for large indoor environments	Vieira, Manuela	Oral (15 min=12+3)
	258	Crack growth testing automation in fracture mechanics	Tavares, Paulo	Oral (15 min=12+3)
	204	Photocatalytic and smart asphalt mixtures: an overview	Rocha Segundo, Iran	Oral (15 min=12+3)
Parallel Sessions Mo.4.c 17:00-18:30 (1h30m) Chair(s): Wei-Yen Woon	61	Ultrafast carrier and spin dynamics of two-dimensional semiconductors	Cerullo, Giulio	Keynote (30 min=25+5)
	185	Light-matter interaction: plasmon-exciton hybridization in strong coupling regime	Rakovich, Yuri	Invited (20 min=17+3)
	191	Measuring valley polarization lifetime and diffusion lengths in transition metal dichalcogenides using time resolved second-harmonic generation	Viana-Gomes, Jose	Invited (20 min=17+3)
	183	Modification of multiphoton emission properties of single quantum dot due to the long-range coupling with plasmon nanoparticles in thin films	Krivenkov, Victor	Oral (15 min=12+3)
	118	Low-loss broadband optical waveguides fabricated in glass by femtosecond laser direct writing	Amorim, Vitor	Oral (15 min=12+3)
Plenary P19 8:55 - 9:40 (45 min)	214	Multifunctional low cost metal oxides: from materials to devices	Fortunato, Elvira	Plenary (45 min=40+5)

Chair(s): Elliot Brown			
Parallel Sessions Tu.1.a 9:45 - 10:45 (1 h)	205	Tunable focalizers: phase conjugate pairs	Ojeda-Castañeda, Jorge
Chair(s): Ignacio Moreno	69	Fabrication of periodic structures in optical fibers by femtosecond laser micromachining for sensing applications	Viveiros, Duarte
	21	Cross-correlation of distributed fiber optic strain map for structural elements diagnosis	Ciminello, Monica
Parallel Sessions Tu.1.b 9:45 - 10:45 (1 h)	78	Large photorefractive effect observed in non-ferroelectric smectic liquid crystal blends containing small amount of chiral compound	Sasaki, Takeo
Chair(s): Catarina Monteiro Beatriz Silveira	167	Photorefractive properties of lithium niobate crystals studied by Raman spectroscopy	Kokanyan, Ninel
	259	Laser ranging in underwater medium: a study into the effect of influence factors on the system performance	Xin, Wang
Parallel Sessions Tu.1.c 9:45 - 10:45 (1 h)	251	Bose-Einstein Condensation of Photons in a Dye-filled Microcavity	Rodrigues, Joao
Chair(s): Serguei Goupalov	92	Enhanced fluorescence in hybrid materials composed of a dye and plasmonic nanoparticles	Paulo, Pedro
	72	Exploring the Coupling of 0D and 2D materials	Bernardo, Cesar

Keynote (30 min=25+5)

Oral (15 min=12+3)

Oral (15 min=12+3)

Keynote (30 min=25+5)

Oral (15 min=12+3)

Oral (15 min=12+3)

Keynote (30 min=25+5)

Invited (20 min=17+3)

Oral (15 min=12+3)