

|                          | #   | Title  | Author                     | Type                  |
|--------------------------|-----|--|----------------------------|-----------------------|
| <b>FRIDAY, May 31</b>    |     |  |                            |                       |
| 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) |
| <b>SATURDAY, June 1</b>  |     |  |                            |                       |
| Plenary P4               | 239 | Laser spectroscopy to meet challenges in medicine  | Svanberg, Katarina         | Plenary (45 min=40+5) |
| 8:55 - 9:40 (45 min)     |     |  |                            |                       |
| Parallel Sessions Sa.1.a | 244 | Controlling light to the limit with the dispersion-scan technique: from single-cycle pulses to biomedical imaging  | Cresco, Helder             | Keynote (30 min=25+5) |
| 9:45 - 10:45 (1 h)       | 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 | 68  | ESPRESSO Coudé-Train: ESO's VLT working as 16-metre telescope  | Cabral, Alexandre          | Invited (20 min=15+5) |
| 9:45 - 10:45 (1 h)       | 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 | 33  | Stable and strong light-emitters based on colloidal quantum dots encapsulated in robust and processable matrices   | Gaponik, Nikolai           | Keynote (30 min=25+5) |
| 9:45 - 10:45 (1 h)       | 250 | Nanostructured yttrium aluminum composites doped with the rare earth elements: sol gel synthesis and up-conversion | Stepikhova, Margarita      | 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 | 176 | Multimodal optical coherence tomography  | Drexler, Wolfgang          | Keynote (30 min=25+5) |
| 11:15-12:30 (1h15m)      | 80  | Fast OCT image enhancement using deep learning for smart laser surgery   | Bayhaqi, Yakub Aqib        | 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   | Fantoni, Alessandro        | Invited (20 min=15+5) |
| Parallel Sessions Sa.2.b | 181 | Lidar imagers for automated vehicles: an overview  | Royo, Santiago             | Keynote (30 min=25+5) |
| 11:15-12:30 (1h15m)      | 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 | 115 | Carbon-based nanomaterials in suspensions far beyond the nonlinear optical threshold                               | Eberle, Bernd              | Keynote (30 min=25+5) |
| 11:15-12:30 (1h15m)      | 189 | Engineering of fluorescent biomaging tools based on quantum dot-encoded polyelectrolyte microcapsules and their    | 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) |
| Plenary P5               | 213 | Attosecond soft X-ray spectroscopy in condensed phase  | Biegert, Jens              | Plenary (45 min=40+5) |
| 13:55 - 14:40 (45 min)   |     |  |                            |                       |
| Parallel Sessions Sa.3.a | 198 | Reliability of ridge waveguide distributed feedback lasers for communications applications: from device specific   | Cantu, Horacio             | Invited (20 min=15+5) |
| 14:45-16:00 (1h15m)      | 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 | 174 | "Unipolar photonics": cross-gap, self-oscillating light emission in GaN/AlN and InGaAs/AlAs RTDs at room temp      | Brown, Elliott             | Keynote (30 min=25+5) |
| 14:45-16:00 (1h15m)      | 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   | Grześ, Pawel               | Oral (15 min=12+3)    |
| Parallel Sessions Sa.3.c | 2   | Nonlinear optical properties of a new inorganic-organic nanocomposite material highly dispersed with semiconduct   | Tomita, Yasuo              | Keynote (30 min=25+5) |
| 14:45-16:00 (1h15m)      | 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, Dmitriy         | Oral (15 min=12+3)    |
| Poster Sessions Sa.T     | 55  | The development of an optical design tool for atmospheric dispersion correction                                    | Wehbe, Bachar              | Poster                |
| 16:00-17:00 (1h)         | 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     | Vilardy Ortiz, Juan        | Poster                |
|                          | 103 | Experimental optical encryption scheme for the double random phase encoding using a nonlinear joint transform      | Vilardy Ortiz, Juan        | Poster                |
|                          | 104 | Image authentication using a joint transform correlator-based encryption and decryption systems and the phot       | 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, Joana               | 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 Camagüey, obtained from an integrating sphere spectral sy     | Mogo, Sandra               | Poster                |
|                          | 39  | A proposal for parametrical characterization of induced electric fields in materials                               | Martínez-Herrero, Rosario  | Poster                |

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|---|-----|---|-----------------------------|-----------------------|
|   | 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 opt        | Proença, Maria Manuela      | Poster                |
|   | 1   | Basic holography for optometry  | Costa, Manuel Filipe        | Poster                |
|   | 16  | Assessment of the accommodative facility training with flippers between sessions                                      | Pena-Verdeal, Hugo          | Poster                |
|   | 27  | Developing tunable optical analogues using nematic liquid crystals  | Ferreira, Tiago             | Poster                |
|   | 72  | Exploring the Coupling of 0D and 2D materials.  | Bernardo, Cesar             | 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 Sc <sub>2</sub> O <sub>3</sub> 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 architect     | 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<br>17:00-18:30 (1h30m) | 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)    |
| Parallel Sessions Sa.4.b<br>17:00-18:30 (1h30m) | 37  | Up/down link data transmission for indoor navigation based on visible light communication                             | Louro, Paula                | Oral (15 min=12+3)    |
|   | 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  | Pfening, Andreas            | Invited (20 min=15+5) |
|   | 170 | Functional metamaterials for optical sensing of hydrogen  | Guerreiro, Ariel            | Invited (20 min=15+5) |
| Parallel Sessions Sa.4.c<br>17:00-18:30 (1h30m) | 69  | Fabrication of periodic structures in optical fibers by femtosecond laser micromachining for sensing applications     | Viveiros, Duarte            | Oral (15 min=12+3)    |
|   | 22  | Wavelength-tuning Fizeau interferometry with a laser diode  | Ishii, Yukihiro             | 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     | Rodríguez-Aguila, Ana Belén | Oral (15 min=12+3)    |
| <b>SUNDAY, June 2</b>                           |     |   |                             |                       |
| Plenary P16<br>8:55 - 9:40 (45 min)             | 245 | Light diagnostics and light treatments in the eye   | Marcos, Susana              | Plenary (45 min=40+5) |
| Parallel Sessions Su.1.a<br>9:45 - 10:45 (1 h)  | 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<br>9:45 - 10:45 (1 h)  | 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<br>9:45 - 10:45 (1 h)  | 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)    |
|   | 157 | Magnetic circular dichroism spectroscopy of QDs/SPIOs nanosystems   | Orlova, Anna                | Oral (15 min=12+3)    |
| Parallel Sessions Su.2.a<br>11:15-12:30 (1h30m) | 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 error | Serra, Pedro                | Invited (20 min=15+5) |
|   | 130 | Variations of the optical properties of two types of contact lenses with dehydration                                  | Lopez Sierra, Sara          | Oral (15 min=12+3)    |
|   | 128 | Evaluation of the optical properties of two different types of soft contact lenses: hydrogel and silicone-hydrogel    | Talaveron López, Andrea     | 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<br>11:15-12:30 (1h30m) | 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<br>11:15-12:30 (1h30m) | 200 | Fundamentals of neutron waveguides: a proposal for slow neutron beams confinement and applications                    | Calvo Padilla, María 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)    |
| <b>MONDAY, June 3</b>                           |     |   |                             |                       |
| Plenary P17<br>8:55 - 9:40 (45 min)             | 194 | Optical techniques for improved vision  | Artal, Pablo                | Plenary (45 min=40+5) |
| Parallel Sessions Mo.1.a<br>9:45 - 10:45 (1 h)  | 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)    |
|   | 88  | Smartphone working distance during active or passive tasks and relation to heterophoria                               | Panke, Karola               | Oral (15 min=12+3)    |
|   | 124 | Influence of pupil function in pseudophakia   | Fonseca, Elsa               | Oral (15 min=12+3)    |
| Parallel Sessions Mo.1.b                        | 17  | Seeing around corners: using the light field to extract information from scattered light                              | Leger, James                | Keynote (30 min=25+5) |

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| 9:45 - 10:45 (1 h)                                | 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<br>9:45 - 10:55 (1:10 h) | 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<br>11:15-12:30 (1h15m)   | 207 | Scattering killed the (light) sheet... or did it?   | Ripoll, Jorge               | Keynote (30 min=25+5) |
|   | 132 | 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<br>11:15-12:30 (1h15m)   | 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                   | Mendonca, 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<br>11:15-12:35 (1h20m)   | 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 microscopy     | 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)    |
| Plenary Pl8<br>13:55 - 14:40 (45 min)             | 13  | Nanoplasmonics for energy conversion: generation of hot electrons and of acoustic surface waves                               | Meier, Stefan               | Plenary (45 min=40+5) |
|   | 23  | Plasmonics in graphene  | 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) |
| Parallel Sessions Mo.3.a<br>14:45-16:00 (1h15m)   | 82  | Enhancing nanoplasmonic sensing with metallic nanowires: from D-type to suspended core fibres                                 | Santos, Diego               | Oral (15 min=12+3)    |
|   | 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)    |
| Parallel Sessions Mo.3.b<br>14:45-16:00 (1h15m)   | 126 | Development of magnetic/plasmonic nickel ferrite/gold nanoparticles covered with lipid bilayers for applications              | Rodrigues, Rita             | Oral (15 min=12+3)    |
|   | 224 | Optical fibres in astronomical spectrographs  | Avila, Gerardo              | Keynote (30 min=25+5) |
|   | 228 | 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)    |
| Parallel Sessions Mo.3.c<br>14:45-16:00 (1h15m)   | 65  | Atmospheric dispersion correction: model requirements and impact on radial velocity measurements                              | Wehbe, Bachar               | Oral (15 min=12+3)    |
|   | 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                                   | Tavares, Cátia              | Poster                |
| Poster Sessions Mo.T<br>16:00-17:00 (1h)          | 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                |
|   | 152 | Photoinduced increase of electron transfer efficiency of QDs based hybrid structures  | Kolesova, Ekaterina         | Poster                |
|   | 165 | Raman spectroscopy and diffuse reflectance of biomass soot samples  | Peña-Gomar, 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                               | Pladere, 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 pilot study   | Vázquez Sánchez, Covadonga  | Poster                |
|   | 95  | Analysis of the relationship of the central tear meniscus area with the tear film symptomatology and stability                | García-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-Perot cavities manufactured by electric arc fusion of NIR-laser micro-drilled optical fiber flat tips           | Nespereira, 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 <sub>2</sub> -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                  | Maiã, João                  | Poster                |
|   | 190 | Electrodynamics model of a hydrogen sensor based on a special photonic crystal fiber taper coated with a nanostructured layer | Minkovich, Vladimir         | Poster                |
|   | 226 | Polycaprolactone as a biomaterial host for second-harmonic generation   | Bernardo, Cesar             | Poster                |

|   |     |  |                        |                       |
|---|-----|--|------------------------|-----------------------|
| Parallel Sessions Mo.4.a<br>17:00-18:30 (1h30m) | 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                |
|   | 222 | Plasma control by pattern recognition in laser induced breakdown spectroscopy  | Ferreira, Miguel       | Poster                |
|   | 237 | Studies of biological liquid films for preliminary diagnostics   | Savchenko, Ekaterina   | Poster                |
| Parallel Sessions Mo.4.b<br>17:00-18:30 (1h30m) | 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)    |
|   | 6   | Preparing to be dazzled: experiments in laser eye dazzle   | Williamson, Craig      | Keynote (30 min=25+5) |
| Parallel Sessions Mo.4.c<br>17:00-18:30 (1h30m) | 254 | Development and application of laser hologram production techniques for the teaching of Physics and the public                         | 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)    |
|   | 61  | Ultrafast carrier and spin dynamics of two-dimensional semiconductors  | Cerullo, Giulio        | Keynote (30 min=25+5) |
| Special Session Mo.5.a<br>18:35-19:05 (30 min)  | 185 | Light-matter interaction: plasmon-exciton hybridization in strong coupling regime  | Rakovich, Yuriy        | Invited (20 min=17+3) |
|   | 191 | Measuring valley polarization lifetime and diffusion lengths in transition metal dichalcogenides using time resolved photoluminescence | 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 plasmons                     | 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)    |
|   | 247 | Open access to European photonics prototyping platforms for innovation-driven researchers: "ACTPHAST4R"                                | Thienpont, Hugo        | Keynote (30 min=25+5) |
| <b>TUESDAY, June 3</b>                          |     |  |                        |                       |
| Plenary P19<br>8:55 - 9:40 (45 min)             | 214 | Multifunctional low cost metal oxides: from materials to devices   | Fortunato, Elvira      | Plenary (45 min=40+5) |
|   |     |  |                        |                       |
| Parallel Sessions Tu.1.a<br>9:45 - 10:45 (1 h)  | 205 | Tunable focalizers: phase conjugate pairs  | Ojeda-Castañeda, Jorge | Keynote (30 min=25+5) |
|   | 20  | Structural monitoring of full scale composite vessels during hydro-proof and mechanical acceptance tests by surface acoustic wave      | Ciminello, Monica      | Oral (15 min=12+3)    |
|   | 21  | Cross-correlation of distributed fiber optic strain map for structural elements diagnosis  | Ciminello, Monica      | Oral (15 min=12+3)    |
| Parallel Sessions Tu.1.b<br>9:45 - 10:45 (1 h)  | 78  | Large photorefractive effect observed in non-ferroelectric smectic liquid crystal blends containing small amount of ferroelectric      | Sasaki, Takeo          | Keynote (30 min=25+5) |
|   | 167 | Photorefractive properties of lithium niobate crystals studied by Raman spectroscopy   | Kokanyan, Ninel        | Oral (15 min=12+3)    |
|   | 195 | Compositional optical and electrical characteristics of SiOx thin films deposited by reactive pulsed DC magnetron sputtering           | Carneiro, Joaquim      | Oral (15 min=12+3)    |
| Parallel Sessions Tu.1.c<br>9:45 - 10:45 (1 h)  | 251 | Bose-Einstein Condensation of Photons in a Dye-filled Microcavity  | Rodrigues, Joao        | Keynote (30 min=25+5) |
|   | 92  | Enhanced fluorescence in hybrid materials composed of a dye and plasmonic nanoparticles  | Paulo, Pedro           | Invited (20 min=17+3) |
|   | 256 | Organometallic Non-Linear Optical Materials  | Joseph, Ginson         | Oral (15 min=12+3)    |