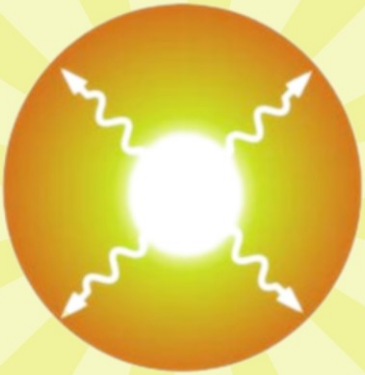


ICOOPMA2018

8th International Conference on Optical, Optoelectronic and Photonic Materials and Applications

August 26-31

Maresias-SP, Brazil

Program Book

FOREWORD

Welcome to the 8th International Conference on Optical, Optoelectronic and Photonic Materials and Applications (ICOOPMA2018).

ICOOPMA is a non-profit conference that is run by scientists for scientists without any institutional constraints and restrictions. It is an international conference series on optical, optoelectronic and photonic materials for a wide range of applications from telecommunications to photovoltaics, and optical, optoelectronic and electro-optic properties of all classes of materials and material systems. The previous seven ICOOPMA conferences were held in Darwin, Australia (2006), London, UK (2007), Edmonton, Canada (2008), Budapest, Hungary (2010), Nara, Japan (2012), Leeds, UK (2014) and Montréal, Canada (2016).

We are delighted to have you for this meeting at Beach Hotel Maresias, in Maresias-SP, one of the most beautiful beaches of the São Paulo State coast, located at ~180kms from São Paulo International Airport.

The 2018 ICOOPMA edition will run from Sunday (August 26) night until Friday (August 31). An exciting scientific program will be covered by 203 contributions. The scientific program includes 8 plenary lectures, 37 invited lectures, 51 oral presentations and 107 poster presentations. Two poster sessions that will be held on Monday (August 27) and Tuesday (August 28) designed to encourage interaction among participants.

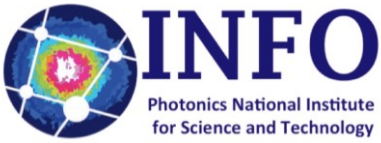
We offer special thanks to the São Paulo State University- UNESP, the Local Organizing Committee, the Advisory Board and the many on-site assistants for their tireless efforts in preparing this world-class event.

We hope you will enjoy Maresias and our country and you experience a valuable and memorable meeting.

On behalf of the Organizing Committee

Sidney J.L. Ribeiro, Marcelo Nalin, Rogéria R. Gonçalves Hernane Barud and Anderson Gomes.

SUPPORT



Instituto de Química – UNESP
Araraquara

Center for Research, Technology and Education in Vitreous Materials

PROGRAM SCHEDULE

26 Sunday August, 2018	**17:00 - 19:00**	Registration
	19:00 - 21:00	Welcome cocktail
27 Monday August, 2018	**08:45 - 09:00**	Opening session
	09:00 - 09:40	**Plenary session** **Exploring new Optical fibers for prevention and sensing in Medicine** Younes Messaddeq, University Laval, Canada.
	09:40 - 10:20	**Plenary session** **Modelling the luminescence due to 4f – 4f transitions in rare earth based materials: recent advances** Oscar Loureiro Malta, Universidade Federal de Pernambuco, Brazil.
	10:20 - 10:50	Coffee Break
	10:50 - 12:50	Invited Lectures: G, K, Q, T
	12:50 - 14:20	Lunch
	14:20 - 16:20	Invited Lectures: G, K, Q
	16:20 - 16:50	Coffee Break
	16:50 - 18:30	Oral Sessions: B, G, K, L, O, Q, T
	19:00 - 21:00	1st Poster Session: A, B, C, D, E, G, H, I, K, N, O, P, Q, R, T
28 Tuesday August, 2018	**07:00**	Registration
	09:00 - 09:40	**Plenary session** **Nonlinearity management of metal-dielectric nanocomposites and nanostructures** Cid B. de Araújo, Universidade Federal de Pernambuco, Brazil.

09:40 - 10:20	**Plenary session** **Nanoparticles for enhanced cardiovascular imaging** Jose Antonio Garcia-Sole, Universidad Autónoma de Madrid, Spain.
10:20 - 10:50	Coffee Break
10:50 - 12:50	Invited Lectures: B, F, G, H, N, O, Q
12:50 - 14:20	Lunch
14:20 - 16:20	Invited Lectures: B, G, H, I, K, Q, T
16:20 - 16:50	Coffee Break
16:50 - 18:30	Oral Sessions: G, H, I, N, O, Q, T
19:00 - 21:00	2nd Poster Session: B, D, E, G, H, I, K, M, O, P, Q, R, T

29 Wednesday August, 2018

07:00	Registration
09:00 - 09:40	**Plenary session** **Highly efficient and stable hybrid solar cells of nanostructures and bulk heterojunction semiconductors** Jai Singh, Charles Darwin University, Australia.
09:40 - 10:20	**Plenary session** **Shedding light on luminescent nanothermometry** Luis Dias Carlos, University of Aveiro, Portugal.
10:20 - 10:50	Coffee Break
10:50 - 12:30	Oral Sessions: C, D, G, H, I, K, R, U
19:00 - 22:00	Conference banquet

30 Thursday August, 2018	**07:00**	Registration
	09:00 - 09:40	**Plenary session** **Near-Infrared persistent luminescence: the quest for traps** Dirk Poelman, Ghent University, Belgium.
	09:40 - 10:20	**Plenary session** **Advances in the development of III-V semiconductors for photonic applications** Stephen J. Sweeney, University of Surrey, UK.
	10:20 - 10:50	Coffee Break
	10:50 - 12:50	Invited Lectures: G, I, Q
	12:50 - 14:20	Lunch
	14:20 - 16:20	Oral Sessions: C, D, G, N, O, Q
	16:20 - 16:50	Coffee Break
	16:50 - 18:30	Oral Sessions: A, B, D, G, M, N, O, V
31 Friday August, 2018	**10:00 - 11:00**	Closing session

INDEX

ORAL PRESENTATIONS

TUESDAY , AUGUST 28 16

THURSDAY , AUGUST 30 25

MONDAY , AUGUST 27

SESSION S1
09:00 - 10:20 - Room Maresias

09:00 **S1.1** **(Plenary Lecture)**

Exploring new Optical fibers for prevention and sensing in Medicine

Younes Messaddeq[1]; [1]Université Laval

09:40 **S1.2** **(Plenary Lecture)**

Modelling the luminescence due to 4f – 4f transitions in rare earth based materials: recent advances

Oscar Loureiro Malta[1]; [1]Universidade Federal de Pernambuco

SESSION INV1-A
10:50 - 12:50 - Room Maresias

10:50 **INV1-A.1** **(Invited Lecture)**

Samarium-based Radio-photoluminescence Materials and Applications for Microbeam Radiation Therapy

Go Okada[1], Jumpei Ueda[2], Setsuhisa Tanabe[2], Farley Chicilo[3], George Belev[3], Cyril Koughia[3], Tomasz Wysokinski[4], Dean Chapman[4], Takayuki Yanagida[1], Andy Edgar[5], Safa Kasap[3]; [1]Nara Institute of Science & Technology, [2]Kyoto University, [3]University of Saskatchewan, [4]Canadian Light Source, [5]Victoria University of Wellington

11:20 **INV1-A.2** **(Invited Lecture)**

Assessment of 4H-SiC epitaxial layers and high resistivity bulk crystals for radiation detectors

Krishna C. Mandal[1], Joshua W. Kleppinger[1], Yuriy V. Pershin[1], Towhid A. Chowdhury[1], Mohsin Sajjad[1]; [1]University of South Carolina

11:50 INV1-A.3 (Invited Lecture)

Photoluminescence spectroscopy study of excited-state structures of thermally activated delayed-fluorescence emitters

Hiroyoshi Naito[1], Takashi Kobayashi[1], Kenichi Goushi[2], Chihaya Adachi[2]; [1]Osaka Prefecture University, [2]Kyushu University

12:20 INV1-A.4 (Invited Lecture)

Structure-Property Relationship of the X-Ray Storage Phosphor CsBr:Eu^{2+}

Elmar Kersting[1], Heinz von Seggern[1]; [1]Technische Universität Darmstadt

SESSION INV1-B
10:50 - 12:50 - Camburi Room

10:50 INV1-B.1 (Invited Lecture)

Rare Earth Activated Glasses: Exploratory Investigation Toward New Scintillators

Luiz G Jacobsohn[1], Ugur Akgun[2]; [1]Clemson University, [2]Coe College

11:20 INV1-B.2 (Invited Lecture)

On the Role of Graphene in Ultrafast Fiber Lasers

Hugo Luis Fragnito[1]; [1]Universidade Presbiteriana Mackenzie

11:50 INV1-B.3 (Invited Lecture)

The ultimate performance of ultralong optical fibre Bragg gratings

Raman Kashyap[1]; [1]Polytechnique Montreal

12:20 INV1-B.4 (Invited Lecture)

Femtosecond fiber Bragg gratings for the development of innovative sensors and lasers

Martin Bernier[1]; [1]Université Laval

SESSION INV2-A
14:20 - 16:20 - Room Maresias

14:20 INV2-A.1 (Invited Lecture)

Organic devices for near-infrared emission and up-conversion

Marco Cremona[1], Rian Esteves Aderne[1], Zubair Ahmed[1], Cristiano Legnani[2], Sandra Jenatsch[3], Roland Hany[3], Frank Nüesch[3]; [1]Pontifícia Universidade Católica do Rio de Janeiro, [2]Universidade Federal de Juiz de Fora, [3]Swiss Federal Laboratories for Materials Science and Technology

14:50 INV2-A.2 (Invited Lecture)

Tin(II)2,3-naphtalocyanine molecule used as near-infrared sensitive layer in Organic Up-Conversion Devices

Cristiano Legnani[1], Welber Gianini Quirino[1], Mônica Cristina Melquiades[1], Marco Cremona[2], Rian Esteves Aderne[2]; [1]Universidade Federal de Juiz de Fora, [2]Pontifícia Universidade Católica do Rio de Janeiro

15:20 INV2-A.3 (Invited Lecture)

Synthesis of luminescent rare earth materials as light converting devices

Hermi Felinto Brito[1], Oscar Loureiro Malta[2], Maria Claudia França da Cunha Felinto[3], Ercules Teotonio[4]; [1]Universidade de São Paulo, [2]Universidade Federal de Pernambuco, [3]Instituto de Pesquisas Energéticas e Nucleares, [4]Universidade Federal da Paraíba

15:50 INV2-A.4 (Invited Lecture)

Efficient luminescent colloidal nitride semiconductor nanocrystals

Richard Curry[1]; [1]Photon Science Institute, University of Manchester

SESSION INV2-B
14:20 - 16:20 - Camburi Room

14:20 INV2-B.1 (Invited Lecture)

Twenty-five years of optically stimulated research of artificial materials: a personal perspective

Eduardo G. Yukihara[1,2]; [1]Oklahoma State University, [2]Paul Scherrer Institute

14:50 **INV2-B.2** **(Invited Lecture)**

Optical properties of rare-earth-doped amorphous chalcogenides

Tomas Wagner[1], Lukas Strizik[1], Vit Prokop[1], Jan Hrabovsky[1], Veronika Mouckova[1], Takeshi Aoki[2], Cyril Koughia[3], Safa Kasap[3]; [1]University of Pardubice, [2]Tokyo Polytechnic University, [3]University of Saskatchewan

15:20 **INV2-B.3** **(Invited Lecture)**

Direct Measurements of Energy Levels in Next Generation Nitride Phosphors

Alexander Moewes[1]; [1]University of Saskatchewan

15:50 **INV2-B.4** **(Invited Lecture)**

Second order non linear optical properties induced by thermal poling in microstructured tantalum germanate glasses and glass-ceramics

Gael Yves Poirier[1], Marc Dussauze[2], Vincent Rodriguez[2], Thierry Cardinal[2], Evelyne Fargin[2]; [1]Universidade Federal de Alfenas, [2]Université de Bordeaux

SESSION ORAL1A
16:50 - 18:30 - Room Maresias

16:50 **ORAL1A.1** Photovoltaic Materials

Anomalous Capacitive Features of Perovskite Solar Cells

Osbel Almora Rodríguez[1], Gebhard J. Matt[1], Germà Garcia-Belmonte[2], Christoph J. Brabec[1]; [1]Friedrich-Alexander-Universität Erlangen-Nürnberg, [2]Universitat Jaume I

17:10 **ORAL1A.2** Photonic materials and devices

Femtosecond laser fabrication of cladding waveguides in aminoacid crystal for second harmonic generation

Gustavo Foresto B. Almeida[1], Renato Juliano Martins[1], Jonathas Paula Siqueira[1], Juliana M. P. Almeida[1], José Joatan Rodrigues Jr.[2], Cleber R. Mendonça[1]; [1]Universidade de São Paulo, [2]Universidade Federal de Sergipe

17:30 **ORAL1A.3** Photovoltaic Materials

Bimolecular Recombination in Organic Bulk-Heterojunction Solar Cells

Roberto Mendonça Faria[1], Daniel Roger Amorim[1], Francineide Araujo[1], Douglas José Coutinho[2]; [1]Universidade de São Paulo, [2]Universidade Tecnológica Federal do Paraná

17:50 **ORAL1A.4** Non-oxide glasses Plasmonics

Periodic pattern in Laser induced forward transfer of chalcogenide glass

Juliana M. P. Almeida[1], Kelly Tasso Paula[1], Craig Arnold[2], Cleber R. Mendonça[1]; [1]Universidade de São Paulo, [2]Princeton University

18:10 **ORAL1A.5** Non-linear effects

Zinc selenide optical nonlinearities measured by nonlinear ellipse rotation

Emerson Cristiano Barbano[1], Tiago Gualberto Bezerra de Souza[1], Lino Misoguti[1]; [1]Universidade de São Paulo

SESSION ORAL1B
16:50 - 18:30 - Camburi Room

16:50 **ORAL1B.1** Luminescent materials

Direct femtosecond laser printing of silk fibroin microstructures.

Molíria Vieira dos Santos[1], Kelly Tasso Paula[1], Sidney J.L. Ribeiro[2], Cleber R. Mendonça[1]; [1]Universidade de São Paulo, [2]Universidade Estadual Paulista Júlio de Mesquita Filho

17:10 **ORAL1B.2** Photonic materials and devices

Chalcogenide microstructured optical fibers for Mid-IR Quantum Cascade Laser pigtailing

Johann Troles[1], Celine Caillaud[1,2], Laurent Brilland[2], Sebastien Venck[2], Jean-Luc Jean-Luc.Adam[1], Maxime Duris[1,3], Damien Deubel[3], Loic Bodiou[1], Joel Charrier[1], Mathieu carras Carras[4], Mickael Brun[4]; [1]University of Rennes 1, [2]SelenOptics, [3]Kerdry, [4]Mirsense

17:30 **ORAL1B.3** Semiconductors for optoelectronics

Novel organic semiconductors and their use in ultrafast photo-switching and near-infrared phototransistors

Jesse Thomas Ernest Quinn[1,2]; [1]Universidade de São Paulo, [2]University of Waterloo

17:50 **ORAL1B.4** Luminescent materials

Excitonic luminescence of new mixed-anion compounds

Yuki Iwasa[1], Hiraku Ogino[1], Dongjoon Song[1], Kohei Yamanoi[2], Toshihiko Shimizu[2], Jumpei Ueda[3], Setsuhisa Tanabe[3], Nobuhiko Sarukura[2]; [1]National Institute of Advanced Industrial Science and Technology, [2]Osaka University, [3]Kyoto University

18:10 **ORAL1B.5** Semiconductors for optoelectronics

Large Area $Cd_{0.9}Zn_{0.1}Te$ Pixelated Detector: Fabrication and Characterization

Mohsin Sajjad[1], Joshua W. Kleppinger[1], Towhid A. Chowdhury[1], Krishna C. Mandal[1]; [1]University of South Carolina

TUESDAY , AUGUST 28

SESSION S2
09:00 - 10:20 - Room Maresias

09:00 **S2.1** **(Plenary Lecture)**

Nonlinearity management of metal-dielectric nanocomposites and nanostructures

Cid B. de Araújo[1]; [1]Universidade Federal de Pernambuco

09:40 **S2.2** **(Plenary Lecture)**

Nanoparticles for enhanced cardiovascular imaging

Jie Hu[1], Francisco Sanz Rodriguez[1], Fernando Rivero[1], Dirk Ortgies[1], Rio Aguilar Torres[1], Emma Martín Rodriguez[1], Fernando Alfonso[2], Daniel Jaque[1], Jose Antonio Garcia-Sole[1]; [1]Universidad Autónoma de Madrid, [2]Instituto Ramón y Cajal

SESSION INV3-A
10:50 - 12:50 - Room Maresias

10:50 INV3-A.1 (Invited Lecture)

Recent advances in femtosecond laser writing of mid-infrared waveguides in chalcogenide glasses

David Le Coq[1], Pascal Masselin[2]; [1]University of Rennes 1, [2]University of Littoral Côte d'Opale

11:20 INV3-A.2 (Invited Lecture)

New composites with Potential Random Laser Application

Caroline Cássia Alves[1], Sidney J.L. Ribeiro[2], Cleber R. Mendonça[1], Leonardo De Boni[1], José Maurício Almeida Caiut[1]; [1]Universidade de São Paulo, [2]Universidade Estadual Paulista Júlio de Mesquita Filho

11:50 INV3-A.3 (Invited Lecture)

High intensity femtosecond lasers at IPEN: tools for modification and characterization of materials High intensity femtosecond lasers at IPEN: tools for modification and characterization of materials

Ricardo Elgul Samad[1], Edison Puig Maldonado[1], Lilia Coronato Courrol[2], Wagner de Rossi[1], Denise Maria Zezell[1], Sonia Licia Baldochi[1], Nilson Dias Vieira Junior[1]; [1]Instituto de Pesquisas Energéticas e Nucleares, [2]Universidade Federal de São Paulo

12:20 INV3-A.4 (Invited Lecture)

Synthesis of aminolevulinic acid with metal nanoparticles for Non-noncommunicable diseases diagnosis and therapy

Lilia Coronato Courrol[1], Karina de Oliveira Gonçalves[1], Daniel Perez Vieira[2]; [1]Universidade Federal de São Paulo, [2]Instituto de Pesquisas Energéticas e Nucleares

SESSION INV3-B
10:50 - 12:50 - Camburi Room

10:50 **INV3-B.1** **(Invited Lecture)**

Materials for the Optimization of Solar Energy Harvesting

Carlos FO Graeff[1]; [1]Universidade Estadual Paulista Júlio de Mesquita Filho

11:20 **INV3-B.2** **(Invited Lecture)**

Carbon-based nanostructures in nanoporous films: materials design for optical applications

Luca Malfatti[1,2]; [1]Department of Chemistry and Pharmacy, [2]University of Sassari

11:50 **INV3-B.3** **(Invited Lecture)**

Towards Optically Controlled Quantum Bits in Rare Earth Doped Nanoparticles

Diana Serrano[1], Jenny Karlsson[1], Alexandre Fossati[1], Alban Ferrier[1], Philippe Goldner[1]; [1]Chimie ParisTech

12:20 **INV3-B.4** **(Invited Lecture)**

Morphological Engineering of Bio-Minerals Using Near-IR Mode-locked Lasers – a new approach for integrative manufacturing of hard-soft tissues for in-theatre use!

Animesh Jha[1], Christian Thomas Brown[2], Monty S Duggal[3], Antonios D Anastasiou[1]; [1]University of Leeds, [2]University of St. Andrews, [3]National University of Singapore

SESSION INV4-A
14:20 - 16:20 - Room Maresias

14:20 **INV4-A.1** **(Invited Lecture)**

Second Harmonic Scattering: from liquids to interfaces and bulk materials

Vincent Rodriguez[1]; [1]University of Bordeaux

14:50 INV4-A.2 (Invited Lecture)

Recent developments in Mid-Infrared Fiber Lasers

Réal Vallée[1]; [1]Université Laval

15:20 INV4-A.3 (Invited Lecture)

Innovative Chemical Sensors Based on Optical Polymers

Robert Lieberman[1]; [1]Lumoptix LLC

15:50 INV4-A.4 (Invited Lecture)

Semiconductor nanowires for 3D nano-LEDs and hybrid optoelectronic devices

Tobias Voss[1]; [1]Technische Universität Braunschweig

SESSION INV4-B
14:20 - 16:20 - Camburi Room

14:20 INV4-B.1 (Invited Lecture)

Exciting host-guest luminescent materials for photonic and biophotonic applications

Andrea Simone Stucchi de Camargo[1]; [1]Instituto de Física de São Carlos

14:50 INV4-B.2 (Invited Lecture)

Nanoporous Anodic Alumina: a versatile material for biomedical applications

Lluis F. Marsal[1], Elisabet Xifre-Perez[1], Laura Karen Acosta[1], Laura Pol[1], Josep Ferre-Borrull[1]; [1]Universitat Rovira i Virgili

15:20 INV4-B.3 (Invited Lecture)

Nanophotonic structures for enhanced light-sound interaction

Gustavo S Wiederhecker[1]; [1]Universidade Estadual de Campinas

15:50 **INV4-B.4** **(Invited Lecture)**

Rare Earth Smart Nanomaterials And Their Biological Application

Maria Claudia França da Cunha Felinto[1], Hermi Felinto Brito[2], Ercules Teotonio[3], Oscar Loureiro Malta[4]; [1]Instituto de Pesquisas Energéticas e Nucleares, [2]Universidade de São Paulo, [3]Universidade Federal da Paraíba, [4]Universidade Federal de Pernambuco

SESSION ORAL2A
16:50 - 18:30 - Room Maresias

16:50 **ORAL2A.1** Photovoltaic Materials

Critical analysis of the performance of $In_xGa_{1-x}N$ based solar cells

Carlos Hernández-Gutierréz[1], Arturo Morales-Acevedo[1], Dagoberto Cardona[2], Gerardo Contreras-Puente[3], Máximo López-López[1]; [1]CINVESTAV, [2]ITESO Universidad Jesuita de Guadalajara, [3]Instituto Politécnico Nacional

17:10 **ORAL2A.2** Semiconductors for optoelectronics

Prediction of electrical response of solution-processed thin-film transistors using multifactorial analysis

João Paulo Braga[1], Lucas Augusto Moises[1], Giovani Gozzi[1], Lucas Fugikawa Santos[1]; [1]Universidade Estadual Paulista Júlio de Mesquita Filho

17:30 **ORAL2A.3** Luminescent materials

Highly luminescent microstructures tailored by direct laser writing (DLW) technique in Ag nanoclusters doped fluorophosphate glass: application in 3D waveguide and second harmonic generation (SHG)

Tarcio Castro Silva[1], Alain Abou Khalil[2], Hssen Fares[1], Jean-Charles Desmoulin[2], Sophie Rouzet[2], Clement Strutynski[2], Yannick Petit[2], Sylvain Danto[2], Véronique Jubera[2], Lionel Canioni[2], Marcelo Nalin[1], Sidney J.L. Ribeiro[1], Thierry Cardinal[2]; [1]Universidade Estadual Paulista Júlio de Mesquita Filho, [2]Institute de Chimie de la Matière Condensée de Bordeaux

17:50 **ORAL2A.4** Nanostructures including photonic crystals

Broad-spectrum UV-to-NIR-active photocatalyst based on semiconductors and lanthanides-doped upconversion crystals

Sajjad Ullah[1], Chanchal Hazra[1], Elias Paiva Ferreira Neto[2], Ubirajara Pereira Rodrigues-Filho[2], Sidney J.L. Ribeiro[1]; [1]Universidade Estadual Paulista Júlio de Mesquita Filho, [2]Universidade de São Paulo

18:10 **ORAL2A.5** Photonic materials and devices

Random Laser emission from Rhodamine B-doped disordered fibers network

Lucas Fiocco Sciuti[1], Nathália Tomazio[1], Cleber R. Mendonça[1], Luíza Mercante[2], Daniel Souza Corrêa[2], Leonardo De Boni[1]; [1]Universidade de São Paulo, [2]Nanotechnology National Laboratory for Agriculture

SESSION ORAL2B
16:50 - 18:30 - Camburi Room

16:50 **ORAL2B.1** Nanophotonics

A study of optical power induced spectral shift in Si photonics

Stefan Tenenbaum[1], Roberto Ricardo Panepucci[1]; [1]Centro de Tecnologia da Informação Renato Archer

17:10 **ORAL2B.2** Photonic materials and devices

X-ray Induced Sm-Valence Conversion in Fluoroaluminate Glasses as a Tool for Investigating Dose Distributions in Microbeam Radiation Therapy

Farley Chicilo[1], Go Okada[2], Cyril Koughia[1], George Belev[1], Tomasz Wysokinski[3], Dean Chapman[3], Andy Edgar[4], Fred Geisler[1], Albert Hanson[1], Safa Kasap[1]; [1]University of Saskatchewan, [2]Nara Institute of Science & Technology, [3]Canadian Light Source, [4]Victoria University of Wellington

17:30 **ORAL2B.3** Non-linear effects

Molecular second order process with optical polarization control: effect of chirality in the Hyper-Rayleigh scattering

Raian G Westin[1], Ruben Fonseca Rodriguez[2], Marcelo G. Vivas[3], Cleber R. Mendonça[4], Leonardo De Boni[4]; [1]Instituto de Física de São Carlos, [2]Departamento de Ciencias Básicas, Universidad de la Costa, [3]Universidade Federal de Alfenas, [4]Universidade de São Paulo

17:50 **ORAL2B.4** Photonic materials and devices

Rare-earth Yb^{3+}-doped MoS_2 grown using femtosecond pulsed laser deposition for photonics applications

Chiranjeevi Maddi[1], Aparna P[2], Adarsh KV[2], Animesh Jha[1]; [1]University of Leeds, [2]Indian Institute of Science Education and Research

18:10 **ORAL2B.5** Photoinduced effects

Luminescence of rare earth doping and interface related electrical transport properties of SnO_2 thin films based heterostructures

Luis Vicente de Andrade Scalvi[1], Cristina de Freitas Bueno[1], Diego Henrique Machado Olliveira[1]; [1]Universidade Estadual Paulista Júlio de Mesquita Filho

WEDNESDAY, AUGUST 29

SESSION S3
09:00 - 10:20 - Room Maresias

09:00 **S3.1** **(Plenary Lecture)**

Highly efficient and stable hybrid solar cells of nanostructures and bulk heterojunction semiconductors

Kiran Sridhar Ram[1], Jai Singh[1]; [1]Charles Darwin University

09:40 **S3.2** **(Plenary Lecture)**

Shedding light on luminescent nanothermometry

Luis Dias Carlos[1]; [1]University of Aveiro

SESSION ORAL3A
10:50 - 12:30 - Room Maresias

10:50 **ORAL3A.1** Luminescent materials

X-ray induced persistent luminescence: How and why?

Lucas Carvalho Veloso Rodrigues[1], Danilo Ormeni Almeida Santos[1], Miguel Aguirre Stock Grein Barbará[1], Douglas Lourenço Fritzen[1], Veronica de Carvalho Teixeira[2]; [1]Universidade de São Paulo, [2]Centro Nacional de Pesquisa em Energia e Materiais

11:10 **ORAL3A.2** Quantum dots

Green Aqueous Synthesis of Fluorescent Ag-In-Zn-S Quantum Dot/Biopolymer Nanomaterials for Potential Applications in Solar Energy Harvesting

Herman Sander Mansur[1], Camila Tabare[1], Alexandra A. P. Mansur[1]; [1]Universidade Federal de Minas Gerais

11:30 **ORAL3A.3** Nanophotonics

Multicolour Emissions through Bi-directional Energy Transfer in Nd^{3+}-Sensitized Gd^{3+}-based Core/Shell/Shell Upconverting Nanoparticles

Chanchal Hazra[1], York Estewin Serge Correales[1], Sajjad Ullah[1], Lais Roncalho Lima[1], Sidney J.L. Ribeiro[1]; [1]Universidade Estadual Paulista Júlio de Mesquita Filho

11:50 **ORAL3A.4** Silicon photonics

Rare-earth doped chalcogenide thin film on SOI plat form for Mid-IR integrated silicon photonic applications

Mehrdad Irannejad[1], Sandra Helena Messaddeq[1], Mohammed El Amraoui[1], Philippe Jean[1], Wei Shi[1], Younes Messaddeq[1]; [1]Université Laval

12:10 **ORAL3A.5** Nanostructures including photonic crystals

Compact switchable power divider based on 2D photonic crystal with chalcogenide $Ge_2Sb_2Te_5$ resonator

Daimam Darlam Zimmer[1], Victor Dmitriev[1], Wagner Ormanes Palheta Castro[1]; [1]Universidade Federal do Pará

SESSION ORAL3B
10:50 - 12:50 - Camburi Room

10:50 **ORAL3B.1** Nanostructures including photonic crystals

Controllable graphene W-shaped three-port THz circulator

Wagner Ormanes Palheta Castro[1], Victor Dmitriev[1], Geraldo Melo[1], Daimam Darlam Zimmer[1], Cristiano Braga[1]; [1]Universidade Federal do Pará

11:10 **ORAL3B.2** Energy conversion in Rare Earths doped materials

Optical and dielectric properties of Nd and Sm-doped $Bi_5Ti_3FeO_{15}$ phases

Jeferson Almeida Dias[1], Lia Mara Marcondes[2], Rosario Elida Suman Bretas[1], Márcio Raymundo Morelli[1]; [1]Universidade Federal de São Carlos, [2]Universidade Federal de Alfenas

11:30 **ORAL3B.3** Nanostructures including photonic crystals

The behavior of the deformation vibration of NH3 in semi-organic crystals under high pressure studied by Raman spectroscopy

André Luís de Oliveira Cavaignac[1], Ricardo Jorge Cruz Lima[2]; [1]Universidade Ceuma, [2]Universidade Federal do Maranhão

11:50 **ORAL3B.4** Electro-optic effects

Bi-functional electro-optical material based on ureasil-polyether hybrid

Gustavo Palacio[1,2], Sandra Helena Pulcinelli[1], Rachid Mahiou[2], Damien Boyer[2], Celso Valentim Santilli[1]; [1]Instituto de Química - UNESP / Campus de Araraquara, [2]Institut de Chemie de Clermont-Ferrand - Université Clermont Auvergne

12:10 **ORAL3B.5** Luminescent materials

The relationship between structural and optical properties of Eu^{3+} doped B_2O_3-Al_2O_3 compounds through soft chemical process

Lauro June Queiroz Maia[1], Fausto Melo Faria Filho[2], Rogéria Rocha Gonçalves[3], Sidney J.L. Ribeiro[4]; [1]Universidade Federal de Goiás, [2]Instituto Federal Goiano, [3]Universidade de São Paulo, [4]Instituto de Química - UNESP / Campus de Araraquara

12:30 **ORAL3B.6** Photonic materials and devices

Nano-optofluidics for Surface Modification Sensing in Porous Anodic Alumina

Josep Ferre-Borrull[1], Chris Eckstein[1], Elisabet Xifre-Perez[1], Lluis F. Marsal[1]; [1]Universitat Rovira i Virgili

THURSDAY , AUGUST 30

SESSION S4
09:00 - 10:20 - Room Maresias

09:00 **S4.1** **(Plenary Lecture)**

Near-Infrared persistent luminescence: the quest for traps

Dirk Poelman[1], Olivier Q De Clercq[1], Jiaren Du[1], Katleen Korthout[1]; [1]Ghent University / Universiteit Gent

09:40 **S4.2** **(Plenary Lecture)**

Advances in the development of III-V semiconductors for photonic applications

Stephen J. Sweeney[1]; [1]University of Surrey

SESSION INV5-A
10:50 - 12:20 - Room Maresias

10:50 **INV5-A.1** **(Invited Lecture)**

Germanium and tellurium oxide glasses based metal-nanocomposites: fabrication and optical applications – a review of recent results.

Luciana Reyes Pires Kassab[1], Cid B. de Araújo[2], Davinson Mariano da Silva[1]; [1]Faculdade de Tecnologia de São Paulo, [2]Universidade Federal de Pernambuco

11:20 **INV5-A.2** **(Invited Lecture)**

Optics in two-dimensional materials and nanocomposites

Christiano J.S. de Matos[1]; [1]Universidade Presbiteriana Mackenzie

11:50 **INV5-A.3** **(Invited Lecture)**

Tunning the optical parameters in nanocomposites: electromagnetic modeling for "custom sized" structures

María Luz Martínez Ricci[1]; [1]Universidad de Buenos Aires

SESSION INV5-B
10:50 - 12:50 - Camburi Room

10:50 **INV5-B.1** **(Invited Lecture)**

Random Laser materials: from ultrahigh efficiency to Anderson localization transition

Niklaus Ursus Wetter[1], Ernesto Jimenez-Villar[1]; [1]Instituto de Pesquisas Energéticas e Nucleares

11:20 **INV5-B.2** **(Invited Lecture)**

Surface decontamination by UV emission of rare-earth phosphors

Bruno Caillier[1], José Maurício Almeida Caiut[2], Cristina Muja[1], Philippe Guillot[1]; [1]Institut National Universitaire Champollion, [2]Universidade de São Paulo

11:50 **INV5-B.3** **(Invited Lecture)**

Rare-earth doped ceramic nanophosphors for applications in nanomedicine

Karina Nigoghossian[1]; [1]Tokyo University of Science

12:20 **INV5-B.4** **(Invited Lecture)**

Photochromism of PMMA - phosphotungstic acid and luminescence of elastomeric copolymer - Eu (III) - b-Diketone

Celso Molina[1], Fernanda Ferraz Camilo[1], Ariane Espindola[1], Pamela Corradi Silva[1], Norberto Sanches Gonçalves[1], Rute A.S. Ferreira[2], Luis Dias Carlos[2]; [1]Universidade Federal de São Paulo, [2]University of Aveiro

SESSION ORAL4A
14:20 - 16:20 - Room Maresias

14:20 **ORAL4A.1** Electro-optic effects

Super-resolution Imaging and Photothermal Combustion of Nanoparticles on Plasmonic Gratings

Biyan Chen[1], Naadaa G. Zakiyyan[1], Aaron Wood[1], Keshab Gangopadhyay[1], Jacob McFarland[1], Matthew R. Maschmann[1], Shubhra Gangopadhyay[1,2]; [1]University of Missouri Columbia, [2]National Science Foundation

14:40 **ORAL4A.2** Energy conversion in Rare Earths doped materials

Energy transfer in Eu^{3+}-Tb^{3+} co-doped a-SiN_x thin films

Diego Silva Oliveira[1], Leandro R. Tessler[1]; [1]Universidade Estadual de Campinas

15:00 **ORAL4A.3** Energy conversion in Rare Earths doped materials

High quantum yield of infrared-to-visible upconversion in Er^{3+}/Yb^{3+} co-doped germanate based materials

Rogéria Rocha Gonçalves[1], Fábio José Caixeta[1], Anderson Aparecido Alves Tostes[1], Vítor Santos Souza[1], Leonardo Sousa Rosa[1], Ramon Josef Nicolete Nascimento[1], Felipe Thomaz Aquino[1], Alban Ferrier[2], Philippe Goldner[2]; [1]Universidade de São Paulo, [2]Chimie ParisTech

15:20 **ORAL4A.4** Photovoltaic Materials

Simplified and quick electrical modeling for dye sensitized solar cells: An experimental and theoretical investigation

Rocelito Lopes Andrade[1], Emerson Kohlrausch[1], Matheus Costa Oliveira[1], Marcos Jose Leite Santos[1]; [1]Universidade Federal do Rio Grande do Sul

15:40 **ORAL4A.5** Photoinduced effects

Study of the photothermal effect in conjugated polymers

Deize Corradi Grodniski[1], Lucimara Stolz Roman[1], Marlus Koehler[1]; [1]Universidade Federal do Paraná

16:00 **ORAL4A.6** Photonic materials and devices

Inverse ridge waveguide platform for optical material development

Roberto Ricardo Panepucci[1], Gilliard Nardel Malheiros-Silveira[2], Celio Antonio Finardi[1], Eliana Van Etten[3], Talita S. Burger[3], Ricardo C. G. Silva[3], André M. Daltrini[3]; [1]Centro de Tecnologia da Informação Renato Archer, [2]Universidade Estadual Paulista Júlio de Mesquita Filho, [3]CEITEC S. A. Semiconductors

SESSION ORAL4B
14:20 - 16:20 - Camburi Room

14:20 **ORAL4B.1** Energy conversion in Rare Earths doped materials

Luminescent Solar Concentrators based on europium complexes utilizing commercially available solar protectors as primary ligands

Helmut Isaac Padilla Chavarría[1], Ian Werner[1], Marcelo Folhadella Azevedo[1], Jiang Kai[1]; [1]Pontifícia Universidade Católica do Rio de Janeiro

14:40 **ORAL4B.2** Luminescent materials

Photonic properties of Yb3+ doped binary glasses and glass ceramics for optical refrigeration

Jyothis Thomas[1], Lauro June Queiroz Maia[2], Wonji Park[3], Yannick Ledemi[3], Denis Seletskiy[1], Younes Messaddeq[3], Raman Kashyap[1]; [1]Polytechnique Montreal, [2]Universidade Federal de Goiás, [3]Université Laval

15:00 **ORAL4B.3** Biophotonics

Magneto-Luminescent Nanoprobe of Fe_3O_4 with Engineered Surface Chemistry by Calixarene and Eu^{3+} TTA Complex for Blood Plasma Protein Detection

Latif Ullah Khan[1,2], Diego Stefani Teodoro Martinez[1], Romana Petry[1]; [1]Centro Nacional de Pesquisa em Energia e Materiais, [2]Laboratório Nacional de Nanotecnologia

15:20 **ORAL4B.4** Photoinduced effects

Periodic structures in Ag- based Chalcogenide thin films produced by laser dewetting

Sandra Helena Messaddeq[1], Alexandre Douaud[1], Younes Messaddeq[1]; [1]Université Laval

15:40 **ORAL4B.5** Luminescent materials

Photoluminescence of β-Ga_2O_3 nanostructures: controlled phase synthesis with promising optoelectronic and gas sensor applications

Aline Varella Rodrigues[1], Naira Linhares Sabino[2], Marcelo Ornaghi Orlandi[2]; [1]Instituto de Química - UNESP / Campus de Araraquara, [2]Universidade Estadual Paulista Júlio de Mesquita Filho

SESSION ORAL5A
16:50 - 18:30 - Room Maresias

16:50 **ORAL5A.1** Luminescent materials

Time-resolved Photoluminescence (TRPL) Spectroscopy – a Macroscopic and Microscopic approach from HORIBA Scientific

Joao Lucas Rangel[1], Linda Casson[1], Francis Ndi[1], Igor Carvalho[1]; [1]Horiba Scientific

17:10 **ORAL5A.2** Energy conversion in Rare Earths doped materials

Efficient energy transfer in transparent nanostructured RE3+ doped sol-gel SiO_2-LaF_3 glass-ceramics

Francisco Javier del Castillo Vargas[1], Angel Carlos Yanes Hernández[1]; [1]Universidad de La Laguna

17:30 **ORAL5A.3** Photoinduced effects

Phototinduced Charge Shifts And Electron Transfer In Tetra(aryl)borate Systems: Dynamics Of Radical-Pair, Spintronics Properties And Polymerization Kinetics

Willy Glen Santos[1], Sidney J.L. Ribeiro[2]; [1]Instituto de Química - UNESP / Campus de Araraquara, [2]Universidade Estadual Paulista Júlio de Mesquita Filho

17:50 **ORAL5A.4** Biophotonics

FRET-based communication for Photodynamic Therapy

Cesar Roberto de Souza[1], Walter Jaimes Salcedo[1]; [1]Universidade de São Paulo

18:10 **ORAL5A.5** Waveguides

Ultrafast pulse generation by the use of 2D materials in fiber lasers

Eunézio Antônio Thoroh de Souza[1]; [1]Universidade Presbiteriana Mackenzie

SESSION ORAL5B
16:50 - 18:30 - Camburi Room

16:50 **ORAL5B.1** Photoconductivity

Gelatin electrospun nanofibers filled with Ag/POSS composite for electrically conductive biodegradable films

Ali Riaz[1], Sidney J.L. Ribeiro[2]; [1]Instituto de Química - UNESP / Campus de Araraquara, [2]Universidade Estadual Paulista Júlio de Mesquita Filho

17:10 **ORAL5B.2** Bioimaging

Synthesis and Characterization oZnSe:xMn^{2+} Quantum Dots. Analysis of their Toxicity and kindetic of uptake in vitro (RAW 264-7) as a first step in the development of a Diagnostic Nanoprobe

Zahid Ullah Khan[1,2], Hermi Felinto Brito[1], Latif Ullah Khan[1,3], Hiro Goto[1], Eduardo Sanchez[1], Magnus Ake Gidlund[1,3]; [1]Universidade de São Paulo, [2]Instituto Ciências Biomédicas/ Imunologia, [3]Instituto Ciências Biomédicas

17:30 **ORAL5B.3** Photovoltaic Materials

High efficiency room temperature binder free TiO_2 paste for flexible dye sensitized solar cells

Kishore Kumar Devarepally[1], Younes Messaddeq[2]; [1]Universidade Estadual Paulista Júlio de Mesquita Filho, [2]Université Laval

POSTER PRESENTATIONS

MONDAY , AUGUST 27

SESSION P1
19:00 - 21:00 - Room Maresias

Bioimaging

P1.1 - **Study of the luminescence mechanism in Eu and Ti doped-Y_2O_3**
Isis Frigeri Manali[1], Veronica de Carvalho Teixeira[2], Lucas Carvalho Veloso Rodrigues[3], Adriano Henrique Braga[2], Douglas Galante[2]; [1]Universidade Estadual de Campinas, [2]Centro Nacional de Pesquisa em Energia e Materiais, [3]Universidade de São Paulo

Biophotonics

P1.2 - **Structural study of rare earth ions doped silk fibroin**
Roberta Silva Pugina[1], José Maurício Almeida Caiut[1]; [1]Universidade de São Paulo

P1.3 - **Potential application of Nb2O5:Eu3+ nanostructured materials as luminescent markers on Photonics and Biophotonics**
Mateus Grecco Manfré[1], Rafael Ramiro Pereira[1], Silvana Ruella de Oliveira[1], Rogéria Rocha Gonçalves[1]; [1]Universidade de São Paulo

P1.4 - **Methyl-aminolevulinate Gold Nanoparticles photodynamic therapy for atherosclerosis: synthesis, characterization and in-vitro study.**
Karina de Oliveira Gonçalves[1], Daniel Perez Vieira[2], Lilia Coronato Courrol[1]; [1]Universidade Federal de São Paulo, [2]Instituto de Pesquisas Energéticas e Nucleares

P1.5 - **Electrochemical detection of MRSA bacteria using Layer-by-Layer films containing antimicrobial peptide Hylina with luminescent nanoparticles immobilized on silk fibroin**
Lais Roncalho Lima[1], Marli Leite de Moraes[2], Eduardo Maffud Cilli[1], Elenice Deffune[1], Sidney J.L. Ribeiro[1]; [1]Universidade Estadual Paulista Júlio de Mesquita Filho, [2]Universidade Federal de São Paulo

P1.6 - **Detection of multiresistant bacteria by combining electrochemical and luminescent techniques**

Marli Leite de Moraes[1], Anna Laura Yuri Yokomichi[1], Lais Roncalho Lima[2], Elenice Deffune[2], Sidney J.L. Ribeiro[2]; [1]Universidade Federal de São Paulo, [2]Universidade Estadual Paulista Júlio de Mesquita Filho

Electro-optic effects

P1.7 - **Study on the opto-electronic behavior of natural latex thin films embedded with $Cu_{2-x}S$ nanocrystals for memory storage applications**

Roberto de Aguiar Ramos Jr.[1], Mirko Congiu[1], Miguel Henrique Boratto[1], Paride Pica[1], Carlos FO Graeff[1]; [1]Universidade Estadual Paulista Júlio de Mesquita Filho

P1.8 - **Characterization of opto-electronic property of WORM memory device with CuS nanocrystals and Gold and Silver nanoparticles in polymeric thin film**

Paride Pica[1], Mirko Congiu[2], Miguel Henrique Boratto[2], Ilaria Fratoddi[1], Carlos FO Graeff[2]; [1]Università degli Studi di Roma La Sapienza, [2]Universidade Estadual Paulista Júlio de Mesquita Filho

Energy conversion in Rare Earths doped materials

P1.9 - **Er^{3+}/Yb^{3+}Doped Silica Matrix Coated by Sol-Gel on Commercial Photovoltaic Cells**

Eduardo José Nassar[1], Jéssica Potomatti Batista[1], Henrique José da Silva[1], Lucas Alonso Rocha[1]; [1]Universidade de Franca

P1.10 - **Upconversion of Yb3+ e Er3+, titanium matrix for solar cell applications**

Danielle Da Cunha Baldini[1], Emerson Henrique de Faria[1], Katia Jorge Ciuffi[1], Lucas Alonso Rocha[1], Eduardo José Nassar[1]; [1]Universidade de Franca

Energy transfer

P1.11 - **Energy transfer study in polyfluorene copolymer systems**
Alessandra Stacchini Menandro[1], Hueder Paulo Moisés de Oliveira[2], Laura Oliveira Péres[1]; [1]Universidade Federal de São Paulo, [2]Universidade Federal do ABC

Luminescent materials

P1.12 - **Radio-photoluminescence in Ag-doped CsBr transparent ceramic**
Hiromi Kimura[1], Go Okada[1], Takumi Kato[1], Noriaki Kawaguchi[1], Safa Kasap[2], Takayuki Yanagida[1]; [1]Nara Institute of Science & Technology, [2]University of Saskatchewan

P1.13 - **Optically stimulated luminescence properties of $BaBr_2$:Eu translucent ceramic and single crystal**
Hiromi Kimura[1], Takumi Kato[1], Daisuke Nakauchi[1], Go Okada[1], Noriaki Kawaguchi[1], Takayuki Yanagida[1]; [1]Nara Institute of Science & Technology

P1.14 - **Thermoluminescence Analysis of Alexandrite: Towards a Natural Dosimeter**
Neilo M Trindade[1], Marcela R Cruz[2], Henrique Kahn[2], Luiz Jacobsohn[3], Elisabeth M Yoshimura[2]; [1]Instituto Federal de Educação, Ciência e Tecnologia de São Paulo, [2]Universidade de São Paulo, [3]Clemson University

P1.15 - **Microwave assisted solid state synthesis of the up-converting material β-$NaGdF_4$:Yb,Tm.**
Luidgi Giordano[1], Lucas Carvalho Veloso Rodrigues[1]; [1]Universidade de São Paulo

P1.16 - **The same Cd, different optical storage properties**
Miguel Aguirre Stock Grein Barbará[1], Lucas Carvalho Veloso Rodrigues[1]; [1]Universidade de São Paulo

P1.17 - **The preparation and study of fluorescence properties of $NaPO_3$-Nb_2O_5-Ga_2O_3:$Yb3^+$ glasses doped with silver nanoparticles**
Silvia Helena Santagneli[1]; [1]Universidade Estadual Paulista Júlio de Mesquita Filho

P1.18 - **Functionalized Upconversion Nanoparticles for Photodynamic Inactivation of Bacteria**

Marylyn Setsuko Arai[1], Malte Grüner[1], Andrea Simone Stucchi de Camargo[1]; [1]Universidade de São Paulo

P1.19 - **White light emission of the single-phase $CaWO_4:Dy^{3+}$ phosphors by simple synthesis and fast heating**

Helliomar Pereira Barbosa[1], Cássio Cardoso Santos Pedroso[1], Maria Claudia França da Cunha Felinto[2], Oscar Loureiro Malta[3], Hermi Felinto Brito[1]; [1]Universidade de São Paulo, [2]Instituto de Pesquisas Energéticas e Nucleares, [3]Universidade Federal de Pernambuco

P1.20 - **Optical thermometry based on Nd^{3+}-doped fluorophosphate glasses**

Walter Jose Gomes Juste Faria[1], Tássia Souza Gonçalves[1], Andrea Simone Stucchi de Camargo[1]; [1]Instituto de Física de São Carlos

P1.21 - **Synthesis and characterization of silica hybrid materials doped with Ir(III) complexes**

Raquel Riciati do Couto Vilela[1], Kassio Papi da Silva Zanoni[1], Fábio Simões de Vicente[2], Andrea Simone Stucchi de Camargo[1]; [1]Instituto de Física de São Carlos, [2]Universidade Estadual Paulista Júlio de Mesquita Filho

P1.22 - **Structural changes in solvent-induced crystallization of [Tb(bbppn)(NO3)] complex**

Thaiane Gregorio[1], Joyce De Mattos Leão[2], Paula C. Rodrigues[2], Siddharttha Om Kumar Giese[1], Emilson Ribeiro Viana Junior[2], Andréia Gerniski Macedo[2], Luis Dias Carlos[3], Rute A.S. Ferreira[3], Eduardo Lemos de Sá[1], Giovana Gioppo Nunes[1], Jaisa Fernades Soares[1]; [1]Universidade Federal do Paraná, [2]Universidade Tecnológica Federal do Paraná, [3]University of Aveiro

P1.23 - **Buriti Oil as plasticizer in Eu^{3+} red emitting membranes and evaluation of cryo-treatment in the luminescent properties**

Airton Germano Bispo Junior[1], Ana Maria Pires[1], Sergio Antonio Marques Lima[1], Celso Xavier Cardoso[1]; [1]FCT-UNESP Campus de Presidente Prudente

P1.24 - **Photoluminescence in doped and alloyed amorphous selenium**
Cyril Koughia[1], Ozan Gunes[1], Richard Curry[2], Safa Kasap[1]; [1]University of Saskatchewan, [2]University of Manchester

P1.25 - **Insights on the improvement of the optical properties of chemically precipitated hydroxyapatite nanorods**
Jussara Soares da Silva[1], Thales Rafael Machado[1], Héctor Beltrán Mir[2], Eloisa Cordoncillo[2], Elson Longo[1]; [1]Universidade Federal de São Carlos, [2]Universitat Jaume I

P1.26 - **Characterization of MgB_2O_4:Dy, Li and MgB_2O_4:Ce, Li for applications as TL and OSL dosimeter**
Gerardo Rivera Barrera[1], Divanizia do Nascimento Souza[1]; [1]Universidade Federal de Sergipe

Nanophotonics

P1.27 - **Nd^{3+}-Sensitized Gd^{3+}-based Core/Shell/Shell Upconverting Nanoparticles: A Platform for Multicolour Emissions through Bi-directional Energy Transfer**
York Estewin Serge Correales[1], Chanchal Hazra[1], Sajjad Ullah[1], Lais Roncalho Lima[1], Sidney J.L. Ribeiro[1]; [1]Universidade Estadual Paulista Júlio de Mesquita Filho

Nanostructures including photonic crystals

P1.28 - **Plasma type impact on Emission and Structure of Nd-doped Si-rich-HfO_2 films prepared by magnetron sputtering**
Erasto Vergara Hernández[1], Leonardo G. Vega Macotela[1], Tetyana V. Torchynska[1], Larysa Khomenkova[2], Christophe Labbpe[3], Fabrice Gourbilleau[3], Xavier Portier[3]; [1]Instituto Politécnico Nacional, [2]National University «Kyiv-Mohyla academyy», [3]CIMAP/CEA/CNRS/Ensicaen/UCBN

Non-linear effects

P1.29 - **Nonlinear spectroscopy of aqueous copper chlorophyllin solution**
Lucas Fiocco Sciuti[1], Leandro Cocca[1], Pablo Gonçalves[1], Leonardo De Boni[1]; [1]Universidade de São Paulo

P1.30 - **Yb^{3+} doped fluorophosphate glasses as promissing candidates for fiber laser applications**

Tássia Souza Gonçalves[1,2], Lucas Fiocco Sciuti[1], Leonardo De Boni[2], Andrea Simone Stucchi de Camargo[2]; [1]Universidade de São Paulo, [2]Instituto de Física de São Carlos

P1.31 - **Interpreting the two-photon absorption spectrum of Copper Indium Disulfide Quantum dots**

George Brian dos Reis[1], Ruben Fonseca Rodriguez[2], Calink I. L. dos Santos[3], Leiriana Aparecida Pinto Gontijo[3], Marco Antonio Schiavon[3], Leonardo De Boni[2], Cleber R. Mendonça[2], Marcelo G. Vivas[1]; [1]Universidade Federal de Alfenas, [2]Instituto de Física de São Carlos, [3]Universidade Federal de São João Del Rei

Photoinduced effects

P1.32 - **XAFS structural study and electro-optical characteristics of GaAs/SnO_2 heterostructure**

Cristina de Freitas Bueno[1], Luis Vicente de Andrade Scalvi[1], Aline Ramos[2], Eric Mossang[2]; [1]Universidade Estadual Paulista Júlio de Mesquita Filho, [2]Institut Néel, CNRS/UGA

Photovoltaic Materials

P1.33 - **Synthesis of $KBiFe_2O_5$ by eletrospinning**

Rosario Elida Suman Bretas[1], Wolfgang Michael Sigmund[2]; [1]Universidade Federal de São Carlos, [2]University of Florida

P1.34 - **Fluorescence behavior of Aluminum Hydroxide Phthalocyanine in the presence of functionalized multi-wall carbon nanotubes in ethylic solution**

Sergio Fernando Curcio[1], Jonnathan Fernando Duarte[1], Bruna Bueno Postacchini[1], Luiz Orlando Ladeira[2], Jaqueline Soares[1], Thiago Cazati[1]; [1]Universidade Federal de Ouro Preto, [2]Universidade Federal de Minas Gerais

P1.35 - **CdS/CdTe ultra-thin solar cells processed by Magneto-Planar-Sputtering**

Karla Gutiérrez Z-B[1], Patricia Zayas-Bazán[1], Framcisco de Moure-Flores[2], Daniel Jiménez-Olarte[1], Jorge Sastré-Hernández[1], Carlos Hernández-Gutierréz[3], Jorge Aguilar-Hernández[1], Concepción Mejía-García[1], Arturo Morales-Acevedo[3], Gerardo Contreras-Puente[1]; [1]Instituto Politécnico Nacional, [2]Universidad Autónoma de Querétaro, [3]CINVESTAV

P1.36 - **Synthesis of the perovskite $KBiFe_2O_5$ by Solution Combustion**

Márcio Raymundo Morelli[1], Jhonata Rafael Verza[1], Cássia Costa Nascimento[1], Rosario Elida Suman Bretas[1]; [1]Universidade Federal de São Carlos

P1.37 - **Synthesis of perovskite $[KNbO_3]_{0,9}[BaNi_{0,5}Nb_{0,5}O_{3-\delta}]_{0,1}$ by Solution Combustion**

Jhonata Rafael Verza[1], Cássia Costa Nascimento[1], Rosario Elida Suman Bretas[1], Márcio Raymundo Morelli[1]; [1]Universidade Federal de São Carlos

P1.38 - **Effect of solvent annealing on the P3HT molecular phases**

Gregorio Couto Faria[1], Márcio Fernando Cobo[1], Eduardo Ribeiro de Azevedo[1]; [1]Instituto de Física de São Carlos

P1.39 - **Photoresistive behavior of $BaTiO_3$/ $BiFeO_3$ composite**

Renato Boschilia Junior[1], Eduardo Antonelli[1]; [1]Universidade Federal de São Paulo

Photonic band gap materials

P1.40 - **Synthesis and optical properties of $LaCrO_3$-doped $Bi_4Ti_3O_{12}$ ceramics**

Ana Carolina Figueiredo Prado[1], Carmen Greice Renda[1], Jeferson Almeida Dias[1], Márcio Raymundo Morelli[1]; [1]Universidade Federal de São Carlos

Photonic materials and devices

P1.41 - Development of apodization profile for highly sensitive pi-phase shifted fiber Bragg grating moisture and temperature sensor
Navjot Kaur[1], Bowei Zhang[1], Peter Kung[2], Mojtaba Kahrizi[1]; [1]Concordia University Montreal, [2]QPS Photronics

P1.42 - Modeling Time dependant Humidity Diffusion into FBG Polyimide Coating for Sensing Applications
Navjot Kaur[1], Parsoua Abedini Sohi[1], Mojtaba Kahrizi[1]; [1]Concordia University Montreal

P1.43 - Application of a ZnO UV sensor for a scintillation-type radiation detector
Takami Abe[1], Yutaro Suzuki[1], Akira Nakagawa[1], Tetsuya Chiba[1], Michiko Nakagawa[1], Yasuhiro Kashiwaba[2], Ikuo Niikura[1], Yasube Kashiwaba[1], Hiroshi Osada[1]; [1]Iwate University, [2]Sendai National College of Technology

P1.44 - Synthesis and characterization of glasses and glass ceramics of tantalum phosphate
Sergio Alexandre Maestri[1], Bianca Paula Sousa[1], Lia Mara Marcondes[1], Cristiano Ramos Cunha[1], Gael Yves Poirier[1]; [1]Universidade Federal de Alfenas

P1.45 - Thermal and structural properties of new tantalum alkali-phosphate glasses
Bianca Paula Sousa[1], Sergio Alexandre Maestri[1], Lia Mara Marcondes[1], Cristiano Ramos Cunha[1], Camila Pereira[1], Gael Yves Poirier[1]; [1]Universidade Federal de Alfenas

P1.46 - X-ray Induced Sm- Valence Conversion in Ion-Implanted Fluoroaluminate Glasses X-ray Induced Sm-Valence Conversion in Ion-Implanted Fluoroaluminate Glasses
Farley Chicilo[1], Cyril Koughia[1], Richard Curry[2], Russel Gwilliam[3], Andy Edgar[4], Safa Kasap[1]; [1]University of Saskatchewan, [2]University of Manchester, [3]University of Surrey, [4]Victoria University of Wellington

P1.47 - **Optical Switches Based on Induced Gratings**
Ozan Gunes[1], Cyril Koughia[1], Safa Kasap[1], Shi-Jie Wen[2], Rick Wong[2]; [1]University of Saskatchewan, [2]Cisco Systems Inc.

P1.48 - **Vanadium dioxide microrods synthesized from vanadium pentoxide thin films**
Safa Kasap[1]; [1]University of Saskatchewan

Quantum dots

P1.49 - **Effect of Dielectric Constant on Emission of Carbon Quantum Dots Dispersed in Solvents**
Jose Luis Casas Espinola[1], Juan Jose Lopez Hernandez[1]; [1]Instituto Politécnico Nacional

P1.50 - **Temperature-Dependent Photoluminescence Spectra of Carbon Quantum Dots**
Jose Luis Casas Espinola[1], Juan Jose Lopez Hernandez[1]; [1]Instituto Politécnico Nacional

Semiconductors for optoelectronics

P1.51 - **Charge transport in PEDOT:PSS/GPTMS composites**
Renan Colucci[1], Gregorio Couto Faria[1], Lucas Fugikawa Santos[2], Giovani Gozzi[2]; [1]Universidade de São Paulo, [2]Universidade Estadual Paulista Júlio de Mesquita Filho

P1.52 - **Ba-doped ZnO material: photoinduzed properties of novel semiconductor applied on photocatalytic process**
Luis Henrique da Silveira Lacerda[1], Renan Augusto Ribeiro[1], Eduardo Felipe Neves[1], Leonardo Konopaski Andreani[1], Alexandre Camilo Junior[1], Sergio Ricardo de Lazaro[1]; [1]Universidade Estadual de Ponta Grossa

P1.53 - **Theoretical investigation of smart materials as photocatalytic agents in water split and organic degradation**
Luis Henrique da Silveira Lacerda[1], Renan Augusto Ribeiro[1], Eduardo Felipe Neves[1], Leonardo Konopaski Andreani[1], Alexandre Camilo Junior[1], Sergio Ricardo de Lazaro[1]; [1]Universidade Estadual de Ponta Grossa

P1.54 - **Transmittance of highly doped TiO_2: Yb^{3+} films deposited by sol-gel dip-coating method Transmittance of highly doped TiO_2: Yb^{3+} films deposited by sol-gel dip-coating method**

Luiz Felipe Kaezmarek Pedrini[1], Luis Vicente de Andrade Scalvi[1]; [1]Universidade Estadual Paulista Júlio de Mesquita Filho

TUESDAY , AUGUST 28

SESSION P2
19:00 - 21:00 - Room Maresias

Biophotonics

P2.1 - **Water dispersible NIR-II Dye-Sensitized Core/Active Shell Upconversion Nanoparticles**

Laís Galvão Caetano[1], Chanchal Hazra[1], Sajjad Ullah[1], Sidney J.L. Ribeiro[1]; [1]Universidade Estadual Paulista Júlio de Mesquita Filho

Energy conversion in Rare Earths doped materials

P2.2 - **Blue up-conversion emission in Tm^{3+}/Yb^{3+} co-doped $Pb_2P_2O_7$-Nb_2O_5-XF_2 (X = Mg, Ca, Sr, Ba) glass and glass-ceramics**

Danilo Manzani[1], Sidney J.L. Ribeiro[2]; [1]Universidade de São Paulo, [2]Universidade Estadual Paulista Júlio de Mesquita Filho

Energy transfer

P2.3 - **Fluorescent proteins as emission sensitizing agents in europium nanoparticles bioconjugates**

Fernando Eduardo Maturi[1], Sidney J.L. Ribeiro[2], Bradley Olsen[3]; [1]Instituto de Química - UNESP / Campus de Araraquara, [2]Universidade Estadual Paulista Júlio de Mesquita Filho, [3]Massachusetts Institute of Technology

Luminescent materials

P2.4 - **Fluorescent H-aggregates from a non-planar AlOHPc phthalocyanine in spin-coated film**

Sergio Fernando Curcio[1], Cassiano Batesttin Costa[1], Vanessa Mosqueira[1], Bruna Bueno Postacchini[1], Thiago Cazati[1]; [1]Universidade Federal de Ouro Preto

P2.5 - **Rare-earth doped niobium germanate glass and nanocrystalline glass-ceramics for optical application**

Lia Mara Marcondes[1], Jeferson Almeida Dias[2], Bianca Paula Sousa[1], Sergio Alexandre Maestri[1], Fabia Cassanjes[1], Gael Yves Poirier[1]; [1]Universidade Federal de Alfenas, [2]Universidade Federal de São Carlos

P2.6 - **A generalized Drude – Lorentz model for refractive index behavior of Tellurite Glasses**

Anderson Gonçalves[1,2], Vitor Santaella Zanuto[1], Nelson G. C. Astrath[1], Antonio Medina Neto[1], Mauricio Apararecido Ribeiro[2], Ervin Kaminski Lenzi[2], Andressa Novatski[2]; [1]Universidade Estadual de Maringá, [2]Universidade Estadual de Ponta Grossa

P2.7 - **Terbium-doped transparent glass-ceramics containing $TbPO_4$ crystals: a promising material for photonic applications**

Douglas Faza Franco[1,2], Hssen Fares[1], Silvia Helena Santagneli[1], Jonatas Campanella[2], Maria Célia Bertolini[2], David Sampaio[3], Paulo Sergio Pizani[3], Marcelo Nalin[1]; [1]Universidade Estadual Paulista Júlio de Mesquita Filho, [2]Instituto de Química - UNESP / Campus de Araraquara, [3]Universidade Federal de São Carlos

P2.8 - **Selective and Reversible Emission evolution from Highly Fluorescent Ag Nanoclusters Embedded Fluorophosphate Glasses for High-Power White-Light-Emitting-Diodes (W-LEDs)**

Hssen Fares[1], Tarcio Castro Silva[2], Douglas Faza Franco[2], Robson Rosa da Silva[1], Sidney J.L. Ribeiro[2], Marcelo Nalin[2]; [1]Instituto de Química - UNESP / Campus de Araraquara, [2]Universidade Estadual Paulista Júlio de Mesquita Filho

P2.9 - **Synthesis of tungstate nanoparticles using pechini method and their luminescent properties**

Maria Claudia França da Cunha Felinto[1], Renan Paes Moreira[1], Hermi Felinto Brito[2], Ercules Teotonio[3], Oscar Loureiro Malta[4]; [1]Instituto de Pesquisas Energéticas e Nucleares, [2]Universidade de São Paulo, [3]Universidade Federal da Paraíba, [4]Universidade Federal de Pernambuco

P2.10 - **Luminescence study of Eu^{3+}β-diketonates doped PMMA films.**
Leonardo Henrique Comini Francisco[1], Maria Claudia França da Cunha Felinto[1], Hermi Felinto Brito[2], Ercules Teotonio[3], Oscar Loureiro Malta[4]; [1]Instituto de Pesquisas Energéticas e Nucleares, [2]Universidade de São Paulo, [3]Universidade Federal da Paraíba, [4]Universidade Federal de Pernambuco

P2.11 - **Sol Gel Eu3+-doped germanate based materials: Syntheis, Propertiesand Aplications**
Rogéria Rocha Gonçalves[1], Fábio José Caixeta[1], Anderson Aparecido Alves Tostes[1], Vítor Santos Souza[1], Leonardo Sousa Rosa[1], Ramon Josef Nicolete Nascimento[1], Felipe Thomaz Aquino[2,1], Lauro June Queiroz Maia[3]; [1]Universidade de São Paulo, [2]Universidade Federal de Mato Grosso, [3]Universidade Federal de Goiás

P2.12 - **Photophysical properties of the Dil dye used as fluorescent probe in polymeric nanoparticules**
Izabel Trindade[1], Rodrigo Moreira Valerio[1], Caio Cesar de Paula[1], Gwenaelle Pound-Lana[1], Vanessa Mosqueira[1], Bruna Bueno Postacchini[1]; [1]Universidade Federal de Ouro Preto

P2.13 - **Luminescent Sensor Based on the Rare-Earth / Fibroin Composite Thin Films**
Euzane Gomes Rocha[1], José Maurício Almeida Caiut[1]; [1]Universidade de São Paulo

P2.14 - **Raman gain coefficient of Er^{3+} doped Tellurite glasses**
Daniele Toniolo Dias[1], Anderson Gonçalves[2,3], Aloisi Somer[3], Vitor Santaella Zanuto[2], Antonio Medina Neto[2], Nelson G. C. Astrath[2], Andressa Novatski[3]; [1]Universidade Tecnológica Federal do Paraná, [2]Universidade Estadual de Maringá, [3]Universidade Estadual de Ponta Grossa

P2.15 - **Spectroscopic properties and Judd-Ofelt parameters of Eu^{3+} in $In(PO_3)_3$ stabilized fluoroindate glasses.**
Gustavo Galleani[1], Walter Jose Gomes Juste Faria[2], Andrea Simone Stucchi de Camargo[2], Hellmut Eckert[2]; [1]Universidade de São Paulo, [2]Instituto de Física de São Carlos

P2.16 - **Size Dependent Tunable Color Upconversion Luminescence Er^{3+} and Yb^{3+} Doped $NaGdF_4$ Nanoparticles**
Latif Ullah Khan[1,2], Zahid Ullah Khan[3]; [1]Centro Nacional de Pesquisa em Energia e Materiais, [2]Laboratório Nacional de Nanotecnologia, [3]Universidade de São Paulo

P2.17 - **High-purity Yb^{3+}, Er^{3+}, Pr^{3+} co- and triply-doped zinc-tellurite glasses for near- and mid-IR light sources**
Danilo Manzani[1], Vitaly V. Dorofeev[2], S. Motorin[3], B. Galagan[3], V. Koltashev[4]; [1]Universidade de São Paulo, [2]G.G. Devyatykh Institute of Chemistry of High-Purity Substances, [3]Center of Laser Technology and Material Science, [4]Fiber Optics Research Center

P2.18 - **Structural and temperature dependence of photoluminescence on Nd^{3+} doped TiO_2 pastille in different thermal annealing**
Jhenifer Naiara Lopes[1], José Carlos Silva Filho[1], Djalmir Nestor Djalmir[1], Viviane Pilla[1], Anielle Christine Almeida Silva[1], Noélio Oliveira Dantas[1], Acácio Aparecido de Castro Andrade[1]; [1]Universidade Federal de Uberlândia

P2.19 - **Erbium-doped niobium germanate glass and glass-ceramics for photonic application**
Lia Mara Marcondes[1], Bianca Paula Sousa[1], Cristiano Ramos Cunha[1], Jeferson Almeida Dias[2], Fabia Castro Cassanjes[1], Gael Yves Poirier[1]; [1]Universidade Federal de Alfenas, [2]Universidade Federal de São Carlos

P2.20 - **RECOLA Project- Recovery of lanthanides and other metals from Waste Electrical and Electronic Equipment (WEEE)**
Sidney J.L. Ribeiro[1]; [1]Universidade Estadual Paulista Júlio de Mesquita Filho

P2.21 - **Cylindrical luminescent solar concentrators**
Amanda Nina Sargi do Nascimento[1], Sidney J.L. Ribeiro[1]; [1]Universidade Estadual Paulista Júlio de Mesquita Filho

P2.22 - **Calcium phosphate coacervates functionalization with chlorhexidine for controlled drug release**
Juliana Moreno de Paiva[1]; [1]Instituto de Química - UNESP / Campus de Araraquara

P2.23 - **Fluorescent PMMA/PFO nanofibers for monotoring volatile organic compounds**
Rafaela C. Sanfelice[1]; [1]Universidade Federal do Triângulo Mineiro

Nanophotonics

P2.24 - **Immunosensor for venous thromboembolism diagnostics based on the detection of factor VIII**
Anna Laura Yuri Yokomichi[1], Andressa Morais Vieira[1], Lais Roncalho Lima[2], Elenice Deffune[3], Sidney J.L. Ribeiro[2], Marli Leite de Moraes[1]; [1]Universidade Federal de São Paulo, [2]Instituto de Química - UNESP / Campus de Araraquara, [3]Universidade Estadual Paulista Júlio de Mesquita Filho

P2.25 - **Immunosensor for Methicillin-resistant Staphylococcus aureus infection diagnosis**
Andressa Morais Vieira[1], Anna Laura Yuri Yokomichi[1], Lais Roncalho Lima[2], Elenice Deffune[3], Sidney J.L. Ribeiro[3], Henrique Apolonio de Oliveira[1], Marli Leite de Moraes[1]; [1]Universidade Federal de São Paulo, [2]Instituto de Química - UNESP / Campus de Araraquara, [3]Universidade Estadual Paulista Júlio de Mesquita Filho

Nanostructures including photonic crystals

P2.26 - **Incorporation of Fe_{3-xO4}@SiO_2 stellate nanoparticles in phosphate glasses via melting-quenching process**
Juliane Resges Orives[1], Benoit P. Pichon[2], Damien Mertz[2], Kevin Sartori[2], Sylvie Begin-Colin[2], Marcelo Nalin[1]; [1]Universidade Estadual Paulista Júlio de Mesquita Filho, [2]Université de Strasbourg

P2.27 - **Improvement of corrosion resistance of AISI 304L stainless steel by plasma duplex treatment using the cathodic cage**

Aguinaldo Barata[1], Bruno Poubel Pimentel[1], Leonardo Cabral Gontijo[1]; [1]Instituto Federal de Educação, Ciência e Tecnologia do Espírito Santo

P2.28 - **MoS_2 modified nanostructured materials for photocatalytic applications**

Elias Paiva Ferreira Neto[1], Sajjad Ullah[1], Ubirajara Pereira Rodrigues-Filho[2], Sidney J.L. Ribeiro[1]; [1]Instituto de Química - UNESP / Campus de Araraquara, [2]Universidade de São Paulo

Non-linear effects

P2.29 - **Dependence of the saturation intensity with the dopant ion concentration: application to the study of nonlinear optical properties in Nd-doped phosphate glass matrix**

Jackson M de Souza[1], Djalmir Nestor Djalmir[1], Noélio Oliveira Dantas[1], Anielle Christine Almeida Silva[1], Viviane Pilla[1], Acácio Aparecido de Castro Andrade[1]; [1]Universidade Federal de Uberlândia

Photoconductivity

P2.30 - **Study of all-sprayed ZnO UV photodiode using CNT/PEDOT:PSS and AgNW as electrodes**

Gabriel Leonardo Nogueira[1], Mayk Rodrigues Nascimento[1], Maykel Santos Klem[1], Rogério Miranda Morais[1], Maiza da Silva Ozório[1], Felipe Barbosa Soares[2], Sidney Alves Lourenço[3], Neri Alves[1]; [1]FCT-UNESP Campus de Presidente Prudente, [2]Universidade Estadual de Londrina, [3]Universidade Tecnológica Federal do Paraná

P2.31 - **Low Cost Humidity Sensor Based on PANI/PEDOT:PSS Printed on Paper**

Rogério Miranda Morais[1], Maykel Santos Klem[2], Gabriel Leonardo Nogueira[2], Tiago Carneiro Gomes[1], Neri Alves[2]; [1]Universidade Estadual Paulista Júlio de Mesquita Filho, [2]FCT-UNESP Campus de Presidente Prudente

P2.32 - **Synthesis and characterization of polyhedral oligomeric silsesquioxanes anchored with glycidoxy, phenyl and methacrylate for electrically active composites**

Syeda Nida Zainab Kazmi[1], Sidney J.L. Ribeiro[2]; [1]Instituto de Química - UNESP / Campus de Araraquara, [2]Universidade Estadual Paulista Júlio de Mesquita Filho

Photovoltaic Materials

P2.33 - **Phase evolution, optical and dielectric properties of La-doped $Bi_5Ti_3CoO_{15}$ phases**

Jeferson Almeida Dias[1], Ana Carolina Figueiredo Prado[1], Márcio Raymundo Morelli[1]; [1]Universidade Federal de São Carlos

P2.34 - **Sustainable route for the fabrication of conductive carbon and silver inks**

Robson Rosa da Silva[1], Deivy Wilson Masso[1], Sidney J.L. Ribeiro[2], Osvaldo Novais Oliveira Jr.[1]; [1]Instituto de Física de São Carlos, [2]Instituto de Química - UNESP / Campus de Araraquara

Photonic band gap materials

P2.35 - **Optical properties of sodium and titanium-based tellurite glasses Optical properties of sodium and titanium-based tellurite glasses**

Jaqueline Valeski Gunha[1], Anderson Gonçalves[2,1], Aloisi Somer[1], Andressa Novatski[1]; [1]Universidade Estadual de Ponta Grossa, [2]Universidade Estadual de Maringá

P2.36 - **Influence of crystallinity and particle size on Zirconate Photoluminescence**

Agda Eunice Souza[1], Silvio Rainho Teixeira[1], Celso Xavier Cardoso[2], Diogo Eduardo Andrade[1], Valdinei Liber Faria[1], Elson Longo[3]; [1]Universidade Estadual Paulista Júlio de Mesquita Filho, [2]FCT-UNESP Campus de Presidente Prudente, [3]Universidade Federal de São Carlos

P2.37 - **Optical characterization of Sb_2O_3-WO_3-ZnO glasses**
Joy Sankar Roy[1], Younes Messaddeq[2]; [1]Universidade Estadual Paulista Júlio de Mesquita Filho, [2]Université Laval

Photonic materials and devices

P2.38 - **Bacterial Cellulose-SiO2@TiO2 Membrane with Self-Cleaning Properties**
Andreia Sousa Monteiro[1], Rafael Romano Domeneguetti[1], Michel Wong Chi Man[2], Hernane da Silva Barud[3], Sidney J.L. Ribeiro[1]; [1]Instituto de Química - UNESP / Campus de Araraquara, [2]Institut Charles Gerhardt Montpellier, [3]Centro Universitário de Araraquara

P2.39 - **Preparation of Polymeric Optical Fibers using 3D Printing technology and its application as sensors.**
Leonardo Vieira Albino[1], Molíria Vieira dos Santos[2], Sabrina Nicoleti C. dos Santos[2], Cleber R. Mendonça[2], Marcelo Nalin[1]; [1]Universidade Estadual Paulista Júlio de Mesquita Filho, [2]Universidade de São Paulo

P2.40 - **Growth of monocrystals in oxide glasses containing rare earth ions**
Antonio Eduardo Souza[1], Marcelo Nalin[2]; [1]Instituto de Química - UNESP / Campus de Araraquara, [2]Universidade Estadual Paulista Júlio de Mesquita Filho

P2.41 - **Preparation and study of germanete glasses for application in photonics in the infrared region**
Roger Gomes Fernandes[1], Paula Valle[1], Douglas Faza Franco[2], Marcelo Nalin[2]; [1]Instituto de Química - UNESP / Campus de Araraquara, [2]Universidade Estadual Paulista Júlio de Mesquita Filho

P2.42 - **As2S3 chalcogenide glass doped with cadmium ferrite nanoparticles**
Joao Victor Schiavon[1], Silvia Helena Santagneli[2], Miguel Jafelicci[1], Marcelo Nalin[2], Rodrigo Fernando Costa Marques[1]; [1]Instituto de Química - UNESP / Campus de Araraquara, [2]Universidade Estadual Paulista Júlio de Mesquita Filho

P2.43 - **Optical properties of Nd:YAB and Rhodamine 6G embedded in a polymer matrix**

Antsar Rih Hlil[1], Lauro June Queiroz Maia[2], Jean-Sebastien Boisvert[3,1], Hassan Iden[4], Yalina García-Puente1[1], Yannick Ledemi[4], Younes Messaddeq[4], Raman Kashyap[1]; [1]Polytechnique Montreal, [2]Universidade Federal de Goiás, [3]École Polytechnique de Montreal, [4]Université Laval

P2.44 - **ITON thin films characterization for application in infrared sensors**

Marina Sparvoli[1], Victor Pederzini[1], Mario Alexandre Gazziro[1], Inès Pereyra[2], Igor Yamamoto Abe[2], Alexandre Lopes[2], Roberto Koji Onmori[2]; [1]Universidade Federal do ABC, [2]Universidade de São Paulo

P2.45 - **ZnO Schottky diode with rGO semi-transparent organic electrode for UV detection application**

Douglas Henrique Vieira[1], Gabriel Leonardo Nogueira[2], Maiza da Silva Ozório[2], Mayk Rodrigues Nascimento[2], Alessandro Henrique Lima[3], Welber Gianini Quirino[3], Neri Alves[2]; [1]Universidade Estadual Paulista Júlio de Mesquita Filho, [2]FCT-UNESP Campus de Presidente Prudente, [3]Universidade Federal de Juiz de Fora

P2.46 - **Temperature dependence of the thermal coefficient of optical path in the vitreous system PANK**

José Carlos Silva Filho[1], Sergio C Zilio[2], Djalmir Nestor Djalmir[1], Viviane Pilla[1], Anielle Christine Almeida Silva[1], Noélio Oliveira Dantas[1], Acácio Aparecido de Castro Andrade[1]; [1]Universidade Federal de Uberlândia, [2]Universidade de São Paulo

P2.47 - **Oxyfluoride tellurite glasses for optical applications**

Fabia Castro Cassanjes[1], Juliana Santos Barbosa[1], Thierry Cardinal[2], Sylvain Danto[2], Clement Strutynski[2], Yannick Petit[2], Gael Yves Poirier[1]; [1]Universidade Federal de Alfenas, [2]Institute de Chimie de la Matière Condensée de Bordeaux

P2.48 - **Allium Cepa L. biopolymeric film based-flexible organic lightemitting diodes**

Hernane da Silva Barud[1], Thales Alves Faraco[2], Diogenes D Santos[3], Robson Rosa da Silva[4,5], Hálice de Xavier Oliveira Silva[2], Marco Cremona[6], Welber Gianini Quirino[2], Clóvis Augusto Ribeiro[5], Cristiano Legnani[2]; [1]Centro Universitário de Araraquara, [2]Universidade Federal de Juiz de Fora, [3]Universidade Estadual Paulista Júlio de Mesquita Filho, [4]Instituto de Física de São Carlos, [5]Instituto de Química - UNESP / Campus de Araraquara, [6]Pontifícia Universidade Católica do Rio de Janeiro

Quantum dots

P2.49 - **Eco-friendly Synthesis of Fluorescent Cu-In-Zn-S Quantum Dot/Carboxymethyl Cellulose Nanocomposites for Potential Applications in Solar Energy Conversion and Catalysis**

Herman Sander Mansur[1], Josue Amaral-Junior[1], Alexandra A. P. Mansur[1]; [1]Universidade Federal de Minas Gerais

P2.50 - **Spectroscopic characterization of resins doped with CdSe/ZnS quantum dots for x-rays detection**

Viviane Pilla[1], Marcos Garcia de Oliveira Júnior[1], Cristiano Alves Guarany[1], Djalmir Nestor Djalmir[1], Acácio Aparecido de Castro Andrade[1], Antônio Ariza Gonçalves Junior[1], Michel Felipe Franco Francisco[1]; [1]Universidade Federal de Uberlândia

P2.51 - **Preliminary results on the study of the nonlinear optical properties of CdS quantum dots in phosphate glass**

Jackson M de Souza[1], Viviane Pilla[1], Djalmir Nestor Djalmir[1], Anielle Christine Almeida Silva[1], Noélio Oliveira Dantas[1], Acácio Aparecido de Castro Andrade[1]; [1]Universidade Federal de Uberlândia

Semiconductors for optoelectronics

P2.52 - Multi Layered Graphene Grown in a Single Step Process as Electrodes for Organic Emitting Devices

Hálice de Xavier Oliveira Silva[1], Indhira Oliveira Maciel[1], Benjamin Fragneaud[1], Welber Gianini Quirino[1], Cristiano Legnani[1]; [1]Universidade Federal de Juiz de Fora

P2.53 - Flexible organic light-emitting diodes fabricated on biocompatible and biodegradable gellan gum substrates

Thales Alves Faraco[1], Hálice de Xavier Oliveira Silva[1], Andréia Bagliotti Meneguin[2], Tais de Cassia Ribeiro[2], Indhira Oliveira Maciel[1], Benjamin Fragneaud[1], Welber Gianini Quirino[1], Hernane da Silva Barud[2], Cristiano Legnani[1]; [1]Universidade Federal de Juiz de Fora, [2]Centro Universitário de Araraquara

AUTHOR INDEX

A

B

C

D

E

F

G

H

I

J

K

L

M

N

S

T

W

X

Y

Z