## **CONFERENCE PROGRAM**

The 7<sup>th</sup> International Conference on the Physics of Optical Materials and Devices (ICOM2024) AND The 4<sup>th</sup> International Conference on Phosphor Thermometry (ICPT2024)

> August 26<sup>th</sup> to 30<sup>th</sup>, 2024 Budva-Bečići, Montenegro

## Sunday, August 25<sup>th</sup>, 2024 Hotel Mediteran (Convention center) 16.00-20.00 Registration (Convention center)

Monday, August 26 <sup>th</sup> , 2024			
8.00-16.00	Registration (Convention center)		
	<b>Opening Ceremony</b>		
9.00-09.10	Chairpersons - Ž. Antić, B. Viana, M. Dramićanin		
		chair – Frank Beyrau	
	Session 1:	9.15-10.30	
	Session cha	iir: F. Beyrau	
	Keynote lecture P. l	Dorenbos How to eng	gineer lanthanide
09.10-09.45	luminescence quenchin	g temperature and lant	hanide charge
	carrier trap depths in c	ompounds	
09.45-10.10	Invited lecture M. I	vanov Rare-earth dop	oed sesquioxide
07.43-10.10	nanophosphors made b		
10.10-10.35	Invited lecture B. F		
	flows based on imaging	g isolated submicron ph	osphor particles
10.35-11.00		<b>Coffee Break</b>	
Session 2: 11.00-12.30			
Session chair: P. Dorenbos			
11.00-11.35	Keynote lecture I. Tanaka Recommender System for the		
11.00-11.55	Discovery of New Inorg	ganic Compounds	
11.35-12.00	Invited lecture R. M	larin Extending the re	ach of
11.55-12.00	luminescence sensing:	3D thermal mapping	
12.00-12.15	S. Som Highly Efficie	nt Deep Red-Emitting	Mn <sup>4+</sup> Phosphors for
12.00-12.13	Enhanced Plant Growth	h and Advanced Optica	l Thermometry
12.15-12.30	B. Bendel Distance c	ontrol of non-radiative	transitions to
12.15-12.50	design luminescent thermometers		
12.30-14.30	Break		
	Parallel Sessions 3,	4 and 5: 14.35-16.	.00
	3 Amphitheatre	4 Amphora	5 Gallery
	Session chair: M.	Session chair: I.	Session chair:
	Ivanov	Tanaka	R. Marin

	T 11 C	T 11	T 11
14.35-15.00	Invited lecture C. Winters Dynamic Testing with Thermographic Phosphor Digital Image Correlation	Invited lecture D. Kulesza Pushing the limits: The 25-1225 K Wide Range Garnet Luminescence Thermometers	Invited lecture Y. Li Near- infrared persistent luminescence phosphors
15.00-15.15	A. Kabański Imidazolium-based double perovskites containing Cr <sup>3+</sup> ions for highly sensitive luminescent thermometry	S. Hirsch 2D surface phosphor thermometry in a shallow boiling water channel	K. Bogdanov Active microresonators with whispering gallery modes: morphological features and potential applications
15.15-15.30	V. Utochnikova Lanthanide-based luminescent thermometer: from fundamentals to the prototype	O. Le Bourgeois Simultaneous temperature and pressure imaging in aerodynamics research combining luminescent metal complexes and thermographic phosphors	M. Adaszyński The novel, inorganic LED phosphor based on Ce <sup>3+</sup> and Cr <sup>3+</sup> doped silicates
15.30-15.45	C. Kiss Temperature dependence of the excitation and emission spectra in Cs <sub>2</sub> SnCl <sub>6</sub> activated by Sb <sup>3+</sup> and Bi <sup>3+</sup>	T. Cai A novel fluid density matched temperature- sensitive phosphorescent particle for simultaneous measurement of temperature and velocity	M. Buryi Influence of the facet of ZnO on the cesium lead bromide attaching abilities in a heterostructure
15.45-16.00	A. Vanetsev The relation between crystallinity and luminescent properties in lutetium	B. Fond Dual- phosphor thermometry to probe the flame particle interaction	M. Motyka Optical properties of InAs/GaSb and InAs/InAsSb type- ii multi quantum

	phosphate	in a model packed	wells for mid-
	nanoparticles	hed	infrared
	nunop un neres		optoelectronics
			applications
16.00-16.30		<b>Coffee Break</b>	
Paralle	l Sessions 6 and 7, R	<b>EMTES Project V</b>	Workshop:
	16.30	-18.00	
	( Amphitheatua	7 Amphana	REMTES
	6 Amphitheatre Session chair: B.	7 Amphora Session chair: (	- Gallery
	Session chair: В. Fond	Winters	Chair: M.
	rona	winters	Dramićanin
	K. Bartosiewicz	A. Mendieta	16.30-16.50
	From fundamental	Simultaneous onlin	G
	insight to property	phosphor thermome	etry Science Fund
	<i>control in</i>	and digital image	of the Republic of
	$Tb_2Y_xAl_5O_{12}$ :Ce (x= 1 and 0.1) garnets via	correlation (DIC) during metal	Serbia:
16.30-16.45	nonstoichiometric	formability testing	<i>Opportunities</i>
	engineering: impacts	jor maoning resung	
	on structure, defects,		
	photoconversion,		
	luminescence and		
	scintillation properties		
	K. Omuro Crystal	T. Naillon	16.50-17.10
	Growth and Optical	Visible/NIR	Ž. Antić
	Properties of Ce-doped	luminescence for	Vinča
16.45-17.00	$(Lu, Tb)_3(Al, Ga)_5O_{12}$	nanothermometry w	
	Scintillators for X-ray Imaging	transition metal dop oxides nanoparticle	Jeu
	Imaging		Introduction
	V Jory Scindilladi	R. Vogel Operand	lo 17.10-17.30
	V. Jary Scintillation properties of Zn <sub>2</sub> SiO <sub>4</sub>	Luminescence	M.D.
	nanoparticles in Na <sub>2</sub> O-	Thermometry of	Dramićanin
17.00-17.15	ZnO-SiO <sub>2</sub> glass system:	Propane	REMTES
	Toward a distributed	Dehydrogenation	Project:
	sensor of harmful	Catalysis	Objectives
	radiation		
	Y. Urano	M. Li YAG:Dy co-	
17.15-17.30	Development of	doped with Tb for	Ž. Antić
	$Tl:Cs_3(Cu, Li)_2I_5$	lifetime-based	REMTES Project: Work
	Scintillator Crystals for	phosphor thermome	etry Trojeci. work

	Neutron and Gamma- ray Dual Detection	from room temperature to 1600°C	Packages 1 and 2
17.30-17.45	K. Kamada Effects of refractive index and grain size on scintillator properties of thermal neutron scintillator	W. Cheng A phase transformation– phosphorescence model of YSZ:Eu and its application in two- dimensional thermal history measurement	
17:45-18.00	S. Kursawa Development of Garnet-type Scintillation Crystal with Infrared Emission Band for the Dose-Rate Sensor with Optical Fiber	T. Cai Three- dimensional surface temperature measurement utilizing lifetime-based phosphor thermometry	<b>17.45-18.00</b> Z. Ristić <i>REMTES</i> <i>Project: Work</i> <i>Packages 3</i> <i>and 4</i>
19.30-21.00	WELCOME PARTY Open pool		

Tuesday, August 27 <sup>th</sup> , 2024				
8.00-16.00	<b>Registration (Convention center)</b>			
	Session 8 (Amphitheatre): 9.00-10.30			
	Session chair: H. Brault			
9.00-9.35	Keynote lecture M. Suta Selection rules of non-radiative			
9.00-9.55	transitions and their consequences for luminescent materials			
	Invited lecture D. Witkowski From demonstration to			
9.35-10.00	application: Considerations for high-speed phosphor			
	thermometry in high transient heat flux environments			
10.00-10.15	K. Hingerl Can Imaging Ellipsometry Beat the Diffraction			
10.00-10.13	Limit?			
10.15-10.30	A. Lushchik Detection of radiation-induced frenkel defects in			
10.15-10.50	functional metal oxides via optical and EPR methods			
10.30-11.00	Coffee Break			
	Session 9 (Amphitheatre): 11.00-12.30			
Session chair: M. Suta				
11.00-11.35	Keynote lecture H. Brault Luminescent Coordination			
11.00-11.35	Polymers or MOFs as Temperature Sensors			

	Invited lecture M. F	Rrik Transition metal ion	as for lighting and
11.35-12.00	Invited lecture M. Brik Transition metal ions for lighting and thermometry - theoretical modeling		
12.00-12.15	Z. Ristić Machine learning assisted thermometry of Mn <sup>5+</sup> doped		
12.00 12.13	$Ca_6Ba(PO_4)_4O$ phosphor		
12.15-12.30		ofiles of electrically heat	
		intensity ratio (IR) phosp	
12.30-12.45	Presentation	tory and Process Equ	ipment
12.45-14.30		Break	
Parallel	Sessions 10 and 11,	<b>REMTES Project V</b>	Vorkshop:
		5-16.00	•
	10 Amphitheatre	11 Amphora	REMTES
	Session chair: D.	Session chair: D.	Gallery
	Witkowski	Kulesza	Chair: Ž. Antić
	Invited lecture V.	Invited lecture K.	
	Castaing Persistent	Boldyrev High-	
	phosphor thin films:	resolution	
14.35-15.00	processing and	spectroscopy for	
	optical environment	luminescence	
	matter	cryothermometry and	14.35-15.05
		magnetic field sensing	Roundtable
	T. Yamamoto	M. Stelter Towards	REMTES,
	Phase Stability and	thermographic	LEDtechGROW, HYDIS
	Electronic Structure	Shake-The-Box:	Networking
	of Tri-Halide	Combined three-	Terrorning
15.00-15.15	Perovskites	dimensional flow	
		thermometry and	
		velocimetry using thermographic	
		phosphors	
	T. Förster Design	R. Jankowski	
	strategies for blue-to-	Molecular	15.05-16.00
	uv upconversion	frameworks built of	Roundtable
15.15-15.30	phosphors with Pr <sup>3+</sup>	luminescent	REMTES:
		ruthenium(ii)	Progress and
		polycyanidometallate s for optical	Plans
		s for optical thermometry	
		inci nonici y	1

15.30-15.45	L. Träger Mn <sup>2+</sup> as a local luminescent probe for unusual ligand field effects	M. Wyczesany Polycyanidometallate s as effective tools for modulating europium(III)- tenkim(III)-	
	G. Kinik A real	terbium(III)-based optical thermometry P. Bonarek	
15.45-16.00	competitor to classic ruby: Photoluminescence properties of Cr <sup>3+</sup> - activated AlB <sub>4</sub> O <sub>6</sub> N	Experimental and theoretical studies on the application of dicyanidoplatinates(I I) as optical thermometers	
16.30-18.30	POSTER SESSION & Coffee Break Banquet hall		

Wednesday, August 28 <sup>th</sup> , 2024				
8.00-10.00	Registration (Convention center)			
	Session 12 (Amphitheatre): 9.00-10.30			
	Session chair: L. Carlos			
9.00-9.35	Keynote lecture A. Meijerink Lanthanides working together			
9.35-10.00	Invited lecture A. Ciric Sensor fusion luminescence			
9.55-10.00	thermometry			
10.00-10.15	E. Zych How Pr <sup>3+</sup> -doped luminescent thermometers shine -			
10.00-10.13	exploring their bright sides and boundaries			
	S. Jobic Topochemistry to the rescue for generating new host			
10.15-10.30	matrices for luminescent materials: a study of $oA-La_2O_2S$ (Ln=			
	Ce, Eu, Pr)			
10.30-11.00	Coffee Break			
	Session 13 (Amphitheatre): 11.00-12.30			
	Session chair: A. Meijerink			
11.00-11.35	Keynote lecture L. Carlos Water's Hidden Density Dance			
11.35-12.00	Invited lecture F. Rabouw Photonic Effects on Lanthanide			
11.55-12.00	Luminescence			
<b>12.00-12.15</b> G. Lozano Designed optical environments to tailor the				
12.00-12.13	emission on nanophosphor thin films			

12.15-12.30	S. Perruchas Luminescence mech	anochromism of hybrid	
12.15-12.30	copper iodide materials		
12.35-12.45	CONFERENC	СЕ РНОТО	
12.45-14.35	Brea	k	
	Parallel Sessions 14 and 15:	14.35-16.00	
	14 Amphitheatre 15 Amphora		
	Session chair: F. Rabouw	Session chair: A. Ćirić	
	Invited lecture D. Van der	Invited lecture M.	
14.35-15.00	Heggen Persistent phosphors enabling the study of uncommon divalent lanthanides	Ramirez Tailoring the optical properties of 2D materials via ferroelectric substrates	
15.00-15.15	V. Fritz Persistent Phosphors for Outdoor Applications: Bridging the gap between models and real-world conditions	J. Miller The behavior of La <sub>2</sub> O <sub>2</sub> S:Eu as a function of excitation duration	
15.15-15.30	M. Romero Aguilar Rationalizing persistent luminescence: Getting into the processes	S. Chorazy Cyanido metal complexes for advanced solids linking non-linear optics with photoluminescence	
15.30-15.45	H. Kai Study on the Photoluminescence and Persistent Luminescence in the Rhombohedral Pyrochlore $M_{1.99}Mn_{0.01}La_3Sb_3O_{14}$ ( $M = Mg$ , Zn, Ca, Mn)	M. Szymczak Optical pressure sensors utilizing the ${}^{4}T_{2g} \rightarrow {}^{4}A_{2g}$ electronic transition of $Cr^{3+}$ ions	
15.45-16.00	M. Zhao Interstitial Sodium- Stabilized Divalent Europium in Lu <sub>2</sub> SiO <sub>5</sub> and Green Persistent Luminescence	G. Sutton Spectral optimisation of intensity ratio phosphor thermometry for Mg <sub>4</sub> FGeO <sub>5.5</sub> :Mn (MFG)	
18.00-00.30	BOAT CRUISE AND CONFERENCE DINNER PARTY		
~18.30 Boarding buses (the exact time will be announced) 20.30-23.30 Boat cruise around the Kotor Bay and Conference dinner 00.30 Return to the hotel			

Thursday, August 29 <sup>th</sup> , 2024		
8.00-10.00	Desk open (Convention center)	

Session 16 (Amphitheatre): 9.00-10.30				
	` <b>-</b>	hair: Z. Xia		
9.00-9.35	Keynote lecture S. Tanabe NIR Persistent luminescence of $Er^{3+}$ in REAGG phosphors and their thermometric properties			
9.35-10.00	Invited lecture G. C Transfer Amplifies Upc	Chen Size-Dependent	Lanthanide Energy	
10.00-10.15	J. Nedeljković TiO <sub>2</sub> -based interfacial charge transfer complex with dihydroquercetin: Optical properties and reactivity of photogenerated species			
10.15-10.30	D. Alves Galico Ma lanthanide(III) complex	gneto-optical thermon	netry with	
10.30-11.00		<b>Coffee Break</b>		
	Session 17 (Amphi	theatre): 11.00-12	.30	
	Session cha	iir: S. Tanabe		
11.00-11.35	Keynote lecture Z. Xia Near-infrared luminescent materials and their light sources applications			
11.35-12.00		Invited lecture J. Ueda Development of Hole Detrapping		
12.00-12.15	K. Szczecinska Cadmium(ii)-iridium(iii) coordination chains as chiral luminophores for sensing of organic solvents			
12.15-12.30	Y. Wang Ratiometric Fluorescence Optical Fiber Enabling In- situ and Real-time Temperature Monitoring			
12.30-14.30	Break			
Р	arallel Sessions 18,	19 and 20: 14.30-	16.00	
	18 Amphitheatre	19 Amphora	20 Gallery	
	Session chair: G.	Session chair: J.	Session chair: A.	
	Chen	Ueda	Suchocki	
	Invited lecture C	Invited lecture	Invited lecture	
	Geng Ma	C. Latouche	A. Gökçe Rare	
	Unraveling	Modeling Excited	earth-doped glass	
14.30-14.55	luminescence	States in Solids:	materials for	
14.30-14.33	behavior of $3d^3$ ions	Advancing	solid-state	
	in solids: Navigating from crystal-field	Accurate Simulation of	lighting: recent advances	
	theory to first-	Luminescence	uuvunces	
	principles analysis	Spectra		
	Y. Abe <i>Temperature</i>	F. Gennari	M. Gökçe <i>Tb</i> <sup>3+</sup>	
14.55-15.10	dependence of	Spectroscopic	doped bismuth	
	luminescence	Properties of $Nd^{3+}$	germanate glass	

	characteristics for (Y,	Doped $Sr_2LaF_7$	systems for green
	Lu, $Sc)_2O_3$ single crystal	Nanoparticles	laser applications
15.10-15.25	T. Runka Raman and high-resolution luminescence spectroscopy of Re doped Gd <sub>1-x</sub> Lu <sub>x</sub> AlO <sub>3</sub> single crystalline films	Y. Zhydachevskyy Possibilities of tuning of Mn <sup>4+</sup> and Cr <sup>3+</sup> luminescence in Ga <sub>2</sub> O <sub>3</sub> by alloying with Al <sub>2</sub> O <sub>3</sub> and In <sub>2</sub> O <sub>3</sub>	D. Koçyiğit Influence of alkaline earth fluorides on structural and photoluminescence properties of oxyfluoride glasses
15.25-15.40	T. Horiai Investigation of Sc <sub>2</sub> O <sub>3</sub> Single Crystal for Luminescence Thermometry	A. Racu Correlations of local symmetry with stark splitting of energy levels in lanthanides doped Y <sub>2</sub> O <sub>3</sub> sesquioxide	J. Hrabovsky Linear and non- linear optical and magneto-optical properties of pure and multicomponent tellurite glasses
15.40-15.55	M. Yoshino Growth and scintillation properties of $Ce^{3+}$ , $Pr^{3+}$ , and $Mg^{2+}$ co- doped $Lu_3Al_5O_{12}$ single crystals	M. Liberka Synchronous switching of electrical and optical properties in organic- inorganic hybrids	D. Alves Galico Lanthanide molecular cluster- aggregates as the next generation of optical materials
15.55-16.10	J. Wang Synthesis, Stability and Application of All- inorganic Perovskite Metal Halide Luminescent Materials for Information Display and Detection	B. Lou Understanding the Excited State Properties and the Luminescence Mechanisms of ns2 Type Ion Doped Phosphors: A First-Principles Study	M. Taibeche First-principles calculation of electronic structure of Li <sup>+</sup> co- doped Eu <sup>3+</sup> -doped ZnO for photodynamic therapy (PDT) application
16.10-16.30		Coffee Break	
Session 21 (Amphora): 16.30-18.00			
Session chair: M. Brik			

16.30-17.05	Keynote lecture B. Hadžic Influence of Laser-Generated Heat on the Characteristics of Individual Crystals and Nano- powders
17.05-17.30	Invited lecture M. Piasecki Influence of Orbital Hybridization on the Intensity of the Hypersensitive Transition and Nonlinear Optical Efficiency in RE Activated Compounds
17.30-17.45	L. Puntus Charge transfer states in lanthanide complexes containing effective light harvesting pi-bonded antenna ligands
17.45-18.00	F. Zajíc First active afterheater used in laser-diode floating zone method

Friday, August 30 <sup>th</sup> , 2024		
8.00-9.00	Desk open (Convention center)	
Session 22 (Amphitheatre): 9.00-10.15		
Session chair: M. Piasecki		
9.00-9.15	L. Aldaz Caballero The role of size and composition in pressure-sensitivity of CuInS <sub>2</sub> QDs	
9.15-9.30	M. Lalic Electronic, optical, and photovoltaic properties of the orthorhombic NaBiS <sub>2</sub> compound: a highly perspective photoferroic material	
9.30-9.45	A. Benayas Combining Luminescence with Indium-Tin Oxide Nanoparticles as Heating Actuators	
9.45-10.00	A. Mandowski Monte carlo calculations for the excitation. A consequence for TL/OSL phenomena and the dose rate effect	
10.00-10.15	D. Kruczek Emissive Cerium(III)-Platinum(II) Single- Molecule-Magnets sensitive to solvent vapors	
10.15-10.45	Coffee Break	
Session 23 (Amphitheatre): 10.45-12.25 Session chair: Z. Ristić		
10.45-11.10	Invited lecture Y. Zorenko Recent advancement in development of composite color converters based on epitaxial structures of Ce <sup>3+</sup> doped garnet compounds	
11.10-11.35	Invited lecture A. Suchocki Mechanoluminescence of LiTaO <sub>3</sub> :Pr and related materials	
11.35-12.00	Invited lecture M. Quintanilla Plasmonic Heating Within the Biological Windows	
12.00-12.30	Closing Ceremony	

## LIST OF POSTER PRESENTATIONS

- P1 C. Nechifor BSA biosensing platform with liquid crystals anchored on physically modified PVA substrate
- P2 C. Nechifor Liquid crystals alignment on mechanically modified substrate obtained from irradiated pva solutions
- P3 C. Nechifor Induced birefringence of thin foils obtained from UV irradiated poly (vinyl alcohol) solutions
- P4 V. Andonova Optical properties and chemical composition of hemp oil
- P5 I. Medvid Spectral studies of  $B_2O_3$  ZnO SrO CaO glasses doped with  $Dy^{3+}$  ions for white light emission applications
- P6 L. Dong Spectra control of europium-doped calcium silicate through topochemical reduction strategy for white LED application
- P7 J. Miller An approach to the determination of the number of exponential decays present in a decay curve
- P8 B. Viana Strontium Aluminate and Garnets Persistent Luminescent Single Crystals
- P9 B. Viana Tm:CALGO: Spectroscopy and laser results at 2.3 μm
- P10 A. Kislov Localized vibrations in photoluminescence spectra of irondoped ZnO
- P11 A. Zatsepin Luminescense of nanoparticles and quantum dots in Znimplanted silica layers
- P12 A. Kenzhebayeva The role of the light lithium ion in the formation of high-temperature peaks of thermally stimulated luminescence in NaCl crystals
- P13 T. Koikawa Up-Conversion Luminescence from Ca<sub>2</sub>SnO<sub>4</sub>:Er
- P14 Y. Shimazaki Effect of rare earth co-doping on UC luminescence intensity in CaSnO<sub>3</sub>:Er

- P15 L. Oster Kinetic modeling of charge transfer following photon bleaching of irradiated LiF:Mg,Ti
- P16 V. Pankratov Fine structure of absorption and excitation spectra of 4f-5d transitions in  $MeF_2$ :Ln, Yb<sup>3+</sup> crystals (Me = Ca, Sr, Ba; Ln = Dy<sup>3+</sup>, Er<sup>3+</sup>)
- P17 R. Kawabata Growth, scintillation properties, and pulse shape discrimination capability of (Ca, Mg)I<sub>2</sub> scintillator
- P18 P. Costa Real-Time Monitoring of CdTe Quantum Dots Growth
- P19 J. Llanos Enhancing c-Si Solar Cell Efficiency in the UV Region: Using Eu<sup>3+</sup> as a Down-Shifting Layer
- P20 N. Kaplan A novel approach of microcontroller-based transverse magneto-optical Kerr effect measurement system
- P21 J. Pisarska Germanate olivines: fabrication and luminescence measurements in the visible and near-infrared ranges
- P22 W. Pisarski Luminescence in Yb<sup>3+</sup>-doped titanate-germanate glass
- P23 J. Barzowska Impact of Manganese Co-doping on the Luminescent and Mechanoluminescent Properties of SrSi<sub>2</sub>N<sub>2</sub>O<sub>2</sub>:Eu<sup>2+</sup>
- P24 A. Babkina Luminescent properties of alkali-germanate glasses with CdS quantum dots
- P25 A. Babkina Luminescent properties of silver ion exchange layers of silicate glasses
- P26 K. Nikolov Phosphorescent fibre optic tip temperature sensor
- P27 K. Nikolov Wavelength referenced polarimetric fibre optic current sensor with smartphone interrogation
- P28 K. Nikolov Rare earth doped strontium aluminates for contactless smartphone readable temperature sensors
- P29 M. Seabra Red mud as colouring agent for stoneware pastes

- P30 N. Cichocka Optical and structural properties of Eu<sup>3+</sup> doped La<sub>3</sub>Al<sub>5</sub>O<sub>12</sub> grown by microwave-driven hydrothermal technique
- P31 J. Nasalska Temperature and pressure dependent emission of mixed Eu<sup>3+</sup> and Tb<sup>3+</sup> coordination compounds with N-phosphorylated carboxamide
- P32 K. Boldyrev Photon-induced effects on color centers of diamonds
- P33 H. Dziełak Heterometallic lanthanide-pentacyanidocobaltate frameworks as NIR-emissive and SHG-active stimuli-responsive solids
- P34 M. Tamashuk Photoluminescent coordination polymers based on bipyridine-cyanido ruthenates(II) and f-block metal complexes
- P35 P. Gas Heterometallic decanuclear copper(I)-rhenium(V) clusters exhibiting efficient tunable luminescence
- P36 M. Romanowska *Ab* initio evaluation of optical properties in lanthanide(III)-based luminescent materials: multiconfigurational and TDDFT approaches
- P37 M. Niemiec Chromium(III)-centered spin-flip luminescence in heterometallic hybrid materials for the construction of optical sensors
- P38 I. Machado  $Nd^{3+}$ ,  $Yb^{3+}$ ,  $Tm^{3+}$  triply-doped LiLuF<sub>4</sub> nanothermometers fully operating in the near-infrared range
- P39 S. Cherevkov Application of amphiphilic acetylacetone-based carbon dots in light emission diodes
- P40 D. Popstoyanova Bioactive components in the leaves of moringa oleifera and their excitation-emission matrices
- P41 D. Popstoyanova Fluorescence from organic dyes induced by a lightemitting-diode for application in excitation-emission fluorescence spectroscopy
- P42 D. Popstoyanova Application of fluorescence spectroscopy and chemical analyses for the characterization of fruits from european plum (prunus domestica L.) varieties

- P43 D. Popstoyanova Sensing of physiological reactions of ferritin with dielectric metasurfaces
- P44 N. Reichholf Optical properties of lanthanide-doped zirconia core/shell nanoparticles
- P45 V. Nikšić A DFT study of interfacial charge transfer complexes between TiO<sub>2</sub> and a series of flavonoid compounds
- P46 M. Maričić Luminescence of Eu doped material incorporated into PMMA fiber
- P47 L. Đačanin Far Improving sensitivity of luminescence thermometry with  $YNbO_4$ : Sm<sup>3+</sup> by exploiting emission from high energy  ${}^4G_{7/2}$  excited level
- P48 V. Đorđević Exploring Luminescence Thermometry Using Principal Component Analysis: Insights from Pr<sup>3+</sup> -Doped YF<sub>3</sub>
- P49 T. Gavrilovic Effect of  $Eu^{3+}$  doping on structure transitions in  $Y_2Mo_3O_{12}$ :  $Eu^{3+}$  and its application as temperature sensing probe
- P50 K. Milenković Microwave-assisted solvothermal method for  $RbY_3F_{10}$ doped with  $Eu^{3+}$
- P51 S. Kuzman Synthesis and photoluminescent properties of Bi<sup>3+</sup>-codoped SrF<sub>2</sub>:Eu<sup>3+</sup> phosphor nanoparticles
- P52 J. Periša Advancing luminescence thermometry: Employing multiple fluorescence intensity ratios of  $Y_3Al_5O_{12}$ :  $Er^{3+}/Mn^{4+}$  nanocrystals for supersensitive temperature sensing
- P53 B. Milićević Synthesis, luminescent properties, and thermal stability of Eu<sup>3+</sup>-doped Sr<sub>2</sub>GdF<sub>7</sub> red-emitting nanophosphor for horticulture LEDs
- P54 I. Zeković Temperature stability of luminescent Eu<sup>3+</sup>-activated Sr<sub>2</sub>GdF<sub>7</sub> colloid incorporated in PVA fiber
- P55 M. Medić Synthesis and luminescent properties of Pr<sup>3+</sup>-doped Sr<sub>2</sub>LaF<sub>7</sub> phosphor nanoparticles

- P56 A. Rajčić Synthesis, structure, and luminescent properties of  $Eu^{3+}$  doped  $BaIn_2O_4$  powders
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