

**International Conference on Physics of Optical Materilas and Devices ICOM2006
Conference Program**

Wednesday 30.08.2006			
15:00 – 18:00			Registration
Thursday 31.08.2006			
8:00 – 9:00			Registration
9:15 – 9:30			OPENING CEREMONY
SESSION 1 – Chairpersons : Elisabeth Antic-Fidancev, M. Popova,			
9:30 – 10:00	I1	ICOM-082	RECENT DEVELOPMENTS IN LIGAND FIELD THEORY FOR LANTHANIDE COMPOUNDS ON THE BASIS OF THE CONCEPTS OF OVERLAP POLARIZABILITY AND IONIC SPECIFIC VALENCE <u>O. L. Malta</u>
10:00 – 10:30	I2	ICOM-002	LOCATION OF LANTHANIDE IMPURITY LEVELS IN III-V GaN AND AlN SEMICONDUCTORS <u>P. Dorenbos</u> and E. van der Kolk
10:30 – 10:45	1	ICOM-108	THEORETICAL INVESTIGATION OF THE 7F_1 LEVEL SPLITTING IN A SERIES OF Eu^{3+} DOPED OXIDES MATRICES <u>M.F.O. Bezerra</u> , M. A. Couto dos Santos, A. Monteil, S. Chaussedent
10:45 – 11:00	2	ICOM-094	COHERENT SPECTROSCOPY AND CRYSTAL FIELD ANALYSIS OF $\text{Pr}^{3+}:\text{LaW}_3\text{O}_{12}$ <u>Y. Le Du</u> , E. Antic-Fidancev, O. Guillot-Noël, Ph. Goldner, B. Julsgaard and S. Kröll
11:00 – 11:30			Welcome party
SESSION 2 – Chairpersons: : F. Cusso, Olivier Guillot-Noel			
11:30 – 12:00	I3	ICOM-107	IS PERIODICITY A NECESSITY FOR PHOTONIC CRYSTALS? <u>Kurt Hingerl</u>
12:00 – 12:15	3	ICOM-001	2D PHOTONIC CRYSTALS ON THE ARCHIMEDEAN LATTICES <u>Radoš Gajić</u> , Đorđe Jovanović, Kurt Hingerl, Ronald Meisels, and Friedemar Kuchar
12:15 – 12:30	4	ICOM-032	OMNIDIRECTIONAL REFLECTOR BASED ON ONE-DIMENSIONAL PHOTONIC CRYSTAL CONTAINING FREE CARRIERS IN THE PRESENCE OF EXTERNAL MAGNETIC FIELDS

			<u>Wulin Jia</u> and Shuyi Zhang
12:30 – 12:45	5	ICOM-013	THE COOPERATIVE JAHN-TELLER EFFECT IN RARE EARTH DOUBLE TUNGSTATE <u>M.T.Borowiec</u> , V.P.Dyakonov, A.D.Prochorov, A.Majchrowski, T.Zayarnyuk, I.Kryniecki, A.Szewczyk, M.Gutowska, J.Zmija, H.Szymczak
12:45 – 13:00	6	ICOM-012	Er ³⁺ -SENSITIZED Pr ³⁺ -DOPED SELENIDE GLASSES IN 1.6 μm AMPLIFICATION REGIONS: ON THE MODELLING CONSIDERATION <u>Cüneyt Berkdemir</u> and Sedat Özsoy
LUNCH BREAK			
SESSION 3 – Chairpersons: F. Bretenaker, L. D. Carlos			
15:00 – 15:30	14	ICOM-102	COMBINATORIAL APPROACH TO FUNDAMENTAL SCIENCE <u>V. I. Srdanov</u>
15:30 – 16:00	15	ICOM-104	STRUCTURAL AND OPTICAL PROPERTIES OF CaTiO ₃ :Pr ³⁺ FILMS DEPOSITED BY CHEMICAL AND PHYSICAL METHODS <u>P. Boutinaud</u> , E. Tomasella, E. Pinel, P. Putaj and R. Mahiou
16:00 – 16:15	6	ICOM-099	PHOTON ENERGY UP-CONVERSION IN COLLOIDAL TiO ₂ NANORODS N.D. Abazović, I. A. Ruvarac-Bugarčić, M.I. Čomor, N. Bibić, S. P. Ahrenkiel, and <u>J. M. Nedeljković</u>
16:15 – 16:30	7	ICOM-065	THERMAL DIFFUSIVITY OF FILM/SUBSTRATE STRUCTURES CHARACTERIZED BY TRANSIENT THERMAL GRATING METHOD <u>Xiao-dong Xu</u> , Shu-yi Zhang, Ai-hua Luo, Xue Qi and Kiyotaka Wasa
16:30 – 16:45	8	ICOM-064	PHOTOINDUCED SPIN-DISORDER IN La _{0.7} Sr _{0.3} MnO ₃ FILM <u>Xiaojun Liu</u>
16:45 – 17:15			Break
SESSION 4 – Chairpersons: V. Srdanov, B. Moine			
17:15 – 17:30	9	ICOM-003	STRUCTURE, OPTICAL AND MECHANICAL PROPERTIES OF GaSe _{1-x} S _x SINGLE CRYSTALS AT 0 ≤ x ≤ 0.4 <u>V.V. Atuchin</u> , Yu.M. Andreev, S.A. Bereznaya, T.A. Gavrilova, Z.V. Korotchenko, T.D. Malinovskaya, L.D. Pokrovsky, S.Yu. Sarkisov
17:30 – 17:45	10	ICOM-086	TEMPERATURE DEPENDENCE OF THE Bi ₁₂ GeO ₂₀ OPTICAL ACTIVITY

			<u>Pedja Mihailovic</u> , Slobodan Petricevic, Stevan Stankovic, Jovan Radunovic
17:45 – 18:00	11	ICOM-115	PREPARATION AND OPTICAL PROPERTIES OF CdS NANOPARTICLES DISPERSED IN POLY(2-(DIMETHYLAMINO)ETHYL-CO-METHACRYLATE ACRYLIC ACID) CO-POLYMERS <u>L. V. Trandafilović</u> , <u>V. Djoković</u> , P. Sreekumari Nair, M. K. Georges, T. Radhakrishnan,
18:00 – 18:15	12	ICOM-083	PHOTOACOUSTIC DETERMINATION OF THE 1.8 μm LUMINESCENCE QUANTUM EFFICIENCY OF Tm^{3+} IONS IN LiNbO_3 CRYSTALS <u>F. Cussó</u> , G.A. Torchia, E.Cantelar and G. Lifante
18:15 – 18:30	13	ICOM-046	TWO-MODE MODULATION OF INFRARED LIGHT BY SMALL PARTICLES-LIQUID CRYSTAL COMPOSITE <u>T.D.Ibragimov</u>
18:30 – 18:45	14	ICOM-041	GROWTH AND CHARACTERIZATION OF DOPED Ga_2O_3 NANOSTRUCTURES <u>Jong Woo Lee</u> and Hyoun Woo Kim
Friday 01.02.2006			
SESSION 5 – Chairpersons: M. Bettinelli, P. Dorenbos			
9:30 – 10:00	16	ICOM-029	EMISSION OF AMINE- AND AMIDE-CROSS-LINKED ALKYLENE/SILOXANE HYBRIDS <u>L. D. Carlos</u> , Lianshe Fu, R. A. Sá Ferreira, S. C. Nunes and V. de Zea Bermudez
10:00 – 10:30	17	ICOM-047	QUANTUM-CUTTING MECHANISM IN BLUE AND GREEN EMITTING RARE-EARTH DOPED MATERIALS <u>Bernard Moine</u> , Lena Beauzamy, Patrick Gredin, Gilles Wallez and Jessica Labeguerie
10:30 – 10:45	15	ICOM-028	UPCONVERSION AND EXCITONIC/HOST EXCITATION IN $\text{Er:Kpb}_2\text{Cl}_5$ CRYSTALS <u>S.E. Ivanova</u> , A.M. Tkachuk, L.I. Isaenko, M.-F. Joubert, Y. Guyot
10:45 – 11:00	16	ICOM-095	ROOM-TEMPERATURE EXCITONIC LASING IN ZnO TETRAPOD-LIKE CRYSTALLITES <u>Lyudmila E. Li</u> , Lyudmila N. Demianets
11:00 – 11:30			Break
SESSION 6 – Chairpersons: Dr J. Nedeljković, A. Monteil			
11:30 – 12:00	18	ICOM-081	SYNTHESIS, STRUCTURAL CHARACTERIZATION AND OPTICAL SPECTROSCOPY OF NANOCRYSTALLINE GADOLINIUM GALLIUM GARNET ACTIVATED WITH LANTHANIDE IONS Matteo Daldosso, Adolfo Speghini, Paolo Ghigna and <u>Marco Bettinelli</u>

12:00 – 12:15	17	ICOM-059	EFFECT OF Si NANOPARTICLES EMBEDDED IN SiO _x FILMS ON THEIR OPTICAL PROPERTIES STUDIED BY SPECTROSCOPIC ELLIPSOMETRY AND PHOTOLUMINESCENCE SPECTROSCOPY <u>A. Szekeres</u> , T. Nikolova, I. Lisovskyy, P.E. Shepeliavi, G.Yu. Rudko
12:15 – 12:30	18	ICOM-087	CREATION OF COPPER NANOPARTICLES BY LASER ABLATION IN OIL <u>Mitsunori Saito</u> , Kohei Yasukawa, and Tomoki Umeda
12:30 – 12:45	19	ICOM-092	PREPARATION AND OPTICAL CHARACTERIZATION OF RARE EARTH DOPED NANOPARTICLES Helène Rétot, Claire Mathieu, <u>Aurélie Bessière</u> , Fabienne Pellé and Bruno Viana
12:45 – 13:00	20	ICOM-031	FORMATION OF PHOTOLUMINESCENT GERMANIUM NANOSTRUCTURE BY FEMTOSECOND LASER PROCESSING ON BULK GERMANIUM <u>Sae Chae Jeoung</u>
12:45 – 13:00	21	ICOM-089	NANOPHOTONIC GOLDEN LIGHT OF 0D QUASISTRUCTURE AND ITS BIOMEDICAL APPLICATIONS <u>Dj. Koruga</u> , L. Matija, Ž. Ratkaj, and N. Ilanković
LUNCH BREAK			
SESSION 7 – Chairpersons: Oscar Malta, Lyudmila E. Li,			
15:00 – 15:30	19	ICOM-048	RELATIONSHIP BETWEEN STRUCTURE AND PROPERTIES IN RARE-EARTH-DOPED HAFNIUM AND SILICON OXIDES: MODELING AND SPECTROSCOPIC MEASUREMENTS <u>A. Monteil</u> , M. El-Jouad, G. Alombert-Goget, S. Chausse-dent, N. Gaumer, A. Chiasera, Y. Jestin, M. Ferrari
15:30 – 16:00	110	ICOM-039	THE FIRST-PRINCIPLES STUDY OF OPTICAL PROPERTIES OF BGO AND BSO SCINTILLATORS <u>M. V. Lalic</u> and S. O. Souza
16:00 – 16:15	22	ICOM-103	MULTILEVEL NANOSTRUCTURE DESIGNING OF Y ₂ SiO ₅ AND Gd ₂ SiO ₅ POWDERS USING COMBINATION OF HYDROTHERMAL SYNTHESIS AND ULTRASONIC SPRAY PYROLYSIS <u>V. Jokanović</u> , M.D. Dramićanin, Ž. Andrić, M. Plavšić
16:15 – 16:30	23	ICOM-098	POLYMER COMPLEX SOLUTION SYNTHESIS OF (Y _x Gd _{1-x}) ₂ O ₃ :Eu ³⁺ NANOPOWDERS <u>Ž. Andrić</u> , M.D. Dramićanin, M. Mitrić, V. Jokanović, A. Bessière and B. Viana
16:30 – 16:45	24	ICOM-112	STRUCTURAL CHARACTERIZATION OF EUROPIUM AND ERBIUM DOPED Li ₂ O-Al ₂ O ₃ -SiO ₂ GLASS CERAMIC <u>Radenka Krsmanović</u> , Giovanni Bertoni, Sara Bals and Gustaaf Van Tendeloo
16:45 – 17:00	25	ICOM-015	THE ELECTRICAL CONDUCTIVITY OF THE BECHGAARD SALTS UNDER HIGH PRESSURE <u>V. Čelebonovic</u>

17:00 – 17:15	26	ICOM-085	GROWTH AND OPTICAL CHARACTERIZATION OF Tm ³⁺ -DOPED LiNbO ₃ <u>M. Quintanilla</u> , E. Cantelar, J.A. Sanz-García and F. Cussó
17:15 – 18:00			Break
18:00– 20:00			POSTER SESSION
20:30 –			CONFERENCE DINNER
Saturday 02.09.2006			
SESSION 8 – Chairpersons: Philippe Boutinaud, Radoš Gajić,			
9:30 – 10:00	I11	ICOM-052	CHARACTERIZATION OF Ho ³⁺ PAIRS IN LiYF ₄ AND LiLuF ₄ BY HIGH-RESOLUTION SPECTROSCOPY <u>M. Popova</u> , S. Klimin, D. Pytalev, G. Shakurov, B. Malkin, M. Vanyunin, R. Abdulsabirov, S. Korableva
10:00 –10:30	I12	ICOM-109	DEVELOPMENT OF SPECIFIC LASER SOURCES FOR RADIOFREQUENCY SIGNAL PROCESSING AND QUANTUM INFORMATION USING RARE EARTH DOPED CRYSTALS M. Alouini, G. Baili, <u>F. Bretenaker</u> , V. Crozatier, D. Dolfi, C. Drag, G. Gorju, J.-L. Le Gouët, I. Lorgeré, A. Louchet, J.-M. Melkonian and T. H. My
10:30 – 10:45	27	ICOM-023	TEMPORAL CHARACTERISTICS OF PICOSECOND STIMULATED RAMAN SCATTERING IN OXIDE CRYSTALS T.T.Basiev, D.S.Chunaev, <u>A.Ya.Karasik</u>
10:45 – 11:00	28	ICOM-056	SPIN-DEPENDENT ELECTRON TRANSPORT IN NONMAGNETIC SEMICONDUCTOR NANOSTRUCTURES J. Radovanović, <u>G. Isić</u> , V. Milanović
11:15 – 11:30	29	ICOM-062	NEW LOW PHONON RE:MPb ₂ Hal ₅ (M=K, Rb; Hal=Cl, Br) MATERIALS FOR MID-IR LASERS AND OPTICAL CONVERTERS <u>A.M. Tkachuk</u> , S.E. Ivanova, L.I. Isaenko, M.-F. Joubert, and Y. Guyot
11:30 – 11:45			Break
SESSION 9 – Chairpersons: M.V. Lalic, A. Tkachuk			
11:45 – 12:00	30	ICOM-053	THE EFFECT OF ANHARMONISITY ON MULTIPHONON RELAXATION OF EXCITED RARE-EARTH IONS IN IONIC CRYSTALS <u>K. K. Pukhov</u> , T.T. Basiev , S. Mirov , Yu.V.Orlovskii , F. Pellé
12:15 – 12:30	31	ICOM-067	PHOTOINDUCED RECONSTRUCTION OF ELECTRONIC STRUCTURE IN HALF-METAL CrO ₂

			Xuewei Wu, Donglin Niu and <u>Xiaojun Liu</u>
12:30 – 12:45	32	ICOM-074	THERMAL STABILITY AND RELAXATION OF AMORPHOUS DIAMOND FILMS DEPOSITED BY FILTERED CATHODIC VACUUM ARC TECHNOLOGY <u>Zhu Jiaqi, Han Jiecai, Han Xiao, Meng Songhe</u>
12:45 – 13:00	33	ICOM-068	THE PHOTOCHEMICALLY SAFE TWO-PHOTON EXCITED DYE PROBES AS THE LUMINESCENT SENSORS FOR BIOLOGICAL OBJECTS DETECTION AND IMAGING <u>Valeriy M.Yashchuk, Vladislav Yu.Kudrya, Mykhaylo Yu.Losytskyy, Viktoriya V.Gusak, Valentina P.Tokar, Vadym M.Prokopets, Dmytro V., Anatoliy O.Balanda, Sergiy M.Yarmoluk, Antonina P.Naumenko, Yaroslav O.Gumenyuk</u>
13:00 – 13:15			CLOSING CEREMONY