# Conference Program

Photorefractive Photonics 2017| PR’ 17, July 17-20, 2017, Qingdao, China

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| July 17, 2017 (Monday)  14:00-18:00, Lobby of Grand Regency Hotel, Registration  18:00-20:00, **Rose Garden Café** on the 2nd floor, Dinner  July 18, 2017 (Tuesday)  08:30-11:45, **Rome Room** on the 3rd floor, **conference session I**  12:00-13:00, **Rose Garden Café** on the 2nd floor, Lunch  14:00-17:25, **Rome Room** on the 3rd floor, **conference session II**  18:00-19:00, **Rose Garden Café** on the 2nd floor, Dinner  19:00-21:00, **Board Room** on the 3rd floor, **poster session**  July 19, 2017 (Wednesday)  08:30-12:00, **Rome Room** on the 3rd floor, **conference session III**  13:00-18:30, **Social Event**  Assembling place: Lobby of Grand Regency Hotel  18:30-20:20, **Huijing Jadeite Restaurant**, Dinner  July 20, 2017 (Thursday)  08:30-11:45, **Rome Room** on the 3rd floor**, conference session IV**  12:00-13:00, **Rose Garden Café** on the 2nd floor, Lunch | **Room of Organizing Committee:**  Room 1105  **Contact:**  Weijin Kong, +86-159-6425-2678  Feng Xia, +86-156-1005-9637  Guoquan Zhang, +86-138-2053-7495  Fang Bo, +86-137-0202-6340 |

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| **July 18, 2017** (Tuesday)**, Rome Room** on the 3rd floor **(**三层**罗马厅)** | | | |
| **Chaired by:** | Prof. Guoquan Zhang, Nankai University, China |  |  |
| 08:30---08:35 | Opening ceremony and welcome address | Jingjun Xu | Nankai University, China |
| 08:35---08:45 | Welcome speech | Vice President | Qingdao University, China |
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| **Chaired by:** | Prof. Stefania Residori, Univ. Nice-Sophia Antipolis, France | | |
| **Time** | **Title** | **Speaker** | **Affiliation** |
| 08:45---09:10 | Direct and indirect waves interaction in dynamic gratings and photorefractive waveguides (invited) | Germano Montemezzani | University of Lorraine, France |
| 09:10---09:35 | Impact of piezoelectric and flexoelectric effects on the wave mixing in photosensitive crystals (invited) | Stanislav M. Shandarov | I.P. Shamyakin Mozyr State Pedagogical University, Belarus |
| 09:35---09:50 | Time resolved nonlinear response of Sn2P2S6:Sb to nanosecond pulse excitation | Serguey Odoulov | Institute of Physics, National Academy of Sciences, Ukraine |
| 09:50---10:05 | Dynamic grating mediated energy transfer between two sub-picosecond pulses in LiNbO3 | Stefan Nolte, Serguey Odoulov | Osnabrueck University, Germany |
| 10:05---10:50 | Group Photo and Coffee Break | | |
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| **Chaired by:** | Prof. Marko Zgonik, University of Ljubljana, Slovenia | | |
| **Time** | **Title** | **Speaker** | **Affiliation** |
| 10:50---11:15 | High order optical nonlinearities in nanocomposite films dispersed with semiconductor quantum dots at high concentrations (invited) | Yasuo Tomita | Univ of Electro-Communications, Japan |
| 11:15---11:30 | Nonlinear polarization rotation of two types of vector beams through isotropic Kerr nonlinearities | Bing Gu | Southeast University, China |
| 11:30---11:45 | Experimental and theoretical investigations of the gain dependence at two-wave interaction on the thickness and orientation angle of the Bi12GeO20 crystal | Vasiliy Shepelevich, Stanislav M. Shandarov | I.P. Shamyakin Mozyr State Pedagogical University, Belarus |
| 11:30---11:45 | Ultrafast dynamics of photoexcited free carriers in CVD diamonds | Xiangming Liu | Academy of Engineering Physics, China |
| 11:45---14:00 | Lunch, **Rose Garden Café** on the 2nd floor（二层**玫瑰园咖啡厅**） | | |
| **July 18, 2017** (Tuesday), **Rome Room** on the 3rd floor **(**三层**罗马厅)** | | | |
| **Chaired by:** | Prof. Karsten Buse, Fraunhofer-Institut fur Physikalische Messtechnik IPM, Germnay | | |
| **Time** | **Title** | **Speaker** | **Affiliation** |
| 14:00---14:25 | SHG in periodically structured AlN waveguides (invited) | Marko Zgonik | University of Ljubljana and Jožef Stefan Institute, Slovenia |
| 14:25---14:50 | Intriguing phenomena observed with photorefractive lattices (invited) | Zhigang Chen | Nankai University, China |
| 14:50---15:05 | Numerical modeling of the scheduling free photopolymer for hologram recording | Tsutomu Shimura | the University of Tokyo, Japan |
| 15:05---15:20 | Y-branch lasers in femtosecond laser written Nd:YAG waveguides | Hongliang Liu | Nankai University, China |
| 15:20---15:35 | Triboelectric Nanogenerator Based on Lithium Niobate Film | Juan Geng | Nankai University, China |
| 15:20---15:50 | Coffee Break | | |
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| **Chaired by:** | Prof. Serguey Odoulov, Institute of Physics, National Academy of Sciences, Ukraine | | |
| **Time** | **Title** | **Speaker** | **Affiliation** |
| 15:50---16:15 | Continuous-Wave Optical Parametric Oscillation Tunable up to 8 μm Wavelength (invited) | Karsten Buse | Fraunhofer IPM, Germany |
| 16:15---16:40 | Nonlinear effects in on-chip lithium niobate microdisk resonators (invited) | Fang Bo | Nankai University, China |
| 16:40---16:55 | Asymmetric propagation of the light beam in the two dimensional nonlinear photonic lattice | Xinyuan Qi | Northwest University, China |
| 16:55---17:10 | Controlling light in Airy and caustic photonic structures | Alessandro Zannotti | University of Münster, Germany |
| 17:10---17:25 | Pseudospin-dependent vortex transformation in photonic graphene | Xiuying Liu | Nankai Univeristy, China |
| 17:25---19:00 | Lunch, **Rose Garden Café** on the 2nd floor（二层**玫瑰园咖啡厅**） | | |

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| **July 19, 2017** (Wednesday), **Rome Room** on the 3rd floor **(**三层**罗马厅)** | | | |
| **Chaired by:** | Prof. Zhigang Chen, Nankai University, China & San Francisco State University, USA | | |
| **Time** | **Title** | **Speaker** | **Affiliation** |
| 08:30---08:55 | Spontaneous three-dimensional supercrystals in composite ferroelectrics: linear and nonlinear waves in a nonlinear lattice (invited) | Eugenio Del Re | University of Rome La Sapienza, Italy |
| 08:55---09:20 | Topological States in Modulated Optical Waveguides (invited) | Chaohong Lee | Sun Yat-Sen University, China |
| 09:20---09:35 | Quantum-like adiabatic light transfer in photo-induced waveguides with longitudinally varying detuning | Hassan Oukraou | Université de Lorraine, France |
| 09:35---09:50 | Dynamic holographic interferometry with doped Sn2P2S6 photorefractive crystals | Alexander Grabar | Uzhgorod National University, Ukraine |
| 09:50---10:05 | Index and gain gratings in Nd-YVO4: Application to speckle vibrometry and photoacoustic detection | François Ramaz, Jean-Pierre Huignard | PSL Research University, France |
| 10:05---10:30 | Coffee Break | | |
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| **Chaired by:** | Prof. Germano Montemezzani, Univ. de Lorraine, LMOPS, Metz, France | | |
| **Time** | **Title** | **Speaker** | **Affiliation** |
| 10:30---10:55 | Phase modulation detection with liquid crystal light valve and digital holography (invited) | Stefania Residori | Université Nice-Sophia Antipolis, France |
| 10:55---11:20 | Nonlinear optical image encryption (invited) | Guohai Situ | Shanghai Institute of Optics and Fine Mechanics, China |
| 11:20---11:45 | Nonlinear Control of Light Polarization using Metamaterials (invited) | Mengxin Ren | Nankai University, China |
| 11:45---12:00 | High resolution compact lensfree phase imager | Manon Rostykus | EPFL, Switzerland |
| 12:00---14:00 | Lunch, **Rose Garden Café** on the 2nd floor（二层**玫瑰园咖啡厅**） | | |
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| **July 20, 2017** (Thursday), **Rome Room** on the 3rd floor **(**三层**罗马厅)** | | | |
| **Chaired by:** | Prof. Yasuo Tomita, The University of Electro-Communications, Japan | | |
| **Time** | **Title** | **Speaker** | **Affiliation** |
| 08:30---08:55 | Optoelectronic tweezers based in photorefractive space charge fields: recent achievements and challenges (invited) | Angel Alcazar | Universidad Autónoma de Madrid, Spain |
| 08:55---09:10 | Convolution Operation of Optical Information via Quantum Storage | Jianji Liu | Nankai University, China |
| 09:10---09:25 | Nanoparticle Gratings for Compact Spectrometers: an Application of Photovoltaic Tweezers | Juan F. Muñoz-Martínez | Technical University of Madrid, Spain |
| 09:25---09:40 | Photorefractive two-beam coupling in AlN at 375 nm | Tomaž Kavaš | University of Ljubljana and Jožef Stefan Institute, Slovenia |
| 09:40---09:55 | Second-harmonic beam shaping | Haissam Hanafi | University of Muenster, Germany |
| 09:55---10:20 | Coffee Break | | |
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| **Chaired by:** | Prof. Guoquan Zhang, Nankai University, China |  |  |
| **Time** | **Title** | **Speaker** | **Affiliation** |
| 10:20---10:45 | Perspectives for photorefractive materials in neutron physics (invited) | Romano Rupp | Nankai University, China  And Univ. Wien, Austria |
| 10:45---11:00 | Fast Novel Nonlinear Optical NLC System with Local Response | Andrey Iljin | Institute of Physics, NAS of Ukraine, Ukraine; |
| 11:00---11:15 | Photorefractive Lithium Niobate crystals: light polarisation rotation highlighted by forward Raman scattering | Ninel Kokanyan | Centrale Supélec and Lorraine University, France |
| 11:15---11:30 | Photogalvanic self-pulsing of electro-wetting of LC droplet on LN-crystal | Nickoly Kukhtarev | Alabama A&M University |
| 11:30---11:45 | Closing | Jingjun Xu | Nankai University |
| 11:45---13:00 | Lunch, **Rose Garden Café** on the 2nd floor（二层**玫瑰园咖啡厅**） | | |
| **Poster Section，Board Room** on the 3rd floor **(**三层**董事厅)**  **July 18，19:00---21:00** | | | |
| **Number** | **Title** | **Authors** | **Affiliation** |
| P1 | Mid-Infrared photorefractivity with non-degenerate two-photon absorption | Björn Bourdon, Felix Freytag, Mirco Imlau, Alexandr Shumelyuk, Serguey Odoulov | Osnabrueck University, Germany |
| P2 | Peculiarities of Beams Coupling in Bent-Core Liquid Crystals | Victor Yu. Reshetnyak, Igor P. Pinkevych and Dean R. Evans | Taras Shevchenko National University of Kyiv, Ukraine |
| P3 | Flexoelectric contribution to the phase demodulation by two-beam coupling on reflection and transmission gratings in cubic photorefractive crystals | Stanislav Shandarov | Tomsk State University of Control Systems and Radioelectronics, Russia |
| P4 | Extreme events induced by self-action of laser beams in dynamic nonlinear liquid crystal cells | S. Bugaychuk1, A. Iljin1, K. Chunihina2 | 1 Institute of Physics, NAS of Ukraine, 46 Prospekt Nauki, Kyiv, Ukraine; 2 Taras Shevchenko National University, Kyiv, Ukraine |
| P5 | Light-induced absorption and optical damage in Sc, Mg, and Zn doped near-stoichiometric LiNbO3 | Huijie Zhang, Youwen Liu, Sen Hua and Chongjun He | Nanjing University of Aeronautics and Astronautics, China |
| P6 | Anomalous beam transverse deflection phenomenon based on the electrostrictive effect in Cu-doped KTa1-xNbxO3 crystal | Zhuan Zhao, Hongliang Liu,\* Pengfei Wu | Nankai University, China |
| P7 | Temperature dependent polarization modulation of light in KTN near the curie point | Xin Zhang, Hongliang Liu，Pengfei Wu | Institute of Modern Optics, Nankai University, China |
| P8 | Position sensing based on the bottle-shaped whispering gallery modes resonators | Xiaoting Li, and Feng Gao | Nankai University, China |
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| **Number** | **Title** | **Authors** | **Affiliation** |
| P9 | Potassium-Tantalate-Niobate Mixed Crystal Thin Films for Applications in Nonlinear Integrated Optics | Yuechen Jia, Jan Szabados, Markus Winkler, Ingo Breunig, Volker Cimalla, Lutz Kirste, Agnė Žukauskaitė, and Karsten Buse | Laboratory for Optical Systems, IMTEK, University of Freiburg, Germany |
| P10 | Fabrication of nano-scale domain structures in bulk Mg-doped LiNbO3 crystals | Yuejian Jiao, Xiaojie Wang, Yunfan Zhang, Fang Bo, Yongfa Kong, Jingjun Xu, and Guoquan Zhang\* | Nankai University, China |
| P11 | The linear diffraction of light waves on periodically poled domain structures in lithium niobate crystals: collinear, isotropic and anisotropic geometries | Stanislav M. Shandarov1, Arkady E. Mandel1, Timur M. Akylbaev1, Maxim V. Borodin1, Grigory I. Bolshanin1, Seraphim V. Smirnov1, Andrei R. Akhmatkhanov2, and Vladimir Ya. Shur2 | Tomsk State University of Control Systems and Radioelectronics, Russia |
| P12 | Modulated Optically Written Waveguide and Diffraction Structures in Lithium Niobate with Photorefractive Surface Layers | Vladimir Shandarov | Tomsk State University of Control Systems and Radioelectronics, Russia |
| P13 | Formation of Photonic Structures in Photorefractive Lithium Niobate by 1D and 2D Bessel-like Optical Fields | Vladimir Shandarov | Tomsk State University of Control Systems and Radioelectronics, Russia |
| P14 | Propagation properties of the accelerating beams generated by the discrete Airy-Vortex phase mask | Kun Han, Shasha Li, Kaiwen Ji, Xinyuan Qi\* | School of Physics, Northwest University, China |
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| **Number** | **Title** | **Authors** | **Affiliation** |
| P15 | Massive orientation and patterning of zeolite micro-crystals on photorefractive templates | I. Elvira,1,2 J.F. Muñoz-Martínez1,2, J. Ramiro,2, Á. Barroso3, C. Denz3, A. García- Cabañes1. F. Agulló-López1, and M. Carrascosa1 | Departamento de Física de Materiales, Universidad Autónoma de Madrid, Spain |
| P16 | 2D bright spatial solitons formed in Lithium Niobate with assistance of incoherent background | A. Pustozerov, V. Shandarov | Tomsk State University of Control Systems and Radioelectronics, Russia |
| P17 | Pyroelectric generation of 2D spatial soliton sets in a bulk of lithium niobate crystal | Vladimir Ryabchenok | Tomsk University of Control Systems and Radioelectronicsm, Russia |
| P18 | The generation and analyzation of 2-D complicated regular polygon photonic lattice | Jing Lv, Yuanmei Gao\* | Shandong Normal University, China |
| P19 | Fabrication of p-type lithium niobate crystals by molybdenum doping and polarization | Tian Tian, Yongfa Kong, Hongde Liu, Shiguo Liu, Wei Li, Shaolin Chen, Jiayue Xu | Shanghai Institute of Technology, China |
| P20 | Nanoparticle manipulation and trapping by the synergy between the photovoltaic and pyroelectric effects | J. Faba, J.F. Muñoz-Martínez, A. Méndez, J. Ramiro, A. García Cabañes and M Carrascosa | Departemento de Fisica de Materiales, Universidad Autonoma de Madrid, Spain |
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| **Number** | **Title** | **Authors** | **Affiliation** |
| P21 | Spectral photosensitization of optical anisotropy in solid films of poly(vinyl-cinnamate) | V.M. Kozenkov1, D.N. Chausov1, A.A. Spahov1, V.V. Belyaev1, O.V. Chausova2, V.G. Chigrinov3 | 1 Moscow Region State University, 10A Radio str, Moscow, Russia, 105005 2 University of technology, 42, Gagarina str, Korolyov, Moscow Region, Russia, 141070 3 Hong Kong University of Science and Technology, Clear Water Bay Road, Kowloon, Hong Kong, China |
| P22 | Characteristics of Einstein oscillator, electron-phonon interaction, and band-edge absorption in LiNbO3:In | Feifei Xin | College of Physics and Materials Science, Tianjin Normal University, Tianjin, 300387, China |
| P23 | The fast photorefrative response of LN:Bi, Mg crystal in CW laser | Dahuai Zheng1, 3, Da Qu2, Shiguo Liu2, Hongde Liu2, Yongfa Kong1, 2, 3\*, Jingjun Xu1, 2, 3 | 1MOE Key Laboratory of Weak-Light Nonlinear Photonics and TEDA Applied Physics School, Nankai University, Tianjin 300457, China 2School of Physics, Nankai University, Tianjin 300071, China 3Collaborative Innovation Center of Chemical Science and Engineering (Tianjin), Tianjin 300072, |
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