



LLPh-2023

**XIX INTERNATIONAL
CONFERENCE
ON LUMINESCENCE AND
LASER PHYSICS**

P R O G R A M

Irkutsk

3 - 8 July

2023



LLPh-2023

**XIX INTERNATIONAL
CONFERENCE ON
LUMINESCENCE AND LASER PHYSICS**

**Scientific Council on optics and laser physics of Russian Academy of Sciences
Scientific Council on luminescence of Russian Academy of Sciences
Irkutsk Branch of Institute of Laser Physics SB RAS
Institute of Geochemistry SB RAS
Irkutsk State University
Siberian Branch of Russian Academy of Sciences
Council of young scientists of Institute of Laser Physics SB RAS**



**XIX INTERNATIONAL
CONFERENCE ON LUMINESCENCE
AND LASER PHYSICS**

LLPH-2023

**Irkutsk, Russia,
3 – 8 July 2023.**



LLPh-2023

**XIX INTERNATIONAL
CONFERENCE ON
LUMINESCENCE AND LASER PHYSICS**

CONTENT

Composition of the Organizing Committee	4
General information about conference	5
Program of plenary and section sessions	6
Program of poster session	34



LLPh-2023

**XIX INTERNATIONAL
CONFERENCE ON
LUMINESCENCE AND LASER PHYSICS**

The Chair of the conference

Academician Bagaev Sergey Nikolaevich, chairman of the Scientific Council on optics and laser physics of RAS.

The Co-Chair of the conference

Professor Martynovich Evgeniy Fedorovich.

Program Committee

A.G. Vitukhnovskiy, A.P. Voytovich, V.P. Dresvyanskiy, E.F. Martynovich (Chair), A.I. Nepomnyashchikh (Deputy Chair), A.V. Taichenachev, Song Feng, I.F. Shaikhislamov.

Scientific Advisory Board

V.G. Arkhipkin, A.T. Akilbekov, S.A. Babin, K.A. Barantsev, V.S. Berdnikov, K.N. Boldyrev, O. Bukhtsooj, I.A. Vainshtein, R. Van, J. Davaasambuu, A.V. Egranov, S.A. Zilov, N.A. Ivanov, R.Ya. Ilyenkov, S.M. Kobtsev, E.A. Kotomin, A.G. Krechetov, S.I. Kudryashov, V.L. Kurochkin, Lee Ki-soon, E.I. Lipatov, V.M. Lisitsyn, V.F. Losev, A.N. Lukin, A.Ch. Lushchik, E.V. Malchukova, V.P. Mironov, S.B. Mirov, S.A. Moiseev, A.V. Naumov, S.V. Nikiforov, O.V. Ovchinnikov, L. Oster, V. Pankratov, V.L. Paperny, P.V. Pokasov, E.F. Polisadova, Yu.M. Popov, M.N. Popova, V.E. Privalov, E.A. Radzhabov, V.G. Ralchenko, N.A. Ratakhin, P.A. Ryabochkina, I.I. Ryabtsev, A.D. Savvin, V.A. Svetlichny, O.I. Semenova, E.A. Slyusareva, V.I. Solomonov, Song Feng, B.G. Sukhov, V.F. Tarasenko, Lyme Trinkler, V.I. Trunov, A.N. Trukhin, Hans-Joachim Fitting, D.R. Khokhlov, S.V. Chekalin, A.S. Chirkin, A.M. Shalagin, T.S. Shamirzaev, Tao Shao, B.V. Shul'gin, Sodnom Enkhbat, V.Yu. Yakovlev

Organizing Committee

V.P. Dresvyanskiy (Chair) A.A. Shalaev (Deputy Chair), F.A. Stepanov (Scientific Secretary), Andrey V. Kuznetsov (Scientific Secretary for international affairs), M.A. Arsenyeva, N.S. Bobina, A.I. Bogdanov, S.V. Boychenko, E.A. Vladimirova, T.Yu. Garmysheva, D.S. Glazunov, Ya.I. Grigorov, A.S. Emelyanova, M.D. Zimin, S.V. Kobeleva, N.D. Krivosheev, I.P. Kuzmenko, N.L. Lazareva, N.T. Maksimova, S.V. Murzin, A.A. Myasnikova, E.A. Protasova, A.I. Rusakov, S.Yu. Terenin, A.A. Tyutrin, O.I. Chachanagova, N.G. Chuklina, R.Yu. Shendrik, A.E. Shipunova.

Languages of the conference

Russian, English.

Contacts

E-mail: LLPh@bk.ru. Official site of the conference: <http://www.llph.ru>

Mailing address: 664033, Russia, Irkutsk, Lermontova str., 130A, ИФ ИЛФ СО РАН (IB ILP SB RAS), Organizing Committee LLPh-2023. Phone: 89834036864, Fax: (3952) 51-21-60.



LLPh-2023

**XIX INTERNATIONAL
CONFERENCE ON
LUMINESCENCE AND LASER PHYSICS**

**GENERAL INFORMATION
about conference**

The conference program includes invited lectures (30 minutes) of leading scientists, as well as verbal reports (15 minutes) and poster presentations of scientists, postgraduates and students in the field of laser physics and luminescence. The time for discussion of each report is 5-10 minutes.

The conference provides for parallel work of the thematic sections:

- Luminescence and its applications.
- Laser physics and its applications.
- Optics of artificial quantum systems.
- Luminescence of diamonds and its applications.
- Laser luminescence micro-and nanoscopy.
- Production technologies, radiation and luminescent properties of optical materials.

The program of plenary sessions includes invited lectures of Russian and foreign scientists on topical issues in the field of luminescence and laser physics.

A significant part of the program is devoted to scientific reports of young scientists, graduate students and students. Within the framework of the conference, a competition of scientific reports among students, postgraduates, young researchers and engineers with diplomas will be held. Young scientists under the age of 35 who present verbal reports or poster presentations at the conference will take part in the contest. Reports (including poster presentations) participating in the competition are marked in the program with the abbreviation **(C)**.

The awarding ceremony of the winners of the contest of scientific reports of young scientists will be held at the final plenary session of the conference on July 7 at 13.00.



LLPh-2023

XIX INTERNATIONAL
CONFERENCE ON
LUMINESCENCE AND LASER PHYSICS

PROGRAM
of plenary and section sessions

3 July, Monday

Registration of conference participants

8-30 – 11-00

*V.G. Rasputin scientific library of ISU, Irkutsk, Lermontova str., 124
(hall)*

11-00 – 11-20

*conference hall
№ 501, 5th floor*

Conference opening

*Co-Chair of the conference,
Professor Evgeniy Fedorovich Martynovich, Ph.D.*

*Speech
5 minutes*

Conference Opening.

Chairman of the Scientific Council of RAS on optics and laser physics,
Academician Sergey Nikolaevich Bagaev.

*Speech
5 minutes*

Greeting word to the conference participants.

Director of Irkutsk Department of the Siberian Branch of the Russian
Academy of Sciences, Academician Igor Vyacheslavovich Bychkov.

*Speech
5 minutes*

Greeting word to the conference participants.

Co-Chair of the conference, Professor Evgeniy Fedorovich Martynovich.

*Speech
5 minutes*

Approval of the contest committee.

Chair of the Organizing Committee of the conference Vladimir Petrovich
Dresvyanskiy.

11-20 – 12-30
*conference hall
№ 501*

1st plenary session

Chair – Dresvyanskiy Vladimir Petrovich, Ph.D.

*Invited lecture
30 minutes*

**E.F. Martynovich, V.P. Dresvyanskiy. Single color centers in wide gap
crystals.**

Principal researcher, Irkutsk Branch of Institute of Laser Physics SB RAS,
Professor Evgeniy Fedorovich Martynovich, Ph.D.

*Invited lecture
30 minutes*

**V.F. Losev, I.A. Zyatikov. Generation of coherent radiation on
molecular nitrogen ions in airborne laser plasma.**

Principal researcher, High Current Electronics Institute SB RAS, Professor
Losev Valeriy Fedorovich, Ph.D.



LLPh-2023

**XIX INTERNATIONAL
CONFERENCE ON
LUMINESCENCE AND LASER PHYSICS**

12-30 – 12-45

Organized photo-shooting (main entrance)

12-45 – 14-00

Lunch break

14-00 – 16-00

Sessions of the thematic sections

**14-00 – 16-00
conference hall
№ 501**

1st session of the thematic section

«LUMINESCENCE AND ITS APPLICATIONS»

Chair – Radzhabov Evgeniy Aleksandrovich, Ph.D.

***Invited lecture
30 minutes***

**T.Yu. Garmysheva, A.I. Nepomnyaschikh, R.Yu. Shendrik,
A.S. Paklin, A.A. Shalaev.**

Luminescence of silica glasses obtained from natural quartzites.

Senior researcher, A.P. Vinogradov Institute of Geochemistry SB RAS,
Tatyana Yuryevna Garmysheva, Cand. Sc.

***Report (C)
15 minutes***

M.V. Ashmarina, Yu.V. Aksenova.

Spectral-luminescent properties of dipyrromethene complexes with d-metals.

Research engineer, National Research Tomsk State University, Ashmarina
Maria Vladimirovna.

***Report (C)
15 minutes***

N.P. Bezlepkin, O.N. Chaykovskaya.

Luminescent study of antibiotic phototransformation in water.

Research engineer, National Research Tomsk State University, Bezlepkin
Nadezhda Pavlovna

***Report (C)
15 minutes***

O.N. Chaykovskaya, E.N. Bocharnikova, V.S. Chaidonova.

Luminescent properties of thiazine dyes.

Junior researcher, National Research Tomsk State University,
Bocharnikova Elena Nikolaevna.

***Report (C)
15 minutes***

**D.A. Butenkov, A.V. Bakaeva, K.I. Runina, A.V. Popov, O.B. Petrova.
Influence of lead chloride concentration on the spectral-luminescent
properties of oxochloride lead-borate glasses doped with neodymium.**

Graduate student, D.I. Mendeleev University of Chemical Technology of
Russia, Butenkov Dmitriy Andreevich.



LLPh-2023

XIX INTERNATIONAL
CONFERENCE ON
LUMINESCENCE AND LASER PHYSICS

14-00 – 16-00
conference hall
№ 515

1st session of the thematic section
«OPTICS OF ARTIFICIAL QUANTUM SYSTEMS»
Chair –Evgeniya Alekseevna Slyusareva, Ph.D.

Report
15 minutes

D.S. Abramkin, M.O. Petrushkov, D.B. Bogomolov, E.A. Emelyanov, M.Yu. Esin, A.V. Vasev, A.A. Bloshkin, E.S. Koptev, M.A. Putyato, V.V. Atuchin, V.V. Preobrazhenskiy.

Novel GaSb/AIP quantum dots: formation, structural properties and energy spectrum.

Senior researcher, A.V. Rzhanov Institute of Semiconductor Physics SB RAS, Abramkin Demid Suad, Cand. Sc.

Report (C)
15 minutes

A.I. Zvyagin, T.A. Chevychelova, O.V. Ovchinnikov.

Manifestation of plasmon-exciton interaction in the nonlinear optical response of $Zn_{0.5}Cd_{0.5}S$ quantum dots in the presence of silver nanoparticles.

Assistant Professor, Voronezh State University, Zvyagin Andrey Ilyich, Cand. Sc.

Report (C)
15 minutes

I.D. Avdeev, M.O. Nestoklon, S.V. Gupalov.

Magneto optical properties and valley structure of exciton in lead chalcogenide quantum dots.

Researcher, A.F. Ioffe Physical-Technical Institute RAS, Avdeev Ivan Dmitrievich, Cand. Sc.

Report (C)
15 minutes

A.M. Farouk, I.I. Beterov, P. Xu, I.I. Ryabtsev.

Scalable heteronuclear architecture of neutral atoms based on EIT.

Graduate student, Novosibirsk National Research State University, Ahmed Mohamed Farouk Mohamed Ali.

Report (C)
15 minutes

V.P. Kalinushkin, S.A. Mironov, A.A. Gladilin, M.S. Storozhevykh, O.V. Uvarov.

Two-photon confocal microscopy - structural defect studying technique in the volume of semiconductor crystals.

Junior researcher, A.M. Prokhorov General Physics Institute RAS, Mironov Sergey Aleksandrovich.

Report (C)
15 minutes

V.V. Chashchin, E.I. Lipatov. Modeling of antireflection coatings based on one-dimensional photonic crystals with superlattices.

Junior researcher, National Research Tomsk State University, Chashchin Vladimir Veniaminovich.



LLPh-2023

**XIX INTERNATIONAL
CONFERENCE ON
LUMINESCENCE AND LASER PHYSICS**

14-00 – 16-00
conference hall
№ 301

1st session of the thematic section
«LASER PHYSICS AND ITS APPLICATIONS»
Chair –Dormidonov Aleksandr Evgenyevich, Cand. Sc.

Invited lecture
(C)
30 minutes

A.O. Makarov, V.I. Vishnyakov, D.V. Brazhnikov, A.E. Bonert, A.N. Goncharov.
Development of Hanle and Bell-Bloom methods for high-sensitivity quantum magnetometry at room temperature.
Researcher, Institute of Laser Physics SB RAS, Makarov Anton Olegovich

Report
15 minutes

S.V. Alekseev, V.F. Losev, V.I. Trunov, S.A. Frolov.
Investigation of the second harmonic spectrum formation of a chirped femtosecond pulse.
Junior researcher, High Current Electronics Institute SB RAS, Alekseev Sergey Vladimirovich

Report (C)
15 minutes

O.V. Goreva, O.L. Nikonovich, M.A. Dudaev, R.N. Badanov.
Modeling of optical and nonlinear optical properties of organic substances in the Femap.
Student, Irkutsk State Transport University, Badanov Roman Nikolaevich

Report (C)
15 minutes

G.A. Romanenko, P.S. Pankin, D.S. Buzin, D.N. Maksimov, V.S. Sutormin, A.I. Krasnov, F.V. Zelenov, A.N. Masyugin, S.V. Nedelin, N.A. Zolotovskiy, I.A. Tambasov, M.N. Volochaev, I.V. Timofeev.
Q-factor controlling of metal-dielectric optical microcavity.
L.V. Kirensky Institute of Physics SB RAS, Romanenko Gavriil Aleksandrovich.

Report (C)
15 minutes

E.Ch. Darmaev, D.A. Ikonnikov, S.A. Myslivets, V.G. Arkhipkin, A.M. Vyunyshev.
Application of the Talbot effect for the formation of superposition optical gratings.
Laboratory assistant, L.V. Kirensky Institute of Physics SB RAS, Darmaev Erdeni Chimitovich.

16-00 – 16-20

Coffee-break



LLPh-2023

XIX INTERNATIONAL
CONFERENCE ON
LUMINESCENCE AND LASER PHYSICS

16-20 – 18-00

Sessions of the thematic sections

16-20 – 18-00

conference hall
№ 501

2nd session of the thematic section

«LUMINESCENCE AND ITS APPLICATIONS»

Chair – Shendrik Roman Yuryevich, Cand. Sc.

Report

15 minutes

A.V. Egranov. Rearrangement of the nearest environment near unstable impurity ions.

Leading researcher, A.P. Vinogradov Institute of Geochemistry SB RAS, Egranov Aleksandr Vasilyevich, Ph.D.

Report (C)

15 minutes

Ya.I. Grigorov, E.F. Martynovich, A.A. Tyutrin, A.L. Rakevich, M.E. Shulgina, S.A. Prokopyev, B.S. Danilov, D.P. Gladkochub. Application of laser-luminescence methods for the study of ore concentrate of the Burun-Naryn deposit.

Production engineer, student, Irkutsk Branch of Institute of Laser Physics SB RAS, Grigorov Yaroslav Ivanovich.

Report (C)

15 minutes

N.D. Krivosheev, V.P. Dresvyanskiy, E.F. Martynovich, S.A. Zilov. Fluctuating luminescence of a single X-center in LiF crystal.

Graduate student, Irkutsk Branch of Institute of Laser Physics SB RAS, Krivosheev Nikita Dmitrievich

Report (C)

15 minutes

A.V. Samborskiy, E.A. Radzhabov. Tremodepolarization of fluorides doped with impurities of trivalent lanthanides.

Graduate student, Irkutsk State University, Samborskiy Arseniy Valeryevich.

Report (C)

15 minutes

D.P. Surzhikova, E.A. Slyusareva. Mechanisms of influence on the temperature fluorescence signal of fluorescein.

Engineer, Siberian Federal University, Surzhikova Darya Pavlovna.

Report

15 minutes

N.V. Izmailova, L.G. Samsonova, K.M. Degtyarenko. Spectral characteristics and mobility of charges in donor-acceptor compounds of dibenzothiophenes with conformational changes.

Graduate student, National Research Tomsk State University, Izmailova Natalya Viktorovna.



LLPh-2023

XIX INTERNATIONAL
CONFERENCE ON
LUMINESCENCE AND LASER PHYSICS

16-20 – 18-00
conference hall
№ 515

1st session of the thematic section

« PRODUCTION TECHNOLOGIES, RADIATION AND
LUMINESCENT PROPERTIES OF OPTICAL MATERIALS »

Chair – Shalaev Aleksey Aleksandrovich, Cand. Sc.

Report
15 minutes

O.B. Petrova, D.A. Butenkov, A.V. Bakaeva, K.I. Runina.
Stabilization of the cubic phase of lead fluoride at the crystallization of fluoroborate glasses codoped with Nd/La, Eu/Gd, and Er/Lu.

Professor, D.I. Mendeleev University of Chemical Technology of Russia, Petrova Olga Borisovna, Ph.D..

Report (C)
15 minutes

A.N. Babkina, K.S. Zyryanova, V.G. Sheremet, E.V. Kulpina, N.K. Kuzmenko.

Crystallization kinetics and spectral properties of Cr-doped Li₂O-K₂O-Al₂O₃-B₂O₃ glass-ceramics.

Associate Professor, ITMO National Research University, Babkina Anastasia Nikolaevna, Cand. Sc..

Report (C)
15 minutes

A.G. Golubovskaya, V.A. Svetlichny.

Synthesis and photocatalytic properties of β -Bi₂O₃/Bi₁₂SiO₂₀ nanocomposites obtained by pulsed laser ablation.

Graduate student, National Research Tomsk State University, Golubovskaya Aleksandra Gennadyevna.

Report (C)
15 minutes

A.V. Volokitina, D.A. Goncharova, V.A. Svetlichny.

Photocatalytic properties of metal-oxide ZnO-Ag nanocomposites obtained by pulsed laser ablation.

Graduate student, National Research Tomsk State University, Volokitina Anastasia Vladimirovna.

Report (C)
15 minutes

Ya.S. Didenko, K.A. Subbotin, A.I. Titov, D.A. Lis, S.K. Pavlov, P.A. Volkov, M.P. Zykova.

Growing and studying a promising Nd:MgMoO₄ laser crystal.

Engineer, student, A.M. Prokhorov General Physics Institute RAS, Didenko Yana Sergeevna.



LLPh-2023

XIX INTERNATIONAL
CONFERENCE ON
LUMINESCENCE AND LASER PHYSICS

Report (C)
15 minutes

Yu.V. Agrafonov, I.S. Petrushin, D.V. Khalaimov, I.V. Bezler.
Structure of thin boundary layers of liquid near hard surface.
Graduate student, Irkutsk State University, Khalaimov Daniil Vyacheslavovich.

16-20 – 18-00
conference hall
№ 301

2nd session of the thematic section
«LASER PHYSICS AND ITS APPLICATIONS»
Chair – Ilyenkov Roman Yaroslavovich, Cand. Sc.

Report (C)
15 minutes

E.A. Dobretsova, O.K. Alimov, V.S. Tsvetkov, S.Ya. Rusanov, V.V. Voronov, V.B. Tsvetkov.
Stark structure of neodymium ion in yttrium scandate.
Senior researcher, A.M. Prokhorov General Physics Institute RAS, Dobretsova Elena Anatolyevna, Cand. Sc..

Report (C)
15 minutes

V.Yu. Zhmykhov, D.A. Guryev, E.A. Dobretsova, V.S. Tsvetkov, S.V. Kuznetsov, M.S. Nikova, I.S. Chikulina, D.S. Vakalov, V.A. Tarala, V.B. Tsvetkov.
Investigation of spectral and energy characteristics of Yb:YSAG ceramic laser generation.
Graduate student, A.M. Prokhorov General Physics Institute RAS, Zhmykhov Vadim Yuryevich.

Report (C)
15 minutes

E.Yu. Erushin, A.E. Bednyakova, I.B. Miroshnichenko, N.Yu. Kostyukova, A.A. Boyko, A.A. Redyuk.
Improving the long-term stability of a photo-acoustic cell signal using the extremum seeking control.
Junior researcher, Novosibirsk National Research State University, Erushin Evgeniy Yuryevich.

Report (C)
15 minutes

D.A. Ikonnikov, S.A. Myslivets, V.G. Arkhipkin, A.M. Vyunyshev.
Fresnel diffraction of optical vortices on a fork-shaped grating.
Researcher, L.V. Kirensky Institute of Physics SB RAS, Ikonnikov Denis Andreevich, Cand. Sc.



LLPh-2023

**XIX INTERNATIONAL
CONFERENCE ON
LUMINESCENCE AND LASER PHYSICS**

Report (C)

15 minutes

R.I. Kuts, D.A. Belousov, V.P. Korolkov.

Study of spatial resolution of direct laser writing technology with use of dual-layer a-Si/Cr thin film.

Graduate student, Institute of Automation and Electrometry SB RAS, Kuts Roman Igorevich.

Report (C)

15 minutes

A.V. Shamshurin, V.V. Slabko, I.A. Kuzovatov.

On the possibility of light amplification by molecules selectively oriented over states in the pulsed field.

Graduate student, Siberian Federal University, Shamshurin Aleksey Valeryevich.

18-30 – 20-00

Buffet-supper (hall)



LLPh-2023

XIX INTERNATIONAL
CONFERENCE ON
LUMINESCENCE AND LASER PHYSICS

4 July, Tuesday

9-00 – 10-30
conference hall
№ 501

2nd plenary session

Chair – Professor Martynovich Evgeniy Fedorovich, Ph.D.

Invited lecture
30 minutes

A.G. Vitukhnovsky, D.A. Kolymagin, A.V. Gritsienko,
A.V. Pisarenko, A.I. Prokhodtsov, M.I. Danilkin, G.V. Prutskov.
**Femtosecond two-photon photopolymerization - creation of 3D
microstructures for optical applications.**

Professor, P.N. Lebedev Physical Institute RAS, Moscow Institute of
Physics and Technology, Vitukhnovsky Aleksey Grigoryevich, Ph.D..

Invited lecture
30 minutes

**T.S. Shamirzaev. Optical orientation and dynamic spin polarization
of electrons in indirect band gap quantum dots.**

Leading researcher, A.V. Rzhanov Institute of Semiconductor Physics
SB RAS, Shamirzaev Timur Sezgirovich, Ph.D..

Invited lecture
30 minutes

**E.A. Slyusareva. Organic phosphors with photoinduced charge
transfer: optical properties and applications**

Professor, Siberian Federal University, Slyusareva Evgenia
Alekseevna, Ph.D..

10-40 – 11-00

Coffee-break

11-00 – 12-30
conference hall
№ 501

3rd plenary session

Chair – Professor Vitukhnovsky Aleksey Grigoryevich, Ph.D.

Invited lecture
30 minutes

S.V. Morozov.

**Investigation of interband relaxation mechanisms of nonequilibrium
charge carriers in HgCdTe/CdHgTe quantum well heterostructures
for mid-IR lasers and detectors.**

Head of laboratory, Institute for Physics of Microstructures RAS,
Morozov Sergey Vyacheslavovich, Ph.D.

Invited lecture
30 minutes

D.A. Kurtina, V.P. Grafova, A.I. Lebedev, R.B. Vasilyev.

**Atomically thin AIBVI nanostructures with enantiomeric ligands as
a platform for chiral photonics.**

Professor, M.V. Lomonosov Moscow State University, Vasilyev Roman
Borisovich, Ph.D.



LLPh-2023

**XIX INTERNATIONAL
CONFERENCE ON
LUMINESCENCE AND LASER PHYSICS**

<i>Invited lecture</i> <i>30 minutes</i>	S.I. Kudryashov. Quantum and atomistic processes of femtosecond laser inscription. Head of laboratory, P.N. Lebedev Physical Institute RAS, Kudryashov Sergey Ivanovich, Ph.D.
12-40 – 14-00	<i>Lunch break</i>
14-00 – 15-30	<i>Sessions of the thematic sections</i>
14-00 – 15-30 <i>conference hall</i> <i>№ 501</i>	<i>3rd session of the thematic section</i> «LUMINESCENCE AND ITS APPLICATIONS» <i>Chair – Egranov Aleksandr Vasilyevich, Ph.D.</i>
<i>Invited lecture</i> <i>30 minutes</i>	R.Yu. Shendrik, N.V. Chukanov, M.F. Vigasina, A.N. Sapozhnikov, E.V. Kaneva, T.A Radomskaya, I.V. Pekov. Optical spectroscopy of extra-framework components in cancrinite and sodalite-like microporous materials. Senior researcher, A.P. Vinogradov Institute of Geochemistry SB RAS, Shendrik Roman Yuryevich, Cand. Sc.
<i>Report (C)</i> <i>15 minutes</i>	V.E. Anikeeva, K.N. Boldyrev, O.I. Semenova. X-ray luminescence of MAPbBr₃ hybrid perovskite crystals. Junior researcher, Institute of Spectroscopy RAS, Anikeeva Vasilisa Evgenyevna.
<i>Report</i> <i>15 minutes</i>	K.N. Boldyrev, E.S. Sektorov. X-Ray luminescence of silicon carbide single crystals of 4H and 6H polytype modifications. Senior researcher, Institute of Spectroscopy RAS, Boldyrev Kirill Nikolaevich.
<i>Report</i> <i>15 minutes</i>	V.I. Baryshnikov, O.V. Goreva, T.A. Kolesnikova, O.L. Nikonovich, Yu.A. Murzina. Nonlinear femtosecond laser excitation of intrinsic and impurity luminescence of crystals Associate Professor, Irkutsk State Transport University, Goreva Olga Valeryevna, Cand. Sc.



LLPh-2023

XIX INTERNATIONAL
CONFERENCE ON
LUMINESCENCE AND LASER PHYSICS

Report (C)
15 minutes

K.V. Kuleshova, K.A. Subbotin, A.I. Titov, V.A. Solomatina, A.V. Khomyakov, E.R. Pakina, V.A. Yakovlev, D.T. Valyaev, M.P. Zykova, Ya.S. Didenko, D.A. Lis, M.B. Grechishin, S.Kh. Batygov, I.Kh. Avetisov.

Influence of random impurities on spectroscopic properties of ZnWO₄ crystals.

Student, A.M. Prokhorov General Physics Institute RAS, Kuleshova Kristina Vitalyevna.

14-00 – 15-30
conference hall
№ 515

1st session of the thematic section
«LUMINESCENCE OF DIAMONDS AND ITS APPLICATIONS»

Chair – Lipatov Evgeniy Igorevich, Cand. Sc.

Invited lecture (C)
30 minutes

D.E. Genin, E.I. Lipatov, I.V. Izmailov, V.G. Vins, A.P. Eliseev, A.D. Savvin.

NV-centers diamond lasers: current state and prospects.

Researcher, National Research Tomsk State University, Genin Dmitriy Evgenyevich,

Report (C)
15 minutes

Z.I. Borodulin, L.A. Vasilyeva, M.A. Shulepov.

Electroluminescence of nickel centers in diamond.

Laboratory assistant, student, National Research Tomsk State University, Borodulin Zakhar Igorevich.

Report
15 minutes

A.G. Burachenko, V.S. Ripenko, A.A. Krylov, K.P. Artemov, A.V. Vukolov, E.I. Lipatov.

Cathodoluminescence and Cherenkov radiation in diamond in a wide temperature range.

High Current Electronics Institute SB RAS, Burachenko Aleksandr Gennadyevich, Cand. Sc..

Report (C)
15 minutes

D.S. Voytenko, E.I. Lipatov.

Temperature dependences of photoluminescence of phonon components of radiative recombination of electron excitations in pure diamond.

Student, National Research Tomsk State University, Voytenko Dmitriy Sergeevich.



LLPh-2023

**XIX INTERNATIONAL
CONFERENCE ON
LUMINESCENCE AND LASER PHYSICS**

Report (C)

15 minutes

**A.S. Emelyanova, V.P. Mironov, D.S. Glazunov, S.A. Shabalin,
E.V. Bubyar, L.V. Kazakov, E.F. Martynovich.**

Interzone recombination in diamond involving local centers.

Production engineer, Irkutsk Branch of Institute of Laser Physics SB RAS, Emelyanova Anastasia Sergeevna.

*14-00 – 15-30
conference hall
№ 301*

3rd session of the thematic section

«LASER PHYSICS AND ITS APPLICATIONS»

Chair – Morozov Sergey Vyacheslavovich, Ph.D.

Report (C)

15 minutes

**A.V. Astrakhantseva, A.A. Shavelyev, S.V. Kuznetsov,
A.G. Nikolaev, K.N. Boldyrev, A.S. Nizamutdinov.**

**Assessment of the possibility of removing self-restriction for the
 $^4I_{11/2} \rightarrow ^4I_{13/2}$ laser transition in Er^{3+} ion for $BaY_{1.8}Lu_{0.2}F_8$ crystal.**

Laboratory assistant, Kazan (Volga region) Federal University, Astrakhantseva Anna Vitalyevna.

Report (C)

15 minutes

D.M. Bezverkhnyaya, A.T. Saakyan, V.N. Puzyrev.

Time characteristics of X-ray laser plasma radiation of a copper target.

Laboratory assistant, student, P.N. Lebedev Physical Institute RAS, Bezverkhnyaya Darya Mikhailovna.

Report (C)

15 minutes

**A.K. Dokudovskaya, M.S. Pudovkin, E.I. Oleynikova,
S.L. Korableva, O.A. Morozov.**

Optical temperature sensors based on down-conversion microparticles Nd^{3+} , Yb^{3+} : $LiYF_4$.

Student, Kazan (Volga region) Federal University, Dokudovskaya Anna Konstantinovna.

Report (C)

15 minutes

A.I. Minibaev, A.V. Kharitonov, S.S. Kharintsev.

Materials with temporal inhomogeneity for controlling optical fields.

Student, Kazan (Volga region) Federal University, Minibaev Aidar Ilshatovich.



LLPh-2023

XIX INTERNATIONAL
CONFERENCE ON
LUMINESCENCE AND LASER PHYSICS

<i>Report (C)</i> <i>15 minutes</i>	E.Yu. Erushin, N.Yu. Kostyukova, A.A. Boyko, E.V. Baranova, D.M. Verbovatyi, D.V. Badikov. Study of the threshold of radiation resistance of a novel crystal $Ba_2Ga_8GeS_{16}$. Junior researcher, Novosibirsk National Research State University, Erushin Evgeniy Yuryevich.
<i>Report (C)</i> <i>15 minutes</i>	N.K. Kuzmenko, L.S. Logunov, E.V. Kolobkova, N.V. Nikonorov, S.V. Makarov. Obtaining reversible recording in glass containing perovskite precursors by femtosecond laser radiation. Graduate student, ITMO National Research University, Kuzmenko Natalya Konstantinovna.
15-40 – 16-00	Coffee-break
16-00 – 17-40	Sessions of the thematic sections
16-00 – 17-45 <i>conference hall</i> <i>№ 501</i>	4th session of the thematic section «LUMINESCENCE AND ITS APPLICATIONS» Chair – Vasilyev Roman Borisovich, Ph.D.
<i>Report (C)</i> <i>15 minutes</i>	D.A. Makarova, A.S. Nizamutdinov, A.A. Buglak, T.A. Telegina. Photooxidation of tetrahydrobiopterin under various conditions. Laboratory assistant, Kazan (Volga region) Federal University, Makarova Darya Andreevna.
<i>Report (C)</i> <i>15 minutes</i>	A.D. Molchanova, K.N. Boldyrev, M.N. Popova. Temperature dependence of the luminescence spectra of Mn centers in $YAl_3(BO_3)_4:Mn$. Researcher, Institute of Spectroscopy RAS, Molchanova Anastasia Dmitrievna, Cand. Sc.
<i>Report (C)</i> <i>15 minutes</i>	E.V. Shindyakin, A.S. Uvarov, A.I. Nepomnyschikh, N.S. Bobina, V.K. Platonov. Application of DTG-4 thermoluminescent dosimeters for surface dose measurements during radiation therapy. Graduate student, A.P. Vinogradov Institute of Geochemistry SB RAS, Shindyakin Evgeniy Vyacheslavovich.



LLPh-2023

**XIX INTERNATIONAL
CONFERENCE ON
LUMINESCENCE AND LASER PHYSICS**

<i>Report (C)</i> <i>15 minutes</i>	A.A. Khrebtov, E.V. Fedorenko, A.G. Mirochnik. Excimer delayed fluorescence of difluoroboron β-diketonate complexes in polymer matrix. Far Eastern Federal University, Khrebtov Aleksandr Andreevich.
<i>Report (C)</i> <i>15 minutes</i>	O.G. Chechekina, K.N. Boldyrev. Machine learning for the investigation of FTIR-spectra of biological samples. Technician, Institute of Spectroscopy RAS, Chechekina Olga Georgievna.
<i>Report (C)</i> <i>15 minutes</i>	A.S. Frolova, A.L. Rakevich, E.F. Martynovich. Spectroscopy of centers induced by laser radiation in the crystal $KCl-Tl_2SO_4$. Irkutsk State University, Frolova Anastasia Sergeevna.
<i>Report (C)</i> <i>15 minutes</i>	E.A. Protasova, A.L. Rakevich, A.S. Lipatyev, V.N. Sigaev, E.F. Martynovich. Contrast and signal-to-noise ratio for photographic materials with luminescent image visualization. Graduate student, Irkutsk Branch of Institute of Laser Physics SB RAS, Protasova Ekaterina Anatolyevna.
16-00 – 17-45 conference hall № 515	2nd session of the thematic section «LUMINESCENCE OF DIAMONDS AND ITS APPLICATIONS» Chair – Kudryashov Sergey Ivanovich, Ph.D.
<i>Report</i> <i>15 minutes</i>	V.P. Mironov. Superluminescence of N3 centers in diamond. Irkutsk Branch of Institute of Laser Physics SB RAS, Mironov Vasily Pavlovich, Cand. Sc.
<i>Report</i> <i>15 minutes</i>	E.I. Lipatov, A.S. Popova. Prospects for the use of synthetic diamond in electronics and photonics. Head of laboratory, National Research Tomsk State University, Lipatov Evgeniy Igorevich, Cand. Sc.



LLPh-2023

XIX INTERNATIONAL
CONFERENCE ON
LUMINESCENCE AND LASER PHYSICS

<i>Report</i> 15 minutes	D.E. Genin, I.V. Izmailov, E.I. Lipatov, A.V. Lyachin. Experience of calculating gain and loss for artificial diamond with NV centers. Associate Professor, National Research Tomsk State University, Izmailov Igor Valeryevich, Cand. Sc..
<i>Report (C)</i> 15 minutes	G.K. Krasin, S.I. Kudryashov. Polarization-sensitive photoluminescence and filamentation of ultrafast laser pulses in diamond. Junior researcher, P.N. Lebedev Physical Institute RAS, Krasin Georgiy Konstantinovich.
<i>Report (C)</i> 15 minutes	A.A. Krylov, A.G. Burachenko, D.A. Peresedova, V.S. Ripenko, E.I. Lipatov. Cathodoluminescence of different luminescence centers in diamond samples at high temperatures. Student, National Research Tomsk State University, Krylov Aleksandr Aleksandrovich a.
<i>Report (C)</i> 15 minutes	O.I. Lyga, M.A. Shulepov. Determination of temperature dependences of photoluminescence spectra of NV centers of diamonds under the action of an applied magnetic field. Student, National Research Tomsk State University, Lyga Olga Igorevna.
16-00 – 17-45 conference hall № 301	2nd session of the thematic section «OPTICS OF ARTIFICIAL QUANTUM SYSTEMS» Chair –Kurochkin Vladimir Leonidovich, Cand. Sc.
<i>Report (C)</i> 15 minutes	G.V. Budkin, M.V. Durnev, S.A. Tarasenko. Microscopic theory of the fine structure of Dirac states in HgTe/CdHgTe quantum wells. Senior researcher, A.F. Ioffe Physical-Technical Institute RAS, Budkin Grigoriy Vladimirovich, Cand. Sc.
<i>Report (C)</i> 15 minutes	A.I. Zvyagin, T.A. Chevychelova, O.V. Ovchinnikov. Influence of the SiO₂ shell on the nonlinear optical properties of PbS quantum dots in the presence of gold nanorods. Assistant Professor, Voronezh State University, Zvyagin Andrey Ilyich, Cand. Sc.



LLPh-2023

**XIX INTERNATIONAL
CONFERENCE ON
LUMINESCENCE AND LASER PHYSICS**

<i>Report (C)</i> <i>15 minutes</i>	E.I. Battalova, S.S. Kharintsev. Phase gradient semiconductors. Student, Kazan (Volga region) Federal University, Battalova Elina Ilgizovna.
<i>Report (C)</i> <i>15 minutes</i>	E.A. Izbasarova, S.S. Kharintsev. Optical heating of silicon cantilevers used in atomic force microscopy. Student, Kazan (Volga region) Federal University, Izbasarova Elina Aleksandrovna.
<i>Report (C)</i> <i>15 minutes</i>	D.S. Buzin, P.S. Pankin, D.N. Maksimov, G.A. Romanenko, V.S. Sutormin, S.V. Nabol, F.V. Zelenov, A.N. Masyugin, M.N. Volochaev, S.Ya. Vetrov, I.V. Timofeev. Hybrid Tamm-microcavity optical modes with tunable Q-factor. Junior researcher, L.V. Kirensky Institute of Physics SB RAS, Buzin Daniil Sergeevich.
<i>Report (C)</i> <i>15 minutes</i>	V.M. Levkovskaya, A.V. Kharitonov, S.S. Kharintsev. Violation of reciprocity in spatio-temporal modulated metamaterials for information transmission and processing task. Student, Kazan (Volga region) Federal University, Levkovskaya Valeria Maksimovna.
<i>Report (C)</i> <i>15 minutes</i>	A.V. Rogova, S.V. Zangeeva, A.N. Kudryavtsev, V.V. Krasitskaya, L.A. Frank, F.N. Tomilin. Optical properties of the furimazine in the coelenterazine-binding protein. Siberian Federal University, Rogova Anastasia Vladimirovna.

19-00	<i>Sports competition (sports ground near the building of Limnological Institute SB RAS)</i>
--------------	---



LLPh-2023

**XIX INTERNATIONAL
CONFERENCE ON
LUMINESCENCE AND LASER PHYSICS**

5 July, Wednesday

*09-00 – 10-30
conference hall
№ 501*

4th plenary session

Chair – Shamirzaev Timur Sezgirovich, Ph.D.

*Invited lecture
30 minutes*

A.V. Taichenachev, V.I. Yudin.
Generalized Ramsey methods in precision laser spectroscopy: from atomic clocks to interferometers.
Institute of Laser Physics SB RAS, corresponding member of RAS
Taichenachev Aleksey Vladimirovich, Ph.D.

*Invited lecture
30 minutes*

V.S. Berdnikov, V.A. Vinokurov, V.V. Vinokurov, V.A. Grishkov, S.A. Kislitsyn, K.A. Mitin, A.V. Mikhailov.
Regularities of complex conjugate heat exchange in directional crystallization methods and their influence on the shapes of crystallization fronts and the thermal history of crystals.
Principal researcher, S.S. Kutateladze Institute of Thermophysics SB RAS,
Berdnikov Vladimir Stepanovich, Ph.D.

*Invited lecture
30 minutes*

V.L. Kurochkin. Satellite quantum cryptography.
Head of laboratory, National University of Science and Technology "MISIS", Kurochkin Vladimir Leonidovich, Cand. Sc.

10-40 – 11-00

Coffee-break

*11-00 – 12-30
conference
hall № 501*

5th plenary session

*Chair – Taichenachev Aleksey Vladimirovich, Ph.D.,
corresponding member of RAS*

*Invited lecture
30 minutes*

S.A. Zilov, V.P. Dresvyanskiy, E.F. Martynovich.
Polarized luminescence of single quantum systems.
Head of laboratory, Irkutsk Branch of Institute of Laser Physics SB RAS,
Zilov Sergey Anatolyevich, Ph.D.

*Invited lecture
30 minutes*

P.A. Frantsuzov.
Long-term fluctuations of the photoluminescence intensity of nanoparticles.
Head of laboratory, V.V. Voevodsky Institute of Chemical Kinetics and Combustion SB RAS, Frantsuzov Pavel Anatolyevich, Cand. Sc.

*Invited lecture
30 minutes*

K.N. Boldyrev, N.Yu. Boldyrev, M.N. Popova.
High resolution luminescence spectroscopy of functional materials.
Senior researcher, Institute of Spectroscopy RAS, Boldyrev Kirill Nikolaevich, Cand. Sc.

12-40 – 14-00

Lunch break



LLPh-2023

**XIX INTERNATIONAL
CONFERENCE ON
LUMINESCENCE AND LASER PHYSICS**

14-00 – 16-00

Sessions of the thematic sections

**14-00 – 16-30
conference hall
№ 501**

5th session of the thematic section

«LUMINESCENCE AND ITS APPLICATIONS»

Chair – Frantsuzov Pavel Anatolyevich, Cand. Sc.

*Report
15 minutes*

E.V. Malchukova, V.S. Levitskiy, N.G. Tyurnina, Z.G. Tyurnina.
Effect of intrinsic defects of borosilicate glasses, containing rare earth ions, on their structural and optical properties.
A.F. Ioffe Physical-Technical Institute RAS, Malchukova Evgeniya Valeryevna, Ph.D..

*Report (C)
15 minutes*

I.E. Kolesnikov, D.V. Mmonova, M.A. Kurochkin.
Multimode luminescence thermometry.
St. Petersburg State University, Kolesnikov Ilya Evgenyevich, Ph.D..

*Report
15 minutes*

N.T. Maksimova, D.D. Miroshnik, A.I. Evdokimova.
A new color centers in short-wave range in fluorides of sodium and lithium.
Associate Professor, Irkutsk State University, Maksimova Natalya Timofeevna, Cand. Sc.

*Report
15 minutes*

E.V. Parfenova, N.V. Slyusarenko, E.A. Slyusareva, S.V. Kulagin, M.L. Kukushkina.
Photophysical properties of phosphors based on 3-(1,3-benzothiazole-2-yl)-4-hydroxybenzenesulfonic acid.
Graduate student, Siberian Federal University, Parfenova Ekaterina Valeryevna.

*Report
15 minutes*

F.N. Tomilin, A.V. Rogova, E.V. Parfenova, N.V. Slyusarenko, E.A. Slyusareva.
Modelling the optical properties of 3-(1,3-benzothiazol-2-yl)-4-hydroxybenzenesulfonic acid.
Senior researcher, L.V. Kirensky Institute of Physics SB RAS, Tomilin Feliks Nikolaevich, Cand. Sc..

*Report
15 minutes*

D.S. Glazunov, E.F. Martynovich. **Generation of radiation pulses, necessary for the study of kinetics of long-term luminescence, by excilamps.**
Junior researcher, Irkutsk Branch of Institute of Laser Physics SB RAS, Glazunov Dmitriy Sergeevich.



LLPh-2023

XIX INTERNATIONAL
CONFERENCE ON
LUMINESCENCE AND LASER PHYSICS

Report (C)
15 minutes

E.I. Oleynikova, M.S. Pudovkin, O.A. Morozov, S.L. Korableva.
Spectral-kinetic characterization of $\text{LiYF}_4:\text{Gd}^{3+}$ and $\text{LiGdF}_4:\text{Eu}^{3+}$ phosphors for the purposes of quantum electronics and sensorics.
Student, Kazan (Volga region) Federal University, Oleynikova Ekaterina Ilyinichna.

Report (C)
15 minutes

A.O. Tarasevich, I.Yu. Eremchev, M.A. Knyazeva, J. Li, A.V. Naumov, I.G. Scheblykin.
Photon statistics of delayed luminescence of single sub-micron MAPbI_3 perovskite crystals.
Junior researcher, Moscow Pedagogical State University, Tarasevich Aleksandr Olegovich.

14-00 – 16-00
conference hall
№ 515

3rd session of the thematic section
«LUMINESCENCE OF DIAMONDS AND ITS APPLICATIONS»

Chair – Izmailov Igor Valeryevich, Cand. Sc.

Report (C)
15 minutes

D.A. Peresedova, V.S. Ripenko, A.A. Krylov, A.G. Burachenko.
Pulsed cathodoluminescence of diamonds containing various nitrogen-vacancy complexes.
Student, National Research Tomsk State University, Peresedova Darya Aleksandrovna.

Report (C)
15 minutes

A.S. Popova, E.I. Lipatov.
Edge photoluminescence spectra of the undoped diamond in various temperature and energy ranges.
Laboratory assistant, National Research Tomsk State University, Popova Alina Sergeevna.

Report (C)
15 minutes

V.S. Ripenko, A.G. Burachenko, D.A. Peresedova, A.A. Krylov, K.P. Artemov, A.V. Vukolov, E.I. Lipatov.
Edge luminescence of low impurity diamonds stimulated by high current and microtron beams.
Researcher, National Research Tomsk State University, Ripenko Vasilii Sergeevich

Report (C)
15 minutes

E.S. Sektarov, K.N. Boldyrev.
Investigation of A-band in diamond by X-Ray luminescence method.
Junior researcher, Institute of Spectroscopy RAS, Sektarov Eduard Saitovich.



LLPh-2023

XIX INTERNATIONAL
CONFERENCE ON
LUMINESCENCE AND LASER PHYSICS

Report (C)
15 minutes

I.A. Fedorova, V.Yu. Yurov, A.P. Bolshakov, A.K. Martyanov, V.G. Ralchenko.

Optical emission spectroscopy of microwave plasma in H₂-CH₄-GeH₄ mixtures during diamond doping with germanium to create GeV color centers.

Junior researcher, A.M. Prokhorov General Physics Institute RAS, Fedorova Irina Aleksandrovna.

Report (C)
15 minutes

F.A. Stepanov, V.P. Mironov, A.L. Rakevich, E.F. Martynovich.
Peculiarities of temperature dependences of luminescence in spectral region of the band of S2 system in diamond.

Production engineer, Irkutsk Branch of Institute of Laser Physics SB RAS, Stepanov Filipp Anatolyevich.

14-00 – 16-30
conference hall
№ 301

4th session of the thematic section
«LASER PHYSICS AND ITS APPLICATIONS»
Chair – Kovalev Mikhail Sergeevich, Cand. Sc.

Report
15 minutes

A.A. Chernenko.

Effects of the level magnetic coherence (interference) induced by the field of a linear polarized wave in saturated absorption and magnetic scanning spectra in atoms with Λ - and V- type transitions.

Senior researcher, A.V. Rzhanov Institute of Semiconductor Physics SB RAS, Chernenko Aleksandr Alekseevich, Cand. Sc.

Report
15 minutes

V.M. Entin, D.V. Brazhnikov, I.I. Ryabtsev.

Application of the double radio-optical resonance technique in Hanle configuration in rubidium cell with buffer gas for the detection of weak microwave field.

Senior researcher, A.V. Rzhanov Institute of Semiconductor Physics SB RAS, Entin Vasily Matveevich, Cand. Sc..

Report (C)
15 minutes

R.Ya. Ilyenkov, O.N. Prudnikov, A.A. Kirpichnikova, A.V. Taichenachev, V.I. Yudin.

Kinetics of laser cooling of atoms in a bichromatic field.

Researcher, Institute of Laser Physics SB RAS, Ilyenkov Roman Yaroslavovich, Cand. Sc.

Report
15 minutes

A.E. Dormidonov, E.D. Zaloznaya, V.O. Kompanets, V.A. Simonova, S.V. Chekalin, V.P. Kandidov.

Formation and spectrum of a single-cycle mid-infrared light bullet.

Head of research department, N.L. Dukhov All-Russian Scientific Research Institute of Automation, Dormidonov Aleksandr Evgenyevich, Cand. Sc.



LLPh-2023

**XIX INTERNATIONAL
CONFERENCE ON
LUMINESCENCE AND LASER PHYSICS**

<i>Report</i> <i>15 minutes</i>	A.V. Kuznetsov. Oscillation of the transverse size of the light bullet. Senior researcher, Irkutsk Branch of Institute of Laser Physics SB RAS, Kuznetsov Andrey Viktorovich, Cand. Sc.
<i>Report</i> <i>15 minutes</i>	A.V. Puchikin, Yu.N. Panchenko, I.N. Konovalov, M.V. Andreev, V.E. Prokopyev. Interaction of nitrogen dioxide with 222 nm laser radiation. Researcher, High Current Electronics Institute SB RAS, Puchikin Aleksy Vladimirovich
<i>Report (C)</i> <i>15 minutes</i>	A.E. Rupasov, S.I. Kudryashov, A.V. Bogatskaya. Direct laser writing in the bulk of transparent dielectrics. Junior researcher, P.N. Lebedev Physical Institute RAS, Rupasov Aleksy Evgenyevich.
<i>Report (C)</i> <i>15 minutes</i>	S.V. Murzin, A.V. Kuznetsov, E.F. Martynovich, V.P. Dresvyanskiy. Efficiency of formation of luminescent defects in LiF crystals under various conditions of femtosecond laser excitation. Graduate student, Irkutsk Branch of Institute of Laser Physics SB RAS, Murzin Semen Vitalyevich.
<i>Report (C)</i> <i>15 minutes</i>	A.V. Kazantseva, S.S. Kharintsev. The glass transition of oligomeric and polymer structures probing by Raman spectroscopy. Graduate student, Kazan (Volga region) Federal University, Kazantseva Anastasia Vladislavovna.

16-30 – 17-30

Poster session (hall)

18-00

Bus tour of the city



LLPh-2023

XIX INTERNATIONAL
CONFERENCE ON
LUMINESCENCE AND LASER PHYSICS

6 July, Thursday

10-00 – 12-30

Sessions of the thematic sections

10-00 – 12-30
conference hall
№ 501

5th session of the thematic section

«LASER PHYSICS AND ITS APPLICATIONS»

Chair – Kuznetsov Andrey Viktorovich, Cand. Sc.

- Report (C)*
15 minutes
- F. Song, J. Yang.**
Additive Manufacturing and Luminescent Properties of Rare Earth/Phosphor Doped Glass.
Graduate student, School of Physics & The Key Laboratory of Weak Light Nonlinear Photonics, Nankai University, Yang Jiaxin
-
- Report (C)*
15 minutes
- R. Xu, M. Feng, J. Yang, X. Sang, Z. Zhao, F. Song.**
Optical field transmission in complex medium and its encryption applications.
Graduate student, School of Physics & The Key Laboratory of Weak Light Nonlinear Photonics, Nankai University, Xu Rui
-
- Report (C)*
15 minutes
- X. Sang, F. Song, R. Xu, J. Yang, Z. Zhao, M. Feng, W. Huang.**
Color regulation for rare-earth/liquid-crystals composites.
Graduate student, School of Physics & The Key Laboratory of Weak Light Nonlinear Photonics, Nankai University, Sang Xu.
-
- Report (C)*
15 minutes
- F. Song, Z. Zhao.**
Mechanism Analysis and Experiment Study on laser cleaning.
Graduate student, School of Physics & The Key Laboratory of Weak Light Nonlinear Photonics, Nankai University, Zhao Zejia.
-
- Report (C)*
15 minutes
- S.B. Bodrov, A.I. Korytin, Yu.A. Sergeev, A.N. Stepanov.**
THz field effect on luminescence in GaAs.
Researcher, A.V. Gaponov-Grekhov Institute of Applied Physics RAS, Sergeev Yuriy Aleksandrovich.
-
- Report (C)*
15 minutes
- J. Holler, T. Korn, D.S. Smirnov.**
Valley magnetophonon resonance in twisted bilayers of transition metal dichalcogenides.
Researcher, A.F. Ioffe Physical-Technical Institute RAS, Smirnov Dmitriy Sergeevich, Cand. Sc..



LLPh-2023

XIX INTERNATIONAL
CONFERENCE ON
LUMINESCENCE AND LASER PHYSICS

Report (C)
15 minutes

Yu.V. Mikhailov, T.O. Lipatyeva, S.S. Fedotov, M.Z. Ziyatdinova, I.S. Glebov, V.N. Sigaev, A.S. Lipatyev.

Laser formation of luminescent centers in the bulk of nanoporous glass doped with bismuth.

Graduate student, D.I. Mendeleev University of Chemical Technology of Russia, Mikhailov Yuriy Vladimirovich

Report (C)
15 minutes

M.A. Fadeev, A.A. Dubinov, A.A. Razova, A.A. Yantser, V.V. Utochkin, V.V. Rummyantsev, V.Ya. Aleshkin, D.V. Shengurov, E.E. Morozova, N.N. Mikhailov, S.A. Dvoretzkiy, V.I. Gavrilenko, S.V. Morozov.

Stimulated emission and laser generation in HgCdTe-based heterostructures in the 3 - 5 μm range.

Researcher, Institute for Physics of Microstructures RAS, Fadeev Mikhail Aleksandrovich, Cand. Sc.

Report (C)
15 minutes

B.A. Nasedkin, F.D. Kiselev, V.V. Chistykov, A.O. Ismagilov, A.N. Tsyppin, A.A. Gaidash, A.V. Kozubov, V.I. Egorov.

Fiber optic components vulnerabilities of quantum key distribution systems.

Researcher, ITMO National Research University, Nasedkin Boris Aleksandrovich.

10-00 – 12-30
conference
hall № 515

2nd session of the thematic section

**« PRODUCTION TECHNOLOGIES, RADIATION AND
LUMINESCENT PROPERTIES OF OPTICAL MATERIALS »**

Chair – Petrova Olga Borisovna, Ph.D.

Report
15 minutes

M.S. Kovalev, S.I. Kudryashov.

Au-hyperdoped Si nanolayer: laser techniques for processing and resulting material properties.

Senior researcher, P.N. Lebedev Physical Institute RAS, Kovalev Mikhail Sergeevich, Cand. Sc.

Report
15 minutes

I.V. Krutikova, K.V. Nefedova.

Scintillation ceramic nanoparticles obtained by combustion in solution.

Researcher, Institute of Electrophysics UrB RAS, Krutikova Irina Vladimirovna, Cand. Sc.

Report
15 minutes

K.A. Mitin, V.S. Berdnikov, A.V. Mitina.

Heat transfer from silicon rods heated by electric current during the production of polycrystalline silicon by the Siemens process in natural convection modes.

S.S. Kutateladze Institute of Thermophysics SB RAS, Mitin Konstantin Aleksandrovich, Cand. Sc.



LLPh-2023

XIX INTERNATIONAL
CONFERENCE ON
LUMINESCENCE AND LASER PHYSICS

<i>Report (C)</i> <i>15 minutes</i>	I.A. Saidazimov, B.P. Gritsenko. Synthesis of YAG:Ce ceramics in the radiation field. Student, National Research Tomsk Polytechnic University, Saidazimov Ibrokhimkhon Aiyupkhonovich.
<i>Report</i> <i>15 minutes</i>	N.V. Ambarnikova, E.F. Polisadova, V.M. Lisitsyn, E.V. Domarov. X-ray phase analysis of luminescent ceramics YAG:Ce, synthesized by the radiation method. Graduate student, National Research Tomsk Polytechnic University, Ambarnikova Natalya Vladimirovna.
<i>Report (C)</i> <i>15 minutes</i>	N.D. Tran, E.F. Polisadova. Photoluminescence of magnesium aluminum spinel $MgAl_2O_4:Mn$ synthesized by the radiation method. Graduate student, National Research Tomsk Polytechnic University, Nhan Dat Tran.
<i>Report (C)</i> <i>15 minutes</i>	A.S. Severin, B.B. Ilyushin, K.S. Pervunin. PIV measurements in a bubbly free jet to study its turbulence structure. Research engineer, student, S.S. Kutateladze Institute of Thermophysics SB RAS, Severin Andrey Sergeevich.
<i>Report (C)</i> <i>15 minutes</i>	S.A. Kislitsyn, A.V. Mikhailov, K.A. Mitin, V.S. Berdnikov. Experimental and numerical studies of water crystallization on a vertical wall. S.S. Kutateladze Institute of Thermophysics SB RAS, Kislitsyn Stepan Aleksandrovich.
<i>Report (C)</i> <i>15 minutes</i>	A.V. Kuznetsov, A.S. Shalin. All-dielectric metasurfaces in hybrid anapole regime with quasi-BIC. Graduate student, Moscow Institute of Physics and Technology, Kuznetsov Aleksey Vitalyevich.

<i>10-00 – 12-30</i> <i>conference</i> <i>hall № 301</i>	<i>3rd session of the thematic section</i> «OPTICS OF ARTIFICIAL QUANTUM SYSTEMS» <i>Chair – Kolesnikov Ilya Evgenyevich, Ph.D.</i>
--	---

<i>Report (C)</i> <i>15 minutes</i>	I.G. Grevtseva, O.V. Ovchinnikov, M.S. Smirnov, S.V. Aslanov, M.S. Astashkina. Photostability of luminescence of colloidal quantum dots Ag_2S in the presence of plasmonic nanoparticles Au. Student, Voronezh State University, Astashkina Marina Sergeevna.
--	--



LLPh-2023

XIX INTERNATIONAL
CONFERENCE ON
LUMINESCENCE AND LASER PHYSICS

<i>Report</i> <i>15 minutes</i>	S.V. Boychenko. A generalized algorithm to compute tight focusing of arbitrary collimated laser beams. Leading electronics engineer, Irkutsk Branch of Institute of Laser Physics SB RAS, Boychenko Stepan Viktorovich.
<i>Report</i> <i>15 minutes</i>	A.S. Mysovsky, A.I. Bogdanov. A new hybrid method for calculations of crystalline and amorphous materials: SML-QM/MM. Senior researcher, A.P. Vinogradov Institute of Geochemistry SB RAS, Mysovsky Andrey Sergeevich, Cand. Sc.
<i>Report (C)</i> <i>15 minutes</i>	A.V. Poshakinskiy, D.I. Ilyin, A.N. Poddubnyi, I.V. Iorsh. Generation of entangled photons by an ensemble of dynamically modulated quantum emitters in a waveguide. Senior researcher, A.F. Ioffe Physical-Technical Institute RAS, Poshakinskiy Aleksandr Valeryevich, Cand. Sc.
<i>Report (C)</i> <i>15 minutes</i>	E.A. Smirnova, N.A. Lozing, M.G. Gladush. Dipole-dipole interactions in the optical spectra of two entangled emitters. Junior researcher, graduate student, Troitsk Branch of P.N. Lebedev Physical Institute RAS, Smirnova Ekaterina Aleksandrovna.
<i>Report (C)</i> <i>15 minutes</i>	E.M. Trifanova, M.E. Nikolaeva, A.P. Sviridov, V.K. Popov. Transformation of photoluminescence spectra of upconversion nanoparticles by biological tissue phantoms. Junior researcher, Institute of Photonic Technologies, FRC "Crystallography and Photonics" RAS, Trifanova Ekaterina Maksimovna.
<i>Report (C)</i> <i>15 minutes</i>	R.D. Kharisova, A.N. Babkina, K.S. Zyryanova. Effect of temperature on the absorption of mixed perovskite nanocrystals CsPb(Br_xI_{1-x})₃ in borogermanate matrix. Engineer, ITMO National Research University, Kharisova Rufina Danilovna.
<i>Report (C)</i> <i>15 minutes</i>	O.V. Ovchinnikov, M.S. Smirnov, I.G. Grevtseva, E.A. Vozgorkova, K.S. Chirkov. Control of the spectral and luminescent properties of Ag₂S and PbS quantum dots in their binary association. Graduate student, Voronezh State University, Chirkov Kirill Sergeevich.
12-30 – 14-00	Lunch break



LLPh-2023

**XIX INTERNATIONAL
CONFERENCE ON
LUMINESCENCE AND LASER PHYSICS**

14-00 – 15-00
conference hall
№ 501

6th plenary session

Chair – Berdnikov Vladimir Stepanovich, Ph.D.

Invited lecture
30 minutes

V.I. Baryshnikov, V.L. Paperny.

Exploration of high-current volumetric picosecond gas discharges in the field of femtosecond laser pulses.

Professor, head of department, Irkutsk State University, Paperny Viktor Lvovich, Ph.D..

Invited lecture
30 minutes

E.A. Padzhabov, V.A. Kozlovskiy, V. Pankratov, R.Yu. Shendrik, A.S. Myasnikova.

Radiation-induced luminescence centres in CaSrBaF₆ crystals.

Principal researcher, A.P. Vinogradov Institute of Geochemistry SB RAS, Radzhabov Evgeniy Aleksandrovich, Ph.D..

15-00

Coffee-break

15-00 – 16-00

Poster session (hall)

16-00 – 17-30

Contest Commission session

18-30

Festive dinner for the participants of the conference



LLPh-2023

XIX INTERNATIONAL
CONFERENCE ON
LUMINESCENCE AND LASER PHYSICS

7 July, Friday

9-00 – 10-30
conference
hall № 501

7th plenary session

Chair – Professor Losev Valeriy Fedorovich, Ph.D.

Invited
lecture
30 minutes

B.G. Sukhov, B.A. Trofimov, D. Regdel.

Hybrid non-organo-organic nanobiocomposites as platforms for interdisciplinary research and technologies.

Leading researcher, V.V. Voevodsky Institute of Chemical Kinetics and Combustion SB RAS, Sukhov Boris Gennadyevich, Cand. Sc.

Invited
lecture
30 minutes

K.A. Subbotin, D.A. Lis, A.I. Titov, O.K. Alimov, E.V. Zharikov.

UV-to-IR emission down-conversion in the Yb doped Scheelite-like molybdate and tungstate crystals.

Head of department, A.M. Prokhorov General Physics Institute RAS, Subbotin Kirill Anatolyevich, Cand. Sc.

Invited
lecture
30 minutes

V.A. Svetlichny, O.A. Reutova, E.D. Fakhrutdinova, T.S. Kharlamova, O.V. Vodyankina.

Laser synthesis of complex Titanium dioxide-based nanostructures for photocatalytic hydrogen generation and conversion of renewable feedstocks.

Head of laboratory, National Research Tomsk State University, Svetlichny Valeriy Antolyevich, Cand. Sc..

Invited
lecture
30 minutes

J. Jiang.

Flexible minimally invasive coherent anti-Stokes Raman spectroscopy (CARS) measurement method with tapered optical fiber probe.

Professor, School of Precision Instrument and Opto-electronics Engineering, Tianjin University, Jiang Junfeng.

11-00 – 11-30

Coffee-break

11-30 – 13-00
conference hall
№ 501

Online session of the thematic section

«LUMINESCENCE AND ITS APPLICATIONS»

Chair – Boldyrev Kirill Nikolaevich, Cand. Sc.

Invited lecture
30 minutes

V.I. Baryshnikov. Non-inertia mechanisms of energy conversion in crystals excited by dense laser pulses and electron beams.

Professor, Irkutsk State Transport University, Baryshnikov Valentin Ivanovich, Ph.D.



LLPh-2023

**XIX INTERNATIONAL
CONFERENCE ON
LUMINESCENCE AND LASER PHYSICS**

<i>Invited lecture</i> 30 minutes	B.P. Aduiev, N.L. Aluker, A.S. Artamonov, D.S. Nurmukhamedov. Diagnostics of pulsed laser action on wide-gap materials using thermoluminescent dosimetry. Federal Research Center of Coal and Coal Chemistry SB RAS, Aluker Nadezhda Leonidovna, Cand. Sc.
<i>Report</i> 15 minutes	S.V. Lepekha, E.A. Vasilyev, D.A. Zedgenizov. Luminescence systems in diamond at 489 nm. Research engineer, A.N. Zavaritsky Institute of Geology and Geochemistry UrB RAS, Lepekha Svetlana Vasilyevna.
<i>Report</i> 15 minutes	G.V. Voloshin, H. Meng, I.M. Sokolov, A.S. Kuraptsev. Influence of collisions on the character of the effect of electromagnetically induced transparency in cells of finite longitudinal sizes with antirelaxation wall coatings. Graduate student, Peter the Great St. Petersburg Polytechnic University, Voloshin Gavriil Valentinovich
<i>Report</i> 15 minutes	E.F. Martynovich, A.S. Frolova, D. Unurbileg, E. Ulziybayar, O. Bukhtsoozh, J. Davaasambu. Linear and nonlinear excitation of color centers in a LiF crystal by femtosecond laser emission. Irkutsk State University, Frolova Anastasia Sergeevna
13-00 <i>conference hall</i> <i>№ 501</i>	<i>Awarding ceremony of the winners of the contest of scientific reports of young scientists</i> <i>Summary of the conference</i> <i>Conference closing</i>
8 July, Saturday	
9-00	<i>Bus tour to the lake Baikal (work settlement Listvyanka)</i>



LLPh-2023

XIX INTERNATIONAL
CONFERENCE ON
LUMINESCENCE AND LASER PHYSICS

POSTER SESSION
PROGRAM

5 July, Wednesday

1. **D.S. Abramkin, I.A. Aleksandrov**
Prospects of $\text{In}_x\text{Ga}_{1-x}\text{N}/\text{Al}_y\text{Ga}_{1-y}\text{N}$ quantum dots application for a universal memory.
2. **K.A. Barbyshev, A.V. Duplinskiy, A.V. Khmelev, V.L. Kurochkin.**
Efficiency of a ground receiving terminal for quantum communication. (C)
3. **E.A. Vladimirova, I.P. Kuzmenko, E.F. Martynovich.**
Experimental study of transients in a diode-pumped solid-state microchip laser with a second harmonic output. (C)
4. **L.I. Bryukvina.**
IR vibrations of impurity complexes in calcium fluoride crystals doped with OH^- , Ce^{3+} , Eu^{3+} .
5. **L.I. Bryukvina, S.V. Lipko, N.A. Ivanov.**
Formation of sodium nanoparticles in radiation-treated NaF crystals after thermal annealing and light irradiation.
6. **L.A. Vasilyeva, Z.I. Borodulin, E.I. Lipatov, V.P. Germogenov.**
Diamond based light-emitting P-i-N structures. (C)
7. **L.I. Vostrikova, I.A. Kartashov.**
Comparison of second harmonic generation in glass materials containing aluminum and germanium.
8. **E.S. Vyatkin, A.V. Poshakinskiy, S.A. Tarasenko.**
Optical activity of twisted metasurfaces due to near-field interactions. (C)
9. **M.A. Gerasimova.**
Effect of halide ions on luminescence efficiency of organic dyes.
10. **Yu.S. Gulina, G.K. Krasin, E.V. Kuzmin, J. Zhu, S.I. Kudryashov**
Numerical aperture dependent luminous channels formation in synthetic diamond induced by ultrashort laser pulses.



**XIX INTERNATIONAL
CONFERENCE ON
LUMINESCENCE AND LASER PHYSICS**

LLPh-2023

-
-
11. **D.S. Daybage, A.V. Osadchenko, A.S. Selyukov, S.A. Ambrozevich, M.I. Danilkin, O.V. Ivkina, I.V. Mosyagina.**
Luminescence of ultrathin colloidal CdSe nanoplatelets. (C)
-
-
12. **P.A. Danilov, D.A. Pomazkin, I.D. Matyaev, P.Ya. Ilyushin.**
Filamentation of ultrashort visible-near-IR laser pulses in water. (C)
-
-
13. **L.I. Schepina, N.A. Ivanov, V.A. Erofeeva, L.I. Ruzhnikov.**
Photoluminescence with a quasi-white spectrum in LiF-UO₂ crystals with color centers. (C)
-
-
14. **E.Yu. Erushin, N.Yu. Kostyukova, A.A. Boyko, E.V. Baranova, D.M. Verbovatyi, D.V. Badikov.**
Study of radiation resistance of sulfur-containing crystals of barium chalcogenides. (C)
-
-
15. **M.A. Zhilin, A.I. Karapuzikov.**
Numerical simulation of gaussian beam caustics in slab CO₂-lasers. (C)
-
-
16. **E.D. Zaloznaya, A.E. Dormidonov, V.O. Kompanets, V.A. Simonova, S.V. Chekalin, V.P. Kandidov.**
Interaction dynamics of a single-cycle light bullet with a dielectric. (C)
-
-
17. **I.A. Zakharchuk, D.S. Daybage, A.V. Osadchenko, A.S. Selyukov, S.A. Ambrozevich, M.I. Danilkin, O.V. Ivkina, I.V. Mosyagina.**
Optical readout luminescent dosimetric materials based on MgB₄O₇:Dy,Na. (C)
-
-
18. **Yu.I. Zimina, K.A. Subbotin, A.I. Titov, D.A. Lis, Ya.S. Didenko, G.Z. Elabedine, K. Ereemeev, R.M. Solé, M. Aguiló, P.A. Volkov, P.A. Popov, F. Díaz, P. Camy, X. Mateos, P.A. Loyko.**
Investigations of a new Tm³⁺:MgMoO₄ laser crystal. (C)
-
-
19. **S.S. Zykova, K.S. Serkina, K.I. Runina, O.B. Petrova.**
Luminescent properties of lead-borogermanate glasses doped with samarium and gadolinium. (C)
-
-
20. **E.I. Ivchenko, A.V. Khmelev, V.L. Kurochkin.**
Improving the estimation of the secret key length in the satellite-to-ground channel. (C)
-
-
21. **S.A. Vyunysheva, S.A. Myslivets, N.N. Davletshin, D.A. Ikonnikov, E.V. Ereemeeva, E.S. Vysotskiy, I.N. Pavlov, A.M. Vyunyshev.**
Enhancement of laser-induced GFP fluorescence excited by femtosecond laser pulses. (C)
-
-
22. **D.D. Kazarinova, A.V. Konyashkin, O.A. Ryabushkin.**
Measuring of weak optical absorption coefficients of lithium triborate crystals at 1070 nm wavelength. (C)
-
-



**XIX INTERNATIONAL
CONFERENCE ON
LUMINESCENCE AND LASER PHYSICS**

LLPh-2023

-
-
23. **K.R. Karimullin, A.I. Arzhanov, K.A. Magaryan, A.O. Savostyanov, A.V. Naumov.**
Study of the luminescent properties of semiconductor quantum dots and composites based on them for applications in photonics.
-
-
24. **R.Ya. Ilyenkov, A.A. Kirpichnikova, O.N. Prudnikov.**
Searching for optimal parameters for bichromatic scheme of laser cooling of ${}^6\text{Li}$ atoms. (C)
-
-
25. **T.V. Kon'kova, N.V. Klushina, I.D. Evseev, B.G. Sukhov.**
Boron-, gadolinium-containing nanobiocomposites for multichannel theranostics.
-
-
26. **T.V. Kon'kova, B.G. Sukhov.**
Enzyme catalytic synthesis of electrically conductive polypyrrole.
-
-
27. **D.O. Kuznetsova, E.A. Slyusareva, N.V. Slyusarenko.**
Efficiency of resonant energy transfer in binary systems under the influence of temperature. (C)
-
-
28. **E.V. Kuzmin, E.N. Rimskaya, P.A. Danilov, S.I. Kudryashov.**
Optical nitrogen centers in natural pink diamonds. (C)
-
-
29. **N.N. Kuzmin, K.N. Boldyrev, V.V. Maltsev, D.D. Mitina, D.V. Deyneko, E.A. Volkova, E.V. Koporulina, A.I. Zhilyaeva.**
Luminescent properties of $\text{LuAl}_3(\text{BO}_3)_4:\text{Dy,Tm}$ and $\text{LaMgB}_5\text{O}_{10}:\text{Tb,Eu}$. (C)
-
-
30. **D.A. Kurtina, R.B. Vasilyev.**
Excitonic properties of chiral atomically thin CdSe nanostructures. (C)
-
-
31. **E.I. Davydov, A.F. Petrovskiy, V.P. Dresvyanskiy, E.F. Martynovich.**
Experimental setup for producing dielectric barrier discharge. (C)
-
-
32. **V.P. Dresvyanskiy, A.S. Ischenko, E.F. Martynovich, A.A. Chernykh, V.L. Paperny.**
Luminescent properties of surface layers, containing nanoscale metal clusters, in alkali halide crystals. (C)
-
-
33. **N.L. Lazareva, V.P. Dresvyanskiy, S.V. Kobeleva, A.M. Belyakova, V.E. Stepanenkov, A.L. Rakevich, O.T. Rusinek, A.B. Kupchinskiy, E.F. Martynovich.**
Luminescence of plankton from Lake Baikal. (C)
-
-



LLPh-2023

XIX INTERNATIONAL
CONFERENCE ON
LUMINESCENCE AND LASER PHYSICS

6 July, Thursday

N.A. Lozing, E.A. Smirnova, M.G. Gladush.

1. Slowly switching fluorescence intensity from an ensemble of quantum emitters in a dielectric host. (C)

K.G. Zenov, A.I. Karapuzikov, M.B. Miroshnichenko, E.G. Nekhorosheva.

2. Optimization of the emission spectrum of a small-sized CO₂ laser for an optical-acoustic gas analyzer SF₆. (C)

V.I. Baryshnikov, Yu.A. Murzina.

3. Peculiarities of laser and radiation excitation of luminescence in Ce:Y₂SiO₅ crystals (C).

S.I. Kudryashov, I.N. Mushkarina.

4. Using ultrashort laser pulses to record photoluminescent microbits in the bulk of dielectric crystals for archiving tasks.

A.S. Myasnikova, A.I. Bogdanov.

5. Features of the calculation of ions of rare earth elements in halide crystals.

A.V. Osadchenko, D.S. Daybage, I.A. Zakharchuk, A.S. Selyukov, S.A. Ambrozevich, A.N. Lobanov, A.V. Ryzhov, N.V. Pevtsov, D.N. Pevtsov.

6. Luminescence quantum yield of new coordination compounds of europium with β -diketones and carboxylic acids. (C)

A.Yu. Ostapiv, V.P. Tsytkin, G.Yu. Ivanov, I.A. Larionov, V.A. Tyrtysnyi, A.V. Konyashkin.

7. Mutual influence of fundamental-mode and intermode four-wave mixing processes in a few-mode optical fiber. (C)

K.A. Subbotin, A.I. Titov, S.K. Pavlov, P.A. Volkov, D.A. Lis, F. Díaz, U. Griebner, P.A. Loyk, R.M. Solé, V. Petrov, M. Aguiló, X. Mateos.

8. Spectral, laser generation and thermechanical properties of Yb,Li:ZnWO₄ crystal. (C)

D.A. Polomoshnova, T.D. Sabaev, A.V. Vukolov, V.D. Paygin, D.A. Shkitov.

9. Measurement of cathodoluminescence from cubic zirconium dioxide during the passage of an electron beam with an energy of 5.7 MeV. (C)

K.I. Runina, L.V. Popkova, R.I. Avetisov, O.B. Petrova, Do Dinh Trung, Ta Thu Trang.

10. Study of the stability of luminescent hybrid materials based on CaF₂ and lithium 8-hydroxyquinolate under tropical climate. (C)



**XIX INTERNATIONAL
CONFERENCE ON
LUMINESCENCE AND LASER PHYSICS**

LLPh-2023

11. **A.V. Samolov, D.E. Genin, E.I. Lipatov.**
Temperature dynamics of NV diamond laser spectrum. (C)

12. **V.S. Sedov, A.K. Martyanov, I.A. Tyazhelov, V.G. Ralchenko, A.Yu. Nelyubov, A.V. Naumov.**
Narrowband photoluminescence of Tin-Vacancy color centers in CVD diamond microcrystals.

13. **N.M. Sedykh.**
Calculation of toxicity of monomer and polymer of ionic liquid.

14. **N.M. Sedykh, B.G. Sukhov, A.N. Chesnokova, N.A. Ivanov.**
Imparting proton-conducting properties to a dielectric track membrane through polymerization of an ionic liquid with a mobile proton in track pores.

15. **K.S. Serkina, D.V. Volkova, A.A. Trofimova, K.I. Runina, I.V. Stepanova.**
IR luminescence of sodium-modified bismuth-germanate glasses. (C)

16. **K.S. Serkina, Yu.V. Zhegucheva, K.I. Runina, I.V. Stepanova.**
Germanate glasses doped with bismuth, erbium, and ytterbium luminescent properties. (C)

17. **K.S. Serkina, A.V. Korol, A.V. Efimochkina, K.I. Runina, I.V. Stepanova.**
Effect of doping with thulium oxide on the bismuth germanate glasses luminescent properties. (C)

18. **V.A. Simonova, A.S. Bychkov, E.D. Zaloznaya, A.A. Karabutov**
Laser ultrasound method for tension diagnosis in additive materials.

19. **N.V. Slyusarenko, M.A. Gerasimova, E.V. Parfenova, E.A. Slyusareva**
Effect of temperature on the photoluminescence of CdSe/ZnS quantum dots in a biopolymer composite with erythrosin B. (C)

20. **P.V. Strekalov, I.I. Marzaeva, K.I. Runina, M.N. Mayakova, O.B. Petrova**
Investigation of the spectral-luminescent properties of hybrid materials in the system of strontium fluoride with lithium 8-hydroxyquinolate obtained by co-precipitation. (C)

21. **V.P. Surovtseva, N.V. Kovalenko, O.A. Ryabushkin**
Optical coherence tomograph with amplification of the reflected signal in the active fiber. (C)

22. **S.Yu. Terenin, M.D. Zimin, A.P. Zhaboedov, A.I. Nepomnyaschikh, R.Yu. Shendrik.**
Determination of water concentration in quartz mineral raw material by infrared spectroscopy. (C)



LLPh-2023

XIX INTERNATIONAL
CONFERENCE ON
LUMINESCENCE AND LASER PHYSICS

-
-
23. **A.I. Titov, K.A. Subbotin, D.A. Lis, E.V. Chernova, O.N. Lis, K.V. Kuleshova, Ya.S. Didnko, Yu.I. Zimina, E.V. Zharikov.**
Down-conversion luminescence of Yb:CaWO₄ single crystals sintered in different redox conditions. (C)
-
-
24. **K.E. Trofimova, A.V. Ishchenko, R.A. Irgashev, I.A. Vainshtein.**
New compounds based on benzothienoacenes: electrical properties and quantum yield. (C)
-
-
25. **H. Zuhayri, A.A. Samarina, D.A. Lopez Guardado, O.A. Zakharova, H. Baalbaki, A.V. Borisov, N.A. Krivova, Yu.V. Kistenev.**
Quantitative comparison of topical low-dose photodynamic therapy using 5-aminolevulinic acid and methylene blue on diabetic wound healing in-vivo using Raman Spectroscopy. (C)
-
-
26. **M.S. Khetseva, K.N. Boldyrev, K.R. Karimullin, E.P. Kozhina, S.A. Bedin, A.R. Kalimullina, D.R. Kurmalev, A.V. Naumov.**
Laser physics methods in the study of pharmaceuticals prohibited in sports. (C)
-
-
27. **E.A. Dobretsova, O.K. Alimov, V.S. Tsvetkov, S.Ya. Rusanov, V.V. Voronov, V.B. Tsvetkov.**
Optically active thulium centers in yttrium scandate crystal. (C)
-
-
28. **A.N. Chernoy, A.V. Khmelev, V.L. Kurochkin.**
Optimized frequency recovery of the satellite quantum signal. (C)
-
-
29. **A.A. Shakirov, A.S. Nizamutdinova, E.A. Gorshkova, A.A. Shvelyev, V.V. Semashko.**
Photoionization of Yb³⁺ ions in LiCaAlF₆:Ce³⁺Yb³⁺ crystals. (C)
-
-
30. **A.O. Shilov, R.V. Kamalov, A.S. Vokhmintsev, I.A. Vainshtein.**
Features of the luminescent response in anodic hafnia nanostructures. (C)
-
-
31. **V.N. Derepko, O.V. Ovchinnikov, M.S. Smirnov, S.V. Aslanov.**
IR luminescence of colloidal quantum dots of silver selenide. (C)
-
-