LYUBOV M. BURAVTSEVA

Scopud Author ID: 8419189800
E-mail: buravtseva@ilt.kharkov.ua
https://scholar.google.com.ua/citations?user=IioKTjQAAAAJ&hl=ru

Affilation and address:
B.Verkin Institute for Low Temperature Physics and Engineering
of the National Academy of Sciences of Ukraine,
47 Nauky Ave., 61103 Kharkiv, Ukraine

Date of birth: 07.09.1973
Place of birth: Eupatoria, Crimea, Ukraine

Education:
1. Kharkiv State University. M.Sc. (Physics; Optics), 1996.
2. B.Verkin Institute for Low Temperature Physics & Engineering, Kharkiv. Postgraduate study (Physics of solid state), 1996-1999.
3. B.Verkin Institute for Low Temperature Physics & Engineering, Kharkiv. Ph.D (Physics of solid state), 2010.

Career/Employers:
B.Verkin Institute for Low Temperature Physics and Engineering, Kharkiv.
1996 - 1999 — Postgraduate student
1999 - 2005 — Engineer
2005 - 2007 — Senior engineer
2007 - 2013 — Junior researcher
2013 - 2017 — Researcher
2017 - till now — Senior researcher

Specialization:
main field: spectroscopy of molecular crystals; growth of molecular crystals; thermodynamic and spectral properties of macromolecules.

current research interest:
Investigation of excited states of molecular crystals of halogen-substituted benzophenones in a wide temperature range; influence of molecules conformation on their optical properties; investigation of amorphous phase of halogen-substituted benzophenones, carbon nanocomposites with high thermal conductivity and controlled thermal capacity.

Publications:
Number of paper on refereed journals: more than 20
Number of communication to scientific meetings: 20

Selected publications:
1. V.N. Baumer, R.V. Romashkin, M.A. Strzhemechny, A.A. Avdeenko, O.S. Pyshkin, R.I. Zubatyuk, L.M. Buravtseva. *2-Bromobenzophenone.* Acta Crystallographica, **E61**, o1170–o1172 (2005).

2. M.A. Strzhemechny, A.A. Avdeenko, V.V. Eremenko, O.S. Pyshkin, L.M. Buravtseva. *Observation of triplet excimer emission in 2-bromobenzophenone.* Chem. Phys. Lett. **431**, 300-302 (2006).
3. M.A. Strzhemechny, V.N. Baumer, A.A. Avdeenko, O.S. Pyshkin, R.V. Romashkin, L.M. Buravtseva. *Polymorphism of 4-bromobenzophenone.* Acta Crystallographica, **B63**, 296–302 (2007).
4. O.S. Pyshkin, L.M. Buravtseva, V.N. Baumer, R.V. Romashkin, M.A. Strzhemechny, and D.I. Zloba. *Structure and low-temperature time-resolved phosphorescence spectra of crystalline and glassy ortho-bromobenzophenone.* Fiz. Nizk. Temp. **35,** № 7, 739-750 (2009) [Low Temp. Phys. **35**, № 7, 580-588 (2009)].
5. M.A. Strzhemechny, D.I. Zloba, O.S. Pyshkin, L.M. Buravtseva. *Low-temperature phosphorescence and triplet exciton transport in 4-bromobenzophenone polymorphs.* Chem. Phys. Lett. **565**, 61-64 (2013).
6. M.A. Strzhemechny, S.G. Stepanian, D.I. Zloba, L.M. Buravtseva, O.S. Pyshkin, Yu.P. Piryatinski, V.I. Melnik, G.V. Klishevich, L. Adamowicz. *Scenario of temperature-related variation of phosphorescence spectra of ortho-bromobenzophenone crystal.* Chemical Physics **463**, 58-64 (2015).
7. M.A. Strzhemechny, A.I. Krivchikov, A. Jezowski, D.I. Zloba, L.M. Buravtseva, O. Churiukova, Yu.V. Horbatenko. *New thermal conductivity mechanism in triclinic4-bromobenzophenone crystal.* Chem. Phys. Lett. **647**, 55-58 (2016).
8. D.I. Zloba, O.S. Pyshkin, L.M. Buravtseva, M.A. Strzhemechny. Phosphorescence of meta-brombenzophenone crystals over a wide temperature range. Fiz. Nizk. Temp. **42,** № 3, 304-307 (2016) [Low Temp. Phys. **42**, № 3, 235 (2016)].
9. A. Jeżowski, M.A. Strzhemechny, A.I. Krivchikov, N.A. Davydova, D. Szewczyk, S.G. Stepanian, L.M. Buravtseva, and O.O. Romantsova. *Glassy anomalies in the heat capacity of an ordered 2-bromobenzophenone single crystal.* Phys. Rev. B **97**, 201201 (2018).
10. D.I. Zloba, O.S. Pyshkin, M.A. Strzhemechny, S.G. Stepanian, L. Adamowicz, L.M. Buravtseva. Low-temperature sensibilization of naphthalene phosphorescence using ortho-bromobenzophenone. Low Temperature Physics, V.46, P.71, (2020).
11. A.I. Krivchikov, A. Jeżowski, D. Szewczyk, O.A. Korolyuk, O.O Romantsova, L.M. Buravtseva, C. Cazorla, J.L. Tamarit. Role of Optical Phonons and Anharmonicity in the Appearance of the Heat Capacity Boson Peak-like Anomaly in Fully Ordered Molecular Crystals. J. Phys. Chem. Lett. V.13, P.5061, (2022).
12. N.A. Vinnikov, A.V. Dolbin, R.M. Basnukaeva, V.G. Gavrilko, V.B. Eselson, L.M. Buravtseva. Quantum effects in the low-temperature thermal expansion of fullerite C60 doped with a 4He impurity. Low Temperature Physics, V.48, P.791, (2022).
13. S.V. Cherednichenko, N.A. Vinnikov, A.V. Dolbin, R.M. Basnukaeva, L.M. Buravtseva. Optical properties of aqueous colloidal solution of fullerenes C60. “Condensed Matter & Low Temperature Physics 2023”, June 05-11, Kharkiv, Ukraine (2023).
14. N. A. Vinnikov, A. V. Dolbin, R. M. Basnukaeva, L. M. Buravtseva, E. M. Grytsyuk. Quantum effects in the kinetics of thermal expansion of C60 fullerite doped with 4He. Low Temperature Physics, V.51, P.367, (2025).