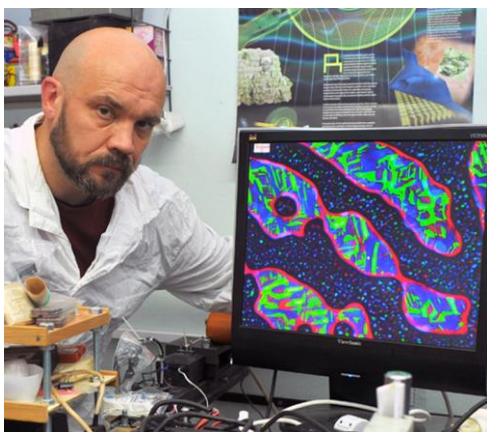


CURRICULUM VITAE



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EDUCATION:

- 2017 Senior Staff Scientist** in specialty 104 “Physics and Astronomy”, 12 December, Institute of Physics, National Academy of Sciences, Kyiv, Ukraine
- 2002** Ph.D. Thesis “*UV-induced effects in the nematic liquid crystals with dopants of the steroid biomolecules*” for Physics and Mathematics candidate’s degree on the speciality 01.04.15 Molecular and Liquid Crystal Physics, Institute of Physics, National Academy of Sciences, Ukraine, Kyiv. (supervisor of studies – professor I.P. Terenetskaya)
- 1998 – 2001** post-graduate student at the Physico-Technical Educational Center, National Academy of Sciences of Ukraine, Kyiv, Ukraine;
- 1992 – 1998** Yuriy Fedcovych Chernivtsi State University, Chernivtsi, Ukraine.
Honours Diploma of M.S. in Physics;
Diploma of M.S. in ecology.

EXPERIENCE:

- 2021.05.14** official opponent of PhD thesis “*Manifestations of structural factors in the optical and electrophysical properties of liquid crystal dispersions of carbon nanotubes*” (author O.M. Samoilov and supervisor of studies - professor L.N. Lisetski);
- 2017** senior staff scientist (Certificate AC № 000058 in speciality 104 “Physics and Astronomy”) at the Department of Optical Quantum Electronics, Institute of Physics, National Academy of Sciences of Ukraine;
- 2015-p.t.** referee in Journals: Optics Express, Optical Materials Express, Journal of Molecular Liquids, Liquid Crystals, ChemistrySelect and ACS Applied Materials & Interfaces;
- 2013 - 2016** participation at the Scientific and Technological Centre of Ukraine project P585 - “*Photorefractive two-beam coupling in the infrared*”;
- 2012.04.26** official opponent of PhD thesis “*Influence of ferroelectric particles $\text{Sn}_2\text{P}_2\text{S}_6$ on the properties of nematic and cholesteric*”

- liquid crystals*" (author O.V. Kurochkin and supervisor of studies - professor Yu.O. Reznikov);
- 2010-p.t.** senior scientist at the Department of Optical Quantum Electronics, Institute of Physics, National Academy of Sciences of Ukraine;
- 2009 - 2010** scientific researcher at the Department of Optical Quantum Electronics, Institute of Physics, National Academy of Sciences of Ukraine;
- 2008 – 2009** member of the XIII Ukrainian Antarctic Expedition; researcher of the ozone hole at Vernadsky station (Galindes Island, Argentina Islands water area);
State target scientific and technical program of research in Antarctica for 2002-2010;
- 2005** scientific researcher at the Department of Optical Quantum Electronics, Institute of Physics, National Academy of Sciences of Ukraine;
- 2003 - 2004** member of the VIII Ukrainian Antarctic Expedition; researcher of the ozone hole and UV-radiation at Vernadsky station (Galindes Island, Argentina Islands water area);
State target scientific and technical program of research in Antarctica for 2002-2010;
- 2002 – 2005** participation at the Scientific and Technological Centre of Ukraine project Gr0-50(j) - *"Ecological monitoring of biologically active UV solar and artificial UV radiation and elaboration of the "VitaD" biodosimeter"*;
- 2002** Ph.D, junior scientist at the Department of Optical Quantum Electronics, Institute of Physics, National Academy of Sciences of Ukraine;
- 2000 - 2002** engineer at the Department of Optical Quantum Electronics, Institute of Physics, National Academy of Sciences of Ukraine;
- 1999 – 2002** teacher of physics and mathematics at the Ukrainian Physico-Technical School, Kyiv, Ukraine;
- 1998 – 2002** postgraduate student at the Physico-Technical Scientific and Educational Center of the National Academy of Sciences of Ukraine, Kyiv, Ukraine.

FIELDS OF SCIENTIFIC ACTIVITIES:

Liquid Crystals:

- Chiral dopants; Cholesteric liquid crystals; Photosensitive cholesteric liquid crystals; Photosensitive chiral nematic colloids and suspensions; Cholesteric diffraction gratings.
- Lehmann-type effects; Rotation of single crystals of chiral (or non-chiral) dopants at the top of a nematic (cholesteric and blue phase) droplet.
- Blue phases; Blue phase of polymer-stabilized cholesteric liquid crystals.
- Uniform lying helix (ULH).

- Hybrid photorefractive/liquid crystal cells (CdTe-LC-CdTe); Liquid crystal light valve (based on the photoconductive GaAs substrate).
- Photoalignment of the nematic liquid crystals; Contact angle and wetting of liquid crystals on photoaligning surfaces.
- The alignment of nematic liquid crystals by layers processed by means of the laser-induced periodic surface structuring (LIPSS).
- N_{tb} phase; heliconical cholesterics; photosensitive heliconical cholesterics.
- N_f phase.

Spectroscopy:

- Photoisomerization of provitamin D; UV-biodosimetry.
- Ozone hole in Antarctica (Dobson ozone spectrophotometer).

HONORS, AWARDS, SCHOLARSHIPS:

- 2023 Igor Gvozдовskyy won the first place in the contest of "[Science photo competition 2022](#)" (General category: [Photo](#)). [Wikimedia Ukraine](#);
- 2016 The manuscript of the author: I. Gvozдовskyy "*'Blue phases' of highly chiral thermotropic liquid crystals with a wide range of near-room temperature.*" Liquid Crystals, 2015, Vol.42, N 10, pp.1391-1404 (doi: 10.1364/AO.55.001076) is **most read in 2015 and present day**
- 2015 The manuscript of the author: I. Gvozдовskyy "*Influence of the anchoring energy on jumps of the period of stripes in thin planar cholesteric layers under the alternating electric field.*" Liquid Crystals, 2014, Vol.41, N 10, pp.1495-1504 (doi: 10.1080/02678292.2014.927930) was **one of eight others that were highly commended by the Selection Committee during award the Luckhurst-Samulski Prize** for the best published each year in the journal Liquid Crystals;
- 23.01-17.02.2012 Research visiting to "Jožef Stefan" Institute. "Photoinduced chiral nematic colloids" (PR-02385 in P1-0099);
- 06.2011 Book of Oleg Zhariy "*Digital HDR-photography and Panorama*", as a winner of the Photographic competition "Long competition of long panoramas";
- 22.06.2006 Medal - Ukrainian Antarctic Station "Akademic Vernadsky";
- 2005-2007 President of Ukraine Scholarship;
- 2004 Vitesse Re-SkillingTM Certificate presented to Gvozдовskyy Igor who has successfully completed the NATO Advanced Study Institute in Biophotonics Sept. 29 - October 9, 2004, Ottawa, Ontario, Canada;
- 2004 NATO travel Grant N82;
- 2004 Diploma Ministry of Education and Sciences of Ukraine N90061.

PERSONAL DATA:

Fist name: **Igor**
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Data and place of Birth: 25 July 1975, Ukraine

Marriage Status: married
Children: daughter, son
Citizenship: Ukraine
E-mail: igvozd@gmail.com, igvozd@iop.kiev.ua
Languages: Ukrainian (native speaker); English (active).
Hobbies: Drawing in pencil and indian ink, cactus cultivation, mountaineering, photography

PUBLICATIONS:

1. Natalia A. Kasian, Longin N. Lisetski, Serhii E. Ivanchenko, Vitalii O. Chornous, Halyna V. Bogatyryova, **Igor A. Gvozдовskyy**. "Enhanced smectic ordering and blue phase formation in mixtures of cyanobiphenyls and cholesterol esters." *ArXiv*. 2024. (<https://doi.org/10.48550/arXiv.2408.00650>).
2. Juliya M. Gudenko, Oleksandr S. Pylypchuk, Victor V. Vainberg, **Igor A. Gvozдовskyy**, Serhii E. Ivanchenko, Denis O. Stetsenko, Nicholas V. Morozovsky, Volodymyr N. Poroshin, Eugene A. Eliseev, Anna N. Morozovska. "Ferroelectric nanoparticles in liquid crystals: the role of ionic transport at small concentrations of the nanoparticles." to be published in *Semiconductor Physics, Quantum Electronics and Optoelectronics*. 2025, Vol.28, N 1, pp.010-018. (doi:10.15407/spqeo28.01.010).
3. **Igor Gvozдовskyy**, Halyna Bogatyryova, Natalia Kasian, Longin Lisetski, Vitalii Chornous. "Light-induced control of selective Bragg diffraction of the oblique helicoidal cholesteric." *Applied Optics*. 2025, Vol.64, N2, pp. 459-466. (<https://doi.org/10.1364/AO.544155>).
4. H. Bogatyryova, V. Chornous, L. Lisetski, **I. Gvozдовskyy**. "Bragg diffraction of higher orders on oblique helicoidal liquid crystal structures." *Liquid Crystals*. 2024, Vol.51, N11, pp. 1847-1857 (doi:10.1080/02678292.2024.2361484).
5. **I. Gvozдовskyy**, D. Bratova, Z. Kazantseva, S. Malyuta, P. Lytvyn, S. Schwarz, R. Hellmann. "Light-controllable hybrid aligning layer based on LIPSS on sapphire surface and PVCN-F film." *Journal of Molecular Liquids*, 2023, Vol.387, pp.122623-1-13. (doi:10.1016/j.molliq.2023.122623)
6. Vitalii Chornous, Alina Grozav, Mykhailo Vovk, Daria Bratova, Natalia Kasian, Longin Lisetski and **Igor Gvozдовskyy**. "Oblique helicoidal state of the twist-bend nematic doped by chiral azo-compound." *Liquid Crystals*, 2023, Vol.50, N6, pp. 1046-1058. (doi:10.1080/02678292.2023.2200267). *Cover Image*.
7. **I.A. Gvozдовskyy**, Y.M. Kachurak, P.V. Vashchenko, I.A. Kravchenko, Z.M. Mykytyuk "Liquid crystal sensors for detection of volatile organic compounds: comparative effects of vapor absorption and temperature on the phase state of the sensor material." *J. Functional Materials*, 2023, Vol.30, Issue2, pp. 303-308. (doi:10.15407/fm30.02.303)
8. K.G. Nazarenko, N.A. Kasian, S.S. Minenko, O.M. Samoilov, V.G. Nazarenko, L.N. Lisetski, **I.A. Gvozдовskyy**. "Chiral ferronematic liquid crystals: a physico-chemical analysis of phase transitions and induced helical twisting." *Liquid Crystals*, 2022, Vol. 50, N1, pp.98-109. (doi:10.1080/02678292.2022.2127158). *Cover Image*.
9. Konstantin Shcherbin, **Igor Gvozдовskyy**, Alexandr Shumelyuk, Jonathan Slagle, and Dean R. Evans. "Near-infrared sensitive two-wave mixing adaptive interferometer based on a liquid crystal light valve with a semiconductor substrate." *Applied Optics*, 2022, Vol. 61, N22, pp.6498-6503. (doi:10.1364/AO.465085).

10. V. Chornous, M. Vovk, M. Bratenko, Yu. Dmytriv, A. Rudnichenko, M. Skorobahatko, N. Kasian, L. Lisetski and **I. Gvozдовskyy**. “Light-controllable chiral dopant based on azo-fragment: synthesis and characterisation.” *Liquid Crystals*, 2022, Vol. **49**, N10, pp. 1322-1337. online published in 24 February (starting the full-scale war in Ukraine). (doi:10.1080/02678292.2022.2031326). Cover Image.
11. Natalia A. Kasian, Longin N. Lisetski and **Igor A. Gvozдовskyy**. “Twist-bend nematics and heliconical cholesterics: a physico-chemical analysis of phase transitions and related specific properties.” *Liquid Crystals*, 2022, Vol. **49**, N1, pp. 142-151. (doi:10.1080/02678292.2021.1970838). Cover Image.
12. **Gvozдовskyy I.**, Kazantseva Z., Schwarz S., Hellmann R. “Influence of periodic non-uniformities of well-structured sapphire surface by LIPSS on the alignment of nematic liquid crystal.” *Nanomaterials*, 2022, Vol. **12**, N3, pp. 508-1-15. (<https://doi.org/10.3390/nano12030508>).
13. I. Pavlov, O. Candemir, A. Rybak, A. Dobrovolskiy, V. Kadan, I. Blonskiy, P. Lytvyn, A. Korchovji, P. Tytarenko, Z. Kazantseva, **I. Gvozдовskyy**. “Azimuthal and polar anchoring energies of aligning layers structured by nonlinear laser lithography.” *Liquid Crystals*, 2021, Vol. **48**, N1, pp. 131-149 (doi:10.1080/02678292.2020.1766589).
14. I. Pavlov, A. Rybak, A. Dobrovolskiy, Z. Kazantseva, A. Bek, O. Candemir and **I. Gvozдовskyy**. “Liquid crystal alignment on the patterns produced by nonlinear laser lithography.” Conference: 2019 Conference on Lasers and Electro-Optics Europe & European Quantum Electronics Conference (CLEO/Europe-EQEC)(doi:10.1109/CLEOE-EQEC.2019.8873241).
15. Ihor Pavlov, Andrey Rybak, Andrii Dobrovolskiy, Viktor Kadan, Ivan Blonskiy, Fatih Ö. Ilday, Zoya Kazantseva and **Igor Gvozдовskyy** “The alignment of nematic liquid crystal by the Ti layer processed by nonlinear laser lithography.” *Liquid Crystals*, 2018, Vol. **45**, N9, pp.1265-1271. (doi:10.1080/02678292.2018.1429027).
16. **Igor Gvozдовskyy** “Electro- and photoswitching of undulation structures in planar cholesteric layers aligned by a polyimide film possessing various values of the anchoring energy.” *Liquid Crystals*, 2018, Vol. **45**, N4, pp.536-552. (doi:10.1080/02678292.2017.1359691).
17. I.A. Pavlov, A.S. Rybak, A.M. Dobrovolskiy, V.M. Kadan, I.V. Blonskiy, Z.I. Kazantseva and **I.A. Gvozдовskyy** “High-quality alignment of nematic liquid crystals using periodic nanostructures created by nonlinear laser lithography.” *Journal of Molecular Liquids*, 2018, Vol. **267**, pp.212-221. (doi:10.1016/j.molliq.2018.02.058).
18. V.A. Shenderovskiy, A.D. Trokhymchuk, L.N. Lisetski, B.V. Kozhushko, **I.A. Gvozдовskyy** “Julius Planer. A pioneer in the study of liquid crystals.” *Journal of Molecular Liquids*, 2018, Vol. **267**, pp.560-563. (doi:10.1016/j.molliq.2018.01.070).
19. K. Shcherbin, **I. Gvozдовskyy** and D.R. Evans “Liquid crystal light valve with a semiconductor substrate for dynamic holography in the infrared.” *Journal of Molecular Liquids*, 2017, Vol. **267**, N, pp.61-66. (doi:10.1016/j.molliq.2017.12.073).
20. Konstantin Shcherbin, **Igor Gvozдовskyy** and Dean R. Evans “Optimization of the liquid crystal light valve for signal beam amplification.” *Optical Materials Express*, 2016, Vol. **6**, N11, 3670-3675. (<http://dx.doi.org/10.1364/OME.6.003670>).
21. **Igor Gvozдовskyy** “Role of the photopolymerisation conditions in the broadening of the temperature range of the ‘blue phases.’” *Liquid Crystals*, 2016, Vol. **43**, N12, pp.1813-1830. (doi:10.1080/02678292.2016.1213431).

22. K. Shcherbin, **I. Gvozдовskyy** and D. R. Evans “Dynamic gratings recording in liquid crystal light valve with semiconductor substrate.” *Proc. SPIE* 9771, Practical Holography XXX: Materials and Applications, 97710U (March 7, 2016). (doi:10.1117/12.2209552) (From Conference Volume 9771, Practical Holography XXX: Materials and Applications, Hans I. Bjelkhagen; V. Michael Bove, San Francisco, California, United States | February 13, 2016).
23. K. Shcherbin, **I. Gvozдовskyy** and D. Evans “Infrared sensitive liquid crystal light valve with semiconductor substrate.” *Appl. Opt.*, 2016, Vol. **55**, N5, pp.1076-1081. (doi: 10.1364/AO.55.001076).
24. **Igor Gvozдовskyy** “Blue phases” of highly chiral thermotropic liquid crystals with a wide range of near-room temperature.” *Liquid Crystals*, 2015, Vol. **42**, N10, pp.1391-1404. (doi: 10.1080/02678292.2015.1053001).
25. **Igor Gvozдовskyy** “Influence of the anchoring energy on jumps of the period of stripes in thin planar cholesteric layers under the alternating electric field.” *Liquid Crystals*, 2014, Vol. **41**, N 10, pp.1495-1504. (doi: 10.1080/02678292.2014.927930).
26. **I. Gvozдовskyy**, V.S.R. Jampani, M. Škarabot and I. Muševič “Light-induced rewiring and winding of Saturn ring defects in photosensitive chiral nematic colloids.” *European Physical Journal E*, 2013, Vol. **36**, N9, pp.13097-8. (doi: 10.1140/epje/i2013-13097-8). Cover Image.
27. Oleg Yaroshchuk, Sergiy Tomylo, **Igor Gvozдовskyy** and Rumiko Yamaguchi “Cholesteric liquid crystal–carbon nanotube composites with photo-settable reversible and memory electro-optic modes.” *Applied Optics*, 2013, Vol. **52**, Issue 22, pp. E53-E59. (doi: 10.1364/AO.52.000E53).
28. **Igor Gvozдовskyy**, Oleg Yaroshchuk, Marina Serbina and Rumiko Yamaguchi “Photoinduced helical inversion in cholesteric liquid crystal cells with homeotropic anchoring.” *Optics Express*, 2012, Vol. **20**, N4, pp. 3499- 3508. (doi: 10.1364/OE.20.003499).
29. Sergiy Tomylo, **Igor Gvozдовskyy**, Oleg Yaroshchuk, and Rumiko Yamaguchi “Two-mode photo-switchable LCD on the base of liquid crystals with a minute amount of carbon nanotubes.” *IMID 2011 DIGEST*, 2011, P1-72, pp. 681-682.
30. **Igor Gvozдовskyy**, Oleg Yaroshchuk and Marina Serbina “Light-induced nematic - cholesteric structural transitions in the LC cells with homeotropic anchoring.” *Mol. Cryst. Liq. Cryst.*, 2011, Vol. **546**, pp. 202/[1672] - 208/[1678]. (doi: 10.1080/15421406.2011.571161).
31. **I. Gvozдовskyy**, K. Shcherbin, D.R. Evans, G. Cook “Infrared sensitive liquid crystal photorefractive hybrid cell with semiconductor substrates.” *Appl. Phys. B*, 2011, Vol. **104**, Issue 4, pp. 883-886. (doi: 10.1007/s00340-011-4374-x).
32. M.I. Serbina, L.N. Lisetski, **I.A. Gvozдовskyy**, A.V. Koval’chuk, G.S. Chilaya “Effect of UV radiation on selective reflection and dielectric properties of cholesterol ester mixtures with photoactive nematics.” *J. Functional Materials*, 2010, Vol. **17**, Issue 4, pp. 449-453.
33. **I. Gvozдовskyy**, Yu. Kurioz, and Yu. Reznikov “Exposure and temperature dependences of contact angle of liquid crystals on photoaligning surface.” *Opto-electronics review*, 2009, Vol. 17, Issue 2, pp.116-119. (doi: 10.2478/s11772-008-0065-5).
34. L.N. Lisetski, **I.A. Gvozдовskyy** “Rotation of small crystals of non-chiral substances at the top of a cholesteric droplet: an inverse case of the Lehmann-type effect.” *J. Functional Materials*, 2008, Vol. **15**, Issue 3, pp. 388-391.

35. **I.A. Gvozдовskyy**, L.N. Lisetski "Rotation of single crystals of chiral dopants at the top of a nematic droplet: a hydrodynamical analogy." *J. Functional Materials*, 2007, Vol. **14**, Issue 3, pp. 332-337.
36. **I.A. Gvozдовskyy**, L.N. Lisetski "Rotation of single crystals of chiral dopants at the top of a nematic droplet: factors affecting the angular velocity." *Mol. Cryst. Liq. Cryst.*, 2007, Vol. **475**, pp. 113-122. (doi: 10.1080/15421400701681331).
37. **I.A. Gvozдовskyy**, L.N. Lisetski "Rotation of single crystals of chiral dopants at the top of a nematic droplet: analogy with Lehmann effect." *European Physical Journal E*, 2007, Vol. **24**, N3, pp.211-215. (doi: 10.1140/epje/i2006-10253-3).
38. N.A. Kasyan, V.D. Panikarskaya, L.N. Lisetski, V.S. Manzhara, **I.A. Gvozдовskyy**. "Temperature-induced transformations of chromenoacridines in liquid crystalline solvents." *Liquid Crystals and Their Application*, 2005, Issue 3-4 (13-14), pp. 93-99.
39. I. Terenetskaya, T. Orlova, **I. Gvozдовskyy**, G. Milinevsky, "Solar UVB radiation and vitamin D synthesis: direct monitoring of the vitamin D synthetic capacity of sunlight in Kiev and in Antarctic." *Annalen der Meteorologie*, 2005, Vol. **2**, N 41, pp.676–678.
40. **I. Gvozдовskyy**, T. Orlova, E. Salkova, I. Terenetskaya, G. Milinevsky. "Ozone and solar UV-B radiation: monitoring of the vitamin D synthetic capacity of sunlight in Kiev and Antarctica." in: *International Journal of Remote Sensing*, 2005, Vol. **26**, N 16, pp. 3555-3559. (doi: 10.1080/01431160500076863).
41. **I. Gvozдовskyy**, T. Orlova, I. Terenetskaya, "Features of Previtamin D *cis-trans* isomerization in the nematic LC matrices: orientation and cholesteric order effects." *Mol. Cryst. Liq. Cryst.*, 2005, Vol. **434**, pp. 325-332. (doi: 10.1080/15421400590955361).
42. **I. Gvozдовskyy**, T. Orlova, I. Terenetskaya. "UV induced photoalignment and color change in nematic liquid crystals with provitamin D dopant." *Mol. Cryst. Liq. Cryst.*, 2005, Vol. **430**, pp. 199-203. (doi: 10.1080/15421400590946389).
43. M. Aronishidze, A. Chanishvili, G. Chilaya, G. Petriashvili; S. Tavzarashvili, L. Lisetski, N.Kireyeva, **I. Gvozдовskyy**, I. Terenetskaya "Colour change effect based on provitamin D phototransformation in right and left-handed cholesteric liquid crystalline mixtures." *Proceedings of the Institute of Cybernetics of the Georgian Academy of Sciences* 2004, Vol. **3**, N 2, p.8.
44. M. Aronishidze, A. Chanishvili, G. Chilaya, G. Petriashvili, S. Tavzarashvili, L. Lisetski, **I. Gvozдовskyy**, I. Terenetskaya "Color change effect based on provitamin D phototransformation in cholesteric liquid crystalline mixtures." *Mol. Cryst. Liq. Cryst.*, 2004, Vol. **420**, pp. 47-53. (doi: 10.1080/15421400490478353).
45. **Gvozдовskyy I.A.**, Terenetskaya I.P., Reshetnyak, V.Y. "Dissolution of steroid crystals in nematic droplet: effect of rotation." *Proceedings - SPIE the International Society for Optical Engineering*, 2003, Vol. **5257**, pp. 102-109. (doi: 10.1117/12.545829).
46. **I.Gvozдовskyy**, I. Terenetskaya "Steroid motor: dynamics of cholesteric helix induction in the nematic droplet." *Liquid Crystals Today* 2002, Vol. **11**, N 4, pp. 8-12(5). (doi: 10.1080/146451802100006824).
47. **I.A. Gvozдовskyy**, I.P. Terenetskaya "UV-induced orientation effects in nematic liquid crystals dye to photo-changes adsorbed of provitamin D₃." *J. Scientific and Applied Photography*, 2002, Vol. **47**, N 2, pp. 45-50 (in Russian).
48. **I.A. Gvozдовskyy**, I.P. Terenetskaya "Effect of rotation of steroid microcrystals in nematic droplet." *Ukrainian J. Phys.*, 2002, Vol. **47**, N 8, pp. 751-754 (in Ukrainian).

49. **I.A. Gvozдовskyy** and I.P. Terenetskaya "Liquid crystal photoorientation mediated by UV irradiation of the composed film PMMA+provitamin D₃." *Journal of Surface Investigation: X-Ray, Synchrotron and Neutron Techniques*, 2002, N 2, pp.80-83 (in Russian).
50. **Igor Gvozдовskyy** and Irina Terenetskaya "Development of personal UVB sensor: detection of previtamin D photosynthesis." *Kluwer Academic Publishers*, 2001, P. 341-353.
51. I.P. Terenetskaya and **I.A. Gvozдовskyy** "In-situ monitoring of biologically active solar UV-B radiation: a new biosensor of vitamin D synthetic capacity." *SPIE Proceedings the International Society for Optical Engineering*, 2001, Vol. **4425**, pp. 183-188. (doi: 10.1117/12.429721).
52. I. Terenetskaya, **I. Gvozдовskyy** "Development of personal UV biodosimeter based on vitamin D photosynthesis." *Mol. Cryst. Liq. Cryst*, 2001. Vol. **368**, pp. 551-558. (doi: 10.1080/10587250108029987).
53. **I.A. Gvozдовskyy**, I.P. Terenetskaya. "Comparative study of the provitamin D photoisomerization kinetics in ethanol and liquid crystal." *J. Functional Materials*. 2000. - Vol. 7, N 3. pp. 508-512.
54. A.G. Dyadyusha, **I.A. Gvozдовskyy**, E.N. Salkova, I.P. Terenetskaya "Development of personal biodosimeter of UV radiation based on vitamin D photosynthesis in nematic liquid crystal matrix." *Semiconductor Physics, Quantum Electronics & Optoelectronics*, 1999, Vol. 2, N4, pp.91-95.

REPORTS AT THE CONFERENCES:

1. SPIE International Conference "Advanced Materials", 3-7 October 1999, Kiev, Ukraine.
2. VIII International Symposium "Advanced Display Technologies", 10-14 October 1999 Crimea, Ukraine.
3. 18th International Conference on Liquid Crystal, 24-28 July 2000, Sendai, Japan.
4. SPIE International Symposium "Smart Sensing 2000", 26-30 September 2000, Kiev, Ukraine.
5. 8th International Conference "Nonlinear Optics of Liquid and Photorefractive Crystals", 2-6 October 2000, Crimea, Ukraine.
6. IX Russian National Conference on Crystal Growing, 16-20 October 2000, Moscow, Russia.
7. First Ukrainian Antarctic Meeting 1UAM2001, 4-7 June 2001, Kyiv, Ukraine.
8. Biologic Effects of Light Boston, Massachusetts, 15-17 June 2001, Boston, USA.
9. XV International School-Seminar "Spectroscopy of molecules and crystals" (XVISSMC) 23-30 June 2001, Chernihiv, Ukraine.
10. 9th ECSBM September 2001, Prague, Czech Republic.
11. XX International Conference on Photochemistry (ICPXX), Moscow, July 30 – August 4, 2001.
12. VIII European Conference on Organised Films (ECOF8), Otranto, (Lecce) Italy, 3-7 September 2001.
13. XIV Conference on Liquid Crystals (Chemistry, Physics and Applications) (CLC 2001), Zakopane, Poland 3-7 September 2001.

14. 19th International Liquid Crystal Conference 30 June - 5 July 2002, Edinburgh, UK.
15. 9th International Conference "Nonlinear Optics of Liquid and Photorefractive Crystals", September 30 - October 4, 2002, Crimea, Ukraine.
16. Ozone Symposium, 1-8 June 2004, Kos, Greece.
17. International Symposium «Atmospheric radiation» (MCAP-2004), 22-25 June 2004, Saint-Petersburg, Russia.
18. 20th International Conference on Liquid Crystal (ILCC 2004), 4-9 July 2004, Ljubljana, Slovenia.
19. 4th International Symposium on Photochromism (ISOP' 04) "Photoswitchable Molecular Systems and Devices", 12-15 September 2004, Arcachon, France.
20. 11th International Topical Meeting on Optics of Liquid Crystals, 2-7 October 2005, Florida, USA.
21. 5-а Різдв'яна Конференція з Рідких Кристалів (РКРК-5), 20-21 грудня 2005, м. Київ, Інститут фізики НАН України.
22. International Conference "Modern Problems of Condensed Matter Optics" MPCMON. April 26-28, 2006, Kyiv, Ukraine.
23. 21 International Liquid Crystal Conference (ILCC 2006), 2-7 July 2006, Keystone, Colorado, USA.
24. XVII Conference on Liquid Crystals (Chemistry, Physics and Applications) (CLC 2007), Augustow, Poland 17-22 September 2007.
25. 8-th International Conference "Electronic processes in organic and inorganic materials" (ICEPOM-8). 17-22 May 2010, Residence Synyogora, Ivano-Frankivsk, Ukraine.
26. 23 International Liquid Crystal Conference (ILCC 2010), 11-16 July 2010, Krakow, Poland.
27. 10 Всеукраїнська наукова конференція "Актуальні питання історії науки і техніки", 6-8 жовтня, 2011, Київ.
28. The 11th International Meeting on Information Display, 11-15 October 2011, KINTEX, Seoul, Korea.
29. Topical Meeting Photorefractive Materials, Effects, and Devices "Light in Nonlinear Structured Materials" (PR-11), 13-15 October 2011, Ensenada, Mexico.
30. 12th European Conference on Liquid Crystals, 22-27 September 2013, Rhodes, Greece.
31. Topical Meeting Photorefractive Materials, Effects, and Devices "Light in Nonlinear Structured Materials" (PR-12), 9-13 June 2014, Key Largo, Florida, USA.
32. Photorefractive photonics (PR-15), 16-19 June 2015, Villars, Switzerland.
33. XXII Galyna Puchkovska International School-Seminar "Spectroscopy of Molecules and Crystals" (XXII ISSSMC), September 27- October 4, 2015, Mukachevo, Zakarpattia, Ukraine.
34. 1st International Conference on Optics, Photonics and Materials, October 26-28, 2016, Nice, France.
35. International Conference of Electronic Processes in Organic and Inorganic Materials (ICEPOM-11), May 21-25, 2018, Ivano-Frankivsk, Ukraine
36. Conference on Lasers and Electro-Optics Europe & European Quantum Electronics Conference (CLEO/Europe-EQEC), 24 June, 2019, Munich, Germany

37. VI Наукова конференція Нанорозмірні системи: будова, властивості, технології. (НАНСИС-2019), 4-6 грудня, 2019, Київ, Україна
38. International Conference of Electronic Processes in Organic and Inorganic Materials (ICEPOM-12), June 1-5, 2020, Kamianets-Podilskyi, Ukraine
39. XXV Galyna Puchkovska International School Seminar "Spectroscopy of Molecules and Crystals" (XXV ISSSMC), September 21-24, 2021, Kyiv, Ukraine
40. "Modern Advances in Organic Synthesis, Polymer Chemistry and Food Additives" in honor of Prof. Stanislav Voronov, dedicated to the 80th anniversary of birth. 7-8 December 2021, Lviv, Ukraine
41. International research and practice conference "Nanotechnology and nanomaterials". 16-19 August 2023, Bukovel, Ukraine
42. International research and practice conference "Nanotechnology and nanomaterials". 21-24 August 2024, Uzhhorod, Ukraine
43. XXVII Galyna Puchkovska International School Seminar "Spectroscopy of Molecules and Crystals" (XXVII ISSSMC), September 22-25, 2024, Wojanow, Poland