CURRICULUM VITAE

Michael I. Shribak

Senior Scientist
The Eugene Bell Center
Marine Biological Laboratory
7 MBL Street, Woods Hole, MA 02543-1015, USA
T: 508-289-7242, E: mshribak@mbl.edu

https://orcid.org/0000-0002-5849-6294

Education:

1977 - 1982 BS/MS in Physical Optics and Spectroscopy, Lviv National University, Lviv, Ukraine.
Department of Nonlinear Optics. Faculty of Physics.
Thesis: Optical properties of potassium-cadmium langbeinite crystals.
Advisor: Prof. Leonid A. Lazko.

1987 - 1991 PhD in Optics, Moscow University of Geodesy and Cartography Moscow, Russia.
Department of Optoelectronic Devices, Faculty of Optical Instrumentation.
Thesis: Developing the optical information storage systems with polarization separation of beams.
Advisor: Prof. Yuri M. Klimkov.

Professional Positions:

1982 - 1987 Engineer, Lviv Radio Engineering Research Institute, Lviv, Ukraine
1987 - 1988 Engineer, Research Institute of Consumer Radio Electronics, Lviv, Ukraine
1988 - 1991 Junior Scientist, Research Institute of Consumer Radio Electronics, Lviv, Ukraine
1991 - 1993 Scientist, Research Institute of Consumer Radio Electronics, Lviv, Ukraine
1993 - 1993 Senior Scientist, Research Institute of Consumer Radio Electronics, Lviv, Ukraine
1993 - 2000 Senior Scientist, Heat and Mass Transfer Institute, Minsk, Belarus
1995 - 1998 Senior Scientist, LEMT (Lasers in Ecology, Medicine & Technology), Minsk, Belarus
1998 - 1999 Visiting Professor, Tokyo Agriculture and Technology University, Tokyo, Japan
2000 - 2002 Staff Scientist, Marine Biological Laboratory, Woods Hole, MA
2002 - 2005 Assistant Research Scientist, Marine Biological Laboratory, Woods Hole, MA
2005 - 2009 Associate Research Scientist, Marine Biological Laboratory, Woods Hole, MA
2009 - 2021 Associate Scientist, Marine Biological Laboratory, Woods Hole, MA
2021 - Senior Scientist, Marine Biological Laboratory, Woods Hole, MA

Honors and Awards (selected):

1985: The First place in competition “The best works on consumer engineering created by young inventors and innovators of Ministry of Radio Industry of the USSR”.
1986: The Second place in competition “The best works on consumer engineering created by young inventors and innovators of Ministry of Radio Industry of the USSR”.
1987: Honorary title and medal "The best young inventor of Ukraine”.
1988: Honorary title and medal “Inventor of the USSR”.
1988: The Silver Medal of the Exhibition of Achievement of National Economy of the USSR.
1989: Honorary title and medal “The best young innovator of Moscow (Russia)”.
2010: One award for the Technical Merit and 3 Honorable Mentions in the Olympus BioScapes International Digital Imaging competition.
2011: Image of Distinction in the Nikon’s Small World International Photomicrography Competition.
2012: Two Images of Distinction in the Nikon’s Small World International Photomicrography Competition.
2017: Director of the NIH Dr. Francis S. Collins highlighted the polychromatic polarizing microscope in the weekly NIH Director’s Blog: https://www.mbl.edu/news/snapshots-life-neurons-new-light-nih-directors-blog

Service on National Committees:

NIH: ZRG1 BST-M (58): “ARRA-Challenge grant program at NIH” (2009)
NIH: ZGM1 BBCB-A: "Biomedical Instrumentation” (2014)
NIH: ZRG1 MDCN-N (92): “Glia Development, Function and Disease” (2015)

NIH: ZRG1 BCMB-A (51) R: “NIH Director’s Transformative Research Awards (R01)” (2017)

Editorial Board of Scientific Journal:
Nature/ Scientific Reports

Ad hoc manuscript reviewer:
Applied Optics; Biomedical Optics Express; Biomedicines; Computational and Mathematical Methods in Medicine; IEEE: Transactions on Medical Imaging; Journal of Biomedical Optics; Journal of Engineering Physics and Thermophysics; Journal of Microscopy; Journal of the Optical Society of America; Journal of Optics; Journal of Physics D: Applied Physics; Journal of Visualized Experiments; Material Research Express; MAPAN - Journal of Metrology Society of India; Nature/ Scientific Reports; Optical Engineering; Optics and Lasers in Engineering; Optics Communications; Optics Express; Optical Letters; Opto-Electronics Review; Photonics; Sensors; Thin Solid Films.

Projects (Principal Investigator):
2005 - 2007: NIH R44HD037317 (sub-award), “Morphology-based rating of egg development potential”.

2007 - 2012: NIH R01EB005710, “Orientation independent DIC and polarization microscopy".

2012 - 2024: NIH R01GM101701, “Orientation independent DIC and polarization microscopy".

2024 - 2026: ExxonMobil LAW-2024-0133 “The development of polychromatic polarized light microscopy for petroleum coke samples”

Patents:
1. M. Shribak, P. Kazansky, “Instant polarized light microscope”, US Patent Application 2025/0147296.
2. P. Kazansky, M. Shribak, “Nanostructured birefringent optical elements and microscopes with nanostructured birefringent optical elements”, US Patent Application 2025/0155623.
3. M. Shribak “Polychromatic polarization state generator and its application for real-time birefringence imaging”, US Patent 9625369 (2017).
4. M. Shribak “Orientation-independent differential interference contrast microscopy technique and device”, US Patent 7564618 (2009).
5. M. Shribak, and R. Oldenbourg “Retardance measurement system and method”, US Patent 7372567 (2007), *licensed to Perkin Elmer (Waltham, MA)*.
6. M. Shribak, and R. Oldenbourg “Retardance measurement system and method”, US Patent 7239388 (2007), *licensed to Perkin Elmer (Waltham, MA)*.
7. M. Shribak “Orientation-independent differential interference contrast microscopy technique and device”, US Patent 7233434 (2007).
8. M. Shribak, and R. Oldenbourg “Retardance measurement system and method”, US Patent 7202950 (2007), *licensed to Perkin Elmer (Waltham, MA)*.
9. M. Shribak, R. Oldenbourg, P.J. Cronin, C.C. Hoyt, and P.J.Miller “Instantaneous polarization measurement system and method”, US Patent 7079247 (2006), *licensed to Perkin Elmer (Waltham, MA)*.
10. R. Oldenbourg, M. Shribak, C. Hoyt, and P. Torok “Enhancing polarized light microscopy”, US Patent 6924893 (2005).
11. M.I. Shribak “Device for quality inspection of the optical fiber end face”, Patent of Belarus 2443 (1995).
12. L.M. Shashuk, M.I. Shribak “Device determining position and speed of translation of optical head of laser player”, Patent of Russia 2071612 (1992).
13. Yu.M. Klimkov, M.I. Shribak, E.L. Iourieva “Method and apparatus for measuring birefringence in optical information carrier”, Patent of Russia 1835556 (1990).
14. Yu.M. Klimkov, M.I. Shribak “Method and apparatus for measurement of the angular displacement of remote object”, Patent of Russia 1721437 (1989).
15. M.I. Shribak, Yu.M. Klimkov “Apparatus for polarization separating of illuminating and reflected laser beams in optical information reading system”, Patent of Russia1716566 (1989).
16. Yu.M. Klimkov, M.I. Shribak “Sensor of focusing of optical system for data reading”, Patent of the USSR 1653001 (1989).
17. Yu.M. Klimkov, M.I. Shribak “Apparatus for attenuating the optical feedback”, Patent of the USSR 1653000 (1989).

18. M.I. Shribak, Yu.M. Klimkov “Optical reading apparatus”, Patent of the USSR 1581076 (1988).
19. O.V. Oleksyuk, M.I. Shribak, A.P. Dovgan, L.M. Shashuk “Apparatus for measuring radial and vertical displacements of information tracks of disc information carrier”, Patent of the USSR 1581075, (1988).
20. Yu.M. Klimkov, S.N. Perevalov, I.M. Senko, L.M. Shashuk, M.I. Shribak “Optical reading apparatus”, Patent of the USSR 1559943 (1988).
21. Yu.M. Klimkov, M.I. Shribak, “Apparatus for measuring noise of a laser diode”, Patent of the USSR 1544064 (1988).
22. V.S. Gvozdikov, Yu.M. Klimkov, V.V. Nasonov, V.P. Chalov, L.M. Shashuk, M.I. Shribak “Apparatus for optical data reading”, Patent of the USSR 1528219 (1988).
23. M.I. Shribak “Apparatus for measuring parameters of the beam multiplicator of laser disk player”, Patent of the USSR 1474499 (1987).
24. M.I. Shribak, V.I. Shribak “Apparatus for adjusting the optical system of laser disc player”, Patent of the USSR 1469520, (1987).
25. M.I. Shribak, A.P. Dovgan, L.M. Shashuk “Apparatus for following-up information track of optical data carrier”, Patent of the USSR 1455360 (1986).
26. O.G. Vlokh, M.I. Shribak “Apparatus for positioning laser beam in optical information reader”, Patent of the USSR 1446651 (1987).
27. M.I. Shribak, S.A. Milutin “Apparatus for adjusting the optical system of laser disk player”, Patent of the USSR 1434494 (1986).
28. M.I. Shribak “Method and apparatus for measuring birefringence of reflecting video disks”, Patent of the USSR 1431484 (1986).
29. S.A. Milutin, M.I. Shribak “Apparatus for adjusting the optical system of laser disk player”, Patent of the USSR 1425776 (1986).
30. M.I. Shribak, “Optical reading apparatus”, Patent of the USSR 1422243 (1986).
31. M.I. Shribak “Apparatus for measuring birefringence of reflecting optical data carrier”, Patent of the USSR 1414097 (1986).
32. M.I. Shribak “Apparatus for measuring birefringence of reflecting optical data carrier”, Patent of the USSR 1390636 (1985).
33. S.A. Milutin, M.I. Shribak “Apparatus for measuring diameter of the laser beam”, Patent of the USSR 1378561 (1986).
34. S.N. Tkachenko, A.P. Dovgan, I.M. Senko, M.I. Shribak “Apparatus for reading information from disc carrier”, Patent of the USSR 1377900 (1986).
35. M.I. Shribak, A.P. Dovgan, I.M.Senko “Optical reading apparatus”, Patent of the USSR 1352528 (1986).
36. M.I. Shribak “Non-destructive method of measuring of the information microrelief of videodisc”, Patent of the USSR 1344108 (1985).
37. M.I. Shribak, “Optical reading apparatus”, Patent of the USSR 1339640 (1986).
38. S.A. Milutin, M.I. Shribak, A.P. Dovgan “Apparatus for measuring diameter of the laser beam”, Patent of the USSR 1317281 (1985).
39. S.A. Milutin, M.I. Shribak “Apparatus for adjusting the optical system of laser player”, Patent of the USSR 1304068 (1985).
40. M.I. Shribak, A.I. Ektov “Apparatus for optical reading of information”, Patent of the USSR 1297106, (1985).
41. A.P. Dovgan, M.I. Shribak “Follow-up system for information track of optical record carrier”, Patent of the USSR 1290410 (1985).
42. M.I. Shribak “Apparatus for measuring birefringence of the reflecting optical information carrier”, Patent of the USSR 1290091 (1985).
43. M.I. Shribak “Apparatus for measuring birefringence of the reflecting optical information carrier”, Patent of the USSR 1290090 (1985).
44. M.I. Shribak “Apparatus for measuring birefringence of the reflecting optical data carrier”, Patent of the USSR 1282202 (1985).
45. A.P. Dovgan, I.M. Senko, M.I. Shribak, L.P. Dovgan “Apparatus for measuring phase-frequency and amplitude-frequency characteristics”, Patent of the USSR 1277014 (1985).
46. M.I. Shribak, A.I. Ektov, M.I. Drobot, I.M. Senko “Apparatus for automatic focusing of the beam”, Patent of the USSR 1273987 (1985).
47. A.P. Dovgan, M.I. Shribak “Follow-up system for information track of optical record carrier”, Patent of the USSR 1224827 (1984).

48. M.I. Shribak “Apparatus for reading information from optical carrier”, Patent of the USSR 1224826, (1983).
49. M.I. Shribak, V.I. Butta “Device for reading information from optical disc carrier”, Patent of the USSR 1216798 (1984).
50. M.I. Shribak, N.N. Shamova “Apparatus for measuring birefringence of reflecting optic information carrier”, Patent of the USSR 1210137 (1984).
51. A.V. Irlin, V.S. Gvozdikov, V.G. Tsukanov, M.I. Shribak “Apparatus for tracking light beam during the optical data reading”, Patent of the USSR 1203583 (1984).
52. M.I. Shribak “Apparatus for reading information from optical disk carrier”, Patent of the USSR 1153353, (1984).
53. V.I. Butta, A.P. Dovgan, M.I. Drobot, I.M. Senko, M.I. Shribak “Optical reading device with beam focused on the carrier surface”, Patent of the USSR 1137518 (1983).

Publications in Peer-Reviewed Journals:

1. S.I. Shevtsov, H. Wang, M. Shribak, H. Sakurai, and P.G. Kazansky “Ultrafast laser nanostructuring in silica glass for optical microscopy”, *Optical Material Express* (accepted).
2. Y. Bao, Z. Marin, X. Chen, Q. Liu, Z. Wang, M. Su, Y. Tuna, S. Stoller, F. Schueder, C. Zhang, S. Fung, M. Wu, K. M. Neugebauer, J. Howard, C. Liu, D. Baddeley, M. Shribak*, J. Bewersdorf*, “A correlative quantitative phase and super-resolution fluorescence microscope for imaging cellular structures and dynamics”, *Light: Science & Applications* (accepted).
3. P.A. Lewis, Z. Horowitz, M. Shribak, and K. Echeverri, “A Shining Starlet: *Nematostella vectensis* as a model for Developmental, Regenerative, and Comparative Biology”, *Developmental Dynamics,* published: 07 July 2026 PMID: 42411919, https://doi.org/10.1002/dvdy.70173
4. Y. Bao, Z. Marin, X. Chen, Q. Liu, Y. Tuna, S. Stoller, F. Schueder, C. Zhang, S. Fung, M. Wu, K. M. Neugebauer, J. Howard, C. Liu, D. Baddeley, M. Shribak*, J. Bewersdorf*, “A correlative quantitative phase contrast and fluorescence super-resolution microscope for imaging molecules in their cellular context”. https://www.biorxiv.org/content/10.1101/2025.10.13.682186v1
5. G. Qian, H. Zhang, Y. Liu, M. Shribak, K. Eliceiri, P. Provenzano, “Computationally enabled polychromatic polarized imaging enables mapping of matrix architectures that promote pancreatic ductal adenocarcinoma dissemination”, *The American Journal of Pathology*, 195 (7) 1242-1253 (2025). https://doi.org/10.1016/j.ajpath.2025.04.017
6. M. Chitsaz, L. Yang, R. Rayes-Danan, O. Savari, B. Li, M. Shribak, K. Eliceiri, A. Loeffler, “Polychromatic polarization microscopy differentiates collagen fiber signatures in benign pancreatic tissue and pancreatic ductal adenocarcinoma”, *Modern Pathology*, 38 100768 (2025) https://doi.org/10.1016/j.modpat.2025.100768
7. K. Martens, N. Martins de Almeida, M. Shribak, J. Higuti, I. Schön, “On *Cytheridella whitmani* sp. nov. (Crustacea, Ostracoda) from Cape Cod (MA, USA), with a reappraisal of the taxonomy of the genus”, ZooKeys, 1224, 317-348 (2025), https://doi.org/10.3897/zookeys.1224.135458
8. M. Goda, M. Shribak, Z. Ikeda, N. Okada, T. Tani, G. Goshima, R. Oldenbourg, A. Kimura, “Live-cell imaging under centrifugation characterized the cellular force for nuclear centration in the *Caenorhabditis elegans* embryo”, Proceedings of the National Academy of Sciences of the USA, 121 (43) e2402759121 (2024). DOI:10.1073/pnas.2402759121. https://www.biorxiv.org/content/10.1101/2024.01.03.574024v1.full.pdf
9. S. Iida, S. Ide, S. Tamura, M. Sasai, T. Tani, T. Goto, M. Shribak*, K. Maeshima*, “Orientation-Independent-DIC imaging reveals that a transient rise in depletion attraction contributes to mitotic chromosome condensation”, Proceedings of the National Academy of Sciences of the USA, 121 (36) e2403153121 (2024); DOI:10.1073/pnas.2403153121. “Orientation-Independent-DIC imaging reveals that a transient rise in macromolecular crowding contributes to mitotic chromosome condensation”, https://www.biorxiv.org/content/10.1101/2023.11.11.566679v1.full
10. D.P. Linklater, A. Vailionis, M. Ryu, S. Kamegaki, J. Morikawa, H. Mu, D. Smith, P. Maasoumi, R. Ford, T. Katkus, S. Blamires, T. Kondo, Y. Nishijima, D. Moraru, M. Shribak, A. O’Connor, E. Ivanova, Soon Ng, M. Hideki, S. Juodkazis, “Structure and optical anisotropy of spider scales and silk: use of chromaticity and azimuth colors”, Nanomaterials, 13 (12), 1894 (2023), https://doi.org/10.3390/nano13121894
11. H. Jum’ah, M. Shribak, A. Keikhosravi, B. Li, Y. Liu, D. Obaidat, K.W. Eliceiri, A. Loeffler, S. Ayub, "Detection of crystals in joint fluid aspirates with polychromatic polarization microscopy”, Annals of the

Rheumatic Diseases Journal. 82, 1501-1502 (2023). Published Online First: 26 May 2023. doi: 10.1136/ard-2023-224331. PMC10592475.
12. M. Rajabi, O. Lavrentovich, and M. Shribak*, “Instantaneous mapping of liquid crystal orientation using polychromatic polarizing microscope”, Liquid Crystals, 50, 181- 190 (2023) https://doi.org/10.1080/02678292.2022.2142883 , https://arxiv.org/pdf/2211.00167.pdf, https://www.ncbi.nlm.nih.gov/pmc/articles/PMC10249429
13. O. M’Saad, M. Shribak, and J. Bewersdorf, “Unclearing microscopy”, https://www.biorxiv.org/content/10.1101/2022.11.29.518361v1 (online December 2, 2022).
14. K. Martens, M. Shribak, I. Arkhipova and Isa Schön, “The common ostracod *Cypridopsis vidua* (O.F. Müller, 1776) (Crustacea, Ostracoda) is not an obligate parthenogen”, Belgian Journal of Zoology, 153, 15-34 (2023), https://doi.org/10.26496/bjz.2023.107 (PMCID: PMC12309733).
15. B. Cesare*, N. Campomenosi, and M. Shribak*, "Polychromatic polarization: boosting the capabilities of the good old petrographic microscope", Geology, vol. 50, No. 2, 137-141 (2022) (https://doi.org/10.1130/G49303.1 (free access)). (PMCID: PMC12312629), (*corresponding authors).
16. A. Keikhosravi, M. Shribak*, M.W. Conklin, Y. Liu, B. Li, A. Loeffler, R.M. Levenson, K.W. Eliceiri*, "Real-time polarization microscopy of fibrillar collagen in histopathology", Scientific Reports, 11, 19063 (2021) (https://www.nature.com/articles/s41598-021-98600-w; https://www.researchsquare.com/article/rs-558678/v1). (*corresponding authors).
17. A. Laurinavicius, A. Rasmusson, B. Plancoulaine, M. Shribak, R. Levenson, "Machine-learning-based evaluation of intratumoral heterogeneity and tumor-stroma interface for clinical guidance", American Journal of Pathology, vol. 191, No. 10, 1724-1731 (2021). (free access https://doi.org/10.1016/j.ajpath.2021.04.008).
18. T. Tani, M. Koike-Tani, M.T. Tran, M. Shribak, and S. Levic, "Postnatal structural development of mammalian Basilar Membrane provides anatomical basis for the maturation of tonotopic maps and frequency tuning", Scientific Reports, 11, 7581 (2021) (free access https://www.nature.com/articles/s41598-021-87150-w).
19. A. Vitkunaite, A. Laurinaviciene, B. Plancoulaine, A. Rasmusson, R. Levenson, M. Shribak, A. Laurinavicius, "Intranuclear birefringent inclusions in paraffin sections by polychromatic polarization microscopy", Scientific Reports, 11, 6275 (2021) (free access https://www.nature.com/articles/s41598-021-85667-8).
20. I. Schön, F. Rodriguez, M. Dunn, K. Martens, M. Shribak, and I. Arkhipova, “A survey of transposon landscapes in the putative ancient asexual ostracod *Darwinula stevensoni*”, Genes, vol.12, No.3, 401 (2021). https://www.mdpi.com/2073-4425/12/3/401.
21. M. Shopa, Y. Shopa, M. Shribak, E. Kostenyukova, I. Pritula and O. Bezkrovnaya, “Polarimetric studies on the L-arginine doped KDP single crystals", Journal of Applied Crystallography, vol. 53, part 5, 1-9 (October 2020). https://doi.org/10.1107/S1600576720010870.
22. M.A. Messerli, M.J. Raihan, B.M. Kobylkevich, A.C. Benson, K.S. Bruening, M. Shribak, J.J.C. Rosenthal, J.J. Sohn, “Construction and composition of the squid pen from Doryteuthis pealeii”, Biological Bulletin, vol.237, No.1, 1-15 (August 2019). https://www.journals.uchicago.edu/doi/abs/10.1086/704209 (PMCID: PMC7340512)
23. R. Nagashima, K. Hibino, S.S. Ashwin, M. Babokhov, S.Fujishiro, R. Imai, T. Nozaki, S. Tamura, T. Tani, K. Kimura, M. Shribak, M.T. Kanemaki, M. Sasai, K. Maeshima, “Single nucleosome imaging reveals loose genome chromatin networks via active RNA polymerase II”, Journal of Cell Biology, vol. 218, No. 5, 1511-1530 (2019). http://jcb.rupress.org/content/218/5/1511, (PMCID: PMC6504897), included in 10 best publications of The Year in Cell Biology:2019.
24. J.E. Malamy, M. Shribak, “High resolution imaging of epithelial cell migration and wound healing in a Cnidarian model using an orientation-independent DIC microscope”, Journal of Microscopy, vol. 270, No. 3, p. 290-301 (2018). https://doi.org/10.1111/jmi.12682, (PMCID: PMC5980661).
25. R. Imai, T. Nozaki, T. Tani, K. Hibino, S. Idea, S. Tamura, K. Takahashi, M. Shribak*, K. Maeshima*, “Density” imaging of heterochromatin in live mouse cells using OI-DIC microscopy”, Molecular Biology of the Cell, vol. 28, No. 23, p. 3349-3359 (2017) (*corresponding authors) (PMCID: PMC5687035) (*on journal cover*; *chosen by the Editorial Board for Highlights from MBoC*) (http://www.molbiolcell.org/content/28/23/3349.full).
26. M. Shribak, K. Larkin, D. Biggs, “Mapping of optical path length and image enhancement using orientation-independent differential interference contrast microscopy”, Journal of Biomedical Optics, vol. 22, No. 1, 16006 (2017), doi: 10.1117/1.JBO.22.1.016006 (PMCID: PMC5217741).

27. T. Tani, M. Shribak, R. Oldenbourg, “Living cells and dynamic molecules observed with the polarized light microscope: The legacy of Shinya Inoué”, Biological Bulletin, vol. 231, No.1, p.85-95 (2016). (free access http://www.journals.uchicago.edu/doi/full/10.1086/689593).
28. M. Shribak, “Polychromatic polarization microscope: bringing colors to a colorless world”, Scientific Reports, 5, 17340; doi: 10.1038/srep17340 (2015) (PMCID: PMC4661494.) (https://www.nature.com/articles/srep17340).
29. J.A. Zinskie, M. Shribak, M.F. Bruist, K. Aufderheide, C. Janetopoulos, “A mechanical microcompressor for high resolution imaging of motile specimens”, Experimental Cell Research, vol. 337, p.249-256 (2015) (PMCID: PMC4696872).
30. S.B. Mehta, M. Shribak, R. Oldenbourg, “Polarized light imaging of birefringence and diattenuation at high resolution and high sensitivity”, Journal of Optics, vol.15, 094007 (2013). https://arxiv.org/abs/1307.0167. PMCID: PMC3834771). *(selected by the editors of Journal of Optics as a Highlight of 2013).*
31. M. Shribak, “Quantitative orientation-independent DIC microscope with fast switching shear direction and bias modulation”, The Journal of the Optical Society of America A, vol.30, No.4, p.769-782 (2013). (PMCID: PMC3695724). (*selected for Virtual Journal of Biomedical Optics, vol.8, No.5 (2013)*)
32. M. Shribak, “Complete polarization state generator with one variable retarder and its application for fast and sensitive measuring of two-dimensional birefringence distribution”, The Journal of the Optical Society of America A, vol.28, No.3, p.410-419 (2011). (PMCID: PMC3059986).
33. M. Shribak, J. LaFountain, D. Biggs, S. Inoué, “Orientation-independent differential interference contrast (DIC) microscopy and its combination with orientation-independent polarization system”, Journal of Biomedical Optics, vol. 13, No.1, 14011 (2008). (PMCID: PMC2302836). (*selected for Virtual Journal of Biological Physics Research, vol.15, No.4 (2008)*)
34. M. Shribak, S. Inoué, “Orientation-Independent Differential Interference Contrast Microscopy”, Applied Optics, vol. 45, No.3, p. 460-469 (2006). (*on journal cover*)
35. E. Barry, Z. Hensel, M. Shribak, R. Oldenbourg, and Z. Dogic, “Entropy driven formation of a chiral liquid-crystalline phase of helical filaments”, Physical Review Letters, vol. 96, 018305 (2006). https://arxiv.org/abs/cond-mat/0510708 .
36. M. Shribak, R. Oldenbourg, “Three-dimensional birefringence distribution in reconstituted asters of Spisula oocytes revealed by scanned aperture polarized light microscopy”, Biological Bulletin; 205: 194-195 (2003).
37. M. Shribak, R. Oldenbourg, “Techniques for fast and sensitive measurements of two-dimensional birefringence distributions”, Applied Optics, vol. 42, No.16, p. 3009-3017 (2003).
38. S.Inoué, O.Shimomura, M.Goda, M.Shribak, P.T.Tran, “Fluorescence polarization of green fluorescence protein”, Proceedings of the National Academy of Sciences of the USA, vol.99, No.7, p.4272 - 4277 (2002).
39. M. Shribak, S. Inoué, R. Oldenbourg, "Polarization aberrations caused by differential transmission and phase shift in high NA lenses: theory, measurement and rectification", Optical Engineering, vol. 41, No. 5, p.943-954, (2002).
40. M.I.Shribak, “Polarimetric optical fiber refractometer”, Applied Optics, vol. 40, No.16, p.2670–2674 (2001).
41. M.I.Shribak, Y.Otani, T.Yoshizawa “Autocollimation polarimeter for measuring two-dimensional distribution of birefringence”, Optics & Spectroscopy, vol. 89, No.1, p.155-159 (2000).
42. M.I.Shribak, “Birefringence measurements in elliptic phase plate in the autocollimating mode”, Instruments and Experimental Techniques, vol.39, No.5, p.732-736 (1996).
43. Yu.M.Klimkov, M.I.Shribak, “Application of auto-collimation balance polarimeter for measurement of angular shifts of distant objects”, Measurement techniques, vol. 38, No.4, p.420-425 (1995).
44. M.I.Shribak, “Compensation detector of birefringence”, Instruments and Experimental Techniques, vol.37, No.4, p.453-456 (1994).
45. V.L.Kolpashchikov, O.G.Martynenko, M.I.Shribak, “Temperature measurements using a birefringent sensor”, Journal of Engineering Physics and Thermophysics, vol.67, No.5-6, p.1106-1112 (1994).
46. V.L.Kolpashchikov, O.G.Martynenko, M.I.Shribak, “Fiber optical sensor with single multimode fiber and moving mirror”, in “Heat & Mass Transfer-93/92” - Minsk, Academic Scientific Complex “A.V.Luikov Heat & Mass Transfer”, p.6-8 (1994) (in Russian).
47. M.I.Shribak, “A compensation method of measuring birefringence”, Soviet Journal of Optical Technology, vol.60, No.8, p.546-549 (1993).

48. Yu.M.Klimkov, M.I.Shribak, E.L.Iourieva, “A balanced method of measuring birefringence for normal reflection”, Measurement techniques, vol. 36, No.7, p.759-762 (1993).
49. L.M.Shashuk, M.I.Shribak, “Autocollimation sensor for laser-head position and velocity in reading data from optical disks”, Measurement techniques, vol. 36, No.4, p.378-380 (1993).
50. Yu.M.Klimkov, M.I.Shribak, “An autocollimation system for measuring of angular displacements of remote object by means of birefringence”, Measurement techniques, vol. 34, No.8, p.781-785 (1991).
51. Yu.M.Klimkov, M.I.Shribak, “Polarization separation of direct and reflected beams of laser diode with use of the two-component phase plate”, Journal of Instrument Engineering, vol.34, No.3, p.54-60 (1991). (in Russian).
52. S.A.Gudenko, Yu.M.Klimkov, E.A.Podpalyi, V.S.Smelov and M.I.Shribak, “Magnetooptical polarization conversion of monochromatic polarized optical radiation”, Optics and Spectroscopy, vol.70, No.5, p.632-634 (1991).
53. Yu.M.Klimkov, M.I.Shribak, “Influence of lens shape on polarization aberrations of the axial beam”, Izvestia vuzov. Geodesy and aerophotography, No.5, p.128-139 (1990). (in Russian).
54. Yu.M.Klimkov, M.I.Shribak, “Using the circularity polarized light for measurement of birefringence at the normal reflection”, Izvestia vuzov. Geodesy and aerophotography, No.1, p.110-115 (1990). (in Russian).
55. M.I.Shribak, “Measurement of birefringence at the normal reflection”, Soviet Journal of Optical Technology, vol.56, No.11, p.703-706 (1989).
56. Yu.M.Klimkov, M.I.Shribak, “A polarization division of direct and reflected beams using a gyrotropic quarter-wave plate”, Soviet Journal of Optical Technology, vol.56, No.11, p.664-667 (1989).
57. Yu.M.Klimkov, M.I.Shribak, “Particularities of using laser diodes in optical video players”, Journal of Instrument Engineering, vol.32, No.9, p.68-74 (1989). (in Russian).
58. O.G.Vlokh, M.I.Shribak, “Jones matrix at arbitrary elliptical birefringence”, Bulletin of the Lviv University. Series Physics, vol.22, p.7-13 (1989). (in Ukrainian).
59. S.A.Milutin, I.M.Senko, S.N.Tkachenko, M.I.Shribak, “Tracking in optical audio players”, Tehknika sredstv svyazi. Ser. TRPA, No.3, p.104-107 (1987). (in Russian).
60. M.I.Shribak, “Use of gyrotropic birefringent plate as quarter-wave plate”, Soviet Journal of Optical Technology, vol.53, No.8, p.443-446 (1986).
61. M.I.Shribak, “A polarization separation of forward and reverse beams in the reading of reflective carriers of information”, Soviet Journal of Optical Technology, vol.53, No.7, p.389-391 (1986).

Book Chapters:

1. M.Shribak, “Polarization” (revised). In: *Handbook of Optical Metrology: Principles and Applications, 2nd edition* (ed. T. Yoshizawa), CRC Press, Boca Raton, FL, USA, pp. 373388 (2015).
2. M.Shribak, “Differential interference contrast microscopy”. In: *Biomedical Optical Phase Microscopy and Nanoscopy* (eds. N. T. Shaked, Z. Zalevsky and L. L. Satterwhite), Elsevier, (2012).
3. R.Oldenbourg, and M.Shribak, “Microscopes”. In: *Handbook of Optics, Third Edition, Volume I: Geometrical and Physical Optics, Polarized Light, Components and Instruments* (ed. Michael Bass), McGraw-Hill Professional, (2010).
4. M.Shribak, “Polarization”. In: *Handbook of Optical Metrology: Principles and Applications* (ed. T. Yoshizawa), CRC Press, Boca Raton, FL, USA, pp. 339-350 (2009).