List of publications:

Publications in Peer-reviewed Journals

1) **V. Trivedi**, S. Mahajan, M. Joglekar, V. Chhaniwal, Z. Zalevsky, B. Javidi, A Anand, " 3D printed hand-held refractometer based on laser speckle correlation", Optics and Lasers in Engineering, **118**, 7-13, (2019)

2) **V. Trivedi**, M. Joglekar, S. Mahajan, V. Chhaniwal, B. Javidi, A. Anand, "Portable device based on beam deflection for refractive index mapping and diffusion coefficient measurement", Optical Engineering, **58**(1), 014101-9, (2019)

3) **V. Trivedi**, M. Joglekar,S. Mahajan, N. Patel, V. Chhaniwal, B. Javidi, A. Anand, "Digital holographic imaging of refractive index distributions for defect detection" Optics & Laser Technology, **111**, 439-446, (2019)

4) N. Patel, **V. Trivedi**, S. Mahajan, V. Chhaniwal, C. Fournier, S. Lee, B. Javidi, ,A. Anand, "Wavefront division digital holographic microscopy", Biomedical Optics Express, **9**, 2779-2784, (2018)

5) P. Vora, **V. Trivedi**, S. Mahajan, N. Patel, M. Joglekar, V. Chhaniwal, A. Moradi, B. Javidi, A. Anand, "Wide field of view common-path lateral-shearing digital holographic interference microscope", Journal of Biomedical Optics, **22**(12), 126001 -11, (2017)

6) S. Mahajan, **V. Trivedi**, A.K. Ranganathan, V. Chhaniwal, B. Javidi, G. Pedrini, W. Osten and A. Anand, "Wide-Field Lensless 3D Imaging and Visualization of Micro-objects", Journal Of Display Technology, **12** 1283-1289, (2016)

7) S. Mahajan, **V. Trivedi**, P. Vora, V. Chhaniwal, B. Javidi, and A. Anand, "Highly Stable Digital Holographic Microscope Using Sagnac Interferometer", Optics Letters, **40**, 3743-3746, (2015)

8) **V. Trivedi**, S. Mahajan, V. Chhaniwal, Z. Zalevsky, B. Javidi and A. Anand, "Optical temperature sensor using speckle field", Sensors and Actuators A: Physical, **216,** 312-317, (2014)

9) Anand, A. Faridian, V.K. Chhaniwal, S. Mahajan, **V. Trivedi**, S.K. Dubey, G. Pedrini, W. Osten and B. Javidi, " Single beam Fourier transform digital holographic quantitative phase microscopy", Applied Physics Letters, **104**, 103705, (2014)

10) A. Anand, **V. Trivedi**, S. Mahajan, V. Chhaniwal, A. Singh, R. Leitgeb, B. Javidi, “Compact, stable, field portable microscope for cell dynamics measurement”, Pramana-Journal of Physics, **82**, 71-78, (2014)

11) Anand, **V. Trivedi**, S. Mahajan, V.K. Chhaniwal, Z. Zalevsky, B. Javidi, “Speckle-Based Optical Sensor for Low Field Faraday Rotation Measurement”, IEEE Sensors Journal, **13** (2), 723-727, (2013)

Publications in Peer-reviewed Conference Proceedings (International)

1) M. Joglekar, **V. Trivedi**, S. Mahajan, V. Chhaniwal, R. Leitgeb, G. Pedrini, B. Javidi, A. Anand, “Wide field of view self-referencing quantitative phase contrast microscopy based on Lloyd’s mirror interferometer”, Proc. of SPIE, 110760S (1-3), (2019)

2) M. Joglekar, H. Shah, **V. Trivedi**, S. Mahajan, V. Chhaniwal, R. Leitgeb, B. Javidi, A. Anand, “Imaging the effect of hemoglobin on properties of RBCs using common-path digital holographic microscope”, Proc. of SPIE-OSA, 10414, (2017)

3) S. Mahajan, **V. Trivedi**, V. Chhaniwal, M. Prajapati. Z. Zalevsky, B. Javidi, A. Anand, "Measurement of concentration of sugar in solutions with speckle decorrelation", Proc. SPIE, 9525, 95253H, (2015)

4) V. Chhaniwal, S. Mahajan, **V. Trivedi**, C. Narayanmurthy, A. Anand, "Diffusivity measurement using compact, low cost, field portable device based on light deflection", Proc. SPIE, 9525, 95253W, (2015)

5) A. Anand, V. Chhaniwal, S. Mahajan, **V. Trivedi**, A. Singh, R. Leitgeb, B. Javidi, "Self-referencing digital holographic microscope for dynamic imaging of living cells", Proc. SPIE, 9117, 91170X, (2014)

Publications in Peer-reviewed Conference Proceedings (National)

1) **V. Trivedi**, S. Mahajan, B. Pathak, V. Chhaniwal, Z. Zalevsky, B. Javidi, A. Anand, “Laser Speckle Based Refractometer”, National Laser Symposium (NLS 26) 2017

2) M. Joglekar, **V. Trivedi**, S. Mahajan, V. Chhaniwal, B. Javidi, A. Anand, “Imaging of refractive index distribution in phase objects using lateral shearing intereferometer”, National Laser Symposium (NLS 26) 2017

3) **V. Trivedi**, S. Mahajan, M. Joglekar, P. Vora, N. Patel, V. Chhaniwal, A. Anand, “Digital holographic interferometric measurement of refractive index profiles in translucent mediums”, National Laser Symposium (NLS 25) 2016

4) M. Joglekar, H. Shah, **V. Trivedi**, S. Mahajan, N. Patel, V. Chhaniwal, B. Javidi, A. Anand, “Imaging the effect of hemoglobin change on bio-physical parameters of RBC using self-referencing digital holographic microscopy”, National Laser Symposium (NLS 25) 2016

5) N. Patel, S. Mahajan, **V. Trivedi**, A. K. Renganathan, P. Vora, V. Chhaniwal, B. Javidi, G. Pedrini, W. Osten, A. Anand, “Lens-less 3D microscope for cell imaging”, National Laser Symposium (NLS 25) 2016

6) P. Vora, P. Rao, **V. Trivedi**, S. Mahajan, N. Patel, V. Chhaniwal, B. Javidi, A. Anand, “Digital holographic phase tomography with a rotating source beam method”, National Laser Symposium (NLS 25) 2016

7) S. Mahajan, **V. Trivedi**, N. Patel, P. Vora, V. Chhaniwal, R. Leitgeb, B. Javidi, A. Anand, "Imaging of cell dynamics by digital holographic microscopy", Optics within life sciences (OWLS), (2016)

8) S. Mahajan, T. Vohra, **V. Trivedi**, P. Gupta, Y. Verma, A. Anand, V. Chhaniwal, "Self-Referencing Sagnac Digital Holographic Imaging of small biological samples", National Laser Symposium (NLS 24), (2015)

9) **V. Trivedi**, S. Mahajan, P. Vora, N. Patel, V. Chhaniwal, Z. Zalevsky, B. Javidi, A. Anand, "Compact and low cost polarimeter based on laser speckle de-correlation", National Laser Symposium (NLS 24), (2015)