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Publications

Journals

- Saadati-Sharafteh, Fazel and Amiri, Pari and Akhlaghi, Ehsan A and Azizian-Kalandaragh, Yashar, "A new criterion for self-healing quantification of structured light beams", Journal of Optics, Vol. 25, NO. 3, 2023
- Saadati, Fazel and Amiri, Pari and Akhlaghi, Ehsan A and Azizian-Kalandaragh, Yashar, "A new criterion for self-healing quantification of structured light beams", Journal of Optics, Vol. 30, NO. 2, 2023
- Rezaei, Nadim and Aakhte, Mostafa and Charsooghi, Mohammad and Borzouei, Hadi and Akhlaghi, Ehsan A, "3D particle tracking using transport of intensity equation (TIE)", Optics Express, Vol. 30, NO. 2, 2022
- Siavashani, Morteza J and Naghedi, Iman and Abbasian, Vahid and Akhlaghi, Ehsan A and Charsooghi, Mohammad A and Tavassoly, Mohammad Taghi and Moradi, Ali-Reza, "3D imaging using scanning diffractometry", Scientific Reports, Vol. 11, NO. 1, 2021
- Najafi-Nezhad, F and Azizian-Kalandaragh, Y and Akhlaghi, Ehsan A and Amiri, P and Porfirev, A and Khonina, S and Najarbashi, G, "Superposition of shifted Laguerre--Gaussian beams", Optik, Vol. 227, NO. 13, 2021



- Hosseini-Saber, SMA and Akhlaghi, Ehsan A and Saber, Ahad, "Diffractometry-based vortex beams fractional topological charge measurement", Optics Letters, Vol. 45, NO. 13, 2020
- Malekmohammadi, Milad and Akhlaghi, Ehsan A and Soltani, Jamal and Hajizadeh, Faegheh, "Escape velocity sorting in optical tweezers system using a home-made piezo mirror", Journal of Optics, Vol. 22, NO. 5, 2020
- Saadati-Sharafteh, Fazel and Borhanifar, Abdollah and Porfirev, Alexey P and Amiri, Pari and Akhlaghi, Ehsan A and Khonina, Svetlana N and Azizian-Kalandaragh, Yashar, "The superposition of the Bessel and mirrored Bessel beams and investigation of their self-healing characteristic", Optik, Vol. 208, NO. 12, 2020
- Badali, Y and Azizian-Kalandaragh, YASHAR and Akhlaghi, Ehsan A and Alt{\i}ndal, {\c{S}}, "Ultrasound-assisted method for preparation of Ag 2 S nanostructures: fabrication of Au/Ag 2 S-PVA/n-Si Schottky barrier diode and exploring their electrical properties", Journal of Electronic Materials, Vol. 49, NO. 12, 2020
- Abbasi, Zahra and Saber, Ahad and Akhlaghi, Ehsan A, "Simultaneous measurement of the light wavelength and the apex angle of Fresnel double mirror using Fresnel diffraction", International Journal of Thermal Sciences, Vol. 135, NO. 12, 2019
- Malek Mohammadi, Milad and Ahadi Akhlaghi, Ehsan and Hajizadeh, Faegheh, "Fabrication of piezoelectric mirror for multiple-beam optical tweezers", International Journal of Thermal Sciences, Vol. 135, NO. 12, 2019
- Hamidi, Arsham and Akhlaghi, Ehsan Ahadi, "Fabrication and Calibration a Spectral-Domain Optical Coherence Tomography in visible range", International Journal of Thermal Sciences, Vol. 135, NO. 12, 2019



- Abbasian, Vahid and Bazzar, Maasoomah and Akhlaghi, Ehsan A and Charsooghi, Mohammad A and Moradi, Ali-Reza, "Detection of Presence of Nanoparticles in Polymeric Composites by Digital Holography", International Journal of Thermal Sciences, Vol. 135, NO. 12, 2019
- Jafariyani, Fatemeh and Akhlaghi, Ehsan A and Charsooghi, Mohammad A, "Temperature distribution measurement in asymmetric geometry using perturbation theory based on an optical method", International Journal of Thermal Sciences, Vol. 135, NO. 12, 2019
- Akhlaghi, Ehsan Ahadi and Badali, Yosef and Altindal, Semsettin and Azizian-Kalandaragh, Yashar, "Preparation of mixed copper/PVA nanocomposites as an interface layer for fabrication of Al/Cu-PVA/p-Si Schottky structures", Physica B: Condensed Matter, Vol. 546, NO. 12, 2018
- Akhlaghi, Ehsan A and Saber, Ahad and Abbasi, Zahra, "Fresnel diffraction due to phase gradient singularity", Optics letters, Vol. 43, NO. 12, 2018
- Abbasian, Vahid and Ganjkhani, Yasaman and Akhlaghi, Ehsan A and Anand, Arun and Javidi, Bahram and Moradi, Ali-Reza, "Super-resolved microsphere-assisted Mirau digital holography by oblique illumination", Journal of Optics, Vol. 20, NO. 6, 2018
- Siavashani, Morteza J and Akhlaghi, Ehsan A and Tavassoly, Mohammad T and Hosseini, Seyed R, "Characterization of transparent thin films by low-coherent diffractometry", Journal of Optics, Vol. 20, NO. 3, 2018
- Aakhte, Mostafa and Akhlaghi, Ehsan A and Miller, H-Arno J, , "SSPIM: a beam shaping toolbox for structured selective plane illumination microscopy", Scientific reports, Vol. 8, NO. 1, 2018
- Abbasian, Vahid and Akhlaghi, Ehsan A and Charsooghi, Mohammad A and Bazzar, Maasoomah and Moradi, Ali-Reza, "Digital holographic microscopy for 3D surface characterization



of polymeric nanocomposites", *Ultramicroscopy*, Vol. 185, NO. 5, 2018

- Tahviliyan, Masoud and Charsooghi, Mohammad A and Akhlaghi, Ehsan A and Tavassoly, Mohammad Taghi, "Nanonewton force measurement using a modified Michelson interferometer", *Measurement Science and Technology*, Vol. 28, NO. 5, 2017
- Ganjkhani, Yasaman and Charsooghi, Mohammad A and Akhlaghi, Ehsan A and Moradi, Ali-Reza, "Super-resolved Mirau digital holography by structured illumination", *Optics Communications*, Vol. 404, NO. 9, 2017
- Aakhte, Mostafa and Abbasian, Vahid and Akhlaghi, Ehsan Ahadi and Moradi, Ali-Reza and Anand, Arun and Javidi, Bahram, "Microsphere-assisted super-resolved Mirau digital holographic microscopy for cell identification", *Applied optics*, Vol. 56, NO. 9, 2017
- Moradi, Amin and Akhlaghi, Ehsan A and Hajizedeh, Faegheh and Reihani, S Nader S, "Digital holography based submicron thermometry", *Optics Express*, Vol. 24, NO. 25, 2016
- Charsooghi, Mohammad A and Akhlaghi, Ehsan A and Tavaddod, Sharareh and Khalesifard, HR, "A MATLAB program to calculate translational and rotational diffusion coefficients of a single particle", *Computer Physics Communications*, Vol. 182, NO. 2, 2011
- Akhlaghi, Ehsan A and Darudi, Ahmad and Tavassoly, M Taghi, "Reconstructing the phase distribution of two interfering wavefronts by analysis of their nonlocalized fringes with an iterative method", *Optics Express*, Vol. 19, NO. 17, 2011