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[ResearchGate](#)

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Publications	Year
A dual band star-shaped fractal slot antenna: Design and measurement R Malallah, RM Shaaban, A Wa'il AEU-International Journal of Electronics and Communications 127, 153473	2020
Design of Wraparound Microstrip Antenna using the Method of Moment A Mohammed, A Wa'il, R Malallah Open Journal of Science and Technology 3 (3), 266-273	2020
Optical Trajectory Manipulations Using the Self-Written Waveguide Technique R Malallah, D Cassidy, M Wan, I Muniraj, JJ Healy, JT Sheridan Polymers 12 (7), 1438	2020
Testing the coherence of light waves within self-written waveguides DJ Cassidy, M Wan, R Malallah, J Healy, JT Sheridan Photosensitive Materials and their Applications 11367, 113671H	2020
Monitoring of photopolymerization induced changes of self-written waveguides R Malallah, AQ Abdullah, JT Sheridan Nonlinear Optics and its Applications 2020 11358, 113581U	2020
Developer Design of Hybrid Plasmonic Nano Patch Antenna with Metal Insulator Metal Multilayer Construction RM Shaaban, A Mudhafer, R Malallah	2019

Publications	Year
Journal of Computer Networks and Communications	2019
Characterization of self-written waveguide within PVA/AA (Conference Presentation) D Cassidy, R Malallah, JJ Healy, M Wan, JT Sheridan Holography: Advances and Modern Trends VI 11030, 1103008	2019
Self-written net waveguides using photopolymer media R Malallah, D Cassidy, I Muniraj, M Wan, HVR Maraka, JT Sheridan Nonlinear Optics and Applications XI 11026, 110260U	2019
Coupling of self-written waveguides (SWW) in photopolymer and reverse manipulation DJ Cassidy, R Malallah, M Wan, JJ Healy, JT Sheridan Micro-structured and Specialty Optical Fibres VI 11029, 110290Y	2019
Orthographic projection images-based photon-counted integral Fourier holography M Wan, I Muniraj, R Malallah, N Chen, JJ Healy, JP Ryle, JT Sheridan Applied Optics 58 (10), 2656-2661	2019
Improving the uniformity of holographic recording using multi-layer photopolymer: part II. experimental results R Malallah, H Li, Y Qi, D Cassidy, I Muniraj, N Al-Attar, JT Sheridan JOSA A 36 (3), 334-344	2019
Improving the uniformity of holographic recording using multilayer photopolymer. Part I. Theoretical analysis R Malallah, H Li, Y Qi, D Cassidy, I Muniraj, N Al-Attar, JT Sheridan JOSA A 36 (3), 320-333	2019
Controlling the trajectories of self-written waveguides in photopolymer R Malallah, H Li, I Muniraj, D Cassidy, N Al-Attar, JJ Healy, JT Sheridan JOSA B 35 (8), 2046-2056	2018
Self-written waveguides in photopolymer R Malallah, D Cassidy, I Muniraj, JP Ryle, JJ Healy, JT Sheridan Applied optics 57 (22), E80-E88	2018
Holographic characterization of diffraction grating modulation in photopolymers H Li, Y Qi, C Guo, R Malallah, JT Sheridan Applied optics 57 (22), E107-E117	2018
Optical characterization of photopolymer material SWW at 532nm and for use at 850nm and 1300nm DJ Cassidy, R Malallah, M Wan, JJ Healy, JT Sheridan Fiber Lasers and Glass Photonics: Materials through Applications 10683, 106832J	2018

Publications	Year
Self-bending of optical waveguides in a dry photosensitive medium R Malallah, M Wan, I Muniraj, D Cassidy, JT Sheridan Optical Components and Materials XV 10528, 105281L	2018
Formation of optical trajectories in the photopolymer material during self-written waveguides process R Malallah, D Cassidy, I Muniraj, L Zhao, JT Sheridan Laser Science, JW4A. 75	2017
A review of hologram storage and self-written waveguides formation in photopolymer media R Malallah, H Li, DP Kelly, JJ Healy, JT Sheridan Polymers 9 (8), 337	2017
Low photon count based digital holography for quadratic phase cryptography I Muniraj, C Guo, R Malallah, JP Ryle, JJ Healy, BG Lee, JT Sheridan Optics Letters 42 (14), 2774-2777	2017
Choice of optical system is critical for the security of double random phase encryption systems I Muniraj, C Guo, R Malallah, D Cassidy, L Zhao, JP Ryle, JJ Healy, ... Optical Engineering 56 (6), 063103	2017
Constraints to solve parallelogram grid problems in 2D non separable linear canonical transform L Zhao, JJ Healy, I Muniraj, XG Cui, R Malallah, JP Ryle, JT Sheridan Holography: Advances and Modern Trends V 10233, 102331V	2017
A fast converging and error reducing phase retrieval algorithm for Fourier Ptychographic microscopy I Muniraj, C Guo, R Malallah, D Cassidy, L Zhao, JP Ryle, JJ Healy, ... Digital Holography and Three-Dimensional Imaging, W1A. 4	2017
Reconstruction of Digital Holograms by Iterative Phase Retrieval Algorithm: Improvements and Analysis L Zhao, J Healy, Y Wu, I Muniraj, R Malallah, DP Kelly, JT Sheridan Digital Holography and Three-Dimensional Imaging, W2A. 24	2017
Sparsity based terahertz reflective off-axis digital holography M Wan, I Muniraj, R Malallah, L Zhao, JP Ryle, L Rong, JJ Healy, D Wang, ... Holography: Advances and Modern Trends V 10233, 102330T	2017
2D non-separable linear canonical transform (2D-NS-LCT) based cryptography L Zhao, I Muniraj, JJ Healy, R Malallah, XG Cui, JP Ryle, JT Sheridan	2017

Publications	Year
Holography: Advances and Modern Trends V 10233, 102331B	
Investigating Nonlinear Distortion in the Photopolymer Materials JTS Ra'ed Malallah, Derek Cassidy, Inbarasan Muniraj, Liang Zhao, James P. Ryle Proc. of SPIE 10228, 1022805	2017
Subpixel based defocused points removal in photon-limited volumetric dataset I Muniraj, C Guo, R Malallah, HVR Maraka, JP Ryle, JT Sheridan Optics Communications 387, 196-201	2017
An investigation of light behaviour in the multilayer photopolymer during holographic recording R Malallah, H Li, I Muniraj, JT Sheridan Frontiers in Optics, FTu5B. 6	2016
Interactions of two counter-propagating waveguides in the dry photopolymer material using fibre optics R Malallah, I Muniraj, H Li, D Cassidy, JT Sheridan Frontiers in Optics, JTh2A. 146	2016
Security analysis of quadratic phase based cryptography I Muniraj, C Guo, R Malallah, JJ Healy, JT Sheridan Optics and Photonics for Information Processing X 9970, 99700T	2016
Self-Written Waveguide Formation in the Dry Photopolymer Material, Using a Single Mode Fiber Optics R Malallah, H Li, N Al-Attar, JP Ryle, JT Sheridan Adaptive Optics: Analysis, Methods & Systems, JT3A. 20	2016
Three-dimensional numerical model of holographic grating formation in photopolymer materials H Li, Y Qi, R Malallah, JT Sheridan Holography: Advances and Modern Trends IV 9508, 95080B	2015
Self-trapping of optical beams in a self-written channel in a solid bulk photopolymer material H Li, Y Qi, R Malallah, JP Ryle, JT Sheridan Holography: Advances and Modern Trends IV 9508, 95080F	2015
Modeling the nonlinear photoabsorptive behavior during self-written waveguide formation in a photopolymer H Li, Y Qi, R Malallah, JT Sheridan JOSA B 32 (5), 912-922	2015

Publications**Year**

The Radiation Fields of Discone Antenna as Feed By Dipole

2011

A Ra'ed

Journal of Education for Pure Science 1 (4), 2-9

Multilayer Data Storage Fundamental for Photopolymer Materials Solved by 3

Dimensional NPDD model

R Malallah, H Li, Y Qi, JT Sheridan

Determination of Radiation Fields of Biconical Antenna as a BoR

AH Abood, AM Ra'ed, RM Dawod, ZA Ahmed