## **Brief CV**

Name	Hani J. Kbashi	Chinese Name	If you have one	
Gender	Male	Title	Dr.	
Position	Research Fellow	Country	United Kingdom	
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Research Area	Optical Fiber, Fiber Laser, Nonlinlear fiber laser, optical sensor and optical communication.			

## Brief introduction of your research experience:

Dr. Kbashi has two Ph.D. and two MSc degrees. His first Ph.D. degree was from the Department of Physics at the University of Baghdad (UoB) in 2006 with high distinction and first student award, while, his second Ph.D. degree from the School of Engineering and Physical Sciences at Aston University (AU), the UK in 2018 with observing the first experimental bright-dark optical rogue waves and first vector resonance multimode instabilities fiber laser. Whereas his first MSc degree was in Physics from UoB and his second Master's degree was in learning and teaching in UK higher education from AU. He was promoted to an Assistant Professor from UoB in 2009 and acquired the status of a teaching fellow in 2018 from the UK learning and teaching higher education academy.

Dr. Kbashi has more than 10 years of academic experience in the laser physics, fiber laser, optical communication, and nonlinear fiber optics. He has made many contributions to research in his field over his previous career, including publications in Optica (28 citations since 2016) and Journal of Materials Science & Technology (52 citations since 2012) and has studied many of the natural phenomena that are related to Physics, including rogue wave, solitons, and breathers. He published more than 30 journals, 20 conference papers, and 1 book chapter. In total, he has more than 190 citations since 2016. Dr. Kbashi experimental results on design and fabricate ultra-short mode-locked fibre laser has shown that this laser is the best candidate for explaining the physical emergence of some natural phenomenon such as rogue wave and breathers. With this kind of laser, he contributed to the observation of the first experimental bright-dark rogue waves and vector resonance multimode instability. Far from the naturalistic studies, he has also contributed to the generation of high frequency (~1 GHz) using acoustic modes resonance in soliton pulse shaping fibre laser.

Dr. Kbashi recent experimental on the design and generate a millimeter-wave generation (up to 110 GHz) using switchable dual-wavelength mode-locked fiber laser have shown that this laser is a very suitable source for 5G and LiDAR applications. For these two applications, he designed and implemented this system in small size, inexpensive, and simple fabrication along with high scalability to

the existing state-of-the-art microwave- photonics networks.

Among that, Dr. Kbashi is the first author of many high-impact publications such as phase-stable millimeter-wave generation using switchable dual-wavelength fiber laser that was published in Optics and Laser in Engineering. Bright-dark rogue wave (Annalen der Physik), High-frequency vector harmonic mode-locking driven by acoustic resonances (Opt. Let.), Vector Soliton Rain (Laser Phys. Lett.), Multiscale Spatiotemporal Structures in Mode-Locked Fiber Lasers (Laser Phys. Lett.) and second author of Vector-Resonance-Multimode Instability (Phy. Rev. Lett.), Dynamics of Vector Rogue Waves in a Fibre Laser with a Ring Cavity (Optica) and some other published papers. Most of Dr. Kbashi's results were presented in international conferences, including CLEO/Europe, SPIE Photonics Europe.

Currently, Dr. Kbashi is a research fellow and a part of the management team of Enabling Technologies & Innovation Competences Challenge (ETICC) project at Aston University, Before that, he was the project manager of the Big Data Corridor (BDC) project at the same University. Both projects are aimed to assist small and medium enterprises and industrial sectors through academic knowledge transfer to develop new solutions, products, and processes, hence developing their marketing strategies.

## \*\*\*\*\*All the columns need to be filled in.