

CV Profile (max. 2 pages length)

Name: Hassan Hafeez

Brief introduction about yourself (including your research interests)

I have a doctorate degree (**PhD**) in **Materials Engineering** from **Hanyang University, South Korea** and **over 4 years of postdoctoral research experience** at the Division of Display Physics, **Korea University**, and Dept. of Physics, **University of St Andrews, United Kingdom**. I strongly believe that my below-mentioned research interests and abilities will be of relevance:

- **Optoelectronic devices:** (5+ years) Hands-on experience related to fabrication of organic light-emitting diodes (OLEDs), wearable/stretchable electronics, silicon/polymer solar cells (Photovoltaics), and micro-batteries with a deep understanding of oxide/metal thin films characteristics, optoelectronic properties of materials, surface plasmon, interface engineering, charge transport mechanisms and so on.
- **Micro/Nano Fabrication:** (6+ years) Hands-on experience related to the photolithography, etching, surface modifications, microelectrodes, biomimetics, mask design (AutoCAD), MEMS.
- **Scientific Achievements:** 22 publications in reputed journals including Nature Communications, J. of Physical Chemistry and Organic Electronics, 2 patents, a fully funded doctorate fellowship, and the best research award. I have also served as the guest editor for the special issue of (MDPI) Crystals journal.
- **Leadership Skills:** Supervision of graduate students, project management, and presentations at international conferences. Served as a president of the international scholar's association.

Education

PhD - Master's degree: Materials Engineering, Hanyang University, South Korea (01/09/2011- 20/08/2016)

Postgraduate Diploma: Stratford college of management, London, UK (10/01/2011- 25/06/2011)

Undergraduate degree: Bachelor of Engineering in Metallurgy and Materials Science (20/11/2004-30/06/2009)

Experience in research

Research Fellow	<i>University of St Andrews</i> Dept. of Physics & Astronomy, Scotland, United Kingdom	Apr. 2020 – Till now
Research Fellow	<i>Korea University</i> Center for Advanced Photonic Materials, South Korea.	Sep. 2016 – Mar. 2020

Activities: (In total over 4 years of postdoctoral research experience)

Research & Development (Sept. 2016 – Till now)

Writing publication articles, analyzing results, supervising graduate students (Sept. 2016 – Till now)

Research Publications (Selected):

1. "Highly Efficient, Stretchable Organic Light-Emitting Diodes on Oxide-Metal-Oxide Electrode"
Nature Communications, Accepted, (2021)
2. "The effect of introducing antibiotics into organic light-emitting diodes".
Nature: Communication Physics, 2:130, 1-13 (2019) [[PDF](#)]
3. "Recombination zone control without sensing layer and the exciton confinement in green phosphorescent OLEDs by excluding interface energy transfer"
Journal of Physical Chemistry C, 122 (5), 2951-2958 (2018) [[PDF](#)]
4. "Recombination zone control without sensing layer and the exciton confinement in green phosphorescent OLEDs by excluding interface energy transfer"
Journal of Physical Chemistry C, 122 (5), 2951-2958 (2018) [[PDF](#)]
5. "Multi-axial wavy top emission organic light emitting diodes on thermally pre-strained elastomeric substrate"
Organic Electronics, 48, 314-322 (2017) [[PDF](#)]

Patents:

1. **US-Patent application** no. US2020274071, Applied on: 16-04-2020
2. **KIPO patent** (Korean Intellectual Property Office), Application no.: KR101429524, Application Date: 2013-5-13

Awards/Honors:

1. **Fully funded MS leading to Ph.D. fellowship** for overseas higher education awarded by the Government of Pakistan (worth 100,000 USD) in July 2011
2. **Excellent research award** presented by Korean Materials Research Society, in November 2012

Sector of activity

Optoelectronics, microdevices, wearable/stretchable electronics, Organic light emitting diodes (OLEDs), Photovoltaics, micro/nano fabrication, Semiconductors.

Select the option/s about your profile

PhD and a minimum of 2 additional years of full-time research experience (*the 2 minimum additional years of full-time research must be done after the PhD*): **Yes**

Contact information

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Current country of residence: **Scotland, United Kingdom**