List of Publications - Shahzad Ahmad (PhDEE17002)

- **Shahzad Ahmad**, M Zubair, Osama Jalil, MQ Mehmood, Usman Younis, Xinke Liu, Kah Wee Ang, LK Ang. Generalized scaling law for exciton binding energy in two-dimensional materials. Physical Review Applied 2020. **IF=4.985**
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- **Shahzad Ahmad**, M Zubair, Osama Jalil, and Usman Younis. A difference method with semi-analytical approach for achieving accuracy in optical gaps of 2D materials using exciton model in fractional space. Japanese Journal of Applied Physics 2021. **IF=1.471**
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- Osama Jalil, **Shahzad Ahmad**, Kah-Wee Ang, and Usman Younis. Behaviour of induced states of substitutional and adatom impurity doping on electronic transport properties of single-layer black phosphorus. Physica E: Low-dimensional Systems and Nanostructures 2021. **IF=3.57**
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- Osama Jalil, **Shahzad Ahmad**, Abdullah Nafis Khan, Kah Wee Ang, and Usman Younis. Modulating the electronic transport properties of single-layer WSe_2 using zero-dimensional defect engineering. SPIE Photonics West 2021
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- Asif Bilal, Osama Jalil, **Shahzad Ahmad**, Abdullah Nafis Khan, Usman Younis. Towards Cavity Enhanced Photo-detection in Al-doped BP Integrated with 2D Photonic Crystal and Waveguide for Mid-IR Wavelengths. SPIE Photonics West 2020.
- Asif Bilal, Abdullah Nafis Khan, Osama Jalil, **Shahzad Ahmad**, Usman Younis, Stavros Lezekiel. Port analysis using S-matrix for 2D metasurface waveguide coupler in mid-IR application. SPIE Photonics Europe 2020