

Aamir Shafique

Assistant Professor
School of Natural Sciences

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About

Dr. Aamir Shafique is working as Assistant Professor in the School of Natural Sciences. Dr. Aamir Shafique has a PhD in Physics. Dr. Aamir Shafique has published 13 research articles & conference papers having a citation count of 908, carried out 0 projects and filed 0 intellectual property.

Qualifications

PhD in Physics	2015 - 2019
Ulsan University , South Korea	
MS in Physics	2013 - 2015
Lahore University of Management Sciences , Pakistan	
BS in Physics	2009 - 2013
Kohat University of Science and Technology (KUST) , Pakistan	

Experience

Assistant Professor	2024- Present
School of Natural Sciences	
Postdoctoral Fellow	2019 - 2024
King Abdullah University of Science and Technology , Thuwal, Saudi Arabia	

Research Articles

Co-TMDC MTJs: A New Frontier in Spintronics	2025
Gokaran Shukla Roshan Ali Aamir Shafique	
ACS Applied Electronic Materials , Volume 7, Issue 1, Pages 115-128	
Impact Factor: 4.400 Quartile: 1	
DOI: https://doi.org/10.1021/acsaelm.4c01583?urlappend=%3Fref%3DPDF&jav=VoR&rel=cite-as	
Study of phase Stability, Optical, and thermoelectric properties of antiperovskites X3GeO (X=Ca, Sr, Ba) for solar cells and energy harvesting	2024
Aamir Shafique Qasim Mahmood Ahmad Ayyaz Reem Alotaibi Hanof Dawas Alkhaldi M. Hassan Saud Alotaibi Abdulaziz A Alshihri Afaf Khadr Alqorashi Ali S. Alshomrany	
Solar Energy , Volume 280, Article Number 112863	
Impact Factor: 6.000 Quartile: 2 Citations: 6	
DOI: 10.1016/j.solener.2024.112863	
Lattice Instability and Ultralow Lattice Thermal Conductivity of Layered PbIF	2022
Aamir Shafique N. Yedukondalu S. C. Rakesh Roshan Mohamed Barhoumi Rajmohan Muthaiah Lars Ehm John B. Parise Udo Schwingenschlög	
ACS Applied Materials and Interfaces , Volume 14, Issue 36, Pages 40738-40748	
Impact Factor: 9.500 Quartile: 1 Citations: 12	
DOI: https://doi.org/10.1021/acsam.2c01135	
Excellent Thermoelectric Performance of the Metal Sulfide CuTaS3	2022
Abdus Samad Hala Aboushehada Aamir Shafique Udo Schwingenschlög	
ACS Applied Electronic Materials , Volume:5, Issue:6, Pages 7364–7370	
Impact Factor: 4.700 Quartile: 2 Citations: 6	
DOI: https://doi.org/10.1021/acsaem.2c00857	
Two-dimensional penta-like PdPSe with a puckered pentagonal structure: a first-principles study	2022
A. Bafekry Aamir Shafique H. R. Jappor M. M. Fadlallah M. Faraji I. Abdolhoseini Sarsari Yee Sin Ang M. Ghergherehchi	
Physical Chemistry Chemical Physics , Volume 24, Issue 17, Pages 9990-9997	
Impact Factor: 3.300 Quartile: 2 Citations: 70	

DOI: 10.1039/d1cp04328e

Multivalley band structure and phonon-glass behavior of TlAgTe

2021

Aamir Shafique Sitansh Sharma Udo Schwingenschlögl Muhammad Sajjad

ACS Applied Energy Materials , Volume 4, Issue 3, Pages 2174–2180

Impact Factor: 6.959 | **Quartile:** 1 | **Citations:** 6

DOI: <https://doi.org/10.1021/acsaem.0c02684>

Monolayer Ag₂S: Ultra Low Lattice Thermal Conductivity and Excellent Thermoelectric Performance

2020

Sitansh Sharma Aamir Shafique Udo Schwingenschlögl

ACS Applied Energy Materials , Volume 3, Issue 10, Pages 10147-10153

Impact Factor: 6.024 | **Quartile:** 2 | **Citations:** 23

DOI: <https://doi.org/10.1021/acsaem.0c01844>

The effect of non-analytical corrections on the phononic thermal transport in InX (X = S, Se, Te) monolayers

2020

Aamir Shafique Young-Han Shin

Scientific Reports , Volume 10, Article Number: 1093

Impact Factor: 4.380 | **Quartile:** 1 | **Citations:** 33

DOI: 10.1038/s41598-020-57644-0

Strain engineering of phonon thermal transport properties in monolayer 2H-MoTe₂

2017

Aamir Shafique Young-Han Shin

Physical Chemistry Chemical Physics , Volume:19, Issue:47, Page:32072-32078

Impact Factor: 3.906 | **Quartile:** 1 | **Citations:** 84

DOI: <https://doi.org/10.1039/C7CP06065C>

Ultra low lattice thermal conductivity and high carrier mobility of monolayer SnS₂ and SnSe₂: A first principles study

2017

Aamir Shafique Abdus Samad Young-Han Shin

Physical Chemistry Chemical Physics , Volume 19, Issue 31, Pages 20677-20683

Impact Factor: 3.906 | **Quartile:** 1 | **Citations:** 206

DOI: 10.1039/C7CP03748A

Superionic and electronic conductivity in monolayer W₂C: ab initio predictions

2017

Abdus Samad Aamir Shafique Hye-Jung Kim Young-Han Shin

Journal of Materials Chemistry A , Volume 5(22), Pages 11094-11099

Impact Factor: 9.931 | **Quartile:** 1 | **Citations:** 57

DOI: 10.1039/C7TA01177F

Thermoelectric and phonon transport properties of two-dimensional IV-VI compounds

2017

Aamir Shafique Young-Han Shin

Scientific Reports , Volume:7, Issue:1, Article Number: 506

Impact Factor: 4.122 | **Quartile:** 1 | **Citations:** 247

DOI: 10.1038/s41598-017-00598-7

Adsorption and diffusion of mono, di, and trivalent ions on two-dimensional TiS₂

2017

Aamir Shafique Abdus Samad Young-Han Shin

Nanotechnology , Volume:28, Issue:17, Article Number:175401, Pages: 07

Impact Factor: 3.404 | **Quartile:** 1 | **Citations:** 158

DOI: 10.1088/1361-6528/aa6536