

Dr. Muhammad Wasim Akhtar

Peer-Reviewed Publications

1. Mughal, M Moez, **M Wasim Akhtar**, M Moazam Baloch, Muddassir Ali Memon, Junaid Ali Syed, and Jong Seok Kim. "Effect of Silanized Sisal Fiber on Thermo-Mechanical Properties of Reinforced Epoxy Composites." *Journal of Composite Materials*, (2019): 1-14. , **Impact Factor: 1.755**
2. Umair Aftab, M.I Abro, Ali Dad Chandio, **M. Wasim Akhtar**, Shafique Ahmed, "Effect of nano-ceria on physiognomies of Aluminum5%-Zinc Sacrificial Anode", *Mehran University Research Journal of Engineering and Technology* 37, no. 2 (2018): 351-358
3. Khan, M. Yasir, ALI Dad Chandio, M. Sohail, M. Arsalan, **M. Wasim Akhtar**, Syed Zeeshan Abbas, and Zeeshan. Akhtar. "Low Temperature Synthesis of Anatase TiO₂ Nanoparticles and its Application in Nanocrystalline Thin Films." In *Key Engineering Materials*, vol. 778, pp. 86-90. Trans Tech Publications, 2018. **Impact Factor: 0.2**
4. **M. Wasim Akhtar**, Y.S. Lee, D.J.Yoo, J.S. Kim, "Alumina-Graphene hybrid Filled Epoxy Composite: Quantitative Validation and Enhanced thermal conductivity", *Composite Part B*, 2017, **Impact Factor: 6.86**
5. **M. Wasim Akhtar**, Y.S. Lee, C.M. Yang, J.S. Kim, "Functionalization of mild oxidized graphene with O-phenylenediamine for highly thermally conductive and thermally stable epoxy composites", *RSC Advances*, 6 (2016), **Impact Factor: 3.049**
6. **M. Wasim Akhtar**, C.W. Park, Y.S. Kim, J.S. Kim, Facile Large-Scale Production of Few-Layer Graphene Sheets by Shear Exfoliation in Volatile Solvent, *Journal of Nanoscience and Nanotechnology*, 15 (2015) 9624-9629. **Impact Factor: 1.354**

Books & Chapters

1. **M. Wasim Akhtar**, Environmental Friendly Thermal Interface Materials (TIMS) for Electronic Control Units, In *Handbook of Remediation for Complex Environmental Problems*, Nova Science Publishers, Inc. 2019

Conference Presentations

Oral Presentation

1. International Symposium on Advanced Materials, October 2019, Pakistan. **M. Wasim Akhtar** "Hybridization of Alumina and Graphene as an Effective Filler for Enhancement of Thermal Properties of Epoxy Composites".
2. The Korean institute of Chemical Engineers Fall Symposium, Apr. 2016, Daejeon-si, South Korea. **M. Wasim Akhtar**, S.Chan Kim, Y. S Lee, C.M. Yang, J.S. Kim, "Surface modification of graphene for highly thermal conductive and thermally stable epoxy composite for thermal interface materials (TIMs)"

Poster Presentation

3. The Korean institute of Chemical Engineers Spring Symposium, Apr. 2017, Jeju-do, South Korea. **M. Wasim Akhtar**, Y. S Lee, C.M. Yang, J.S. Kim "3D Hybrid structure of functionalized BNNs-Ag-Graphene nanosheets as a fillers for epoxy composite with enhanced thermal conductivity"
4. The Korean institute of Chemical Engineers Spring Symposium, Apr. 2017 Jeju-do, South Korea. **M. Wasim Akhtar**, Y. S Lee, C.M. Yang, J.S. Kim "Effect of surface modified magnesium oxide for improved thermal and mechanical properties of epoxy composite for thermal interface materials (TIMs)"

5. The Korean Society of Industrial and Chemical Engineering, 2016 KSIEC Spring Meeting, May. 2016, Yeosu-si, South Korea. Hyung-Guen Kim, C.M Yang, Y.S. Lee, **M. Wasim Akhtar**, J.S Kim and Y.S Kim “Silane treated h-BN for improved thermal conductive epoxy composite for Thermal interface materials (TIMs)”
6. The Korean institute of Chemical Engineers Spring Symposium, Apr.2016, Busan-si, South Korea. **M. Wasim Akhtar**, S.Chan Kim, Y. S Lee, C.M. Yang, J.S. Kim, “Surface modification of graphene for highly thermal conductive and thermally stable epoxy composite”
7. Mehran University of Engineering & Technology, 1st National conference on Metallurgy & Materials, Jamshoro, Pakistan. M.A Memon, M.M Baloch, **M. Wasim Akhtar**, S.A.Memon, “ Development and Characterization of SAPCs by using Nano-clay”
8. The Korean institute of Chemical Engineers Spring Symposium, Apr.2014, Busan-si, South Korea. **M. Wasim Akhtar**, J.S. Kim, “Effective high shear exfoliation of graphene in volatile organic solvent for commercial applications”