

Prof. Mehmet Egilmez

Name : Prof. Mehmet Egilmez
Current Affiliation : Dept. of physics, The American University of Sharjah, UAE.
Ph.D. : University of Alberta, Canada, 2009
Post Doc : KAIST, South Korea and Toyota Technological Institute, Japan.
Research Interests :

- Magnetism and Superconductivity
- Spintronics, Magnetic systems with competing interactions
- Muon spin resonance/rotation
- Colossal Magnetoresistive materials
- Thin metal films

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Brief CV :

Prior to his current position, Mehmet Egilmez worked as a research associate at University of Cambridge, UK, for more than three years. He has expertise in oxide thin film growth and characterization of their electrical and magnetic properties. He has studied many oxide materials with particular emphasis on magnetic/superconducting thin film hetero-structures. His research benefits from various measurement techniques, ranging from standard magneto-transport measurements to sophisticated Muon spin rotation/resonance measurements. He is the author/co-author of over 50 publications.

- Nawaz, T., Abuzaid, W., Egilmez, M., & Mustafa, F. (2025). The Effect of Vanadium on the Superelastic Properties of FeMnAlNi Shape Memory Alloy. *Shape Memory and Superelasticity*, 1-16.
- Nawaz, T., Ahmad, S., Abuzaid, W., Mustafa, F., Ahmad, W., El-Khatib, S., ... & Egilmez, M. (2025). Enhanced electrocatalytic hydrogen evolution with CoNiFe (Cr/V) based high entropy alloy electrodes. *APL Materials*, 13(5).
- Tahir Nawaz, Vinod Paul, Sidrah Younus, Shahbaz Ahmad, Mehmet Egilmez, Wael Abuzaid, Ganjaboy Boltaev, Noor Akbar, Mustafa Khamis, Ghaleb Husaini and Ali Alnaser. (2025) Biocompatibility and drug release kinetics of TiNbZrSn femtosecond laser-induced superhydrophilic structures, *Applied Surface Science Advances*, 1 January (1st Quarter/Winter).
- Faisal Mustafa, Mehmet Egilmez, Wael Abuzaid and Sami El-khatib. (2024) Effect of Heat Treatments on Microstructure and Mechanical Properties of Fe-Mn-Ni-Al-Gd Shape Memory Alloy.
- Shahbaz Ahmad, Mehmet Egilmez, Wael Abuzaid, Faisal Mustafa, Arunachala Kannan And Ali Alnaser. (2024) Efficient medium entropy alloy thin films as bifunctional electrodes for electrocatalytic water splitting, *International Journal Of Hydrogen Energy*.
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