

IDENTIFYING INFORMATION:

NAME: Amin, Abdullah

ORCID iD: <https://orcid.org/0000-0002-3245-5785>

POSITION TITLE: Assistant Professor

PRIMARY ORGANIZATION AND LOCATION: University of Dayton, Dayton, Ohio, United States**Professional Preparation:**

ORGANIZATION AND LOCATION	DEGREE (if applicable)	RECEIPT DATE	FIELD OF STUDY
Case Western Reserve University, Cleveland, OH, US	Doctor of Philosophy	12/2017	Mechanical & Aerospace
The University of Akron, Akron, OH, US	Master of Science	12/2014	Mechanical Engineering
Bangladesh University of Engineering and Technology, Dhaka, Dhaka District, BD	BS	03/2009	Mechanical Engineering

Appointments and Positions

2023 - present	Assistant Professor, University of Dayton, Mechanical and Aerospace Engineering, Dayton, Ohio, United States
2021 - 2023	Postdoctoral Scholar, Northwestern University, Mechanical Engineering, Evanston, Illinois, US
2018 - 2021	Research Engineer, Bridgestone Americas, Akron, OH, United States
2013 - 2017	Graduate Research Assistant, Case Western Reserve University, Department of Physics, Cleveland, OH, US
2010 - 2013	Research Assistant, University of Akron, Akron, Ohio, United States

Products**Products Most Closely Related to the Proposed Project**

1. Amin A, Li Y, Lu Y, Xie X, Gan Z, Mojumder S, Wagner G, Liu W. Physics guided heat source for quantitative prediction of IN718 laser additive manufacturing processes. npj Computational Materials. 2024 February 19; 10(1):- . Available from: <https://www.nature.com/articles/s41524-024-01198-6> DOI: 10.1038/s41524-024-01198-6
2. Mojumder S, Gan Z, Li Y, Amin A, Liu W. Linking process parameters with lack-of-fusion porosity for laser powder bed fusion metal additive manufacturing. Additive Manufacturing. 2023 April; 68:103500-. Available from: <https://linkinghub.elsevier.com/retrieve/pii/S2214860423001136> DOI: 10.1016/j.addma.2023.103500
3. Islam M, Thakur M, Mojumder S, Al Amin A, Islam M. Mechanical and vibrational characteristics of functionally graded Cu–Ni nanowire: A molecular dynamics study. Composites Part B: Engineering. 2020 October; 198:108212-. Available from: <https://linkinghub.elsevier.com/retrieve/pii/S1359836820332625> DOI:

10.1016/j.compositesb.2020.108212

4. Sultana N, Al Amin A, Metin D, Gaston N. Unveiling the structures and electronic properties of CH₃NH₃PbI₃ interfaces with TiO₂, ZnO, and SnO₂: a first-principles study. Journal of Materials Science. 2019; 54(21):13594-13608. Available from: <http://link.springer.com/10.1007/s10853-019-03867-0> DOI: 10.1007/s10853-019-03867-0
5. Amin A, Sabri L, Poole C, Baig T, Deissler R, Rindfleisch M, Doll D, Tomsic M, Akkus O, Martens M. Computational homogenization of the elastic and thermal properties of superconducting composite MgB₂ wire. Composite Structures. 2018 March; 188:313-329. Available from: <https://linkinghub.elsevier.com/retrieve/pii/S0263822317327903> DOI: 10.1016/j.compstruct.2017.12.060

Other Significant Products, Whether or Not Related to the Proposed Project

1. Amin Abdullah Al, Baig Tanvir, Deissler Robert, Akkus Ozan, Martens Michael. Stress Analysis of Conduction Cooled MgB₂ Superconducting MRI Magnet Design. Research ShowCASE; 2015; c2015.
2. Amin A, Baig T, Deissler R, Sabri L, Doll D, Tomsic M, Akkus O, Martens M. Mechanical Analysis of MgB₂ Based Full Body MRI Coils Under Different Winding Conditions. IEEE Transactions on Applied Superconductivity. 2017; 27(4):1-5. Available from: <http://ieeexplore.ieee.org/document/7820118/> DOI: 10.1109/TASC.2017.2654349
3. Huang H, Mojumder S, Suarez D, Amin A, Fleming M, Liu W. Knowledge database creation for design of polymer matrix composite. Computational Materials Science. 2022 November; 214:111703-. Available from: <https://linkinghub.elsevier.com/retrieve/pii/S0927025622004268> DOI: 10.1016/j.commatsci.2022.111703
4. Poole C, Al Amin A, Baig T, Martens M. Mechanical analysis of an MgB₂ 1.5 T MRI main magnet protected using Coupling Loss Induced Quench. Cryogenics. 2019 June; 100:18-27. Available from: <https://linkinghub.elsevier.com/retrieve/pii/S0011227518303424> DOI: 10.1016/j.cryogenics.2019.02.005
5. Magneto-optical detection and discernment of biofluid crystals. 2019 February.

Synergistic Activities

1. Reviewer, Journal of Manufacturing Process (August 2023-Present)
2. Reviewer, Superconductor Science and Technology (October 2022-Present)
3. Reviewer, Computational Mechanics (March 2021 – Present)
4. Reviewer, Applied Superconductivity and Electromagnetic Devices (March 2021 – Present)
5. Reviewer, Journal of Mechanical Engineering Science (March 2021– Present)

Certification:

When the individual signs the certification on behalf of themselves, they are certifying that the information is current, accurate, and complete. This includes, but is not limited to, information related to domestic and foreign appointments and positions. Misrepresentations and/or omissions may be subject to prosecution and liability pursuant to, but not limited to, 18 U.S.C. §§ 287, 1001, 1031 and 31 U.S.C. §§ 3729-3733 and 3802.

Certified by Amin, Abdullah in SciENcv on 2024-03-07 10:39:20