

Publications

Mechanical Engineering

Year 2022	
Journals	
1.	Almomani, Abdulla, Suleyman Deveci, Abdel-Hamid I. Mourad, and Imad Barsoum. "Constitutive model calibration for the thermal viscoelastic-viscoplastic behavior of high density polyethylene under monotonic and cyclic loading." <i>Polymer Testing</i> (2022): 107911.
2.	Thekkuden, Dinu Thomas, Abdel-Hamid Ismail Mourad, Abdel-Hakim Bouzid, and Muhammad M. Sherif. "Investigation of expansion percentages and groove inclusions on the performance of welded, expanded, welded-expanded tube-to-tubesheet joints." <i>Journal of Materials Research and Technology</i> (2022).
3.	Hadia, Nomery MA, Mohamed Shaban, S. H. Mohamed, Ali F. Al-Ghamdi, Meshal Alzaid, Asmaa M. Elsayed, Abdel Hamid I. Mourad et al. "Highly crystalline hexagonal PbI ₂ sheets on polyaniline/antimony tin oxide surface as a novel and highly efficient photodetector in UV, Vis, and near IR regions." <i>Polymers for Advanced Technologies</i> 33, no. 12 (2022): 3977-3987.
4.	Habib, Rana Zeeshan, Ruwaya Al Kendi, Furtuna Ghebremedhin, Marim Elkashlan, Syed Haris Iftikhar, Vijo Poulose, Tholkappiyan Ramachandran, Abdel-Hamid Ismail Mourad, Fathalla Hamed, and Thies Thiemann. "Tire and rubber particles in the environment—a case study from a hot arid region." <i>Frontiers in Environmental Science</i> (2022): 2232.
5.	Thekkuden, Dinu Thomas, Abdel-Hamid Ismail Mourad, Tholkappiyan Ramachandran, Abdel-Hakim Bouzid, Ravi Kumar, and Ahmed Alzamly. "Combined effect of tungsten inert gas welding and roller expansion processes on mechanical and metallurgical characteristics of heat exchanger tube-to-tubesheet joints." <i>Journal of Materials Research and Technology</i> 21 (2022): 4724-4744.
6.	Iftikhar, Syed Haris, Abdel-Hamid Ismail Mourad, and Dinu Thomas Thekkuden. "Friction stir welding of tube-to-tubesheets for thermoplastic shell and tube heat exchangers." <i>Manufacturing Letters</i> 34 (2022): 82-86.
7.	Ayad, Omar G., Abdel-Hamid I. Mourad, Yaser E. Greish, Sherif M. Karam, and Ali Hilal Alnaqbi. "Injection-Molded Ultrahigh Molecular Weight Polyethylene Material with Improved Moldability for Artificial Joint Implants Design." <i>Advanced Engineering Materials</i> 24, no. 10 (2022): 2200059.
8.	Darabseh, Tariq, Abdallah Tarabulsi, and Abdel-Hamid I. Mourad. "Discrete-Time Model Predictive Controller Using Laguerre Functions for Active Flutter Suppression of a 2D wing with a Flap." <i>Aerospace</i> 9, no. 9 (2022): 475.
9.	Sudha, Priya, K. S. Tun, Manoj Gupta, Abdel-Hamid I. Mourad, and S. Vincent. "Electrochemical characterization of a novel multicomponent Al75Mg5Li10Zn5Cu5 low entropy alloy in different pH environments." <i>Materials and Corrosion</i> (2022).
10.	Elkashlan, Marim, Vijo Poulose, Rana Zeeshan Habib, Obaida Karabala, Afnan Aldhanhani, Maryam Shakir, Heba Shaath et al. "Analysis of the Solid Contents of Toothpastes Available in UAE (United Arab Emirates) Markets." <i>Journal of Environmental Protection</i> 13, no. 7 (2022): 539-556.
11.	Hadia, N. M. A., Mohammed AH Khalafalla, Fatma M. Abdel Salam, Ashour M. Ahmed, Mohamed Shaban, Aljawhara H. Almuqrin, Ali Hajjiah et al. "Conversion of Sewage Water into H ₂ Gas Fuel Using Hexagonal Nanosheets of the Polyaniline-Assisted Deposition of PbI ₂ as a Nanocomposite Photocathode with the

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12. Raji, Ramesh Kumar, Tholkappiyan Ramachandran, M. Muralidharan, R. Suriakarthick, M. Dhilip, A. Raja, K. Aravinth et al. "Dual-phase formation in LaFeO₃ upon doping of rare-earth Dy³⁺: Struct–Opto–Dielectric–Magnetic characteristics." *Journal of Materials Science: Materials in Electronics* 33, no. 13 (2022): 10626–10644.
 13. Stephen, Clifton, B. Shivamurthy, Mahesh Mohan, Abdel-Hamid I. Mourad, Rajiv Selvam, and B. H. S. Thimmappa. "Low Velocity Impact Behavior of Fabric Reinforced Polymer Composites—A Review." *Engineered Science* 18 (2022): 75–97.
 14. R.Z. Habib, V. Poulose, R. Alsaidi, R. al Kendi, S.H. Iftikhar, A.-H.I. Mourad, W.F. Kittaneh, T. Thiemann, Plastic cutting boards as a source of microplastics in meat, *Food Addit. Contam. - Part A Chem. Anal. Control. Expo. Risk Assess.* 39 (2022) 609–619. <https://doi.org/10.1080/19440049.2021.2017002>.
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 20. O.G. Ayad, A.-H.I. Mourad, Y.E. Greish, S.M. Karam, A.H. Alnaqbi, Injection-Molded Ultrahigh Molecular Weight Polyethylene Material with Improved Moldability for Artificial Joint Implants Design, *Adv. Eng. Mater.* (2022). <https://doi.org/10.1002/adem.202200059>.
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41. Iftikhar, Syed Haris, Abdel-Hamid Ismail Mourad, and Dinu Thomas Thekkuden. "Friction stir welding of tube-to-tubesheets for thermoplastic shell and tube heat exchangers." *Manufacturing Letters* 34 (2022): 82-86.
42. Ayad, Omar G., Abdel-Hamid I. Mourad, Yaser E. Greish, Sherif M. Karam, and Ali Hilal Alnaqbi. "Injection-Molded Ultrahigh Molecular Weight Polyethylene Material with Improved Moldability for Artificial Joint Implants Design." *Advanced Engineering Materials* 24, no. 10 (2022): 2200059.
43. Darabseh, Tariq, Abdallah Tarabulsi, and Abdel-Hamid I. Mourad. "Discrete-Time Model Predictive Controller Using Laguerre Functions for Active Flutter Suppression of a 2D wing with a Flap." *Aerospace* 9, no. 9 (2022): 475.
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46. **Jeongmoo Huh**, Kisun Park, Jeongsub Lee and Sejin Kwon, “*Performance of MEMS-Based Monopropellant Microthruster With Insulating Effect*”, IEEE Journal of Microelectromechanical Systems, 1-13, May 2022. <https://doi.org/10.1109/JMEMS.2022.3168147>
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Conferences

1. Khan, Shah Nawaz, Ali Usman, Abdel-Hamid Ismail Mourad, Cheol Woo Park, Marcus Liwicki, and Andreas Almqvist. "Numerical Investigation of Thermo-Mechanical Behaviour of an Aluminum-Silicon Alloy Piston in an IC Engine." In 2022 13th International Conference on Mechanical and Aerospace Engineering (ICMAE), pp. 210-216. IEEE, 2022.
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