

Mechanical Engineering

Year 2012

Conference Papers

1. **S. A. Khashan** and E. P. Furlani, Modeling Particle-Fluid Coupling and its Impact on Magnetic Particle Transport in Microfluidic Systems, *NSTI Nanotech.* **2**, pp. 408-411, 2012.
2. Heat Transfer Conference, ASME 2013, July 14-19, 2013, Minneapolis, Minnesota, USA.
3. Alsayyed B., Hamdan M.O., Aldajah S., "Vortex Tube impact on cooling CNC machining", Proceeding of the annual ASME International Mechanical Engineering Congress and Exposition, Denver, Colorado, November 11-17 2012. IMECE2012. Paper No 89885
4. Elnajjar E., Hamdan, M. O., Haik Y., "Experimental Investigation of Impinging Jet Flow on a Heated Curved Surface", 6th International Conference on Thermal Engineering, Istanbul, Turkey, May 22-25, 2012. ICTEA2012.
5. Hamdan, M. O., "Experimental Solar Chimney Data with Analytical Model Prediction", Will be presented in World Renewable Energy Forum, May 13-18, 2012. WREF2012.
6. Hamdan, M. O., "Mathematical Thermal Modeling of Solar Chimney Power Plant", Proceedings of the 2nd International Conference on Renewable Energy, March 4-7, 2012. ICRE2012.
7. Elnajjar, E., Hamdan, M. O., Selim, M., "Experimental Investigation of Dual Engine Performance under Using Variable LPG Composition Fuel, Proceedings of the 2nd International Conference on Renewable Energy, March 4-7, 2012. ICRE2012.
8. Hilal-alnaqbi A , Mourad A, Gaylor JDS. Oxygen consumption rate of hepatocytes cells: Experimental and Theoretical studies. 10th International Symposium on Biomechanics and Biomedical Engineering. Berlin, Germany
9. **S.-A. B. Al Omari**, Using Liquid Metals to Enhance Heat Transfer from Hot Water in a Coflow Mini-Channel, 6th International Conference on Thermal Engineering, Istanbul, Turkey, 2012.
10. **Salah A. B. Al Omari** and Basim Abu-Jdayil, Thermal Characteristics of a Furnace Fueled with Diesel/Used Engine-Lube-Oil Blends CO-fired with LPG, International Conference on Renewable Energy, ICRE2012, Al Ain, UAE, 2012.
11. B. Abdel-Magid, A-H. I. Mourad "Long-term Effect of Seawater on Glass/Thermoset Composites," Fifteenth European Conference on Composite Materials (ECCM 15), Venice, Italy, June 2012.
12. A.-H. I. Mourad, A. Dehbi and K. Djakhdanne "Impact of Degradation of Polyethylene Films under Simulated Climatic Conditions on Their Mechanical Behaviour and Thermal Stability and Lifetime, proceedings of the 2012 Pressure Vessels & Piping Conference, American Society of Mechanical Engineers (ASME PVP2012), PP. 131-135, Toronto, Canada, July 15-19, 2012.
13. A.-H. I. Mourad, J. Altarawneh, A. El Domiaty and Y. Chao, "Fracture Toughness Determined from Full-Scale Pipe, Proceedings of the ASME PVP 2012, PP 125-130, Toronto, Canada, July 15-19, 2012

14. **Yousef, Basem F.**, et al. "In-Pipe Inspection robot", 15th International Conference on Climbing and Walking Robots (CLAWAR), Johns Hopkins University, Maryland, USA, July 2012.
15. Harib, K., Sharif Ullah, M., and Moustafa, K.A., "Optimal Design for Improved Hybrid Kinematic Machine Tools Structure," Proceedings, 8th CIRP Conference on Intelligent Computation in Manufacturing Engineering (CIRP ICME'12), Gulf of Naples, Italy, 18 - 20 July 2012.
16. Moustafa, K.A , Haik, Y , and Omar, F., "Statistical Modeling of SO2 Pollution Levels in Al Ain City," Proceedings, the 7th Symposium on Industrial Systems and Control (SISC2012), Dammam, Saudi Arabia, May 13 – 14, 2012.
17. Moustafa, K.A , Harib, K , and Omar, F., "Statistical Optimum Controller Design of an Overhead Crane," Proceedings, the 5th International Multi-Conference on Engineering and Technological Innovation (IMETI 2012), Orlando, USA, July 17 – 20, 2012.

Books

18. - Mohamed Y.E. Selim, Yousef Haik, Chapter: Production and Properties of Algae Oil Biofuel and Environmental Benefits, Book title: Algae: Ecology, Economic Uses and Environmental Impact, Editors: Dagmar Krueger and Helga Meye , ISBN: 978-1-62081-280-8, Imprint: Nova, **2012**.

Edited Books

Book Chapters

- **Yousef, Basem F.**, A Robot for Surgery: Design, Control and Testing, book chapter in "Advances in Robotics and Virtual Reality", Springer "Intelligent Systems Reference Library series", 2012, vol. 26, Part I, pp. 33-59
- Harib, K. , Sharif Ullah, A.M.M., Moustafa, K. A. F., Zenieh, S., Parallel, Serial and Hybrid Machine Tools and Robotics Structures: Comparative Study on Optimum Kinematic Design, In: Serial and Parallel Robot Manipulators: Kinematic Dynamics and Control, S. Kucuk (Ed), InTech, ISBN 979-953-307-550-0, 2012
- First and corresponding author of book chapter No.5 in book "Environmental and Industrial Corrosion - Practical and Theoretical Aspects". Edited by Benjamin Valdez Salas and Michael Schorr, ISBN 978-953-51-0877-1, Hard cover, 168 pages, Publisher: InTech, December 12, 2012 , DOI: 10.5772/45617

Patents

