Refereed Publications

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Patents

1. Nanostructured thermoplastic polyimide films
   Patent number: 9034426 Issued: May 19, 2015 Assignee: Tuskegee University
   Inventor: Heshmat Aglan Inventor: Heshmat Aglan

Publications *(Over 120 book chapters and referred publications)*

Refereed Journals

1. Producing A615 / A615M High Strength Construction Re-Bars Without Use of Microalloys: Part 2, I. Okafor, K. Prayakarao, H. A. Aglan, Mechanics, Materials Science & Engineering, October 2015.

2. Effect of Preheating Temperature on the Microstructural Features of Welded Rail HesrlJ, K

9. E-Learning and Instructional Management System Based on Local Computer Networks and Internet, (2014) H. Khazaal, M. Karam and H. Aglan, Journal of College Teaching & Learning – Third Quarter 11(3).
10. Fungal Populations in Air and Materials in a Flood Simulation Study,(2014) Skrobot (III), F, H. Aglan, S. Kitchens, A. Ludwick, T. Amburgey, H. Borazjani, and S. Diehl, Wood & Fiber Science, 46 (4).
11. Development of Gelatin Films with Designed Antimicrobial Peptide and Silver Nanoparticles. (2013). Abdulla, M. A., Harding, H. G., Samuel, T., Jayne, J., & Aglan, H. A. International Journal of Biomaterials Research & Engineering, 1(2), 13.
12. Effect of Preheating Temperature on the Mechanical and Fracture Properties of Welded Pearlitic Rail Steels, H. Aglan, S. Ahmed, K. Prayakarao and M. Fateh, Engineering Journal, Vol. 11, 2013.
13. Effect of Zinc Galvanization on the Microstructure and Fracture Behavior of Low and Medium Carbon Structural Steels. Ignatius C., O., Ronald J., O., Kaushal R., P., & Heshmat A., (2013). Engineering, 8, 656.
14. Green anti-scalant for cooling water systems. Abdel-Gaber, A., Abd-El-Nabey, B., Khamis, E., Abd-El-Rhmann, H., Aglan, H., & Ludwick, A. (2012), International Journal of Electrochemical Science, 7(12), 11930-11940.
15. Evaluation of the Corrosion Barrier Properties of Nano-Reinforced Vinyl Chloride/Vinyl Acetate Coatings, M. Calhoun, A. Ludwick, M. Mahmoud and H. Aglan, Journal of Applied Polymer Science, pp. 15–22, 5 January 2011.
16. Effect of Micro-Silica Loading on the Mechanical and Acoustic Properties of Cement Pastes, S.S. Shebl, H.S. Seddeq and H.A. Aglan, Construction and Building Materials 25 (2011) 3903–3908.
17. Microstructure-Fracture Behavior Relationships of Slot-Welded Rail Steels, (2011) A. Allie, H. Aglan and M. Fateh, Metallurgical and Materials Transactions A, pp. 1-10.
18. Modeling and validation of the thermal performance of an affordable, energy efficient, healthy dwelling unit. (2011) Hassan, M. A., Shebl, S. S., Ibrahim, E. A., & Aglan, H. Building Simulation, (3), 255.
19. Fatigue crack growth of bainitic rail steel welds." (2011) Allie, A, H Aglan, and M Fateh. Science & Technology Of Welding & Joining 16, no. 6: 535-540
20. Mechanical and Fracture Analysis of Welded Pearlitic Rail Steels, (2010) A. Allie, H. Aglan and M. Fateh, Journal of Mechanics of Materials and Structures, Vol. 5, No. 2. 263-276.
21. Characterization of Nanostructured Phenolic and Epoxy Composites Under Pulse Laser Degradation. (2010).Young, S., Kumar, A., Ludwick, A., & Aglan, H. Nanotech, 2, 107-110.
22. Mechanical and Moisture Resistance Performance of Silver Nanoparticle Reinforced Fish Skin Gelatin Films. (2010) Harding, H., Ludwick, A., Samuel, T., Young, S., & Aglan, H. Nanotech, 1, 897-900.

23. Effect of Mechanically Induced Ventilation on the Indoor Air Quality of Building Envelopes, T Paul, D. Sree and H. Aglan, Energy and Buildings 42 (2010), 326-332.

24. Influence of Natural Inhibitor, Pigment and Extender on Corrosion of Polymer Coated Steel, A. Abdel-Gabera, B. El-Nabeya, E. Khamisa, O Abdelattefa, H. Aglan, A. Ludwick, Progress in Organic Coatings 69 (2010) 402–409.

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103. Polymeric Additives and Their Role in Asphaltic Pavements. Part I: Effect of Additive

Presentations

Dr. Aglan and his research team have delivered more than 100 presentations at national and international conferences.

Book Chapters

120. Processing conditions and Durability of Polypropylene Films. H. Aglan and Y.X. Gan, In Handbook of Plastic Films., E. Abdel-bary (Ed.), 1998, Smither Rapra Press.
121. Modifiers for Improved Performance of Asphaltic Mixtures, Heshmat A. Aglan in Asphalt Science and Technology, A. Usmani ed. CRC Press. 1997.
122. High performance polymers: Structure, properties, composites, fibers. Moet, A., Aglan, H., & Baer, E. (1991). Munchen Hanser.
123. Engineering Plastics, Moet, A and H. Aglan in Fatigue Failure, Vol 2 of Engineering Materials Handbook, J Epel (ed.) (1988) 741-750 ASM International