

## 2006 Peered Reviewed Archival Publications

Adjeroh, D.A., Y. Zhang\*, and R. Parthe\*. 2006. On denoising and compression of DNA microarray images. *Pattern Recognition*. 39(12): 2478-2493. **(LCSEE)**

Agrawal<sup>+</sup>, B., P.C. Upadhyay<sup>+</sup>, L. Banta, and D.W. Lyons. 2006. Transient temperature distribution in composites with layers of functionally graded materials (FGM's). *Journal of Reinforced Plastics and Composites*. 25: 513-542. **(MAE)**

Alexander, D.W. 2006. Cost of coal mine catastrophes. *Mining Engineering*. 58(3): 49-53. **(MinE)**

Alleman, T.L., R. Barnitt, L. Eudy, M. Miyasato, A. Oshinuga, T. Corocan, S. Chatterjee, T. Jacobs, R.A. Cherrillo, N.N. Clark, and W.A. Wayne. 2006. Final operability and chassis emissions results from a fleet of class 6 trucks operating on gas-to-liquid fuel and catalyzed diesel particle filters. *Transactions of the SAE. Journal of Fuels & Lubricants*. 1450-1464. **(MAE)**

Alsewailem\*, F.D. and R.K. Gupta. 2006. Effect of impact modifier types on mechanical properties of rubber-toughened glass-fiber-reinforced nylon 66. *Can. J. Chem. Eng.* 84: 693-703. **(ChE)**

Alsewailem\*, F.D. and R.K. Gupta. 2006. Mechanical properties of rubber-toughened post-industrial glass-fiber reinforced PA 66. *Int. Polym. Processing*. 21: 189-197. **(ChE)**

Angle\*, G., J.E. Smith, and W.W. Huebsch. 2006. Experimental and computational investigation into the use of the coanda effect on the bell A821201 airfoil. *Application of Circulation Control Technologies. Progress in Astronautics and Aeronautics Series*. 214(9): 275-289. **(MAE)**

Barbero, E.J., P. Lonetti, and K. Sikkil. 2006. Finite element continuum damage modeling of plain weave reinforced composites. *Composites Part B*. 37: 137-147. **(MAE)**

Barbero, E.J. and K.J. Ford. 2006. Determination of aging shift factor rates for field-processed polymers. *SAMPE J. of Advanced Materials*. 38(2): 7-13. **(MAE)**

Barbero, E.J.; J. Trovillion, J.A. Mayugo, and K.K. Sikkil. 2006. Finite element modeling of plain weave fabrics from photomicrograph measurements. *Composite Structures*. 73(1): 41-52. **(MAE)**

Barker<sup>+</sup>, M.G. and K.E. Barth. 2006. Field testing serviceability performance of Missouri's first HPS bridge. *TRB Transportation Research Record, Design of Structures*. 36-42 **(CEE)**

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<sup>+</sup>Faculty member outside the College

Beare, R., M. MacVean, A. Holtslag, J. Cuxart, I. Esau, J.-C. Golaz, M. Jimenez, M. Khairoutdinov, B. Kosovic, D. Lewellen, T. Lund, J. Lundquist, A. McCabe, A. Moene, Y. Noh, S. Raasch, and P. Sullivan. 2006. An intercomparison of large-eddy simulations of the stable boundary layer. *Boundary-Layer Meteorology*. 118: 247-272. **(MAE)**

Blatchley<sup>+</sup>, III, E.B., C. Shen, Z. Naunovic<sup>+</sup>, L.-S. Lin, D.A. Lyn<sup>+</sup>, J.P. Robinson<sup>+</sup>, K. Ragheb, G. Gregori<sup>+</sup>, D.E. Bergstrom<sup>+</sup>, S. Fang<sup>+</sup>, K. Jennings<sup>+</sup>, and N. Gunaratra<sup>+</sup>. 2006. Photochemical reactor characterization by lagrangian actinometry. *ASCE J. Environmental Engineering*. 132(11): 1390-1403. **(CEE)**

Bond, R.E., G.J. Morris, and J.L. Loth. 2006. Ground effect characteristics and centerline pressure distributions for a hypersonic configuration. *Journal of Aircraft*. 43(6): 58-63. **(MAE)**

Cameron<sup>+</sup>, K., E.M. Eschen, C.T. Hoang<sup>+</sup>, and R. Sritharan<sup>+</sup>. 2006. Recognition of perfect circular-arc graphs. In *Graph Theory in Paris (Trends in Mathematics)*, A. Bondy et al. eds., Birkhauser Verlag. 97-108. **(LCSEE)**

Cao, X.A., H. Piao<sup>+</sup>, S.F. LeBoeuf<sup>+</sup>, J. Li<sup>+</sup>, J.Y. Lin<sup>+</sup>, and H.X. Jiang<sup>+</sup>. 2006. Effects of plasma treatment on the ohmic characteristics of Ti/Al/Ti/Au contacts to n-AlGaN. *Applied Physics Letters*. 89: 082109-082111. **(LCSEE)**

Celik, I., M. Klein, M. Freitag, and J. Janicka. 2006. Assessment measures for URANS/DES/LES: An Overview with Applications. *Journal of Turbulence*. 7(48): 1-27. **(MAE)**

Chen<sup>+</sup>, C., E.B. Kennel, A.H. Stiller, P.G. Stansberry, and J.W. Zondlo. 2006. Carbon foam derived from various precursors. *Carbon*. 44(8): 1535-1543. **(ChE)**

Chen, H.L. and J. Choi<sup>\*</sup>. 2006. Fatigue crack growth and remaining life estimation of AVL B components. *Structural Engineering and Mechanics. An International Journal*. 23(6): 651-674. **(CEE)**

Chen<sup>\*</sup>, Y., J.F. Davalos, and I. Ray. 2006. Durability prediction for GFRP reinforcing bars using short-term data of accelerated aging tests. *ASCE Journal of Composites for Construction*. 10(4): 279-286. **(CEE)**

Chen<sup>+</sup>, I.R. and B. Cukic. 2006. High assurance software systems. *The Computer Journal*. 49(5): 507-508. **(LCSEE)**

Chen<sup>+</sup>, K., L. Banta, and G. Jiang<sup>\*+</sup>. 2006. Saddle-point based separation of touched objects in 2-D image. *Journal of Electronics (China)*. 23(3): 450-456. **(MAE)**

Cornell<sup>\*</sup>, T., J. Nightingale<sup>\*</sup>, S. Pathak<sup>\*</sup>, L. Hornak, and D. Korakakis. 2006. Thickness and fourier transform infrared peak instability in silicon dioxide thin films deposited using electron-gun deposition. *Journal of Vacuum Science & Technology B*. 24: 2250. **(LCSEE)**

<sup>\*</sup>Student author

<sup>+</sup>Faculty member outside the College

Cuxart, J., A. Holtslag, R. Beare, E. Bazile, A. Beljaars, A. Cheng, L. Conangla, M. Ek, F. Freedman, R. Hamdi, A. Kerstein, H. Kitagawa, G. Lenderink, D. Lewellen, J. Mailhot, T. Mauritsen, V. Perov, G. Schayes, G.-J. Steeneveld, G. Svensson, P. Taylor, W. Weng, S. Wunsch, and K.-M. Xu. 2006. Single-column model intercomparison for a stably stratified atmospheric boundary layer. *Boundary-Layer Meteorology*. 118: 273-303. **(MAE)**

Dai\*, C., Y. Zheng\*, and X. Li. 2006. Accurate alignment of multiview sequences. *IEEE Signal Processing Letter*. 13(12): 737-740. **(LCSEE)**

DaSilva, L., G. Morgan, C. Bostian, D. Sweeney, S. Midkiff, C. Thompson, J. Reed, W. Newhall, and B. Woerner. 2006. The resurgence of push-to-talk radios. *IEEE Communication Magazine*. 44(1): 48-55. **(LCSEE)**

Davalos, J.F., P.Z. Qiao<sup>+</sup>, and L. Shan<sup>+</sup>. 2006. Advanced fiber reinforced polymeric (FRP) structural composites for use in Civil Engineering. Chapter IV, pp. 118-202, in *Advance Civil Infrastructure Materials – Advancements in Science, Mechanics and Applications*. Edited by Hwai-Chung Wu. Woodhead Publishing Limited, Abington, Cambridge, UK. ISBN: 1-85573-943-7. **(CEE)**

Davalos J.F., S.S Kodkani\*, and I. Ray. 2006. Fracture mechanics method for Mode-I interface evaluation of FRP bonded to concrete substrate. *ASCE J. of Materials in Civil Engineering*. 18(5): 732-742. **(CEE)**

Desovski\*, D., V. Gandikota\*, Y. Liu\*, Y. Jiang\*, and B. Cukic. 2006. Verification and validation of a fingerprint image registration software. *EURASIP Journal on Applied Signal Processing*. 5940: 1-9. **(LCSEE)**

El-Sherbeeny\*, A.M., J.V. Odom, and J.E. Smith. 2006. Ocular manifestations due to systemic exposure to mercury. *Journal of Toxicology: Cutaneous and Ocular Toxicology*. 25(3): 173-183. **(MAE)**

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El-Sherbeeny\*, A.M., J.V. Odom, and J.E. Smith. 2006. Spatial density distribution as a basis for image compensation. *Journal of Modern Optics, Special Issue: Developments in Vision Enhancement Technology and their Evaluation*. 53(9): 1241-1244. **(MAE)**

Feng, C. and B. Kang. 2006. A transparent indenter measurement method for mechanical property evaluation. *Experimental Mechanics*. 1: 1-14. **(MAE)**

Gadde<sup>+</sup>, M.M. and S.S. Peng. 2006. Numerical simulation of cutter rock failure under weak roof conditions. *SME Transactions*. 320: 54-60. **(MinE)**

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<sup>+</sup>Faculty member outside the College

GangaRao, H.V.S., N. Taly<sup>+</sup>, and P.V. Vijay. 2006. Reinforced concrete design with FRP composites. Taylor and Francis Group, CRC Press. **(CEE)**

Gold<sup>\*</sup>, J.S., J.M. Lannon<sup>\*</sup>, Jr., K.S. Ziemer<sup>\*</sup>, M. Guntu<sup>\*</sup>, V.L. Tolani<sup>\*</sup>, and C.D. Stinespring. 2006. Characterization of a methyl radical source ultrahigh vacuum thin film growth studies. Journal of Vacuum Science and Technology. A24: 1044-1050. **(ChE)**

Gopalakrishnan, B., S. Chaudhari, P. Famouri, and R.W. Plummer. 2006. Facilitation for load based energy savings in three phase squirrel cage induction motors. Energy Engineering. 103(6): 37-64. **(IMSE/LCSEE)**

Goseva-Popstojanova, K., A. Singh<sup>\*</sup>, S. Mazimdar<sup>\*</sup>, and F. Li<sup>\*</sup>. 2006. Empirical characterization of session-based workload and reliability for web servers. Empirical Software Engineering Journal. 11(1): 71-117. **(LCSEE)**

Gu, Y., B. Seanor, G. Campa, M.R. Napolitano, L. Rowe, S. Gururajan, and S. Wan. 2006. Design and flight testing evaluation of formation control laws. IEEE Transactions on Control Systems Technology. 14(6): 1105-1112. **(MAE)**

Guiler, R.W. and W.W. Huebsch. 2006. Development and testing of a wing morphing mechanism for the control of a swept wing tailless aircraft. SAE Transactions. Journal of Aerospace. 1296-1305. **(MAE)**

Gupta, R.K. and S. Agarwal. 2006. Sensitive, spin-line type extensional viscometer for mobile liquids employing very small liquid volumes. US Patent No. 7,114,374. **(ChE)**

Haj-Said<sup>\*</sup>, E.H., D. Nassar<sup>\*</sup>, G. Fahmy<sup>+</sup>, and H.H. Ammar. 2006. Teeth segmentation in digitized dental X-ray films using mathematical morphology. IEEE Transactions on Information Forensics and Security. 1(2): 178-189. **(LCSEE)**

Huebsch, W.W. 2006. Dynamic roughness for aerodynamic flow control. AIAA Journal of Aircraft. 43(2): 353-362. **(MAE)**

Huang<sup>\*</sup>, Y., R. Turton, J. Park<sup>+</sup>, P. Famouri, and E.J. Boyle<sup>+</sup>. 2006. Dynamic model of the riser in circulating fluidized bed. Powder Technology. 163: 23-31. **(ChE/LCSEE)**

Ikonomov, P., M. Ghantasala, S. Dwivedi and D.W. Lyons. 2006. Simulation of forces for virtual, nanoassembly. International Journal of Advanced Manufacturing Systems. 9: 2. **(MAE)**

Jaca, R., E.M. Sosa, and L.A. Godoy. 2006. Límites inferiores de cargas de pandeo para tanques de pared delgada con techo cónico. Mecánica Computacional. 25: 585-604. **(MAE)**

Jain<sup>+</sup>, A.K., A. Ross, and S. Pankanti<sup>+</sup>. 2006. Biometrics: a tool for information security. IEEE Transactions on Information Forensics and Security. 1(2): 125-143. **(LCSEE)**

<sup>\*</sup>Student author

<sup>+</sup>Faculty member outside the College

Johnson, E., J. Regester, and B. Kang. Fluidized bed riser as a dry particle separation system. *Minerals & Metallurgical Processes*. 22(3): 130-134. **(MAE)**

Khan<sup>\*</sup>, ABM S., N.N. Clark, G.J. Thompson, W.S. Wayne, M. Gautam, and D. Lyons. 2006. Idle emissions from heavy-duty diesel vehicles: review and recent data. *Journal of Air and Waste Management Association*. 56(10): 1404-1419. **(MAE)**

Kang, B. and R. Cisloiu. 2006. Evaluation of fracture behavior of iron aluminides. *Theoretical and Applied Fracture Mechanics*. 45(11): 25-40. **(MAE)**

Kang, B., Z. Yao, and E.J. Barbero. 2006. Post-yielding stress-strain determination using spherical indentation. *Mechanics of Advanced Materials and Structures*. 13: 129-138. **(MAE)**

Khan, A.S., N.N. Clark, G.J. Thompson, W.S. Wayne, M. Gautam, D.W. Lyons, and D. Hawelti. 2006. Idle emissions from heavy-duty diesel vehicles: review and recent data. *Jour. of the Air & Waste Management Assoc.* 56: 1404-1419. **(MAE)**

Kinsey, J.S., W.A. Mitchell, W.C. Squier, K. Linna, F.G. King, R. Logan, Y. Dong, G.J. Thompson, and N.N. Clark. 2006. Evaluation of methods for the determination of diesel-generated fine particulate matter: physical characterization results. *Journal of Aerosol Science*. 37: 63-87. **(MAE)**

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Klinke, D.J. 2006. An age-structured model of dendritic cell trafficking in the lung. *Am. J. Physiol. Lung Cell Mol. Physiol.* 291: L1038-L1049. **(ChE)**

Kugler, E.L., C.H. Clark<sup>\*</sup>, D.B. Dadyburjor, J.C. Hanson<sup>+</sup>, J.H. Wright<sup>\*</sup>, Z. Song<sup>+</sup>, T. Cai<sup>+</sup>, and J. Hrbek<sup>+</sup>. 2006. Preparation, interconversion and characterization of nanometer-sized molybdenum carbide catalysts. *Topics in Catalysis*. 39: 257-262. **(ChE)**

KuShaari<sup>\*</sup>, K., P. Pandey<sup>\*</sup>, and R. Turton. Monte Carlo simulation to determine coating uniformity in a Wurster fluidized-bed coating process. *Powder Technology*. 166: 81-90. **(ChE)**

Li, X. 2006. Backward adaptive video coding based on least square prediction. *EURASIP Journal on Applied Signal Proc., Special issue on H.264 and Beyond*. **(LCSEE)**

Li, X. 2006. Edge directed error diffusion. *IEEE Signal Processing Letter*. 13(11): 688-691. **(LCSEE)**

Liu<sup>\*</sup>, Y., B. Cukic, E. Fuller<sup>+</sup>, S. Yerramalla<sup>\*</sup>, and S. Gururajan<sup>\*</sup>. 2006. Monitoring techniques for an on-line neuro-adaptive controller. *Journal of Systems and Software*. 79: 1527-1540. **(LCSEE)**

<sup>\*</sup>Student author

<sup>+</sup>Faculty member outside the College

Liu, X., J. Xu, N. Deem, K-M. Chang, E.J. Barbero, W-D. Cao, R.L. Kennedy, and T. Carneiro. 2006. Effect of thermal-mechanical treatment on the fatigue crack propagation behavior of newly developed ALLVAC 718PLUS Alloy. *Superalloys*. 233-242. **(MAE)**

Liu, X., N.Q. Wu, B.H. Wunsch, R.J. Barsotti, and F. Stellacci. 2006. Shape-controlled growth of micron-sized gold crystals by a slow reduction method, *Small*. 2: 1046-1050. **(MAE)**

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McCarthy, M.C., D.S. Eisinger, H.R. Hafner, L.R. Chinkin, P.T. Roberts, K.N. Black, N.N. Clark, P.H. McMurry, and A.H. Winer. 2006. Particulate matter: a strategic vision for transportation-related research. *Environmental Science & Technology*. 40(8): 5593-5599. **(MAE)**

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McKendall Jr., A.R., J. Shang\*, J.S. Noble<sup>+</sup>, and C.M. Klein<sup>+</sup>. 2006. A simulated annealing heuristics for a crane scheduling problem. *International Journal of Industrial Engineering*. 13(1): 90-98. **(IMSE)**

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Ma, L., X. Liu, and K.-M. Chang. 2006. Reply to comment on 'Identification of SAGBO-induced damage zone ahead of crack tip to characterize sustained loading crack growth in alloy 783'. *Scripta Materialia*. 54: 309–311. **(MAE)**

Ma, N., B.R. Cooper, and B. Kang. Tight-binding study of thermal expansions for Mo<sub>3</sub>Si. *Journal of Applied Physics*. 99(053514): 1-8. **(MAE)**

Madireddy, M.R. and N.N. Clark. 2006. Sequential inversion technique and differential coefficient approach for accurate instantaneous emission measurement. *International Journal of Engine Research*. 7: 437-446. **(MAE)**

Menzies, T., Z. Chen<sup>\*</sup>, J. Hihn<sup>+</sup>, and K. Lum. 2006. Selecting best practices for effort estimation. *IEEE Transactions on Software Engineering*. 32(11). **(LCSEE)**

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Nirmala, K., P.C. Upadhyay, J. Prucz and D.W. Lyons. 2006. Thermo-elastic stress in composite beams with functionally graded layer. *Journal of Reinforced Plastics and Composites*. 25: 1241-1254. **(MAE)**

Noore, A. 2006. Secure distribution of heterogeneous multimedia content on the internet. *International Journal of Internet Protocol Technology*. 1(3): 198-203. **(LCSEE)**

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Ogretim, E. and W.W. Huebsch. 2006. Aircraft ice accretion prediction based on neural networks. *AIAA Journal of Aircraft*. 43(1): 233-240. **(MAE)**

<sup>\*</sup>Student author

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O'Hare\*, B., G. Angle\*, W.W. Huebsch, and J.E. Smith. 2006. Continued computational investigation into circulation control for the V-22 osprey download reduction. SAE Transactions. Journal of Aerospace. 824-830. **(MAE)**

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Pandey\*, P., Y. Song\*, F. Kayihan<sup>+</sup>, and R. Turton. 2006. Simulation of particle movement in a pan coating device using discrete element modeling and its comparison with video-imaging experiments. Powder Technol. 161: 79-88. **(ChE)**

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<sup>+</sup>Faculty member outside the College

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<sup>\*</sup>Student author

<sup>+</sup>Faculty member outside the College

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