

2005 Peered Reviewed Archival Publications

Ahluwalia, R.S. and S. Govindarajulu*. 2005. A software tool for disposal of obsolete vessels. *Journal of Ship Production*. 21(2): 1-7. **(IMSE)**

Al-Yemni*, M. and R.Y.K. Yang. 2005. Hybrid neural-networks modeling of an enzymatic membrane reactor. *Journal of the Chinese Institute of Engineers*. 28: 1061-1067. **(ChE)**

Aminian, K. and S. Ameri. 2005. Application of artificial neural networks for reservoir characterization with limited data. *Journal Petroleum Science and Engineering*. 49: 212-222. **(PNGE)**

Alleman, T.L., B. Barnitt, I. Eudy, M. Miysato, A. Oshinuga, T. Corcoran, S. Chatterjee, T. Jacobs, R.A. Cherillo, N.N. Clark, W.S. Wayne, and R. Lansing. 2005. Final operability and chassis emissions results from a fleet of class 6 trucks operating on gas-to-liquid fuel and catalyzed diesel particulate filters. *SAE 2005 Transactions - Journal of Fuels and Lubricants, Society of Automotive Engineers*. 114: 1450-1463. **(MAE)**

Al-Qahtani, H.M., S.K. Datta, and O.M. Mukdadi. 2005. Laser-generated thermoelastic waves in an anisotropic infinite plate: FEM analysis. *Journal of Thermal Stresses*. 28: 1099-1122. **(MAE)**

Aluri, S., C. Jinka*, and H.V.S. GangaRao. 2005. Dynamic response of three FRP bridges. *Journal of Bridge Engineering*. ASCE 10(6): 722-730. **(CEE)**

Bachlechner⁺, M.E., J. Zhang*, Y. Wang*, J. Schiffbauer*, S.R. Knudsen*, and D. Korakakis. 2005. Molecular dynamics simulations of the mechanical strength of Si/Si₃N₄ interfaces. *Physical Review B*. 72, 094115. **(LCSEE)**

Barbero E.J., F. Greco, and P. Lonetti. 2005. Continuum damage-healing mechanics with application to self-healing composites. *J. Damage Mechanics*. 14(1): 51-81. **(MAE)**

Barbero, E.J., T.M. Damiani*, and J. Trovillion. 2005. Micromechanics of fabric reinforced composites with periodic microstructure. *Int. J. of Solids and Structures*. 42: 2489-2504. **(MAE)**

Barbero, E.J., G.F. Abdelal, and A. Caceres. 2005. A micromechanics approach for damage modeling of polymer matrix composites. *Composite Structures*. 67: 427-436. **(MAE)**

Barbero, E.J. and S. Rangarajan*. 2005. Long-term testing of trenchless pipe liners. *ASTM Journal of Testing and Evaluation*. 33: 377-384. **(MAE)**

Barth, K.E., D.W. White, J.E. Righman, and L. Yang. 2005. Evaluation of web compactness limits for singly and doubly symmetric steel I-girders, Elsevier. *Journal of Constructional Steel Research*. 61(10): 1411-1434. **(CEE)**

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Boyajian^{*}, D.M., J.F. Davalos, and I. Ray. 2005. Appraisal of the novel single contoured-cantilever beam. *Journal of Materials and Structures*, RILEM (France). 38: 11-16. **(CEE)**

Celik, I.B., J. Li^{*}, G. Hu^{*}, and C. Shaffer^{*}. 2005. Limitations of richardson extrapolation and some possible remedies. *Journal of Fluids Engineering*. 127(4): 795-805. **(MAE)**

Celik, I.B., Z. Cehreli^{*}, and I. Yavuz. 2005. Index of resolution quality for large eddy simulation. *Journal of Fluids Engineering*. 127(5): 949-958. **(MAE)**

Celik, I.B., S.R. Pakalapati^{*}, and M.D. Salazar-Villalpando. 2005. Theoretical calculation of the electrical potential at the electrode/electrolyte interfaces of solid oxide fuel cells. *Journal of Fuel Cell Science and Technology*. 2(4): 238-45. **(MAE)**

Celik, I.B. and J. Li^{*}. 2005. Assessment of numerical uncertainty for the calculations of turbulent flow over a backward facing step. *International Journal of Numerical Methods in Fluids*. 49: 1015-1031. **(MAE)**

Chen, H.L. and A. Kiriakidis^{*}. 2005. Nondestructive evaluation of ceramic candle filters with various boundary conditions. *Journal of Nondestructive Evaluation*. 24(2): 67-81. **(CEE)**

Chen^{*}, A. and J.F. Davalos. 2005. A solution including skin effect for stiffness and stress field of sandwich honeycomb core. *International Journal of Solids and Structures*. 42: 2711-2739. **(CEE)**

Cortellessa⁺, V., K. Goseva-Popstojanova, K. Appukutty^{*}, A. Guedem^{*}, A. Hassan^{*}, R. Elnaggar^{*}, W. Abdelmoez^{*}, and H.H. Ammar. 2005. Model-based performance risk analysis. *IEEE Transactions on Software Engineering*. 31(1): 3-20. **(LCSEE)**

Crites^{*}, T. and R. Turton. 2005. A mathematical model for the prediction of cycle-time distributions for the wurster column coating process. *I&EC Research*. 44: 5397-5402. **(ChE)**

Cukic, B. 2005. Guest editor's introduction: the promise of public software engineering data repositories. *IEEE Software*. 22(6): 20-22. **(LCSEE)**

Cukic, B. 2005. The virtues of assessing software reliability early. *IEEE Software*. 22(3): 50-53. **(LCSEE)**

Cukic, B., E. Fuller⁺, M. Mladenovski^{*}, and S. Yerramalla^{*}. 2005. Run-time assessment of neural network control systems. *Methods and Procedures for the Verification and Validation of Artificial Neural Networks*. B.J. Taylor (ed), Springer Science. 257-269. **(LCSEE)**

Dadyburjor, D.B., H. Shao^{*}, E.L. Kugler, and W. Ma. 2005. Effect of temperature on structure and performance of in-house cobalt-tungsten carbide catalyst for dry reforming of methane. *I&EC Research*. 44: 4914-4921. **(ChE)**

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Davalos, J.F. and A. Chen*. 2005. Buckling behavior of honeycomb FRP core with partially restrained loaded edges under out-of-plane compression. *Journal of Composite Materials*. 39(16): 1465-1485. **(CEE)**

Davalos, J.F., P.Z. Qiao⁺, and L. Shan⁺. 2005. Advanced fiber reinforced polymer (FRP) structural composites in Civil Engineering, Chapter IV, pages 118-202, in *Advanced Civil Infrastructure Materials – Advancements in Science and Mechanics*. Edited by Hwai-Chung Wu. Woodhead Publishing Limited, Abington, Cambridge, UK. ISBN: 1-85573-943-7. **(CEE)**

Della-Giustina, D.E. 2005. Emergency preparedness in the workplace. *Journal of Emergency Management*. 3(1): 46-50. **(IMSE)**

Drozdov⁺, A.D., S. Agarwal, and R.K. Gupta. 2005. The effect of temperature on the viscoelastic response of polymer melts. *Int. J. Eng. Sci.* 43: 304-320. **(ChE)**

Drozdov⁺, A.D., A. Al-Mulla⁺, and R.K. Gupta. 2005. Finite viscoplasticity of polycarbonate reinforced with short glass fibers. *Mech. Mater.* 37: 473-491. **(ChE)**

Eschen, E.M., C.T. Hoang⁺, M.D.T. Petrick*, and R. Sritharan⁺. 2005. Disjoint clique cutsets in graphs without long holes. *Journal of Graph Theory*. 48: 277-298. **(LCSEE)**

Fahmy, G., D. Nassar*, E. Haj-Said*, H.H. Ammar, M. AbdelMottaleb⁺, A.H. Chen⁺, and A. Jain⁺. 2005. Toward an automated Denta identification system. *Journal of Electronic Imaging*. 14(4). **(LCSEE)**

Feliachi A. and D. Rerkpreedapong*. 2005. NERC compliant load frequency control design using fuzzy rules. *Electric Power Systems Research Journal*. 73(2): 101-106. **(LCSEE)**

Feliachi, A. 2005. On the control of re-structured power systems. *International Journal of Control, Automation, and Systems*. 3(2): 363-375. **(LCSEE)**

Firth, A., T.C. Bell⁺, A. Mukherjee⁺, and D.A. Adjero. 2005. A comparison of BWT approaches to string pattern matching. *Software - Practice and Experience*. 35: 1217-1258. **(LCSEE)**

Fuller⁺, E., S. Yerramalla*, and B. Cukic. 2005. Stability properties of neural networks. *Methods and Procedures for the Verification and Validation of Artificial Neural Networks*. B.J. Taylor (ed), Springer Science. 97-108. **(LCSEE)**

Gopalakrishnan, B., R. Selvaraj*, R. Turton, R.W. Plummer, and S. Sukumar*. 2005. A systems approach to plant-wide energy assessment. *Energy Engineering Journal*. 102(5): 49-80. **(ChE/IMSE)**

Heasley, K.A. and O. Akinkugbe*. 2005. A simple program for estimating multiple-seam interactions. *Mining Engineering*. 57(4): 61-66. **(MinE)**

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- Ireson, R.G., M.D. Easter, M.L. Lakin, J.M. Ondov, N.N. Clark, and D.B. Wright. 2005. Estimation of diesel particulate matter concentrations in a school bus using a fuel-based tracer - a sensitive and specific method for quantifying vehicle contributions. *Transportation Research Record*. 1880: 21-28. **(MAE)**
- Jain⁺, A.K., K. Nandakumar, and A. Ross. 2005. Score normalization in multimodal biometric systems. *Pattern Recognition Journal*. 38(12): 2270-2285. **(LCSEE)**
- Johnson, E.K., J.L. Regester^{*}, and B.S.-J. Kang. 2005. Fluidized bed riser as a dry particle separation system. *Society for Mining, Metallurgy, and Exploration*. 22(3). **(MAE)**
- Jung, J.^{*} and R.S. Ahluwalia. 2005. NC tool path generation for 5-axis machining of free formed surfaces. *Journal of Intelligent Manufacturing*. 16(1): 115-127. **(IMSE)**
- Kandaswamy^{*}, U., D.A. Adjeroh, and M.C. Lee⁺. 2005. Efficient texture analysis of SAR imagery. *IEEE Transactions on Geosciences and Remote Sensing*. 43(9): 2075-2083. **(LCSEE)**
- Khan⁺, M.M.K., R.F. Liang, R.K. Gupta, and S. Agarwal. 2005. Rheological and mechanical properties of ABS/PC blends. *Korea-Australia Rheology Journal*. 17(1): 1-17. **(ChE)**
- Li, C., X. Wang, and D. Reynolds^{*}. 2005. Utility-based joint power and rate allocation for downlink CDMA with blind multiuser detection. *IEEE Transactions on Wireless Communications*. 4(3): 1536-1174. **(LCSEE)**
- Li^{*}, J., I. Yavuz, I.B. Celik, and S.E. Guffey. 2005. A numerical study of worker exposure to a gaseous contaminant: variations on body shape and scalar transport model. *Journal of Occupational and Environmental Hygiene*. 2(6): 323-334. **(MAE)**
- Li, S., M.C. Lee⁺, and D.A. Adjeroh. 2005. Effective invariant features for shape based image retrieval. *Journal of the American Society for Information Science and Technology*. 56(7): 729-740. **(LCSEE)**
- Li^{*}, W. and E.H. Cho. 2005. Coal desulfurization with sodium hypochlorite. *Energy & Fuels*. 19(1): 499-507. **(ChE)**
- Li, X. 2005. Demosaicing by successive approximation. *IEEE Trans. on Image Processing*. 14(3): 370-379. **(LCSEE)**
- Li, X. 2005. Improved wavelet decoding via set theoretic estimation. *IEEE Transactions on Cir. and Sys. for Video Tech*. 15(1): 101-105. **(LCSEE)**
- Lim, K.H., W. Zhang, G.A. Smith, and D.H. Smith. 2005. Temperature dependence of emulsion morphologies and the dispersion morphology diagram: two-phase emulsions of the system C₆H₁₃(OC₂H₄)₂OH/n-tetradecane/"water". *Colloids and Surfaces A: Physicochemical and Engineering Aspects*. 264(1-3): 43-48. **(ChE)**

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Liu, X., E.J. Barbero, M. Burris, K-M Chang, and V. Sikka. 2005. Liquid metal corrosion of 316LFeAl and FeCrSi in molten Zn-Al baths. *TMS Metallurgical and Materials Transactions*. A:2049-36. **(MAE)**

Liu, X., L. Ma, K-M Chang, and E.J. Barbero. 2005. Fatigue crack propagation of Ni-base superalloys. *Acta Metallurgica Sinica (English Letters)*. 55-64. **(MAE)**

Long, T., W.S. Wayne, and A. Stiller. 2005. Wheelchair propulsive mechanism. US Patent No. 6,910,701 B1. **(ChE/MAE)**

Loth, J. and G.J. Morris. 2005. Compression ignition by air injection cycle and engine. US Patent No. 6,899,061. **(MAE)**

Manian, V. and A. Ross. 2005. Face detection using statistical and multiresolution texture features. *Multimedia Cyberspace Journal*. 3(3): 1-9. **(LCSEE)**

McKendall Jr., A.R., J.S. Noble⁺, and C.M. Klein⁺. 2005. Simulated annealing heuristics for managing resources during planned outages at electric power plants. *Computers & Operations Research*. 32(1): 107-125. **(IMSE)**

Mirabile^{*}, B., S.S. Peng, Y. Luo, and D. Tang^{*}. 2005. Roof bolter drilling parameter as a tool for strata prediction. *Transactions of the Society of Mining, Metallurgy, and Exploration, Inc.* 318: 119-126. **(MinE)**

Mohaghegh, S.D. 2005. A new methodology for the identification of best practices in the oil and gas industry, using intelligent systems. *Journal of Petroleum Science and Engineering*. 49(3-4): 239-260. **(PNGE)**

Mohaghegh, S.D. 2005. Recent developments in application of artificial intelligence in petroleum engineering. *Journal of Petroleum Technology, Distinguished Author Series*. 57(4): 86-91. **(PNGE)**

Mostofa, R., R. Gozali^{*}, R.C. Palat, M. Roberts, W.G. Newhall, B.D. Woerner, and J.H. Reed. 2005. Design and implementation of a DSP-based MIMO system prototype for real-time demonstration and indoor channel measurement. *EURASIP Journal on Applied Signal Processing*. 16: 2673-2685. **(LCSEE)**

Mukdadi, O.M., S.K. Datta, and M.L. Dunn. 2005. Acoustic-phonon dispersion in nanowires. *Journal of Applied Physics*. 97: 074313. **(MAE)**

Nachiappan^{*}, V. and E.H. Cho. 2005. Corrosion of high chromium and conventional steels imbedded in concrete. *Journal of Performance of Constructed Facilities*. 19(2): 499-507. **(ChE)**

Natarajan^{*}, V., H.V.S. GangaRao, and V. Shekar. 2005. Fatigue response of fabric – reinforced polymeric composites. *Journal and Composite Materials*. 39(17): 1541-1559. **(CEE)**

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Noore A. and P.L. Cross⁺. 2005. Modeling the reliability of large dynamic distributed non-homogeneous networks. *Information Processing Letters*. 93(2): 57-61. **(LCSEE)**

Noore A. 2005. Reliable detection of CMOS stuck-open faults due to variable internal delays. *IEICE Electronics Express*. 2(8): 1-6. **(LCSEE)**

O'Hara*, B, G. Angle*, W. Huebsch, and J.E. Smith. 2005. Continued computational investigation into circulation control for the V-22 osprey download reduction. *SAE Transactions – Aerospace Journal*. 114(1): 924-930. **(MAE)**

Pandey*, P. and R. Turton. 2005. Movement of different shaped particles inside a pan coating device using novel video-imaging techniques. *AAPS PharmSciTech Journal*. 6(2): E237-E244. **(ChE)**

Park*, J., Y. Huang*, R. Turton, P. Famouri, and E.J. Boyle. 2005. The control of bed height and solids circulation rate in the standpipe of a cold flow circulating fluidized bed. *Powder Technology*. 150: 176-184. **(ChE/LCSEE)**

Park*, J., L. Wang*, J.M. Dawson*, L.A. Hornak, and P. Famouri. 2005. Sliding mode based microstructure torque and force estimations using MEMS optical monitoring. *IEEE Sensors Journal*. 5(3): 546-552. **(LCSEE)**

Park*, J., Y. Huang*, R. Turton, P. Famouri, and E. Boyle⁺. 2005. The control of bed height and solids circulation rate in the standpipe of a cold flow circulating fluidized bed. *Powder Technology*. 150: 176-184. **(ChE/LCSEE)**

Parthasaradhi*, S.T.V., R.R. Derakhshani*, L.A. Hornak, and S.A.C. Schuckers⁺. 2005. Time series detection of perspiration as a liveness test in fingerprint devices. *IEEE – Systems Man, and Cybernetics Society, Part C: Applications and Reviews - Special Issue on Biometric Systems*. 35(3): 335-343 (2005). **(LCSEE)**

Peng, F. and Z. Gu*. 2005. Processing Florida dolomitic phosphate pebble in a double reverse fine flotation process. *Minerals & Metallurgical Processing*. 22(1): 23-30. **(MinE)**

Pertl, E.D., M. Gautam, F.A. Pertl, D. Carder, and J.E. Smith. 2005. Design of a portable micro-dilution tunnel particulate matter emissions measurement system. *SAE Transactions - Fuels and Lubricants Journal*. 114(4): 1498-1505. **(MAE)**

Pertl, F.A., R.S. Nutter, Jr., and J.E. Smith. 2005. An analysis of the CTHA's resonance currents and the resulting radiation shapes. *IEEE Transactions Antennas and Propagation*. 53(1): 377-385. **(MAE/LCSEE)**

Rana*, H.T., R.K. Gupta, H.V.S. GangaRao, and L.N. Sridhar⁺. 2005. Measurement of moisture diffusivity through layered – silicate nanocomposite. *American Institute of Chemical Engineers Journal*. 51(12): 3249-3256. **(CEE)**

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Rai^{*}, A., Y. Luo, and S.S. Peng. 2005. Experimental studies of applying active noise cancellation technology to reducing stage loader noise. Transactions of the Society of Mining, Metallurgy, and Exploration, Inc. 318: 221-225. **(MinE)**

Ray, I., J.F. Davalos, and S. Luo^{*}. 2005. Interface evaluations of overlay-concrete bi-layer composites by a direct shear test. Cement and Concrete Composites. 27: 339-347. **(CEE)**

Reynolds^{*}, D., X. Wang, and K.N. Modi⁺. 2005. Interference suppression and diversity exploitation for multi-antenna CDMA with ultra-low complexity receivers. IEEE Transactions on Signal Processing. 53(8): 3226-3237. **(LCSEE)**

Ross, A., S. Dass⁺, and A.K. Jain⁺. 2005. A deformable model for fingerprint matching. Pattern Recognition Journal. 38(1): 95-103. **(LCSEE)**

Salim^{*}, H.A. and J.F. Davalos. 2005. Torsion of open and closed thin-walled laminated composite sections. Journal of Composite Materials. 39(6): 497-524. **(CEE)**

Schuckers⁺, S. and L.A. Hornak. 2005. Liveness detection in biometric devices. The Electrical Engineering Handbook, 3rd Edition, D. Etter, Editor, Chapter 26, CRC Press 2005. **(LCSEE)**

Shoukry, S.N., G.W. William, and M. Riad. 2005. Effect of thermal stresses on mid-slab cracking in dowel jointed concrete pavements. Journal of Structures & Infrastructure Engineering, DOI: 10.1080/15732470500253214. **(CEE)**

Singh^{*} R., M. Vatsa^{*}, and A. Noore. 2005. Textural feature based face recognition for single training images. IEEE Electronics Letters. 41(11): 640-641. **(LCSEE)**

Smirnov, A.V., I. Celik, and S. Shaoping. 2005. LES of bubble dynamics in wake flows. Journal of Computers and Fluids. 34(3): 351-373 **(MAE)**

Stevens, B., C-H. Moeng, A. Ackerman, C. Bretherton, A. Chlond, S. De Roods, J. Edwards, J-C Golaz, H. Jiang, M. Khairoutdinov, M. Kirkpatrick, D. Lewellen, A. Lock, F. Muller, D. Stevens, E. Whelan, and P. Zhu. 2005. Evaluation of large-eddy simulations via observations of nocturnal marine stratocumulus - Monthly Weather Review. 133:1443-1462. **(MAE)**

Sun^{*}, J. and M.C. Valenti. 2005. Joint synchronization and SNR estimation for turbo codes in AWGN channels. IEEE Transactions on Communications. 53(7): 1136-1144. **(LCSEE)**

Swivedi, S., P. Ranga, and D.W. Lyons. 2005. A perspective on analytical prototype process. International Journal of Product Development. 2(1/2): 138-154. **(MAE)**

Thornton⁺, J.D., G.A. Richards⁺, K.A. Dodrill, R.S. Nutter, Jr., and D. Straub⁺. 2005. Real-time combustion controls and diagnostics sensors (CCADS). US Patent No. 6,887,069. **(LCSEE)**

Tian^{*}, L. and A. Noore. 2005. On-line prediction of software reliability using an evolutionary connectionist model. Journal of Systems and Software. 77(2): 173-180. **(LCSEE)**

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Tian*, L. and A. Noore. 2005. Dynamic software reliability prediction: an approach based on support vector machines. Intl. Journal of Reliability, Quality and Safety Engineering. 12(4): 309-321. **(LCSEE)**

Tian*, L. and A. Noore. 2005. Modeling distributed software defect removal effectiveness in the presence of code churn. Mathematical and Computer Modeling. 41(4-5): 379-389. **(LCSEE)**

Tian*, L. and A. Noore. 2005. Evolutionary neural network modeling for software cumulative failure time prediction. Reliability Engineering and System Safety. 87(1): 45-51. **(LCSEE)**

Turton, R. and X.X. Cheng*. 2005. The scale-up of coating processes. Powder Technology. 150: 78-85. **(ChE)**

Valenti, M.C. and S. Cheng*. 2005. Iterative demodulation and decoding of turbo coded M-ary noncoherent orthogonal modulation. IEEE Journal on Selected Areas in Communications. 23(9): 1738-1747. **(LCSEE)**

Valenti, M.C., S. Cheng*, and R.I. Seshadri*. 2005. Turbo and LDPC codes for digital video broadcasting. Turbo Code Applications. 12: 301-320. **(LCSEE)**

Vatsa* M., R. Singh*, and A. Noore. 2005. Improving biometric recognition accuracy and robustness using DWT and SVM watermarking. IEICE Electronics Express. 2(12): 362-367. **(LCSEE)**

Vatsa* M., R. Singh*, and A. Noore. 2005. Reducing the false rejection rate of iris recognition using textural and topological features. Intl. Journal of Signal Processing. 2(1): 66-72. **(LCSEE)**

William, G.W., S.N. Shoukry, and M. Riad. 2005. Thermal stresses in steel girder bridges with integral abutments. Journal of Bridge Structures. 1(2): 103-119. **(CEE)**

Winn, G., B. Gopalakrishnan, R.M. Premkumar*, and Akladios. 2005. What safety managers must know about independent validation and verification of software, professional safety? Journal of the American Society of Safety Engineers. 50(8): 45-52. **(IMSE)**

Wu*, C.F., M.G. Yost⁺, R.A. Hashmonay⁺, T.V. Larson⁺, and S.E. Guffey. 2005. Applying open-path FTIR with computed tomography to evaluate personal exposures. Part 1: Simulation Studies, Ann. Occup. Hyg. 49(1): 61-71. **IMSE**

Wu, N.Q., M. Zhao, J.-G. Zheng, C. Jiang, B. Myers, M. Chyu, S. Li, and S.X. Mao. 2005. Porous CuO-ZnO nanocomposite for sensing electrode of high-temperature CO solid-state electrochemical sensor. Nanotechnology. 16 2878-2881. **(MAE)**

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Xu, J., X. Li, X. Liu, C. Dong, N. Deem, and E.J. Barbero. 2005. X-ray photoelectron spectroscopy study of passive layers formed on Pb-Sn and Pb-Sb alloys. *Metalurgical Transactions A*. 2175-36. **(MAE)**

Yu-Qin, L., M. Keane, M. Ensell, W. Miller, M. Kashon, T. Ong, J. Mauderly, D. Lawson, M. Gautam, B. Zielinska, K. Whitney, J. Eberhardt, and W. Wallace. 2005. In-vitro genotoxicity of exhaust emissions of diesel and gasoline engine vehicles operated on a unified driving cycle. *Journal of Environmental Monitoring*. 7: 60-66. **(MAE)**

Zhang, H. and A.V. Smirnov. 2005. Node placement for triangular mesh generation by Monte Carlo simulation. *International Journal for Numerical Methods in Engineering*. 64(7): 973-989. **(MAE)**

Zheng, H.R., O. Mukdadi, H. Kim, J.R. Hertzberg, and R. Shandas. 2005. Advantages in using multifrequency excitation of contrast microbubbles for enhancing echo particle image velocimetry techniques: initial numerical studies using rectangular and triangular waves. *Ultrasound in Medicine and Biology*. 31: 99-108. **(MAE)**

Yassien*, A., K.A. Heasley, A.W. Khair, and S.S. Peng. 2005. Analysis of failure modes for fully grouted resin bolts. *Transactions of the Society for Mining, Metallurgy, and Exploration, Inc.* 318: 79-86. **(MinE)**

Yu, J., R. Reddy, S. Selliah, S. Reddy, V. Bharadwaj, and S. Kankanahalli. 2005. TRINETR: an architecture for collaborative intrusion detection and knowledge-based alert evaluation. *Advanced Engineering Informatics (Elsevier Science)*. 19: 93-101. **(LCSEE)**

Zhang*, Y., K.A. Heasley, and S.S. Peng. 2005. Pillar and roof bolting design under conditions of weak roof and multi-seam interaction – a case study. *Transactions of the Society for Mining, Metallurgy, and Exploration, Inc.* 318: 103-108. **(MinE)**

Zhao*, B. and M.C. Valenti. 2005. Position-based relaying with hybrid-ARQ for efficient ad hoc networking. *EURASIP Journal on Wireless Communications and Networking*. 5(5): 610-624. **(LCSEE)**

Zhao*, B. and M.C. Valenti. 2005. Practical relay networks: a generalization of hybrid-ARQ. *IEEE Journal on Selected Areas in Communications*. 23(1): 7-18. **(LCSEE)**

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