

Chemistry and Biochemistry

Peer-Reviewed Publications

(with publication dates in 2005)

Publications are listed alphabetically by department and by first author.

Faculty are shown in bold face print.

Al-Talla. Z.A., & **Tolley, L.T.** (2005) Analysis of Vitamin E derivatives in serum using coordinated ion spray mass spectrometry Rapid Comm Mass Spectrometry 19: 2337-2342.

Aouadi, S.M. Shreeman. P.K., **Ge, Q.** Xu, J. & Mishra, S.R (2005) Correlation between interfacial electronic structure and mechanical properties of ZrN-Me (Me =Ag, Au, or Pd) nanocomposite films. Appl Phys Lett 87: 041902-1-3.

Balakrishnan, K., Datar, A., Oitker R., Chen, H., Zuo, J., & **Zang, L.** (2005) Nanobelt self-assembly from an organic n-type semiconductor Propoxyethyl-PTCDI J. Am. Chem. Soc. 127: 10496-10497.

Banz. W. J., Davis, J., Steinle. JJ. Adler, S, Oitker, J, Winters. TA Higginbotham, DA, **Hou, Y.**, Henry N . Peterson, R, & **Meyers, C.Y.** (2005) (+)-Z-Bisdehydrodoisynollic acid ameliorates obesity and the metabolic syndrome in female ZDF rats. Obesity Res. 1: 1915-1924.

Burt, M.C. & Dave, B.C. (2005) An optical temperature sensing system based on encapsulation of a dye molecule in organosilica sol-gels Sensors Actuators B 107: 552-556.

Che, Y., Ma, W., Ren, Y., Chen, C., Zhang X., Zhao, J. & **Zang, L.** (2005) Photooxidation of dibenzothiophene and 4,6-dimethyldibenzothiophene sensitized by N-methylquinolinium tetrafluoroborate. Mechanism and intermediates investigation J. Phys. Chem. B 109: 8270-8276.

Davis, J.M. (2005) Statistical-overlap theory for elliptical zones of high aspect ratio in comprehensive two-dimensional separations J. Sep. Sci. 28: 347-359.

Davis, J.M., & Blumberg, L.M. (2005) Probability theory for number of mixture components resolved by n independent columns J. Chromatogr. A 1096: 28-39.

Deshpande, K., Chueng, S., Rao, M.S., & **Dave, B.C.** (2005) Efficient sequestration and reduction of hexavalent chromium with organosilica sol-gels J. Mater. Chem. 15: 2997-3004.

Gardimalla, H.M.R. Mandal, D., Stevens, P D., Yen. M., & **Gao, Y.** (2005) Superparamagnetic nanoparticle-supported enzymatic resolution of racemic carboxylates Chem. Commun. 2005: 4432-4434.

Goodson, B.M. (2005) Applications of optical pumping and polarization techniques in NMR I. Optical nuclear polarization in molecular crystals. Ann. Rep. NMR Spectrosc. 55: 299-323.

Johnston, S.A., Fadgen, K.E., **Tolley, L.T.**, & Jorgenson, J.W (2005) Expanded electrical model of a contactless conductivity detector: Development and verification J. Chromatography A 1094: 148-157.

Kohli, P. & Martin C.R. (2005) Template-synthesized nanotubes for biotechnology and biomedical applications J. Drug Delivery Sci. Technol. 15: 49-57.

Kohli, P. & Martin, G.R (2005) Smart nanotubes for biotechnology Current Pharm. Biotechnol. 6: 35-47.

Lei, P., Chen, C., Yang, J., Ma, W., Zhao, J. & **Zang, L.** (2005) Degradation of dye pollutants by immobilized polyoxometalate with H₂O₂ under visible-light irradiation. Environ. Sci. Technol. 39: 8466-8474.

Li, C., **Dyer, D.J.**, Rath. N.P & Robinson, P.D. (2005) N,N,N"-Tris(p-methoxyphenyl) phosphoric triamide. Acta Cryst. C C61 o654-o656.

Li, C., Wolf, J.R., **Dyer, D.J.**, & Robinson, P.D. (2005) 1-(4-Decyl-phenyl)-1H-pyridin-4-one Acta Cryst. E E61: o233-o235.

Li, C., Timmons R. B. & **Kinsel, G.R.** (2005) RF plasma polymer coatings for affinity capture MALDI mass spectrometry Anal. Chem. 77: 350-353.

Li. X., Newberry, C., Saha, I., Nikolaou, P., Whiting, N., & **Goodson, B.M.** (2005) Interactions between xenon and phospholipid bicelles studied by ²H/¹²⁹Xe/¹³¹Xe NMR and optical pumping of nuclear spins Chem. Phys. Lett. 419: 233-239.

Liao, Y.T., **Zang, L.**, & Akins, D.L. (2005) Catalytic reduction of methyl viologen by sulfide Ion within MCM-41. Catalysis Comm. 6: 141-145.

Liu, S. & **Davis, J.M.** (2005) Verification of statistical-overlap theory in micellar electrokinetic chromatography Anal. Bioanal. Chem 382: 765-776.

Robinson, P.D., Li, C., Wolf, J.R. & **Dyer, D.J.** (2005) 1-[4-(Hexyloxy)phenyl]pyridin-4(1H)-one monohydrate. Acta Cryst. E E61: o1254-o1256.

Siwy, Z., Trofin. L., **Kohli, P.**, Baker. L.L., Trautmann, C. & Martin, C.R. (2005) Protein biosensors based on biofunctionalized conical gold nanotubes. J. Am. Chem. Soc. 127: 5000-5001.

Song, C., **Ge, Q.**, & **Wang, L.** (2005) DFT studies of Pt/Au bimetallic clusters and their interactions with CO molecule. J. Phys. Chem. B 109: 22341-22350.

Stevens, P.O., Fan, J., Gardimalla, H.M.R., Yen, M., & **Gao, Y.** (2005) Superparamagnetic nanoparticle-supported catalysis of Suzuki cross-coupling reactions Organic Lett. 7: 2085-2088.

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Williamson, Y., & **Davis, J.M.** (2005) Modeling of anti-Langmuirian peaks In micellar electrokinetic chromatography: benzene and naphthalene. Electrophoresis 26: 4026-4042.

Xu, B., Xiao, X., Yang, X., Zang, L., & Tao, N. (2005) Large gate modulation In the current of a room temperature Single molecule transistor. J. Am. Chem. Soc. 127: 2386-2387.

Xu, Y. & **McCarroll, M.E.** (2005) Fluorescence anisotropy as a method to examine thermodynamics of enantioselectivity J. Phys. Chem. B 109: 8144-8152.

