

Adair, B., S. Natarajan and A.K. Cheetham, "Synthesis and structural characterization of a novel tin(II) phosphonate, Sn₂(O₃PCH₃)(C₂O₄)", *J. Mater. Chem.*, Vol. 8, pg. 1477 (1998)

Agger, J.R., N. Pervaiz, A. K. Cheetham and M. W. Anderson, "Crystallization in zeolite A studied by atomic force microscopy", *J. Amer. Chem. Soc.*, Vol. 120, pg. 10754 (1998)

Albert, B.R., A.K. Cheetham and C.J. Adams, "Investigations on P zeolites: Synthesis and structure of the gismondine analogue, high crystalline low-silica CaP", *Microporous and Mesoporous Materials*, Vol. 21, pg. 127 (1998)

Albert, B.R., A.K. Cheetham, J.A. Stuart and C.J. Adams, "Investigations of P zeolites: Synthesis, characterisation, and structure of highly crystalline low-silica NaP", *Microporous and Mesoporous Materials*, Vol. 21, pg. 133 (1998)

Aleshin, A.N., S.R. Williams and A.J. Heeger, "Transport properties of poly (3,4-ethylenedioxythiophene)/poly(styrenesulfonate)", *Synthetic Metals*, Vol. 94, pg. 173 (1998)

Arulraj, A., A. Biswas, A.K. Raychaudhuri, C.N.R. Rao, P.M. Woodward, T. Vogt, D.E. Cox and A.K. Cheetham, "Reentrant transition from an incipient charge-ordered state to a ferromagnetic metallic state in a rare earth manganate", *Phys. Rev. B.*, Vol. 57, pg. 8115 (1998)

Ayyappan, S., A.K. Cheetham, S. Natarajan and C.N.R. Rao, "Tin (II) oxalates synthesized in the presence of structure-directing organic amines: members of a potentially vast class of new open-framework and related materials", *Chemistry of Materials*, Vol. 10, pg. 3746 (1998)

Ayyappan, S., X. Bu, A.K. Cheetham, S. Natarajan and C.N.R. Rao, "A simple ladder tin phosphate and its layered relative", *Chem. Commun.*, Vol. 20, pg. 2181 (1998)

Ayyappan, S., X. Bu, A.K. Cheetham and C.N.R. Rao, "An investigation of both enantiomorphs of a chiral open-framework Tin(II) phosphate, [CN₃H₆][Sn₄P₃O₁₂] (GUAN-SnPO), synthesized from an achiral template", *Chem. Mater.*, Vol. 10, pg. 3308 (1998)

Ayyappan, S., A.K. Cheetham, S. Natarajan and C.N.R. Rao, "A novel monomeric Tin(II) phosphate, [N(C₂H₅NH₃)₃]³⁺ [Sn(PO₄)(HPO₄)₃]⁻ · 4H₂O, connected through hydrogen bonding", *J. of Solid State Chemistry*, Vol. 139, pg. 207 (1998)

Belcher, A.M., P.K. Hansma, G.D. Stucky and D.E. Morse, "First steps in harnessing the potential of biomineralization as a route to new high-performance composite materials", *Acta Mater.*, Vol. 46, pg. 733 (1998)

Bu, X., P. Feng, T.E. Gier and G.D. Stucky, "Synthesis and crystal structure of Feldspar analogs in berylliosilicate and aluminum cobalt phosphate systems", *Microporous and Mesoporous Materials*, Vol. 23, pg. 323 (1998)

Bu, X., P. Feng, T.E. Gier, D. Zhao and G.D. Stucky, "Hydrothermal synthesis and structural characterization of zeolite-type structures based on gallium and aluminum germanates", *J. Amer. Chem. Soc.*, (in press) (1998)

Bu, X., T.E. Gier, P. Feng and G. D. Stucky, "Cobalt phosphate based zeolite structures with the Edingtonite framework topology", *Chem. Mater.*, Vol. 10, pg. 2546 (1998)

Bull, L.M., A.K. Cheetham, T. Anupold, A. Reinhold, A. Samoson, J. Sauer, B. Bussemer, Y. Lee, S. Gan, J. Shore, A. Pines and R. Dupree, "A high resolution ^{17}O NMR study of siliceous zeolite faujasite", *J. Amer. Chem. Soc.*, Vol. 120, pg. 3510 (1998)

Campbell, B.J., G. Bellussi, L. Carluccio, G. Perego, A.K. Cheetham, D.E. Cox and R. Millini, "The synthesis of the new zeolite, ERS-7, and the determination of its structure by simulated annealing and synchrotron X-ray powder diffraction", *Chem. Commun.*, Vol. 16, pg. 1725 (1998)

Campbell, S.E., C.K. Park, D.D. Lasic and J.N. Israelachvili, "Structure and forces in transfection related surfactant systems", *MRS Proceedings of 1997 Symposium on "Materials Science of the Cell"*, (in press) (1998)

Chien, A. T., L. Zhao, M. Colic, J. S. Speck, and F. F. Lange, "Microstructural development of BaTiO₃ heteroepitaxial thin films by hydrothermal synthesis", *J. Mat. Res.*, Vol. 13, pg. 649 (1998)

Deming, T.J., "Amino Acid Derived Nickelacycles: Intermediates in Nickel Mediated Polypeptide Synthesis", *J. Am. Chem. Soc.*, Vol. 120, pg. 4240 (1998)

Derry, B.W., L. Wilson, and M. Jordan, "The low potency of taxol at microtubule minus ends: Implications for its anti-miotic and therapeutic mechanism", *Cancer Res.*, Vol. 58, pg. 1177 (1998)

Falk, M.L. and J.S. Langer, "Dynamics of viscoplastic deformation in amorphous solids," *Phys. Rev. E*, Vol. 57, pg. 7192 (1998)

Favre, D.E., D.J. Schaefer, S.M. Auerbach and B.F. Chmelka, "Direct measurement of intercage hopping in strongly adsorbing guest-zeolite systems", *Phys. Rev. Lett.*, Vol. 81, pg. 5852 (1998)

Favre, D.E., D.J. Schaefer and B.F. Chmelka, "Direct determination of motional correlation times by 1D MAS and 2D exchange NMR techniques", *Journal of Magnetic Resonance*, Vol. 134, pg. 261 (1998)

Feng, P., X. Bu, T.E. Gier and G.D. Stucky, "Amine-directed syntheses and crystal structures of phosphate-based zeolite analogs", *Microporous and Mesoporous Materials*, Vol. 23, pg. 221 (1998)

Feng, P., X. Bu, and G.D. Stucky, "Amine-templated syntheses and crystal structures of zeolite rho analogs", *Microporous and Mesoporous Materials*, Vol. 23, pg. 315 (1998)

Fredrickson, G.H. and F.S. Bates, "Stabilizing co-continuous polymer blend morphologies with ABC block copolymers," *Euro. Phys. J. B*, Vol. 1, pg. 71 (1998)

Frischknecht, A., "Stability of cylindrical domains in phase-separating binary fluids in shear flow", *Phys. Rev. E*, Vol. 58, pg. 3495 (1998)

Gier, T.E., X. Bu, P. Feng and G.D. Stucky, "Synthesis and organization of zeolite-like materials with three-dimensional helical pores", *Nature*, Vol. 395, pg. 154 (1998)

Goveas, J.L. and G.H. Fredrickson, "Apparent slip at a polymer-polymer interface," *Euro. Phys. J. B*, Vol. 2, pg. 79 (1998)

Gungor, M.R. and D. Maroudas, "Electromigration-induced failure of metallic thin films due to transgranular void propagation," *App. Phys. Lett.*, Vol. 72, pg. 3452 (1998)

Gungor, M.R. and D. Maroudas, "Non-linear analysis of the morphological evolution of void surfaces in metallic thin films under surface electromigration conditions," *Surface Science*, Vol 415, pg. L1055 (1998)

Henson, N.J., A.K. Cheetham, M. Stockenhuber, and J.A. Lercher, "Modeling aromatics in siliceous zeolites: A new forcefield from thermochemical studies," *J. Chem. Soc., Faraday Trans.*, Vol. 94, pg. 3759 (1998)

Hu, Y., P. Boltenhagen and D.J. Pine, "Shear-thickening in low-concentration solutions of worm-like micelles I: Direct visualization of transient behavior and phase transitions", *Journal of Rheology*, Vol. 42, pg. 1185 (1998)

Hu, Y., P. Boltenhagen, E. Mattheis and D.J. Pine, "Shear-thickening in low-concentration solutions of worm-like micelles II: Slip, fracture, and stability of the shear-induced phase", *Journal of Rheology*, Vol. 42, pg. 1209 (1998)

Janicke, M., C.C. Landry, D. Kumar, G.D. Stucky, and B.F. Chmelka, "Aluminum incorporation and interfacial structures in MCM-41 mesoporous molecular sieves," *J. Am. Chem. Soc.*, Vol. 120, pg. 6940 (1998)

Keller, S.L., P. Boltenhagen, D.J. Pines and J.A. Zasadzinski, "Direct observation of shear-induced structures in wormlike micellar solutions by freeze-fracture electron microscopy", *Phys. Rev. Lett.*, Vol. 80, pg. 2725 (1998)

Kennedy, M.T., B.A. Korgel, H. Monbouquette and J.A. Zasadzinski, "Cryo-transmission electron micrographs of single size-quantized CdS nanocrystals within vesicles," *Chemistry of Materials*, Vol. 10, pg. 2116 (1998)

Koltover, I., T. Salditt, J.O. Rädler and C. R. Safinya, "An inverted hexagonal phase of DNA-cationic liposome complexes related to DNA release and delivery", *Science*, Vol. 281, pg. 78 (1998)

Koltover, I., T. Salditt, J.-L. Rigaud and C. R. Safinya, "Stacked 2D crystalline sheets of the membrane-protein bacteriorhodopsin: A specular and diffuse reflectivity study", *Phys. Rev. Lett.*, Vol. 81, pg. 2494 (1998)

Koneripalli, N., F.S. Bates, and G.H. Fredrickson, "Fractal hole growth in strained block copolymer films," *Phys. Rev. Lett.*, Vol. 81, pg. 1861 (1998)

Kuhl, T.L., J. Majewski, J.Y. Wong, S. Steinberg, D. E. Leckband, J.N. Israelachvili and G.S. Smith, "A neutron reflectivity study of polymer modified phospholipid monolayers at the solid-solution interface: PEG-lipids on silane modified substrates", *Biophys J.*, Vol. 75, pg. 2352 (1998)

Lakeman, C.D.E., Y. Xia, J.-H. Kim and X. Wu, H. G. Eckert and F. F. Lange, "Epitaxial films of Li_{1-x}Nb_{1-x}W_xO₃ prepared by chemical solution deposition", *J. Mater. Res.*, Vol. 13, pg. 1596 (1998)

Langjahr, P.A., F.F. Lange, T. Wagner, and M. Rühle, "Lattice mismatch accommodation in perovskite films on perovskite substrates", *Acta Materialia*, Vol. 46, pg. 773 (1998)

Li, Y., G.C.L. Wong, E.J. Caine, E.L. Hu and C.R. Safinya, "Structural studies of DNA-cationic lipid complexes confined in lithographically patterned microchannel arrays", *International Journal of Thermophysics*, Vol. 19, pg. 1165 (1998)

Li, Y., G.C.L. Wong, C.R. Safinya, E.J. Caine, E.L. Hu, D. Haeffner, P. Fernandez and W. Yun, "Bragg-Fresnel optics for hard X-ray microscopy: Development of fabrication process and X-ray characterization at the advanced photon source", *Review of Scientific Instruments*, Vol. 69, pg. 2844 (1998)

Majewski, J., T.L. Kuhl, K. Kjaer, M.C. Gerstenberg, J. Als-Nielsen, J.N. Israelachvili, G.S. Smith, "An X-ray synchrotron study of packing and protrusions of polymer lipid monolayers at the air-water interface," *J. Am. Chem. Soc.*, Vol. 120, pg. 1469 (1998)

McGehee, M.D., R. Gupta, S. Veenstra, E.K. Miller, M.A. Diaz-Garcia and A.J. Heeger, "Amplified spontaneous emission from photopumped films of a conjugated polymer", *Phys. Rev. B*, Vol. 58, pg. 7035 (1998)

McNally, F., F.F. Lange and D.B. Marshall, "Processing and harness of single crystal A1203 films containing Nano-Zr-02 inclusions produced by chemical solution deposition", *Phys. Stat. Sol. (a)*, Vol. 166, pg. 231 (1998)

Mellot, C.F., A.K. Cheetham, S. Harms, S. Savitz, R.J. Gorte and A.L. Myers, "Halocarbon adsorption in nanoporous materials; a combined calorimetric and Monte Carlo study of trichloroethylene (TCE) in faujasite-type zeolites", *Langmuir*, Vol. 14, pg. 6728 (1998)

Mellot, C.F., A.K. Cheetham, S. Harms, S. Savitz, R.J. Gorte and A.L. Myers, "On the adsorption of chlorocarbons in zeolites", *J. Amer. Chem. Soc.*, Vol. 120, pg. 5788 (1998)

Mellot, C.F., A.M. Davidson, J. Eckert and A.K. Cheetham, "Adsorption of chloroform in NaY zeolite: A computational and vibrational spectroscopy study", *Journal of Physical Chemistry B*, Vol. 102, pg. 2530 (1998)

Menon, R., C.O. Yoon, D. Moses, A.J. Heeger, "Metal-insulator transition in doped conducting polymers," *Handbook of Conducting Polymers*, T.A. Skotheim and R. Elsenbaumer, eds., pg. 27, Marcel Dekker, Inc., Publ. (1998).

Morey, M.S., A. Davidson and G.D. Stucky, "Silica-based, cubic mesostructures: Synthesis, characterization, and relevance for catalysis", *J. Porous Materials*, Vol. 5, pg. 195 (1998)

Natarajan, S., S. Ayyappan, A.K. Cheetham and C.N.R. Rao, "Novel open-framework tin (II) phosphate materials containing Sn-O-Sn linkages and three-coordinated oxygens", *Chem. Mater.*, Vol. 10, pg. 1627 (1998)

Natarajan, S. and A. K. Cheetham, "Synthesis and structural characterization of a layered tin (II) phosphate, $[Sn_2(PO_4)_2][C_2N_2H_{10}]_2 + H_2O$ ", *J. Solid State Chem.*, Vol. 140, pg. 435 (1998)

Natarajan, S., M. Eswaramoorthy, A.K. Cheetham and C.N.R. Rao, "A three dimensional open-framework tin(II) phosphate exhibiting reversible hydration and ion-exchange properties", *J. Chem. Soc. Chem. Comm.*, pg. 1561 (1998)

Oglesby, D., R. Archuleta, and S. Nielsen, "Earthquakes on dipping faults: The effects of broken symmetry," *Science*, Vol. 280, pg. 1055 (1998)

Pincus, P. and S.A. Safran, "Charge fluctuations and membrane attractions", *Europhys. Lett.*, Vol. 42, 103 (1998)

Rao, C.N.R., A. Arulraj, P.N. Santosh and A.K. Cheetham, "Charge ordering in manganates", *Chemistry of Materials*, Vol. 10, pg. 2714 (1998)

Rädler, J.O., I. Koltover, T. Salditt, A. Jamieson and C.R. Safinya, "Structure and interfacial aspects of self-assembled cationic lipid-DNA gene carrier complexes", *Langmuir*, Vol. 14, pg. 4272 (1998)

Romanov, A.E., M.J. Lefevre, J.S. Speck, W. Pompe, S.K. Streiffer, C.M. Foster, "Domain pattern formation in epitaxial rhombohedral ferroelectric films, II. Interfacial defects and energetics," *J. of Appl. Phys.*, Vol. 83, pg. 1 (1998)

Safinya, C.R., I. Koltover and J.O. Rädler, "DNA at membrane surfaces: An experimental overview", *Current Opinion in Colloid & Interface Science*, Vol. 3, pg. 69 (1998)

Salditt, T., I. Koltover, J.O. Rädler and C.R. Safinya, "Self-assembled DNA-cationic lipid complexes: Two-dimensional smectic ordering, correlations, and interactions", *Phys. Rev. E*, Vol. 58, pg. 889 (1998)

Schiessel, H., "Bending of charged flexible membranes due to the presence of macroions", *Europhys. J. B*, Vol. 6, pg. 373 (1998)

Schmitt, F-J., C. Park, J. Simon, H. Ringsdorf, J. Israelachvili, "Direct surface force and contact angle measurements of an adsorbed polymer with a lower critical solution temperature," *Langmuir*, Vol. 14, pg. 2838 (1998)

Sen, R., B.C. Satishkumar, A. Govindaraj, K.R. Karikumar, G. Raini, J-P. Zhang, A.K. Cheetham and C.N.R. Rao, "B-C-N, C-N and B-N nanotubes produced by the pyrolysis of precursor molecules over Co catalysts", *Chem. Phys. Lett.*, Vol. 287, pg. 671 (1998)

Shimizu, K., J. Cha, G.D. Stucky and D.E. Morse, "Silicatein a: Cathepsin L-like protein in sponge biosilicate," *Proc. Natl. Acad. Sci.*, Vol. 95, pg. 6234 (1998)

Slack, N.L., P. Eiselt, M. Schellhorn, M.A. Chibbaro, U. Schulze, H.E. Warriner, P. Davidson, H.-W. Schmidt, and C.R. Safinya, "Synthesis and phase behavior of new amphiphilic PEG-based block copolymers as gelling agents for lamellar liquid crystalline phases," *Macromolecules*, Vol. 31, pg. 8503 (1998)

Streiffer, S.K., C.B. Parker, A.E. Romanov, M.J. Lefevre, L. Zhao, J.S. Speck, W. Pompe, C.M. Foster and G.R. Bai, "Domain patterns in epitaxial rhombohedral ferroelectric films, I. Geometry and experiments," *J. Appl. Phys.*, Vol. 83, pg. 1 (1998)

Stucky, G.D., D. Zhao, P. Yang, W. Lukens, N. Melosh and B.F. Chmelka, "Using the organic-inorganic interface to define pore structure and macroscale structure", *Proceedings of the International Symposium on Mesoporous Molecular Sieves*, Elsevier Science, S. Kaliaguine, ed., Vol. 117, pg. 1 (1998)

Terrones, M., N. Grobert, J.P. Zhang, H. Terrones, J. Olivares, W.K. Hsu, J.P. Hare, A.K. Cheetham, H.W. Kroto and D.R.M. Walton, "Preparation of aligned carbon nanotubes catalysed by laser-etched cobalt thin films", *Chem. Phys. Lett.*, Vol. 285, pg. 299 (1998)

Warriner, H.E., S.L. Keller, S.H.J. Idziak, N.L. Slack, P. Davidson, J.A. Zasadzinski and C.R. Safinya, "The influence of polymer molecular weight in lamellar gels based on PEG-Lipids", *Biophysical Journal*, Vol. 75, pg. 272 (1998)

Weigel, S.J., R.E. Morris, A.K. Cheetham and G.D. Stucky, "Synthesis and crystal structure of a gallium phosphate with 14-ring channels", *J. Mater. Chem.*, Vol. 8, pg. 1607 (1998)

Wong, G.C.L., Y. Li, I. Koltover, C.R. Safinya, Z. Cai and W. Yun, "Mesoscopic structure of DNA-membrane self assemblies: Microdiffraction and manipulation on lithographic substrates", *Applied Physics Letters*, Vol. 73, pg. 2042 (1998)

Woodward, P.M., T. Vogt, D.E. Cox, A. Arulraj, C.N.R. Rao, P. Karen and A.K. Cheetham, "The influence of cation size on the structural features of Ln_{1/2}A_{1/2}MnO₃ perovskites at room temperature", *Chemistry of Materials*, Vol. 10, pg. 3652 (1998)

Woodward, P.M., T. Vogt, D.E. Cox, C.N.R. Rao and A.K. Cheetham, "Phase separation in (Nd_{1/2}Sr_{1/2})_{0.95}MnO₃", *Chemistry of Materials*, (in press) (1998)

Xu, X., E. Schneider, C. Zaremba, G.D. Stucky and F. Wudl, "Modification of the semitransparent prunus serrula bark film: Making rubber out of bark", *Chem. Mater.*, Vol. 10, pg. 3523 (1998)

Yaman, K., C. Jeppesen, and C.M. Marques, "Depletion forces between two spheres in a rod solution", *Europhys. Lett.*, Vol. 42, 221 (1998)

Yang, C.Y., F. Hide, M.A. Diaz-Garcia, A.J. Heeger and Y. Cao, "Microstructure of thin films of photoluminescent semiconducting polymers," *Polymer*, Vol. 39, pg. 2299 (1998)

Yang, P., T. Deng, D. Zhao, P. Feng, D.J. Pine, B.F. Chmelka, G.M. Whitesides and G.D. Stucky, "Hierarchically ordered oxides", *Science*, (in press) (1998)

Yang, P., D. Zhao, B.F. Chmelka and G.D. Stucky "Triblock copolymer-directed syntheses of large-pore mesoporous silica fibers", *Chem. Mater.*, Vol. 10, pg. 2033 (1998)

Yang, P., D. Zhao, D.I. Margolese, B.F. Chmelka and G.D. Stucky, "Generalized block copolymer syntheses of large-pore mesoporous metal oxides with semicrystalline frameworks", *Nature*, Vol. 396, pg. 152 (1998)

Zaremba, C.M., D.E. Morse, S. Mann, P.K. Hansma, and G.D. Stucky, "Aragonite-hydroxyapatite conversion in gastropod (abalone) nacre," *Chem. Mater.*, Vol. 10, pg. 3813 (1998)

Zhao, D., J. Feng, Q. Huo, N. Melosh, G.H. Fredrickson, B.F. Chmelka, and G.D. Stucky, "Triblock copolymer syntheses of mesoporous silica with periodic 50 to 300 Å pores," *Science*, Vol. 279, pg. 548 (1998)

Zhao, D., P. Yang, Q. Huo, B. F. Chmelka, and G. D. Stucky, "Topological Construction of Mesoporous Materials", *Current Opinion in Solid State and Materials Science*, Vol. 3, pg. 111 (1998)

Zhao, D., Q. Huo, J. Feng, B.F. Chmelka and G.D. Stucky, "Nonionic triblock and star diblock copolymer and oligomeric surfactant syntheses of highly ordered, hydrothermally stable, mesoporous silica structures", *J. Am. Chem. Soc.*, Vol. 120, pg. 6024 (1998)

Zhao, D., P. Yang, N. Melosh, J. Feng, B.F. Chmelka and G.D. Stucky, "Continuous mesoporous silica films with highly ordered large pore structures", *Advanced Materials*, Vol. 10, pg. 1380 (1998)