

**List of preprints**

1. **03MA5002:** MADSEN A., ALS-NIELSEN J., GRUEBEL G., "On the viscosity of a liquid crystal near the Nematic-Smectic A phase transition", Physical Review Letters, (Accepted in 2003).
2. **03MO5006:** MOCELLA V., GUIGAY J.P., HRDY J., FERRERO C., HOSZOWSKA J., "Dynamical focusing of a polychromatic incident beam with bent crystals in laue geometry", Proceedings SPIE **5195** (Accepted in 2003).
3. **03SZ5008:** SZCZERBOWSKA-BORUCHOWSKA M., LANKOSZ M., OSTACHOWICZ J., ADAMEK D., KRYGOWSKA-WAJS A., TOMIK B., SZCZUDLIK A., SIMIONOVICI A., BOHIC S., "Topographic and quantitative microanalysis of human central nervous system tissue using synchrotron radiation", X-Ray Spectrometry **32** (Accepted in 2003).
4. **03PR5009:** PRIME M.B., SEBRING R.J., EDWARDS J.M., HUGHES D.J., WEBSTER P.J., "Laser surface-contouring and spline data-smoothing for residual stress measurement", Experimental Mechanics (in press).
5. **03RE5010:** REVESZ A., HEUNEN G., VARGA L.K., SURINACH S., BARO M.D., "Real time synchrotron studies on amorphous  $Al_{85}Ce_5Ni_8Co_2$  and  $Al_{85}Y_5Ni_8Co_2$  alloys", Journal of Alloys and Compounds (in press).
6. **03WE5011:** WEBSTER P.J., HUGHES D.J., MALARD B., SITEPU H., RATEL N., DALE A.M., "FaME38: A new approach to materials science at the ILL-ESRF", Physica B (to be published).
7. **03HU5012:** HUGHES D.J., WEBSTER P.J., MALARD B., RATEL N., SITEPU H., DALE A., "FaME38: A new approach to materials engineering at the ILL", Journal of Neutron Research (to be published).
8. **03HU5013:** HUGHES D.J., JAMES M.N., HATTINGH D.G., WEBSTER P.J., "The use of combs for evaluation of strain-free references for residual strain measurements by neutron and synchrotron X-ray diffraction", Journal of Neutron Research (to be published).
9. **03JA5014:** JAMES M.N., HATTINGH D.G., HUGHES D.J., WEI L.W., PATTERSON E.A., FONSECA J., "Synchrotron diffraction investigation of the distribution and influence of residual stresses in fatigue", Fatigue and Fracture of Engineering Materials and Structures (submitted).
10. **03JA5015:** JAMES M.N., HUGHES D.J., HATTINGH D.G., BRADLEY G.R., MILLS G., WEBSTER P.J., "Synchrotron measurements of residual stresses in friction stir welded 5383-H321 aluminium butt joints and their modification by fatigue cycling", Fatigue and Fracture of Engineering Materials and Structures (submitted).
11. **03AU5016:** AUSILI P., PISANI M., FINET S., AMENITSCH H., FERRERO C., MARIANI P., "Pressure effects on columnar lyotropics: Anisotropic compressibilities in guanosine mono-phosphate four-stranded helices", Journal of Physical Chemistry (to be published).
12. **03FR5017:** FRANCESCANGELI O., FERRERO C., STANIC V., LUCCHETTI L., BURGHAMMER M., "X-ray microdiffraction study of the liquid crystal ordering in confined geometries", Molecular Crystals and Liquid Crystals (to be published).
13. **03DE5018:** DE FELICI M., FELICI R., SANCHEZ DEL RIO M., DILMANIAN A., FERRERO C., "Monte Carlo study of a MOSFET detector response applied to X-ray microbeam radiation therapy", "8th International Conference on ICATPP-8", Villa Erba, Como, Italy, 2003-10-6/10 (accepted)
14. **03MC5019:** MCMANUS J.J., RAEDLER J.O., DAWSON K.A., "Phase behavior of DPPC in a DNA-calcium-zwitterionic lipid complex studied by a small-angle X-ray scattering", Langmuir (accepted).