

List of publications

Urs Staub

21.12.2016 5 most important publications with red titles, No. 109, 146, 176, 198, 201

2016

220. **FERROMAGNETIC AND ANTIFERROMAGNETIC ORDERS OF A PHASE-SEPARATED MANGANITE PROBED THROUGH OUT THE B-T PHASE DIAGRAM**
Y. W. Windsor, Yoshikazu Tanaka, V. Scagnoli, M. Garganourakis, R. A. de Souza, M. Medarde, S.-W. Cheong, and, *U. Staub*, *Phys. Rev. B* **94**, 214412 (2016).
219. **MAGNETIC DIFFUSE SCATTERING IN ARTIFICIAL KAGOME SPIN ICE**
O. Sendetskyi, L. Anghinolfi, V. Scagnoli, G. Möller, N. Leo, A. Alberca, J. Kohlbrecher, J. Lüning, *U. Staub*, and L. J. Heyderman, *Phys. Rev. B* **93**, 224413 (2016).
218. **ITINERANT AND LOCALIZED MAGNETIZATION DYNAMICS IN ANTIFERROMAGNETIC Ho**
L. Rettig, C. Dornes, N. Thielemann-Kühn, N. Pontius, H. Zabel, D. L. Schlagel, T. A. Lograsso, M. Chollet, A. Robert, M. Sikorski, S. Song, J. M. Glowina, C. Schüßler-Langeheine, S. L. Johnson, and *U. Staub*, *Phys. Rev. Lett.* **116**, 257202 (2016).
217. **QUASISTATIC MAGNETOELECTRIC MULTIPOLES AS ORDER PARAMETER FOR PSEUDOGAP PHASE IN CUPRATE SUPERCONDUCTORS**
M. Fechner, M. J. A. Fierz, F. Thöle, *U. Staub*, and N. A. Spaldin, *Phys. Rev. B* **93**, 174419 (2016).
216. **ULTRAFAST STRUCTURAL DYNAMICS OF THE ORTHORHOMBIC DISTORTION IN THE FE-PNICTIDE PARENT COMPOUND BaFe₂As₂**
L. Rettig, S. O. Mariager, A. Ferrer, S. Grübel, J. A. Johnson, J. Rittmann, T. Wolf, S. L. Johnson, G. Ingold, P. Beaud, and *U. Staub*, *Struc. Dyn.* **3**, 023611 (2016).
215. **MULTIFERROIC PROPERTIES OF UNIAXIALLY COMPRESSED ORTHORHOMBIC HoMnO₃ THIN FILMS**
K. Shimamoto, Y. W. Windsor, Y. Hu, M. Ramakrishnan, A. Alberca, E. M. Bothschafter, L. Rettig, Th. Lippert, *U. Staub*, and C. W. Schneider, *Appl. Phys. Lett.* **108**, 112904 (2016)

2015

214. **MAGNETIC ORDER DYNAMICS IN OPTICALLY EXCITED MULTIFERROIC TbMnO₃**
J. A. Johnson, T. Kubacka, M. C. Hoffmann, C. Vicario, S. de Jong, P. Beaud, S. Grübel, S.-W. Huang, L. Huber, Y. W. Windsor, E. M. Bothschafter, L. Rettig, M. Ramakrishnan, A. Alberca, L. Patthey, Y.-D. Chuang, J. J. Turner, G. L. Dakovski, W.-S. Lee, M. P. Minitti, W. Schlotter, R. G. Moore, C. P. Hauri, S. M. Koohpayeh, V. Scagnoli, G. Ingold, S. L. Johnson, and *U. Staub*, *Phys. Rev. B*, **92**, 184429 (2015).
213. **MAGNETOELECTRONICS—ELECTRIC FIELD CONTROL OF MAGNETISM IN THE SOLID STATE**
C. A. F. Vaz and *U. Staub*, *J. Phys. Condensed Matt.*, **27** 500301 (2015).

212. **ELEMENT-SPECIFIC MAGNETIZATION REDISTRIBUTION AT $\text{YBa}_2\text{Cu}_3\text{O}_7/\text{La}_{2/3}\text{Ca}_{1/3}\text{MnO}_3$ INTERFACES**
A. Alberca, M. A. Uribe-Laverde, Y. W. Windsor, M. Ramakrishnan, L. Rettig, I. Marozau, J.-M. Tonnerre, J. Stahn, *U. Staub*, and C. Bernhard, *Phys. Rev. B*, **92**, 174415 (2015).
211. **COHERENT ACOUSTIC PERTURBATION OF SECOND-HARMONIC-GENERATION IN NiO**
L. Huber, A. Ferrer, T. Kubacka, T. Huber, C. Dornes, T. Sato, K. Ogawa, K. Tono, T. Katayama, Y. Inubushi, M. Yabashi, Yoshikazu Tanaka, P. Beaud, M. Fiebig, V. Scagnoli, *U. Staub*, and S. L. Johnson, *Phys. Rev. B*, **92**, 094304 (2015).
210. **EMITTING ELECTRONS THROUGH PHONONS**
Valerio Sagnoli and *Urs Staub*, *News and Views, Nature Mater.* **14**, 859 (2015).
209. **INTERFACIAL PROPERTIES OF $\text{LaMnO}_3/\text{LaNiO}_3$ SUPERLATTICES GROWN ALONG (001) AND (111) ORIENTATIONS**
C. Piamonteze, M. Gibert, J. Heidler, J. Dreiser, S. Rusponi, H. Brune, J.-M. Triscone, F. Nolting, and *U. Staub*, *Phys. Rev. B* **92**, 014426 (2015).
208. **FERRO-TYPE ORDER OF MAGNETO-ELECTRIC QUADRUPOLES AS AN ORDER-PARAMETER FOR THE PSEUDO-GAP PHASE OF A CUPRATE SUPERCONDUCTOR**
S. W. Lovesey, D. D. Khalyavin, and *U. Staub*, *J. Phys. Condens. Matter (fast track)* **27**, 292201 (2015).
207. **INTERPLAY BETWEEN MAGNETIC ORDER AT Mn AND Tm SITES ALONGSIDE THE STRUCTURAL DISTORTION IN MULTIFERROIC FILMS OF $\alpha\text{-TmMnO}_3$**
Y. W. Windsor, M. Ramakrishnan, L. Rettig, A. Alberca, E. M. Bothschafter, and *U. Staub*, K. Shimamoto, Y. Hu, T. Lippert, and C. W. Schneider, *Phys. Rev. B* **91**, 235144 (2015).
206. **FERMI SURFACE OF THREE-DIMENSIONAL $\text{La}_{1-x}\text{Sr}_x\text{MnO}_3$ EXPLORED BY SOFT-X-RAY ARPES: RHOMBOHEDRAL LATTICE DISTORTION AND ITS EFFECT ON MAGNETORESISTANCE**
L. L. Lev, J. Krempaský, *U. Staub*, V. A. Rogalev, T. Schmitt, M. Shi, P. Blaha, A. S. Mishchenko, A. A. Veligzhanin, Y. V. Zubavichus, M. B. Tsetlin, H. Volfová, J. Braun, J. Minár, and V. N. Strocov, *Phys. Rev. Lett.* **114**, 237601 (2015).
205. **COMBINING THz LASER EXCITATION WITH RESONANT SOFT X-RAY SCATTERING AT THE LINAC COHERENT LIGHT SOURCE**
J. J. Turner, G. L. Dakovski, M. Hoffmann, H. Y. Hwang, A. Zarem, W. Schlotter, S. Moeller, M. Minitti, *U. Staub*, S. Johnson, A. Mitra, M. Swiggers, P. Noonan, I. Curiel and M. Holmes, *J. Synchrotron Rad.* **22**, 621 (2015).
204. **NONLINEAR DELAYED SYMMETRY BREAKING IN A SOLID EXCITED BY HARD X-RAY FEL PULSES**
A. Ferrer, J. A. Johnson, T. Huber, S. O. Mariager, M. Trant, S. Grübel, D. Zhu, M. Chollet, J. Robinson, H. T. Lemke, G. Ingold, C. Milne, *U. Staub*, P. Beaud, and S. L. Johnson, *Appl. Phys. Lett.* **106**, 154101 (2015).
203. **ULTRAFAST STRUCTURAL DYNAMICS OF THE Fe-PNICTIDE PARENT COMPOUND**

BaFe₂As₂

L. Rettig, S. O. Mariager, A. Ferrer, S. Grübel, J. A. Johnson, J. Rittmann, T. Wolf, S. L. Johnson, G. Ingold, P. Beaud, and *U. Staub*, Phys. Rev. Lett. **114**, 067402 (2015).

2014

202. **MULTIFERROIC PROPERTIES OF α -LuMnO₃ CONTROLLED BY B-AXIS STRAIN**

Y. W. Windsor, S. W. Huang, Y. Hu, L. Rettig, A. Alberca, K. Shimamoto, V. Scagnoli T. Lippert, C. W. Schneider, and *U. Staub*, Phys. Rev. Lett. **113**, 167202 (2014).

201. **A TIME-DEPENDENT ORDER PARAMETER FOR ULTRAFAST PHOTO-INDUCED PHASE TRANSITIONS**

P. Beaud, A. Caviezel, S. O. Mariager, L. Rettig, G. Ingold, C. Dornes, S-W. Huang, J. A. Johnson, M. Radovic, T. Huber, T. Kubacka, A. Ferrer, H. T. Lemke, M. Chollet, D. Zhu, J. M. Glownia, M. Sikorski, A. Robert, H. Wadati, M. Nakamura, M. Kawasaki, Y. Tokura, S. L. Johnson, and *U. Staub*, Nature Mater. **13**, 923 (2014).

200. **ORBITAL CORRELATIONS AND DIMENSIONAL CROSSOVER IN EPITAXIAL Pr_{0.5}Ca_{0.5}MnO₃/La_{0.5}Sr_{0.5}MnO₃ SUPERLATTICES**

H. Wadati, J. Okamoto, M. Garganourakis, V. Scagnoli, *U. Staub*, E. Sakai, H. Kumigashira, T. Sugiyama, E. Ikenaga, M. Nakamura, M. Kawasaki and Y. Tokura, N. J. Phys. **16**, 073044 (2014).

199. **PERSISTENCE OF MAGNETIC ORDER IN A HIGHLY EXCITED Cu²⁺ STATE IN CuO**

U. Staub, R. A. de Souza, P. Beaud, E. Möhr-Vorobeve, G. Ingold, A. Caviezel, V. Scagnoli, B. Delley, M. P. Minitti, W. F. Schlotter, J. J. Turner, O. Krupin, W.-S. Lee, Y.-D. Chuang, L. Patthey, R. G. Moore, D. Lu, M. Yi, P. S. Kirchmann, M. Trigo, P. Denes, D. Doering, Z. Hussain, Z.-X. Shen, D. Prabhakaran, A. T. Boothroyd, and S. L. Johnson Phys. Rev. B **89**, 220401(R) (2014).

198. **LARGE AMPLITUDE SPIN DYNAMICS DRIVEN BY A THz PULSE IN RESONANCE WITH AN ELECTROMAGNON**

T. Kubacka, J.A. Johnson, M.C. Hoffmann, C. Vicario, S. de Jong, P. Beaud, S. Grübel, S-W. Huang, L. Huber, L. Patthey, Y-D. Chuang, J.J. Turner, G.L. Dakovski, W-S. Lee, M.P. Minitti, W. Schlotter, R.G. Moore, C.P. Hauri, S.M. Koohpayeh, V. Scagnoli, G. Ingold, S.L. Johnson and *U. Staub*, Science **343**,1333 (2014).

2013

197. **CHIRAL PROPERTIES OF HEMATITE α -Fe₂O₃ INFERRED FROM RESONANT BRAGG DIFFRACTION USING CIRCULARLY POLARIZED X - RAYS**

A. Rodríguez-Fernández, J. A. Blanco, S. W. Lovesey, V. Scagnoli, *U. Staub*, H. C. Walker, D. K. Shukla, and J. Stremper, Phys. Rev B **88**, 094437 (2013).

196. **DZYALOSHINSKY-MORIYA DRIVEN HELICAL-BUTTERFLY STRUCTURE IN Ba₃NbFe₃Si₂O₁₄**

V. Scagnoli, S. W. Huang, M. Garganourakis, R. A. de Souza, and *U. Staub*, V. Simonet, P. Lejay, and R. Ballou, Phys. Rev B **88**, 104417 (2013).

195. **ARTIFICIAL MULTIFERROIC HETEROSTRUCTURES**
 Carlos Antonio Fernandes Vaz and *Urs Staub*, Journal of Materials Chemistry C, (highlight) J. Mater. Chem. C **1**, 6731 (2013).
194. **MELTING OF CHIRAL ORDER IN TERBIUM MANGANATE (TbMnO₃) OBSERVED WITH RESONANT X-RAY BRAGG DIFFRACTION**
 S. W. Lovesey, V. Scagnoli, M. Garganourakis, S. M. Koohpayed, C. Detlefs and *U. Staub*, J. Phys. Cond. Matter, (fast track) **25**, 362202 (2013).
193. **IDENTIFICATION OF COHERENT LATTICE MODULATIONS COUPLED TO CHARGE AND ORBITAL ORDER IN A MANGANITE**
 A. Caviezel, S. O. Mariager, S. L. Johnson, E. Möhr-Vorobeva, S. W. Huang, G. Ingold, *U. Staub*, C. J. Milne, S.-W. Cheong, and P. Beaud, Phys. Rev. **B87**, 205104 (2013).
192. **OPTICAL AND X-RAY TIME RESOLVED STUDY OF THE STRUCTURAL TRANSITION IN MIXED VALENCE MANGANITES**
 A. Caviezel, *U. Staub*, S. L. Johnson, S. O. Mariager, G. Ingold, E. Möhr-Vorobeva, M. Garganourakis, S. W. Huang, C. J. Milne, Q. X. Jia, S.-W. Cheong, and P. Beaud, EPJ Web of Conf. **41**, 03002 (2013).
- 2012
191. **FEMTOSECOND DYNAMICS OF THE STRUCTURAL TRANSITION IN MIXED VALENCE MANGANITES**
 A. Caviezel, *U. Staub*, S. L. Johnson, S. O. Mariager, E. Möhr-Vorobeva, G. Ingold, C. J. Milne, M. Garganourakis, V. Scagnoli, S. W. Huang, Q. X. Jia, S.-W. Cheong, and P. Beaud, Phys. Rev. B **86**, 174105 (2012).
190. **IMPRINTING MAGNETIC INFORMATION IN MANGANITES WITH X-RAYS**
 M. Garganourakis, V. Scagnoli, S. W. Huang, H. Wadati, M. Nakamura, V. A. Guzenko, M. Kawasaki, Y. Tokura and *U. Staub*, Phys. Rev. Lett, **109**, 157203 (2012).
189. **MAGNETIC AND ELECTRONIC ORDERINGS IN ORTHORHOMBIC RMnO₃ (R = Tm, Lu) STUDIED BY RESONANT SOFT X-RAY POWDER DIFFRACTION**
 M. Garganourakis, Y. Bodenthin, R. A. de Souza, V. Scagnoli, A. Dönni, M. Tachibana, H. Kitazawa, E. Takayama-Muromachi, and *U. Staub*, Phys. Rev. B **86**, 054425 (2012).
188. **EVOLUTION OF CHARGE ORDER THROUGH THE MAGNETIC PHASE TRANSITION OF LuFe₂O₄**
 M. Bartowiak, A. M. Mulders, V. Scagnoli, *U. Staub*, E. Pomjakushina, and K. Conder, Phys. Rev. B **86**, 035121 (2012).
187. **INHOMOGENEOUS TEMPERATURE DEPENDENCE OF THE MAGNETIZATION IN FCC-Fe ON Cu(001)**
 C. E. ViolBarbosa, H. L. Meyerheim, E. Jal, J.-M. Tonnerre, M. Przybylski, L. M. Sandratskii, F. Yildiz, *U. Staub*, and J. Kirschner, Phys. Rev. B **85**, 184414 (2012).
186. **ACENTRIC MAGNETIC AND OPTICAL PROPERTIES OF CHALCOPYRITE (CuFeS₂)**
 S. W. Lovesey, K. S. Knight, C. Detlefs, S. W. Huang, V. Scagnoli and

U. Staub, J. Phys.; Cond. Matter **24**, 216001 (2012).

185. **FERROMAGNETIC-TYPE ORDER OF ATOMIC MULTIPOLES IN THE POLAR FERRIMAGNETIC GaFeO₃**

U. Staub, C. Piamonteze, M. Garganourakis, S. P. Collins, S. M. Koohpayeh, D. Fort, and S. W. Lovesey, Phys. Rev. B **85**, 144421 (2012).

184. **COMPETING FERRI- AND ANTIFERROMAGNETIC PHASES IN GEOMETRICALLY FRUSTRATED LuFe₂O₄**

J. de Groot, K. Marty, M.D. Lumsden, A.D. Christianson, S.E. Nagler, S. Adiga, W.J.H. Borghols, K. Schmalzl, Z. Yamani, S.R. Bland, R. de Souza, *U. Staub*, W. Schweika, Y. Su, M. Angst, Phys. Rev. Lett. **108**, 037206 (2012).

183. **ORIGIN OF THE LARGE POLARIZATION IN MULTIFERROIC YMnO₃ THIN FILMS REVEALED BY SOFT AND HARD X-RAY DIFFRACTION**

H. Wadati, J. Okamoto, M. Garganourakis, V. Scagnoli, *U. Staub*, Y. Yamasaki, H. Nakao, Y. Murakami, M. Mochizuki, M. Nakamura, M. Kawasaki, Y. Tokura, Phys. Rev. Lett. **108**, 047203 (2012).

182. **FEMTOSECOND DYNAMICS OF THE COLLINEAR-TO-SPIRAL ANTIFERROMAGNETIC PHASE TRANSITION IN CuO**

S. L. Johnson, R. A. de Souza, *U. Staub*, P. Beaud, E. Möhr-Vorobeva, G. Ingold, A. Caviezel, V. Scagnoli, W. F. Schlotter, J. J. Turner, O. Krupin, W.-S. Lee, Y.-D. Chuang, L. Patthey, R. G. Moore, D. Lu, M. Yi, P. S. Kirchmann, M. Trigo, P. Denes, D. Doering, Z. Hussain, Z.-X. Shen, D. Prabhakaran, A. T. Boothroyd, Phys. Rev. Lett. **108**, 037203 (2012).

2011

181. **MAGNETIC STRUCTURE AND ELECTRIC FIELD EFFECTS IN MULTIFERROIC YMn₂O₅**

R. A. de Souza, *U. Staub*, V. Scagnoli, M. Garganourakis, Y. Bodenthin, S.-W. Hunang, M. García-Fernández, S. Ji, S.-H. Lee, S. Park, S.-W. Chuang, Phys. Rev. B **84**, 104416 (2011).

180. **NONTHERMAL MELTING OF A CHARGE DENSITY WAVE IN TiSe₂**

E. Möhr-Vorobeva, S. L. Johnson, P. Beaud, *U. Staub*, R. De Souza, C. Milne, G. Ingold, J. Demsar, H. Schäfer and A. Titov, Phys. Rev. Lett, **107**, 036403 (2011).

179. **ULTRAFAST STRUCTURAL DYNAMICS IN CONDENSED MATTER**

P. Beaud, S. L. Johnson, E. Vorobeva, C. J. Milne, A. Caviezel, S. O. Mariager, R. A. De Souza, *U. Staub* and G. Ingold, Chimia **65**, 308 (2011).

178. **TRIKONTADIPOLE AND HIGH-ORDER DYSPROSIUM MULTIPOLES IN THE ANTIFERROMAGNETIC PHASE OF DyB₂C₂**

A. J. Princep, A. M. Mulders, *U. Staub*, V. Scagnoli, T. Nakamura, A. Kikkawa, S. W. Lovesey and E. Balcar, J. Phys. Cond. Matter **23**, 266002 (2011).

177. **THE ORIGIN OF THE LOW-TEMPERATURE (T_x) PHASE TRANSITION IN BaVS₃**

R. A. de Souza, *U. Staub*, V. Scagnoli, M. Garganourakis, Y. Bodenthin, and H. Berger,

Phys. Rev. B **84**, 014409 (2011).

176. OBSERVATION OF ORBITAL CURRENTS IN CuO

V. Scagnoli, *U. Staub*, Y. Bodenthin, R. A. de Souza, M. Garcia-Fernandez, M. Garganourakis, A. T. Boothroyd, D. Prabhakaran, and S. W. Lovesey, *Science* **332**, 696 (2011).

175. MAGNETIC AND ELECTRONIC PROPERTIES OF RNiO₃ (R=Pr, Nd, Eu, Ho, and Y) PEROVSKITES STUDIED BY RESONANT SOFT X-RAY MAGNETIC POWDER DIFFRACTION.

Y. Bodenthin, *U. Staub*, C. Piamonteze, M. Garcia-Fernandez, M. J. Martinez-Lope, and J. A. Alonso, *J. Phys.: Condens. Matter* **23**, 036002 (2011).

2010

174. SOFT X-RAY RESONANT MAGNETIC REFLECTIVITY STUDIES FOR IN- AND OUT-OF-PLANE MAGNETIZATION PROFILE IN ULTRA THIN FILMS

J-M Tonnerre, N Jaouen, E Bontempi, D Carbone, D Babonneau, M De Santis, H C N Tolentino, S Grenier, S Garaudee and U Staub, *J. Phys.: Conf. Series* **211**, 012015 (2010).

173. DOPING AND TEMPERATURE DEPENDENCE OF Mn 3d STATES IN A-SITE ORDERED MANGANITES

M. García-Fernández, *U. Staub*, Y. Bodenthin, V. Pomjakushin, A. Mirone, J. Fernández-Rodríguez, V. Scagnoli, A. M. Mulders S. M. Lawrence, and E. Pomjakushina, *Phys. Rev. B* **82**, 235108 (2010).

172. MAGNETOELECTRIC EFFECTS STUDIED BY RESONANT X-RAY DIFFRACTION IN FERRIMAGNETIC GaFeO₃

U. Staub, Y. Bodenthin, C. Piamonteze, S. P. Collins, S. Koohpayeh, D. Fort, and S. W. Lovesey, *Phys. Rev. B* **82**, 104411 (2010).

171. MAGNETIC ORDER OF MULTIFERROIC ErMn₂O₅ STUDIED BY RESONANT SOFT X-RAY BRAGG DIFFRACTION

U. Staub, Y. Bodenthin, M. García-Fernández, R. A. de Souza, M. Garganourakis, E.I. Golovenchits, V.A. Sanina, and S. G. Lushnikov, *Phys. Rev. B* **81**, 144401 (2010).

170. ADVANCED RESONANT SOFT X-RAY DIFFRACTION TO STUDY ORDERING PHENOMENA IN MAGNETIC MATERIALS

Urs Staub, *J. Phys.: Conf. Series* **211**, 012003 (2010).

169. CIRCULARLY POLARIZED SOFT X-RAY DIFFRACTION STUDY OF HELICAL MAGNETISM IN HEXAFERRITE

A.M. Mulders, S.M. Lawrence, A.J. Princep, *U. Staub*, Y. Bodenthin, M. Garcia-Fernandez, M. Garganourakis, J. Hester, R. Macquart and C.D. Ling, *Phys. Rev. B* **81** 092405 (2010).

168. THE EFFECT OF CORE-VALENCE INTRA-ATOMIC QUADRUPOLAR INTERACTION IN RESONANT X-RAY SCATTERING AT THE Dy M_{4,5} EDGES IN DyB₂C₂

Javier Fernández-Rodríguez, Alessandro Mirone and Urs Staub, *J. Phys.: Condens. Matter* **22**, 016001 (2010).

2009

167. **DETECTING OXYGEN VACANCIES IN SrTiO₃ BY 3d TRANSITION METAL TRACER-IONS**
B. P. Andreasson, M. Janousch, *U. Staub*, T. Todorova, B. Delley, G. I. Meijer, and E. Pomjakushina, *Phys. Rev. B* **80**, 212103 (2009).
166. **REPLY TO COMMENT 'CALCULATED CHIRAL AND MAGNETO-ELECTRIC DICHROIC SIGNALS FOR COPPER METABORATE (CuB₂O₄) IN AN APPLIED MAGNETIC FIELD'**
Stephen W. Lovesey and Urs Staub, *J. Phys.: Condens. Matter* **21**, 498002 (2009).
165. **ORIGIN OF OXYGEN VACANCIES IN RESISTIVE SWITCHING MEMORY DEVICES**
B. P. Andreasson, M. Janousch, *U. Staub*, G. I. Meijer, A. Ramar, J. Krbanjevic, and R. Schaeublin, *J. Phys.: Conf. Series* **190**, 012074 (2009).
164. **PARITY-AND TIME-ODD ATOMIC MULTIPOLES IN MAGNETOELECTRIC GaFeO₃ AS SEEN VIA SOFT X-RAY BRAGG DIFFRACTION**
U. Staub, Y. Bodenthin, C. Piamonteze, M. García-Fernández, V. Scagnoli, M. Garganourakis, S. Koochpayeh, D. Fort, and S. W. Lovesey, *Phys. Rev. B* **80**, 140410(R) (2009).
163. **ULTRAFAST STRUCTURAL PHASE TRANSITION DRIVEN BY PHOTOINDUCED MELTING OF CHARGE AND ORBITAL ORDER**
P. Beaud, S. L. Johnson, E. Vorobeva, *U. Staub*, R. A. De Souza, C. J. Milne, Q. X. Jia, and G. Ingold, *Phys. Rev. Lett.* **103**, 155702 (2009).
162. **ORBITAL ORDER AT Mn AND O SITES AND ABSENCE OF ZENER POLARON FORMATION IN MANGANITES**
M. García-Fernández, *U. Staub*, Y. Bodenthin, V. Scagnoli, V. Pomjakushin, S. W. Lovesey, A. Mirone, J. Herrero-Martín, C. Piamonteze, and E. Pomjakushina, *Phys. Rev. Lett.* **103**, 097205 (2009).
161. **DIRECT OBSERVATION OF CHARGE ORDER AND AN ORBITAL GLASS STATE IN MULTIFERROIC LuFe₂O₄**
A. M. Mulders, S. M. Shane, *U. Staub*, M. García-Fernández, V. Scagnoli, C. Mazzoli, E. Pomjakushina, and K. Conder, *Phys. Rev. Lett.* **103**, 077602 (2009).
160. **ORBITAL AND MAGNETIC ORDERING IN Pr_{1-x}Ca_xMnO₃ AND Nd_{1-x}Sr_xMnO₃ MANGANITES NEAR HALF DOPING STUDIED BY RESONANT X-RAY POWDER DIFFRACTION**
U. Staub, M. García-Fernández, Y. Bodenthin, V. Scagnoli, R. A. De Souza, M. Garganourakis, E. Pomjakushina, and K. Conder, *Phys. Rev. B* **79**, 224419 (2009).
159. **CALCULATED CHIRAL AND MAGNETO-ELECTRIC DICHROIC SIGNALS FOR COPPER METABORATE (CuB₂O₄) IN AN APPLIED MAGNETIC FIELD**
Stephen W. Lovesey and Urs Staub, *J. Phys.: Condens. Matter* **21**, 142201 (2009).

158. **SPATIAL DISTRIBUTION OF OXYGEN VACANCIES IN Cr-DOPED SrTiO₃ DURING AN ELECTRIC-FIELD-DRIVEN INSULATOR-TO-METAL TRANSITION**
B. P. Andreasson, M. Janousch, *U. Staub* and G. I. Meijer, *Appl. Phys. Lett.* **94**, 013513 (2009).

2008

157. **COMBINING *M*- AND *L*- EDGE RESONANT INELASTIC X-RAY SCATTERING FOR STUDIES OF 3d TRANSITION METAL COMPOUNDS**
S. G. Chiuzbaian, T. Schmitt, M. Matsubara, A. Kotani, G. Ghiringhelli, C. Dallera, A. Tagliaferri, L. Braicovich, V. Scagnoli, N. B. Brookes, *U. Staub*, and L. Patthey, *Phys. Rev. B* **78**, 245102 (2008).
156. **POLARIZATION ANALYSIS IN SOFT X-RAY DIFFRACTION TO STUDY MAGNETIC AND ORBITAL ORDERING**
U. Staub, V. Scagnoli, Y. Bodenthin, M. García-Fernández, R. Wetter, A. M. Mulders, H. Grimmer and M. Horisberger, *J. Syn. Rad.* **15**, 469 (2008).
155. **MAGNETIC AND ELECTRONIC Co STATES IN LAYERED COBALTATE GdBaCo₂O_{5.5-x}**
M. García-Fernández, V. Scagnoli, *U. Staub*, A. M. Mulders, M. Janousch, Y. Bodenthin, D. Meister, B. D. Patterson, A. Mirone, Y. Tanaka, T. Nakamura, S. Grenier, Y. Huang and K. Conder, *Phys. Rev. B* **78**, 054424 (2008).
154. **TRANSITION-METAL OXIDE BASED RESISTANCE-CHANGE MEMORIES**
S. F. Karg, G. I. Meijer, J. G. Bednorz, C. T. Rettner, A. G. Schrott, E. A. Joseph, C. H. Lam, M. Janousch, *U. Staub*, F. La Mattina, S. F. Alvarado, W. Widmer, R. Stutz, U. Drechsler, and D. Caimi, *IBM J. Res. & Dev.* **52**, 481 (2008).
153. **TOWARDS PUMP-PROBE RESONANT X-RAY DIFFRACTION AT FEMTO SECOND UNDULATOR SOURCES**
G. Ingold, R. Abela, P. Beaud, S. L. Johnson, and *U. Staub*, *Z. Krist.* **223**, 292 (2008).
152. **DEPTH MAGNETIZATION PROFILE OF A PERPENDICULAR EXCHANGE COUPLED SYSTEM**
J. M. Tonnerre, M. De Santis, S. Grenier, H. C. N. Tolentino, V. Langlais, E. Bontempi, M. García-Fernández, and *U. Staub*, *Phys. Rev. Lett.* **100**, 157202 (2008).
151. **INDUCED NON-COLLINEAR MAGNETIC ORDER OF Nd³⁺ IN NdNiO₃ OBSERVED BY RESONANT SOFT X-RAY DIFFRACTION**
V. Scagnoli, *U. Staub*, Y. Bodenthin, M. García-Fernández, G. I. Meijer, and G. Hammerl, *Phys. Rev. B* **77**, 115138 (2008).
150. **A RESONANT SOFT X-RAY POWDER DIFFRACTION STUDY TO DETERMINE THE ORBITAL ORDERING IN A-SITE ORDERED SmBaMn₂O₆**

M. García-Fernández, *U. Staub*, Y. Bodenthin, S. M. Laurence, A. M. Mulders, C. E. Buckley, S. Weyneth, E. Pomjakushina, and K. Conder, *Phys. Rev. B* **77**, 060402(R) (2008).

149. **MANIPULATING THE MAGNETIC STRUCTURE WITH ELECTRIC FIELDS IN MULTIFERROIC ErMn_2O_5**

Y. Bodenthin, *U. Staub*, M. García-Fernández, M. Janoschek, J. Schlappa, E. I. Golovenchits, V. A. Sanina, and S. G. Lushnikov, *Phys. Rev. Lett.* **100**, 027201 (2008).

2007

148. **DIRECT PROBE OF OXYGEN SUPERSTRUCTURES IN MANGANITES**

S. Grenier, K. J. Thomas, J. P. Hill, *U. Staub*, Y. Bodenthin, M. García-Fernández, V. Scagnoli, V. Kiryukhin, S-W. Cheong, B. G. Kim, and J. M. Tonnerre, *Phys. Rev. Lett.* **99**, 206403 (2007).

147. **RESISTIVE SWITCHING IN Cr DOPED SrTiO_3 : AN X-RAY ABSORPTION STUDY**

B. P. Andreasson, M. Janousch, *U. Staub*, G. I. Meijer, and B. Delley, *Mater. Sci. Eng. B.* **144**, 60 (2007).

146. **ROLE OF OXYGEN VACANCIES IN Cr-DOPED SrTiO_3 FOR RESISTANCE-CHANGE MEMORY**

M. Janousch*, G. I. Meijer*, *U. Staub**, B. Delley, S. F. Karg, B. P. Andreasson, *Adv. Mat.* **19**, 2232 (2007). * authors with equal contribution.

145. **CORRELATION BETWEEN CRYSTAL STRUCTURE AND MAGNETISM IN A FRUSTRATED ANTIFERROMAGNET CuFeO_2 UNDER HIGH MAGNETIC FIELDS**

N. Terada, Y. Narumi, Y. Sawai, K. Katsumata, *U. Staub*, Y. Tanaka, A. Kikkawa, T. Fukui, K. Kindo, T. Yamamoto, R. Kanmuri, M. Hagiwara, H. Toyokawa, T. Ishikawa, and H. Kitamura, *Phys. Rev. B* **75**, 224411 (2007).

144. **MANIPULATING 4f QUADRUPOLAR PAIR-INTERACTIONS IN TbB_2C_2 USING A MAGNETIC FIELD**

A. M. Mulders, *U. Staub*, V. Scagnoli, Y. Tanaka, A. Kikkawa, K. Katsumata and J. M. Tonnerre, *Phys. Rev. B* **75**, 184438 (2007).

143. **LATTICE DEFORMATIONS INDUCED BY AN APPLIED MAGNETIC FIELD IN THE FRUSTRATED ANTIFERROMAGNET HgCr_2O_4**

Y. Tanaka, Y. Narumi, N. Terada, K. Katsumata, H. Ueda, *U. Staub*, K. Kindo, T. Fukui, T. Yamamoto, R. Kammuri, M. Hagiwara, A. Kikkawa, Y. Ueda, H. Toyokawa, T. Ishikawa and H. Kitamura, *J. Phys. Soc. Jpn* **76**, 43708 (2007).

142. **SOFT X-RAY RESONANT MAGNETIC POWDER DIFFRACTION ON PrNiO_3**

U. Staub, M. García-Fernández, A. M. Mulders, Y. Bodenthin, M. J. Martínez-Lope, J. A. Alonso, *J. Phys.: Cond. Matter, fast track* **19**, 092201 (2007).

141. **OBSERVATION OF ORBITAL ORDERING AND JAHN-TELLER DISTORTIONS SUPPORTING THE WIGNER-CRYSTAL MODEL IN HIGHLY DOPED $\text{Bi}_{1-x}\text{Ca}_x\text{MnO}_3$**

S. Grenier, V. Kiryukhin, S-W. Cheong, J. P. Hill, K. J. Thomas, J. M. Tonnerre, Y. Joly, *U. Staub*, and V. Scagnoli, *Phys. Rev. B* **75**, 085101 (2007).

2006

140. **CHARGE/ORBITAL ORDERING VS. JAHN-TELLER DISTORTION IN $\text{La}_{0.5}\text{Sr}_{1.5}\text{MnO}_4$**
U. Staub, V. Scagnoli, A. M. Mulders, M. Janousch, Z. Honda, and J. M. Tonnerre, *Europhys. Lett.* **76**, 926 (2006).
139. **HIGHER-ORDER Dy MULTIPOLE MOTIFS OBSERVED IN DyB_2C_2 WITH RESONANT SOFT X-RAY BRAGG DIFFRACTION**
A. Mulders, *U. Staub*, V. Scagnoli, S. W. Lovesey, E. Blacar, T. Nakamura, A. Kikkawa, G. van der Laan, and J.M. Tonnerre, *J. Phys.: Cond. Matter* **18**, 11195 (2006).
138. **EFFECT OF MAGNETIC FIELD ON THE MAGNETIC STATE OF COPPER METABORATE**
G. Petrakovskii, M. Popov, V. Zinenkov, B. Roessli, J. Schefer, M. Boehm, and *U. Staub*, in *Smart Materials for Ranging Systems*, p. 49-65, Ed. J. Franse et al. Springer Netherlands (2006).
137. **FIELD-INDUCED LATTICE STAIRCASE IN A FRUSTRATED ANTIFERROMAGNET CuFe_2O_4**
N. Terada, Y. Narumi, K. Katsumata, T. Yamamoto, *U. Staub*, K. Kindo, M. Hagiwara, Y. Tanaka, A. Kikkawa, H. Toyakawa, T. Fukui, R. Kanamuri, T. Ishikawa, and H. Kitamura, *Phys. Rev. B* **74**, 180404(R) (2006).
136. **INFLUENCE OF STRESS AND MAGNETIC FIELD ON THE ORBITAL ORIENTATIONS IN CeB_6**
U. Staub, Y. Tanaka, K. Katsumata, A. Kikkawa, Y. Kuramoto, and Y. Onuki, *J. Phys.: Cond. Matter*, **18**, 11007 (2006).
135. **X-RAY DIFFRACTION STUDIES IN PULSED HIGH MAGNETIC FIELDS**
Y. Narumi, K. Kindo, K. Katsumata, M. Kawauchi, Ch. Broennimann, *U. Staub*, H. Toyokawa, Y. Tanaka, K. Kikkawa, T. Yamamoto, M. Hagiwara, T. Ishikawa, and H. Kitamura, *J. Phys.: Conf. Proc.* **51**, 494 (2006).
134. **ORBITAL ORDER IN DyB_2C_2 STUDIED WITH RESONANT SOFT X-RAY SCATTERING**
A. Mulders, *U. Staub*, V. Scagnoli, T. Nakamura, A. Kikkawa, J. M. Tonnerre, *Physica B* **378-380**, 367 (2006).
133. **ROLE OF MAGNETIC AND ORBITAL ORDERING AT THE METAL-INSULATOR TRANSITION IN NdNiO_3**
V. Scagnoli, *U. Staub*, A. M. Mulders, M. Janousch, G. I. Meijer, G. Hammerl, J. M. Tonnerre, and N. Stojic, *Phys. Rev. B* **73**, 100409(R) (2006).
132. **X-RAY DIFFRACTOMETER COMBINING SYNCHROTRON RADIATION AND PULSED MAGNETIC FIELDS UP TO 40 T**
Y. Narumi, K. Kindo, K. Katsumata, M. Kawauchi, Ch. Broennimann, *U. Staub*, H. Toyokawa, Y. Tanaka, A. Kikkawa, T. Yamamoto, M. Hagiwara, T. Ishikawa, and H.

Kitamura, J. Synch. Rad. **13**, 271 (2006).

131. LATTICE DISTORTION IN ANTIFERROMAGNETIC CoO UNDER HIGH MAGNETIC FIELDS

Y. Narumi, K. Katsumata, *U. Staub*, K. Kindo, M. Kawauchi, C. Broennimann, H. Toyokawa, Y. Tanaka, A. Kikkawa, T. Yamamoto, M. Hagiwara, T. Ishikawa, and H. Kitamura, J. Phys. Soc. Jpn **75**, 075991 (2006).

130. MAGNETIC AND ORBITAL ORDERING IN NdNiO₃

V. Scagnoli, *U. Staub*, A. M. Mulders, G. I. Meijer, G. Hammerl, and J. M. Tonnerre, Physica B **378-380**, 541 (2006).

2005

129. ORBITAL DYNAMICS OF THE 4f SHELL IN DyB₂C₂

U. Staub, A. M. Mulders, O. Zaharko, S. Janssen, T. Nakamura, and S. W. Lovesey, Phys. Rev. Lett. **94** 36408 (2005).

128. TEMPERATURE-DEPENDENCE OF THE CRYSTALS STRUCTURE AND CHARGE-ORDERING IN Yb₄As₃

U. Staub, M. Shi, C. Schulze-Briese, B. D. Patterson, F. Fauth, E. Dooryhee, L. Soderholm, J. O. Cross, D. Mannix and A. Ochiai, Phys. Rev. B, **71** 75115 (2005).

127. MAGNETIC FIELD-INDUCED ORBITAL ORDER IN TbB₂C₂ OBSERVED BY INELASTIC NEUTRON SCATTERING

M. Mulders, *U. Staub*, O. Zaharko and S. Janssen, Physica B, **369-361**, 1231 (2005).

126. SPIN DENSITY WAVE AND CHARGE DENSITY WAVE IN THE KONDO-LATTICE COMPOUND Ce(Ru_{1-x}Rh_x)₂Si₂

Y. Tabata, T. Taniguchi, S. Kawarazaki, Y. Narumi, S. Kimura, Y. Tanaka, K. Katsumata, T. Ishikawa, *U. Staub*, M. Kohgi, and K. Iwasa, Physica B, **359-361**, 260 (2005).

125. GIANT MAGNETO-VOLUME EFFECT IN SOLID OXYGEN

K. Katsumata, S. Kimura, *U. Staub*, Y. Narumi, Y. Tanaka, S. Shimomura, T. Nakamura, S. W. Lovesey, T. Ishikawa, and H. Kitamura, J. Phys.: Condens. Matter, **17**, L235 (2005).

124. ORBITAL AND MAGNETIC ORDERING IN La_{0.5}Sr_{1.5}MnO₄ STUDIED BY SOFT X-RAY RESONANT SCATTERING

U. Staub, V. Scagnoli, A. M. Mulders, K. Katsumata, Z. Honda, H. Grimmer, M. Horisberger, and J. M. Tonnerre, Phys. Rev. B, **71**, 214421 (2005).

123. CHARGE DISPROPORTIONATION AND ORBITAL ORDERING IN NdNiO₃ STUDIED BY RESONANT X-RAY SCATTERING

V. Scagnoli, *U. Staub*, M. Janousch, A. M. Mulders, M. Shi, S. Rosenkranz, S. Wilkins, L. Paolasini, and S. W. Lovesey, Phys. Rev. B **72**, 155111 (2005).

122. VALENCE STATES OF Cr AND THE INSULATOR-TO-METAL TRANSITION IN Cr-DOPED SrTiO₃

G. I. Mejer, *U. Staub*, M. Janousch, S. L. Johnson, B. Delley, and T. Neisius, *Phys. Rev. B* **72**, 155102 (2005).

2004

121. **CHARGE DISPROPORTIONATION OBSERVED BY RESONANT X-RAY SCATTERING AT THE METAL-INSULATOR TRANSITION IN NdNiO₃**
U. Staub, V. Scagnoli, M. Janousch, G. I. Meijer, L. Paolasini, F. D'Acapito, J. G. Bednorz, R. Allenspach, and S. W. Lovesey, *Physica B* **345**, 23 (2004).
120. **NON-RESONANT X-RAY DIFFRACTION MEASUREMENTS ON CeB₆**
Y. Tanaka, *U. Staub*, Y. Narumi, K. Katsumata, V. Scagnoli, S. Shimomura, Y. Tabata, and Y. Onuki, *Physica B* **345**, 78 (2004).
119. **CORRELATION BETWEEN MAGNETIC AND ELECTRONIC PROPERTIES OF THE PEROVSKITE HoBaCo₂O₅**
U. Staub, F. Fauth, E. Suard, A. Amato, V. Caignart, and D. Herlach, *J. Phys.: Condensed Matt.* **16**, 3361 (2004).
118. **INCOMMENSURATE MAGNETIC STRUCTURE IN COPPER METABORATE**
G. Petrakovskii, M. Popov, S. Martynov, B. Roessli, J. Schefer, B. Ouladdiaf, M. Boehm, *U. Staub*, and A. Amato, *Physica B* **272-276**, e199 (2004).
117. **QUADRUPOLEAR, STRUCTURAL AND MAGNETIC ORDERING IN DyB₂C₂ STUDIED BY SYMMETRY ANALYSIS AND NEUTRON DIFFRACTION**
O. Zaharko, W. Sikora, F. Bialas, *U. Staub*, and T. Nakamura, *Phys. Rev. B* **69**, 224417 (2004).
116. **CHARGE DISPROPORTIONATION OBSERVED BY RESONANT X-RAY SCATTERING AT THE METAL-INSULATOR TRANSITION IN NdNiO₃**
V. Scagnoli, *U. Staub*, M. Janousch, G. I. Meijer, L. Paolasini, F. D'Acapito, J. G. Bednorz, and R. Allenspach, *J. Mag. Mag. Mat.* **272-276**, 420 (2004).
115. **DIRECT AND QUANTITATIVE DETERMINATION OF THE ORBITAL ORDERING IN CeB₆ BY X-RAY DIFFRACTION**
Y. Tanaka, *U. Staub*, K. Katsumata, S. W. Lovesey, J. E. Lorenzo, Y. Narumi, V. Scagnoli, S. Shimomura, Y. Tabata, Y. Onuki, Y. Kuramoto, A. Kikkawa, T. Ishikawa, and H. Kitamura, *Europhys. Lett.* **68**, 671 (2004).
114. **INFLUENCE OF SINGLE-SITE AND COOPERATIVE MAGNETIC EFFECTS ON PHONONS IN CeNi-BASED COMPOUNDS**
V. N. Lazukov, N.N. Tiden, P. A. Alekseev, M. Braden, E. S. Clementyev, E.V. Nefedova, *U. Staub*, I. P. Sadikov, and G. Lapertot, *Phys. Stat. Sol. C*, **1**, 3174-7 (2004).

2003

113. **CRYSTAL-FIELD LEVELS IN PURE AND DILUTE DyB₂C₂ STUDIES BY NEUTRON INELASTIC SCATTERING TECHNIQUE**

T. Nakamura, *U. Staub*, Y. Narumi, K. Katsumata and F. Jurany, *Europhys. Lett.* **62**, 251 (2003).

112. **EPR STUDY OF SOME RARE-EARTH IONS (Dy^{3+} , Tb^{3+} AND Nd^{3+}) IN $YBa_2Cu_3O_6$ -COMPOUND**

M. R. Gafurov, V. A. Ivanshin, I. N. Kurkin, M. P. Rodionova, H. Keller, M. Gutmann, and *U. Staub*, *J. Mag. Res.*, **161**, 210 (2003).

111. **NEPTUNIUM OCTUPOLE AND HEXADECAPOLE MOTIF IN NpO_2 DIRECTLY FROM ELECTRIC-DIPOLE (E1) ENHANCED X-RAY DIFFRACTION**

S. W. Lovesey, E. Balcar, C. Detlefs, G. van der Laan, D. S. Sivia, and *U. Staub*, *J. Phys.: Condens Matt.* **15**, 4511 (2003).

110. **COMPLEX MAGNETIC GROUND-STATE OF CuB_2O_4**

M. Boehm, B. Roessli, J. Schefer, A. Wills, B. Ouladdiaf, E. Lelièvre-Berna, *U. Staub*, and G. A. Petrakovskii, *Phys. Rev. B* **68**, 24405 (2003).

2002

109. **DIRECT OBSERVATION OF CHARGE ORDER IN AN EPITAXIAL $NdNiO_3$ FILM**

U. Staub, G. I. Meijer, F. Fauth, R. Allenspach, G. Bednorz, J. Karpinski, S. M. Kazakov, L. Paolasini, and F. d'Acapito, *Phys. Rev. Lett.* **88**, 126402 (2002).

108. **4f-ELECTRON CORRELATIONS AND LATTICE PROPERTIES OF A VALENCE-UNSTABLE $CeNi$**

V. N. Lazukov, E. V. Nefedova, V. V. Sikolenko, *U. Staub*, P. A. Alekseev, K. S. Nemkovskii, C. Pradervand, I. P. Sadikov, L. Soderholm, N. N. Tiden, *Phys. Met. Metallography* **93**, 161 (2002).

107. **CHARGE ORDER AND CRYSTAL STRUCTURE BELOW THE FIRST-ORDER "METAL-INSULATOR" TRANSITION IN Yb_4As_3**

U. Staub, B. D. Patterson, C. Schulze-Briese, F. Fauth, M. Shi, L. Soderholm, G. B. M. Vaughan, E. Dooryhee, J. O. Cross, and A. Ochiai, *Physica B* **318**, 284 (2002).

106. **A NEUTRON SCATTERING AND μ SR INVESTIGATION OF THE MANGANESE PHASE TRANSITIONS OF CuB_2O_4**

M. Boehm, B. Roessli, J. Schefer, B. Ouladdiaf, A. Amato, C. Baines, *U. Staub*, G. A. Petrakovskii, *Physica B* **318**, 277 (2002).

105. **f-ELECTRON EXCITATIONS IN THE NEUTRON SPECTRA OF MIXED-VALENCE $Sm_{1-x}Y_xS$**

P. A. Alekseev, J.-M. Mignot, *U. Staub*, A. Ochiai, A. V. Golubkov, M. Braden, R. I. Bewley, E.V. Nefedova, I. P. Sadikov, E. S. Clementyev, V. N. Lazukov, and K.S. Nemkovski, *Physica B* **312-313**, 333 (2002).

104. **SOLITON LATTICE IN COPPERMETABORATE, CuB_2O_4 , IN THE PRESENCE OF AN EXTERNAL MAGNETIC FIELD**
J. Schefer, M. Boehm, B. Roessli, G. A. Petrakovskii, B. Ouladdiaf, and *U. Staub*, *Appl. Phys. A* **74**, 1740 (2002).
103. **MAGNETIC PROPERTIES OF COPPER METABORATE CuB_2O_4**
G. A. Petrakovskii, A. I. Pankatras, M. A. Popov, A. D. Balaev, D. A. Velikanov, A. M. Vorotynov, K. A. Sablina, B. Roessli, J. Schefer, A. Amato, *U. Staub*, M. Boehm, B. Ouladduaf, *Low Temp. Phys.* **28**, 606 (2002).
102. **MAGNETIC X-RAY SCATTERING AND ABSORPTION**
U. Staub, in *Proc. "1st School on Condensed Matter Physics", Zuoz, 10-17.8.2002*, (ISSN 1019-6447), p. 93-117 (2002).
101. **LATTICE ANOMALIES IN CeNi UNSTABLE VALENCE COMPOUND**
V. N. Lazukov, E. V. Nefeodova, V. V. Sikolenko, *U. Staub*, P. A. Alekseev, M. Braden, K. S. Nemkovski, C. Pradervand, I. P. Sadikov, L. Soderholm, and N. N. Tiden, *Appl. Phys. A*, **74**, 559 (2002).

2001

100. **LOW-ENERGY MAGNETIC RESPONSE AND Yb VALNECE IN THE KONDO INSULATOR YbB_{12}**
P. A. Alekseev, E. V. Nefeodova, *U. Staub*, J.-M. Mignot, V. N. Lazukov, P. Sadikov, L. Soderholm, S. R. Wassermann, Yu. B. Paderno, N. Yu. Shitsevalova, A. Murani, *Phys. Rev. B* **63**, 064411 (2001).
99. **DIRECT OBSERVATION OF 1-DIMENSIONAL CHARGE ORDER BELOW THE FIRST ORDER "METAL-INSULATOR" TRANSITION IN Yb_4As_3**
U. Staub, B.D. Patterson, C. Schulze-Briese, F. Fauth, M. Shi, L. Soderholm, G. B. M. Vaughan, and A. Ochiai, *Europhys. Lett.* **53**, 72 (2001).
98. **FORMATION OF A MAGNETIC SOLITON LATTICE IN COPPER METABORATE B.**
Roessli, J. Schefer, G. Petrakovskii, B. Ouladdiaf, M. Boehm, *U. Staub*, A. Vorotinov, and L. Bezmaternikh, *Phys. Rev. Lett.* **86**, 1885 (2001).
97. **THE SITE-SPECIFIC ELECTRONIC STRUCUTRE OF Pr IN $\text{Pr}_{1-x}\text{Ba}_{2+x}\text{Cu}_3\text{O}_{7-x}$**
U. Staub, M. Shi, A. G. O'Conner, M. J. Kramer, M. Knapp, *Phys. Rev. B* **63**, 134522 (2001).
96. **REPLY TO "COMMENT ON MAGNETOELASTIC MODEL FOR THE RELAXATION OF LANTHANIDE IONS IN $\text{YBa}_2\text{Cu}_3\text{O}_{7-x}$, OBSERVED BY NEUTRON SCATTERING**
Stephen W. Lovesey and *U. Staub*, *Phys. Rev. B* **64**, 066502, (2001)
95. **MAGNETIC PHASE TRANSITION IN THE DOUBLE SPIN-CHAINS COMPOUND LiCu_2O_2**

B. Roessli, *U. Staub*, A. Amato, D. Herlach, P. Pattison, K. Sablina, and G. A. Petrakovskii, *Physica B* **296**, 306 (2001).

94. **REAL PART EXAFS FROM MULTILAYER BRAGG REFLECTIONS: A PROMISING NEW EXAFS TECHNIQUE**

U. Staub, O. Zaharko, H. Grimmer, M. Horisberger, and F. d'Acaprio, *Europhys. Lett.* **56**, 241 (2001).

93. **SIMULTANEOUS DETERMINATION OF THE ELECTRONIC AND CHEMICAL STRUCTURES IN $\text{CeNi}_x\text{Cu}_{5-x}$ AT HIGH PRESSURES**

U. Staub, C. Schulze-Briese, P. A. Alekseev, M. Hanfland, S. Pascarelli, V. Honkimäki, and Oleg D. Chistyakov. *J. Phys.:Condens. Matter*, **13**, 11511 (2001).

92. **FIELD DEPENDENCE OF THE MAGNETIC SOLITON LATTICE IN CuB_2O_4**

M. Boehm; B. Roessli; J. Schefer; B. Ouladdiaf; *U. Staub* and G. Petrakovskii, in Proceedings of the International Workshop on New Opportunities in Single Crystal Spectroscopy with Neutrons (KFKI-2001-01/E). Hungarian Acad. Sci, Budapest, Hungary; 2001; 94 pp. p.71-2.

2000

91. **VALENCE DETERMINATION AS A FUNCTION OF DOPING IN $\text{PrBa}_2\text{Cu}_3\text{O}_{7-x}$**

U. Staub, L. Soderholm, S. R. Wasserman, A.G. O. Conner, M. J. Kramer, B. Patterson, M. Shi, and M. Knapp, *Phys. Rev. B* **61**, 1548 (2000).

90. **A MANGETO-ELASTIC MODEL FOR THE RELAXATION OF LANTHANIDE IONS IN $\text{YBa}_2\text{Cu}_3\text{O}_{7-d}$ OBSERVED BY NEUTRON SCATTERING**

Stephen W. Lovesey and Urs Staub, *Phys. Rev. B* **61**, 9130 (2000).

89. **THE MAGNETIC PROPERTIES OF Pr IN THE HIGH- T_c SUPERCONDUCTOR $\text{Pb}_2\text{Sr}_2\text{R}_{1-x}\text{Ca}_x\text{Cu}_3\text{O}_{8-x}$**

U. Staub, L. Soderholm, S. Skanthakumar, R. Osborn, F. Fauth, and C. Ritter, *Physica C* **333**, 13 (2000).

88. **MAGNETIC ORDERING IN Li_2CuO_2 STUDIED BY μSR TECHNIQUE**

U. Staub, B. Roessli, A. Amato, *Physica B* **289-290**, 299 (2000).

87. **ELECTRONIC $4f$ STATE SPLITTINGS IN CUPRATES**

U. Staub and L. Soderholm, in *Handbook of Chemistry and Physics of Rare Earth's*, edited by K. A. Gschneidner, Jr., L. Eyring and M. B. Maple, Amsterdam, North-Holland, Vol. 30, pp. 491-545 (2000).

86. **MULTILAYER OPTICS FOR SOFT X-RAYS**

H. Grimmer, M. Horisberger, *U. Staub*, H.-Ch. Mertins, and F. Schäfers, in *Advances in Structure Analysis*, edited by R. Kuzel und J. Hasek pp.311-319 (2000).

85. **ELECTRON PARAMAGNETIC RESONANCE OF Tb^{3+} IONS IN $\text{YBa}_2\text{Cu}_3\text{O}_6$**

M. R. Gafurov, V. A. Ivanshin, I. N. Kurkin, M. P. Rodionova, H. Keller, M. Gutmann, and *U. Staub*, *J. Supercond.* **13**, 895 (2000).

1999

84. **DIFFICULTY OF PROBING THE SUPERCONDUCTING GAP WITH RELAXATION MEASUREMENTS ON $4f$ CRYSTAL-FIELD TRANSITIONS WITH NEUTRON SCATTERING**
U. Staub, M. Gutmann, F. Fauth, and W. Kagunya, *J. Phys.: Condens. Matter* **11**, L59 (1999).
83. **SOFT X-RAY DIFFRACTION ANOMALOUS FINE STRUCTURE ON Ni/V MULTILAYERS**
U. Staub, H. Grimmer and H.-Ch. Mertins, *J. Phys.: Condens. Matter* **11**, 5691 (1999).
82. **WEAK FERROMAGNETISM IN CuB_2O_4 COPPER METABORATE**
G. Petrakovskii, D. Velikaniv, A. Vorotinov, A. Balaev, K. Sablina, A. Amato, B. Roessli, J. Schefer, and *U. Staub*, *J. Mag. Mag. Mat.* **205**, 105 (1999).
81. **THE EXCEPTIONAL BEHAVIOUR OF Pr, Ce AND Tb IN HIGH- T_c SUPERCONDUCTORS**
U. Staub, *Materials Science Forum* **315-317**, 306 (1999).
80. **OPTICAL COMPONENTS FOR POLARIZATION ANALYSIS OF SOFT X-RAY RADIATION**
Hans Grimmer, Oksana Zaharko, Michael Horisberger, Hans-Christoph Mertins, Franz Schäfers, and Urs Staub, in *Proc. X-Ray Optics Design, Performance, and Applications, Denver, USA*, SPIE **3773**, 224 (1999).
79. **CRYSTALLINE ELECTRIC FIELD OF THE RARE-EARTH NICKELATES RNiO_3 (R=Pr, Nd, Sm, Eu, AND $\text{Pr}_{1-x}\text{La}_x$, $0 \leq x \leq 0.7$) DETERMINED BY INELASTIC NEUTRON SCATTERING**
S. Rosenkranz, M. Medarde, F. Fauth, J. Mesot, M. Zolliker, A. Furrer, *U. Staub*, P. Lacorre, R. Osborn, R. S. Eccelston, V. Trounov, *Phys. Rev. B* **60**, 14857 (1999).
78. **THE ROLE OF SELECTED f-IONS IN THE SUPPRESSION OF HIGH- T_c SUPERCONDUCTIVITY**
L. Soderholm and *U. Staub*, *Electron Correlations and Materials Properties*, edited by Gonis et al., Kluwer Academic/Plenum Publishers, pp 115-135 (1999).

1998

77. **STRUCTURAL DISORDER IN THE $\text{Pb}_2\text{Sr}_2\text{Y}_{1-x}\text{Ca}_x\text{Cu}_3\text{O}_8$ CUPRATES**
U. Staub, L. Soderholm, S. Skanthakumar, P. Pattison, and K. Conder, *Phys. Rev. B* **57**, 5535 (1998).
76. **THE EFFECT OF SURFACE MODIFICATION ON THE INTERLAYER CHEMISTRY OF IRON IN A SMECTITE CLAY**
Stephen R. Wassermann, L. Soderholm, and *U. Staub*, *Chem. Mat.* **10**, 559 (1998).
75. **MAGNETIC GROUND STATE OF Pr IN $(\text{Pr}_{1.5}\text{Ce}_{0.5})\text{Sr}_2\text{Cu}_2\text{NbO}_{10-x}$**

U. Staub, L. Soderholm, R. Osborn, T.J. Goodwin, H. B. Radousky, and R. N. Shelton, *J. Phys.: Condens. Matter* **10**, 4637 (1998).

1997

74. **THE TOTAL FLUORESCENCE YIELD FROM MAGNETIC MATERIALS USING CIRCULARLY POLARIZED X-RAYS**
Stephen L. Lovesey and Urs Staub, *J. Phys.: Condens. Matter* **9**, 4271 (1997).
73. **WAVE VECTOR DEPENDENCE OF INTERMULTIPLY TRANSITIONS IN $\text{EuBa}_2\text{Cu}_3\text{O}_x$ ($x=6.1$ and 7): AN INELASTIC NEUTRON SCATTERING STUDY**
U. Staub, R. Osborn, E. Balcar, L. Soderholm, and V. Trounov, *Phys. Rev B* **55**, 11629 (1997).
72. **INTERMULTIPLY CRYSTAL FIELD TRANSITIONS IN EuNiO_3**
S. Rosenkranz, U. Staub, A. Furrer, R. Osborn, P. Lacorre, and V. Trounov, *J. Alloys Compounds* **250**, 577 (1997).
71. **MAGNETIC PROPERTIES OF $\text{Pb}_2\text{Sr}_2\text{PrCu}_3\text{O}_8$**
U. Staub, S. Skanthakumar, L. Soderholm, and R. Osborn, *J. Alloys Compounds* **250**, 581 (1997).
70. **THE EFFECT OF f-ION VALENCE ON SUPERCONDUCTIVITY IN THE SERIES $\text{Pb}_2\text{Sr}_2\text{RCu}_3\text{O}_8$ ($R=\text{Ce, Pr, Tb, and Am}$)**
L. Soderholm, S. Skanthakumar, U. Staub, Mark R. Antonio, *J. Alloys Compounds* **250**, 623 (1997).
69. **OXIDATION STATE OF THE UNUSUAL RARE EARTH ($R=\text{Ce, Pr and Tb}$) IN DOUBLE-LAYER HIGH- T_c SUPERCONDUCTORS**
U. Staub, L. Soderholm, S. Skanthakumar, and Mark R. Antonio, *J. Phys. IV France* **7**, C2-1077 (1997).
68. **MAGNETIC PROPERTIES OF Tb DOPED IN $\text{YBa}_2\text{Cu}_3\text{O}_x$**
U. Staub, F. Fauth, M. Gutmann, and W. Kagunya, *Physica B* **234-236**, 841 (1997).
67. **QUASI TWO-DIMENSIONAL MAGNETIC ORDER OF Tb^{3+} SPINS IN $\text{Pb}_2\text{Sr}_2\text{Tb}_{0.5}\text{Ca}_{0.5}\text{Cu}_3\text{O}_8$ ($x=0$ AND 0.5)**
U. Staub, L. Soderholm, S. Skanthakumar, S. Rosenkranz, C. Ritter, and W. Kagunya, *Z. Phys. B* **104**, 37 (1997).
66. **MAGNETIC PROPERTIES OF $\text{HoBa}_2\text{Cu}_3\text{O}_{6+x}$**
M. Pinkpank, A. Amato, F. N. Gygax, H. R. Ott, A. Schenck, U. Staub, in *Proc. of Third Summerschool on High Temperature Superconductivity 19-27. July 1997, Eger, Hungary.* (1997).
65. **IMPORTANCE OF THE MAGNETIC GROUND-STATE FOR Pr IN HIGH- T_c SUPERCONDUCTORS**

U. Staub, L. Soderholm, S. Skanthakumar, R. Osborn, and F. Fauth, *Europhys. Lett.* **39**, 663 (1997).

1996

64. **SPUTTERING METHOD FOR IMPROVING COMPOSITE GERMANIUM MONOCHROMATORS**

J. Schefer, M. Medarde, S. Fischer, R. Thut, M. Koch, P. Fischer, *U. Staub*, M. Horisberger, G. Boettger, and A. Doenni, *Nucl. Instr. and Meth. in Phys. Res. A* **372**, 229-232 (1996).

63. **Tb SPIN CORRELATIONS IN $\text{Pb}_2\text{Sr}_2\text{Tb}_{0.5}\text{Ca}_{0.5}\text{Cu}_3\text{O}_8$**

U. Staub, L. Soderholm, S. Skanthakumar, S. Rosenkranz, C. Ritter, and W. Kagunya, *Europhys. Lett.* **34**, 447 (1996).

62. **A COMPARISON OF THE CATION VALENCES AND COORDINATIONS IN Ce_2UO_6 AND Ce_2MoO_6**

Mark R. Antonio, *U. Staub*, J. S. Xue, and L. Soderholm, *Chem. Mater* **8**, 2673 (1996).

61. **TWO DIMENSIONAL SPIN FLUCTUATIONS OF Ho^{+3} IN $\text{HoBa}_2\text{Cu}_3\text{O}_7$**

U. Staub and C. Ritter, *Phys. Rev. B* **54**, 7279 (1996).

60. **COMMENT ON "LOCAL MAGNETISM AND CRYSTAL FIELDS OF Pr IN $\text{PrBa}_2\text{Cu}_3\text{O}_7$ STUDIED BY NMR**

U. Staub, *Phys. Rev. Lett.* **77**, 4688 (1996)

59. **A NEW TREATMENT OF FOCUSING VARIED-LINE GRATINGS WITH APPLICATION TO THE PETERSON PGM SYSTEM**

M. R. Howells and *U. Staub*, PSI report 96-20, ISSN 1019-0643; (1996).

58. **POWDER NEUTRON DIFFRATOMETER HRPT AND DMCG**

Peter Fischer, Andreas Dönni, Urs Staub and Markus Zolliker, in Proc. of the Neutron Summerschool 18.-24. Aug., Zuoz. (1996)

1995

57. **THE MAGNETIC PROPERTIES OF R IN $\text{Pb}_2\text{Sr}_2\text{RCu}_3\text{O}_8$ (R=Ho AND Er)**

L. Soderholm, C.-K. Loong, *U. Staub*, S. Skanthakumar, J. Simon Xue, J.P. Hammonds, J. E. Greedan and M. Maric, *Physica C* **246**, 11 (1995).

56. **COLLECTIVE MAGNETIC EXCITATIONS OF Ho^{3+} IONS IN GRAIN-ALIGNED $\text{HoBa}_2\text{Cu}_3\text{O}_x$ (x=7, 6.2)**

F. Fauth, *U. Staub*, M. Guillaume, J. Mesot, A. Furrer, P. Dosanjh, H. Zhou and P. Vorderwisch; *J. Phys.: Condens. Matter* **7**, 4215 (1995)

55. **COLLECTIVE MAGNETIC EXCITATIONS OF R^{3+} IONS IN GRAIN-ALIGNED $R\text{Ba}_2\text{Cu}_3\text{O}_7$ ($R=\text{Ho}, \text{Er}$)**
 F. Fauth, *U. Staub*, M. Guillaume, J. Mesot, A. Furrer, P. Dosanjh, H. Zhou, P. Vorderwisch and U. Stühr, *J. Magn. Magn. Mat.* **140-144**, 1333 (1995)
54. **INTERMULTIPLY TRANSITIONS IN OPTICALLY OPAQUE $\text{EuBa}_2\text{Cu}_3\text{O}_7$: AN INELASTIC NEUTRON SCATTERING STUDY**
U. Staub, L. Soderholm, R. Osborn, M. Guillaume, A. Furrer, and V. Truonov, *J. Alloys. Compounds* **226**, 591 (1995)
53. **OBSERVATIONS OF CEF-SPLIT INTERMULTIPLY TRANSITIONS IN OPTICALLY OPAQUE $\text{EuBa}_2\text{Cu}_3\text{O}_7$ USING INELASTIC NEUTRON SCATTERING.**
U. Staub, L. Soderholm, R. Osborn, E. Balcar and V. Truonov; *Mat. Res. Soc. Symp.* vol. **376**, 535 (1995)
52. **THE OXIDATION STATE AND MAGNETIC BEHAVIOUR OF Tb IN HIGH T_c RELATED MATERIALS**
 L. Soderholm, *U. Staub*, S. Skanthakumar and M. R. Antonio, *Mat. Res. Soc. Symp.* vol. **376**, 529 (1995)
51. **OXIDATION STATE AND MAGNETIC PROPERTIES OF Tb IN $\text{Pb}_2\text{Sr}_2\text{TbCu}_3\text{O}_8$**
U. Staub, L. Soderholm, S. Skanthakumar, Mark R. Antonio, and J. Simon Xue, *Phys. Rev. B* **52**, 9736 (1995).
50. **CRYSTAL FIELD-SPLIT INTERMULTIPLY TRANSITIONS AND THEIR Q-DEPENDENCE IN $\text{EuBa}_2\text{Cu}_3\text{O}_7$**
U. Staub, R. Osborn, L. Soderholm and V. Truonov; *Europhys. Lett.* **31**, 175 (1995).
- 1994
49. **CRYSTAL-FIELD EXCITATIONS IN HIGH- T_c SUPERCONDUCTING MATERIALS**
 J. Mesot, P. Allenspach, *U. Staub*, and A. Furrer, *Neutron News* **5**, 20 (1994).
48. **Ho^{3+} DIMER EXCITATIONS AND Cu^{2+} SPIN FLUCTUATIONS IN $\text{Ho}_{0.1}\text{Y}_{0.9}\text{Ba}_2\text{Cu}_3\text{O}_x$ ($6.6 \leq x \leq 7.0$)**
 M. Guillaume, *U. Staub*, F. Fauth, J. Mesot, A. Furrer, and C. J. Carlile, *Physica C* **223**, 333 (1994).
47. **NEUTRON SPECTROSCOPIC STUDIES OF THE CRYSTAL FIELD IN $\text{HoBa}_2\text{Cu}_3\text{O}_x$ ($6 < x < 7$)**
U. Staub, J. Mesot, M. Guillaume, P. Allenspach, A. Furrer, H. Mutka, Z. Bowden, and A. Taylor, *Phys. Rev. B* **50**, 4068 (1994).

46. **NEUTRON SPECTROSCOPY IN $\text{RBa}_2\text{Cu}_3\text{O}_x$ (R=Ho, Er; $6 < x < 7$) COMPOUNDS**
A. Furrer, J. Mesot, *U. Staub*, F. Fauth, and M. Guillaume, *J. Alloys Compounds* **207/208** 138 (1994).
45. **NEUTRON SPECTROSCOPY IN $\text{RBa}_2\text{Cu}_3\text{O}_x$ (R=RARE EARTH) COMPOUNDS: CHARGE TRANSFER, PHASE SEPARATION, SPIN FLUCTUATIONS**
A. Furrer, J. Mesot, P. Allenspach, *U. Staub*, F. Fauth, and M. Guillaume, in Proc. of Sec. Workshop on Phase Separation in Cuprate Superconductors, 4. - 10. Sept. 1993, Cottbus, Germany (1994)
44. **COLLECTIVE MAGNETIC EXCITATIONS OF Ho^{3+} IN GRAIN-ALIGNED $\text{HoBa}_2\text{Cu}_3\text{O}_7$**
U. Staub, F. Fauth, M. Guillaume, J. Mesot, A. Furrer, P. Dosanjh, H. Zhou, and P. Vorderwisch, *J. Appl. Phys.* **75**, 6334 (1994).
43. **COMBINED ELECTRONIC-NUCLEAR MAGNETIC ORDERING OF THE Ho^{+3} IONS AND MAGNETIC STACKING FAULTS IN $\text{HoBa}_2\text{Cu}_3\text{O}_x$ ($x=7.0, 6.8, 6.3$)**
B. Roessli, P. Fischer, *U. Staub*, M. Zolliker, and A. Furrer, *J. Appl. Phys.* **75**, 6337 (1994).
42. **Tb OXIDATION STATE AND HYBRIDISATION IN $\text{Y}_{0.9}\text{Tb}_{0.1}\text{Ba}_2\text{Cu}_3\text{O}_{7-d}$ ($d=0.02, 0.84$) A MAGNETIC-SUSCEPTIBILITY AND X-RAY ABSORPTION STUDY**
U. Staub, Mark. R. Antonio, L. Soderholm, M. Guillaume, W. Henggeler, and A. Furrer, *Phys. Rev. B* **50**, 7085 (1994).
41. **ANTIFERROMAGNETIC ORDERING AND CRYSTAL-FIELD SPLITTINGS OF THE Ho^{+3} IONS IN $\text{HoBa}_2\text{Cu}_4\text{O}_8$**
B. Roessli, P. Fischer, M. Guillaume, J. Mesot, *U. Staub*, M. Zolliker, A. Furrer, E. Kaldis, J. Karpinski and E. Jilek, *J. Phys.: Condens. Matter* **6**, 4147 (1994).
40. **MAGNETIC PROPERTIES OF Nd^{+3} IN Nd—Ba—Cu—O-COMPOUNDS**
P. Allenspach, J. Mesot, *U. Staub*, M. Guillaume, A. Furrer, S.-I. Yoo, M. J. Kramer, R.W. McCallum, H. Maletta, H. Blank, H. Mutka, R. Osborn, M. Arai, Z. Bowden and A.D. Taylor, *Z. Phys. B* **95**, 301 (1994)
39. **A SYSTEMATIC LOW-TEMPERATURE NEUTRON DIFFRACTION STUDY OF THE $\text{RBa}_2\text{Cu}_3\text{O}_x$ (R=YTTRIUM AND RARE EARTHS; X=6 AND 7) COMPOUNDS**
M. Guillaume, P. Allenspach, W. Henggeler, J. Mesot, B. Roessli, *U. Staub*, P. Fischer, A. Furrer, and V. Truonov, *J. Phys.: Condens. Matter* **6**, 7963 (1994).
38. **Ho^{+3} DIMER EXCITATIONS IN $\text{Y}_{0.9}\text{Ho}_{0.1}\text{Ba}_2\text{Cu}_3\text{O}_7$ ($6.6 \leq x \leq 7.0$)**
M. Guillaume, *U. Staub*, F. Fauth, J. Mesot, A. Furrer, and C. J. Carlile, *Physica C* **233**, 333 (1994).

1993

37. **A SYSTEMATIC NEUTRON DIFFRACTION STUDY OF $\text{RBa}_2\text{Cu}_3\text{O}_7$ (R=YTTRIUM AND RARE EARTHS) HIGH- T_c SUPERCONDUCTORS**
M. Guillaume, P. Allenspach, J. Mesot, *U. Staub*, B. Roessli, and A. Furrer, in *Z. Phys. B-Condensed Matter* **90**, 13 (1993).
36. **NEUTRON SPECTROSCOPIC EVIDENCE FOR CLUSTER FORMATION AND PERCOLATIVE SUPERCONDUCTIVITY IN $\text{ErBa}_2\text{Cu}_3\text{O}_x$**
J. Mesot, P. Allenspach, *U. Staub*, A. Furrer, and H. Mutka, *Phys. Rev. Lett.* **70**, 865 (1993).
35. **NEUTRON SPECTROSCOPIC STUDIES OF THE CRYSTAL FIELD IN $\text{ErBa}_2\text{Cu}_3\text{O}_7$**
J. Mesot, P. Allenspach, *U. Staub*, A. Furrer, H. Mutka, R. Osborn, and A. D. Taylor, *Phys. Rev. B* **47**, 6027 (1993).
34. **CRYSTAL FIELD, CLUSTER FORMATION AND PERCOLATIVE SUPERCONDUCTIVITY IN $\text{ErBa}_2\text{Cu}_3\text{O}_x$**
U. Staub, J. Mesot, P. Allenspach, A. Furrer, and H. Mutka, *J. Alloys Comp.* **195**, 595 (1993).
33. **COLLECTIVE MAGNETIC EXCITATIONS OF Ho^{+3} IN GRAIN-ALIGNED $\text{HoBa}_2\text{Cu}_3\text{O}_7$**
U. Staub, F. Fauth, M. Guillaume, J. Mesot, A. Furrer, P. Dosanjh, and H. Zhou, *Europhys. Lett.* **21**, 845 (1993).
32. **COMBINED ELECTRONIC-NUCLEAR MAGNETIC ORDERING OF Ho^{3+} IONS AND MAGNETIC STACKING FAULTS IN THE HIGH- T_c SUPERCONDUCTOR $\text{HoBa}_2\text{Cu}_3\text{O}_7$**
B. Roessli, P. Fischer, *U. Staub*, M. Zolliker, and A. Furrer, *Europhys. Lett.* **23**, 511 (1993).
31. **CRYSTAL-FIELD SPLITTING AND TEMPERATURE DEPENDENCE OF TWO-DIMENSIONAL ANTIFERROMAGNETISM IN THE HIGH- T_c COMPOUND $\text{DyBa}_2\text{Cu}_4\text{O}_8$**
B. Roessli, P. Fischer, M. Zolliker, P. Allenspach, J. Mesot, *U. Staub*, A. Furrer, E. Kaldis, B. Bucher, J. Karpinski, E. Jilek, and H. Mutka, *Z. Phys. B* **91**, 149 (1993).
30. **A SYSTEMATIC NEUTRON STUDY OF $\text{RBa}_2\text{Cu}_3\text{O}_7$ (R=YTTRIUM AND RARE EARTHS) HIGH- T_c SUPERCONDUCTORS**
M. Guillaume, P. Allenspach, J. Mesot, B. Roessli, *U. Staub*, P. Fischer, and A. Furrer, *J. Alloys Comp.* **195**, 599 (1993).
29. **MAGNETIC EXCITATIONS IN GRAIN-ALIGNED $\text{HoBa}_2\text{Cu}_3\text{O}_7$ (ABSTRACT)**
U. Staub, F. Fauth, M. Guillaume, J. Mesot, and A. Furrer, *J. Appl. Phys.* **73**, 7022 (1993).
28. **CRYSTAL FIELD, PHASE SEPARATION, AND PERCOLATIVE SUPERCONDUCTIVITY IN $\text{ErBa}_2\text{Cu}_3\text{O}_7$ ($6 < x < 7$) (ABSTRACT)**

J. Mesot, P. Allenspach, *U. Staub*, and A. Furrer, *J. Appl. Phys.* **73**, 6334 (1993).

1992

27. **CRYSTAL STRUCTURES AND LONG-RANGE ANTIFERROMAGNETIC ORDERING IN $\text{REBa}_2\text{Cu}_3\text{O}_{7-d}$ (RE=Yb, Nd)**
B. Roessli, P. Allenspach, P. Fischer, J. Mesot, *U. Staub*, H. Maletta, P. Brüesch, C. Ritter, and A.W. Hewat, *Physica B* **180&181**, 396 (1992).
26. **NEUTRON SPECTROSCOPY AND DIFFRACTION STUDIES OF THE HIGH- T_c SUPERCONDUCTOR $\text{HoBa}_2\text{Cu}_3\text{O}_x$**
U. Staub, P. Allenspach, J. Mesot, H. Blank, and H. Mutka, *Physica B* **180&181**, 417 (1992).
25. **PRESSURE-INDUCED CHARGE REDISTRIBUTION IN $\text{ErBa}_2\text{Cu}_3\text{O}_x$ DETERMINED BY NEUTRON CRYSTAL-FIELD SPECTROSCOPY**
J. Mesot, *U. Staub*, P. Allenspach, A. Furrer, H. Mutka, and A. Hewat, *Physica B* **180&181**, 405 (1992).
24. **NEUTRON SPECTROSCOPY OF $\text{Nd}_{1-v+y}\text{Ca}_v\text{Ba}_{2-y}\text{Cu}_{3+z}\text{O}_x$**
P. Allenspach, J. Mesot, *U. Staub*, A. Furrer, H. Blank, H. Mutka, R. Osborn, A.D. Taylor, H. Maletta, M.J. Kramer, S.-I. Yoo, E. Kaldis, J. Karpinski, and S. Rusiecki, *Physica B* **180&181**, 389 (1992).
23. **NEUTRON DIFFRACTION STUDY OF "RE124" & "Nd247"**
P. Fischer, B. Roessli, J. Mesot, P. Allenspach, *U. Staub*, E. Kaldis, B. Bucher, J. Karpinski, S. Rusiecki, E. Jilek, and A. W. Hewat, *Physica B* **180&181**, 180 (1992).
22. **NEUTRON SPECTROSCOPY OF THE CRYSTALLINE ELECTRIC FIELD IN HIGH- T_c $\text{YbBa}_2\text{Cu}_3\text{O}_7$**
M. Guillaume, P. Allenspach, J. Mesot, *U. Staub*, and A. Furrer, *Solid State Communications*, Vol. **81**, No. 12, 999, 1992.
21. **NEUTRON SCATTERING STUDIES OF CRYSTAL STRUCTURE AND CRYSTALLINE ELECTRIC FIELD IN HIGH- T_c $\text{ErBa}_2\text{Cu}_3\text{O}_x$ DISORDERED BY FAST NEUTRON IRRADIATION**
A. Mirmelstein, A. Podlesnyak, V. Voronin, S. Lebedev, B. Goshchitskii, P. Allenspach, J. Mesot, *U. Staub*, M. Guillaume, P. Fischer, and A. Furrer, *Physica C* **200**, 337 (1992).

1991

20. **NEUTRON SPECTROSCOPIC STUDIES OF THE RELATION BETWEEN SUPERCONDUCTIVITY AND THE CRYSTAL FIELD IN HIGH-TEMPERATURE SUPERCONDUCTORS**

- A. Furrer, P. Allenspach, J. Mesot, *U. Staub*, H. Blank, H. Mutka, C. Vettier, and A. Mirmelstein, in Proc. of the "VI INTERNATIONAL SCHOOL ON NEUTRON PHYSICS", 8-18 October, 1990, Alushta, USSR Vol. 2, p. 278.
19. **NEUTRON SPECTROSCOPIC STUDIES OF CRYSTALLINE ELECTRIC FIELDS IN HIGH-T_c ErBa₂Cu₃O₇ DOPED WITH Zn and Ni**
A. Podlesnyak, V. Kozhevnikov, A. Mirmelstein, P. Allenspach, J. Mesot, *U. Staub*, A. Furrer, R. Osborn, S.M. Bennington, and A.D. Taylor, *Physica C* **175**, 587 (1991).
 18. **THE CRYSTALLINE ELECTRIC FIELD AS A DIRECT PROBE FOR CHARGE TRANSFER PROCESSES IN HIGH-TEMPERATURE SUPERCONDUCTORS**
P. Allenspach, J. Mesot, *U. Staub*, A. Furrer, H. Blank, H. Mutka, C. Vettier, E. Kaldis, J. Karpinski, and S. Rusiecki, *Supercond. Sci. Technol.* **4**, 76 (1991).
 17. **NEUTRON SPECTROSCOPIC STUDIES OF THE RELATION BETWEEN SUPERCONDUCTIVITY AND THE CRYSTAL FIELD IN HIGH-TEMPERATURE SUPERCONDUCTORS**
A. Furrer, P. Allenspach, J. Mesot, *U. Staub*, H. Blank, H. Mutka, C. Vettier, E. Kaldis, J. Karpinski, S. Rusiecki, and A. Mirmelstein, *Eur. J. Solid State Inorg. Chem.* **28**, 627 (1991).
 16. **OXYGEN-VACANCY AND PRESSURE INDUCED CHANGES OF THE CRYSTAL-FIELD INTERACTION IN ErBa₂Cu₃O_x (6.1≤x≤7.0) DETERMINED BY INELASTIC NEUTRON SCATTERING**
P. Allenspach, J. Mesot, *U. Staub*, A. Furrer, H. Blank, H. Mutka, and C. Vettier, Proc. ICMC'90, Topical-Conf. on Material Aspects of High-Temperature Superconductors, Vol. 2, p. 707, ed. H.C. Freyhardt, R. Flükiger, M. Penckert (DGM Informationsgesellschaft, Verlag, 1991).
 15. **THE CRYSTALLINE ELECTRIC FIELD AS A DIRECT PROBE FOR CHARGE TRANSFER PROCESSES IN HIGH-TEMPERATURE SUPERCONDUCTORS**
P. Allenspach, J. Mesot, *U. Staub*, A. Furrer, H. Blank, H. Mutka, C. Vettier, E. Kaldis, J. Karpinski, and S. Rusiecki, *Physica B* **171**, 269 (1991)
 14. **NEUTRON SPECTROSCOPIC STUDIES OF CRYSTALLINE ELECTRIC FIELDS IN DISORDERED HIGH-T_c ErBa₂Cu₃O_x**
A. Podlesnyak, V. Kozhevnikov, A. Mirmelstein, P. Allenspach, J. Mesot, *U. Staub*, and A. Furrer, *Physica C* **185-189**, 817 (1991).
 13. **EVIDENCE FOR INTERMEDIATE VALENCE Sm IONS IN SmBa₂Cu₃O_x**
M. Guillaume, P. Allenspach, J. Mesot, *U. Staub*, A. Furrer, V. Trounov, A. Kurbakov, H. Blank, and H. Mutka, *Physica C* **185-189**, 819 (1991).
 12. **THE CRYSTALLINE ELECTRIC FIELD AS A DIRECT PROBE FOR CHARGE DISTRIBUTION IN THE COPPER-OXYGEN PLANES OF THE HIGH-T_c SUPERCONDUCTOR ErBa₂Cu₃O_x**

J. Mesot, P. Allenspach, *U. Staub*, A. Furrer, R. Osborn, S. Bennington, and A.D. Taylor, *Physica C* **185-189**, 2167 (1991).

11. **NEUTRON SCATTERING STUDIES OF $\text{Bi}_2\text{Sr}_2\text{Ca}_{0.5}\text{Ho}_{0.5}\text{Cu}_2\text{O}_{8+x}$**
U. Staub, P. Allenspach, J. Mesot, A. Furrer, R. Müller, T. Schweizer, L.J. Gauckler, H. Blank, and H. Mutka, *Z. Phys. B-Condensed Matter* **85**, 35 (1991).
10. **MAGNETIC PHASE TRANSITION IN $\alpha\text{-CeS}_2$**
A. G. Klimenko, S. M. Ishikaev, A. B. Tagaev, I. G. Vasilyeva, M. M. Karpenko, P. Fischer, A. Furrer, and *U. Staub*, *J. Appl. Phys.* **69**, 4630 (1991).
9. **THE CRISTALLINE FIELD AS A LOCAL PROBE FOR CHARGE DISTRIBIUTIONS IN THE COPPER-OXIDE PLANES OF HIGH- T_c SUPERCONDUCTORS**
A. Furrer, P. Allenspach, J. Mesot, and *U. Staub*, presented ICMAS-91, Gournay sur Marne, France, 1991.
8. **THE CRYSTALLINE ELECTRIC FIELD AS A DIRECT PROBE FOR CHARGE TRANSFER PROCESSES IN HIGH-TEMPERATURE SUPERCONDUCTORS (ABSTRACT)**
P. Allenspach, J. Mesot, *U. Staub*, and A. Furrer, *J. Appl. Phys.* **69**, 5204 (1991).

1990

7. **THE CRYSTALLINE ELECTRIC FIELD AS A DIRECT PROBE FOR THE ELECTRON DOPING PROCESS IN $\text{Nd}_{2-x}\text{Ce}_x\text{CuO}_4$**
A. Furrer, P. Allenspach, J. Mesot, and *U. Staub*, *Physica C* **168**, 609 (1990).
6. **CRYSTAL-FIELD EXCITATION IN Nd_2CuO_4**
U. Staub, P. Allenspach, A. Furrer, H.R. Ott, S.-W. Cheong, and Z. Fisk, *Solid State Comm.* **75**, 431 (1990).
5. **PRESSURE INDUCED STRUCTURAL AND ELECTRONIC PROPERTIES OF HIGH- T_c SUPERCONDUCTING MATERIALS STUDIED BY NEUTRON SCATTERING**
J. Mesot, P. Allenspach, *U. Staub*, A. Furrer, H. Blank, H. Mutka, C. Vettier, E. Kaldis, J. Karpinski, and S. Rusiecki, *J. Less-Common Metals* **164&165**, 59 (1990).
4. **PRESSURE INDUCED ELECTRONIC PROPERTIES OF $\text{ErBa}_2\text{Cu}_3\text{O}_x$ and $\text{ErBa}_2\text{Cu}_4\text{O}_8$**
P. Allenspach, J. Mesot, *U. Staub*, A. Furrer, H. Blank, H. Mutka, C. Vettier, E. Kaldis, J. Karpinski, and S. Rusiecki, *Proc. Int. Workshop "Effects of Strong Disorder in HTSC"*, 25-29 June 1990, Zarechny, USSR, ed. B.N. Goshchitskii, V.I. Bobrovskii, p. 276.
3. **PRESSURE-INDUCED CHARGE REDISTRIBUTION IN $\text{ErBa}_2\text{Cu}_3\text{O}_x$ DETERMINED BY NEUTRON CRYSTAL-FIELD SPECTROSCOPY**
J. Mesot, *U. Staub*, P. Allenspach, A. Furrer, and C. Vettier, in *Springer Series in Solid-State Sciences, Vol. 99, Electronic Properties of High- T_c Superconductors and Related Compounds*, ed. H. Kuzmany, M. Mehring, J. Fink, 1990.

2. **NEUTRON SPECTROSCOPIC STUDIES OF THE RELATION BETWEEN SUPERCONDUCTIVITY AND THE CRYSTAL FIELD IN HIGH-T_c MATERIALS**

A. Furrer, P. Allenspach, J. Mesot, and U. Staub, Proc. Int. Workshop "Effects of Strong Disorder in HTSC", 25-29 June 1990, Zarechny, USSR, ed. B.N. Goshchitskii, V.I. Bobrovskii, p. 267.

1989

1. **NEUTRON SPECTROSCOPIC STUDIES OF THE RELATION BETWEEN SUPERCONDUCTIVITY AND THE CRYSTAL FIELD IN ErBa₂Cu₃O_x (6<x≤7) AND ErBa₂Cu₄O₈**

P. Allenspach, U. Staub, A. Furrer, E. Kaldis, J. Karpinski, S. Rusiecki, and H. Blank, Proc. Int. Conf. on Superconductivity, 1989, Paris, ed. R. Surayanaryanan (Inst. for Indust. Techn. Transfer, Paris, 1989).