

# ARBEITSGRUPPEN DEPARTEMENT FÜR CHEMIE UND BIOCHEMIE

Band 1

PROF. U. BAUMANN

1 - 56

1. H. Lilie, W. Haehnel, R. Rudolph, U. Baumann  
Folding of a synthetic parallel  $\beta$ -roll protein  
FEBS Letters 2000, 470, 173-177
2. K. Snell, U. Baumann, P.C. Byrne, K.J. Chave,  
S.B. Renwick, P.G. Sanders and S.K. Whitehouse  
The genetic organization and protein crystallographic  
structure of human serine hydroxymethyltransferase  
Advan. Enzyme. Regul. 2000, 40, 353-403

PROF. P. BIGLER

57 - 78

3. P. Bigler  
NMR Spectroscopy: Processing Strategies (Zweitaufgabe)  
VCH-Wiley, 2000
4. J.-D. Berset, P. Bigler, D. Herren  
Analysis of Nitro Musk Compounds and their Amino Metabolites in  
Liquid Sewage Sludges using NMR and Mass Spectroscopy  
Anal. Chem. 2000, **72**, 2124-2131
5. R. Burger, C. Schorn, P. Bigler  
BIRD-HMBC: improved detection of heteronuclear long-range cou-  
plings  
Magn. Reson. Chem. 2000, **38**, 963-969

PROF. A. BOSCHETTI

79 - 88

6. A. Rüfenacht, A. Boschetti  
Chloroplasts of the green alga *Chlamydomonas reinhardtii*  
possess at least four distinct stromal processing proteases  
Photosynthesis Research 2000, 63, 249-258

PROF. G. CALZAFERRI

89 - 176

7. G. Calzaferri  
Dye molecules in zeolite L nano crystals for efficient light harvesting  
Photofunctional Zeolites, NOVA Science Publ. NY, editor M. Anpo,  
205 - 218 (2000).
8. G. Calzaferri, D. Brühwiler, S. Megelski, M. Pfenniger, M. Pauchard,  
B. Hennessy, H. Maas, A. Devaux, U. Graf  
Playing with dye molecules at the inner and outer surface of zeolite L  
Solid State Sciences, 2, 421 - 447 (2000).
9. M. Pauchard, A. Devaux, G. Calzaferri  
Dye-loaded zeolite L sandwiches as artificial antenna systems for light  
transport  
Chemistry, a European Journal, 6, 3456 - 3470 (2000).
10. M. Pfenniger, G. Calzaferri  
Intrazeolite diffusion kinetics of dye molecules in the nanochannels of  
zeolite L, monitored by energy transfer  
ChemPhysChem, 4, 211 - 217 (2000).
11. R. Seifert, R. Rytz, G. Calzaferri  
Colors of Ag<sup>+</sup>-exchanged zeolite A  
J. Phys. Chem. A, 104, 7473 - 7483 (2000).
12. G. Calzaferri, D. Brühwiler, S. Glaus, D. Schürch, A. Currao  
Quantum-sized silver, silver chloride and silver sulfide clusters  
Int. Symp. on Silver Halide Techn., Sept. 11-14, 2000, Quebec  
(IS&T and SPSTJ) AgX-2000, Proceedings, 59 - 62 (2000).
13. M. Corboz, I. Alxneit, G. Stoll, H. R. Tschudi  
On the determination of quantum efficiencies in heterogeneous  
photocatalysis  
J. Phys. Chem. B, 104, 10569 – 10577 (2000).

## PROF. S. DECURTINS

177 - 237

14. R. Sieber, S. Decurtins, H. Stoeckli-Evans, C. Wilson, D. Yufit,  
J.A.K. Howard, S. C. Capelli, A. Hauser  
A thermal spin-transition in [Co(bpy)<sub>3</sub>][LiCr(ox)<sub>3</sub>] (ox=C<sub>2</sub>O<sub>4</sub><sup>2-</sup>;  
bpy=2,2'-bipyridine)  
Chem. Eur. J. 2000, 6, 361-368
15. H.P. Andres, S. Decurtins, H.U. Güdel  
Neutron Scattering of Molecular Magnets  
In *Proceedings of the 7th Summer School on Neutron Scattering,*  
*Zuoz 1999*, Furrer, A., Ed.; World Scientific: London, 2000, 149-167

16. M.E. von Arx, L. van Pieterson, E. Burattini, A. Hauser, R. Pellaux, S. Decurtins  
Luminescence and Energy Transfer of  $[\text{Ru}(\text{bpy})_3]^{2+}$ ,  $[\text{Cr}(\text{ox})_3]^{3-}$ , and  $[\text{Os}(\text{bpy})_3]^{2+}$  in three-dimensional oxalato-networks  
J. Phys. Chem 2000, A104, 883-893
17. G. Francese, F.M. Romero, A. Neels, H. Stoeckli-Evans, S. Decurtins  
Crystal Structures and Magnetic Properties of Metal Complexes Bearing Four Nitronyl Nitroxide Moieties in the same Coordination Sphere  
Inorg. Chem. 2000, 39, 2087-2095
18. J. Larionova, M. Gross, M. Pilkington, H.P. Andres, H. Stoeckli, H.U. Güdel, S. Decurtins  
High-Spin Molecules: A Novel Cyano-Bridged  $\text{Mn}(\text{II})_9\text{Mo}(\text{V})_6$  Cluster with a  $S = 5^{1/2}$  Ground State and Ferromagnetic Intercluster Ordering at low Temperatures  
Angew. Chem. Int. Ed. 2000, 39, 1605-1609
19. M. Pilkington, S. Decurtins  
Molecular-Based Magnetism in High-Spin Molecular Clusters and Three-Dimensional Networks Based on Cyanometalate Building Blocks  
CHIMIA 2000, 54, 593-601

PROF. B. ERNI / DR. B. BLUM

238 - 257

20. R. Beutler, F. Ruggiero, B. Erni  
Folding and activity of circularly permuted forms of a polytopic membrane protein  
Proc. Natl. Acad. Sci. USA 2000, 97, 1477-1482
21. R. Beutler, M. Kaufmann, F. Ruggiero, B. Erni  
The glucose transporter of the *Escherichia coli* phosphotransferase system: Linker insertion mutants and split variants  
Biochemistry 2000, 39, 3745-3750
22. A. Schnauffer, S. Sbicego, B. Blum  
Antimycin A resistance in a mutant *Leishmania tarentolae* strain is correlated to a point mutation in the mitochondrial apocytochrome *b* gene  
Curr. Genet. 2000, 37, 234-241

PROF. H. GÄGGELER

258 - 417

23. B. Eichler, H.P. Zimmermann, H.W. Gäggeler  
Adsorption of radon on ice surfaces  
J. Phys. Chem. **A104**, 14, 3126-3131 (2000).
24. R. Eichler, B. Eichler, H.W. Gäggeler, D.T. Jost, D. Piguet, A. Türler  
Gas phase chemistry of technetium and rhenium oxychlorides  
Radiochim. Acta **88**, 87-93 (2000).

25. R. Eichler, W. Bröchle, R. Dressler, Ch.E. Düllmann, B. Eichler, H.W. Gäggeler, K.E. Gregorich, D.C. Hoffman, S. Hübener, D.T. Jost, U.W. Kirbach, C.A. Laue, V.M. Lavanchy, H. Nitsche, J.B. Patin, D. Piguet, M. Schädel, D.A. Shaughnessy, D.A. Strellis, S. Taut, L. Tobler, Y.S. Tsyganov, A. Türler, A. Vahle, P.A. Wilk, A.B. Yakushev  
Chemical characterisization of bohrium (element 107)  
Nature **407**, 63-65 (2000).
26. H.W. Gäggeler  
Bohrium finds a place in the Table  
Int. Journal of High-Energy Physics CERN COURIER, Vol. **40/1**  
(2000).
27. M. Wachsmuth, B. Eichler, L. Tobler, D.T. Jost, H.W. Gäggeler, M. Ammann  
On-line gas-phase separation of short-lived bromine nuclides from precursor selenium  
Radiochim. Acta **88**, 873-877 (2000).
28. A. Eichler, M. Schwikowski, H.W. Gäggeler, V. Furrer, H.-A. Synal, J. Beer, M. Sauer, M. Funk  
Glaciochemical dating of an ice core from the upper Grenzgletscher (4200 m a.s.l.)  
J. Glaciology **46**, 507-515 (2000).
29. A. Eichler, M. Schwikowski, H.W. Gäggeler  
An Alpine ice core record of anthropogenic HF and HCl emissions  
Geophys. Res. Lett. **27**, 3225-3228 (2000).
30. M. Hoelzle, D. Vonder Mühl, M. Schwikowski, H.W. Gäggeler  
Hochalpine Gletscher als Zeugen der Geschichte der Luftverschmutzung  
Die Alpen **10**, 25-33 (2000).
31. M. Lugauer, U. Baltensperger, M. Furger, H.W. Gäggeler, D.T. Jost, S. Nyeki, M. Schwikowski  
Influences of vertical transport and scavenging on aerosol particle surface area and radon decay product concentrations at the Jungfrauoch (3454 m a.s.l.)  
J. Geophys. Res. **105**, 19'869-19'879 (2000).
32. S. Nyeki, M. Kalberer, I. Colbeck, S. De Wekker, M. Furger, H.W. Gäggeler, M. Kossmann, M. Lugauer, D. Steyn, E. Weingartner, M. Wirth, U. Baltensperger  
Convective boundary layer evolution to 4 km asl over high-Alpine terrain: Airborne Lidar observations in the Alps  
Geophys. Res. Lett. **27**,5, 689-692 (2000).
33. U. Schotterer, Th. Stocker, H. Bürki, J. Hunziker, R. Kozel, D. A. Grasso, J.-P. Tripet  
*Das Schweizer Isotopen-Messnetz: Trends 1992-1999*  
Gwa **10** (2000).

- 34.** W. Stichler, U. Schotterer  
From accumulation to discharge: modification of stable isotopes during glacial and post-glacial processes  
*Hydrol. Process.* **14**, 1423-1438 (2000).
- 35.** N. Streit, E. Weingartner, C. Zellweger, M. Schwikowski, H.W. Gäggeler, U. Baltensperger  
Characterisation of size-fractionated aerosol from the Jungfrauoch (3580 m asl) using Total Reflection X-Ray Fluorescence (TXRF)  
*Intern. J. Environ. Anal. Chem.* **76**, 1-16 (2000).
- 36.** B. Tenberken-Pötzsch, M. Schwikowski, H.W. Gäggeler  
Analysis of size-classified ice crystals by capillary electrophoresis  
*J. Chromatogr. A* **871**, 391-398 (2000).
- 37.** B. Tenberken-Pötzsch, M. Schwikowski, H.W. Gäggeler  
A method to sample and separate ice crystals and supercooled cloud droplets in mixed phased clouds for subsequent chemical analysis  
*Atmos. Environ.* **34**, 3629-3633 (2000).
- 38.** E. Strub, J.V. Kratz, A. Kronenberg, A. Nähler, P. Thörle, S. Zauner, W. Brüche, E. Jäger, M. Schädel, B. Schausten, E. Schimpf, Li Zongwei, U. Kirbach, D. Schumann, D. Jost, A. Türlér, A. Asai, Y. Nagame, M. Sakama, K. Tsukada, H.W. Gäggeler, J.P. Glatz  
Fluoride complexation of rutherfordium (Rf, element 104)  
*Radiochim. Acta* **88**, 265-271 (2000).
- 39.** A. Stohl, N. Spichtinger-Rakowsky, P. Bonasoni, H. Feldmann, M. Memmesheimer, H.E. Scheel, T. Trickl, S. Hübener, W. Ringer, M. Mandl  
The influence of stratospheric intrusions on alpine ozone concentrations  
*Atmos. Environm.* **34**, 1323-1354 (2000).
- 40.** P.A. Wilk, K.E. Gregorich, A. Türlér, C.A. Laue, R. Eichler, V. Ninov, J.L. Adams, U.W. Kirbach, M.R. Lane, D.M. Lee, J.B. Patin, D.A. Shaughnessy, D.A. Strellis, H. Nitsche, D.C. Hoffman  
Evidence for New Isotopes of Element 107: <sup>266</sup>Bh and <sup>267</sup>Bh  
*Physical Review Letters* **85**, 13, 2697-2700 (2000).

41. H.P. Andres, S. Decurtins and H.U. Güdel  
Neutron Scattering of Molecular Magnets  
Frontiers of Neutron Scattering, ed. A. Furrer (World Scientific, Singapore 2000) 149-167
42. M.F. Hazenkamp, A.C. Stückli, E. Cavalli and H.U. Güdel  
Optical Spectroscopy and Density Functional Calculations of Chromium(V)-Doped YVO<sub>4</sub> and YPO<sub>4</sub>: Influence of the Second Coordination Sphere  
Inorganic Chem. 39, 251-254 (2000)
43. M. Pollnau, D.R. Gamelin, S.R. Lüthi, M.P. Hehlen and H.U. Güdel  
Power dependence of upconversion luminescence in lanthanide and transition-metal-ion systems  
Physical Rev. B 61, 3337-3346 (2000)
44. Høgni Weihe, Hans U. Güdel and Hans Toftlund  
Superexchange in Magnetic Insulators:  
An Interpretation of the Metal-Metal Charge Transfer Energy in the Anderson Theory  
Inorganic Chem. 39, 1351-1362 (2000)
45. N. Cavadini, W. Henggeler, A. Furrer, H.U. Güdel, K. Krämer, H. Mutka  
Magnetic excitations and spin gap in KCuCl<sub>3</sub>  
Physica B 276-278, 540-542 (2000)
46. K.W. Krämer, H.U. Güdel, B. Roessli, P. Fischer, A. Dönni, N. Wada, F. Fauth, M.T. Fernandez-Diaz, T. Hauss  
Magnetic ordering in the erbium honeycomb lattices of ErX<sub>3</sub> (X=Cl, Br, I)  
Physica B 276-278, 674-675 (2000)
47. D. Schaniel, P. Allenspach, A. Furrer, K. Krämer, H.U. Güdel  
Dimer splitting of Er<sup>3+</sup> in Cs<sub>3</sub>Er<sub>2</sub>X<sub>9</sub> (X=Cl, Br): mystery solved  
Physica B 276-278, 690-691 (2000)
48. I. Mirebeau, M. Hennion, H. Casalta, H. Andres, H.U. Güdel, V. Irodova, A. Caneschi  
The Mn<sub>12</sub>-acetate spin cluster  
ILL Annual Report 99, 48-49 (2000)
49. Daniel R. Gamelin and Hans U. Güdel  
Design of Luminescent Inorganic Materials:  
New Photophysical Processes Studied by Optical Spectroscopy  
Accounts of Chem. Research 33, 235-242 (2000)

50. Rafael Valiente, Oliver Wenger and Hans U. Güdel  
New photon upconversion processes in Yb<sup>3+</sup> doped CsMnCl<sub>3</sub>  
and RbMnCl<sub>3</sub>  
Chem. Physics Letters 320, 639-644 (2000)
51. Joulia Larionova, Mathias Gross, Melanie Pilkington, Hanspeter Andres, Helen Stoeckli-Evans, Hans U. Güdel and Silvio Decurtins  
High-Spin Molecules: A Novel Cyano-Bridged Mn<sup>II</sup><sub>9</sub>Mo<sup>V</sup><sub>6</sub> Molecular Cluster with a S = 51/2 Ground State and Ferromagnetic Intercluster Ordering at Low Temperatures  
Angew. Chemie Int. Ed. 39, 1605-1609 (2000)
52. Markus Wermuth, Hans U. Güdel  
NIR to VIS up-conversion in Os<sup>4+</sup>-doped halide compounds  
J. of Lum. 87-89, 1014-1016 (2000)
53. Hans U. Güdel and Markus Pollnau  
Near-infrared to visible photon upconversion processes in lanthanide doped chloride, bromide and iodide lattices  
Journal of Alloys and Comp. 303-304, 307-315 (2000)
54. Andreas Loosli, Markus Wermuth and Hans-Ueli Güdel, Silvia Capelli, Jürg Hauser and Hans-Beat Bürgi  
Crystal Structure and Optical Spectroscopy of Er<sub>2</sub>[Pt(CN)<sub>4</sub>]<sub>3</sub>·21H<sub>2</sub>O and Er<sub>2</sub>[Pt(CN)<sub>4</sub>]<sub>2</sub>·SO<sub>4</sub>·11.5H<sub>2</sub>O  
Inorg. Chem. 39, 2289-2293 (2000)
55. N. Cavadini, G. Heigold, W. Henggeler, A. Furrer, H.U. Güdel, K. Krämer and H. Mutka  
Quantum magnetic interactions in S=1/2 KCuCl<sub>3</sub>  
J. Phys.: Condens. Matter 12, 5463-5472 (2000)
56. A. Furrer and H.U. Güdel  
Spin-wave excitations in finite chain segments in the diluted one-dimensional Heisenberg antiferromagnet CsMn<sub>1-x</sub>Mg<sub>x</sub>Br<sub>3</sub>  
The European Phys. J. B 16, 81-84 (2000)
57. Oliver S. Wenger, Daniel R. Gamelin, Hans U. Güdel, Andrei V. Butashin, and Alexander A. Kaminskii  
Site-selective yellow to violet and near-infrared to green upconversion in BaLu<sub>2</sub>F<sub>8</sub>:Nd<sup>3+</sup>  
Phys. Rev. B. 61, 16530-16537 (2000)
58. Markus Wermuth and Hans U. Güdel  
Lifetime determination of intermediate excited electronic states via up-conversion using sequences of square-wave excitation pulses  
Chem. Phys. Letters 323, 514-521 (2000)
59. Oliver S. Wenger, Daniel R. Gamelin and Hans U. Güdel  
Chemical Modification of Transition Metal Upconversion Properties: Exchange Enhancement of Ni<sup>2+</sup> Upconversion Rates in Ni<sup>2+</sup>:RbMnCl<sub>3</sub>  
J. of the American Chemical Society 122, 7408-7409 (2000)
60. Høgne Weihe and Hans U. Güdel  
Magnetic Exchange Across the Cyanide Bridge

Comments Inorg. Chem. 22, 75-103 (2000)

61. D. Andreica, N. Cavadini, H.U. Güdel, F.N. Gygax, K. Krämer, M. Pinkpank, A. Schenck  
Muon-induced break up of spin-singlet pairs in the double-chain compound  $\text{KCuCl}_3$   
Physica B 289-290, 176-180 (2000)
62. E.V.D. van Loef, P. Dorenbos and C.W.E. van Eijk, K. Krämer and H.U. Güdel  
High-energy-resolution scintillator:  $\text{Ce}^{3+}$  activated  $\text{LaCl}_3$   
Applied Physics Letters 77, 1467-1468 (2000)
63. R. Burlot-Loison, M. Pollnau, K. Krämer, P. Egger, J. Hulliger, and H.U. Güdel  
Laser-relevant spectroscopy and upconversion mechanisms of  $\text{Er}^{3+}$  in  $\text{Ba}_2\text{YCl}_7$  pumped at 800 nm  
J. Opt. Soc. Am. B 17, 2055-2067 (2000)
64. Daniel R. Gamelin and Hans U. Güdel  
Excited-State Dynamics and Sequential Two-Photon Upconversion Excitation of  $\text{Mo}^{3+}$ -Doped Chloro- and Bromo-elpasolites  
The Journal of Phys. Chem. B 104, 10222-10234 (2000)
65. K.W. Krämer, H.U. Güdel, P. Fischer, F. Fauth, M.T. Fernandez-Diaz and T. Hauss  
Triangular antiferromagnetic order in the honeycomb layer lattice of  $\text{ErCl}_3$   
Eur. Phys. J. B 18, 39-47 (2000)
66. Hanspeter Andres, Reto Basler, Hans-Ulrich Güdel, Guillem Aromi, George Christou, Herma Büttner, and Benoit Rufflé  
Inelastic Neutron Scattering and Magnetic Susceptibilities of the Single-Molecule Magnets  $[\text{Mn}_4\text{O}_3\text{X}(\text{OAc})_3(\text{dbm})_3]$  ( $\text{X}=\text{Br}, \text{Cl}, \text{OAc}$ , and  $\text{F}$ ). Variation of the Anisotropy along the Series.  
J. of the American Chem. Soc. 122, 12469-12477 (2000)
67. Daniel R. Gamelin, Stefan R. Lüthi and Hans U. Güdel  
The Role of Laser Heating in the Intrinsic Optical Bistability of  $\text{Yb}^{3+}$ -Doped Bromide Lattices  
The Journal of Phys. Chem. B 104, 11045-11057 (2000)
68. F. Rodriguez, D. Hernández and H.U. Güdel  
Evidence of  $\text{Mn}^{2+}$ - $\text{Mn}^{2+}$  Double Excitation Transitions in  $\text{NH}_4\text{MnCl}_3$  by Pressure Spectroscopy in Science and Technology of High Pressure, Proceedings of AIRAPT-17, edited by M.H. Manghnani, W.J. Nellis and M.F. Nicol, pp. 987-990, Universities Press, Hyderabad, India, 2, 987-990 (2000)



69. N. Cavadini, Ch. Rüegg, W. Henggeler, A. Furrer, H.-U. Güdel, K. Krämer and H. Mutka  
Temperature renormalization of the magnetic excitations in  $S=1/2$   $KCuCl_3$   
Eur. Phys. J. B 18, 565-571 (2000)
70. N. Cavadini, W. Henggeler, A. Furrer, K. Krämer, H.U. Güdel, A. Wildes, H. Mutka, P. Vorderwisch  
Triplet Excitations in a Family of  $S=1/2$  Unconventional Antiferromagnets  
Neutron Scattering in Novel Materials, ed. A. Furrer (World Scientific, Singapore, 2000) 237-251

## PROF. R. HÄNER

661 - 690

71. S.H. Leech, R.A. Olie, O. Gautschi, A.P. Simoes-Wüst, S. Tschopp, R. Häner, J. Hall, R.A. Stahel, U. Zangemeister-Wittke  
Induction of apoptosis in lung-cancer cells following *bcl-xL* anti-sense treatment  
Int. J. Cancer 2000, 86, 570-576.
72. A.P. Simoes-Wüst, R.A. Olie, O. Gautschi, S.H. Leech, R. Häner, J. Hall, D. Fabbro, R.A. Stahel, U. Zangemeister-Wittke  
*bcl-xL* antisense treatment induces apoptosis in breast carcinoma cells  
Int. J. Cancer 2000, 87, 582-590.
73. U. Zangemeister-Wittke, S.H. Leech, R.A. Olie, A.P. Simoes-Wüst, O. Gautschi, G.H. Luedke, F. Natt, R. Häner, P. Martin, J. Hall, C.M. Nalin, R.A. Stahel  
A novel bispecific antisense oligonucleotide inhibiting both *bcl-2* and *bcl-xL* expression efficiently induces apoptosis in tumor cells  
Clinical Cancer Research 2000, 6, 2547-2555.
74. R. Häner, D. Hüsken, J. Hall  
Development of artificial ribonucleases using macrocyclic lanthanide complexes  
Chimia 2000, 54, 569-573.

# ARBEITSGRUPPEN DEPARTEMENT FÜR CHEMIE UND BIOCHEMIE

Band 2

PROF. J. HULLIGER

691 - 804

75. T. Müller, J. Hulliger, W. Seichter, E. Weber, T. Weber and M. Wübbenhorst  
A new Organic Nanoporous Architecture: Dumb-Bell Shaped Molecules with Guests into Parallel Channels  
Chem. Eur. J., 6, 54-61, 2000
76. A. Quintel, F. Budde, P. Rechsteiner, K. Thoma, A. Zayats and J. Hulliger  
Molecular beam deposition of crystalline layers of polar perhydrotriphenylene inclusion compounds characterised by second harmonic generation microscopy  
J. Mater. Chem., 10, 27-30, 2000
77. A. Quintel, S.W. Roth, J. Hulliger and M. Wübbenhorst  
3D Imaging and Simulation of the Polarisation Distribution in Molecular Crystals  
Mol. Cryst. Liq. Cryst. A 338, 243-256, 2000
78. M. Wübbenhorst, J. van Turnhout, A. Quintel and J. Hulliger  
Spatially resolved heat conduction in polar perhydrotriphenylene inclusion compounds studied by means of thermal waves  
J. Appl. Phys. 88, 2108-2117, 2000
79. M. Wübbenhorst, J. van Turnhout, G. Klap, J.C. Jansen, A. Quintel and J. Hulliger  
Spontaneous Polarization and Orientational Dynamics of Polar Rod-like Molecules in Host/Guest Materials  
IEEE Transactions on Dielectrics and Electrical Insulation, 7, 523-530, 2000
80. P. Rechsteiner, J. Hulliger and M. Flörsheimer  
Phase-Sensitive Second Harmonic Microscopy Reveals Bipolar Twinning of Markov-Type Molecular Crystals  
Chem. Mater. 12, 3296-3300, 2000

81. J. Hulliger, S.W. Roth, A. Quintel and H. Bebie  
Polarity of Organic Supramolecular Materials: A Tunable Crystal Property  
J. Solid State Chem., 152, 49-56, 2000
82. J. Hulliger, F. Budde, A. Quintel and H. Bebie  
Spontaneous polarity formation in thin crystalline films of host-guest materials  
Surface Science 453, L323-L327, 2000
83. H. Bebie and J. Hulliger  
Thermal equilibrium polarization: a near-surface effect in dipolar-based molecular crystals  
Physica A 278, 327-336, 2000
84. P. Mikhail, J. Hulliger, M. Schnieper and H. Bill  
SrB<sub>4</sub>O<sub>7</sub>:Sm<sup>2+</sup>: crystal chemistry, Czochralski growth and optical hole burning  
J. Mater. Chem., 10, 987-991, 2000
85. P. Mikhail, A. Sieber, T. Samtleben, B. Trusch, T. Lüthi and J. Hulliger  
On the Crystal Chemistry and Stability of Sm<sup>2+</sup> in SmSO<sub>4</sub> and Solid Solutions of M<sub>1-x</sub>Sm<sub>x</sub>SO<sub>4</sub> (M = Ba, Sr)  
J. Solid State Chem. 154, 535-541, 2000
86. A.A. Kaminskii, H.J. Eichler, J. Hulliger, S. Haussühl, T. Chyba, D. Temple, J.C. Barnes, V.N. Dolbinina, J. Findeisen, Wang Jiyang and Lü Menkai  
Multiple Stokes and Anti-Stokes Generation in Triclinic  $\gamma$ -KIO<sub>3</sub> and Hexagonal  $\alpha$ -LiIO<sub>3</sub> Nonlinear Crystals  
Laser Phys. 10, 627-632, 2000
87. K. Szot, W. Speier, M. Pawelczyk, J. Kwapuliński, J. Hulliger, H. Hesse, U. Breuer and W. Quadackers  
Chemical inhomogeneity in the near-surface region of KTaO<sub>3</sub> evolving at elevated temperatures  
J. Phys.: Condens. Matter 12, 4687-4697, 2000
88. R. Burlot-Loison, M. Pollnau, K. Krämer, P. Egger, J. Hulliger and H.U. Güdel  
Laser-relevant spectroscopy and upconversion mechanisms of Er<sup>3+</sup> in Ba<sub>2</sub>YCl<sub>7</sub> pumped at 800 nm  
J. Opt. Soc. Am. B, 17, 2055-2067, 2000

DR. J. HUNZIKER

805 - 823

89. R. Tona, R. Bertolini, J. Hunziker  
Synthesis of Aminoglycoside-Modified Oligonucleotides  
Org. Lett. **2000**, 2, 1693-1696
90. R. Bertolini, J. Hunziker  
Aromatic vs. Carbohydrate Residues in the Major Groove: Synthesis of 5-[(Benzyloxy)methyl]pyrimidine Nucleosides

and Their Incorporation into Oligonucleotides  
Helv. Chim. Acta **2000**, 83, 1962-1976

PROF. R. KEESE

824 - 830

91. Tamis Darbre, Donghong Zheng, Rui Fraga, Reinhart Keese  
Some Novel Redox Reaction of Corrinoids  
in A. Fry, Y. Matsumura, eds, Organic Electrochemistry:  
Manuel L. Baizer Award Symposium in Honor of J. Simonet and  
J.W.P. Utley, pg 53-56, 2000.
92. Rui Fraga, Reinhart Keese  
Synthesis of a Vitamin B<sub>12</sub> Derivative with a Dipyrrole Side Chain  
Synlett 2000, 11, 1694-1696.

PROF. U. KRÄHENBÜHL

831 - 863

93. B.A. Hofmann, J.O. Nyström, U. Krähenbühl  
The Ordovician chondrite from Brunflo, central Sweden  
III. Geochemistry of terrestrial alteration  
Lithos 2000, 50, 305-324.
94. C.R. Widmer, U. Krähenbühl, J. Kramers, L. Tobler  
Lead isotope measurements on aerosol samples with ICP-MS  
J. Anal. Chem. 2000, 366, 171-173.
95. U. Krähenbühl  
The significance of lunar glasses  
Meteoritics & Planetary Science 2000, 35, 647.
96. D. Grambole, C. Neelmeijer, K. Noll, F. Herrmann  
<sup>19</sup>F(p,p' $\gamma$ )<sup>19</sup>F and <sup>18</sup>O(p, $\gamma$ )<sup>19</sup>F gamma-ray interferences studied on liquids  
Nucl. Instr. and Meth. in Phys. Res. B 161-163, 2000, 269-274.
97. P. Hoppe, K. Marti, U. Krähenbühl  
An Ion Microprobe Study of Boron in two Chondrules from the Allende  
CV3 Meteorite  
Lunar and Planetary Science XXXI, abstract # 1235, Lunar Planetary  
Institute Houston, CD rom 2000.

PROF. C. LEUMANN

864 - 915

98. E. Stulz, H.-B. Bürgi, C. Leumann  
Zr(IV)-tetraphenylporphyrinates as nuclease mimicks: structural kinetic and mechanistic studies on phosphate diester transesterification  
*Chem. Eur. J.*, **2000**, 6, 523-536.
99. R. Schütz, M. Cantin, C. Roberts, B. Greiner, E. Uhlmann,  
C. Leumann  
Olefinic peptide nucleic acid (OPA): New aspects on the  
molecular recognition of DNA by PNA

*Angewandte Chemie*, **2000**, 112, 1305-1308;  
*Angew. Chem. Int. Ed.* **2000**, 39, 1250-1253.

- 100.** B. M. Keller, C. J. Leumann  
Bicyclo[3.2.1]-DNA: implications on the structural and energetic role of the furanose subunit in complementary strand recognition of DNA  
*Angewandte Chemie*, **2000**, 112, 2367-2369;  
*Angew. Chem. Int. Ed.* **2000**, 39, 2278-2281.
- 101.** I. Pompizi, A. Häberli and C. J. Leumann  
Oligodeoxynucleotides containing conformationally constrained abasic sites: a UV- and fluorescence spectroscopic investigation on duplex stability and structure  
*Nucleic Acids Res.*, **2000**, 28, 2702-2708.
- 102.** S. P. Parel, C. J. Leumann  
Synthesis and pairing properties of oligodeoxynucleotides containing *N*<sup>7</sup>-2-aminopurine deoxynucleosides  
*Helv. Chim. Acta*, **2000**, 83, 2514-2526.
- 103.** D. Renneberg, H.-P. Pfander, C. J. Leumann  
Total synthesis of Coraxeniolide-A  
*J. Org. Chem.*, **2000**, 65, 9069-9079.

## PROF. S. LEUTWYLER

916 - 995

- 104.** A. Bach, S. Leutwyler  
Proton transfer in 7-hydroxyquinoline·(NH<sub>3</sub>)<sub>n</sub> solvent clusters  
*J. Chem. Phys.* 112, 560 – 565 (2000).
- 105.** A. Bach, S. Coussan, A. Müller, S. Leutwyler  
Water-chain clusters: Vibronic spectra of 7-hydroxyquinoline·(H<sub>2</sub>O)<sub>2</sub>  
*J. Chem. Phys.* 112, 1192 – 1203 (2000).
- 106.** A. Müller, F. Talbot, S. Leutwyler  
Intermolecular vibrations of jet-cooled (2-pyridone)<sub>2</sub>: A model for the uracil dimer  
*J. Chem. Phys.* 112, 3717 – 3725 (2000).
- 107.** S. Coussan, M. E. Alikhani, J. P. Perchard, W. Q. Zheng  
Infrared-induced isomerization of ethanol dimers trapped in argon and nitrogen matrices: Monochromatic irradiation experiments and DFT calculations  
*J. Phys. Chem. A*, 104, 5475 - 5483 (2000).

- 108.** S. Coussan, V. Brenner, J. P. Perchard, W. Q. Zheng  
Methanol-pyridine complexes trapped in argon and nitrogen matrices:  
Infrared induced isomerization and theoretical calculations  
J. Chem. Phys., 113, 8059 - 8069 (2000).
- 109.** S. Coussan, A. Bach, S. Leutwyler  
Hydrogen bonding and intermolecular vibrations of 7-Hydroxy-  
quinoline · NH<sub>3</sub> in the S<sub>0</sub> and S<sub>1</sub> states  
J. Phys. Chem. A, 104, 9864 - 9873 (2000).
- 110.** A. Bach, S. Coussan, A. Müller, S. Leutwyler  
Water-wire clusters: Vibronic spectra of 7-hydroxyquinoline · (H<sub>2</sub>O)<sub>3</sub>  
J. Chem. Phys., 113, 9032 - 9043 (2000).
- 111.** S. Portmann, A. Inauen, H. P. Lüthi, S. Leutwyler  
Chiral discrimination in hydrogen-bonded complexes  
J. Chem. Phys., 113, 9577 - 9585 (2000).
- 112.** T. Lang, H.-M. Frey, P. Beaud, M. Motzkus  
High resolution spectroscopy by fs-CARS in a molecular beam:  
vibrational anharmonicity, rotational constants and isotope shift in  
polyatomic molecules  
Raman Spectroscopy, ed. by S.-L. Zhang and B.-F. Zhu, John Wiley  
New York, 362 - 363 (2000).

PD DR. J. LÜTHY

996 - 1033

- 113.** M. v. Büren, J. Lüthy, P. Hübner  
A spelt-specific  $\gamma$ -gliadin gene: discovery and detection  
Theor Appl Genet 2000, 100, 271-279
- 114.** C. Wolf, M. Scherzinger, A. Wurz, U. Pauli, P. Hübner, J. Lüthy  
Detection of cauliflowermosaic virus by the polymerase  
chaine reaction: testing of food components for false-positive  
35S-promotor screening results  
Eur Food Res Technol 2000, 210, 367-372
- 115.** C. Wolf, M. Burgener, P. Hübner, J. Lüthy  
PCR-RFLP Analysis of Mitochondrial DNA:  
Differentiation of Fish Species  
Lebensm.- Wiss. u. -Technol. 2000, 33, 144-150
- 116.** D. Häfliger, P. Hübner, J. Lüthy  
Outbreak of viral gastroenteritis due to  
sewage-contaminated drinking water  
International Journal of Food Microbiology 2000, 54, 123-126
- 117.** C. Wolf, J. Lüthy  
Development of a PCR-system for Detection  
of Rapeseed and Other Cruciferae  
Mitt. Gebiete Lebensm. 2000, 91, 352-355
- 118.** C. Wolf, J. Lüthy  
Quantitative competitive (QC) PCR for

quantification of porcine DNA  
Meat Science 2001, 57, 161-168

PROF. J.-L. REYMOND

1034 - 1065

119. Fabrizio Badalassi, Denis Wahler, Gérard Klein, Paolo Crotti, Jean-Louis Reymond  
A Versatile Periodate-Coupled Fluorogenic Assay for Hydrolytic Enzymes  
Angew. Chem. 2000, 112, Nr. 22, 4233 – 4236; Angew. Chem. Int. Ed. 2000, 39, Nr. 22, 4067-4070
120. Raquel Pérez Carlón, Nathalie Jourdain and Jean-Louis Reymond  
Fluorogenic Polypropionate Fragments for Detecting Stereoselective Aldolases  
Chem. Eur. J 2000, 6, Nr. 22, 4154-4162
121. Olaf Ritzeler, Serge Parel, Bruno Therrien, Nicolas Bensele, Jean-Louis Reymond, and Kurt Schenk  
Atropisomeric Transition State Analogs  
Eur. J. Org. Chem. 2000, 1365-1372
122. Olivier Boss, Emmanuel Leroy, Adrian Blaser, and Jean-Louis Reymond  
Synthesis and Evaluation of Aminocyclopentitol Inhibitors of  $\beta$ -Glucosidases  
Organic Letters, 2000, 2, Nr. 2, 151-154
123. Adrian Blaser and Jean-Louis Reymond  
Stereoselective Inhibition of  $\alpha$ -L-Fucosidases by *N*-Benzyl Aminocyclopentitols  
Organic Letters, 2000, 2, Nr. 12, 1733-1736
124. Adrian Blaser, Jean-Louis Reymond  
Stereoselective Synthesis of an Aminocyclopentitol Analog of  $\alpha$ -L-Fucose via an Allylic Bromohydrin  
Synlett 2000, No 6, 817-819

PD DR. J. SCHALLER

1066 - 1104

125. S. Haeberli, L. Kuhn-Nentwig, J. Schaller, W. Nentwig  
Characterisation of antibacterial activity of peptides isolated from the venom of the spider *Cupiennius salei* (Araneae: Ctenidae)  
Toxicon 2000, 38, 373-380

126. L. Kuhn-Nentwig, J. Schaller, U. Kämpfer,  
H. Imboden, H. Malli, W. Nentwig  
A lysine rich C-terminal tail is directly involved in the toxicity of CSTX-1,  
a neurotoxic peptide from the venom of the spider *Cupiennius salei*  
Archives of Insect Biochemistry and Physiology 2000, 44, 101-111
127. J. Schaller  
Analysis of hydrophobic proteins and peptides by mass spectrometry  
Methods in Molecular Biology 2000, 146, 425-437
128. M. Suter, P. von Ballmoos, S. Kopriva, R. Op den Camp,  
J. Schaller, C. Kuhlemeier, P. Schürmann, C. Brunold  
Adenosine 5'-phosphosulfate sulfotransferase and adenosine  
5'-phosphosulfate reductase are identical enzymes  
Journal of Biological Chemistry 2000, 275, 930-936

### DR. S. SCHÜRCH

1105 - 1113

129. J. Magnusen, L.G. Blomberg, S. Claude, R. Tabacchi, A. Saxer,  
S. Schürch  
Gas Chromatographic Enantiomer Separation of Atropisomeric PCBs  
Using Modified Cyclodextrins as Chiral Phases  
J. High Resol Chromatogr. 2000, 23, (11), 619-627

### PROF. H. SIEGENTHALER

1114 - 1141

130. P. Forrer, F. Schlottig, H. Siegenthaler, M. Textor  
Electrochemical Preparation and Surface Properties of  
Gold Nanowire Arrays formed by the Template Technique  
Journal of Applied Electrochemistry 2000, 30, 533-541
131. D. Alliata, R. Kötz, P. Novak, H. Siegenthaler  
Electrochemical SPM Investigation of the Solid Electrolyte  
Interphase Film formed on HOPG Electrodes  
Electrochemistry Communications 2000, 2, 436-440
132. A. Daridon, J. Fompeyrine, J.-P. Locquet, C. Musil, H. Siegenthaler  
Investigations of the Surface Morphology of La<sub>2</sub>CuO<sub>4</sub> MBE-grown  
Thin Films before and after Electrochemical Oxidation  
Surface Science 2000, 465, 149-162

### DR. Ph.L.W. TREGENNA-PIGGOTT

1142 - 1154

133. Ph.L.W. Tregenna-Piggott, Ch.J. Noble, J.R. Pilbrow  
The study of the influence of Jahn-Teller coupling and low symmetry  
strain on the anomalous electron paramagnetic resonance spectrum  
of titanium(III) doped CsAl(SO<sub>4</sub>)<sub>2</sub>·12H<sub>2</sub>O  
Journal of Chemical Physics 2000, 113, 8, 3289-3301,



- 134.** H.B. Bürgi, S.C. Capelli  
Dynamics of molecules in crystals from multi-temperature anisotropic displacement parameters. I. Theory  
Acta Cryst. 2000, A56, 403-412
- 135.** S.C. Capelli, M. Förtsch, H.B. Bürgi  
Dynamics of molecules in crystals from multi-temperature anisotropic displacement parameters. II. Application to benzene ( $C_6D_6$ ) and urea  $[OC(NH)_2]$   
Acta Cryst. 2000, A56, 413-424
- 136.** H.B. Bürgi, S.C. Capelli, H. Birkedal  
Anharmonicity in anisotropic displacement parameters  
Acta Cryst. 2000, A56, 425-435
- 137.** H.B. Bürgi  
Motion and Disorder in Crystal Structure Analysis: Measuring and Distinguishing Them  
Annu. Rev. Phys. Chem., 2000, 51: 275-296
- 138.** E. Stulz, H.B. Bürgi, Ch. Leumann  
 $Zr^{IV}$ -tetraphenylporphyrinates as Nuclease Mimics: Structural, Kinetic and Mechanistic Studies on Phosphate Diester Transesterification.  
Chem. Eur. J. 2000, 6, No. 3, 523-536
- 139.** A. Loosli, M. Wermuth, H-U. Güdel, S. Capelli, J. Hauser, H.B. Bürgi  
Crystal Structure and Optical Spectroscopy of  $Er_2[Pt(CN)_4]_3 \cdot 21H_2O$  and  $Er_2[Pt(CN)_4]_2 \cdot SO_4 \cdot 11.5H_2O$   
Inorganic Chemistry, 39, No. 11, 2289-2293
- 140.** T. Müller, J. Hulliger, W. Seichter, E. Weber, Th. Weber, M. Wübberhorst  
A New Organic Nanoporous Architecture: Dumb-Bell-Shaped Molecules with Guests in Parallel Channels  
Chem. Eur. J. 2000, 6, No. 1, 54-61
- 141.** S. Merlino, E. Bonaccorsi, Th. Armbruster  
The real structures of clinotobermorite and tobermorite 9 Å: OD character, polytypes, and structural relationships  
Eur. J. Mineral. 2000, 12, 411-429
- 142.** J. Stolz, Th. Armbruster, B. Henessy  
Site preference of exchanged alkylammonium ions in heulandite: single-crystal X-ray structure refinements  
Z. Kristallogr. 2000, 215, 278-287
- 143.** E. Gnos, Th. Armbruster  
Kinoshitalite,  $Ba(Mg)_3(Al_2Si_2)_{10}(OH,F)_2$ , a brittle mica from a manganese deposit in Oman: Paragenesis and crystal

- chemistry  
American Mineralogist, 2000, 85, 242-250
- 144.** Th. Arlt, M. Kunz, J. Stolz, Th. Armbruster, R.J. Angel  
P-T-X data on P<sub>2</sub>/c-clinopyroxenes and their displacive phase  
transitions  
Contrib. Mineral. Petrol. 2000, 138, 35-45
- 145.** Th. Armbruster, E. Gnos  
P<sub>4</sub>/n and P<sub>4</sub>nc long-range ordering in low-temperature  
vesuvianites  
American Mineralogist 2000, 85, 563-569
- 146.** Th. Armbruster, E. Gnos  
Tetrahedral vacancies and cation ordering in low-temperature  
Mn-bearing vesuvianites: Indication of a hydrogarnet-like  
substitution  
American Mineralogist, 2000, 85, 570-577
- 147.** J. Stolz, P. Yang, Th. Armbruster  
Cd-exchanged heulandite: symmetry lowering and site  
preference  
Microporous and Mesoporous Materials, 2000, 37, 233-242
- 148.** Th. Armbruster, E. Gnos  
"Rod" polytypism in vesuvianite: crystal structure of a low-  
temperature P<sub>4</sub>nc vesuvianite with pronounced octahedral  
cation ordering  
Schweiz. Mineral. Petrogr. Mitt., 2000, 80, 109-116
- 149.** C.A. Geiger, Th. Armbruster, V. Khomenko, S. Quartieri  
Cordierite I: The coordinatin of Fe<sup>2+</sup>  
American Mineralogist, 2000, 85, 1255-1264
- 150.** J. Brugger, N. Meisser, K. Schenk, P. Berlepsch, M. Bonin,  
Th. Armbruster, D. Nyfeler, S. Schmidt  
Description and crystal structure of cabalzarite Ca(Mg,Al,Fe)<sub>2</sub>  
(AsO<sub>4</sub>)<sub>2</sub>(H<sub>2</sub>O,OH)<sub>2</sub>, a new mineral of the tsumcorite group  
American Mineralogist, 2000, 85, 1307-1314
- 151.** Th. Armbruster  
Cation distribution in Mg, Mn-bearing babingtonite from Arvigo,  
Val Calanca, Grisons, Switzerland  
Schweiz. Mineral. Petrogr. Mitt., 2000, 80, 279-284
- 152.** Th. Armbruster, H.A. Stalder, E. Gnos, B. Hofmann, M. Herwegh  
Epitaxy of hedenbergite whiskers on babingtonite in Alpine  
fissures at Arvigo, Val Calanca, Grisons, Switzerland  
Schweiz. Mineral. Petrogr. Mitt. 2000, 80, 285-290
- 153.** Th. Armbruster  
Natural Zeolites: Mineralogy and applications. In: *Applied  
Mineralogy in Research, Economy, Technology, Ecology and  
Culture*. Eds. D. Rammlmair, et al. A.A. Balkema, Rotterdam,  
2000, p. 13-15

- 154.** C. Hejny, Th. Armbruster  
Structure modeling and identification of xonotlite polytypes. In:  
*Applied Mineralogy in Research, Economy, Technology,  
Ecology and Culture.*  
Eds. D. Rammlmair et al. A.A. Balkema, Rotterdam, 2000, p.  
795-797
- 155.** P. Engel  
The contraction types of parallelohedra in  $E^5$   
*Acta Cryst.* 2000, A56, 491-496