

ARBEITSGRUPPEN DEPARTEMENT FÜR

CHEMIE UND BIOCHEMIE

Ordner 1

PROF. BAUMANN

1. Hugot, M., Bensel, N., Reymond, M., Reymond, JL & Baumann, U. (2002).
The crystal structure of a retro-Diels-Alder catalytic antibody: evidence for a catalytic aromatic residue.
Proceed. Natl. Acad. Sci. **99**, 9674-9678
2. Stocker, A., Tomazaki, T., Briese-Schulze, C. & Baumann, U. (2002).
The crystal structure of human supernatant protein factor.
Structure **10**, 1533 -1540.

PROF. P. BIGLER

3. S. Wächter, M. Vogt, R. Kreis, C. Boesch, P. Bigler, H. Hoppeler and S. Krähenbühl, *Clinica Chimica Acta* **318**, 51-61 (2002)
Long-term administration of L-carnitine to humans: effect on skeletal muscle carnitine content and physical performance
4. M. Ith, P. Bigler, E. Scheurer, R. Kreis, L. Hofmann, R. Dirnhofer and C. Boesch, *Magn. Reson. Med.* **48**, 915-920 (2002)
Observation and Identification of Metabolites Emerging during Postmortem Decomposition of Brain Tissue by means of *in situ* ¹H-Magnetic Resonance Spectroscopy

PROF. G. CALZAFERRI

5. Photonic antenna system for light harvesting, transport and trapping
Gion Calzaferri, Marc Pauchard, Huub Maas, Stefan Huber, Abderrahim Khatyr, Tjeerd Schaafsma
J. Mater. Chem. 2002, **12**, 1-13
6. A Photonic antenna system for light harvesting, transport and trapping
Gion Calzaferri, Marc Pauchard, Huub Maas, Stefan Huber, Abderrahim Khatyr, Tjeerd Schaafsma
J. Mater. Chem. 2002, **12**, Cover Page.
7. Supramolecularly Organized Luminescent Dye Molecules in the Channels of Zeolite L
Gion Calzaferri, Huub Maas, Marc Pauchard, Michel Pfenniger, Silke Megelski,

André Devaux

Advances in Photochemistry, Editors D.C. Neckers, G. von Bünau, W.S. Jenks, Vol **27**, **2002**, 1-50. (Buchbeitrag)

8. Luminescent Silver Sulfide Clusters
Dominik Brühwiler, Claudia Leiggner, Stephan Glaus, Gion Calzaferri
J. Phys. Chem. B, 2002, **106**, 3770.
9. Electronic Properties of the Silver-Silver Chloride Cluster Interface
Stephan Glaus, Gion Calzaferri, Roald Hoffmann
Chemistry - A European Journal, 2002, **8**, 1785 – 1794
10. Trapping Energy from and Injecting Energy into Dye-Zeolite Nanoantennae
Huub Maas, Gion Calzaferri
Angew. Chem. Int. Edition, 41, **2002**, 2284-2288.
Angew. Chem. 114, **2002**, 2389-2392.
11. Dye Loaded Zeolite Materials
Gion Calzaferri *International patent PCT/CH01/00647*, Publication Number: WO 02/36490 A1; 10 May 2002.
12. Synthesis of New Molecules Containing Head, Spacer, and Label Moieties
Abderrahim Khatyr, Huub Maas, Gion Calzaferri
J. Org. Chem. 67, **2002**, 6705-6710.
13. Chemical solution deposition of silver halides
Gary Hodes, Gion Calzaferri
Advanced Functional Materials, 12, **2002**, 501-505.
14. Encapsulated Lanthanides as Luminescent Materials
Huub Maas, Antonio Currao, Gion Calzaferri
Angew. Chemie, Int. Ed. 41, **2002**, 2495-2497.
Angew. Chem. 114, **2002**, 2607-2608.
15. The Silver Chloride Photoanode in Photoelectrochemical Water Splitting
David Schürch, Antonio Currao, Shaibal Sarkar, Gary Hodes, Gion Calzaferri
J. Phys. Chem. B, 109, **2002**, 12764-12775

DR. T. DARBLE

16. Synthesis and Irradiation of B₁₂ Complexes Incorporating Peripheral G-C Base Pairing
F.P. Sun and T. Darbre
Helv. Chim. Acta **2002**, 85, 3002.
17. Synthesis of zinc-complexes with multidentate nitrogen ligands: New catalysts for Aldol reactions
T. Darbre*, C. Dubs, E. Rusanov, H. Stoeckli-Evans
Eur. J. Inorg. Chemistry **2002**, 3284.
18. Model Studies for the B₁₂ Dependent Methyltransferases
T. Darbre
in *Chemistry and Biology of Pteridines and folates*, Ed.S. Milstien, G. Kapatos, R. A. Levine, B. Shane, Kluwer Ac. Publishers, Boston, **2002**.

PROF. S. DECURTINS

19. Li-Min Zheng, S. Gao, H.H. Song, S. Decurtins, A.J. Jacobson, X.Q. Xin, *Chem. Mater.*, **2002**, *14*, 3143-3147.
Metamagnetic copper(II) diphosphonates with layered structures.
20. Shi-Xia Liu, S. Dolder, M. Pilkington, S. Decurtins, *J. Org. Chem.*, **2002**, *67*, 3160-3162.
Facile Synthesis of Novel Functionalized Bis(ethylenedithio)tetrathiafulvalene (BEDT-TTF) Derivatives.
21. S. Kheradmandan, H.W. Schmalle, H. Jacobsen, O. Blacque, T. Fox, H. Berke, M. Gross, S. Decurtins, *Chem. Eur. J.*, **2002**, *8*, 2526-2533.
An Unusual (10,3)-a Racemic Twofold Interpenetrating Network Assembled from Isolable Tris(cyclopentadienyl)manganate and Cesocene Building Blocks.
22. K. Isele, V. Broughton, C.J. Matthews, A.F. Williams, G. Bernardinelli, P. Franz, S. Decurtins, *J. Chem. Soc., Dalton Trans.*, **2002**, 3899-3905.
1,2-bis-(2-benzimidazolyl)-1,2-ethanediol, a chiral, tridentate, facially coordinating ligand.
23. F. Bonadio, M. Gross, H. Stoeckli-Evans, S. Decurtins, *Inorg. Chem.*, **2002**, *41*, 5891-5896.
High-Spin Molecules: Synthesis, X-Ray Characterization and Magnetic Behavior of two new Cyano-Bridged $\text{Ni}_9^{II}\text{Mo}_6^{\text{V}}$ and $\text{Ni}_9^{II}\text{W}_6^{\text{V}}$ Clusters with a $S = 12$ Ground State.
24. J.A. Rusanova, S. Decurtins, E.B. Rusanov, H. Stoeckli-Evans, *Z. Kristallogr. NCS 217*, **2002**, 1-4.
Crystal structure of bis(2,2'-bipyridine-N,N')-[1,10-phenanthroline-5,6-dione] ruthenium(II)dihexafluorophosphate acetone solvate.
25. J. Rusanova, M. Pilkington, S. Decurtins, *J. Chem. Soc., Chem. Commun.*, **2002**, 2236-7.
A novel fully conjugated phenanthroline-appended phthalocyanine: synthesis and characterisation.
26. J. Rusanova, S. Decurtins, E. Rusanov, H. Stoeckli-Evans, S. Delahaye, A. Hauser, *J. Chem. Soc., Dalton Trans.*, **2002**, 4318-4320.
Ruthenium(II) complex of bis(2,2'-bipyridine)(6,7-dicyanodipyrido[3,2-a:2',3'-c]phenazine): synthesis, structure, electrochemical and luminescence studies.

PROF. B. ERNI

27. Esquinas-Rychen, M. and Erni, B. (2002)
Facilitation of bacteriophage lambda DNA injection by inner membrane proteins of the bacterial phosphoenol-pyruvate:carbohydrate phosphotransferase system (PTS). From: The Bacterial Phosphotransferase System (ISBN 1-898486-35-2), Chapter 5, 81-103.
28. García-Alles, L.F., Navdaeva, V., Haenni S. and Erni, B. (2002)
The glucose-specific carrier of the *Escherichia coli* phosphotransferase

- system: Synthesis of selective inhibitors and inactivation studies.
Eur. J. Biochem. 269, 4969-4980.
29. Siebold, C. and Erni, B. (2002)
Intein-mediated cyclization of a soluble and a membrane protein *in vivo*: function and stability.
Biophys. Chem. 96, 163-171.
30. García-Alles, L.F., Zahn, A. and Erni, B. (2002)
Sugar recognition by the glucose and mannose permeases of *Escherichia coli*. Steady-state kinetics and inhibition studies.
Biochemistry 41, 10077-10086.
31. García-Alles, L.F. and Erni, B. (2002)
Synthesis of phosphoenolpyruvate (PEP) analogues and evaluation as inhibitors of PEP-utilizing enzymes.
Eur. J. Biochem. 269, 3226-3236.
32. García-Alles, L.F., Flükiger, K., Hewel, J., Gutknecht, R., Siebold, C., Schürch, S., and Erni, B. (2002)
Mechanism-based inhibition of enzyme I of the *Escherichia coli* phosphotransferase system: Cysteine 502 is an essential residue.
J. Biol. Chem. 277, 6934-6942.

PROF. H. GÄGGELE

33. B. Eichler, J. Adams, R. Eichler, H.W. Gäggeler, J. Peterson
Thermochromatography of ²⁴¹Am and ²⁵⁴Es in chlorinating carrier gases
Radiochm. Acta **90**, 1-3 (2002).
34. Ch.E. Düllmann, W. Brüchle, R. Dressler, K. Eberhardt, B. Eichler, R. Eichler, H.W. Gäggeler, T.N. Ginter, F. Glaus, K.W. Gregorich, D.C. Hoffman, E. Jäger, D.T. Jost, U.W. Kirbach, D.M. Lee, H. Nitsche, J.B. Patin, V. Pershina, D. Piquet, Z. Qin, M. Schädel, B. Schausten, E. Schimpf, H.-J. Schött, S. Soverna, R. Sudowe, P. Thörle, S.N. Timokhin, N. Trautmann, A. Türler, A. Vahle, G. Wirth, A.B. Yakushev, P.M. Zielinski
Chemical investigation of hassium (element 108)
Nature **418**, 859 (2002).
35. C.E. Düllmann, B. Eichler, R. Eichler, H.W. Gäggeler, A. Türler
On the stability and volatility of group 8 tetroxides, MO₄ (M = ruthenium, osmium, and hassium (Z = 108)).
J. Phys. Chem. B **106**, 6679 (2002).
36. Ch.E. Düllmann, B. Eichler, R. Eichler, H.W. Gäggeler, D.T. Jost, D. Piquet, A. Türler
IVO, a device for In-situ Volatilization and On-line detection of products from heavy ion reactions.
Nucl. Instrum. Meths. A **479**, 631 (2002).
37. Y. Nagame, M. Asai, H. Haba, S. Goto, K. Tsukada, I. Nishinaka, K. Nishio, S. Ichikawa, A. Toyoshima, K. Akiyama, H. Nakahara, M. Sakama, M. Schädel, J.V. Kratz, H.W. GäggelerA. Türler

- Production Cross Sections of ^{261}Rf and ^{262}Db in Bombardments of ^{248}Cm with ^{18}O and ^{19}F*
J. Nucl. Rad. Sci. **3** (1), 85 (2002).
38. F. Arens, L. Gutzwiller, H.W. Gäggeler, M. Ammann
The reaction of NO_2 with solid anthrarobin (1,2,10-trihydroxy-anthracene)
Phys. Chem. Chem. Phys. **4**, 3684 (2002).
39. T. Bartels-Rausch, B. Eichler, P. Zimmermann, H.W. Gäggeler, M. Ammann
The adsorption enthalpy of nitrogen oxides on crystalline ice
Atmospheric Chemistry and Physics **2**, 235 (2002).
40. C. Guimbaud, F. Arens, L. Gutzwiller, H.W. Gäggeler, M. Ammann
Uptake of HNO_3 to deliquescent sea-salt particles: a study using the short-lived radioactive isotope tracer N-13
Atmospheric Chemistry and Physics **2**, 249 (2002).
41. L. Gutzwiller, F. Arens, U. Baltensperger, H.W. Gäggeler, M. Ammann
Significance of semivolatile diesel exhaust organics for secondary HONO formation
Environmental Science & Technology **36**(4), 677 (2002).
42. M. Wachsmuth, B. Eichler, L. Tobler, F. Hänsler, H.W. Gäggeler, M. Ammann
Chemical characterization of short-lived selenium and their daughter isotopes from thermal neutron induced fission of U-235 at a gas-jet facility
Journal of Radioanalytical and Nuclear Chemistry **254**(1), 201 (2002).
43. M. Wachsmuth, H.W. Gäggeler, R. von Glasow, M. Ammann
Accommodation coefficient of HOBr on deliquescent sodium bromide aerosol particles
Atmospheric Chemistry and Physics **2**, 121 (2002).
44. P. Ginot, M. Schwikowski, U. Schotterer, H.W. Gäggeler, R. Gallaire, B. Pouyaud
Potential for climate variability reconstruction from Andean glaciochemical records
Annals of Glaciology **35**, 35A120 (2002).
45. P. Ginot, F. Stampfli, D. Stampfli, M. Schwikowski, H.W. Gäggeler
FELICS, a new ice core drilling system for high-altitude glaciers
Memoirs of National Institute of Polar Research, Special Issue, **56**, 38 (2002).
46. P. Ginot, M. Schwikowski, H.W. Gäggeler, U. Schotterer, Ch. Kull, M. Funk,
A. Rivera, F. Stampfli, W. Stichler
First results of a paleoatmospheric chemistry and climate study of Cerro Tapado, Chile
The Patagonian Icefields, A Unique National Laboratory for Environmental and Climate Change Studies. Eds. G. Casassa, F. Sepulveda, R.M. Sinclair, Kluwer Academic/Plenum Publishers, New York, p. 157-167 (2002).
47. S. Henning, E. Weingartner, S. Schmidt, M. Wendisch, H.W. Gäggeler,
U. Baltensperger
Size-dependent aerosol activation at the high-alpine site Jungfraujoch (3580 m asl)
Tellus **54 B**, 82 (2002).
48. U. Baltensperger, N. Streit, E. Weingartner, S. Nyeki, A.S.H. Prévôt,
R.Van Dingenen, A. Virkkula, J.-P. Putaud, A. Even, H. ten Brink, A. Blatter,
A. Neftel
Urban and rural aerosol characterization of summer smog events during the

PIPAPO field compaign in Milan, Italy
 Journal of Geophysical Research, 107, D22, 8193, LOP 6-1 - 6-14.

PROF. H. U. GÜDEL

49. Markus Wermuth, Christian Reber and Hans U. Güdel
 High-resolution luminescence and absorption spectroscopy of $\text{Cs}_2\text{GeF}_6 \cdot \text{Os}^{4+}$
 Inorganic Chemistry 40, 3693-3703 (2001)
50. Markus P. Hehlen, Mark L.F. Phillips, Nigel J. Cockcroft, and Hans U. Güdel
 Upconversion Phosphors
 in "Encylopedia of Materials: Science and Technology",
 Eds. K. Buschow, R.W. Cahn, M.C. Flemings, B. Lischner, E.J. Kramer and
 S. Mahajan
 Pergamon Press, Elsevier Science, Oxford, 10, 9456-9458 (2001)
51. Christine Reinhard and Hans U. Güdel
 High-Resolution Optical Spectroscopy of $\text{Na}_3[\text{Ln}(\text{dpa})_3] \cdot 13\text{H}_2\text{O}$ with $\text{Ln} = \text{Er}^{3+}, \text{Tm}^{3+}, \text{Yb}^{3+}$
 Inorganic Chemistry 41, 1048-1055 (2002)
52. Rafael Valiente, Oliver S. Wenger, and Hans U. Güdel
 Upconversion luminescence in Yb^{3+} doped CsMnCl_3 : Spectroscopy, dynamics and mechanisms
 Journal of Chemical Physics 116, 5196-5204 (2002)
53. Oliver S. Wenger, Hans U. Güdel
 Luminescence spectroscopy of V^{3+} -doped $\text{Cs}_2\text{NaYCl}_6$ under high pressure
 Chemical Physics Letters 354, 75-81 (2002)
54. Fabiana R. Gonçalves e Silva, Oscar L. Malta, Christine Reinhard,
 Hans-Ulrich Güdel, Claude Piguet, Jacques E. Moser, and Jean-Claude G. Bünzli
 Visible and Near-Infrared Luminescence of Lanthanide-Containing Dimetallic Triple-Stranded Helicates: Energy Transfer Mechanisms in the Sm^{III} and Yb^{III} Molecular Edifices
 J. Phys. Chem. A 106, 1670-1677 (2002)
55. N. Cavadini, Ch. Rüegg, A. Furrer, H.U. Güdel, K. Krämer, H. Mutka, and
 P. Vorderwisch
 Triplet excitations in low- H_c spin gap systems KCuCl_3 and TCuCl_3 : An inelastic neutron scattering study
 Physical Review B 65, 132415-1-132415-4 (2002)
56. S. Heer, M. Wermuth, K. Krämer, and H.U. Güdel
 Sharp 2E upconversion luminescence of Cr^{3+} in $\text{Y}_3\text{Ga}_5\text{O}_{12}$ codoped with Cr^{3+} and Yb^{3+}
 Physical Review B 65, 125112-1-125112-10 (2002)
57. Oliver S. Wenger, Rafael Valiente and Hans U. Güdel
 Luminescence Upconversion under High Pressure in Ni^{2+} Doped CsCdCl_3
 High Pressure Research 22, 57-62 (2002)
58. Oliver S. Wenger, Markus Wermuth, Hans U. Güdel
 Chemical tuning of transition metal upconversion properties
 Journal of Alloys and Compounds 341, 342-348 (2002)

59. G. Chaboussant, R. Basler, A. Sieber, S.T. Ochsenbein, A. Desmedt, R.E. Lechner, M.T.F. Telling, P. Kögerler, A. Müller and H.-U. Güdel
 Low-energy spin excitations in the molecular magnetic cluster V₁₅
Europhysics Letters 59, 291-297 (2002)
60. Oliver S. Wenger and Hans U. Güdel, Stefan Kück
 Excited state absorption of Cr³⁺ in Cs₂NaScCl₆
Journal of Chemical Physics 117, 909-913 (2002)
61. Oliver S. Wenger, G. Mackay Salley, Rafael Valiente, and Hans U. Güdel
 Luminescence upconversion under hydrostatic pressure in the 3d-metal systems
 Ti²⁺:NaCl and Ni²⁺:CsCdCl₃
Physical Review B 65, 212108-1-212108-4 (2002)
62. Ralph Schenker, Michael N. Leuenberger, Grégory Chaboussant, Hans U. Güdel, Daniel Loss
 Butterfly hysteresis and slow relaxation of the magnetization in (Et₄N)₃Fe₂F₉: manifestations of a single-molecule magnet
Chemical Physics Letters 358, 413-418 (2002)
63. G M Salley, R Valiente and H U Güdel
 Phonon-assisted cooperative sensitization of Tb³⁺ in SrCl₂:Yb, Tb
Journal of Physics: Condensed Matter 14, 5461-5475 (2002)
64. Ralph Schenker, Høgni Weihe, Hanspeter Andres, Reto Basler, Grégory Chaboussant, Kirsten Michelsen, Michael Aebersold, Herma Büttner, and Hans U. Güdel
 Competing Interactions in the Tetranuclear Spin Cluster
 {Ni[(OH)₂Cr(bispictn)]₃}I₅·5H₂O. An Inelastic Neutron Scattering and Magnetic Study.
Inorganic Chemistry 41, 4266-4274 (2002)
65. Christine Reinhard, Rafael Valiente, and Hans U. Güdel
 Exchange-Induced Upconversion in Rb₂MnCl₄:Yb³⁺
The Journal of Physical Chemistry B 106, 10051-10057 (2002)
66. C.P. Allier, E.V.D. van Loef, P. Dorenbos, R.W. Hollander, C.W.E. van Eijk, K.W. Krämer, H.U. Güdel
 Readout of a LaCl₃(Ce³⁺) scintillation crystal with a large area avalanche photodiode
Nuclear Instruments and Methods in Physics Research A 485, 547-550 (2002)
67. Stefan T. Ochsenbein, Mark Murrie, Eduard Rusanov, Helen Stoeckli-Evans, Chihiro Sekine, and Hans U. Güdel
 Synthesis, Structure and Magnetic Properties of the Single Molecule Magnet
 [Ni₂₁(cit)₁₂(OH)₁₀(H₂O)₁₀]¹⁶⁻
Inorganic Chemistry 41, 5133-5140 (2002)
68. E.V.D. van Loef, P. Dorenbos, C.W.E. van Eijk, K.W. Krämer, H.U. Güdel
 Scintillation properties of LaBr₃:Ce³⁺ crystals: fast, efficient and high-energy-resolution scintillators
Nuclear Instruments and Methods in Physics Research A 486, 254-258 (2002)
69. Oliver S. Wenger, G. Mackay Salley, and Hans U. Güdel
 Effects of High Pressure on the Luminescence and Upconversion Properties of Ti²⁺-Doped NaCl
The Journal of Physical Chemistry B 106, 10082-10088 (2002)

70. Oliver S. Wenger and Hans U. Güdel
 Broadband near-Infrared Sensitization of Visible Upconversion Luminescence in V³⁺ and Mo³⁺ Co-Doped Cs₂NaYCl₆
 The Journal of Physical Chemistry B 106, 10011 - 10019 (2002)
71. Reto Basler, Grégory Chaboussant, Andreas Sieber, Hanspeter Andres, Mark Murrie, Paul Kögerler, Hartmut Bögge, Debbie C. Crans, Erich Krickemeyer, Stefan Janssen, Hannu Mutka, Achim Müller, and Hans-Ulrich Güdel
 Inelastic Neutron Scattering on Three Mixed-Valence Dodecanuclear Polyoxovanadate Clusters
 Inorganic Chemistry 41, 5675-5685 (2002)
72. Hanspeter Andres, Reto Basler, Alexander J. Blake, Cyril Cadiou, Grégory Chaboussant, Craig M. Grant, Hans-Ulrich Güdel, Mark Murrie, Simon Parsons, Carley Paulsen, Fabrizio Semadini, Vincent Villar, Wolfgang Wernsdorfer, and Richard E.P. Winpenny
 Studies of a Nickel-Based Single Molecule Magnet
 Chem. Eur. J. 8, 4867-4876 (2002)
73. Annina Aebscher, G. Mackay Salley and Hans U. Güdel
 Near infrared to visible photon upconversion in Re⁴⁺ doped Cs₂ZrBr₆
 Journal of Chemical Physics 117, 8515-8522 (2002)
74. Oliver S. Wenger, Sophie Bénard, and Hans U. Güdel
 Crystal Field Effects on the Optical Absorption and Luminescence Properties of Ni²⁺-Doped Chlorides and Bromides: Crossover in the Emitting Higher Excited State
 Inorganic Chemistry 41, 5968-5977 (2002)
75. E.V.D. van Loef, P. Dorenbos, C.W.E. van Eijk, K.W. Krämer and H.U. Güdel
 Scintillation and spectroscopy of the pure -and Ce³⁺-doped elpasolites: Cs₂LiYX₆ (X = Cl, Br)
 J. Phys.: Condens. Matter 14, 8481-8496 (2002)
76. Colette Boskovic, Eduard Rusanov, Helen Stoeckli-Evans, Hans U. Güdel
 New tri- and tetrานuclear transition metal spin clusters incorporating a versatile polydentate Schiff base ligand
 Inorganic Chemistry Communications 5, 881-886 (2002)
77. N. Cavadini, Ch. Rüegg, A. Furrer, H.U. Güdel, K. Krämer, H. Mutka, A. Wildes, K. Habicht and P. Vorderwisch
 Triplet Modes in a Quantum Spin Liquid across the Critical Field
 Proceedings of the fourth Conference on Physical Phenomena in High Magnetic Fields, Santa Fe, 2001
 International Journal of Modern Physics B 16, 3302-3305 (2002)
78. Juan. M. Clemente-Juan, Eugenio Coronado, Alejandro Gaita-Ariño, Carlos Giménez-Saiz, Grégory Chaboussant, Hans-Ulrich Güdel, Ramón Burriel and Hannu Mutka
 Magnetism in Polyoxometalates: Anisotropic Exchange Interactions in the Co₃^{II}
 Moiety of [Co₃W(D₂O)₂(ZnW₉O₃₄)₂]¹²⁻. A Magnetic and Inelastic Neutron Scattering Study.
 Chemistry, a European Journal 8, 5701-5708 (2002)
79. R. Basler, G. Chaboussant, H. Andres, P. Kögerler, E. Krickemeier, H. Bögge, H. Mutka, A. Müller, H.-U. Güdel

- Inelastic neutron scattering on a mixed-valence dodecanuclear polyoxovanadate clusters
 Applied Physics A 74, 734-736 (2002)
80. K.W. Krämer, H.U. Güdel, P. Fischer, L. Keller
 Magnetic order in CeI_2
 Applied Physics A 74, 595-597 (2002)
81. Ch. Rüegg, N. Cavadini, A. Furrer, K. Krämer, H.U. Güdel, P. Vorderwisch, H. Mutka
 Spin dynamics in the high-field phase of quantum-critical $S=1/2 \text{ TlCuCl}_3$
 Applied Physics A 74, 840-842 (2002)
82. U. Rogulis, S. Schweizer, J.-M. Spaeth, E. V. D. van Loef, P. Dorenbos, C. W. E. van Eijk, K. Krämer and H.-U. Güdel
 Magnetic Resonance Investigations of $\text{LaCl}_3:\text{Ce}^{3+}$ Scintillators
 Radiation Effects and Defects in Solids 157, 951-955 (2002)
83. G. Mackay Salley, Oliver S. Wenger, Karl W. Krämer, Hans U. Güdel
 Inorganic solid state optical materials: Major recent advances
 Current Opinion in Solid State and Materials Science 6, 487-493 (2002)
- ### PROF. R. HÄNER
84. Inhibition of CD40-mediated endothelial cell activation with antisense oligonucleotides
 S.A. Rushworth, C.A. Bravery, J. Hall, F. Natt, N.J. Parsons, J. Weiler, R. Häner and S. Thompson
 Transplantation 73, 4, 635-642, 2002
85. Artificial Ribonucleases: Efficient and Specific in Vitro Cleavage of Human *c-raf-1* RNA
 L. Canaple, D. Hüskens, J. Hall and R. Häner
 Bioconjugate Chemistry, Vol. 13, Nr. 5, 945-951
86. The Effect of a Non-nucleosidic Phenanthrene Building Block on DNA Duplex Stability
 Simon M. Langenegger and Robert Häner
 Helv.Chimica Acta 85, 10, 3414-3421, 2002.
- ### PROF. J. HULLIGER
87. J. Hulliger, H. Bebie, S. Kluge, A. Quintel
 Growth-Induced Evolution of Polarity in Organic Crystals
 Chem. Mater. 14, 1523-1529, 2002.
88. A. A. Kaminskii, T. Kaino, T. Taima, A. Yokoo, K. Ueda, K. Takaichi, J. Hulliger, H.J. Eichler, J. Hanuza, J. Fernandez, R. Balda, M. Moczka, G.M.A. Gad
 Monocrystalline 2-Adamantylamino-5-Nitropyridine (AANP) - a Novel Organic Material for Laser Raman Converters in the Visible and Near-IR
 Jpn. J. Appl. Phys. 41, L603-L605, 2002.
89. S. Kluge, F. Budde, I. Dohnke, P. Rechsteiner, J. Hulliger
 Phase -sensitive second-harmonic microscopy reveals polarity of topologically

- centrosymmetric molecular crystals
Appl. Phys. Lett. **81**, 247-249, 2002.
90. J. Hulliger
Diffractography: an integral part of the structural endeavour
Z. Kristallogr. **217**, 321-322, 2002.
(invited article).
91. P. Mikhail, A. Weixelbaumer, A. Gaschen, J. Hulliger
On the stability and Czochralski growth of Sm^{2+} in solid solutions of $\text{Sr}_{1-x}\text{Pb}_x\text{B}_4\text{O}_7$
Mater. Lett. **54**, 181-184, 2002.
92. H.I. Süss, T. Wuest, A. Sieber, R. Althaus, F. Budde, H.-P. Lüthi, G.D. McManus,
J. Rawson, J. Hulliger
Alignment of radicals into chains by a Markov mechanism for polarity formation
CrystEngComm. **4**, 432-439, 2002.
93. T. Hertzsch, F. Budde, E. Weber, J. Hulliger
Supramolecular-Wire Confinement of I_2 Molecules in Channels of the Organic
Zeolite Tris(*o*-phenylenedioxy)cyclotriphosphazene
Angew. Chem. Int. Ed. **41**, 2281-2284, 2002.
94. H. Bebie, J. Hulliger, S. Eugster, M. Alaga-Bogdanović
Ising model of polarity formation in molecular crystals: From the growth model to the
asymtotic equilibrium state
Am. Phys. Soc., Phys. Rev. E**66**, 021605, 2002.
95. A.A. Kaminskii, E. Haussühl, J. Hulliger, K. Ueda, K. Takaichi, J. Hanuza,
M. Maczka, H.J. Eichler, G.M.A. Gad
Bis(Guanidinium) Zirconium bis(Nitrilotriacetate) Hydrate,
[C(NH₂)₃]₂Zr[N(CH₂COO)₃]₂ H₂O – A New Crystal for Raman Laser Converters
phys. stat. sol. (a) **193**, 167-178, 2002.
96. A.A. Kaminskii, H. Klapper, J. Hulliger, H.J. Eichler, J. Hanuza, K. Ueda,
K. Takaichi, C. Wickleder, G.A.M. Gad, M. Maczka
High-Order Many-Phonon Stimulated Raman Scattering in Orthorhombic
Benzophenone (C₁₃H₁₀O) and Monoclinic α -4-Methylbenzophenone (α -C₁₄H₁₂O)
Crystals
Laser Physics **12**, 1041-1053, 2002.
97. J. Hulliger
Markov-type Evolution of Materials into a Polar State
Chem. Eur. J. **8**, 4579-4586, 2002.
98. H.I. Süss, M. Lutz, J. Hulliger
Inclusion of fullerenes into channels of 2,4,6-tris(4-bromophenoxy)-1,3,5-triazine
(BrPOT)
CrystEngComm **4**, 610-612, 2002.
99. J. Hulliger
(Interview)
Adv. Mater. **14**, 1185, 2002.
100. G.R. Desiraju, J. Hulliger
Molecular crystals
Current Opinion in Solid State and Materials Science **6**, 107-108, 2002.
(editorial).

101. J. Hulliger
Polare Kristalle
NFP 47 Supramolekulare funktionale Materialien, Technische Rundschau **16**, 120-121, 2002.

PD DR. J. HUNZIKER

102. R. Buff, J. Hunziker,
"2'-Ethynyl-DNA: Synthesis and Pairing Properties",
Helv. Chim. Acta **2002**, 85, 224.
103. G. Mathis, J. Hunziker,
"Towards A DNA-Like Duplex without Hydrogen-Bonded Base Pairs",
Angew. Chem. **2002**, 114, 3335, *Angew. Chem. Int. Ed.* **2002**, 41, 3203.

PROF. R. KEESE

104. Radical Induced Formation of Some Siloles and Diazasiloles
Bangwei Ding, Zhu Teng and Reinhart Keese
J.Org. Chem. 2002, 67, 8906-8910.
105. Structural Aspects of Nucleosides: Protonated and Complexed Adenosines
Jürg Hauser and Reinhart Keese
Helv.Chim.Acta, 2002, 85, 2481-2488.

ARBEITSGRUPPEN DEPARTEMENT FÜR

CHEMIE UND BIOCHEMIE

Ordner 2

PROF. C. KEMPF

106. Omar, A. and Kempf, C.
Removal of neutralized model Parvoviruses and Enteroviruses in Human IgG solutions by Nanofiltration.
Transfusion 42, 1005-10 2002
107. Ros, C. and Kempf, C.
Cytoplasmic Trafficking of MVM. Low pH Requirement, Routing to Late Endosomes and Proteasome Interaction.
J. Virol. 76, 12634-45, 2002
108. Ros, C. and Belák, S.
Characterization of the Glycoprotein B gene from ruminant Alphaherpesviruses.
Virus Genes 24, 99-105, 2002
109. Frasang, A. Ros, C., Renström, L.H.M., Baule, C., Soós, T. and Belák, S.
Molecular epizootiology of infectious bronchitis virus in Sweden indicating the involvement of a vaccine strain.
Avian Pathology 31, 229-36, 2002
110. Nordengrahn A, Merza M, Ros C, Lindholm A, Palfi V, Hannant D, Belak S.
Prevalence of equine herpesvirus types 2 and 5 in horse populations by using type-specific PCR assays.
Vet Res 2002 May-Jun;33(3):251-9

PROF. U. KRÄHENBÜHL

111. C. Kottler, M Döbeli, U. Krähenbühl
Exposure Age dating by flurone diffusion
Nuclear Instr and Methods in Physics Res B **188** 61-66 (2002)
112. Marin Ayranov, Lukas Wacker, Urs Krähenbühl
Plutonium separation by solvent extraction for the determination by photon electron rejecting alpha liquid spectrometry
Radiochimica Acta **90** 199-204 (2002)
113. Lukas Wacker, Urs Krähenbühl, Bernd Eichler
Direct separation of plutonium by thermochromatography from environmental samples
Radiochimica Acta **90** 133-139 (2002)

114. Pierre Vauclare, Stanislav Kopriva, David Fell, Marianne Suter, Liliane Sticher, Peter von Ballmoos, Urs Krähenbühl, Roel Op den Camp, Christian Brunold
Flux control of sulphate assimilation in *Arabidopsis thaliana*: adenosine 5'-phosphosulphate reductase is more susceptible than ATP sulphurylase to negative control by thiols
The Plant Journal **31** 729-740 (2002)
115. Stanislav Kopriva, Marianne Suter, Peter von Ballmoos, Holger Hess, Urs Krähenbühl, Heinz Rennenberg, Christian Brunold
Interaction of Sulfate Assimilation with Carbon and Nitrogen Metabolism in *Lemna minor*
Plant Physiology **130** 1406-1413 (2002)

PROF. C. LEUMANN

116. Prévot, C. J. Leumann:
Evaluation of novel third strand bases for the recognition of a C-G base-pair in the parallel DNA triple-helical binding motif,
Helv. Chim. Acta, **2002**, 85, 502-515.
117. C. J. Leumann:
DNA-analogues: from supramolecular principles to biological properties,
Bioorg. Med. Chem., **2002**, 10, 841-854.
118. D. Renneberg, C. J. Leumann:
Watson-Crick base-pairing properties of tricyclo-DNA,
J. Am. Chem. Soc., **2002**, 124, 5993-6002.
119. B. M. Keller, C. J. Leumann:
Synthesis and incorporation into α -DNA of a novel conformationally constrained α -nucleoside analogue,
Synthesis, **2002**, 789-796.
120. D. Renneberg, E. Bouliong, U. Reber, D. Schümperli, C. J. Leumann:
Biological and antisense properties of tricyclo-DNA,
Nucleic Acids Res., **2002**, 30, 2751-2757.
121. E. Bernal-Mendez, C. J. Leumann,
Stability and kinetics of nucleic acid triplexes with chimaeric DNA/RNA third strands,
Biochemistry, **2002**, in press.
122. S. Schürch, E. Bernal-Mendez, C. J. Leumann,
Electrospray tandem mass spectrometry of mixed-sequence RNA/DNA oligonucleotides,
J. Am. Soc. Mass Spectrom., **2002**, 13, 936-945.
123. D.-R. Ahn, A. Egger, C. Lehmann, S. Pitsch, C.J. Leumann,
Bicyclo[3.2.1]amide-DNA: a chiral non-chiroselective base-pairing system,
Chem. Eur. J., **2002**, 8, 5312-5322.
124. A. Häberli, C. J. Leumann,
Paring properties of oligodeoxynucleotides containing pyrrolidino C-

nucleosides,
Org. Lett., **2002**, 4, 3275-3278.

PROF. S. LEUTWYLER

125. C. Wickleder, D. Henseler, S. Leutwyler
 Accurate dissociation energies of O-H \cdots O hydrogen-bonded 1-naphthol·solvent complexes.
J. Chem. Phys., 116, 1850 - 1857 (2002).
126. A. Müller, F. Talbot, S. Leutwyler
 S_1/S_2 exciton splitting in the (2-pyridone)₂ dimer.
J. Chem. Phys., 116, 2836 - 2847 (2002).
127. S. Leutwyler
 Acids caught in the act.
Nature, 417, 230 - 231 (2002).
128. M. Losada, S. Leutwyler
 Water hexamer clusters: Structures, energies, and predicted mid-infrared spectra.
J. Chem. Phys. 117, 2003 - 2016 (2002).
129. D. R. Borst, J. R. Roscioli, D. W. Pratt, G. M. Florio, T. S. Zwier, A. Müller, S. Leutwyler
 Hydrogen bonding and tunneling in the 2-pyridone·2-hydroxypyridine dimer. Effect of electronic excitation.
Chem. Phys. 283, 341 - 354 (2002).
130. A. Müller, F. Talbot, S. Leutwyler
 Hydrogen bond vibrations of 2-aminopyridine·2-pyridone, a Watson-Crick analogue of adenine·uracil.
J. Am. Chem. Soc. 124, 14486 - 14494 (2002).
131. H. M. Frey, P. Beaud, T. Lang, M. Motzkus
 High resolution femtosecond CARS spectroscopy.
 in *Femtochemistry and Femtobiology* by A. Douhal and J. Santamaria
 World Scientific, 99 - 104 (2002).
132. H. M. Frey, A. Müller, S. Leutwyler
 Femtosecond degenerate four-wave mixing of pyridine and its biologically relevant derivatives.
J. Raman Spectrosc. 33, 855 - 860 (2002).

PROF. P. RENAUD

133. "Allyl Sulfoxides as Precursors for Radical Two-Carbon Ring Expansion of Cyclobutanones"
 Chuard, R.; Giraud, A.; Renaud, P.
Angew. Chem. Int. Ed. **2002**, 41, 4323-4325.
134. "A Radical Alternative to the Anionic Oxy-Cope Rearrangement"
 Chuard, R.; Giraud, A.; Renaud, P.
Angew. Chem. Int. Ed. **2002**, 41, 4321-4323.

135. "Synthesis of (\pm)-Nephromopsinic, (-)-Phaseolinic and (-)-Dihydroperpusaric acids"
 Brecht-Forster, A.; Fitremann, J.; Renaud, P.
Helv. Chim. Acta **2002**, 3965-3974
136. "Stereoselective Intermolecular Carboazidation of Chiral Allylsilanes"
 Chabaud, L.; Landais, Y.; Renaud, P.
Organic Lett. **2002**, 4, 4257-4260.
137. "Radical Carboazidation of Alkenes: An Efficient Tool for the Preparation of Pyrrolidinone Derivatives"
 Renaud, P.; Ollivier, C.; Panchaud, P.
Angew. Chem. Int. Ed. **2002**, 41, 3460-3462.
138. "Free-Radical Hydroxylation Reactions of Alkylboronates"
 Cadot, C.; Dalko, P. I.; Cossy, J.; Ollivier, C.; Chuard, R.; Renaud, P.
J. Org. Chem. **2002**, 67, 7193-7202.
139. "N-alkoxyacrylamides as Substrates for Enantioselective Diels-Alder Reactions"
 Corminboeuf, O.; Renaud, P.
Organic Lett. **2002**, 4, 1735-1738.
140. "Enantioselective Diels-Alder Reactions with N-Hydroxy-N-phenylacrylamide"
 Corminboeuf, O.; Renaud, P.
Organic Lett. **2002**, 4, 1931-1933.
141. "Chiral Relay Effect: 4-Substituted 1,3-Benzoxazol-2-(3H)-ones as Achiral Templates for Enantioselective Diels-Alder Reactions"
 Quaranta, L.; Corminboeuf, O.; Renaud, P.
Organic Lett. **2002**, 4, 39-42.

PROF. J.-L. REYMOND

142. The Adrenaline Test for Enzymes.
 D. Wahler, J.-L. Reymond,
Angew. Chem. Int. Ed. Engl. 2002, 41, 1229-1232.
143. Substrate Arrays as Enzyme Fingerprinting Tools.
 J.-L. Reymond, D. Wahler,
ChemBioChem 2002, 3, 701-708.
144. Methylamine Adenine Dinucleotide (MAD), a Cofactor to Turn Alcohol Dehydrogenases into Aldolases.
 D. Wahler, J.-L. Reymond,
Can. J. Chem. 2002, 80, 665-670.
145. Enzyme Fingerprints of Activity, Stereo- and Enantioselectivity from Fluorogenic and Chromogenic Substrate Arrays.
 D. Wahler, F. Badalassi, P. Crotti, J.-L. Reymond,
Chem. Eur. J. 2002, 8, 3211-3228.

146. A structural basis for the activity of retro-Diels-Alder catalytic antibodies: Evidence for a catalytic aromatic residue.
M. Hugot, N. Bensel, M. Vogel, M. T. Reymond, B. Stadler, J.-L. Reymond, U. Baumann,
Proc. Natl. Acad. Sci. USA 2002, 99, 9674-8.
147. A selective HIV-Protease Assay Based on a Chromogenic Amino Acid.
F. Badalassi, H.-K. Nguyen, P. Crotti, J.-L. Reymond,
Helv. Chim. Acta 2002, 85, 3090-3098.
148. High-Throughput Screening of Thermostable Esterases for Industrial Bioconversions.
D. Lagarde, H.-K. Nguyen, G. Ravot, D. Wahler, J.-L. Reymond, G. Hills, T. Veit, F. Lefevre,
Org. Process. R. & D. 2002, 6, 441-5.
149. Detection Strategies for Catalytic Antibodies.
J.-L. Reymond,
J. Immunol. Methods 2002, 269, 125-131.

PD DR. J. SCHALLER

150. Douglas JT, von Haller PD, Gehrmann M, Llinás M, Schaller J (2002) Biochemistry 41:3302-3310.
The two-domain NK1 fragment of plasminogen: folding, ligand binding, and thermal stability profile.
151. Kuhn-Nentwig L, Müller J, Schaller J, Walz A, Dathe M, Nentwig W (2002) J Biol Chem 277:11208-11216.
Cupiennin 1, a new family of highly basic antimicrobial peptides in the venom of the spider *cupiennius salei* (ctenidae).
152. Kuhn-Nentwig L, Dathe M, Walz A, Schaller J, Nentwig W (2002) FEBS Letters 527:193-198.
Cupiennin 1d*: The cytolytic activity depends on the hydrophobic N-terminus and is modulated by the polar C-terminus.

PD DR. L. SCHMITZ

153. Hofmann, T.G., Möller, A., Sirma, H., Zentgraf, H., Taya, Y., Dröge, W., Will, H. and M.L. Schmitz (2002)
Regulation of p53 activity by its interaction with homeodomain interacting protein kinase 2.
Nature Cell Biol. **4**, 1-10.
154. Schlüter, D., Meyer, T., Kwok, L.-Y., Montesinos-Rongen, M., Lütjen, S., Strack, A., Schmitz, M.L. and M. Deckert (2002)
Phenotype und regulation of persistent intracerebral T cells in murine Toxoplasma encephalitis.
J. Immunol. **169**, 315-322.
155. Nheu, T.V., He, H., Hirokawa, Y., Tamaki, K., Florin, L., Schmitz, M.L., Suzuki-Takahashi, I., Jorissen, R., Burgess, A.W., Wood, J., Nishimura, S. and H. Maruta

- (2002)
 Designing the first PAK-specific inhibitors derived from K252a that block oncogenic RAS signaling.
Cancer J. **8**, 328-335.
156. You, L., Kruse, F., Bacher, S. and M.L. Schmitz (2002)
 Lipoteichoic acid selectively induces the ERK signaling pathway in the cornea.
Invest. Ophthalmol. & Vis. Science **43**, 2272-2277.
157. Spitkovsky, D., Hehner, S.P., Hofmann, T.G., Möller, A. and M.L. Schmitz (2002)
 The human papillomavirus oncoprotein E7 attenuates NF-κB activation by targeting the IκB kinase complex.
J. Biol. Chem. **277**, 25576-25582.
158. Schmitz, M.L., Bacher, S. and W. Dröge (2002)
 Molecular analysis of Redox-activated MAPKinase signaling pathways.
Methods in Enzymology **352**, 53-61.
159. Dienz, O. Grohmann, A., Bacher, S. and M.L. Schmitz (2002)
 Activation and function of NF-κB in T lymphocytes.
Recent Research Developments in Molecular and Cellular Biology **3**, 59-74.
160. Bantel, H., Schmitz, M.L., Raible, A., Gregor, M. and K. Schulze-Osthoff (2002)
 Critical role of nuclear factor-κB and stress-activated protein kinases in steroid unresponsiveness.
FASEB J. **16**, 1832-1834.
161. Hofmann, T.G. and M.L. Schmitz (2002)
 The promoter context determines mutual repression or synergism between NF-κB and the Glucocorticoid receptor.
Biol. Chem. **383**, 1947-1951.
162. Bacher S, Achatz G, Schmitz ML, Lamers MC.
 Prohibitin and prohibitone are contained in high-molecular weight complexes and interact with alpha-actinin and annexin A2.
Biochimie 2002 Dec;84(12):1205-18

DR. S. SCHÜRCH

163. S. Schürch, E. Bernal-Méndez, C.J. Leumann
 Electrospray Tandem Mass Spectrometry of Mixed-Sequence RNA/DNA Oligonucleotides
J. Am. Soc. Mass Spectrom. **2002**, 13, 936-945
164. L.F. Garcia-Alles, K. Flückiger, J. Hewel, R. Gutknecht, C. Siebold, S. Schürch, B. Erni
 Mechanism-based Inhibition of Enzyme I of the Escherichia coli Phosphotransferase System
J. Biol. Chem. **2002**, 277, 6934-6942

DR. Ph.L.W. TREGENNA-PIGGOTT

165. G. Carver, J. Bendix and P.L.W. Tregenna-Piggott,
 The dependence of the spin-Hamiltonian parameters of the $[\text{Ti}(\text{OH}_2)_6]^{3+}$ cation on the

mode of water co-ordination,
Chemical Physics **282**, 245-263 (2002).

166. C. Dobe, H-P. Andres, P.L.W. Tregenna-Piggott, S. Mossin, H. Weihe and S. Janssen, Variable Temperature Inelastic Neutron Scattering Study of Chromium(II) Tutton Salt: Manifestation of the $^5E \otimes e$ Jahn-Teller Effect,
Chem. Phys. Lett. **362**, 387, (2002).

LABORATORIUM FÜR CHEMISCHE UND MINERALOGISCHE KRISTALLOGRAPHIE

PROF. H.B. BÜRGKI

167. Orientational Disorder as a function of temperature in the clathrate structure of hydroquinone and C₆₀.
 E. Blanc, R. Restori, D. Schwarzenbach, H.B. Bürgi, M. Förtsch, P. Venugopalan, O. Ermer.
Acta Cryst. B **56**, 1003-1010, 2000.
168. Determination and refinement of disordered crystal structures using evolutionary algorithms in combination with Monte Carlo methods.
 Th. Weber, H.B. Bürgi.
Acta Cryst. A **58**, 526-540, 2002.
169. What we can learn about fast chemical processes from slow diffraction experiments.
 H.B. Bürgi.
Faraday Discussion, **122**, 41-63, 2002.
170. Recovering Transdisciplinarity.
 H.B. Bürgi.
Z. Krist. **217**, 288, 2002.
171. Electron Distribution and Molecular Motion in Crystalline Benzene: An Accurate Experimental Study Combining CCD X-ray Data on C₆H₆ with Multitemperature Neutron-Diffraction Results on C₆D₆.
 H.B. Bürgi, S.C. Capelli, A.E. Goeta, J.A.K. Howard, M.A. Spackman, D.S. Yufit.
Chem. Eur. J. **8**, No. 15, 3512-3521 2002.
172. Structural Aspects of Nucleosides: Protonated and Complexed Adenosines.
 J. Hauser, R. Keesee.
Helvetica Chimica Acta, **85**, 2481-2488, 2002.

PROF. Th. ARMBRUSTER

173. Polysomatism in högbomite: The crystal structures of 10T, 12H, 14T, and 24R polysomes.
C. Hejny, Th. Armbruster.
American Mineralogist, 87, 277-292, 2002.
174. The crystal structure of (001) twinned xilingolite, Pb₃Bi₂S₆, from Mittal-Hohtenn, Valais, Switzerland.
P. Berlepsch, Th. Armbruster, E. Makovicky, C. Hejny, D. Topa, St. Graeser.
The Canadian Mineralogist, 39, 1653-1663, 2001.
175. Crystal Structures of Natural Zeolites.
Th. Armbruster, M.E. Gunter.
In: *REVIEWS IN MINERALOGY AND GEOCHEMISTRY*, Vol. 45, 2001, 1-67;
Natural zeolites: Occurrence, Properties, Applications. Ed. D.L. Bish, D.W. Ming,
Mineralogical Society of America, Washington.
176. Manganvesuvianite and weddellite, two new Mn³⁺-silicate minerals from the Kalaharimanganese fields, South Africa.
Th. Armbruster, E. Gnos, R. Dixon, J. Gutzmer, C. Hejny, N. Döbelin,
O. Medenbach.
Mineralogical Magazine, 66, 137-150, 2002.
177. The crystal structures of grossular and spessartine between 100 and 600 K and the crystal chemistry of grossular-spessartine solid solutions.
U. Rodehorst, C.A. Geiger, Th. Armbruster.
American Mineralogist, 87, 542-549, 2002.
178. Revised nomenclature of högbomite, nigerite, and taaffeite minerals.
Th. Armbruster.
Eur. J. Mineral. 14, 389-395, 2002.
179. Epitactic hedenbergite whiskers on babingtonite, a second occurrence from a Triassic basalt at Lincoln Park near Paterson, New Jersey, USA.
Th. Armbruster, E. Gnos, R.P. Richards.
Schweiz. Mineral. Petrogr. Mitt. 82, 25-32, 2002.
180. Multiple phase transitions of leonite-type compounds: optical, calorimetric, and X-ray data.
B. Hertweck, Th. Armbruster, E. Libowitzky.
Mineralogy and Petrology 75, 245-259, 2002.
181. Crystal chemistry of the polysome ferro högbomite-2N₂S, a long-known but newly defined mineral species.
C. Hejny, E. Gnos, B. Grobety, Th. Armbruster.
Eur. J. Mineral. 14, 957-967, 2002.
182. Crystal chemistry and structure refinements of barian muscovites from the Berisal Complex, Simplon region, Switzerland.
Th. Armbruster, P. Berlepsch, E. Gnos, C. J. Hetherington.
Schweiz. Mineral. Petrogr. Mitt. 82, 537-547, 2002.
183. Structural and chemical variations in rathite, Pb₈Pb_{4-x}(Ti₂As₂)_x(Ag₂As₂)As₁₆S₄₀: modulations of a parent structure.
P. Berlepsch, Th. Armbruster, D. Topa.
Z. Kristallogr. 217, 581-590, 2002.

184. Structural relationships between sicherite, marrite, freieslebenite, and diaphorite - analysis based on anionic nets and polyhedral characteristics.
P. Berlepsch, E. Makovicky, Th. Armbruster.
N. Jb. Miner. Abh. 178, 1, 75-91, 2002
185. N. Döbelin
Diplomarbeit 27.6.2002: "Stepwise dehydration of Cd- and Sr-exchanged heulandite". (Leiter: Jan Kramers, Beisitzer: Thomas Armbruster).

PD DR. P. ENGEL

186. There are exactly 222 L-types of primitive five-dimensional lattices.
P. Engel, V. Grishukhin.
Europ. J. Combinatorics 23, 275-279, 2002.
187. On the determination of a lattice basis of facet vectors.
P. Engel.
Rendiconti del Circolo Matematico di Palermo, Serie II, Suppl. 70, 269-278, 2002.