

ARBEITSGRUPPEN DEPARTEMENT FÜR CHEMIE UND BIOCHEMIE

Ordner 1

PROF. U. BAUMANN

1. Schutz P, Bumann M, Oberholzer A, Bieniossek C, Trachsel H, Altmann M*, Baumann U* (2008). Crystal structure of the yeast elf4A-eIF4G complex: An RNA helicase controlled by protein-protein interactions. *Proceed. Natl. Acad. Sciences U.S.A.* **105**, 9564-9.
2. Zurbriggen A, Jeckelmann JM, Christen S, Bieniossek C, Baumann U*, Erni B* (2008). X-ray structures of the three *I. lactis* dihydroxyacetone kinase subunits and of a transient inter subunit complex. *J Biol Chem* **283**, 35789-96.

PROF. P. BIGLER

3. P. Bigler
Spec. Letters **41**, 162-165 (2008)
Fast ¹³C-NMR Spectral Editing for Determining CH_n Multiplicities
4. M. Vermathen, P. Vermathen, U. Simonis, P. Bigler
Langmuir **24** (21), 12521-12533 (2008)
Time-Dependent Interactions of the Two Porphyrinic Compounds Chlorin e6 and Mono-I-asparyl-cholin e6 with Phospholipid Vesicles Probed by NMR Spectroscopy

DR. P. BROECKMANN

5. **Tagungsbeitrag:**
14th Meeting of The Electrochemical Society (ECS), Honolulu, Hawaii, US
12/10/2008 – 17/10/2008
“Synergistic Additive-Additive Interactions in the Copper Electroplating Process”
(Regular talk)

PROF. G. CALZAFERRI

6. Olivia Bossart, Gion Calzaferri
Selfassembly of zeolite L crystals on biological self-cleaning surfaces
Microporous and Mesoporous Materials, 109, 392 - 397 (2008).
7. Michael Busby, Hannes Kerschbaumer, Gion Calzaferri, Luisa De Cola
Orthogonally Bifunctional Fluorescent Zeolite-L Microcrystals
Advanced Materials, 20, 1614 - 1618 (2008).

8. Le-Quyen Dieu, André Devaux, Ismael López-Duarte, M. Victoria Martínez-Díaz, Dominik Brühwiler, Gion Calzaferri, Tomás Torres
Novel phthalocyanine-based stopcock for zeolite L
Chem. Commun., 1187 - 1189 (2008).
9. Monguzzi, G. Macchi, F. Meinardi, R. Tubino, M. Burger, G. Calzaferri
Sensitized near infrared emission from lanthanide-exchanged zeolites
Applied Physics Letters, 92, 123301-1 - 123301-3 (2008).
10. Michael Busby, Christian Blum, Marc Tibben, Sandra Fibikar, Gion Calzaferri, Vinod Subramaniam, Luisa De Cola
Time, Space, and Spectrally Resolved Studies on J-Aggregate Interactions in Zeolite L Nanochannels
J. Amer. Chem. Soc., 130, 10970 - 10976 (2008).
11. Gion Calzaferri, Katsiaryna Lutkouskaya
Mimicking the antenna system of green plants
Photochemical & Photobiological Sciences, 7, 879 - 910 (2008).
12. Chenyi Yi, Carmen Blum, Shi-Xia Liu, Ying-Fen Ran, Gabriela Frei, Antonia Neels, Helen Stoeckli-Evans, Gion Calzaferri, Samuel Leutwyler, Silvio Decurtins
A Layered Red-Emitting Chromophoric Organic Salt
Crystal Growth & Design, 8, 3004 - 3009 (2008).
13. Gion Calzaferri, Huanrong Li, Dominik Brühwiler
Dye Modified Nanochannel Materials for Photoelectronic and Optical Devices
Chem. Eur. J., 14, 7442 - 7449 (2008).
14. Yige Wang, Huanrong Li, Binyuan Liu, Quanying Gan, Qinglin Dong, Gion Calzaferri, Zheng Sun
Fabrication of oriented zeolite L monolayer via covalent molecular linkers
Journal of Solid State Chemistry, 181, 2469 - 2472 (2008).
15. Gion Calzaferri
Dye in nanochannels boosts performance of artificial photonic antenna systems
SPIE Newsroom, 10.1117/2.1200805.1162 (2008).
16. **Buchbeiträge**

Z. Ruiz, D. Brühwiler, L.-Q. Dieu, G. Calzaferri
Controlling Size and Morphology of Zeolite L
Materials Syntheses - A Practical Guide, Editors: U. Schubert, N. Hüsing, R. Laine, Springer Wien, ISBN 978-3-211-75124-4, 9 - 19 (2008).

Leiggener, A. Currao, G. Calzaferri
Zeolite A and ZK-4
Materials Syntheses - A Practical Guide, Editors: U. Schubert, N. Hüsing, R. Laine, Springer Wien, ISBN 978-3-211-75124-4, 21 - 28 (2008).
17. **Tagungsbeiträge**

Gion Calzaferri, Huanrong Li
Mimicking the antenna system of green plants
Proc. SPIE, Vol. 7002, 700202-1 - 700202-7 (2008); DOI: 10.1117/2.1200805.1162;
<http://spie.org/x24946.xml?ArticleID=x24946>.

18. **Patente**

Gion Calzaferri

Dye Loaded Zeolite Material Containing Devices

US 7,327,012; granted May 13, 2008.

H. J. Metz, G. Calzaferri, S. Suarez, A. Devaux, A. Kunzmann

Transparent zeolite-polymer hybrid material with tunable properties

EP 1873202, published January 2, 2008, granted.

Z. Popović, M. Tsotsalas, M. Busby, L. De Cola, G. Calzaferri, H. P. Josel

Method for the preparation of Micro-Porous Crystals and Conjugates thereof

WO 2008/052603, published May 8, 2008, pending.

G. Calzaferri, A. Kunzmann, D. Brühwiler, C. Baur

Lumineszenzkonzentratoren und Lumineszenzdispergatoren auf der Basis orientierter Farbstoff-Zeolith Antennen

CH-1016/08, submitted July 1, 2008, pending.

L. De Cola, M. Busby, G. Calzaferri, C. Blum, V. Subramaniam

Method for intercalating chromophores into Zeolite L nanochannels and products thereof

UK 0812218.6, submitted July 2, 2008, pending.

PROF. M. CASCELLA

19. M. Cascella, M. A. Neri, P. Carloni and M. Dal Peraro

Topologically-reconstructed long-range electrostatic interactions in multiscale simulations of proteins

J. Chem. Theory Comput. 4: 1378-1385 (2008) [+cover page]

20. F. El-Turk, M. Cascella, H. Ouertatani-Sakouhi, R. L. Narayanan, L. Leng, R. Bucala, M. Sweckstetter, U. Rothlisberger and H. A. Lashuel

The conformational flexibility of the carboxy terminal residues 105-114 is a key modulator of the catalytic activity and stability of macrophage migration inhibitory factor

Biochemistry 47: 10740-10756 (2008)

21. **Tagungsbeiträge**Invited talks:

CPMD MEETING 2008 - Conference on modeling and computation of structure and dynamics of condensed phase systems - Location: International Centre for Theoretical Physics ICTP, Trieste, Italy. 23-27 June 2008

Electronic structure / function relationship in copper-bound metalloenzymes investigated by hybrid QM/MM simulations

BERNER CHEMISCHE GESELLSCHAFT - Bern, 15 October 2008

From the Schroedinger equation to the living matter: challenges and perspectives in computer-aided molecular simulations

Contributed talks:

8th CONGRESS OF THE WATOC (World Association of Theoretical and Computational Chemists) - Location: Sydney, Australia. 14-19 September 2008.

Topologically-reconstructed long-range electrostatic interactions in multiscale simulations of proteins

PROF. S. DECURTINS

22. C. Goze, S.-X. Liu, C. Leiggenger, L. Sanguinet, E. Levillain, A. Hauser, S. Decurtins *Tetrahedron* **2008**, *64*, 1345-1350.
Synthesis of new ethynylbipyridine-linked mono- and bis-tetrathiafulvalenes: electrochemical, spectroscopic and Ru(II)-binding studies.
23. Y.-H. Deng, J. Liu, B. Wu, C. Ambrus, T. D. Keene, O. Waldmann, S.-X. Liu, S. Decurtins, X.-J. Yang, *Eur. J. Inorg. Chem.* **2008**, 1712-1718.
Comparing techniques for modelling spin- $\frac{1}{2}$ Heisenberg antiferromagnetic chains using a new coordination polymer: $[\text{Cu}(\text{II})(\text{HL})_2(4,4'\text{-bpy})]_n$ (H_2L = 3-nitrophthalic acid, bpy = bipyridine).
24. T. Samuely, S.-X. Liu, N. Wintjes, M. Haas, S. Decurtins, T. A. Jung, M. Stöhr, *J. Phys. Chem. C* **2008**, *112*, 6139-6144.
Two-Dimensional Multiphase Behavior Induced by Sterically Hindered Conformational Optimization of Phenoxy Substituted Phthalocyanines.
25. J.-C. Wu, S.-X. Liu, T. D. Keene, A. Neels, C. E. Anson, A. K. Powell, S. Decurtins, *Inorg. Chem.* **2008**, *47*, 3452-3459.
Coordination Chemistry of a π -Extended, Rigid and Redox-Active Tetrathiafulvalene-Fused Schiff-Base Ligand.
26. C.-Y. Yi, C. Blum, S.-X. Liu, Y.-F. Ran, G. Frei, A. Neels, H. Stoeckli-Evans, G. Calzaferri, S. Leutwyler, S. Decurtins, *Cryst. Growth Des.* **2008**, *8*, 3004-3009.
A layered red-emitting chromophoric organic salt.
27. S. G. Bacca, I. L. Malaestean, T. Keene, H. Adams, M. D. Ward, J. Hauser, A. Neels, S. Decurtins, *Inorg. Chem.* **2008**, *47*, 11108-11119.
One-Dimensional Manganese Coordination Polymers Composed of Polynuclear Cluster Blocks and Polypyridyl Linkers: Structures and Properties.
28. J. M. Herrera, P. Franz, R. Podgajny, M. Pilkington, M. Biner, S. Decurtins, H. Stoeckli-Evans, A. Neels, R. Garde, Y. Dromzée, M. Julve, B. Sieclucka, K. Hashimoto, S.-I. Okhoshi, M. Verdager, *C. R. Chimie* **2008**, *11*, 1192-1199.
Three-Dimensional Bimetallic Octacyanidometalates $[\text{M}^{\text{IV}}\{(\mu\text{-CN})_4\text{Mn}^{\text{II}}(\text{H}_2\text{O})_2\}_2 \cdot 4\text{H}_2\text{O}]_n$ [M = Nb, Mo, W]. Synthesis, Single-Crystal X-ray Diffraction and Magnetism.
29. C. Yi, C. Blum, S.-X. Liu, G. Frei, A. Neels, P. Renaud, S. Leutwyler, S. Decurtins, *J. Org. Chem.* **2008**, *73*, 3596-3599.
An Efficient and Facile Synthesis of Highly Substituted 2,6-Dicyanoanilines.
30. B. Gillon, J. Larionova, E. Ruiz, Q. Nau, A. Goujon, F. Bonadio, S. Decurtins, *Inorg. Chim. Acta* **2008**, *361*, 3609-3615.
Experimental and Theoretical Study of the Spin Ground State of the High-Spin Molecular Cluster $[\text{Ni}(\text{II})\{\text{Ni}(\text{II})(\text{CH}_3\text{OH})_3\}_8(\mu\text{-CN})_{30}\{\text{M}(\text{V})(\text{CN})_3\}_6] \cdot 15\text{CH}_3\text{OH}$ by Polarized Neutron Diffraction and DFT Calculations.
31. C. Yi, C. Blum, S.-X. Liu, G. Frei, A. Neels, H. Stoeckli-Evans, S. Leutwyler, S. Decurtins, *Tetrahedron* **2008**, *64*, 9437-9441.
An efficient one-pot synthesis of strongly fluorescent (hetero)arenes polysubstituted with amino and cyano groups.
32. J. E. Beves, E. C. Constable, S. Decurtins, E. L. Dunphy, C. E. Housecroft, T. D. Keene, M. Neuburger, S. Schaffner, *CrystEngComm.* **2008**, *10*, 986-990.
Homoleptic metal complexes of 4'-(5-Pyrimidinyl)-2,2':6',2''-terpyridine: tetrafurcated expanded ligands.

33. N. Bouquin, V. L. Malinovskii, X. Guégano, S.-X. Liu, S. Decurtins, R. Häner, *Chem. Eur. J.* **2008**, *14*, 5732-5736.
TTF-Modified DNA.
34. I. Zimmermann, T. D. Keene, A. Neels, S. Decurtins, *Acta Cryst.* **2008**, *E64*, m845-m846.
Di- μ -acetato- μ -aqua-bis[acetatobis(1*H*-benzimidazole)cobalt(II)].
35. C. Goze, N. Dupont, E. Beitler, C. Leiggenger, H. Jia, P. Monbaron, S.-X. Liu, A. Neels, A. Hauser, S. Decurtins, *Inorg. Chem.* **2008**, *47*, 11010-11017.
Ru(II) Coordination Chemistry of a Fused Donor-Acceptor Ligand: Synthesis, Characterization, and Photoinduced Electron-Transfer Reactions of $[\{\text{Ru}(\text{bpy})_2\}_n(\text{TTF-ppb})](\text{PF}_6)_{2n}$ ($n = 1, 2$).

PROF. B. ERNI

36. Zurbriggen, A., Jeckelmann, J.M., Christen, S., Bieniossek, C., Baumann, U., and Erni, B.
X-ray Structures of the Three *Lactococcus lactis* Dihydroxyacetone Kinase Subunits and of a Transient Intersubunit Complex
J.Biol.Chem. **283**: 35789-35796, (2008).

PROF. D.J. FERMÍN

37. J. Zhao, C.R. Bradbury, D.J. Fermín,
Long-Range Electronic Communication Between Metal Nanoparticles and Electrode Surfaces Separated by Polyelectrolyte Multilayer,
J. Phys. Chem. C **112** (2008) 6832-6841.
38. J. Zhao, M. Wasem, C.R. Bradbury, D.J. Fermín,
Charge Transport Across Self-Assembled Nanoscale Metal-Insulator-Metal Heterostructures,
J. Phys. Chem. C **112** (2008) 7284-7289.
39. F. Li, I. Ciani, P. Bertocello, P.R. Unwin, J. Zhao, C.R. Bradbury, D.J. Fermín,
Scanning Electrochemical Microscopy of Redox-Mediated Hydrogen Evolution Catalyzed by Two-Dimensional Assemblies of Palladium Nanoparticles,
J. Phys. Chem. C **112** (2008) 9686-9694.
40. C.R. Bradbury, J. Zhao, D.J. Fermín,
Distance-Independent Charge-Transfer Resistance at Gold Electrodes Modified by Thiol Monolayers and Metal Nanoparticles,
J. Phys. Chem. C **112** (2008) 10153-10160.
41. C.R. Bradbury, C. Bünzli, J. Zhao, M. Carrara, G.P. Kissling, E. Aslan-Gürel, D.J. Fermin,
Modulating the Reactivity of Electrode Surfaces by Electrostatic Assembly of Metal Nanoparticles and Quantum Dots,
Chimia **62** (2008) 841-846.

PROF. H. GÄGGELER

42. R. Eichler, N.V. Aksenov, A.V. Belozherov, G.A. Bozhikov, V.I. Chepigin, R. Dressler, S.N. Dmitriev, **H.W. Gäggeler**,
V.A. Gorshkov, F. Haenssler, M.G. Itkis, V.Y. Lebedev, A. Laube, O.N. Malyshev, Yu.Ts.

- Oganessian, O.V. Petruschkin, D. Piguët, P. Rasmussen, A. Serov, S.V. Shishkin, A.V. Shutov, A.I. Svirikhin, E.E. Tereshatov, G.K. Vostokin, M. Wegrzecki, A.V. Yeremin
Thermochemical and physical properties of element 112
Angew.Chem. Int. Ed., **47(17)**, 3262-3266 (2008).
43. R. Eichler, N.V. Aksenov, A.V. Belozarov, G.A. Bozhikov, V.I. Chepigin, R. Dressler, S.N. Dmitriev, **H.W. Gäggeler**, V.A. Gorshkov, F. Haenssler, M.G. Itkis, V.Y. Lebedev, A. Laube, O.N. Malyshev, Yu.Ts. Oganessian, O.V. Petruschkin, D. Piguët, P. Rasmussen, A. Serov, S.V. Shishkin, A.V. Shutov, A.I. Svirikhin, E.E. Tereshatov, G.K. Vostokin, M. Wegrzecki, A.V. Yeremin
Thermochemische und physikalische Eigenschaften von Element 112
Angew. Chem. **120(17)**, 3306-3310 (2008).
44. E. E. Tereshatov, H. Bruchertseifer, G.A. Bozhikov, N.V. Aksenov, G.Ya. Starodub, G.K. Vostokin, A.G. Belov, S.V. Shishkin, S.N. Dmitriev, **H.W. Gäggeler**, R. Eichler, D. Schumann
Cation-Exchange Separation of Group V Elements: Model Experiments on Isolation and Chemical Identification of Db Radiochemistry 50 (**3**), 290-293 (2008).
45. T. Bartels-Rausch, T. Huthwelker, M. Jöri, **H. W. Gäggeler**, M. Ammann
Interaction of gaseous elemental mercury with snow surfaces: Laboratory investigation
Env. Res. Let. **3(4)**, 045009 (2008).
46. M. Kerbrat, B. Pinzer, T. Huthwelker, **H. W. Gäggeler**, M. Ammann, M. Schneebeli
Measuring the specific surface area of snow with x-ray tomography and gas adsorption: Comparison and implications for surface smoothness
Atmos. Chem. Phys. **8(5)**, 1261-1275 (2008).
47. O. Vesna, S. Sjogren, E. Weingartner, V. Samburova, M. Kalberer, **H. W. Gäggeler**, M. Ammann
Changes of fatty acid aerosol hygroscopicity induced by ozonolysis under humid conditions
Atmos. Chem. Phys. **8(16)**, 4683-4690 (2008).
48. E.E. Tereshatov, H. Bruchertseifer, G.A. Bozhikov, N.V. Aksenov, G.Ya. Starodub, G.K. Vostokin, A.G. Belov, S.V. Shishkin, S.N. Dmitriev, **H.W. Gäggeler**, R. Eichler, D. Schumann
Cation Exchange Separation of Group V Elements: Model Experiments on Isolation and Chemical Identification of Db
Radiochemistry, 2008, Vol.50, No.3, pp. 290-293.
49. **REPORTS**
H.W. Gäggeler, S. Szidat, E. Vogel, Leonhard Tobler
²¹⁰Pb Messungen in Niederschlagsproben
BAG (Federal Office of Public Health) report "Umweltradioaktivität und Strahlendosen in der Schweiz 2007", Bern 2008.
50. **CONTRIBUTIONS TO CONFERENCES, WORKSHOPS AND SEMINARS**
H.W. Gäggeler
Chemical Studies with single Atoms of Superheavy Elements
Technical University Prague, Czech Republic, 3 March 2008.

H.W. Gäggeler

How chemists have reached the island of superheavy elements

Symp. on the occasion of the 75th birthday of Y.T. Oganessian, Dubna, Russia, 24 May 2008.

H.W. Gäggeler

Die naturwissenschaftlichen Grundlagen des Klimawandels: ,Umweltforschung anhand von Gletschereis,

Weiterbildung der PH Bern, Switzerland, 31 May 2008.

H.W. Gäggeler

Happy landing on the island of superheavy elements

CERN, Geneva, Switzerland, 19 August 2008.

H.W. Gäggeler

Long-term air pollution records retrieved from Alpine ice cores

Workshop "Spawning the Atmosphere Measurements of Jungfrauoch", Swiss Academy of Sciences, Bern, Switzerland, 25/26 November 2008.

T. Bartels-Rausch, M. Jöri, T. Huthwelker, **H. W. Gäggeler**, M. Ammann

Interaction of gaseous, elemental mercury with snow surfaces: Laboratory investigations

AICI-HiT Workshop "Ice and Halogens: Laboratory Studies to Improve the Modelling of Field Data", British Antarctic Survey, Cambridge, UK, 16-18 June 2008.

Ciric, L. Tobler, **H.W. Gäggeler**, G. Casassa, M. Schwikowski

Source apportionment of trace species and possible ENSO detection in the Mercedario ice core

7th NCCR Climate Summer School, Monte Verità, Switzerland, 31 August-05 September 2008.

Ciric, L. Tobler, **H.W. Gäggeler**, G. Casassa, M. Schwikowski

An ice core record from Mercedario (32°S), Central Argentinean Andes

4th EGU Alexander von Humboldt International Conference "The Andes: Challenge for Geosciences",

Santiago, Chile, 24-28 November 2008.

T. Kellerhals, S. Brütsch, M. Sigl, S. Knüsel, **H.W. Gäggeler**, M. Schwikowski

Holocene climatic fluctuations including Medieval Warm Period and Little Ice Age type events in tropical

South America deduced from Illimani ice core

4th EGU Alexander von Humboldt International Conference "The Andes: Challenge for Geosciences",

Santiago, Chile, 24-28 November 2008.

M. Sigl, T.M. Jenk, T. Kellerhals, M. Ruff, S. Szidat, C. Boutron, C. Barbante, H.-A. Synal,

H.W. Gäggeler,

M. Schwikowski

Radiocarbon dating of glacier ice on a microgram level – examples from the Alps and the Andes

EGU General Assembly, Vienna, Austria, 13–18 April 2008.

M. Sigl, T.M. Jenk, T. Kellerhals, M. Ruff, S. Szidat, C. Boutron, C. Barbante, H.-A. Synal,

L. Wacker, **H.W. Gäggeler**,

M. Schwikowski

Radiocarbon dating of glacier ice on a microgram level – examples from the Alps and the Andes

7th NCCR Climate Summer School, Monte Verità, Switzerland, 31 Aug.-05 Sept. 2008.

M. Ruff, **H.W. Gäggeler**, M. Suter, H.-A. Synal, S. Szidat, L. Wacker
Fully automated radiocarbon AMS measurements with elemental analyser and gas ion source

Frühjahrstagung der Deutschen Physikalischen Gesellschaft – Fachverband
Massenspektrometrie, Darmstadt, Germany,
10-14 March 2008.

M. Ruff, **H.W. Gäggeler**, I. Hajdas, T. Jenk, M. Němec, S. Riedi, M. Sigl, M. Suter, H.-A. Synal, S. Szidat, L. Wacker
Radiocarbon Dating of small Samples
5th International Symposium on Radiocarbon and Archaeology, Zurich, Switzerland, 26-28 March 2008.

S. Fahrni, **H. W. Gäggeler**, I. Hajdas, M. Ruff, S. Szidat, L. Wacker
A direct combination of CuO oxidation with a gas ion source for small ^{14}C samples
11th International Conference on Accelerator Mass Spectrometry, Rome, Italy, 14- 19 September 2008.

M. Ruff, S. Fahrni, **H.W. Gäggeler**, M. Suter, H.-A. Synal, S. Szidat, L. Wacker
Radiocarbon Measurements with the MICADAS Gas Ion Source
11th International Conference on Accelerator Mass Spectrometry, Rome, Italy, 14-19 September 2008.

PROF. H. U. GÜDEL

51. E. van der Kolk, P. Dorenbos, K. Krämer, D. Biner and H. U. Güdel
High-resolution luminescence spectroscopy study of down-conversion routes in $\text{NaGdF}_4:\text{Nd}^{3+}$ and $\text{NaGdF}_4:\text{Tm}^{3+}$ using synchrotron radiation
Phys. Rev. B **77**, 125110/1-7 (2008)
52. Oliver Waldmann, Ayuk M. Ako, Hans U. Güdel and Annie K. Powell
Assessment of the Anisotropy in the Molecule Mn_{19} with a High-Spin Ground State $S = 83/2$ by 35 GHz Electron Paramagnetic Resonance
Inorg. Chem. **47**, 3486-3488 (2008)
53. Ch. Rüegg, B. Normand, M. Matsumoto, A. Furrer, D. F. McMorrow, K. W. Krämer, H.-U. Güdel, S. N. Gvasaliya, H. Mutka and M. Boehm
Quantum Magnets under Pressure: Controlling Elementary Excitations in TlCuCl_3
Phys. Rev. Lett. **100**, 205701/1-4 (2008)
54. M. D. Birowosuto, P. Dorenbos, K. W. Krämer and H. U. Güdel
 Ce^{3+} activated $\text{LaBr}_{3-x}\text{I}_x$: High-light-yield and fast-response mixed halide scintillators
J. Appl. Phys. **103**, 103517/1-6 (2008)
55. Stefan T. Ochsenein, Floriana Tuna, Marzio Rancan, Rachel S. G. Davies, Christopher A. Muryn, Oliver Waldmann, Roland Bircher, Andreas Sieber, Graham Carver, Hannu Mutka, Felix Fernandez-Alonso, Andrew Podlesnyak, Larry P. Engelhardt, Grigore A. Timco, Hans U. Güdel and Richard E. P. Winpenny
Studies of Finite Molecular Chains: Synthesis, Structural, Magnetic and Inelastic Neutron Scattering Studies of Hexa- and Heptanuclear Chromium Horseshoes
Chem. Eur. J. **14**, 5144-5158 (2008)

56. M. Danang Birowosuto, Pieter Dorenbos, Johan T. M. de Haas, Carel W. E. van Eijk, Karl W. Krämer and H. U. Güdel
Li-Based Thermal Neutron Scintillator Research; $\text{Rb}_2\text{LiYBr}_6 : \text{Ce}^{3+}$ and Other Elpasolites
IEEE Trans. Nucl. Sci. **55**, 1152-1155 (2008)
57. M. Danang Birowosuto, Pieter Dorenbos, G. Bizarri, Carel W. E. van Eijk, Karl W. Krämer and H. U. Güdel
Temperature Dependent Scintillation and Luminescence Characteristics of $\text{GdI}_3 : \text{Ce}^{3+}$
IEEE Trans. Nucl. Sci. **55**, 1164-1169 (2008)
58. Dominik Schaniel, Theo Woike, Bernard Delley, Colette Boskovic and Hans-Ueli Güdel
Photogeneration of metastable side-on N_2 linkage isomers in $[\text{Ru}(\text{NH}_3)_5\text{N}_2]\text{Cl}_2$,
 $[\text{Ru}(\text{NH}_3)_5\text{N}_2]\text{Br}_2$ and $[\text{Os}(\text{NH}_3)_5\text{N}_2]\text{Cl}_2$
Phys. Chem. Chem. Phys. **10**, 5531-5538 (2008)
59. R. Valiente, I. Hernández, F. Rodríguez, F. Aguado, H. U. Güdel and K. Krämer
High-pressure induced absorption line narrowing in $\text{Cs}_3\text{Yb}_2\text{Cl}_9$
J. Phys. Conf. Ser. **121**, 042002/1-5 (2008)

PROF. R. HÄNER

60. H. Bittermann, D. Siegemund, V.L. Malinovskii, R. Häner:
Dialkynylpyrenes: strongly fluorescent, environment-sensitive DNA building blocks
J. Am. Chem. Soc. **2008**, *130*, 15285-15287.
61. N. Bouquin, V.L. Malinovskii, X. Guégano, S.-X. Liu, S. Decurtins, R. Häner:
TTF-Modified DNA
Chem. Eur. J. **2008**, 5732-5736.
62. S. Werder, V.L. Malinovskii, R. Häner:
Triazolylpyrenes: Synthesis, Fluorescence Properties and Incorporation into DNA
Org. Lett. **2008**, *10*, 2011-2014.
63. N. Bouquin, V.L. Malinovskii, R. Häner:
Highly efficient quenching of excimer fluorescence by perylene diimide in DNA
Chem. Commun. **2008**, 1974-1976.
This Paper was featured as a ['Hot Article'](#)
64. N. Bouquin, V.L. Malinovskii, R. Häner:
Anthraquinones as Artificial DNA Building Blocks
Eur. J. Org. Chem. **2008**, 2213-2219.
65. F. Samain, V.L. Malinovskii, S. M. Langenegger, R. Häner:
Spectroscopic Properties of Pyrene-Containing DNA Mimics
Bioorg. Med. Chem. **2008**, *16*, 27-33
66. **Patent**

R. Jaggi, R. Häner
Method and reagent for optimized isolation of RNA from fixed tissue
08.04.2008

PROF. J. HULLIGER

67. P.J. Stephens, F.J. Devlin, S. Schürch, J. Hulliger
The Absolute configuration (AC) of the chiral alkane D₃-anti-trans-anti-trans-anti-trans-perhydrotriphenylene (PHTP)
Theor. Chem. Acc., **119**, 19-28, 2008
68. Athanasios Batagiannis and Jürg Hulliger
Dissymetrization of molecular crystals: a driving force for property formation
Cryst. Res. Technol., **43**, 1133-1137, 2008
69. Gaetan Couderc, Michel Bonin, Gael Labat, Ricarda Berger and Jürg Hulliger
Inclusion of tetramethylpyrazine in channels of the organic zeolite 2,4,6-tris(4-bromophenoxy)-1,3,5-triazine
J. Incl. Phenom. Macrocycl. Chem., **61**, 377-379, 2008
70. Katharina Reichenbaecher, Gaetan Couderc, Antonia Neels, Karl Kraemer, Edwin Weber and Jürg Hulliger
Improved thermal stability of an organic zeolite by fluorination
J. Incl. Phenom. Macrocycl. Chem., **61**, 127-130, 2008
71. L. Landau, J. Willems and J. Hulliger
Detailed magnetization study of superconducting properties of YBa₂Cu₃O_{7-x} ceramic spheres
J. Phys. Condens. Matter, **20**, 095222-1-8, 2008
72. I.L. Landau
Comparison of the scaling analysis of mixed-state magnetization data with direct measurements of the upper critical field for YBa₂Cu₃O_{7-x}
J. Phys. Condens. Matter, **20**, 275229, 2008

PROF. R. KEESE

73. Preparation of Dicyano- and Methylcobinamide from Vitamin B_{12a}
Christina Wedemeyer-Exl, Tamis Darbre, Reinhart Keese
SYNTHESIS **2008**, No. 21, pp 3429-3432

ARBEITSGRUPPEN DEPARTEMENT FÜR CHEMIE UND BIOCHEMIE

Ordner 2

PROF. C. KEMPF

74. M. Stucki, N. Boschetti, W. Schafer, T. Hostettler, F. Kasermann, T. Nowak, A. Groener, C. Kempf
Investigations of prion and virus safety of a new liquid IVIG product. *Biologicals* 36 (2008) 239-247
75. Claudia Boensch, Christoph Kempf, Carlos Ros. Interaction of Parvovirus B19 with Human Erythrocytes Alters Virus Structure and Cell Membrane Integrity. *JOURNAL OF VIROLOGY* 82 (2008) 11784–11791
76. Congress Abstracts:

Bönsch, C.; Kempf, C.; Ros, C. Binding of Parvovirus B19 to P antigen receptor induces the externalization of the immunodominant VP1-unique region and triggers the PLA2 activity. Abstract for oral presentation at the XII Parvovirus Workshop, Cordoba Spain, Jun 2008

PROF. U. KRÄHENBÜHL

77. Nadzeya Homazava, Andrea Ulrich, Urs Krähenbühl
In situ Element-Specific and Time-Resolved Investigation of Micro-Corrosion Processes *Chimia* **62** 530 (2008)
78. T. Barrelet, A. Ulrich, H. Rennenberg, C.N. Zwicky and U. Krähenbühl
Assesing the Suitability of Norway Spruce Wood as an Environmental Archive for Sulphur Environmental Pollution **156** 1007-1008 (2008)
79. Annina Alica Maria Gaschen, Max Döbeli, A Markwitz, B. Barry S. Ulrich-Bochsler and Urs Krähenbühl
Restrictions on fluor DepthProfiling for Exposure Age dating in archaeological Bones. *J of Archaeological Science* **35** 535-552 (2008)
80. Willy Tinner, Christian Bigler, Feng Sheng Hu, Sharon Gedye, Irene Gregory-Eaves, richard T. Jones, Petra Kaltenrieder and Urs Krähenbühl
Boreal ecosystem responses to climatic variation in southeastern Alaska during the past seven centuries
Ecology **89** 729-743 (2008)
81. Rudolf P.W. Struis, Christian Ludwig, Timothée Barrelet, Urs Krähenbühl, Heinz Rennenberg
Studying sulphur functional groups in Norway spruce year rings using S L-edge total

- electron yield spectroscopy
 Science of Total Environment **403** 196-206 (2008)
82. Weibi Hsu, Aicheng Zhang, Yunbin Guan, Takayuki Ushikubo, Rainer Bartoschewitz, Urs Krähenbühl, Rudolf Pepelnik, Ulrich Reus, Thomas Kurtz, Paul Kurtz
 Petrography, Mineralogy and Geochemistry of Lunar Meteorite Sayh al Uhaymir 300
 Meteoritics Planet Sci **43** 1363-1381 (2008)
83. Ingo Leya, Maria Schönbächler, Uwe Wiechdert, Urs Krähenbühl, Alex N. Halliday
 Titanium isotopes and the radial heterogeneity of the solar system
 Earth Planet Sci Letters **226** 233-244 (2008)
84. N. Homazava, A. Ulrich, U. Krähenbühl
 Spatially and time-resolved element-specific in situ corrosion investigations with an online hyphenated microcapillary flow injection inductively coupled plasma mass spectrometry set-up
 Spectrochimica Acta Part B **63** 777-783 (2008)
85. N. Homazava, A. Shkabko, D. Logvinovich, U. Krähenbühl, A. Ulrich
 Element-specific in situ corrosion behaviour of Zr-Cu-Ni-Al-Nb bulk metallic glass in acidic media studied using a novel microcapillary flow injection inductively coupled plasma mass spectrometry technique
 Intermetallics **16** 1066-1072 (2008)

DR. K. KRÄMER

86. T. Lorenz, O. Heyer, M. Garst, F. Anfuso, A. Rosch, Ch. Rüegg und K.W. Krämer
 Diverging thermal expansion of the spin-ladder system $(C_5H_{12}N)_2CuBr_4$
 Phys. Rev. Lett. **100** (2008) 067208, 1 - 4.
87. M.F. Butman, V.B. Motalov, L.S. Kudin, A.E. Grishin, A.S. Kryuchkov und K.W. Krämer
 A mass spectroscopic study of the molecular and ionic sublimation of lanthanum tribromide
 Russ. J. Phys. Chem. A **82** (2008) 164 - 171.
88. M.F. Butman, L.S. Kudin, V.B. Motalov, D.E. Vorobev, A.E. Grishin, A.S. Kryuchkov und K.W. Krämer
 A mass spectroscopic study of the sublimation of lutetium tribromide under Knudsen and Langmuir conditions
 Russ. J. Phys. Chem. A **82** (2008) 535 - 543.
89. Furrer, F. Juranyi, K.W. Krämer und Th. Strässle
 Reconciling exchange striction with biquadratic exchange in $KMn_{0.1}Zn_{0.9}F_3$:
 An inelastic neutron scattering study
 Phys. Rev. B **77** (2008) 134410, 1 – 7.
90. M.F. Butman, L.S. Kudin, V.B. Motalov, D.A. Ivanov, V.V. Sliznev und K.W. Krämer
 The thermodynamic stability of the $LaBr_4^-$ Ion
 Russ. J. Phys. Chem. A **82** (2008) 767 - 772.

91. Ch. Rüegg, B. Normand, M. Matsumoto, A. Furrer, D.F. McMorrow, K.W. Krämer, H.U. Güdel, S.N. Gvasaliya, H. Mutka und M. Boehm
Quantum magnets under pressure: Controlling elementary excitations in TlCuCl_3
Phys. Rev. Lett. **100** (2008) 205701, 1 - 4.
92. E. van der Kolk, P. Dorenbos, K. Krämer, D. Biner und H.U. Güdel
High resolution luminescence study of down-conversion routes in $\text{NaGdF}_4 : \text{Nd}^{3+}$ and $\text{NaGdF}_4 : \text{Tm}^{3+}$ using synchrotron radiation
Phys. Rev. B **77** (2008) 125110, 1 – 7.
93. F. Anfuso, M. Garst, A. Rosch, O. Heyer, Th. Lorenz, Ch. Rüegg und K. Krämer
Spin-spin correlation of the spin-ladder compound $(\text{C}_5\text{H}_{12}\text{N})_2\text{CuBr}_4$ measured by magnetostriction and comparison to quantum Monte Carlo results
Phys. Rev. B **77** (2008) 235113, 1 – 11.
94. M.D. Birowosuto, P. Dorenbos, J.T.M. de Haas, C.W.E. van Eijk, K.W. Krämer und H.U. Güdel
Li-based thermal neutron scintillator research; $\text{Rb}_2\text{LiYBr}_6 : \text{Ce}^{3+}$ and other elpasolites
IEEE Trans. Nucl. Sci. **55** (2008) 1152 – 1155.
95. M.D. Birowosuto, P. Dorenbos, G. Bizarri, C.W.E. van Eijk, K.W. Krämer und H.U. Güdel
Temperature dependent scintillation and luminescence characteristics of $\text{GdI}_3 : \text{Ce}^{3+}$
IEEE Trans. Nucl. Sci. **55** (2008) 1164 – 1169.
96. M.D. Birowosuto, P. Dorenbos, K.W. Krämer und H.U. Güdel
 Ce^{3+} activated $\text{LaBr}_{3-x}\text{I}_x$: High light yield and fast response mixed halide scintillators
J. Appl. Phys. **103** (2008) 103517, 1 - 6.
97. K. Reichenbacher, G. Couderc, A. Neéls, K. Krämer, E. Weber und J. Hulliger
Improved thermal stability of an organic zeolite by fluorination
J. Incl. Phenom. Macrocycl. Chem. **61** (2008) 127 – 130.
98. A.H. Krumpel, E. van der Kolk, D. Zeelenberg, A.J.J. Bos, K.W. Krämer und P. Dorenbos
Lanthanide 4f-level location in lanthanide doped and cerium-lanthanide co-doped NaLaF_4 by photo- and thermoluminescence
J. Appl. Phys. **103** (2008) 103517, 1 - 6.
99. M.F. Butman, V.B. Motalov, L.S. Kudin, A.S. Kryuchkov, A.E. Grishin und K.W. Krämer
A jump change in the sublimation coefficient of the PrBr_3 single crystal at the polymorphic transition point
Russ. J. Phys. Chem. A **82** (2008) 1972 - 1974.
100. Ch. Rüegg, K. Kiefer, B. Thielemann, D.F. McMorrow, V. Zapf, B. Normand, M.B. Zvonarev, P. Bouillot, C. Kollath, T. Giamarchi, S. Capponi, D. Poilblanc, D. Biner und K. Krämer
Thermodynamics of the spin Luttinger liquid in a model ladder material
Phys. Rev. Lett. **101** (2008), 247202, 1 - 4.
101. R. Valiente, I. Hernández, F. Rodríguez, F. Aguado, H.U. Güdel und K. Krämer
High-pressure induced absorption line narrowing in $\text{Cs}_3\text{Yb}_2\text{Cl}_9$
J. Phys.: Conf. Series **121** (2008), 042002, 1 - 5.

102. V.B. Motalov, M.F. Butman, L.S. Kudin, K.W. Krämer, L. Rycerz und M. Gaune-Escard
A mass spectroscopic study of the vaporization of cerium tribromide under Knudsen and Langmuir conditions
J. Molecular Liquids **142** (2008) 78 - 82.
103. R. Dell'Amore, A. Schilling und K. Krämer
Fraction of Bose-Einstein condensed triplons in TlCuCl_3 from magnetization data
Phys. Rev. B. **78** (2008), 224403, 1 - 8.

PROF. C. LEUMANN

104. Z. Johar, A. Zahn, C. J. Leumann, B. Jaun, Solution structure of a DNA duplex containing a biphenyl base-pair, *Chem. Eur. J.*, **2008**, *14*, 1080-1086.
105. Zahn, C. J. Leumann, Recognition Properties of Donor- and Acceptor-Modified Biphenyl-DNA, *Chem. Eur. J.* **2008**, *14*, 1087-1094.
106. P. S. Pallan, D. Ittig, A. Héroux, Z. Wawrzak, C. J. Leumann, M. Egli*, Crystal Structure of Tricyclo-DNA: An Unusual Compensatory Change of Two Adjacent Backbone Torsion Angles, *Chem. Commun.* **2008**, 883-885
107. S. Luisier, C. J. Leumann, Screening the Structural and Functional Properties of Bicyclo-DNA: bc^{ox} -DNA, *ChemBioChem*, **2008**, *9*, 2244-2253.
108. N. A. Grigorenko, C. J. Leumann, Excess Electron Transport through a Stable Phenanthrenyl Pair in DNA, *Chem. Commun.*, **2008**, 5417-5419.
109. S. Luisier, C. J. Leumann, Synthesis of bicyclo-DNA nucleosides with additional functionalization in the carbocyclic ring, *Chimia*, **2008**, *62*, 270-272.
110. **Tagungsbeiträge** (ohne peer-review)
- S. P. Scheidegger, C. J. Leumann, Strand invasion properties and serum stability of α -tricyclo-DNA, *Nucleic Acids Symp. Ser.* **2008**, *52*, 139-140.
- A. Stauffiger, C. J. Leumann, Synthesis and structural analysis of [4.3.0]-bicyclothymidine, *Nucleic Acids Symp. Ser.* **2008**, *52*, 267-268.
- D. Ittig, D. Schümperli, C. J. Leumann, Tc-DNA modified siRNA, *Nucleic Acids Symp. Ser.* **2008**, *52*, 501-502.
- S. Luisier, P. Silhar, C. J. Leumann, Highly α -selective, N-iodosuccinimide-mediated nucleosidation to bicyclo- and tricyclo-nucleosides, *Nucleic Acids Symp. Ser.* **2008**, *52*, 581-582.

PROF. S. LEUTWYLER

111. Markus Thut, Carine Manca, Christian Tanner, and Samuel Leutwyler:
Spectral tuning by switching C-H \cdots O hydrogen bonds: Rotation-induced spectral shifts of 7-hydroxy-quinoline \cdot HCOOH isomers.
J. Chem. Phys. **128**, 024304 1-13 (2008).

112. Rafael A. Bachorz, Florian A. Bischoff, Sebastian Höfener, Wim Klopper, Philipp Ottiger, Roman Leist, Jann A. Frey, and Samuel Leutwyler:
Scope and limitations of the SCS-MP2 method for stacking and hydrogen bonding interactions.
Phys. Chem. Chem. Phys. **10**, 2758-2766 (2008).
113. Chenyi Yi, Carmen Blum, Shi-Xia Liu, Gabriela Frei, Antonia Neels, Philippe Renaud, Samuel Leutwyler, and Silvio Decurtins:
An Efficient and Facile Synthesis of Highly Substituted 2,6-Dicyanoanilines.
J. Org. Chem. **73**, 3596-3599 (2008).
114. Markus Thut, Christian Tanner, Andreas Steinlin, and Samuel Leutwyler:
Time-Dependent Density Functional Theory as a Tool for Isomer Assignments of Hydrogen-Bonded Solute · Solvent Clusters.
J. Phys. Chem. A **112**, 5566-5572 (2008).
115. Dominique S. Kumpli, Simon Lobsiger, Hans-Martin Frey, Samuel Leutwyler, and John F. Stanton:
Accurate Determination of the Structure of Cyclooctatetraene by Femtosecond Rotational Coherence Spectroscopy and *ab Initio* Calculations.
J. Phys. Chem. A **112**, 9134-9143 (2008).
116. Chenyi Yi, Carmen Blum, Shi-Xia Liu, Gabriela Frei, Antonia Neels, Helen Stoeckli-Evans, Samuel Leutwyler, and Silvio Decurtins:
An efficient one-pot synthesis of strongly fluorescent (hetero)arenes polysubstituted with amino and cyano groups.
Tetrahedron **64**, 9437-9441 (2008).
117. Chenyi Yi, Carmen Blum, Shi-Xia Liu, Ying-Fen Ran, Gabriela Frei, Antonia Neels, Helen Stoeckli-Evans, Gion Calzaferri, Samuel Leutwyler, and Silvio Decurtins:
A Layered Red-Emitting Chromophoric Organic Salt.
Crystal Growth & Design **8**, 3004-3009 (2008).
118. Richard J. Plowright, Mark J. Watkins, Adrian M. Gardner, Timothy G. Wright, W. H. Breckenridge, Franz Wallimann, and Samuel Leutwyler:
Electronic spectroscopy of the Au(6p)-Kr complex.
J. Chem. Phys. **129**, 154315 1-11 (2008).

PROF. P. RENAUD

119. Azidosulfonylation of alkenes, dienes, and enynes,
N. Mantrand, P. Renaud,
Tetrahedron **2008**, *64*, 11860.
120. Chemistry - A light touch catalyzes asymmetric carbon-carbon bond formation,
P. Renaud, P. Leong,
Science **2008**, *322*, 55.
121. Radicals by design,
A. K. Croft, K. B. Lindsay, P. Renaud, T. Skrydstrup,
Chimia **2008**, *62*, 735.
122. Preparation of 5-Membered Rings via Translocation-Cyclization of Vinyl Radicals,
F. Dénès, F. Beaufils, P. Renaud,
Synlett **2008**, *16*, 2389-2399.

123. Stereoselective Radical Translocation,
P. Renaud, F. Beaufile, F. Dénès, L. Feray, C. Imboden, N. Kuznetsov,
Chimia **2008**, 62, 510.
124. An Efficient and Facile Synthesis of Highly Substituted 2,6-Dicyanoanilines,
C. Yi, C. Blum, S.-X. Liu, G. Frei, A. Neels, P. Renaud, S. Leutwyler, S. Decurtins,
J. Org. Chem. **2008**, 73, 3596.
125. An Efficient Radical Procedure for the Halogenation and Chalcogenation of *B*-
Alkylcatecholboranes,
A.-P. Schaffner, F. Montermini, D. Pozzi, V. Darmency, E. M. Scanlan, P. Renaud,
Adv. Synth. Catal. **2008**, 350, 1163.
126. An Efficient Method to Convert Lactams and Amides into 2,2-Dialkylated Amines,
A. Agosti, S. Britto, P. Renaud,
Org. Lett. **2008**, 10, 1417.
127. Decarboxylative Radical Azidation using MPDOC and MMDOC esters,
E. Nyfeler, P. Renaud,
Org. Lett. **2008**, 10, 985.
128. Carboazidation of Chiral Allylsilanes. Experimental and Theoretical Investigations,
L. Chabaud, Y. Landais, P. Renaud, F. Robert, F. Castet, M. Lucarini, K. Schenk,
Chem. Eur. J. **2008**, 14, 2744.

PROF. J.-L. REYMOND

129. Substrate Arrays for Fluorescence-Based Enzyme Fingerprinting and High-Throughput Screening.
J.-L. Reymond,
Ann. N. Y. Acad. Sci. **2008**, 1130, 12-20.
130. On-bead cyclization in a combinatorial library of 15,625 octapeptides.
V. S. Fluxa, J.-L. Reymond,
Bioorg. Med. Chem. **2008** Jan 30.
131. A Peptide Dendrimer Model for Vitamin B₁₂ Transport Proteins.
P. Sommer, N. Uhlich, J.-L. Reymond, T. Darbre,
Chembiochem **2008**, 9, 689-693.
132. The Search for New Enzymes.
J.-L. Reymond, W. Streit.
Book Chapter in *Asymmetric Organic Synthesis with Enzymes*, Ed. V. Gotor, I. Alfonso and E. Garcia-Urdiales, Wiley-VCH, Weinheim, **2008**, pp. 65-86.
133. Enzyme assay and activity fingerprinting of hydrolases with the red-chromogenic adrenaline test. V. S. Fluxá, D. Wahler, J.-L. Reymond,
Nature Protoc. **2008**, 3, 1270-1277.
134. Discovery of NMDA Glycine Site Inhibitors from the Chemical Universe Database GDB.
K. T. Nguyen, S. Syed, S. Urwyler, S. Bertrand, D. Bertrand, J.-L. Reymond,
ChemMedChem **2008**, 3, 1520-1524.
135. Glycopeptide dendrimers for biomedical applications.
T. Darbre, J.-L. Reymond,
Curr. Top. Med. Chem. **2008**, 8, 1286-1293.

136. A cyclodecapeptide ligand to vitamin B₁₂.
V. Duléry, N. A. Uhlich, N. Maillard, V. S. Fluxá, J. Garcia, P. Dumy, O. Renaudet, J.-L. Reymond, T. Darbre.
Org. Biomol. Chem. **2008**, *6*, 4134-4141.
137. Colorimetric and Fluorescence-Based Screening.
J.-L. Reymond. Book chapter in *Protein Engineering Handbook*,
Ed. S. Lutz and U. T. Bornscheuer, Wiley-VCH, Weinheim, **2008**, pp. 669-711.
138. Inhibition and Dispersion of *Pseudomonas aeruginosa* Biofilms by Glycopeptide Dendrimers Targeting the Fucose-Specific Lectin LecB.
E. M. V. Johansson, S. A. Cruz, E. Kolomiets, L. Buts, R. U. Kadam, M. Cacciarini, K.-M. Bartels, S. P. Diggle, M. Cámara, P. Williams, R. Loris, C. Nativi, F. Rosenau, K.-E. Jaeger, T. Darbre, J.-L. Reymond,
Chem. Biol. **2008**, *15*, 1249-1257.
139. α -Helix Stabilization within a Peptide Dendrimer.
S. Javor, A. Natalello, S. M. Doglia, J.-L. Reymond,
J. Am. Chem. Soc. **2008**, *130*, 17248-17249.
140. **Patent**

Kong Thong Nguyen, Jean-Louis Reymond, EP 08/015358, Title: INHIBITORS OF THE NMDA GLYCINE SITE AND MEDICAL USES THEREOF

PROF. J. SCHALLER

141. Baumgartner S, Shah D, **Schaller J**, Kämpfer U, Thurneysen A, Heusser P (2008) *Complement Ther Med* **16**: 183-191. Reproducibility of dwarf pea shoot growth stimulation by homeopathic potencies of gibberellic acid.
142. **Bücher**

Schaller J, Gerber S, Kämpfer U, Lejon S, Trachsel C (2008) John Wiley & Sons. Book: 540 pages. Human Blood Plasma Proteins: Structure and Function.

PROF. A. SCHNEIDER

143. Schneider A., Bursac D., Lithgow T.
The direct route: a simplified pathway for protein import into the mitochondrion of trypanosomes *Trends Cell Biol.* **18**: 12-18, (2008)

PROF. H. SIEGENTHALER

144. F.P. Campana, H. Buqa, P. Novak, R. Kötz, H. Siegenthaler,
In situ atomic force microscopy study of exfoliation phenomena on graphite basal planes, *Electrochem. Comm.* **10** (2008) 1590-1593.

DR. S. SZIDAT

145. T. Barrelet, A. Ulrich, H. Rennenberg, C.N. Zwicky, U. Krähenbühl
Assesing the Suitability of Norway Spruce Wood as an Environmental Archive for Sulphur
Environmental Pollution **156**, 1007-1014 (2008).
146. A.A.M. Gaschen, M. Döbeli, A. Markwitz, B. Barry, S. Ulrich-Bochsler, U. Krähenbühl
Restrictions on fluor DepthProfiling for Exposure Age dating in archaeological Bones
Journal of Archaeological Science **35**, 535-552 (2008).
147. N. Homazava, A. Ulrich, U. Krähenbühl
In situ Element-Specific and Time-Resolved Investigation of Micro-Corrosion Processes
Chimia **62**, 530 (2008).
148. N. Homazava, A. Ulrich, U. Krähenbühl
Spatially and time-resolved element-specific in situ corrosion investigations with an online hyphenated microcapillary flow injection inductively coupled plasma mass spectrometry set-up
Spectrochimica Acta Part B **63**, 777-783 (2008).
149. N. Homazava, A. Shkabko, D. Logvinovich, U. Krähenbühl, A. Ulrich
Element-specific in situ corrosion behaviour of Zr-Cu-Ni-Al-Nb bulk metallic glass in acidic media studied using a novel microcapillary flow injection inductively coupled plasma mass spectrometry technique
Intermetallics **16**, 1066-1072 (2008).
150. W. Hsu, A. Zhang, R. Bartoschewitz, Y. Guan, T. Ushikubo, U. Krähenbühl, R. Niedergesaess, R. Pepelnik, U. Reus, T. Kurtz, P. Kurtz
Petrography, Mineralogy and Geochemistry of Lunar Meteorite Sayh al Uhaymir 300
Meteoritics Planet. Sci. **43**, 1363-1381 (2008).
151. V.A. Lanz, M.R. Alfarra, U. Baltensperger, B. Buchmann, C. Hueglin, S. Szidat, M.N. Wehrli, L. Wacker, S. Weimer, A. Caseiro, H. Puxbaum, A.S.H. Prévôt
Source attribution of submicron organic aerosols during wintertime inversions by advanced factor analysis of aerosol mass spectra
Environ. Sci. Technol. **42**, 214-220, doi:10.1021/es0707207 (2008).
152. Leya, M. Schönbächler, U. Wiechdert, U. Krähenbühl, A.N. Halliday
Titanium isotopes and the radial heterogeneity of the solar system
Earth Planet Science Letters **266**, 233-244 (2008).
153. J. Mohn, S. Szidat, J. Fellner, H. Rechberger, R. Quartier, B. Buchmann, L. Emmenegger
Determination of biogenic and fossil CO₂ emitted by waste incineration based on ¹⁴CO₂ and mass balances
Bioresour. Technol. **99**, 6471–6479, doi:10.1016/j.biortech.2007.11.042 (2008).
154. J. Sandradewi, A.S.H. Prévôt, S. Szidat, N. Perron, M.R. Alfarra, V.A. Lanz, E. Weingartner, U. Baltensperger
Using aerosol light absorption measurements for the quantitative determination of wood burning and traffic emission contributions to particulate matter
Environ. Sci. Technol. **42**, 3316–3323, doi:10.1021/es702253m (2008).
155. R.P.W. Struis, C. Ludwig, T. Barrelet, U. Krähenbühl, H. Rennenberg
Studying sulphur functional groups in Norway spruce year rings using S L-edge total electron yield spectroscopy
Science of the Total Environment **403**, 196-206 (2008).

156. W. Tinner, C. Bigler, F.S. Hu, S. Gedye, I. Gregory-Eaves, R.T. Jones, P. Kaltenrieder, and U. Krähenbühl
Boreal ecosystem responses to climatic variation in southeastern Alaska during the past seven centuries
Ecology **89**, 729-743 (2008).
157. M. Viana, T.A.J. Kuhlbusch, X. Querol, A. Alastuey, R.M. Harrison, P.K. Hopke, W. Winiwarter, M. Vallius, S. Szidat, A.S.H. Prévôt, C. Hueglin, H. Bloemen, P. Wählin, R. Vecchi, A.I. Miranda, A. Kasper-Giebl, W. Maenhaut, R. Hitzenberger
Source apportionment of particulate matter in Europe: A review of methods and results
J. Aerosol Sci. **39**, 827-849, doi:10.1016/j.jaerosci.2008.05.007 (2008).
158. **Tagungsbeiträge**
- S. Szidat
¹⁴C-Analysen von Feinstaubproben
Fachtagung Immissionsmesstechnik, Dübendorf, 25 January, 2008
- M. Ruff, H.W. Gäggeler, M. Suter, H.-A. Synal, S. Szidat, L. Wacker
Fully automated radiocarbon AMS measurements with elemental analyser and gas ion source
Frühjahrstagung der Deutschen Physikalischen Gesellschaft – Fachverband
Massenspektrometrie, Darmstadt, Germany, 10-14 March, 2008
- M. Suter, G. Bonani, I. Hajdas, M. Ruff, T. Schulze-König, H.-A. Synal, S. Szidat, L. Wacker
Recent developments in accelerator mass spectrometry and its impact to archaeology
5th International Symposium on Radiocarbon and Archaeology, Zurich, Switzerland, 26-28 March, 2008
- M. Ruff, H.W. Gäggeler, I. Hajdas, T. Jenk, M. Němec, S. Riedi, M. Sigl, M. Suter, H.-A. Synal, S. Szidat, L. Wacker
Radiocarbon Dating of small Samples
5th International Symposium on Radiocarbon and Archaeology, Zurich, Switzerland, 26-28 March, 2008
- S. Szidat, S. Fahrni, U. Baltensperger, M. Ruff, L. Wacker, B. Klatzer, H. Puxbaum, E. Finessi, S. Decesari
Refined ¹⁴C source apportionment of organic carbon
9th International Conference on Carbonaceous Particles in the Atmosphere, Berkeley, CA, USA, 12-14 August, 2008
- N. Perron, L. Besnier, A.S. Prévôt, S. Szidat, M. Ruff, S. Fahrni, U. Baltensperger
Optimised separation of OC and EC for radiocarbon-based source apportionment of carbonaceous aerosol
9th International Conference on Carbonaceous Particles in the Atmosphere, Berkeley, CA, USA, 12-14 August, 2008
- A.S.H. Prevot, J. Sandradewi, M.R. Alfarra, S. Szidat, M.N. Wehrli, M. Ruff, S. Weimer, V.A. Lanz, E. Weingartner, N. Perron, A. Caseiro, A. Kasper-Giebl, H. Puxbaum, L. Wacker, U. Baltensperger
A comparison of new and classic methods to estimate the wood smoke contribution to particulate matter for several field campaigns
European Aerosol Conference, Thessaloniki, Greece, 24-29 August, 2008
- S. Fahrni, H. W. Gäggeler, I. Hajdas, M. Ruff, S. Szidat, L. Wacker
A direct combination of CuO oxidation with a gas ion source for small ¹⁴C samples
11th International Conference on Accelerator Mass Spectrometry, Rome, Italy, 14- 19

September, 2008

M. Ruff, S. Fahrni, H.W. Gäggeler, M. Suter, H.-A. Synal, S. Szidat, L. Wacker
Radiocarbon Measurements with the MICADAS Gas Ion Source
 11th International Conference on Accelerator Mass Spectrometry, Rome, Italy, 14-19
 September, 2008

A.C. Aiken, C. Wiedinmyer, B. de Foy, D. Salcedo, M. Cubison, I. Ulbrich, P. DeCarlo, J.A. Huffman, K. Docherty, D. Sueper, D.R. Worsnop, A. Trimborn, M. Northway, A.S.H. Prevot, S. Szidat, M.N. Wehrli, E.A. Stone, J.J. Schauer, J. Wang, J. Zheng, E. Fortner, R. Zhang, A. Laskin, J. Gaffney, N. Marley, L. Molina, G. Sosa, J.L. Jimenez
Organic aerosols in Mexico City: urban and biomass burning contributions during MILAGRO / MCMA-2006 at the urban supersite (T0)
 American Association for Aerosol Research (AAAR): 27th Annual Conference, Orlando, FL, USA, 20-24 October, 2008

A.S.H. Prevot, J. Sandradewi, M.R. Alfarra, S. Szidat, M.N. Wehrli, M. Ruff, S. Weimer, V.A. Lanz, E. Weingartner, N. Perron, A. Caseiro, A. Kasper-Giebl, H. Puxbaum, L. Wacker, U. Baltensperger
Comparison of different wood smoke markers in ambient aerosol
 American Association for Aerosol Research (AAAR): 27th Annual Conference, Orlando, FL, USA, 20-24 October, 2008

N. Perron, S. Szidat, A.S.H. Prévôt, M. Ruff, S. Fahrni, U. Baltensperger
Improved separation of OC and EC for radiocarbon-based source apportionment of carbonaceous aerosol
 EUCAARI annual meeting, Helsinki, Finland, 17-21 November, 2008

PROF. Th. WANDLOWSKI

159. C. Li, I. Pobelov, Th. Wandlowski, A. Bagrets, A. Arnold, F. Evers,
“Charge Transport in Single Au-Alkandithiol-Au Junctions – Conductance Histograms and Conformational Degrees of Freedom”
 J. Am. Chem. Soc. 130 (2008) 318 - 326
160. T. Weibel, A. Błaszczuk, C. von Hänisch, M. Mayor, I. Pobelov, Th. Wandlowski, F. Chen, N. Tao:
“Redox-Active Catechol-Functionalized Molecular Rods: Suitable Protection Groups and Single-Molecule Transport Investigations”
 Eur. J. Org. Chem. **2008** 136–149
161. C. Li, A. Mishchenko, Z. Li, I. Pobelov, Th. Wandlowski, X. Q. Li, F. Würthner, A. Bagrets, F. Evers:
“Electrochemical Gate-controlled Electron Transport of Redox-active Single Perylene Bisimide Molecular Junctions”
 J. Phys. Cond. Matt., 20 (2008) 374122
162. I. Pobelov, Z. Li, Th. Wandlowski:
“Electrolyte Gating and Redox-active Tunneling Junctions – An electrochemical STM Approach”
 J. Am. Chem. Soc. 130 (2008) 16045 - 15054
163. **Buchbeitrag**
- B. Han, Z. Li, I. Pobelov, G. Su, R. Aguilar-Sanchez, **Th. Wandlowski**:
“From self-assembly to Charge Transport with Single Molecules – An Electrochemical

Approach” In “Topics in Current Chemistry – Templates III”, K.Dötz, A.Schalley, P.Broekmann eds., Springer, 128 (2008) 152

164. **Tagungsbeiträge**

C. Li, I. Pobelov, Z. Li, G. Meszaros, M. Mayor, A. Bagrets, F. Evers, Th. Wandlowski:
“Electron Transfer with Single Redox Molecules – An Electrochemical Approach”
Symposium Proceedings, 13-15 (2008) Nagasaki Symposium on Nanodynamics,
29.01.2008, Nagasaki

Th.Wandlowski

“Charge Transport with Single Molecules – A Case Study with Perylenes”
5th Balic Conference on Electrochemistry, Proceedings, 10 (2008)

C. Li, Z. Li, G. Meszaros, A. Mishchenko, I. Pobelov, A. Bagrets, F. Evers, Th. Wandlowski:
“An Electrochemical Approach to charge transfer with Single Molecules”
Proceedings International Conference on Functional Materials, Chennai, (2008) 16