

Publikationsliste - List of Publications

Philipp Gütlich

- (1) **Die Reaktion von Aluminiumchlorid mit Chlorwasserstoff in 1,1,2,2-Tetrachloräthan und in Nitromethan**
Lieser, K.H.; Gütlich, P.
Ber. Bunsenges. Phys. Chem. **1963**, 67, 445

- (2) **Der Einfluß der Vorbehandlung auf den heterogenen Isotopenaustausch an der Oberfläche von Ionenkristallen und die Bildung von Kationenkörpern und Anionenkörpern**
Gütlich, P.; Lieser, K.H.
Z. Phys. Chem. (Neue Folge) **1965**, 46, 3/4, 216

- (3) **Die spezifische Oberfläche von frisch gefälltem Bariumsulfat**
Gütlich, P.; Lieser, K.H.
Z. Phys. Chem. (Neue Folge) **1965**, 46, 5/6, 257

- (4) **Die Geschwindigkeit des heterogenen Isotopenaustausches an der Oberfläche von Ionenkristallen**
Lieser, K.H.; Gütlich, P.; Rosenbaum, I.
Radiochim. Acta **1965**, 4, 216

- (5) **Die Temperaturabhängigkeit des heterogenen Isotopenaustausches an der Oberfläche von Ionenkristallen**
Lieser, K.H.; Gütlich, P.; Rosenbaum, I.
Radiochim. Acta **1966**, 5, 38

- (6) **Kinetics and Mechanism of Heterogeneous Exchange Reactions on the Surface of Ionic Crystals**
K.H. Lieser, K.H.; Gütlich, P.; Rosenbaum, I.
Proc. Int. Atomic Energy Agency, Symp. "Exchange Reactions", Brookhaven **1965**

- (7) **Exchange Equilibria on the Surface of Ionic Crystals**
Lieser, K.H.; Gütlich, P.; Hild, W.; Hecker, A.; Rosenbaum, I.
Proc. Int. Atomic Energy Agency, Symp. "Exchange Reactions", Brookhaven **1965**
- (8) **Hot-Atom Reaction Products in Crystals of Hexa- and Trivalent Chromium Compounds**
Gütlich, P.; Harbottle, G.
Radiochim. Acta **1966**, 5, 70
- (9) **A Study of ^{51}Cr Retention and Annealing in Single Crystals of K_2CrO_4 Irradiated at Low Neutron Doses**
Gütlich, P.; Harbottle, G.
Radiochim. Acta **1967**, 8, 30
- (10) **Beiträge zur Anwendung des Mößbauer-Effekts in der Chemie**
Gütlich, P.
Habilitationsschrift, TH Darmstadt **1968**
- (11) **Mößbauer-Effekt-Untersuchungen an Gamma-bestrahlten Eisenkomplexen. I. Oktaedrische High-Spin-Komplexe**
Gütlich, P.; Odar, S; Fritzsimmmons, B.W.; Erickson, N.E.
Radiochim. Acta **1968**, 10, 147
- (12) **^{61}Ni Mössbauer Spectra of Some Complexes of Ni(II)**
Erich, U.; Fröhlich, K.; Gütlich, P.; Webb, G.
Inorg. Nucl. Chem. Lett. **1969**, 5, 855
- (13) **Anwendung des Mößbauer-Effekts zur Untersuchung der Festkörperreaktion zwischen Eisen(II)-sulfat und Kaliumcyanid**
Gütlich, P.; Hasselbach, K.M.
Angew. Chem. **1969**, 81, 627

- (14) **Radiochemische Untersuchungen des Koordinationszustandes von Eisen im zweikernigen Eisen(III)-phenanthrolin-Komplexion**
Gütlich, P.; Fritzsimmmons, B.W.
Angew. Chem. **1969**, *81*, 788
- (15) **Beobachtung von anomalen Spinzuständen von Eisen(II) in $[\text{Fe}(\text{phen})_3](\text{ClO}_4)_2 \cdot 2\text{H}_2\text{O}$ mit Hilfe des Mößbauer-Effekts**
Ensling, J.; Fritzsimmmons, B.W.; Gütlich, P.; Hasselbach, K.M.
Angew. Chem. **1970**, *82 /15*, 638
- (16) **Polymere Chrom(III)-Komplexe als Folge der Neutronenbestrahlung von kristallinem Kaliumchromat.**
I. Trennungsmethode und einige chemische Eigenschaften der mehr-kernigen Rückstoßprodukte
Fröhlich, K.; Gütlich, P.; Odar, S.
J. Inorg. Nucl. Chem. **1971**, *33*, 307
- (17) **Polymere Chrom(III)-Komplexe als Folge der Neutronenbestrahlung von kristallinem Kaliumchromat.**
II. Einfluß der Bestrahlungsdauer auf die spezifische Aktivität und Diskussion der Bildungsweise der ein- und mehrkernigen Rückstoßprodukte
Fröhlich, K.; Gütlich, P.; Odar, S.
J. Inorg. Chem. **1971**, *33*, 621
- (18) **Mößbauer-Messungen an Krypton-83 in einigen ^{83}RbX -Verbindungen (X = F, Cl, Br, OH)**
Gütlich, P.; Odar, S.; Walcher, D.
Z. Naturforschung **1970**, *25b /10*, 1184
- (19) **Physikalische Methoden in der Chemie: Mößbauer-Spektroskopie.**
I. Grundlagen
Gütlich, P.
Chemie in unserer Zeit **1970**, *4 /5*, 133

- (20) **Physikalische Methoden in der Chemie: Mößbauer-Spektroskopie.**
II. Anwendungen
Gütlich, P.
Chemie in unserer Zeit **1971**, 5 /5, 131
- (21) **Zur Anwendung des Mößbauer-Effekts in der analytischen Chemie**
Gütlich, P.
Transacta des VI. Int. Symp. für Mikrochemie in Graz, Mikrochim. Acta **1970**, Vol. E, 89 (Verlag Wiener Medizin. Akad.)
- (22) **The Mössbauer Effect and Chemistry: Part V: Triorganotin Penta-Coordinate Complexes**
Ensling, J.; Fritzsimmmons, B.W.; Gütlich, P.; Hasselbach, K.M.; Owusu, A.
J. Chem. Soc. **1971**, A, 1940
- (23) **Der Mößbauer-Effekt und seine Anwendung auf chemisch-technische Probleme**
Gütlich, P.; Prange, H.
Chemie-Ingenieur-Technik **1971**, 43 /19, 1049
- (24) **Die Mößbauer-Spektroskopie und ihre Anwendung in der Chemie**
Gütlich, P.
Broschüre (57 S.) zu Gastvorlesungen an der ETH Zürich, Juni 1971
- (25) **Mößbauer-Spektroskopie**
Gütlich, P.; Prange, H.
Broschüre (105 S.) zum GDCh-Fortbildungskurs, Oktober 1971
- (26) **Mößbauer-Messungen an Neptunium(VII)-Verbindungen**
Fröhlich, K.; Gütlich, P.; Keller, C.
Angew. Chem. **1972**, 84, 26
- (27) **Mössbauer Effect Studies on Some Heptavalent Neptunium Compounds**

Fröhlich, K.; Gütlich, P.; Keller, C.

J. Chem. Soc. A **1972**, 971

(28) **The Problem of Spin Triplet States of Iron(II) in ^{57}Fe Mössbauer Emission Spectra**

König, E.; Gütlich, P.; Link, R.

Chem. Phys. Lett. **1972**, 15, 302

(29) **High Spin \leftrightarrow Low Spin Transitions in Substituted Phenanthroline Complexes of Iron(II)**

Fleisch, J.; Gütlich, P.; Hasselbach, K.M.; Müller, W.

J. Physique Coll. **1974**, C6 35, 659, Supplement au No. 12

(30) **Beobachtung des Ligandenaustausches im System $\text{FeSO}_4 \cdot 7\text{H}_2\text{O}/\text{KCN}$ mit Hilfe der Mößbauer-Spektroskopie**

Gütlich, P.; Hasselbach, K.M.

Ber. Bunsenges. Phys. Chem. **1974**, 78 /10, 1017

(31) **^{57}Fe - und ^{119}Sn -Mößbauer-Untersuchungen an Tetracarbonyl-(organoelement IVa-phosphin)eisen(o)-Komplexen**

Ensling, J.; Gütlich, P.; Rösch, L.

Z. Naturforschung **1975**, 30b, 850

(32) **Mössbauer Spectroscopy in Chemistry Topics**

Gütlich, P.

in *Applied Physics* **1975**,

ed. Gonser, U.; Springer Verlag Berlin, Heidelberg, New York

(33) **Mössbauer Effect Study of the Electronic Ground State of Iron(II) in Tris(2-chlorophenanthroline)iron(II) Perchlorate**

Fleisch, J.; Gütlich, P.; Hasselbach, K.M.

Inorg. Chim. Acta **1976**, 17, 51

- (34) **New Aspects on the High Spin \leftrightarrow Low Spin Transition in Tris(2-methyl-1,10-phenanthroline)iron(II) Perchlorate**
Fleisch, J.; Gütlich, P.; Hasselbach, K.M.; Müller, W.
Inorg. Chem. **1976**, *15*, 958
- (35) **^{197}Au Mössbauer Effect Studies on Ternary Alloys of Gold with Main-Group Metals**
Gütlich, P.; Odar, S.; Weiss, A.
J. Phys. Chem. Solids **1976**, *37*, 1011
- (36) **Anomalous Spin States of Iron(II) in ^{57}Fe Mössbauer Emission Spectra of $[\text{}^{57}\text{Co}(\text{phen})_2(\text{NCS})_2]$ and $[\text{}^{57}\text{Co}(\text{bipy})_2(\text{NCS})_2]$**
Enslin, J.; Gütlich, P.; Hasselbach, K.M.
Chem. Phys. Lett. **1976**, *42*, 232
- (37) **Mössbauer Effect Study on Low Spin $^1\text{A}_1 \leftrightarrow$ High Spin $^5\text{T}_2$ Transition in $[\text{Fe}(\text{2-pic})_3]\text{Cl}_2$.
I. Dilution Effect in $[\text{Fe}_x\text{Zn}_{1-x}(\text{2-pic})_3]\text{Cl}_2 \cdot \text{C}_2\text{H}_5\text{OH}$**
Sorai, M.; Enslin, J.; Gütlich, P.
Chem. Phys. **1976**, *18*, 199
- (38) **Mössbauer Effect Study on Low Spin $^1\text{A}_1 \leftrightarrow$ High Spin $^5\text{T}_2$ Transition in $[\text{Fe}(\text{2-pic})_3]\text{Cl}_2$.
I. Influence of Non-Coordinate Solvent Molecule in $[\text{Fe}(\text{2-pic})_3]\text{Cl}_2 \cdot \text{X}$ (X = $\text{C}_2\text{H}_5\text{OH}$, CH_3OH , H_2O and $2\text{H}_2\text{O}$)**
Sorai, M.; Enslin, J.; Gütlich, P.
Chem. Phys. **1977**, *20*, 197
- (39) **Anomalous Spin State of Iron(II) in ^{57}Fe Mössbauer Emission Spectra of ^{57}Co -labeled Tris(2-methylphenanthroline)cobalt(II) Perchlorate**
Fleisch, J.; Gütlich, P.
Chem. Phys. Lett. **1976**, *42*, 237
- (40) **Thermally Induced Spin Transition in Tris(2-methoxy-1.10-**

phenanthroline)iron(II) Perchlorate. Variable-Temperature Mössbauer, Magnetic Susceptibility, and Far-Infrared Measurements

Fleisch, J.; Gütlich, P.; Hasselbach, K.M.

Inorg. Chem. **1977**, *16*, 1979

(41) Observation of Anomalous Spin States of Iron(II) in Strong-Field Diimine Complexes by ^{57}Fe Mössbauer Emission Spectroscopy

Ensling, J.; Fleisch, J.; Gütlich, P.

Chem. Phys. Lett. **1977**, *45*, 22

(42) Variable-Temperature ^{57}Fe Mössbauer Emission Studies on Tris(2-X-1.10-phenanthroline) ^{57}Co (II) Perchlorate (X = Cl, CH₃O)

Fleisch, J.; Gütlich, P.

Chem. Phys. Lett. **1977**, *45*, 29

(43) Time and Temperature Dependence of After-Effects in [$^{57}\text{Co}(\text{phen})_3$](ClO₄)₂ * 2H₂O from Time-Differential Mössbauer Emission Spectroscopy

Grimm, R.; Gütlich, P.; Kankeleit, E.; Link, R.

J. Chem. Phys. **1977**, *67* /12, 5491

(44) On-Line Mössbauer Measurements at Low Temperatures of $^{83\text{m}}\text{Kr}$ Implanted into Al

Gütlich, P.; Link, R.; Fritsch, T.; Wolf, G.K.

Nucl. Instr. Meth. **1978**, *148*, 573

(45) Mössbauer Spectroscopy and Transition-Metal Chemistry

Gütlich, P.; Link, R.; Trautwein, A.

Inorganic Chemistry Concepts 3 **1978**, Springer-Verlag, Heidelberg

(46) Mössbauer Effect Study of the Thermally Induced Spin Transition in Tris(2-picolyamine)iron(II) Chloride. Dilution Effect in Mixed Crystals of [$\text{Fe}_x\text{Zn}_{1-x}(\text{2-pic})_3$] Cl_2 * C₂H₅OH (x = 0.15, 0.029, 0.0009)

Gütlich, P.; Link, R.; Steinhäuser, H.G.

Inorg. Chem. **1978**, *17*, 2509

(47) **Corrosion Study of Austenitic and Martensitic Steels under Boiler Conditions by Means of ^{57}Fe Conversion Electron Mössbauer Spectroscopy**

Ensling, J.; Fleisch, J.; Grimm, R.; Grübler, J.; Gütlich, P.

Corr. Sci. **1978**, *18*, 797

(48) **Anwendung der Mößbauer-Spektroskopie auf die Untersuchung von Deckschichten in Naturumlaufkesseln Applications of Mössbauer Spectroscopy to the Study of Surface Layers in Natural Convection Boilers**

Ensling, J.; Gütlich, P.; Rieß, R.

Werkstoffe und Korrosion **1978**, *29*, 250

(49) **Interpretation of High Spin-Low Spin Transition in Iron(II) Complexes. I. A Phenomenological Thermodynamic Model**

Gütlich, P.; Köppen, H.; Link, R.; Steinhäuser, H.G.

J. Chem. Phys. **1979** *70*, 3977

(50) **Mössbauer Spectroscopic Studies of Spin Crossover Compounds**

Gütlich, P.

J. Physique Coll. **1979**, *C2 40*, 378

(51) **Determination of the Aluminum Content in Natural and Synthetic Alumo-Goethites Using Mössbauer Spectroscopy**

Fleisch, J.; Grimm, R.; Grübler, J.; Gütlich, P.

J. Physique Coll. **1980**, *C1 41*, 169

(52) **^{61}Ni Mössbauer Effect Studies of the Ferrimagnetic Spinel NiCr_2O_4 in an Applied Magnetic Field**

Gütlich, P.; Rummel, H.; Spiering, H.

J. Physique Coll. **1980**, *C1 41*, 185

(53) **Investigation of the Spin Crossover in $[\text{Fe}_x\text{M}_{1-x}(\text{phen})_2(\text{NCS})_2]$ (M = Mn, Co, Ni)**

Ganguli, P.; Gütlich, P.
J. Physique Coll. C1 **1980**, *41*, 313

(54) **Deuterium Isotope Effect on the High Spin <-> Low Spin Transition in Deuterated Solvates of Tris(2-picolyamine)iron(II) Chloride**

Gütlich, P.; Köppen, H.; Steinhäuser, H.G.
Chem. Phys. Lett. **1980**, *74* /3, 475

(55) **Spin Crossover in Iron Complexes**

Gütlich, P.
Structure and Bonding **1981**, *44*, 83, Springer-Verlag

(56) **⁵⁷Fe Mössbauer Emission Spectroscopy of an Iron(II) Complex with Temperature Dependent Spin State**

Gütlich, P.; Köppen, H.
J. Physique Coll. C1 **1980**, *41*, 311

(57) **⁵⁷Fe Mössbauer Emission Spectroscopy of an Iron(II) Complex with Temperature Dependent Spin Transition**

Fleisch, J.; Gütlich, P.; Köppen, H.
Radiochem. Radioanal. Lett. **1980**, *42* /4-5, 279

(58) **Recent Investigations of Spin Crossover**

Gütlich, P.
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ed. Stevens, John G.; Shenoy, Gopal K. in: *Mössbauer Spectroscopy and Its Chemical Applications, Advances in Chemistry Series* **1981**, *194*, 405,
American Chemical Society, Washington D.C.

(59) **Mössbauer Effect Study of the Electronic Ground State of Iron(II) in [⁵⁷Fe_xM_{1-x}(bipy)₃](ClO₄)₂ (M = Mn, Ni, Zn) and [⁵⁷Fe_xM_{1-x}(phen)₃](ClO₄)₂ (M = Ni, Zn) at Very Low Iron Concentrations (x < 0.005)**

Bode, K.; Gütlich, P.; Köppen, H.

Inorg. Chim. Acta **1980**, 42, 281

(60) **Temperature Dependent $^5T_2(O_h) \leftrightarrow ^1A_1(O_h)$ Spin Equilibrium in a Six-Coordinate Cobalt(III) Complex. Investigation by ^{31}P NMR in Solution**

Gütlich, P.; McGarvey, B.R.; Kläui, W.

Inorg. Chem. **1980**, 19, 3704

(61) **Electron Spin Resonance and Mössbauer Study of the High Spin \leftrightarrow Low Spin Transition in $[Fe(phen)_2(NCS)_2]$ and $[Fe(pic)_3]Cl_2 \cdot EtOH$**

Rao, P.S.; Reuveni, A.; McGarvey, B.R.; Ganguli, P.; Gütlich, P.

Inorg. Chem. **1981**, 20, 204

(62) **Further Studies on the Spin Crossover Phenomenon in Di-isothiocyanatobis(1,10-phenanthroline)iron(II)**

Ganguli, P.; Gütlich, P.; Müller, E.W.; Irlner, W.

J. Chem. Soc., Dalton Trans. **1981**, 441

(63) **Temperature Dependence of the Lifetimes of the Ligand Field States of Tris(1,10-phenanthroline)iron(II)**

Bergkamp, M.A.; Brunschwig, B.S.; Gütlich, P.; Netzel, T.L.; Sutin, N.

Chem. Phys. Lett. **1981**, 81, 147

(64) **Phasenumwandlungen in Korrosionsschichten auf Eisen: Mößbauerspektroskopische Untersuchungen**

Meisel, W.; Gütlich, P.

Werkstoffe und Korrosion **1981**, 32, 296

(65) **Mößbauer- und ESCA-Untersuchungen zur Bildung oxidischer Eisenphasen in wäßrigen Medien unter der Einwirkung organischer Korrosionsinhibitoren**

Gütlich, P.; Meisel, W.; Mohs, E.

Werkstoffe und Korrosion **1982**, 33, 35

(66) Some Recent Technical Applications of Mössbauer Spectroscopy

Ensling, J.; Grimm, R.; Gütlich, P.; Meisel, W.

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(67) ⁶¹Ni Mössbauer Measurements of Nickel Microprecipitates Produced in LaNi₅ by Cyclic Hydrogen Absorption and Desorption

Rummel, H.; Cohen, R.L.; Gütlich, P.; West, K.W.

Appl. Phys. Lett. **1982**, 40 /6, 477

(68) Gemischtvalente Bromoaurate(I,III) und ihre Mößbauer-Spektren

Gütlich, P.; Lehnis, B.; Römhild, K.; Strähle, J.

Z. Naturforschung **1982**, 87b, 550

(69) The Effect of the Lattice Expansion on High Spin <-> Low Spin Transitions

Spiering, H.; Meissner, E.; Köppen, H.; Müller, E.W; Gütlich, P.

Chem. Phys. **1982**, 68, 65

(70) Effect of Metal Dilution on the Spin Crossover Behavior in

[Fe_xM_{1-x}(phen)₂(NCS)₂] (M = Mn, Co, Ni, Zn)

Ganguli, P.; Gütlich, P.; Müller, E.W.

Inorg. Chem. **1982**, 21, 3429

(71) Unusual Spin Transition Anomaly in the Crossover System [Fe(2-pic)₃]Cl₂ * EtOH

Köppen, H.; Müller, E.W.; Köhler, C.P.; Spiering, H.; Meissner, E.; Gütlich, P.

Chem. Phys. Lett. **1982**, 91 /5, 348

(72) Mößbauerspektroskopische Phasenanalyse eisenhaltiger Oberflächenschichten

Meisel, W.; Gütlich, P.

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(73) Spin Transition in [Fe(phen)₂(NCS)₂] and [Fe(bipy)₂(NCS)₂]: Hysteresis and

Effect of Crystal Quality

Müller, E.W.; Spiering, H.; Gütlich, P.

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(74) The Effect of Low Pressure on a High Spin <-> Low Spin Transition

Meissner, E.; Köppen, H.; Spiering, H.; Gütlich, P.

Chem. Phys. Lett. **1983**, 95 /2, 163

(75) Cooperative Pseudo-Jahn Teller Effect of the $[\text{Fe}(\text{H}_2\text{O})_6]^{2+}$ Complexes in the Sulfate Heptahydrates

Siebke, W.; Spiering, H.; Meissner, E.

Phys. Rev. B **1983**, 27 /5, 2730

(76) An ESCA and Mössbauer Study of the Oxide Layer Formed on Steel in Water Containing Chromate and Chloride Ions

Meisel, W.; Mohs, E.; Guttman, H.-J.; Gütlich, P.

Corr. Sci. **1983**, 23 /5, 465

(77) On the Participation of Domains in the High Spin ($^5\text{T}_2$) <-> Low Spin ($^1\text{A}_1$) Transition in Dithiocyanatobis(2,2'-di-2-thiazoline)iron(II)

Müller, E.W.; Spiering, H.; Gütlich, P.

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(78) Lifetimes of the Ligand-to-Metal Charge Transfer Excited States of Iron(III)- and Osmium(III)polypyridine Complexes. Effects of Isotopic Substitution and Temperature

Bergkamp, M.A.; Gütlich, P.; Netzel, T.L.; Sutin, N.

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(79) Rubification of Terrae Rossae in Slovakia: A Mössbauer Effect Study

Bronger, A.; Ensling, J.; Gütlich, P.; Spiering, H.

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- (80) **The Effect of a Magnetic Field on the High Spin \leftrightarrow Low Spin Transition in $[\text{Fe}(\text{phen})_2(\text{NCS})_2]$**
Qi, Y.; Müller, E.W.; Spiering, H.; Gütlich, P.
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- (81) **The Influence of Phosphoric Acid on Steel and on its Corrosion Products: A Mössbauer Spectroscopic Approach**
Meisel, W.; Guttman, H.-J.; Gütlich, P.
Corr. Sci. **1983**, 23 /12, 1373
- (82) **Exchange Coupling in Tris(μ -hydroxo)bis[(1,4,7-trimethyl-1,4,7-triazacyclononane)chromium(III)] Triperchlorate Trihydrate**
Bolster, D.E.; Gütlich, P.; Hatfield, H.E.; Kremer, S.; Müller, E.W.; Wieghardt, K.
Inorg. Chem. **1983**, 22, 1725
- (83) **High Spin \leftrightarrow Low Spin Transitions in Hexacoordinate Complexes of Iron(II) with Monodentate 1-Alkyltetrazole Ligands: A Variable-Temperature Mössbauer, Magnetic Susceptibility, and Far-Infrared Study**
Müller, E.W.; Ensling, J.; Spiering, H.; Gütlich, P.
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- (84) **Light-Induced Excited Spin State Trapping in a Transition-Metal Complex: The Hexa-1-Propyltetrazole-Iron(II) Tetrafluoroborate Spin Crossover System**
Decurtins, S.; Gütlich, P.; Köhler, C.P.; Spiering, H.; Hauser, A.
Chem. Phys. Lett. **1984**, 105 /1, 1
- (85) **Effect of Crystal Quality on the Spin Transition Behavior in a Cobalt(II) Complex**
Müller, E.W.; Spiering, H.; Gütlich, P.
Inorg. Chem. **1984**, 23, 119
- (86) **Synthesis, Structure, and Magnetic Properties of Catena-(μ -Oxo) (hemiporphyrinato- μ)iron(IV), the First Polymeric μ -Oxo-Bridged Complex of Iron**

Hiller, H.; Strähle, J.; Datz, A.; Hanack, M.; Hatfield, H.E.; terHaar, L.W.; Gülich, P.
J. Am. Chem. Soc. **1984**, *106*, 329

(87) **The Metal Dilution Effect on the High Spin (5T_2) \leftrightarrow Low Spin (1A_1) Transition in $[Fe_xCo_{1-x}(2-pic)_3]Cl_2 \cdot EtOH$**

Sanner, I.; Meissner, E.; Köppen, H.; Spiering, H.; Gülich, P.
Chem. Phys. **1984**, *86*, 227

(88) **Hot Atom Chemistry in Relation to Mössbauer Emission Spectroscopy**

Sano, H.; Gülich, P.

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(89) **^{61}Ni Mössbauer Spectroscopy of Magnetic Hyperfine Interaction in Nickel Spinel**

Gülich, P.; Hasselbach, K.M.; Rummel, H.; Spiering, H.

J. Chem. Phys. **1984**, *81* /3, 1396

(90) **Datierungsversuche an hessischen Lößprofilen mit Hilfe der Mößbauer-Spektroskopie**

Ensling, J.; Gülich, P.; Semmel, A.

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(91) **Untersuchungen zur Reaktion von konzentrierter Phosphorsäure mit reinen und korrodierten Stahloberflächen**

Meisel, W.; Swolfs, A.; Gülich, P.

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(92) **Spin Transition in Iron Compounds**

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(93) **Spin Transition in Iron Compounds**

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(94) New Examples of Light-Induced Excited Spin State Trapping (LIESST) in Iron(II) Spin Crossover Systems

Decurtins, S.; Gütlich, P.; Köhler, C.P.; Spiering, H.

J. Chem. Soc., Chem. Commun. **1985**, 430

(95) Light-Induced Excited Spin State Trapping in Iron(II) Spin Crossover Systems. Optical Spectroscopic and Magnetic Susceptibility Study

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Inorg. Chem. **1985**, 24, 2174

(96) Mössbauer Spectroscopic Evidence of a Crystal Field Effect on Transient Electronic States of $^{57}\text{Fe}^{3+}$ After the EC Decay of ^{57}Co

Doerfler, R.; Gruber, W.; Gütlich, P.; Hasselbach, K.M.; Leupold, O.; Molnar, B.; Nagy, D.L.; Ritter, G.; Spiering, H.; Tuzcek, F.

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(97) A ^{61}Ni Mössbauer Study of the Magnetic Properties of Ultrafine Metallic Nickel Particles

Rummel, H.; Gütlich, P.; Clausen, B.; Topsoe, H.; Morup, S.

(98) Spin Transition in Iron(II) Complexes Induced by Heat, Pressure, Light, and Nuclear Decay

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