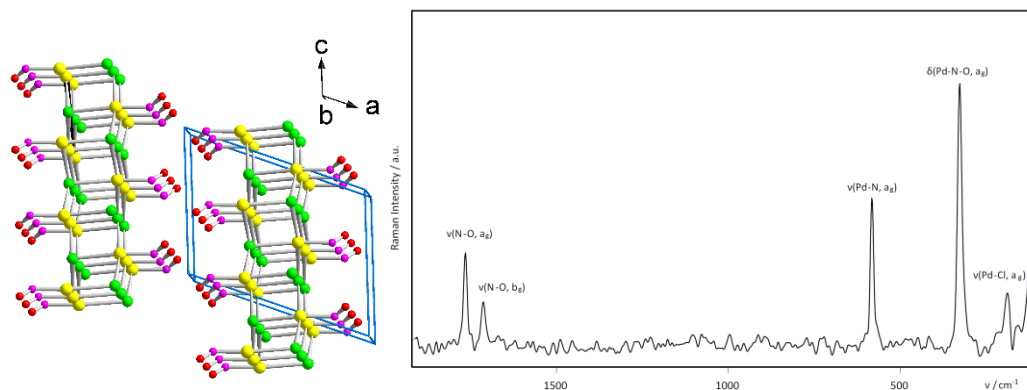
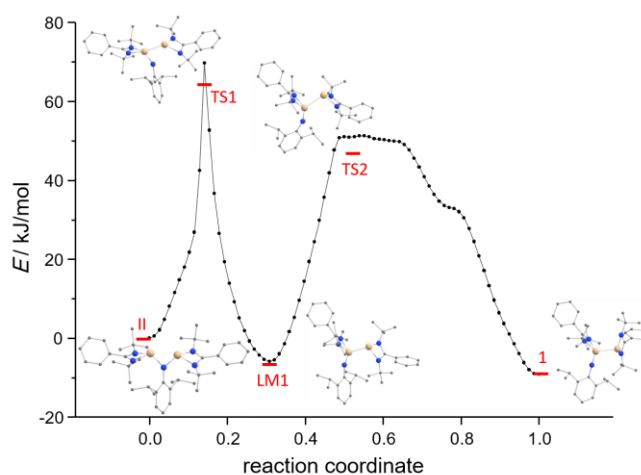


Publikationsliste Dr. Ralf Köppe

116. J. Evers, T. M. Klapötke, W. Beck, M. B. R. Vökl, G. Oehlinger, R. Köppe, A. Zimina, S. Wolf
PdCl(NO) – an iconic compound with corrugated Pd₄Cl₄ octagons built up by Pd₂Cl₂(NO)₂ moieties:
[Z. Anorg. Allg. Chem. 2023](#)



115. R. Yadav, X. Sun, R. Köppe, Ralf, M. T. Gamer, F. Weigend, P. W. Roesky
Stimuli Responsive Silylene: Electromerism Induced Reversible Switching Between Mono- and Bis-Silylene:
[Angew. Chem. 2022.](#)



114. S. Wolf, Silke, S. Seidel, J. Treptow, R. Köppe, P. W. Roesky, C. Feldmann
Room-Temperature Synthesis of [BmIm][Sn₅O₂Cl₇] with ∞¹(Sn₂OCl₂) Strands in a Saline [BmIm][SnCl₃]
Matrix:
[Inorg. Chem. 2022, 61, 4018–4023.](#)

113. C. Uhlmann, T. Feuerstein, T. P. Seifert, A. Jung, M. T. Gamer, R. Köppe, S. Lebedkin, M. M. Kappes, P. W.
Roesky
Luminescent early-late-hetero-tetranuclear group IV–Au (I) bisamidinate complexes:
[Dalton Trans. 2022, 51, 10357-10360.](#)

112. S. Kaufmann, R. Köppe, P. W. Roesky
A square planar silylene nickel four-membered ring:
[Dalton Trans. 2021, 50, 14105-14109.](#)



111. N. Schwarz, X. Sun, R. Yadav, R. Köppe, T. Simler, P. W. Roesky
Application of the Redox-Transmetalation Procedure to Access Divalent Lanthanide and Alkaline-Earth NHC Complexes:
[Chem. Eur. J. 2021, 27, 12857-12865.](#)

110. P. W. Roesky, B. Goswami, T. J. Feuerstein, R. Yadav, S. Lebedkin, M. M. Kappes, R. Köppe:
Enantiopure Calcium Iminophosphonamide Complexes: Synthesis, Photoluminescence and Catalysis
[Chem. Eur. J. 2021, 27, 3974-3978.](#)

109. B. Goswami, T. J. Feuerstein, R. Yadav, R. Köppe, S. Lebedkin, M. M. Kappes, P. W. Roesky
Enantiopure Calcium Iminophosphonamide Complexes: Synthesis, Photoluminescence, and Catalysis
[Chem. Eur. J. 2021, 27, 4401-4411](#)

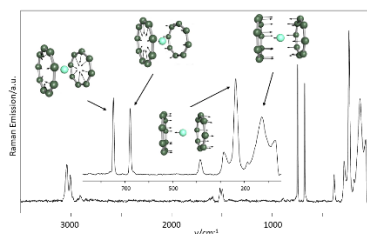
108. N. Reinfandt, C. Schoo, L. Dütsch, R. Köppe, S. N. Konchenko, M. Scheer, P. W. Roesky
Synthesis of Unprecedented 4d/4f-Polypnictogens
[Chem. Eur. J. 2021, 27, 3974-3978](#)

107. R. Yadav, T. Simler, B. Goswami, C. Schoo, R. Köppe, S. Dey, P. W. Roesky
Regioselective Insertion of Aluminum (I) in the cyclo-P₅ Ring of Pentaphosphaferrocene
[Angew. Chem. Int. Ed. 2020, 59, 9443-9447](#)

106. S. Wolf, R. Köppe, T. Block, R. Pöttgen, P. W. Roesky, C. Feldmann
[SnI₈{Fe(CO)₄]₄]²⁺: Highly Coordinated Sn^{+II}I₈ Subunit with Fragile Carbonyl Clips
[Angew. Chem. Int. Ed. 2020, 59, 5510–5514](#)

105. R. Yadav, T. Simler, S. Reichl, B. Goswami, C. Schoo, R. Köppe, M. Scheer, P. W. Roesky
Highly Selective Substitution and Insertion Reactions of Silylenes in a Metal-Coordinated Polyphosphide
[J. Am. Chem. Soc. 2020, 142, 1190–1195](#)

104. L. Münzfeld, C. Schoo, S. Bestgen, E. Moreno-Pineda, R. Köppe, M. Ruben, P.W. Roesky
Synthesis, structures and magnetic properties of $[(\eta^9\text{-C}_9\text{H}_9)\text{Ln}(\eta^8\text{-C}_8\text{H}_8)]$ super sandwich complexes
[Nature Commun. 2019, 10, 3135](#)



Highlight in: [Nachr. Chem. 2019, 67, 46](#) and [Nachr. Chem. 2020, 68, 73](#).

103. X. Sun, T. Simler, R. Yadav, R. Köppe, P. W. Roesky
A Stable Aromatic Tetrasilacyclobutadiene Dication
[J. Am. Chem. Soc. 2019, 141, 14987–14990](#)

Highlight in [Nachr. Chem. 2019, 67, 45](#).

102. R. Yadav, T. Simler, M. T. Gamer, R. Köppe, P. W. Roesky
Rhenium is different: CO tetramerization induced by a divalent lanthanide complex in rhenium carbonyls.
[Chem. Commun., 2019, 55, 5765–5768](#)

101. T. J. Feuerstein, B. Goswami, P. Rauthe, R. Köppe, S. Lebedkin, M. M. Kappes, P. W. Roesky
Alkali metal complexes of an enantiopure iminophosphoramidate ligand with bright delayed fluorescence
[Chem. Sci., 2019, 10, 4742–4749](#)



100. X. Chen, T. Simler, R. Yadav, M. T. Gamer, R. Köppe, P. W. Roesky
Reaction of an arsinoamide with chloro tetrylenes: substitution and As–N bond insertion
[Chem. Commun., 2019, 55, 9315–9318](#)

99. A. Eich, R. Köppe, P. W. Roesky, C. Feldmann
The Bromine-Rich Bromido Metallates The Bromine-Rich Bromido Metallates $[\text{BmIm}]_2[\text{SnBr}_6] \cdot (\text{Br}_2)$ and $[\text{MnBr}(\text{18-crown-6})]_4[\text{SnBr}_6]_2 \cdot (\text{Br}_2)_{4.5}$
[Eur. J. Inorg. Chem. 2019, 1292–1298](#)

98. P. W. Roesky, S. Bestgen, C. Schoo, B. L. Neumeier, T. J. Feuerstein, C. Zovko, R. Köppe, C. Feldmann
Intensely Photoluminescent Diamidophosphines of the Alkaline Earth metals, Aluminium, and Zinc
[Angew. Chem. Int. Ed. 2018, 57, 14265–14269](#)

97. F. Tambornino, A. Hinz, R. Köppe, M. Goicoechea

A General Synthesis of Phosphorus- and Arsenic-Containing Analogues of the Thio- and Seleno-cyanate Anions

[*Angew. Chem. Int. Ed.* **2018**, *57*, 8230-8234](#)

96. A. Henschel, M. Binnewies, M. Schmidt, R. Köppe, U. Burkhardt, Y. Grin

Tungsten Borides: On the Reaction of Tungsten with Boron(III) Bromide

[*Chem. Eur. J.* **2018**, *24*, 10109-10115](#)



95. C. Schoo, R. Köppe, M. Piesch, M. T. Gamer, S. N. Konchenko, M. Scheer, P. W. Roesky

Open Chain Polyarsenides of the Lanthanides

[*Chem. Eur. J.* **2018**, *24*, 7890-7895](#)



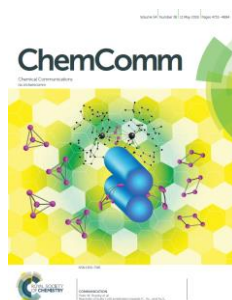
94. A. Eich, R. Köppe, P. W. Roesky, C. Feldmann

Ionic-Liquid-Based Synthesis of the Bromine-Rich Bromidoplatinates $[\text{NBu}_3\text{Me}]_2[\text{Pt}_2\text{Br}_{10}](\text{Br}_2)_2$ and $[\text{NBu}_3\text{Me}]_2[\text{Pt}_2\text{Br}_{10}](\text{Br}_2)_3$

[*Z. Anorg. Allg. Chem.* **2018**, *644*, 275-279.](#)



93. C. Schoo, S. Bestgen, R. Köppe, S. N. Konchenko, P. W. Roesky
Reactivity of bulky Ln(II) amidinates towards P₄, As₄, and As₄S₄
[Chem. Comm. 2018, 54, 4770-4773.](#)

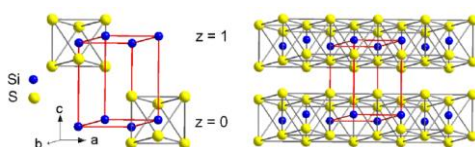


92. F. Walz, E. Moos, D. Garnier, R. Köppe, C. E. Anson, F. Breher
A Redox-Switchable Germylene and its Ligating Properties in Selected Transition Metal Complexes
[Chem. Eur. J. 2017, 23, 1173-1186.](#)

91. C. Kaub, S. Lebedkin, S. Bestgen, R. Köppe, M. M. Kappes, P. W. Roesky
Defined tetranuclear coinage metal chains
[Chem. Comm. 2017, 53, 9578-9581.](#)

90. K. N. R. Wuest, V. Trouillet, R. Köppe, P. W. Roesky, A. S. Goldmann, M. H. Stenzel, C. Barner-Kowollik
Direct light-induced (co-) grafting of photoactive polymers to graphitic nanodiamonds From Polymer
[Chem. Eur. J. 2017, 8, 838-842.](#)

89. J. Evers, L. Moeckl, G. Leonhard, R. Köppe, H. Schnoekel, O. Barkalov, S. Medvedev, P. Naumov
More Than 50 Years after Its Discovery in SiO₂ Octahedral Coordination Has Also Been Established in SiS₂ at High Pressure
[Inorg. Chem. 2017, 56, 372-377.](#)



88. S. Schaefer, R. Köppe, P. W. Roesky
Investigations of the Nature of Zn(II)-Si(II) Bonds
[Chem. Eur. J. 2016, 22, 7127-7133.](#)

87. S. Bestgen, C. Schoo, C. Zovko, R. Köppe, R. P. Kelly, P. W. Roesky, S. Lebedkin, M. M. Kappes
Early-Late Heterometallic Complexes of Gold and Zirconium: Photoluminescence and Reactivity
[Chem. Eur. J. 2016, 22, 7115-26.](#)

86. D. Hausmann, R. Köppe, S. Wolf, P. W. Roesky, C. Feldmann
Ionic-liquid-assisted synthesis of the phosphorus interhalides [PBr₄][IBr₂] and [PBr₄][I₅Br₇]
[Dalton Transactions 2016, 45, 16526-16532.](#)
Correction: [Dalton Transactions 2017, 46, 5457](#)

85. A. Fiedler, P. Vogt, L. Pfaffmann, V. Trouillet, J. T. Breukelgen, R. Köppe, C. Barner-Kowollik, H. Ehrenberg, F. Scheiba
Lithium-air battery cathode modification via an unconventional thermal method employing borax
[RSC Advances 2016, 6, 66307-66310.](#)

84. N. Arleth, M. T. Gamer, R. Köppe, S. N. Konchenko, M. Fleischmann, M. Scheer, P. W. Roesky
Molecular Polyarsenides of the Rare Earth Elements

[Angew. Chem. 2016, 128, 1583-1586](#); [Angew. Chem. Int. Ed. 2016, 55, 1557-1560](#)

83. N. Arleth, M. T. Gamer, R. Köppe, N. A. Pushkarevsky, S. N. Konchenko, M. Fleischmann, M. Bodensteiner, M. Scheer, P. W. Roesky

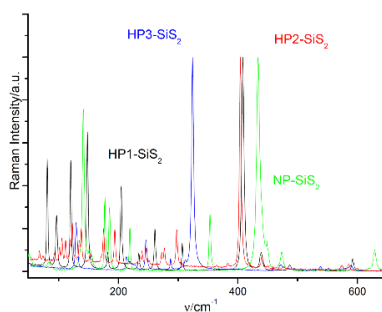
The approach to 4d/4f polyphosphides

[Chem. Sci. 2015, 6, 7179-7184](#)

82. J. Evers, P. Mayer, L. Möckl, G. Oehlinger, R. Köppe, H. Schnöckel

Two High-Pressure Phases of SiS₂ as Missing Links between the Extremes of Only Edge-Sharing and Only Corner-Sharing Tetrahedra

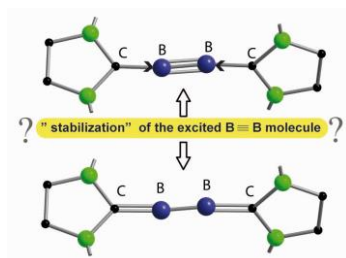
[Inorg. Chem. 2015, 54, 1240-1253](#)



81. R. Köppe, H. Schnöckel

The boron–boron triple bond? A thermodynamic and force field based interpretation of the N-heterocyclic carbene (NHC) stabilization procedure

[Chem. Sci., 2015, 6, 1199-1205](#)



80. S. Schäfer, R. Köppe, M. Gamer, P. W. Roesky

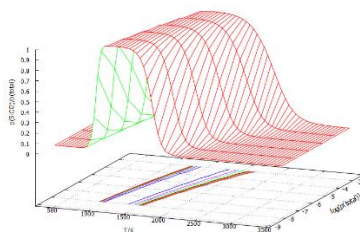
Zinc-Silylene Complexes

[Chem. Comm. 2014, 50, 11401-11403](#)

79. F. Uhlemann, R. Köppe, A. Schnepf:

Si^{II}X₂ Solutions (X = F, Cl). A Novel Binary Halide for Synthesis.

[Z. Anorg. Allg. Chem. 2014, 640, 1658–1664](#)



78. T. Li, N. Arleth, M. T. Gamer, R. Köppe, T. Augenstein, F. Dielmann, M. Scheer, S. N. Konchenko, P. W. Roesky:

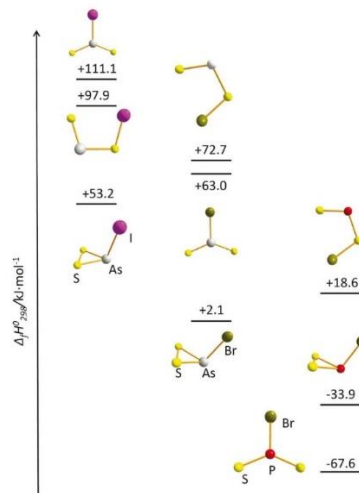
Intramolecular Phosphorus-Phosphorus Bond Formation within a Co_2P_4 Core.

[Inorg. Chem. 2013, 42, 14231-14236.](#)

77. E. Milke, R. Köppe, M. Binnewies:

PS_2Br and AsS_2X (X = Br, I): Similar molecules with completely different shapes - a combined experimental and theoretical Study.

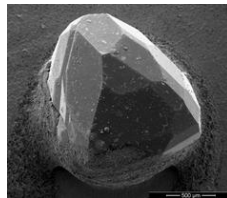
[Dalton, Trans. 2013, 42, 1417-1426.](#)



76. A. Diener, R. Köppe:

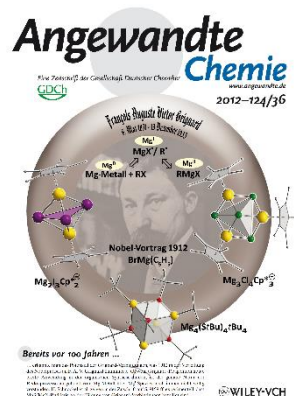
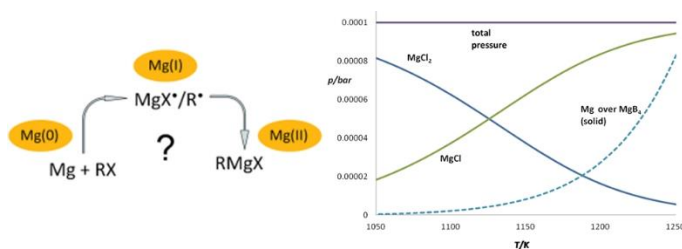
Synthesis of selenium doped pyrite single crystals prepared by chemical vapor transport.

[J. of Crystal Growth, 2012, 349, 55-60.](#)



75. T. Kruczynski, N. Pushkarevsky, P. Henke, R. Köppe, E. Baum, S. Konchenko, J. Piekies, H. Schnoekel: Hunting for the magnesium(I) species: formation, structure, and reactivity of some donor-free Grignard compounds.

[Angew. Chem. \(Int. ed. Engl.\), 2012, 51, 9025-9.](#)



74. P. Benndorf, S. Schmitt, R Köppe, P. Ona-Burgos, A. Scheurer, K. Meyer, P.W. Roesky
Catching gaseous SO₂ in cone-type lanthanide complexes: an unexpected coordination mode for SO₂ in f-element chemistry

[Angew. Chem. \(Int. ed. Engl.\) 2012, 51, 5006-10](#)

73. J. Jenter, R. Köppe, P. W. Roesky:

2,5-Bis{N-(2,6-diisopropylphenyl)iminomethyl}pyrrolyl Complexes of the Heavy Alkaline Earth Metals: Synthesis, Structures, and Hydroamination.

[Organometallics 2011, 30, 1404.](#)

72. C. Schenk, R. Köppe, H. Schnoeckel, A. Schnepf:

A Convenient Synthesis of Cyclopentadienylgallium - The Awakening of a Sleeping Beauty in Organometallic Chemistry.

[Eur. J. Inorg. Chem. 2011, 3681.](#)

See also the [report in ChemistryViews](#).

71. H. P. Nayek, A. Luehl, S. Schulz, R. Köppe, P. W. Roesky:

Aminotroponiminatozinc(I) Complexes: Syntheses and Spectroscopic Analyses.

[Chem. Eur. J. 2011, 17, 1773.](#)

70. E. Milke, R. Köppe, M. Binnewies:

AsS₂Cl-an Arsenic(V) Compound? Formation, Stability and Structure of gaseous AsS₂Cl and AsS₂Cl - a combined experimental and theoretical study.

[Dalton Trans. 2011, 40, 6676.](#)

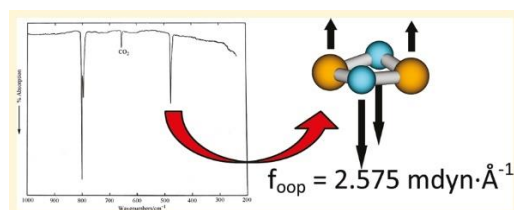
69. T. Li, J. Wiecko, A. Pushkarevsky, M. T. Gamer, R. Köppe, S. N. Konchenko, M. Scheer, P. W. Roesky:
Mixed-Metal Lanthanide-Iron Triple-Decker Complexes with a cyclo-P₅ Building Block.

[Angew. Chem., Int. Ed. 2011, 50, 9491.](#)

68. R. Evans, A.J. Downs, R Koppe, S. C. Peake:

Vibrational properties of the disulfur dinitride molecule, S₂N₂: IR and Raman spectra of the matrix-isolated molecule.

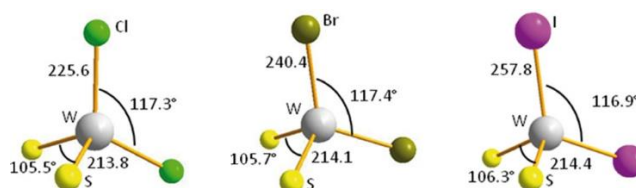
[J. Phys. Chem. A 2011, 115, 5127-37.](#)



67. E. Milke, R. Köppe, M. Binnewies:

Formation and Stability of Gaseous WS_2Cl_2 , WS_2Br_2 and WS_2I_2 - A Combined Experimental and Theoretical Study.

[Z. Anorg. Allg. Chem 2010, 636, 1313](#)



66. P. W. Roesky, J. Jenter, R. Köppe:

Mixed borohydride-chloride complexes of the rare earth elements.

[Comptes Rendus Chimie 2010, 13, 603](#)

65. D. Nied, R. Köppe, W. Klopper, H. Schnöckel, F. Breher:

Synthesis of a pentasilpropellane. Exploring the nature of a stretched silicon-silicon bond in a nonclassical molecule.

[J. Am. Chem. Soc. 2010, 132, 10264](#)

64. S. N. Konchenko, T. Sanden, N. A. Pushkarevsky, R. Köppe, P. W. Roesky:

Wheel-Shaped Lanthanide Iron Sulfide Clusters.

[Chem. Eur. J. 2010, 16, 14278 – 14280](#)

63. S. Marks, R. Köppe, T. K. Panda, P. W. Roesky:

Unprecedented zinc-borane complexes.

[Chem. Eur. J. 2010, 16, 7096](#)

62. S. N. Konchenko, N. A. Pushkarevsky, M. T. Gamer, R. Köppe, H. Schnoeckel, P. W. Roesky:

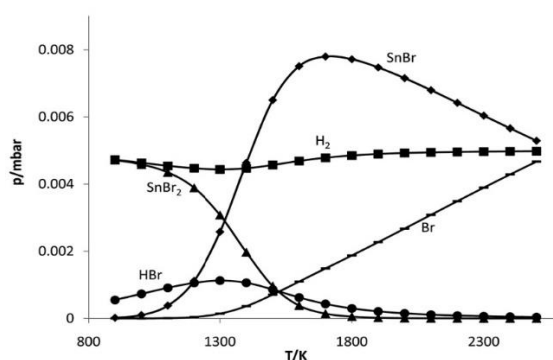
$[(\eta^5\text{-CsMe}_5)_2\text{Sm}]_4\text{P}_8$: A Molecular Polyphosphide of the Rare-Earth Elements.

[J. Am. Chem. Soc. 2009, 131, 5740](#)

61. C. Schrenk, R. Köppe, I. Schellenberg, R. Poettgen, A. Schnepf:

Synthesis of Tin(II) Bromide. A Novel Binary Halide for Synthetic Chemistry.

[Z. Anorg. Allg. Chem. 2009, 635, 1541](#)



60. S. Domingo Köhler, B. Pilawa, D. Saez de Jauregui, G. Fischer, R. Köppe, A. Schnepf, H. Schnöckel, E. Dormann:

Magnetic resonance of the new neutral Al-cluster radical $[Al_7R_6]$.

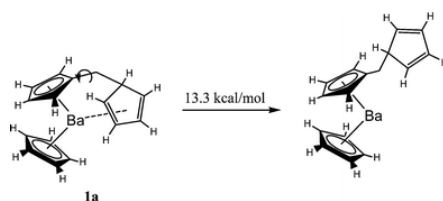
[EPL 2008 82, 37002](#)

59. L. Schmidt, D. Fischer, H.-J. Himmel, R. Köppe, H. Schnoekel, M. Hansen:
To the knowledge of interpseudohalogen: a contribution to cyanogen isocyanate (NC-NCO).
[Z. Anorg. Allg. Chem. 2009, 635, 1172.](#)

58. I. Resa del Rio, A. Rodriguez, L. Sanchez, R. Koppe, A. J. Downs, C. Y. Tang, E. Carmona
IR and Raman Characterization of the Zincocenes (μ_5 -C₅Me₅)₂Zn₂ and (μ_5 -C₅Me₅)(μ_1 -C₅Me₅)Zn.
[J. Phys. Chem. A 2008, 112, 10516.](#)

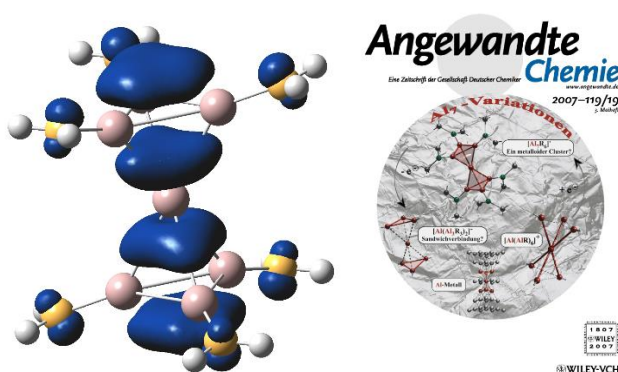
57. M. Neumaier, R. Köppe, H. Schnoekel:
A molecular corrosion model for metals?
[Nachrichten aus der Chemie 2008, 56, 999.](#)

56. M. Wiecko, C. Eidamshaus, R. Köppe, P. W. Roesky:
An unusual barium olefin complex.
[Dalton Trans. 2008, 36, 4837.](#)



55. R. Köppe, P. Henke, H. Schnoekel:
MgCl and Mg₂Cl₂: from theoretical and thermodynamic considerations to spectroscopy and chemistry of species with Mg-Mg bonds.
[Angew. Chem. Int. Ed. 2008, 47, 8740.](#)

54. P. Yang, R. Köppe, T. Duan, J. Hartig, G. Hadiprono, B. Pilawa, I. Keilhauer, H. Schnoekel:
[Al(Al₃R₃)₂]: prototype of a metalloid Al cluster or a sandwich-stabilized Al atom?
[Angew. Chem. Int. Ed. 2007, 46, 3579.](#)



53. G. Robinson, C. Y. Tang, R. Köppe, A. R. Cowley, H.-J. Himmel:
A new class of binuclear gallium hydrides: synthesis and properties of [{GaCl(hpp)H}₂](hpp = 1,3,4,6,7,8-hexahydro-2H-pyrimido[1,2-a]pyrimidate).
[Chem. Eur. J. 2007, 13, 2648.](#)

52. R. Köppe:

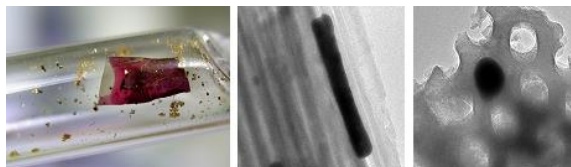
The reaction of AlCl with H₂O in solid argon. IR matrix-spectroscopic detection of HAl(Cl)OH.

[Z. Anorg. Allg. Chem. 2006, 632, 959.](#)

51. R. Köppe, G. Schmid, S. Schneider, H. Schnöckel:

Template-fabricated gold nanowires from gas-phase transport reactions.

[Eur. J. Inorg. Chem. 2005, 18, 3657.](#)



50. S. Brownridge, T.S. Cameron, H. Du, C. Knapp, R. Köppe, J. Passmore, J.M. Rautiainen, H. Schnoeckel:
The Highest Bond Order Between Heavier Main-Group Elements in an Isolated Compound? Energetics and
Vibrational Spectroscopy of S₂I₄(MF₆)₂ (M = As, Sb).

[Inorg. Chem. 2005, 44, 1660.](#)

See also the following Highlight-Report:

S. K. Ritter:

SULFUR'S TURN FOR MULTIPLE BONDS - 'Triple-bond' compounds have highest bond order for multiply bonded
main-group elements.

[Chemical Engineering News 2005](#), [83](#), [49](#).

49. A. Schnepf, R. Köppe, E. Weckert, H. Schnoeckel:

Two metalloid Ga₂₂ clusters containing a novel Ga₂₂ core with an icosahedral Ga₁₂ center.

[Chem. Eur. J. 2004, 10, 1977.](#)

48. A. Schnepf, R. Köppe:

[Ge₈{N(SiMe₃)₂}]₆: A ligand-stabilized Ge cluster compound with formally zero-valent Ge atoms.

[Angew. Chem. Int. Ed. 2003, 42, 911-913.](#)

47. R. Köppe, H. Schnöckel:

Quantenchemische und experimentelle Untersuchungen zur Stabilität und Struktur von GaAs₅ und InAs₅.

[Angew. Chem. 2004, 116, 2222-2230](#), [Angew. Chem. Int. Ed. 2004, 43, 2170-2178.](#)

46. R. Köppe, H. Schnöckel:

Reactions with matrix isolated SiO molecules.

in Silicon Chemistry, Wiley (2003) Eds P. Jutzi, U. Schubert

45. A. Schnepf, R. Köppe, E. Weckert, H. Schnöckel:

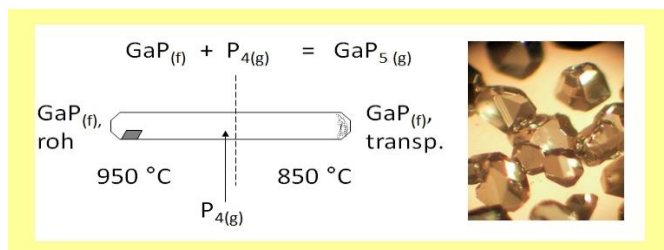
Two Metalloid Ga₂₂ Clusters containing a novel Ga₂₂ Core with an Icosahedral Ga₁₂ Center.

[Chem. Eur. J. 2003, 10, 1977-1981.](#)

44. R. Köppe, J. Steiner, H. Schnöckel:

GaP₅ und InP₅: Ungewöhnliche Moleküle eröffnen neue Wege zur Reindarstellung von III/V-Halbleitermaterialien.

[Z. Anorg. Allg. Chem. 2003, 629, 2168-2172](#)



43. M. Veith, K. Andres, J. Blin, M. Zimmer, Y. Wolf, H. Schnöckel, R. Köppe, R. de Masi, S. Hüfner:

The Metastable, Glasslike Solid-State Phase of HAIO and Its Transformation to Al/Al₂O₃ Using a CO₂ Laser.

[Eur. J. Inorg. Chem. 2003, 4387-4394](#)

42. A. Schnepf, R. Köppe:

[Ge₈N(SiMe₃)₂]₆: A Ligand-stabilized Ge Cluster Compound with formally zero-valent Ge Atoms.

[Angew. Chem. 2003, 115, 940-942](#), [Angew. Chem. Int. Ed. 2003, 42, 911-913](#)

41. K. Weiss, R. Köppe, H. Schnöckel:

Ga₁₉(C(SiMe₃)₃)₆⁻ as a precursor for pure and silicon-doped gallium clusters: a mass spectrometric study of a Ga₁₃⁻ and a Ga₁₂Si⁻ anion.

[Int. J. Mass. Spect. 2002, 214, 383-396](#)

40. A. Schnepf, R. Köppe:

Synthese von Germanium(II)-bromid. Ein erster Schritt zu neuen Clusterverbindungen des Germaniums?

[Z. Anorg. Allg. Chem. 2002, 628, 2914-2918](#)

39. A. Schnepf, R. Köppe, H. Schnöckel:

Ein Ga₈R₆-Cluster als Idealmodell für eine Metall-Metall-Bindung?

[Angew. Chem. 2001, 113, 1287-1290](#), [Angew. Chem. Int. Ed. Engl. 2001, 40, 1241-1242](#)

38. R. Köppe, H. Schnöckel:

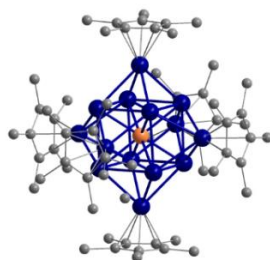
GaGa and AlFe Multiple Bonds? An Attempt of Interpretation on the Basis of Force Constants.

[Z. Anorg. Allg. Chem. 2000, 626, 1095-1099](#)

37. A. Schnepf, G. Stösser, R. Köppe, H. Schnöckel:











(Li(THF)₄)₂(Ga₁₂(C₁₃H₉)₁₀): die erste molekulare Verbindung mit ikosaedrischem Ga₁₂-Gerüst.

[Angew. Chem. 2000, 112, 1709-1712](#), [Angew. Chem. Int. Ed. Engl. 2000, 39, 1637-1638](#)



36. A. Purath, C. Dohmeier, A. Ecker, R. Köppe, H. Krautscheid, H. Schnöckel, R. Ahlrichs, C. Stoermer, J. Friedrich, P. Jutzi:
Synthesis and Structure of a Neutral SiAl₁₄ Cluster.
[J. Am. Chem. Soc. 2000, 122, 6955-6959](#)
35. C. Doriat, R. Köppe, E. Baum, G. Stoesser, H. Köhnlein, H. Schnöckel:
Molecular Lattice Fragment of Lil. Crystal Structure and ab Initio Calculations of [LiI(NEt₃)]₄.
[Inorg. Chem. 2000, 39, 1534-1537](#)
34. C. Klemp, R. Köppe, E. Weckert, H. Schnöckel:
Al₂₂Br₂₀ · 12THF: das erste polyedrische Aluminiumsubhalogenid - ein Schritt auf dem Weg zu einer neuen Aluminiummodifikation.
[Angew. Chem. 1999, 111, 1852-1854](#); [Angew. Chem. Intern. Ed. Engl. 1999, 38, 1740-1742](#)
33. A. Purath, R. Köppe, H. Schnöckel:
An Al₁₂R₈⁻ cluster as an intermediate on the way from aluminium(I) compounds to aluminium metal.
[Chem. Comm. 1999, 1933-1934](#)
32. A. Purath, R. Köppe, H. Schnöckel:
(Al₇(N(SiMe₃)₂)₆)⁻ : ein Primärschritt auf dem Weg zur Aluminiummetallbildung durch Disproportionierung.
[Angew. Chem. 1999, 111, 3114-3115](#); [Angew. Chem. Intern. Ed. Engl. 1999, 38, 2926-2927](#)
31. H. Beckers, J. Breidung, H. Bürger, R. Köppe, C. Kötting, W. Sander, H. Schnöckel, W. Thiel:
Difluorosilanethione F₂Si=S by Flash Vacuum Thermolysis of (F₃Si)₂S and by Reaction of SiS with F₂ - Matrix Studies and Ab initio Calculations.
[Eur. J. Inorg. Chem. 1999, 2013-2020](#)
30. C. Limberg, R. Köppe:
Reactive Intermediates in Olefin Oxidations with Chromyl Chloride. IR Spectroscopic Proof for O=CrCl₂ - Epoxide – Complexes.
[Inorg. Chem. 1999, 38, 2106-2116](#)
29. C. Purath, C. Dohmeier, E. Baum, R. Köppe, H. Schnöckel:
Molekulare Verbindungen mit SiAl₄-, SiAl₃- und GeAl₄-Einheiten: Synthese und Struktur von Si(AlCl₂ · OEt₂)₄, Ge(AlCl₂ · OEt₂)₄ und HSi(Cp* AlBr)₃.
[Z. Anorg. Allg. Chemie 1998, 625, 2144-2148](#)
28. A. Ecker, R. Köppe, C. Üffing, H. Schnöckel:
Reactions of Aluminium(I) Iodide.
[Z. Anorg. Allg. Chemie 1998, 624, 817-822](#)
27. C. Üffing, A. Ecker, R. Köppe, K. Merzweiler, H. Schnöckel:
Two Isomers with an Al₄C₈ Framework.
[Chem. Eur. J. 1998, 4, 2142-2147](#)
26. C. Üffing, A. Ecker, R. Köppe, H. Schnöckel:
Synthesis, Structure, and Bonding of a Polyhedral Al₂Co₂ Cluster.
[Organometallics 1998, 17, 2373-2375](#)
25. C. Üffing, R. Köppe, H. Schnöckel:
Molecular Structure of Fluorenyllithium.
[Organometallics 1998, 17, 3512-3515](#)

24. C. Üffing, E. Baum, R. Köppe, H. Schnöckel:
Cp₃⁺Al₅I₆ : ein Intermediat im Reaktionsgeschehen zwischen elementarem Aluminium und Al(III)-Spezies ?
[Angew. Chem. 1998,110, 2488 – 2491.](#)
23. V. Doan, R. Köppe, P.H. Kasai:
Dimerization of Carboxylic Acids and Salts: An IR Study in Perfluoropolyether Media.
[J. Am. Chem. Soc. 1997,119, 9810 – 9815.](#)
22. A. Ecker, E. Baum, M.A. Friesen, M.A. Junker, C. Üffing, R. Köppe, H. Schnöckel:
Synthesen und Strukturen donorstabilisierter Aluminiumdihalogenide.
[Z. Anorg. Allg. Chem. 1998, 624, 513 – 516.](#)
21. C. Limberg, R. Köppe, H. Schnöckel, :
Matrix Isolation and Characterization of a Reactive Intermediate in Olefin Oxidation with Chromyl Chloride.
[Angew. Chem. Engl. ed. 1998, 37, 496 – 498.](#)
20. R. Teuber, R. Köppe, G. Linti, M. Tacke:
The X-ray structure of Fe(fulvene)₂: The missing link in the direct synthesis of ansa- and Cp1-metallocenes (Cp1 = C₅H₄CHMe₂).
[J. Organometall. Chem. 1997, 545-546, 105-110.](#)
19. R. Köppe, P. H. Kasai:
HAlCl and AlCl₂: A Matrix Isolation ESR Study
[J. Am. Chem. Soc. 1996, 118, 135–139.](#)
18. C. Dohmeier, E. Baum, A. Ecker, R. Köppe, H. Schnöckel:
Pentabenzylcyclopentadienides of Lithium.
[Organometallics 1996, 15, 4702-4706.](#)
17. C. Dohmeier, R. Köppe, C. Robl, H. Schnöckel:
Kristallstruktur von (CpⁿBBr)(AlBr₄).
[J. Organometall. Chem. 1995, 487, 127 – 130.](#)
16. R. Köppe, P. H. Kasai:
Li⁺CO₂⁻ and Na⁺CO₂⁻ Generated in Argon Matrices: An ESR Study.
[J. Phys. Chem. 1994, 98, 11331.](#)
15. R. Köppe, P. H. Kasai:
ESR Spectra, Structure and Photochemistry of Carboxylic Acid and Ester Anions: Matrix Isolation Study.
[J. Chem. Phys. 1994, 189, 401.](#)
14. R. Köppe, P. H. Kasai:
Aliphatic Ketone Anion-Radicals: A Matrix Isolation ESR Study.
[J. Phys. Chem. 1994, 98, 12904.](#)
13. H. Schnöckel, R. Köppe
Unsaturated Silicon Compounds - Matrix IR Investigations and Quantum Chemical Calculations.
Organosilicon Chemistry 1994, S. 147 - 153 ed: N. Auner and J. Weis; VCH, Weinheim.
12. T. Mehner, R. Köppe, H. Schnöckel:
IR-spektroskopischer Nachweis von PdSiO.
[Angew. Chem. 1992,104, 653 - 655; Angew. Chem. Int. Ed. Engl. 1992, 31, 638 – 640.](#)

11. M. Veith, E. Werle, R. Lisowsky, R. Köppe, H. Schnöckel:
Spektroskopischer Nachweis eines Bis(amino)silylens.
[Chem. Ber. 1992, 125, 1375 – 1377](#) 
10. R. Köppe, H. Schnöckel:
IR-Spectroscopic Evidence for NaSiO and KSiO in Solid Argon.
[Heteroatom Chem. 1992, 3, 329 – 331](#) 
9. R. Köppe, H. Schnöckel:
Molecular GaH₂Cl: Matrix Infrared Spectrum and ab initio Investigations.
[J. Chem. Soc. Dalton Trans. 1992, 3393 – 3395](#) 
8. R. Köppe, H. Schnöckel:
Molekulares S=Si(H)Cl: Matrix-IR-Untersuchungen und ab initio SCF- Rechnungen.
[Z. anorg. allg. Chem. 1992, 607, 41 – 44](#) 
7. R. Köppe, H. Schnöckel, C. Jouany, F. X. Gadea, J. C. Barthelat:
Interaction of Molecular SiS with Silver Atoms in an Argon Matrix: IR Spectrum und ab initio Rationalization.
[Heteroatom Chem. 1992, 3, 333 – 335](#) 
6. R. Köppe, M. Tacke, H. Schnöckel:
Infrarotspektroskopischer Nachweis von monomerem HGaCl₂ in festem Argon.
[Z. anorg. allg. Chem. 1991, 605, 35 – 41](#) 
5. R. Köppe, H. Schnöckel:
Molekulares S=GeCl₂ Matrix-IR-Untersuchungen und ab initio SCF-Rechnungen.
[Z. anorg. allg. Chem. 1991, 592, 179 – 186](#) 
4. R. Köppe, H. Schnöckel:
Molekulares GeS₂: Matrix-IR-Untersuchungen und ab initio SCF-Rechnungen.
[Mol. Struct. 1990, 238, 429 – 432](#) 
3. H. Schöckel, H. J. Göcke, R. Köppe:
Molekulares S=SiCl₂ Matrix-IR-Untersuchungen und ab initio SCF-Rechnungen.
[Z. anorg. allg. Chem. 1989, 578, 159 – 165](#) 
2. S. Schunck, H. - J. Göcke, R. Köppe, H. Schnöckel:
Molekulares PO₂Br Matrix-IR-Untersuchungen und ab initio SCF-Rechnungen.
[Z. anorg. allg. Chem. 1989, 579, 66 – 74](#) 

1. H. Schnöckel, R. Köppe:

Matrix IR Spectrum and ab initio SCF Calculations of Molecular SiS₂.

[J. Am. Chem. Soc. 1989, 111, 4583 – 4586](#) 

