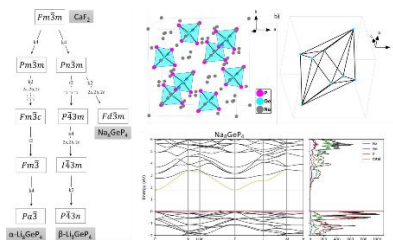


Probing Charge-Transfer Processes in a Covalently Linked [Ge₉]-Cluster Imine Dyad

C. Wallach, Y. Selic, F. S. Geitner, A. Kumar, E. Thyrhaug, J. Hauer, A. J. Karttunen, T. F. Fässler

Angew. Chem. Int. Ed. (2023) e202304088

(DOI: doi.org/10.1002/anie.202304088)

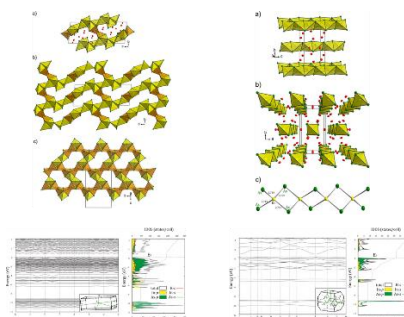


Synthesis, Structure and Physical Properties of the Sodium-Rich Phosphidogermanate Na₈GeP₄

M. Botta, S. Zeitz, T. F. Fässler

Z. Anorg.Allg.Chem. 649 (2023) e202300166.

(DOI: doi.org/10.1002/zaac.202300166)

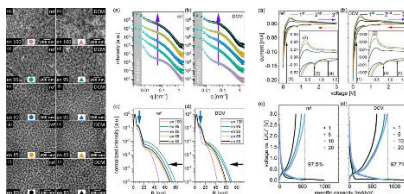


K₇In₄As₆ and K₃InAs₂ - Two more Zintl phases showing the rich variety of In-As polyanion structures

M. Boyko, V. Hlukhyy, T. F. Fässler

Z. Anorg.Allg.Chem. (2023) e202300164

(DOI: doi.org/10.1002/zaac.202300164)

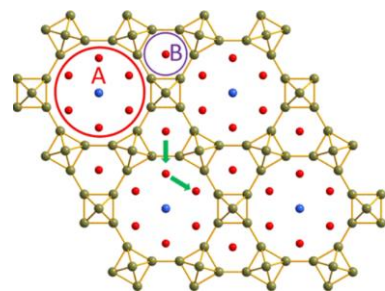


Toluene-mediated morphology tuning of diblock copolymer templated porous Si/Ge/C thin films for Li-ion batteries

C. L. Weindl, K. Wu, C. E. Fajman, Z. Xu, T. Zheng, T. Tian, C. Harder, B. Sochor, S. V. Roth, T. F. Fässler, P. Müller-Buschbaum

Adv. Energy Sustainability Res. 4 (2023) 2300096

(DOI: doi.org/10.1002/aesr.202300096)

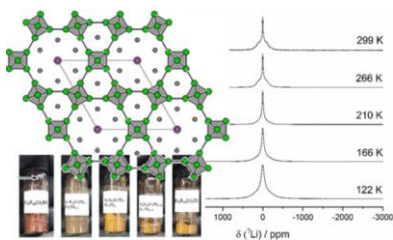


The mechanism of Li ion migration in the superionic conducting open framework structure Li₆B₁₈(Li₃N)_{1-x}(Li₂O)_x (0 ≤ x ≤ 1).

R. J. Spranger, H. Kirchhain, T. M. F. Restle, J. V. Dums, A. J., Karttunen, L. van Wüllen, T. F. Fässler

Phys. Chem. C 127 (2023) 1622–1632

(DOI: doi.org/10.1021/acs.jpcc.2c06839)

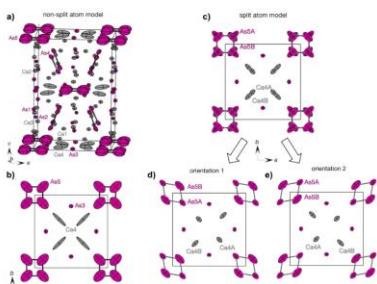


Lithium Ion Mobility in Li₆B₁₈(Li₃N) and Li Vacancy Tuning in the Solid Solution Li₆B₁₈(Li₃N)_{1-x}(Li₂O)_x

T. M. F. Restle, L. Scherf, J. V. Dums, A. G. Mutschke, R. J. Spranger, H. Kirchhain, A. J. Karttunen, L. van Wüllen, T. F. Fässler

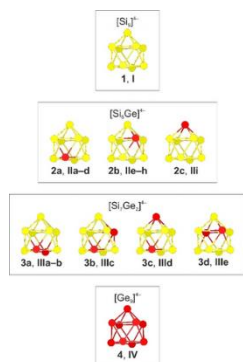
Angew. Chem. Int. Ed. 62 (2023) e202213962

(DOI: doi.org/10.1002/anie.202213962)



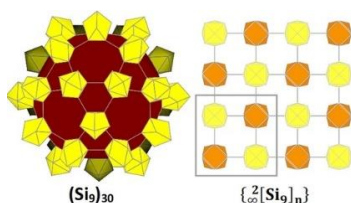
Crystal Structure of Undecacalcium decaarsenide, Ca₁₁As₁₀.

A. V. Hoffmann, T. F. Fässler, V. Hlukhyy
Z. Kristallogr. - N. Cryst. Struct. 238 (2023) 1–3.
 (DOI: doi.org/10.1515/NCRS-2022-0380)



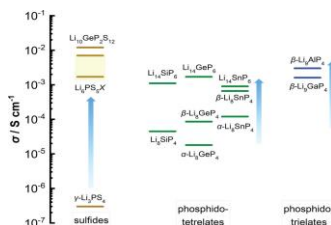
Structural characteristics of mixed nido-[Si_{9-x}Ge_x]⁴⁻ (x = 1, 2) Zintl clusters in solution and within solvent crystals

L.-A. Jantke, A. J. Karttunen, T. F. Fässler
Z. Anorg. Allg. Chem. 684 (2022) e202200276
 (DOI: doi.org/10.1002/zaac.202200276)



Chemi-Inspired Silicon Allotropes—Experimentally Accessible Si₉ Cages as Proposed Building Block for 1D Polymers, 2D Sheets, Single-Walled Nanotubes, and Nanoparticles

L.-A. Jantke, A. J. Karttunen, T. F. Fässler
Molecules 27 (2022) 822. (DOI: doi.org/10.3390/molecules27030822)



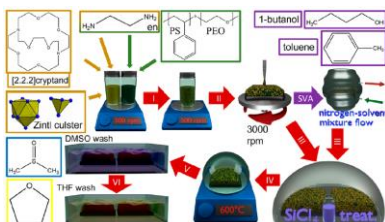
Super-Ionic Conductivity in ω Li₉TrP₄ (Tr = Al, Ga, In) and Lithium Diffusion Pathways in Li₉AlP₄ Polymorphs

T. M. F. Restle, S. Strangmüller, V. Baran, A. Senyshyn, H. Kirchhain, W. Klein, S. Merk, D. Müller, T. Kutsch, L. van Wüllen, T. F. Fässler
Adv. Funct. Mat. 32 (2022) 2112377. (DOI: doi.org/10.1002/adfm.202112377)



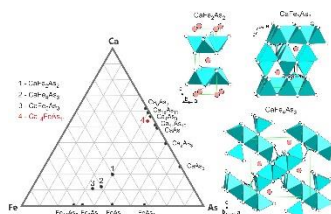
Oxidative Coupling of Silylated Nonagermanide Clusters

C. Wallach, W. Klein, T. F. Fässler
Chem. Commun. 58 (2022) 5486–5489 (DOI: doi.org/10.1039/d2cc01250b)



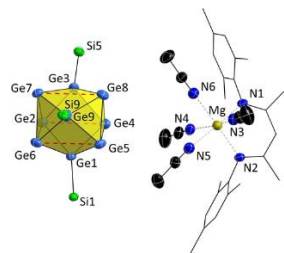
Effect of Solvent Vapor Annealing on Diblock Copolymer-Templated Mesoporous Si/Ge/C Thin Films: Implications for Li-Ion Batteries

C. L. Weindl, C. E. Fajman, M. A. Giebel, K. S. Wienhold, S. Yin, T. Tian, C. Geiger, L. P. Kreuzer, M. Schwartzkopf, S. V. Roth, T. F. Fässler, P. Müller-Buschbaum
ACS Appl. Nano Mater. 5 (2022) 7278–7287
 (DOI: doi.org/10.1021/acsnm.2c01191)



Ca₁₄FeAs₁₁ – A structure comprising structural motifs of iron-based superconductors and Ca-As Zintl phases

A. V. Hoffmann, T. F. Fässler, V. Hlukhyy
Z. Anorg. Allg. Chem. 648 (2022) (DOI: doi.org/10.1002/zaac.202200168)

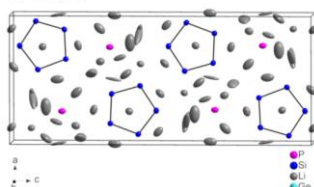


Nonagermanide Zintl Clusters with Mg²⁺ Counter Ions

C. Wallach, W. Klein, T. F. Fässler

Z. Anorg. Allg. Chem. 648 (2022) (DOI: doi.org/10.1002/zaac.202200065)

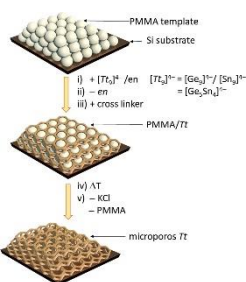
a) Li_{10+x}Si₅P



Planar Si₅ and Ge₅ Pentagons beside Isolated Phosphide Anions in Lithium Phosphide Tetrelides Li_{10+x}Si₅P and Li_{10+x}Ge₅P

H. Eickhoff, W. Klein, L. Toffoletti, G. Raudaschl-Sieber, T. F. Fässler

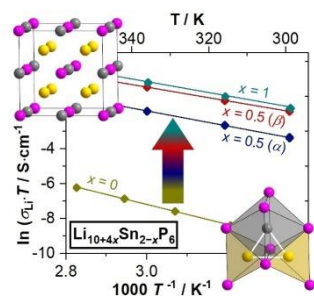
Z. Anorg. Allg. Chem. 2022 (DOI: doi.org/10.1002/zaac.202100376)



Inverse Opal-Structured Sn and Sn/Ge Films from Soluble Zintl Clusters as Precursors

S. Geier, T. Kratky, S. Günther, T. F. Fässler

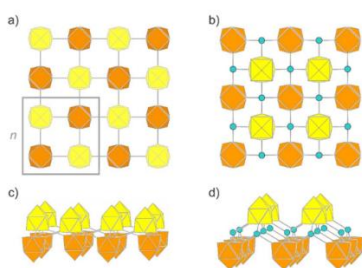
Z. Anorg. Allg. Chem. 2022 (DOI: doi.org/10.1002/zaac.202100362)



Li₅SnP₃ — a member of the series Li_{10+4x}Sn_{2-x}P₆ for x = 0 comprising the fast lithium-ion conductors Li₈SnP₄ (x = 0.5) and Li₁₄SnP₆ (x = 1)

S. Strangmüller, D. Müller, G. Raudaschl-Sieber, H. Kirchhain, L. van Wüllen, T. F. Fässler

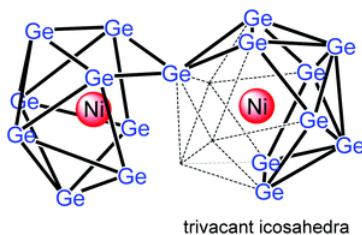
Chem. Eur. J. 2022 (DOI: [10.1002/chem.202104219](https://doi.org/10.1002/chem.202104219))



Chemi-inspired silicon allotropes – experimentally accessible Si₉ cages as proposed building block for 1D polymers, 2D sheets, single-walled nanotubes, and nanoparticles

L.-A. Jantke, A. J. Karttunen, T. F. Fässler

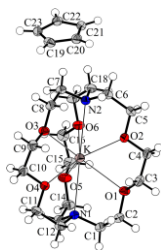
Molecules 2021 (DOI: [10.3390/molecules27030822](https://doi.org/10.3390/molecules27030822))



Filled Trivacant Icosahedra as Building Fragments in 17-atomic Endohedral Germanides [TM₂@Ge₁₇]³⁻ (TM = Co, Ni)

C. Wallach, Y. Selic, B. J. L. Witzel, W. Klein, T. F. Fässler

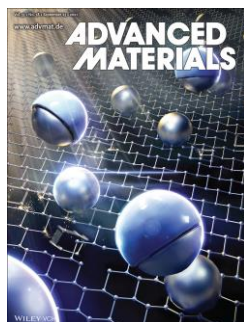
Dalton Trans. 50 (2021)13671–13675 (DOI: [10.1039/d1dt03078g](https://doi.org/10.1039/d1dt03078g))



Crystal structure of (4,7,13,16,21,24-hexaoxa-1,10-diazabicyclo[8.8.8]hexacosane-)potassium cyclopentadienide, [K([2.2.2]crypt)]Cp, $C_{23}H_{41}KN_2O_6$

C. Fischer, W. Klein, T. F. Fässler

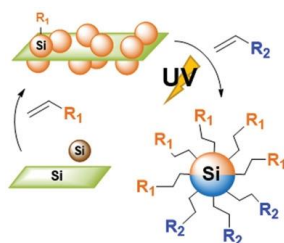
Z. Cryst. C, (2021), online (DOI: [10.1515/ncrs-2021-0296](https://doi.org/10.1515/ncrs-2021-0296))



Inside Front Cover: Surface-Anisotropic Janus Silicon Quantum Dots via Masking on 2D Silicon Nanosheets

M. J. Kloberg, H. Yu, E. Groß, F. Eckmann, T. M. F. Restle, T. F. Fässler, J. G. C. Veinot, B. Rieger

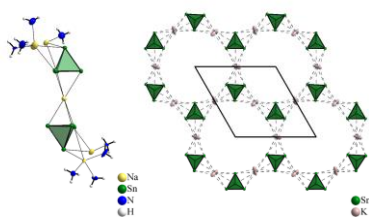
Adv. Mater. 33 (2021), 2170296 (DOI: [10.1002/adma.202170296](https://doi.org/10.1002/adma.202170296))



Surface-Anisotropic Janus Silicon Quantum Dots via Masking on 2D Silicon Nanosheets

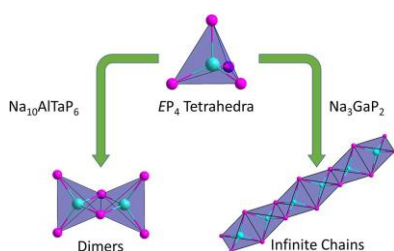
M. J. Kloberg, H. Yu, E. Groß, F. Eckmann, T. M. F. Restle, T. F. Fässler, J. G. C. Veinot, B. Rieger

Adv. Mater. 33 (2021), 210028 (DOI: [10.1002/adma.202100288](https://doi.org/10.1002/adma.202100288))



Investigations on the Solubility of Sn_4 -Cluster Compounds in Liquid Ammonia

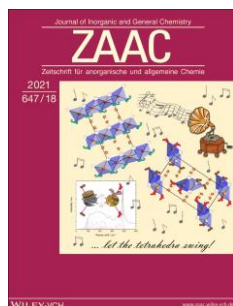
W. Klein, C. B. Benda, T. Henneberger, B. J. L. Witzel, T. F. Fässler
Anorg. Allg. Chem. 647 (2021), online (DOI: [10.1002/zaac.202100239](https://doi.org/10.1002/zaac.202100239))



Aliovalent substitution in phosphide-based materials - Crystal structures of $Na_{10}AlTaP_6$ and Na_3GaP_2 featuring edge-sharing EP_4 tetrahedra ($E = Al/Ta$ and Ga)

T. M. F. Restle, S. Zeitz, J. Meyer, W. Klein, G. Raudaschl-Sieber, A. J. Karttunen, T. F. Fässler

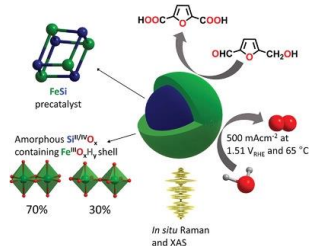
Anorg. Allg. Chem. 647 (2021), online (DOI: [10.1002/zaac.202100149](https://doi.org/10.1002/zaac.202100149))



Front Cover

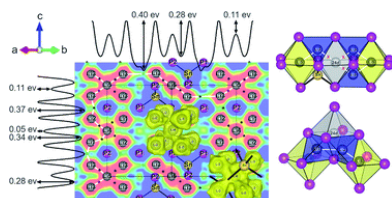
Dedicated to the 80th birthday of Prof. Schnöckel

Anorg. Allg. Chem. 647 (2021), online (DOI: [10.1002/zaac.202100269](https://doi.org/10.1002/zaac.202100269))



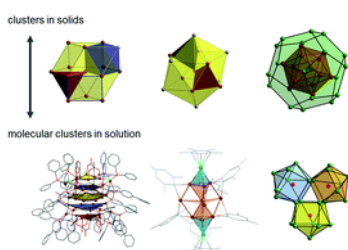
Evolving Highly Active Oxidic Iron(III) Phase from Corrosion of Intermetallic Iron Silicide to Master Efficient Electrocatalytic Water Oxidation and Selective Oxygenation of 5-Hydroxymethylfurfural

J. N. Hausmann, R. Beltrán-Suito, S. Mebs, V. Hlukhyy, T. F. Fässler, H. Dau, M. Driess, P. W. Menezes
Adv. Mater. 33 (2021) 2008823 (DOI: [10.1002/adma.202008823](https://doi.org/10.1002/adma.202008823))



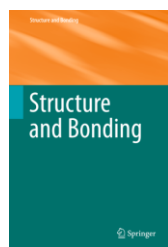
Synthesis, Structure and Diffusion Pathways of Fast Lithium-Ion Conductors in the Polymorphs α - and β -Li₈SnP₄

S. Strangmüller, H. Eickhoff, W. Klein, G. Raudaschl-Sieber, H. Kirchhain, T. Kutsch, V. Baran, A. Senyshyn, L. van Wüllen, H. A. Gasteiger, T. F. Fässler
J. Mat. Chem. A, 9 (2021), 15254–15268 (DOI: [10.1039/D1TA03021C](https://doi.org/10.1039/D1TA03021C))



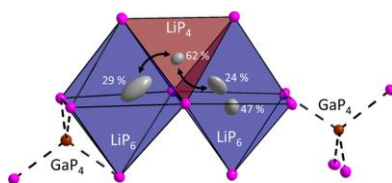
Intermetallic phases meet intermetalloid clusters

M. Schütz, C. Gemel, W. Klein, R. A. Fischer, T. F. Fässler
Chem. Soc. Rev. 50 (2021), 8496–8510 (DOI: [10.1039/D1CS00286D](https://doi.org/10.1039/D1CS00286D))



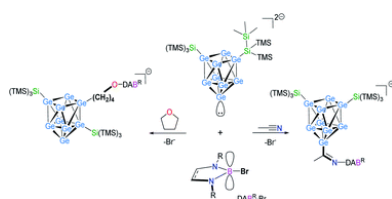
Molecules Meet Solids: From Wade-Mingos Clusters to Intermetalloid Clusters

W. Klein, A. Schier, T. F. Fässler
 In: *Structure and Bonding*. Springer, Berlin, Heidelberg (2021)
 (DOI: [10.1007/430_2021_82](https://doi.org/10.1007/430_2021_82))



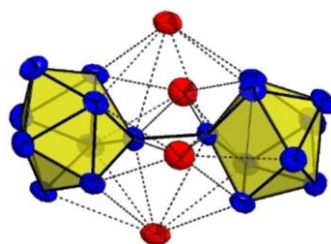
Fast Lithium Ion Conduction in Li₉GaP₄

T. M. F. Restle, C. Sedlmeier, H. Kirchhain, W. Klein, G. Raudaschl-Sieber, L. van Wüllen, T. F. Fässler
Chem. Mater. 33 (2021), 2957–2966 (DOI: [10.1021/acs.chemmater.1c00504](https://doi.org/10.1021/acs.chemmater.1c00504))



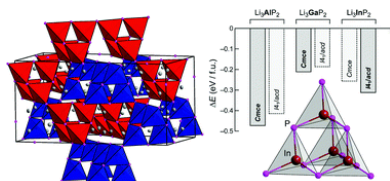
FLP-type Nitrile Activation and Cyclic Ether Ring Opening by Halo-Borane Nonagermanide Cluster Lewis Acid-Base-Pairs

C. Wallach, F. S. Geitner, T. F. Fässler
Chem. Sci., 12 (2021) 6969–6976 (DOI: [10.1039/D1SC00811K](https://doi.org/10.1039/D1SC00811K))

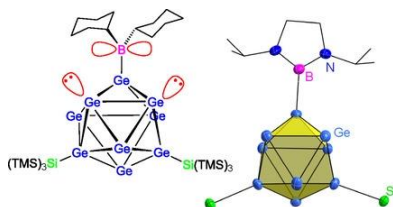


On the Oxidation of [Ge₉]⁴⁺ – Crystal Structures and Raman Spectroscopic Investigation of Linked Ge₉ Clusters

K. Mayer, W. Klein, S. Geier, T. F. Fässler
Z. Anorg. Allg. Chem. 647 (2021), 377–384 (DOI: [10.1002/zaac.202000411](https://doi.org/10.1002/zaac.202000411))

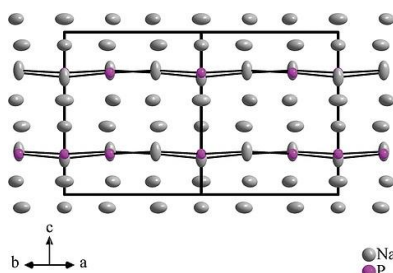


Supertetrahedral polyanionic network in the first lithium phosphidoindate Li_3InP_2 – structural similarity to Li_2SiP_2 and Li_2GeP_2 and dissimilarity to Li_3AlP_2 and Li_3GaP_2
 T. M. F. Restle, V. L. Deringer, J. Meyer, G. Raudaschl-Sieber, T. F. Fässler
Chem. Sci. 12 (2021), 1278–1285 (DOI: [10.1039/D0SC05851C](https://doi.org/10.1039/D0SC05851C))



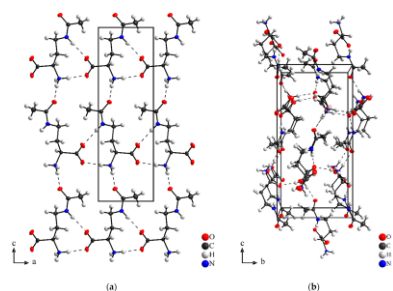
Boranyl-Functionalized $[\text{Ge}_9]$ Clusters: Providing the Idea of Intramolecular Ge/B Frustrated Lewis Pairs

C. Wallach, F. S. Geitner, A. J. Karttunen, T. F. Fässler
Angew. Chem. Int. Ed. 60 (2020), 2648–2653 (DOI: [10.1002/anie.202012336](https://doi.org/10.1002/anie.202012336))
Angew. Chem. 133 (2020), 2680–2685 (DOI: [10.1002/ange.202012336](https://doi.org/10.1002/ange.202012336))



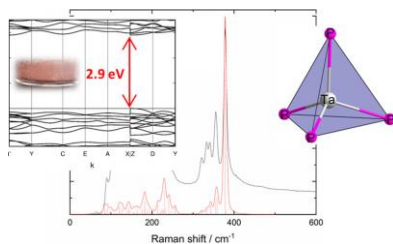
On the Crystal Structure and Conductivity of Na_3P

H. Eickhoff, C. Dietrich, W. Klein, W. G. Zeier, T. F. Fässler
Z. Anorg. Allg. Chem. 647 (2020), 28–33 (DOI: [10.1002/zaac.202000308](https://doi.org/10.1002/zaac.202000308))

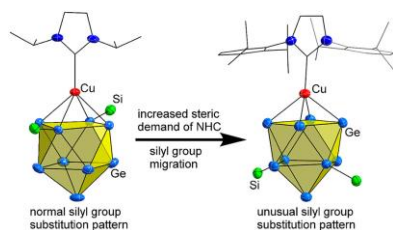


Crystal Structure and Spectroscopic Analysis of the Compatible Solute γ -Acetyl-L-2,4-Diaminobutyric Acid

L. Martin, W. Klein, S. P. Schwaminger, T. F. Fässler, S. Berensmeier
Crystals 10 (2020), 1136 (DOI: [10.3390/cryst10121136](https://doi.org/10.3390/cryst10121136))

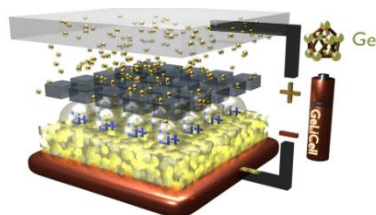


Na_7TaP_4 : A Ternary Sodium Phosphidotantalate Containing $[\text{TaP}_4]^{7-}$ Tetrahedra
 T. M. F. Restle, J. V. Dums, G. Raudaschl-Sieber, W. Klein, T. F. Fässler
Inorg. Chem. 59 (2020), 18420 – 18426 (DOI: [10.1021/acs.inorgchem.0c03021](https://doi.org/10.1021/acs.inorgchem.0c03021))



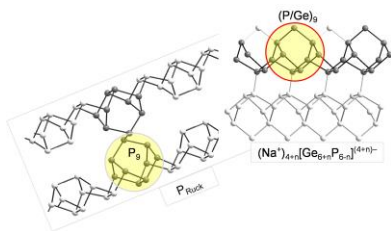
Cluster Expansion versus Complex Formation: Coinage Metal Coordination to Silylated $[\text{Ge}_9]$ Cages

F. S. Geitner, T. F. Fässler
Inorg. Chem. 59 (2020), 15218–15227 (DOI: [10.1021/acs.inorgchem.0c02190](https://doi.org/10.1021/acs.inorgchem.0c02190))



Mesoporous $\text{GeO}_x/\text{Ge}/\text{C}$ as Highly Reversible Anode Material with High Specific Capacity for Lithium Ion Batteries

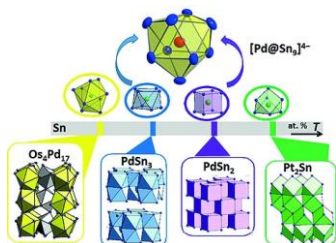
N. Hohn, X. Wang, M. A. Giebel, S. Yin, D. Müller, A. Hetzenecker, L. Bießmann, L. P. Kreuzer, G. E. Moehl, H. Yu, J. G. C. Veinot, T. F. Fässler, Y.-J. Cheng, P. Müller-Buschbaum
ACS Appl. Mater. Interfaces 12 (2020), 47002–47009
 (DOI: [10.1021/acsami.0c13560](https://doi.org/10.1021/acsami.0c13560))



Na₂Ge₃P₃ and Na₅Ge₇P₅ Comprising Heteroatomic Polyanions Mimicking the Structure of Fibrous Red Phosphorus

H. Eickhoff, V. Hlukhyy, T. F. Fässler

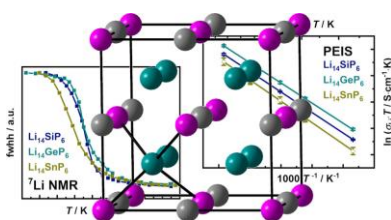
Z. Anorg. Allg. Chem. 646 (2020), 1834–1838 (DOI: [10.1002/zaac.202000316](https://doi.org/10.1002/zaac.202000316))



Extracting [Pd@Sn₉]⁴⁻ and [Rh@Pb₉]⁴⁻ Clusters from their Binary Alloys Using “Metal Scissors”

M. Boyko, V. Hlukhyy, H. Jin, J. V. Dums, T. F. Fässler

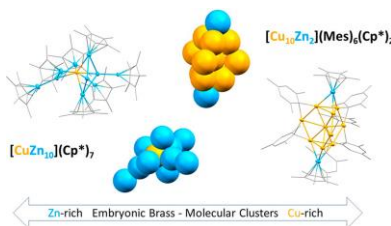
Z. Anorg. Allg. Chem. 646 (2020), 1575–158 (DOI: [10.1002/zaac.202000061](https://doi.org/10.1002/zaac.202000061))



Modifying the Properties of Fast Lithium-Ion Conductors—The Lithium Phosphidotetrelates Li₁₄SiP₆, Li₁₄GeP₆, and Li₁₄SnP₆

S. Strangmüller, H. Eickhoff, G. Raudaschl-Sieber, H. Kirchhain, C. Sedlmeier, L. van Wüllen, H. A. Gasteiger, T. F. Fässler

Chem. Mater. 32 (2020), 6925–6934 (DOI: [10.1021/acs.chemmater.0c02052](https://doi.org/10.1021/acs.chemmater.0c02052))

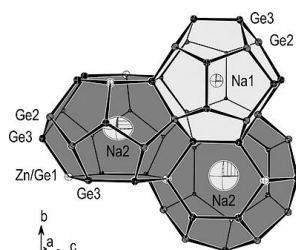


Contrasting Structure and Bonding of a Copper-Rich and a Zinc-Rich Intermetallic Cu/Zn Cluster

M. Schütz, M. Muhr, K. Freitag, C. Gemel, S. Kahlal, J.-Y. Saillard,

A. C. H. Da Silva, J. L. F. Da Silva, T. F. Fässler, R. A. Fischer

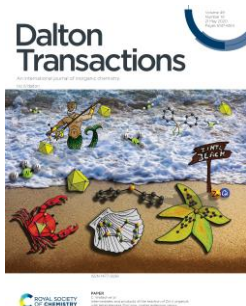
Inorg. Chem. 59 (2020), 9077–9085 (DOI: [10.1021/acs.inorgchem.0c00943](https://doi.org/10.1021/acs.inorgchem.0c00943))



The Intermetallic Type-I Clathrate Na₈Zn₄Ge₄₂

S. Stegmaier, V. Hlukhyy, T. F. Fässler

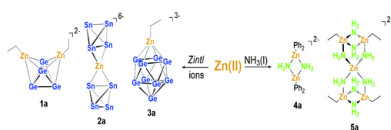
Z. Anorg. Allg. Chem. 646 (2020), 1073–1078 (DOI: [10.1002/zaac.201900253](https://doi.org/10.1002/zaac.201900253))



Inside front cover: Intermediates and Products of the Reaction of Zn(II) Organyl with Tetrel Element Zintl Ions: Cluster Extension versus Complexation

C. Wallach, K. Mayer, T. Henneberger, W. Klein, T. F. Fässler

Dalt. Trans. 49 (2020), 6148–6148 (DOI: [10.1039/D0DT90093A](https://doi.org/10.1039/D0DT90093A))



Intermediates and Products of the Reaction of Zn(II) Organyl with Tetrel Element Zintl Ions: Cluster Extension versus Complexation

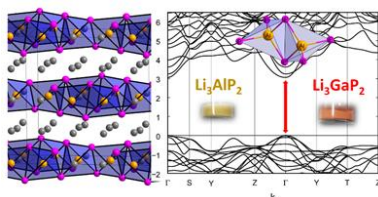
C. Wallach, K. Mayer, T. Henneberger, W. Klein, T. F. Fässler

Dalt. Trans. 49 (2020), 6191–6198 (DOI: [10.1039/D0DT01096K](https://doi.org/10.1039/D0DT01096K))



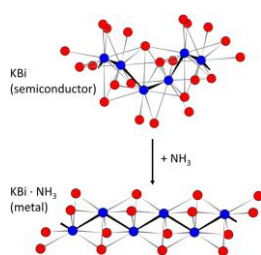
Cover Picture: Synthesis, Structure, Solid State NMR Spectroscopy, and Electronic Structures of the Phosphidotrirelates Li_3AlP_2 and Li_3GaP_2

T. M. F. Restle, J. V. Dums, G. Raudaschl-Sieber, T. F. Fässler
Chem. Eur. J. 26 (2020), 6737–6737 (DOI: [10.1002/chem.202001592](https://doi.org/10.1002/chem.202001592))



Synthesis, Structure, Solid State NMR Spectroscopy, and Electronic Structures of the Phosphidotrirelates Li_3AlP_2 and Li_3GaP_2

T. M. F. Restle, J. V. Dums, G. Raudaschl-Sieber, T. F. Fässler
Chem. Eur. J. 26 (2020), 6812–6819 (DOI: [10.1002/chem.202000482](https://doi.org/10.1002/chem.202000482))

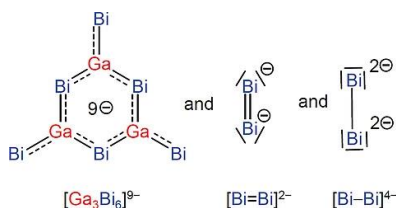


Lösemittel-induzierter Halbleiter-Metall-Übergang: Planare $[\text{Bi}^{1-}]$ -Zickzack-Ketten im metallischen $\text{KBi} \cdot \text{NH}_3$ im Vergleich zu $[\text{Bi}^{1-}]$ -Helices im halbleitenden KBi

K. Mayer, J. V. Dums, C. B. Benda, W. Klein, T. F. Fässler
Angew. Chem. 132 (2020), 6866–6871 (DOI: [10.1002/ange.201915735](https://doi.org/10.1002/ange.201915735))

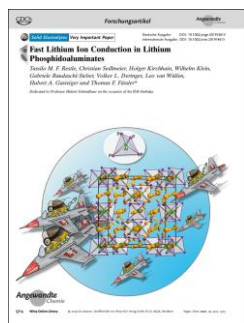
Solvate-Induced Metallization: Flat $[\text{Bi}^{1-}]$ Zigzag Chains in Metallic $\text{KBi} \cdot \text{NH}_3$ versus $[\text{Bi}^{1-}]$ Helices in Semiconducting KBi

Angew. Chem. Int. Ed. 59 (2020), 6800–6805 (DOI: [10.1002/anie.201915735](https://doi.org/10.1002/anie.201915735))



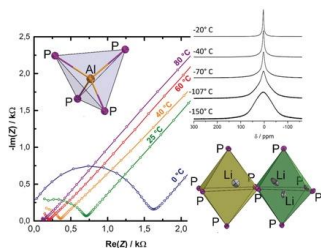
$\text{K}_{10}\text{Ga}_3\text{Bi}_{6.65}$ – The First Compound in the Ternary A-Ga-Bi System Comprising Cyclic Tris-meta Borate-Analogous $[\text{Ga}_3\text{Bi}_6]^{9-}$ Units and Bi_2 Dumbbells

M. Boyko, V. Hlukhyy, T. F. Fässler
Z. Anorg. Allg. Chem. 646 (2020), 659–664 (DOI: [10.1002/zaac.201900292](https://doi.org/10.1002/zaac.201900292))



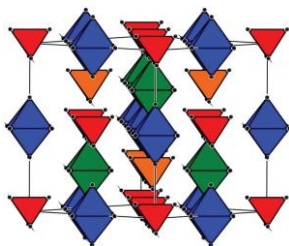
Frontispiz: Fast Lithium Ion Conduction in Lithium Phosphidoaluminates

T. M. F. Restle, C. Sedlmeier, H. Kirchhain, W. Klein, G. Raudaschl-Sieber, V. L. Deringer, L. van Wüllen, H. A. Gasteiger, T. F. Fässler
Angew. Chem. Int. Ed. 59 (2020), 5665 (DOI: [10.1002/anie.202081462](https://doi.org/10.1002/anie.202081462))
Angew. Chem. 132 (2020), 5714 (DOI: [10.1002/ange.202081462](https://doi.org/10.1002/ange.202081462))



Fast Lithium Ion Conduction in Lithium Phosphidoaluminates

T. M. F. Restle, C. Sedlmeier, H. Kirchhain, W. Klein, G. Raudaschl-Sieber, V. L. Deringer, L. van Wüllen, H. A. Gasteiger, T. F. Fässler
Angew. Chem. Int. Ed. 59 (2019), 5665–5674 (DOI: [10.1002/anie.201914613](https://doi.org/10.1002/anie.201914613))
Angew. Chem. 132 (2019), 5714–5723 (DOI: [10.1002/ange.201914613](https://doi.org/10.1002/ange.201914613))



Li vs. Zn substitution in $Li_{17}Si_4 - Li_{17-\epsilon-\delta}Zn_{\epsilon}Si_4$ connecting the structures of $Li_{21}Si_5$ and $Li_{17}Si_4$

V. Baran, T. F. Fässler

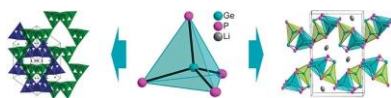
Z. Naturforsch. B 75 (2020), 91–96 (DOI: [10.1515/znb-2019-0157](https://doi.org/10.1515/znb-2019-0157))



Cover Feature: Polyanionic Frameworks in the Lithium Phosphidogermanates Li_2GeP_2 and $LiGe_3P_3$ – Synthesis, Structure, and Lithium Ion Mobility (*Z. Anorg. Allg. Chem.* 3/2020)

H. Eickhoff, C. Sedlmeier, W. Klein, G. Raudaschl-Sieber, H. A. Gasteiger, T. F. Fässler

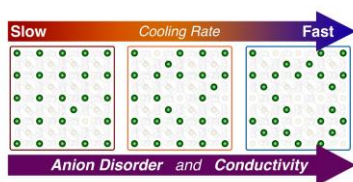
Z. Anorg. Allg. Chem. 646 (2020), 79 (DOI: [10.1002/zaac.202070033](https://doi.org/10.1002/zaac.202070033))



Polyanionic Frameworks in the Lithium Phosphidogermanates Li_2GeP_2 and $LiGe_3P_3$ – Synthesis, Structure, and Lithium Ion Mobility

H. Eickhoff, C. Sedlmeier, W. Klein, G. Raudaschl-Sieber, H. A. Gasteiger, T. F. Fässler

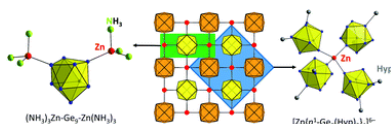
Z. Anorg. Allg. Chem. 646 (2020), 95–102 (DOI: [10.1002/zaac.201900228](https://doi.org/10.1002/zaac.201900228))



Rapid crystallization and Kinetic Freezing of Site-Disorder in the Lithium Superionic Argyroditite Li_6PS_5Br

A. Gautam, M. Sadowski, N. Prinz, H. Eickhoff, N. Minafra, M. Ghidui, S. P. Culver, K. Albe, T. F. Fässler, M. Zobel, W. G. Zeier

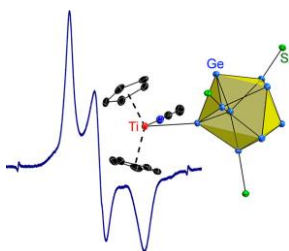
Chem. Mater. 31 (2019), 10178–10185 (DOI: [10.1021/acs.chemmater.9b03852](https://doi.org/10.1021/acs.chemmater.9b03852))



Zinc as a Versatile Connecting Atom for Zintl Cluster Oligomers

K. Mayer, W. Klein, T. F. Fässler

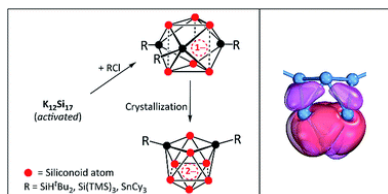
Chem. Commun. 55 (2019), 12156–12159 (DOI: [10.1039/C9CC06388A](https://doi.org/10.1039/C9CC06388A))



Early-Transition-Metal Complexes of Functionalized Nonagermanide Clusters: Synthesis and Characterization of $[Cp_2(MeCN)Ti(\eta^1-Ge_9\{Si(TMS)_3\}_3)]$ and $K_3[Cp_2Ti(\eta^1-Ge_9\{Si(TMS)_3\}_2)_2]$

F. S. Geitner, W. Klein, O. Storcheva, T. D. Tilley, T. F. Fässler

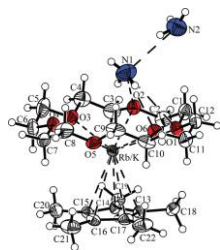
Inorg. Chem. 58 (2019), 13293–13298 (DOI: [10.1021/acs.inorgchem.9b02158](https://doi.org/10.1021/acs.inorgchem.9b02158))



Silicon clusters with six and seven unsubstituted vertices via a two-step reaction from elemental silicon

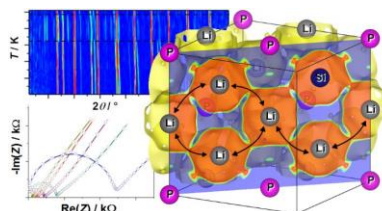
L. J. Schiegerl, A. J. Karttunen, W. Klein, T. F. Fässler

Chem. Sci. 10 (2019), 9130–9139 (DOI: [10.1039/C9SC03324F](https://doi.org/10.1039/C9SC03324F))

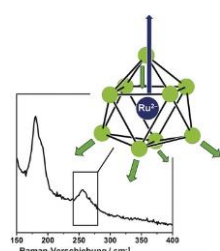


Crystal structure of (1,4,7,10,13,16-hexaoxacyclooctadecane- κ^6O_6) 1,2,3,4,5-pentamethyl-cyclopenta-2,4-dien-1-yl(potassium, rubidium) — ammonia (1/2), $[K_{0.3}Rb_{0.7}(18\text{-crown-}6)]Cp^* \cdot 2 NH_3$, $C_{22}H_{45}K_{0.3}N_2O_6Rb_{0.7}$

T. Henneberger, W. Klein, T. F. Fässler
Z. Kristallogr. – New Cryst. Struct. 234 (2019), 1241–1243
 (DOI: [10.1515/ncrs-2019-0368](https://doi.org/10.1515/ncrs-2019-0368))

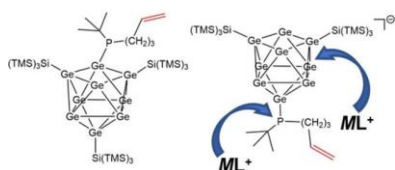


Fast Ionic Conductivity in the Most Lithium-Rich Phosphidosilicate $Li_{14}SiP_6$
 S. Strangmüller, H. Eickhoff, D. Müller, W. Klein, G. Raudaschl-Sieber, H. Kirchhain, C. Sedlmeier, V. Baran, A. Senyshyn, V. L. Deringer, L. van Wüllen, H. A. Gasteiger, T. F. Fässler
J. Am. Chem. Soc. 141 (2019), 14200–14209 (DOI: [10.1021/jacs.9b05301](https://doi.org/10.1021/jacs.9b05301))

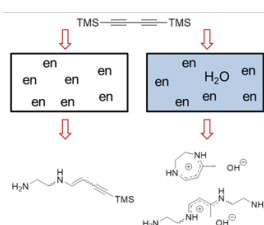


Metallo-Käfige für Metall-Anionen: Hochgeladene $[Co@Ge_9]^{5-}$ - und $[Ru@Sn_9]^{6-}$ -Cluster mit sphärisch eingelagerten Co^- - und Ru^{2-} -Anionen
 B. J. L. Witzel, W. Klein, J. V. Dums, M. Boyko, T. F. Fässler
Angew. Chem. 131 (2019), 13040–13045 (DOI: [10.1002/ange.201907127](https://doi.org/10.1002/ange.201907127))

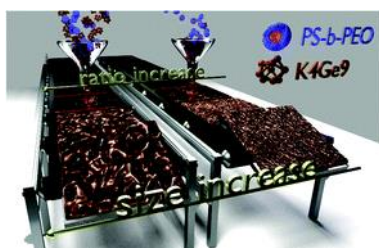
Metallocages for Metal Anions: Highly Charged $[Co@Ge_9]^{5-}$ and $[Ru@Sn_9]^{6-}$ Clusters Featuring Spherically Encapsulated Co^{1-} and Ru^{2-} Anions
Angew. Chem. Int. Ed. 58 (2019), 12908–12913 (DOI: [10.1002/anie.201907127](https://doi.org/10.1002/anie.201907127))



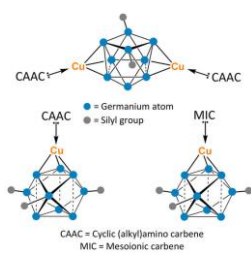
Enhancing the Variability of $[Ge_9]$ Cluster Chemistry through Phosphine Functionalization
 C. Wallach, F. S. Geitner, W. Klein, T. F. Fässler
Chem. Eur. J. 25 (2019), 12349–12356 (DOI: [10.1002/chem.201901673](https://doi.org/10.1002/chem.201901673))



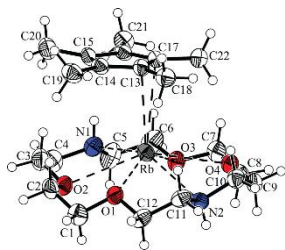
The Reaction of Ethylenediamine with 1,4-Bis(trimethylsilyl)butadiyne and the Role of Water: A Qualitative Method for the Determination of Water Impurities in Ethylenediamine
 S. Frischhut, M. Bentlohner, T. F. Fässler
Eur. J. Org. Chem. 20 (2019), 3101–3104 (DOI: [10.1002/ejoc.201900200](https://doi.org/10.1002/ejoc.201900200))



Amphiphilic diblock copolymer-mediated structure control in nanoporous germanium-based thin films
 N. Hohn, A. E. Hetzenecker, M. A. Giebel, S. Geier, L. Bießmann, V. Körstgens, N. Saxena, J. Schlipf, W. Ohm, P. S. Deimel, F. Allegretti, J. V. Barth, S. V. Roth, T. F. Fässler, P. Müller-Buschbaum
Nanoscale 11 (2019), 2048–2055 (DOI: [10.1039/C8NR09427F](https://doi.org/10.1039/C8NR09427F))



Silylated Ge_9 Clusters as New Ligands for Cyclic (Alkyl)amino and Mesoionic Carbene Copper Complexes
 L. J. Schiegerl, M. Melaimi, D. R. Tolentino, W. Klein, G. Bertrand, T. F. Fässler
Inorg. Chem. 58 (2019), 3256–2364 (DOI: [10.1021/acs.inorgchem.8b03338](https://doi.org/10.1021/acs.inorgchem.8b03338))



Crystal structure of [(1,2- η)-1,2,3,4,5-pentamethyl-cyclopenta-2,4-dien-1-yl] (1,4,10,13-tetraoxa-7,16-diazacyclooctadecane- κ^6 N₂,O₄) rubidium (1), [Rb(diaza-18-crown-6)]Cp*, C₂₂H₄₁N₂O₄Rb

T. Henneberger, W. Klein, T. F. Fässler

Z. Kristallogr. – New Cryst. Struct. 234 (2019), 165–167

(DOI: [10.1515/ncrs-2018-0252](https://doi.org/10.1515/ncrs-2018-0252))