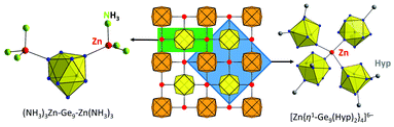
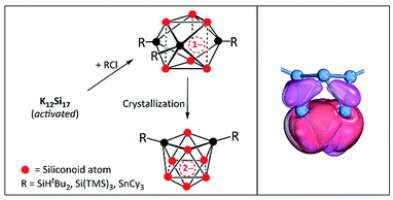
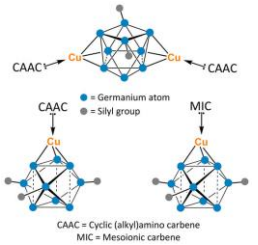
Novel Allotropes of Tetrel Elements



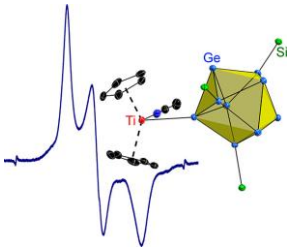
Zinc as a Versatile Connecting Atom for Zintl Cluster Oligomers
K. Mayer, W. Klein, T. F. Fässler
Chem. Commun. 55 (2019), 12156–12159 (DOI: 10.1039/C9CC06388A)



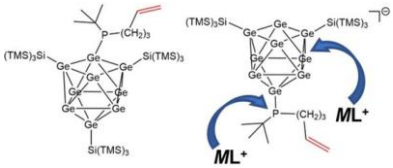
Silicon clusters with six and seven unsubstituted vertices via a two-step reaction from elemental silicon
L. J. Schiegerl, A. A. Karttunen, W. Klein, T. F. Fässler
Chem. Sci. 10 (2019), 9130–9139 (DOI: 10.1039/C9SC03324F)



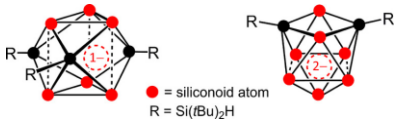
Silylated Ge_9 Clusters as New Ligands for Cyclic (Alkyl)amino and Mesoionic Carbene Copper Complexes
L. J. Schiegerl, M. Melaimi, D. R. Tolentino, W. Klein, G. Bertrand, T. F. Fässler
Inorg. Chem. 58 (2019), 3256–2364 (DOI: 10.1021/acs.inorgchem.8b03338)



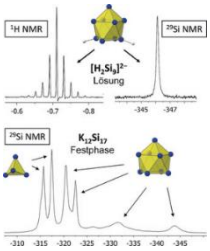
Early-Transition-Metal Complexes of Functionalized Nonagermanide Clusters: Synthesis and Characterization of $[Cp_2(MeCN)Ti(\eta^1\text{-}Ge_9\{Si(TMS)_3\}_3)]$ and $K_3[Cp_2Ti(\eta^1\text{-}Ge_9\{Si(TMS)_3\}_2)_2]$
F. S. Geitner, W. Klein, O. Storcheva, T. D. Tilley, T. F. Fässler
Inorg. Chem. 58 (2019), 13293–13298 (DOI: 10.1021/acs.inorgchem.9b02158)



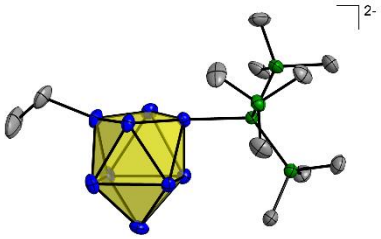
Enhancing the Variability of $[Ge_9]$ Cluster Chemistry through Phosphine Functionalization
C. Wallach, F. S. Geitner, W. Klein, T. F. Fässler
Chem. Eur. J. 25 (2019), 12349–12356 (DOI: 10.1002/chem.201901673)



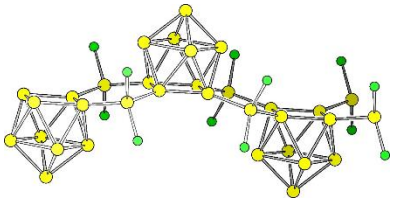
Anionic Siliconoids from Zintl Phases: $R_3Si_9^-$ with Six and $R_2Si_9^{2-}$ with Seven Unsubstituted Exposed Silicon Cluster Atoms ($R = Si(^tBu)_2H$)
L. J. Schiegerl, A. J. Karttunen, W. Klein, T. F. Fässler
Chem. Eur. J. 24 (2018), 19171–19174 (DOI: 10.1002/chem.201805442)



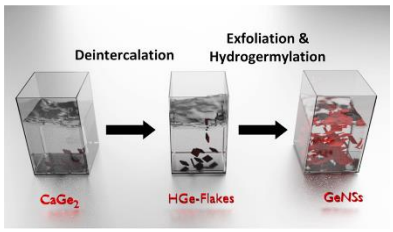
Charged Si_9 Clusters in Neat Solids and the Detection of $[H_2Si_9]^{2-}$ in Solution: A Combined NMR, Raman, Mass Spectrometric, and Quantum Chemical Investigation
L. J. Schiegerl, A. J. Karttunen, J. Tillmann, S. Geier, G. Raudaschl-Sieber, M. Waibel, T. F. Fässler
Angew. Chem. 130 (2018), 13132–13137 (DOI: 10.1002/ange.201804756)
Angew. Chem. Int. Ed. 57 (2018), 12950–12955 (DOI: 10.1002/anie.201804756)



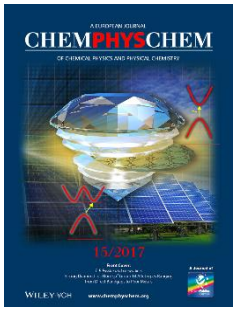
Challenges in Chemical Synthesis at the Border of Solution-Based and Solid State Chemistry - Synthesis and Structure of $[\{(Me_3Si)_3Si\}Ge_9(CH_2CH_3)]^{2-}$
S. Frischhut, W. Klein, T. F. Fässler
C. R. Chim. 21 (2018), 932–937 (DOI: 10.1016/j.crci.2018.04.007)



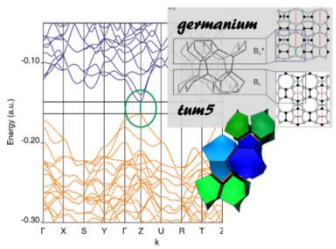
Predicted Siliconoids by Bridging Si_9 *Clusters through* sp^3*-Si Linkers*
L.-A. Jantke, T. F. Fässler
Inorganics 6 (2018), 31 (DOI: 10.3390/inorganics6010031)



Radical-Initiated and Thermally Induced Hydrogermylation of Alkenes on the Surfaces of Germanium Nanosheets
H. Yu, T. Helbich, L. M. Scherf, J. Chen, K. Cui, T. F. Fässler, B. Rieger, J. G. C. Veinot
Chem. Mater. 30 (2018), 2274–2280 (DOI: 10.1021/acs.chemmater.7b04974)

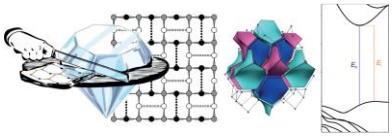


Cover Profile:
Slicing Diamond for more sp^3 *Group 14 allotropes reaching from direct band gaps to poor metals*
L.-A. Jantke, A. J. Karttunen, T. F. Fässler
ChemPhysChem 18 (2017), 1960 (DOI: 10.1002/cphc.201700799)

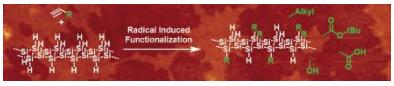


Slicing Diamond for more sp^3 *Group 14 allotropes reaching from direct band gaps to poor metals*
L.-A. Jantke, A. J. Karttunen, T. F. Fässler
ChemPhysChem 18 (2017), 1992–2006 (DOI: 10.1002/cphc.201700290)

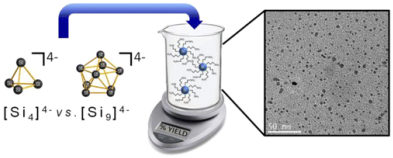
Electrochemical Synthesis of the Allotrope allo-Ge and Investigations on the Use as an Anode Material
L. M Scherf, J. Hattendorf, I. Buchberger, S. Geier, H. A. Gasteiger, T. F. Fässler
J. Mater. Chem. A 5 (2017), 11179–11187 (DOI: 10.1039/C7TA03164E)



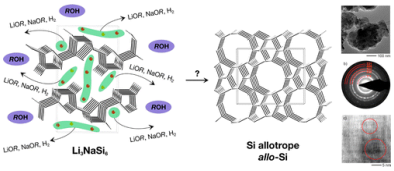
Slicing Diamond – A guide to Deriving sp^3-Si Allotropes
L.-A. Jantke, S. Stegmaier, A. J. Karttunen, T. F. Fässler
Chem. Eur. J. 23 (2017), 2734–2747 (DOI: 10.1002/chem.201603406)



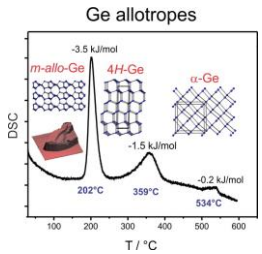
Radical-Induced Hydrosilylation Reactions for the Functionalization of Two-Dimensional Hydride Terminated Silicon Nanosheets
T. Helbich, A. Lyuleeva, I. M. D. Hohlein, P. Marx, L. M. Scherf, J. Kehrle, T. F. Fässler, P. Lugli, B. Rieger
Chem. Eur. J. 22 (2016), 6194–6198 (DOI: 10.1002/chem.201505134)



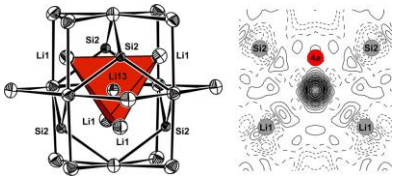
Silicon Nanoparticles by the Oxidation of $[Si_4]^{4-}$- and $[Si_9]^{4-}$-Containing Zintl Phases and Their Corresponding Yield
B. M. Nolan, T. Henneberger, M. Waibel, T. F. Fässler, S. M. Kauzlarich
Inorg. Chem. 54 (2015), 396–401 (DOI: 10.1021/ic5027398)



Alkali metal extraction reactions with the silicides $Li_{15}Si_4$ and Li_3NaSi_6: amorphous Si versus allo-Si
M. Zeilinger, L.-A. Jantke, L. M. Scherf, F. J. Kiefer, G. Neubüser, L. Kienle, A. J. Karttunen, S. Konar, U. Häussermann, T. F. Fässler
Chem. Mater. 26 (2014), 6603−6612 (DOI: 10.1021/cm503371e)



Thermochemistry, Morphology, and Optical Characterization of Germanium Allotropes
J. V. Zaikina, E. Muthuswamy, K. I. Lilova, Z. M. Gibbs, M. Zeilinger, G. J. Snyder, T. F. Fässler,.A. Navrotsky, S. M. Kauzlarich
Chem. Mater. 26 (2014), 3263−3271 (DOI: 10.1021/cm5010467)



Single crystal growth and thermodynamic stability $Li_{17}Si_4$
M. Zeilinger, D. Benson, U. Häussermann, T. F. Fässler
Chem. Mater. 25 (2013), 1960−1967 (DOI: 10.1021/cm400612k)