

LISTE DER VERÖFFENTLICHUNGEN ab 2021

1. W. Schilling, Y. Zhang, P. K. Sahoo, S. K. Sarkar, G. Sivaraman, H. W. Roesky, Shubhik Das
Nature inspired singlet oxygen generation to access the α -amino carbonyl compounds via 1,2-acyl migration
Green Chemistry, **2021**, 23, 379-387
RSC DOI: 10.1039/DOGC03551
Highlighted as hot article
2. Y. Liu, H. Keil, M. Zhong, J. Li, Z. Yang, R. Herbst-Irmer, D. Stalke, H. W. Roesky
MesPX₂/IsPX₂ as Precursors for the Preparation of Phosphasilenes
Eur. J. Inorg. Chem. **2021**, 639–643
<https://doi.org/10.1002/ejic.202000966>
3. Yi Ding, P. N. Ruth, R. Herbst-Irmer, D. Stalke, Z. Yang, H.W. Roesky
Pentamethyl-and 1,2,4-tri(tert-butyl)cyclopentadienyl containing p-block Complexes – differences and similarities
Dalton Trans. **2021**, 50, 2067-2074
4. M. M. Siddiqui, S. K. Sarkar, M. Nazish, M. Morganti, Ch. Köhler, J. Cai, L. Zhao, R. Herbst – Irmer, D. Stalke, G. Frenking, H.W.Roesky
Donor – stabilized antimony(I) and bismuth(I) ions: Heavier valence isoelectronic analogues of carbone
J. Am. Chem. Soc. **2021**, 143, 1301-1306
<https://10.1021/jacs.0c120084>
5. Y. Chen, J. Li, Y. Zhao, L. Zhang, G. Tan, H. Zhu, H.W. Roesky
Stable radical cation and dication of a 1,4-disilabenzene
J. Am. Chem. Soc. **2021**, 143, 2212-2216
<https://dx.doi.org/jacs.0c12908>
6. M. Nazish, M. M. Siddiqui, S. K. Sarkar, A. Münch, C. M. Legendre, R. Herbst-Irmer, D. Stalke, H. W. Roesky
Synthesis and coordination behavior of a new hybrid bidentate ligand with phosphine and silylene donors
Chem. Eur. J. **2021**, 27, 1744 –1752
7. Y. Ding, P. N. Ruth, R. Herbst-Irmer, D. Stalke, Z. Yang, H.W. Roesky
Pentamethyl-and 1,2,4-tri(tert-butyl)cyclopentadienyl containing p-block Complexes – differences and similarities
Dalton Trans. **2021**, 50, 2067-2074
8. S. Banerjee, C. A. Kumar, S. Bose, S. K. Sakar, S.K. Gupta, N. Graw, C. Köhler, R. Herbst- Irmer, D. Stalke, S. Dutta, D. Koley, H. W. Roesky
Preparation and reactivity studies of four and five coordinated amidinate aluminum compounds
Z. Anorg. Allg. Chem. **2021**, 647, 1-10

Publikationen H. W. Roesky ab 2021

9. J. Li, D. J. Goffitzer, M. Xiang, Y. Chen, W. Jiang, M. Diefenbach, H. Zhu, M. C. Holthausen, H. W. Roesky
1-Aza-2,4-disilabicyclo[1.1.0]butanes with superelongated C–N σ-bonds
J. Am. Chem. Soc. **2021**, *143*, 8244–8248
10. M. Nazish, Ch. M. Legendre, S. K. Sarkar, J. Lücke, D. J. Goffitzer, M. Diefenbach, B. Schwederski, R. Herbst-Irmer, D. Stalke, M. C. Holthausen, W. Kaim, H. W. Roesky
Selective Route to stable silicon–boron radicals and their corresponding cations
Inorg. Chem. **2021**, *60*, 10100–10104
11. Y. Fang, Y. Yang, Z. Yang, H. Li, H. W. Roesky
Advances in design of metal-organic frameworks activating persulfate for water decontamination
J. Organometallic Chem. **2021**, 954–955
DOI: 10.1016/j.orgchem.954-955,(2021)
12. B. Zhang, X. Ma, B. Yan, C. Ni, H. Yu, Z. Yang, H.W. Roesky
An efficient catalytic method for Hydrophosphination of Heterocumulenes with diethylzinc as precatalyst without a solvent
Dalton Trans. **2021**, *50*, 15488–15492
13. Y. Ding, S. K. Sarkar, M. Nazish, S. Muhammed, D. Lüert, P. N. Ruth, C. M. Legendre, R. Herbst-Irmer, P. Parameswaran, D. Stalke, Z. Yang H. W. Roesky
Stabilization of reactive nitrene by silylenes without using a reducing metal
Angew. Chem. Int. Ed. **2021**, *60*, 27206–27211
14. C. Ni, X. Ma, Z. Yang, H. W. Roesky
Recent advances in aluminum compounds for catalysis
Europ. J. Inorg. Chem. **2022**, (10), 1–15
<https://doi.org/10.1002/ejic.202100929>
15. A. Kumar, S. Banerjee, N. Sharma, M. Nazish, N. Graw, R. Herbst-Irmer, D. Stalke, U. Lourderaj, H.W. Roesky
Synthesis and computational aspects of Al(II)–Al(II) and Ga(II)–Ga(II) dihalides based on an amidinate scaffold
Dalton Trans. **2022**, *51*, 4898–4902
DOI: 10.1039/d2dt00317a
16. S. K. Kushvaha, A. Mishra, H. W. Roesky, K. C. Mondal
Recent Advances in the Domain of Cyclic (Alkyl)(Amino) Carbenes
Chem. Asian J. **2022**, *17*, 1–48
<https://onlinelibrary.wiley.com/doi/epdf/10.1002/asia.202101301>
17. Yilin Chen, Zhikang Chen, Liuyin Jiang, Jiancheng Li, Yiling Zhao, Hongping, Zhu, Herbert W. Roesky
One- and Two-Electron Transfer Oxidation of 1,4-Disilabenzene with Formation of Stable Radical Cations and Dications
Chem. Eur. J. **2022**, *28*, 1–9
<https://doi.org/10.1002/chem.202103715>

Publikationen H. W. Roesky ab 2021

18. Ekta Nag, Aditya Kulkarni, Sai Manoj, N. V. T. Gorantla, Nico Graw, Maria Francis, Regine Herbst-Irmer, Dietmar Stalke, Herbert W. Roesky, Kartik Chandra Mondal, Sudipta Roy
Fluorescent organo-antimony compounds as precursors for syntheses of redox-active trimeric and dimeric alkali metal antimonides: an insight into electron transfer reduction processes
Dalton Trans. **2022**, 51(5), 1791-1805
<https://pubs.rsc.org/en/content/articlepdf/2022/dt/d1dt03398k>
19. S. Ralbangshi, S. Ghosh, G. Hogarth, Vo.V. Nesterov, Vi. N. Nesterov, M. G. Richmond, S. E. Kabir, H. W. Roesky
Stereochemical control of the diphosphine and alkyne ligands in triruthenium clusters: the effect of reversible CO loss/addition on the ligand distribution in $[\text{Ru}_3(\mu_3\eta^2-\text{PhCCPh})\{\mu\text{-Ph}_2\text{PCH(Me)PPh}_2\}(\text{CO})_{7,8}]$
J. Organomet. Chem. **2022**, 968-969: 122337
<https://doi.org/10.1016/j.jorgchem.2022.122337>
<https://www.sciencedirect.com/science/article/abs/pii/S0022328X22000857>
20. B. Yan, S. Dutta, X. Ma, C. Ni, D. Koley, Z. Yang, H. W. Roesky
Organoaluminum hydrides catalyzed hydroboration of carbonates, esters, carboxylic acids and carbon dioxide
Dalton Trans. **2022**, 51, 6756-6765
DOI: 10.1039/D2DT00785A
21. S. Kumar Sarka, S. Kundu, M. Nazish, J. Kretsch, R. Herbst-Irmer, D. Stalke, Parameswaran Parvathy; Pattiyl Parameswaran, H. W. Roesky
A carbene-stabilized boryl-phosphinidene
Chemistry – A European Journal **2022**, 28,e202200913
DOI: 10.1002/chem.202200913
22. M. Nazish, Y. Ding, C. M. Legendre, A. Kumar, N. Graw, B. Schwederski, R. Herbst-Irmer, P. Parvathy, P. Parameswaran, D. Stalke, W. Kaim, H. W. Roesky
Excellent yield of a variety of silicon-boron radicals and their reactivity
Dalton Trans. **2022**, 51, 11040-11047
23. M. Nazish, H. Bai, M. Legendre, R. Herbst-Irmer, L. Zhao, D. Stalke, H.W. Roesky
A neutral vicinal silylene/phosphane supported six-membered C_2PSiAu_2 ring and a silver(I) complex
Chem. Commun. **2022**, 12704-12707
24. B. Wang, Y. Zhuang, D. Tu, L. Shen, Zheng-Feng Zhang, Ming-Der Su, Yan Li, Di Wu, H. W. Roesky
Deoxygenation Reduction of CO_2 by $[\text{Cp}^+\text{Al}_4]$ to form $(\text{Al}_3\text{O}_2\text{C})_2$ cluster featuring two ketene moieties
Inorg.Chem. **2022**, 61,14500-14506
25. Y. Ding, S. K. Sarkar, M. Nazish, P. Niklas Ruth, R. Herbst-Irmer, S. Muhammed, P. Parameswaran, D. Stalke, H. W. Roesky
Insertion Reaction of Me_3SiN_3 with Bis(germylene)
Inorg. Chem. **2022**, 61, 19067-19074
<https://doi.org/10.1021/acs.inorgchem.2c02252>.

Publikationen H. W. Roesky ab 2021

26. M.L. Bhowmik, Md. Abdullah Al Mamun, S. Ghosh, V. N. Nesterov, M.G. Richmond, Shariff E. Kabir, H. W. Roesky
Polynuclear ruthenium clusters containing stibine, stibene, and stibnidene ligands
J. Organomet. Chem. **2023**, 948, 122574
<https://doi.org/10.1016/j.jorgchem.2022.122574>
27. F. Islam, Md. Sohag Hasan, S. Ghosh, M.G. Richmond, S. E. Kabir, H. W. Roesky
Reactions of diphosphine-stabilized Os₃ clusters with triphenylantimony: syntheses and structures of new antimony-containing Os₃ clusters via Sb-Ph bond cleavage
RSC.Adv. **2023**, 13, 2841-2851
28. S.C. Huo, Yao Li, Peng-Fei Ji, De-Xiang Zhang, Zhi-Jiao Zhang, Ying Yang, H. W. Roesky
β-Diketiminate Aluminum dihydride is a valuable precursor for the preparation of acyclic and cyclic systems
Z. Anorg.Allg. Chem. **2023**, 649, e202200279
<https://onlinelibrary.wiley.com/doi/10.1002/zaac.202200279>
29. M. Nazish, C. M. Legendre, N. Graw, R. Herbst-Irmer, D. Stalke, S. Sankar Dutta, Upakarasamy, Lourderaj, H. W. Roesky
Coordination and stabilization of a lithium ion with a silylene
Chem.Eur. J. **2023**, e202203528
30. M. Nazish, C. M. Legendre, N. Graw, R. Herbst- Irmer, Shahila Muhammed, Pattiyl Parameswaran, D. Stalke, H. W. Roesky
Compounds with alternating single and double bonds of antimony and silicon; isoelectronic to ethane-1,2-diimine
Inorg.Chem. **2023**, 62, 24, 9306-9313
31. M. Nazish, A. Harinath, D. Lüert, C. Köhler, R. Herbst- Irmer, D. Stalke, H.W. Roesky
Reactivity of silylene with gallium- and boron trihalide at reductive conditions resulting in unforeseen products
Chem. Eur. J. **2023**, e 202300310
32. Yi Ding, M. Nazish, P.N. Ruth, R. Herbst-Irmer, D. Stalke, H.W.Roesky
One silicon atom of bis(silylene) functions as a selective Lewis base under adduct formation with a Lewis acid
Dalton Trans. **2023**, 52, 6175-6179
33. Shuai-Cong Huo, Yao Li, De-Xiang, Qi Zhou, Ying Yang, H.W. Roesky
Synthesis, characterization, and reaction of digermylenes
Chem. Asian J. **2022**, 17, e202200141
34. M. Nazish, Han Bai, C. M. Legendre, R. Herbst-Irmer, Lili Zhao, D. Stalke, H.W. Roesky
A neutral silylene/phosphane supported six-membered C₂PSiAu₂ ring and a silver(I) complex
Chem. Commun. **2022**, DOI:10.1039/d2cc04163d

Publikationen H. W. Roesky ab 2021

35. M. Nazish, C. M. Legendre, R. Herbst-Irmer, S. Muhammed, P. Parameswaran, D. Stalke, H.W. Roesky
Synthesis and Characterization of substituted Phosphasilenes and its rare homologue stibasilene Si=Sb-
Chem.Eur. J. **2023**, e202300791 (1 of 5)
36. Shuai-Cong Hua, Yao Li, Peng-Fei Ji, De-Xiang, Ying Yang, H.W. Roesky
Interaction of germanium analogue of organic isonitrile with Cu(I) imide in side-on-mode
Dalton Trans. **2023**, 52, 10672-10676
37. A. Kumar, K. Yadav, N. Graw, M. K. Pandey, R. Herbst – Irmer, U. Lourderaj, D. Stalke, H.W.Roesky
[2+4] Cycloaddition product of an amidinate substituted dialumene with Toluene
Chem. Eur. J. **2023**, 29, e202300546
38. M. Asif Ansari, M. Ansari, M. K. Pandey, C. Köhler, R. Herbst-Irmer, D. Stalke, H.W. Roesky
Divers reactivity of bis(silylene and bis(germylene) [LE-LE (E=Si and Ge: L= PhC(NtBu)₂) in the oxidative activation of C-F bond: Si-Si bond has retained while the Ge-Ge bond is cleaved
Europ. J. Inorg. Chem. **2023**, 26, 10.1002/ejic.202300209. <https://doi.org/10.1002/ejic.202300209>