

## Dr. Robin Haunschild – list of publications

### **Publications regarding scientometrics:**

49. R. Haunschild, L. Bornmann, and W. Marx, „Climate change research in view of bibliometrics”, *PLoS One* (in press, 2016), arXiv preprint: arXiv:1602.03834.
48. R. Haunschild, „Alternative Metriken in der Forschungsbewertung”, *Laborjournal*, **7-8**, 40-43 (2016).
47. L. Bornmann and R. Haunschild, „Normalization of Mendeley reader impact on the reader- and paper-side: A comparison of the mean discipline normalized reader score (MDNRS) with the mean normalized reader score (MNRS) and bare reader counts”, *Journal of Informetrics*, **10**, 776-788 (2016).
46. L. Bornmann and R. Haunschild, „Efficiency of research performance and the glass researcher”, *Journal of Informetrics*, **10**, 652-654 (2016).
45. R. Haunschild, H. Schier, and L. Bornmann, „Proposal of a minimum constraint for indicators based on means or averages”, *Journal of Informetrics*, **10**, 485 (2016).  
L. Bornmann and R. Haunschild, „How to normalize Twitter counts? A first attempt based on journals in the Twitter Index”, *Scientometrics* (in press, 2016), DOI: 10.1007/s11192-016-1893-6 (open access).
44. L. Bornmann, J. Bauer, and R. Haunschild, „Distribution of women and men among highly cited scientists”, *J. Assoc. Inform. Science Tech.*, **66**, 2715 (2016).
43. L. Bornmann and R. Haunschild, „Relative Citation Ratio (RCR): An empirical attempt to study a new field-normalized bibliometric indicator”, *J. Assoc. Inform. Science Tech.*, in press (2016).
42. R. Haunschild and L. Bornmann, „Proposal of using scaling for calculating field-normalized citation scores”, *Profesional de la Informacion*, **25**, 11 (2016).
41. R. Haunschild and L. Bornmann, „Normalization of reader impact for Mendeley reader statistics”, *Journal of Informetrics*, **10**, 62 (2016).
40. R. Haunschild, L. Bornmann, and L. Leydesdorff, „Networks of reader and country status: An analysis of Mendeley reader statistics”, *PeerJ Computer Science*, 32 (2015), open access.

39. L. Bornmann, W. Marx, and R. Haunschild, „Assessment Related to Journals: Peer Review and (Alternative) Metrics” in „Publishing in the Academic World” edited by Ciaran Sugrue and Sefika Martkan, in press (2016).
38. R. Haunschild, „Review about ‘Beyond Bibliometrics: Harnessing Multidimensional Indicators of Scholarly Impact’” *J. Scientometric Research*, **4**, 40 (2015).
37. L. Bornmann and R. Haunschild, „Overlay maps based on Mendeley data: The use of altmetrics for readership networks”, *J. Assoc. Inform. Science Tech.*, in press (2015).
36. R. Haunschild, M. Stefaner, and L. Bornmann, „Who publishes, reads, and cites papers? An analysis of country information”, *ISSI contribution* (2015).
35. R. Haunschild and L. Bornmann, „F1000Prime: an analysis of discipline-specific reader data from Mendeley”, *F1000Research*, **4**, 41 (2015).
34. L. Bornmann and R. Haunschild, „Which people use which scientific papers? An evaluation of data from F1000 and Mendeley”, *J. Informetrics*, **9**, 477 (2015).
33. R. Haunschild and L. Bornmann, „Criteria for Nature Index questioned”, *Nature*, **517**, 21 (2015).
32. R. Haunschild and L. Bornmann, „Discussion about the new Nature Index”, *Scientometrics*, **102**, 1829 (2015).
31. L. Bornmann and R. Haunschild, „The interest of the scientific community in expert opinions from journal peer review procedures”, *Scientometrics*, **102**, 2187 (2015).

## **Publications regarding theoretical chemistry:**

30. R. Haunschild, „Theoretical Study on the Reaction Mechanism of Carbon Dioxide Reduction to Methanol Using a Homogeneous Ruthenium(II) Phosphine Catalyst” *Polyhedron*, **85**, 543 (2015).
29. K. D. Vogiatzis, R. Haunschild und W. Klopper, „Accurate atomization energies from combining coupled-cluster computations with interference-corrected explicitly-correlated second-order perturbation theory”, *Theor. Chem. Acc.* **133**, 1446 (2014).
28. B. Xiao, J. Sun, A. Ruzsinszky, J. Feng, R. Haunschild, G. E. Scuseria und J. P. Perdew, „Testing Density Functionals for Structural Phase Transitions of Solids under Pressure: Si, SiO<sub>2</sub> and Zr”, *Phys. Rev. B* **88**, 184103 (2013).

27. J. Sun, B. Xiao, Y. Fang, R. Haunschild, P. Hao, A. Ruzsinszky, G. I. Csonka, G. E. Scuseria und J. P. Perdew, „Density Functionals that Recognize Covalent, Metallic, and Weak Bonds”, *Phys. Rev. Lett.* **111**, 106401 (2013).
26. R. Haunschild, L. Cheng, D. Mukherjee und W. Klopper, „Communication: Extension of a universal explicit electron correlation correction to general complete active spaces“, *J. Chem. Phys.* **138**, 212101 (2013).
25. J. Sun, R. Haunschild, B. Xiao, I. W. Bulik, G. E. Scuseria, and J. P. Perdew, „Semilocal and Hybrid Meta-Generalized Gradient Approximations Based on the Understanding of the Kinetic-Energy-Density Dependence“, *J. Chem. Phys.* **138**, 044113 (2013).
24. R. Haunschild und W. Klopper, „Erratum to: Theoretical reference values for the AE6 and BH6 test sets from explicitly correlated coupled-cluster theory“, *Theor. Chem. Acc.* **132**, 1306 (2013).
23. R. Haunschild, J. P. Perdew, and G. E. Scuseria, „Insensitivity of the error of the minimally empirical hybrid functional revTPSSh to its parameters“, *J. Chem. Phys.* **137**, 224104 (2012).
22. M. Odashima, R. Haunschild, G. E. Scuseria, J. P. Perdew und K. Capelle, „Non-empirical hyper-GGA based on a tighter Lieb-Oxford bound“, *J. Chem. Phys.* **136**, 184102 (2012).
21. R. Haunschild und W. Klopper, „New accurate reference energies for the G2/97 test set“, *J. Chem. Phys.* **136**, 164102 (2012).
20. R. Haunschild, S. Mao, D. Mukherjee und W. Klopper, „A universal explicit electron correlation correction applied to Mukherjee’s multi-reference perturbation theory“, *Chem. Phys. Lett.* **531**, 247 (2012).
19. R. Haunschild und W. Klopper, „Theoretical reference values for the AE6 and BH6 test sets from explicitly correlated coupled-cluster theory“, *Theor. Chem. Acc.* **131**, 1112 (2012).
18. R. Haunschild, T. M. Henderson, C. A. Jiménez-Hoyos und G. E. Scuseria, „Many-electron self-interaction and spin polarization errors in local hybrid density functionals“, *J. Chem. Phys.* **133**, 134116 (2010).

17. R. Haunschild und G. E. Scuseria, „Range-separated local hybrids”, *J. Chem. Phys.* **132**, 224308 (2010).
16. R. Haunschild, B. G. Janesko und G. E. Scuseria, „Range-separated local hybrid density functional approximations based on Gaussian-type mixing functions”, *Abstracts of Papers of the Am. Chem. Soc.* **239**, COMP-194 (2010).
15. M. A. Celik, R. Haunschild und G. Frenking, „Quantum Chemical Study on Ethylene Addition to  $(O)_2Os(NH)_2$  and  $(O)_2Os(NH)$ -cyclo-( $NHCH_2CH_2HN$ ) as Model Complexes for the Osmium-Catalyzed Aminohydroxylation of Olefins”, *Organometallics* **29**, 1560 (2010).
14. R. Haunschild, B. G. Janesko und G. E. Scuseria, „Local hybrids as a perturbation to global hybrid functionals”, *J. Chem. Phys.* **131**, 154112 (2009).
13. C. Goedecke, P. Hillebrecht, T. Uhlemann, R. Haunschild und G. Frenking, „Bonding Analysis of Neutral Donor Acceptor Complexes of non-chelating  $EX_3$  and  $M(PMe_3)_2$ ,  $E = B, Al, Ga, In, Tl; X = H, F, Cl, Br, I$  and  $M = Ni, Pd, Pt$ ”, *Can. J. Chem.* **87**, 1470 (2009).
12. R. Haunschild und G. Frenking, „Comparative Theoretical Study of [3+2] and [2+2] Cycloadditions of Ethylene and  $WXYMe_2$ ;  $X, Y = (=O), (=NH), (=CH_2)$ ”, *J. Organomet. Chem.* **694**, 4090 (2009).
11. R. Haunschild und G. Frenking, „Tetrahedrane. A theoretical study of singlet  $E_4H_4$  molecules ( $E = C-Pb$  and  $B-Tl$ )”, *Mol. Phys.* **107**, 911 (2009).
10. R. Haunschild, S. Tüllmann, G. Frenking und M. C. Holthausen, „Ethylene Addition to  $Ru(=CH_2)(=O)_3$  A Theoretical Study”, *J. Organomet. Chem.* **694**, 1081 (2009).
9. F. E. Hahn, A. V. Zabula, T. Pape, A. Hepp, R. Tonner, R. Haunschild und G. Frenking, „ $\pi$ -Bonding in Complexes of Benzanulated Biscarbenes, -germylenes and -stannylenes: An Experimental and Theoretical Study”, *Chem. Eur. J.* **14**, 10716 (2008).
8. R. Haunschild und G. Frenking, „Theoretical Studies of Organometallic Compounds. Ethylene Addition to Group-9 Transition Metal Dioxo Compounds A Quantum Chemical Study”, *Z. Anorg. Allg. Chem.* **634**, 2145 (2008).

7. R. Haunschild und G. Frenking, „Quantum Chemical Study of Ethylene Addition to Group-7 Transition Metal Oxo Complexes”, *J. Organomet. Chem.* **693**, 3627 (2008).
6. R. Haunschild, „Quantenchemische Untersuchungen von Ethylenadditionen an hochvalente Übergangsmetallkomplexe der Gruppen 6 bis 9”, Dissertation, *ibidem*-Verlag, ISBN 978-3-89821-889-4, Stuttgart (2008).
5. R. Haunschild und G. Frenking, „Ethylene Addition to Group-6 Transition Metal Oxo Complexes – A Theoretical Study”, *J. Organomet. Chem.* **693**, 737 (2008).
4. R. Haunschild und G. Frenking, „Theoretical Study of Ethylene Addition to  $O=W(=CH_2)(CH_3)_2$ ”, *Z. Naturforsch.* **62b**, 367 (2007).
3. R. Haunschild, C. Loschen, S. Tüllmann, D. Cappel, M. Hölscher, M. C. Holthausen und G. Frenking, „Theoretical studies of ethylene addition to transition metal compounds with carbene and oxo groups  $L_nM(=CH_2)(=O)$ ”, *J. Phys. Org. Chem.* **20**, 11 (2007).
2. R. Haunschild, „Semiempirische Untersuchungen von Lösungsmittelleffekten mit Hilfe des asymptotischen Dichtemodells”, *ibidem*-Verlag, ISBN 3-89821-888-0, Stuttgart (2005).
1. R. Haunschild, „Quantenchemische Untersuchungen an Metallocenverbindungen”, *ibidem*-Verlag, ISBN 3-89821-335-8, Stuttgart (2004).