List of Publications

Prof. Dr. Hans-Peter Steinrück
Physical Chemistry, University Erlangen-Nürnberg, Germany

Publications in Peer-Reviewed Journals

1) H.-P. Steinrück, A. Winkler, K. D. Rendulic
Angle-resolved thermal desorption spectra for CO and H_2 from Ni(111), Ni(110) and polycrystalline nickel
J. Phys. C 17 (1984) L311-L316.

2) H.-P. Steinrück, A. Winkler, K. D. Rendulic
An accurate technique to measure angle-resolved flash desorption spectra
Surf. Sci. 152-153 (1985) 323-327.

3) H.-P. Steinrück, K. D. Rendulic, A. Winkler
The sticking coefficient of H_2 on Ni(111) as a function of particle energy and angle of incidence: A test of detailed balancing
Surf. Sci. 154 (1985) 99-108.

4) H.-P. Steinrück, M. Luger, A. Winkler, K. D. Rendulic
Adsorption probabilities of H_2 and D_2 on various flat and stepped nickel surfaces
Phys. Rev. B 32 (1985) 5032-5037.

5) H. Karner, M. Luger, H.-P. Steinrück, A. Winkler, K. D. Rendulic
Features of hydrogen adsorption on a Ni(997) surface
Surf. Sci. Lett. 163 (1985) L641-L644.

6) H.-P. Steinrück and K. D. Rendulic
A test of capillary array beam sources for very large Knudsen numbers
Vacuum 36 (1986) 213-215.

7) H.-P. Steinrück, M. P. D'Evelyn, R. J. Madix
The role of defects in the dissociative adsorption of CO on Ni(100)
Surf. Sci. Lett. 172 (1986) L561-L567.

8) H.-P. Steinrück, A. V. Hamza, R. J. Madix
A molecular beam investigation on the kinetic energy dependence of the activation of ethane on the reconstructed Ir(110)-(1x2) surface
Surf. Sci. Lett. 173 (1986) L571-L575.

9) A. V. Hamza, H.-P. Steinrück, R. J. Madix
Activation of n-butane with translational energy on Ir(110)-(1x2)
J. Chem. Phys. 85 (1986) 7494-7495.

10) M. P. D'Evelyn, H.-P. Steinrück, R. J. Madix
Precursors and trapping in the molecular chemisorption of CO on Ni(100)
Surf. Sci. 180 (1987) 47-76.

11) A. V. Hamza, H.-P. Steinrück, R. J. Madix
The dynamics of the dissociative adsorption of alkanes on Ir(110)
J. Chem. Phys. 86 (1987) 6506-6514.

12) H.-P. Steinrück and R. J. Madix
The interaction of CO and Ar molecular beams with Ir(110)
Surf. Sci. 185 (1987) 36-52.

13) K. D. Rendulic, A. Winkler, H.-P. Steinrück
The role of surface defects in the adsorption and desorption of hydrogen on Ni(111)
Surf. Sci. 185 (1987) 469-478.

14) A. V. Hamza, H. P. Steinrück, R. J. Madix
The dynamics of alkane activation on Ni(100) and Ir(110)
J. Vac. Sci. Technol. A 5 (1987) 520-521.

15) D. Coulman, A. Puschmann, W. Wurth, H.-P. Steinrück, D. Menzel
Highly efficient dissociation of condensed and adsorbed water via core-to-bound excitation
Chem. Phys. Lett. 148 (1988) 371-376.

16) H.-P. Steinrück, C. Schneider, P. A. Heimann, T. Pache, E. Umbach, D. Menzel
Electronic structure and orientation of NO on Ni(111) studied by ARUPS using synchrotron radiation
Surf. Sci. 208 (1989) 136-154.

17) P. A. Heimann, P. Jakob, T. Pache, H.-P. Steinrück, D. Menzel
Benzene coadsorbed with CO and NO on Ru(001): I. A UPS study with synchrotron radiation
Surf. Sci. 210 (1989) 282-300.

18) W. Huber, H.-P. Steinrück, T. Pache, D. Menzel
The electronic structure and molecular symmetry of pure benzene and benzene coadsorbed with CO on Ni(111)
Surf. Sci. 217 (1989) 103-126.

19) H.-P. Steinrück, W. Huber, T. Pache, D. Menzel
The adsorption of benzene mono- and multilayers on Ni(111) studied by TPD and LEED
Surf. Sci. 218 (1989) 293-316.

20) T. Pache, H.-P. Steinrück, W. Huber, D. Menzel
The adsorption of H_2O on clean and oxygen precovered Ni(111) studied by ARUPS and TPD
Surf. Sci. 224 (1989) 195-214.

21) H.-P. Steinrück, P. Heimann, W. Huber, P. Jakob, T. Pache, D. Menzel
Electronic structure, orientation and symmetry of benzene and benzene coadsorbed with CO and NO on Ni(111) and Ru(001)
J. Electron Spectrosc. Relat. Phenom. 52 (1990) 91-102.

22) H.-P. Steinrück, T. Pache, W. Huber
A low coverage study of NO on Ni(111) by angle resolved Auger electron spectroscopy at resonant excitation
Phys. Scr. 41 (1990) 177-180.

23) C. Schneider, H.-P. Steinrück, T. Pache, P. A. Heimann, D. J. Coulman, E. Umbach, D. Menzel
A comparative study of the electronic structure of CO, CO + K, NO and NO + K on Ni(111) by ARUPS using synchrotron radiation
Vacuum 41 (1990) 730-731.

24) D. Coulman, A. Puschmann, U. Höfer, H.-P. Steinrück, W. Wurth, P. Feulner, D. Menzel
Excitation, deexcitation, and fragmentation in the core region of condensed and adsorbed water
J. Chem. Phys. 93 (1990) 58-75.

25) W. Huber, P. Zebisch, T. Bornemann, H.-P. Steinrück
Electronic structure of cyclohexane on Ni(111)
Surf. Sci. 239 (1990) 353-362.

26) P. Zebisch, W. Huber, H.-P. Steinrück
Changes in the adsorption and desorption behavior of cyclohexane and benzene on Ni(111) induced by a monoatomic potassium layer
Surf. Sci. 244 (1991) 185-196.

27) W. Huber, M. Weinelt, P. Zebisch, H.-P. Steinrück
Azimuthal reorientation of adsorbed molecules induced by lateral interactions: benzene/Ni(110)
Surf. Sci. 253 (1991) 72-98.

28) T. Bornemann, H.-P. Steinrück, W. Huber, K. Eberle, M. Glanz, D. Menzel
The adsorption of H_2O on K precovered Ni(111) studied by ARUPS and TPD
Surf. Sci. 254 (1991) 105-118.

29) J. Eiding, W. Domcke, W. Huber, H.-P. Steinrück
Jahn-Teller effect of the $2e_{2g}$ level of chemisorbed benzene
Chem. Phys. Lett. 180 (1991) 133-138.
ERRATUM: Chem. Phys. Lett. 191 (1992) 203.

30) P. Zebisch, W. Huber, H.-P. Steinrück
On the formation of mixed ordered structures in the coadsorption system benzene + NO on Ni(111)
Surf. Sci. 258 (1991) 1-15.

31) W. Huber, P. Zebisch, T. Bornemann, H.-P. Steinrück
Lateral interactions and azimuthal orientation of pure and coadsorbed benzene layers on Ni(111)
Surf. Sci. 258 (1991) 16-22.

32) D. Menzel, G. Rocker, H.-P. Steinrück, D. Coulman, P. A. Heimann, W. Huber, P. Zebisch, D. R. Lloyd
Core excitation, decay, and fragmentation in solid benzene as studied by x-ray absorption, resonant Auger, and photon stimulated desorption
J. Chem. Phys. 96 (1992) 1724-1734.

33) M. Weinelt, W. Huber, P. Zebisch, H.-P. Steinrück, B. Reichert, U. Birkenheuer, N. Rösch
Ethylene adsorbed on Ni(110): An experimental and theoretical determination of the two-dimensional band structure
Phys. Rev. B 46 (1992) 1675-1686.

34) M. Weinelt, W. Huber, P. Zebisch, H.-P. Steinrück, M. Pabst, N. Rösch
The electronic structure of ethylene on Ni(110): an experimental and theoretical study
Surf. Sci. 271 (1992) 539-554.

35) M. Weinelt, P. Zebisch, H.-P. Steinrück
A multimethod-investigation of the adsorption of ethylene oxide on Ni(110)
Surf. Sci. 287-288 (1993) 471-475.

36) M. Mauerer, P. Zebisch, M. Weinelt, H.-P. Steinrück
Resonant excitation and decay of core holes in condensed layers of furan and pyrrole
J. Chem. Phys. 99 (1993) 3343-3352.

37) M. Weinelt, P. Zebisch, H.-P. Steinrück
Ethylene oxide on Pt(110)1x2. A multimethod investigation
Chem. Phys. 177 (1993) 321-336.
INVITED contribution to Special Issue on "Molecules at Surfaces: Electronic Structure and Dynamics"

38) P. Zebisch, M. Weinelt, H.-P. Steinrück
Sulphur dioxide adsorption on the Ni(110) surface
Surf. Sci. 295 (1993) 295-305.

39) H.-P. Steinrück
Angle-resolved UV-photoelectron spectroscopy
Vacuum 45 (1994) 715-731.
INVITED contribution to Special Edition on "Modern Methods of Surface Science and Analysis"

40) M. Zharnikov, D. Mehl, M. Weinelt, P. Zebisch, H.-P. Steinrück
Photoelectron diffraction and holography of clean and sulphur-covered Ni(110)
Surf. Sci. 306 (1994) 125-143.

41) M. Zharnikov, D. Mehl, M. Weinelt, P. Zebisch, H.-P. Steinrück
Holographic reconstruction of Pt(110) using multiple wave number photoelectron diffraction patterns
Surf. Sci. 312 (1994) 82-96.

42) M. Zharnikov, D. Mehl, H.-P. Steinrück
Multiple surface plasmon excitations in overlayers of K and Na on Ru(001)
J. Electron Spectrosc. Relat. Phenom. 70 (1994) 103-116.

43) H.-P. Steinrück
Angle resolved UV photoelectron spectroscopy of ethylene and benzene on nickel
Appl. Phys. A 59 (1994) 517-529.
INVITED contribution.

44) M. Zharnikov, M. Weinelt, P. Zebisch, M. Stichler, H.-P. Steinrück
First experimental determination of an adsorption site using multiple wave number photoelectron diffraction patterns
Phys. Rev. Lett. 73 (1994) 3548-3551.

45) P. Ulbricht, O. D. Häberlen, M. Weinelt, H.-P. Steinrück, N. Rösch
The photoelectron spectrum of ethylene oxide adsorbed at metal surfaces: a density functional model cluster study of C_2H_4O/Ni(110)
Surf. Sci. 326 (1995) 53-58.

46) H.-P. Steinrück, F. Pesty, L. Zhang, T. E. Madey
Ultrathin films of Pt on TiO_2(110): Growth and chemisorption-induced surfactant effects
Phys. Rev. B 51 (1995) 2427-2439.

47) M. Zharnikov, M. Weinelt, P. Zebisch, M. Stichler, H.-P. Steinrück
Holography of clean and sulphur-covered Ni(111) using multiple wave number photoelectron diffraction patterns
Surf. Sci. 334 (1995) 114-134.

48) M. Weinelt, W. Huber, P. Zebisch, H.-P. Steinrück, P. Ulbricht, U. Birkenheuer, J. C. Boettger, N. Rösch
The adsorption of acetylene on Ni(110): An experimental and theoretical study
J. Chem. Phys. 102 (1995) 9709-9724.

49) F. Pesty, H.-P. Steinrück, T. E. Madey
Thermal stability of Pt films on TiO_2(110): evidence for encapsulation
Surf. Sci. 339 (1995) 83-95.

50) M. Weinelt, P. Trischberger, W. Widdra, K. Eberle, P. Zebisch, S. Gokhale, D. Menzel, J. Henk, R. Feder, H. Dröge, H.-P. Steinrück
One-dimensional band structures: Rare gases on Pt(110)1x2
Phys. Rev. B 52 (1995) R17048-R17051.

51) M. Stichler, P. Zebisch, M. Weinelt, H.-P. Steinrück
Argon desorption as a tool to study the growth of molecular layers
Surf. Sci. 348 (1996) 370-378.

52) M. Zharnikov, M. Weinelt, P. Zebisch, H.-P. Steinrück
Surface structure characterization by photoelectron holography
Thin Solid Films 275 (1996) 266-269.

53) H.-P. Steinrück
Angle-resolved photoemission studies of adsorbed hydrocarbons
J. Phys. Condens. Matter 8 (1996) 6465-6509.
INVITED Topical Review article.

54) P. Zebisch, M. Stichler, P. Trischberger, M. Weinelt, H.-P. Steinrück
Adsorption and thermal evolution of SO_2 on the Pt(110) surface
Surf. Sci. 371 (1997) 235-244.

55) F. Maier, S. Kneitz, H. Koschel, H.-P. Steinrück
A simple design for a helium scattering apparatus
Surf. Sci. 377-379 (1997) 1101-1105.

56) P. Trischberger, H. Dröge, S. Gokhale, J. Henk, H.-P. Steinrück, W. Widdra, D. Menzel
One-dimensional xenon band structures on hydrogen modified and stepped platinum surfaces
Surf. Sci. 377-379 (1997) 155-159.

57) W. Schmidt, P. Kummeth, R. Nies, R. Schmid, B. Seebacher, H.-P. Steinrück, H.-W. Neumüller
Preparation of switching elements for a resistive type HTS fault current limiter
Inst. Phys. Conf. Ser. 158 (1997) 1247-1250.

58) G.Held, J.Schuler, W.Sklarek, H.-P.Steinrück
Determination of adsorption sites of pure and coadsorbed CO on Ni(111) by high resolution X-ray photoelectron spectroscopy
Surf. Sci. 398 (1998) 154-171.

59) P.Zebisch, M.Stichler, P.Trischberger, M.Weinelt, H.-P. Steinrück
Tilted adsorption of benzene on Pt(110)1x2
Surf. Sci. 396 (1998) 61-77.

60) M. Th. Litz, F. Fischer, H.-J. Lugauer, M. Keim, U. Zehnder, W. Ossau, Th. Gerhard, R. Gall, A. Waag, G. Landwehr, M. Nagelstraßer, H.-P. Steinrück, Th. Walter, D. Gerthsen
Be-chalcogenides - heteroepitaxy and interface properties
Appl. Surf. Sci. 123-124 (1998) 429-434.

61) M. Nagelstraßer, H. Dröge, F. Fischer, T. Litz, A. Waag, G. Landwehr, H.-P. Steinrück
Photoelectron spectroscopy of molecular-beam epitaxially grown BeTe/ZnSe and BeTe/GaAs heterostructures
J. Cryst. Growth 184-185 (1998) 173-177.

62) H. Dröge, A. Fleszar, H.-P. Steinrück
REELS measurements on a CdTe(100) surface
J. Cryst. Growth 184-185 (1998) 208-212.

63) G. Held, W. Sklarek, M. Mayan, H.-P.Steinrück
Characterization of thin copper films on Ni(111) by CO titration
Surf. Sci. 402-404 (1998) 322-326.

64) M. Nagelstraßer, H. Dröge, F. Fischer, T. Litz, A. Waag, G. Landwehr, H.-P. Steinrück
Band discontinuities and local interface composition in BeTe/ZnSe heterostructures
J. Appl. Phys. 83 (1998) 4253-4257.

65) S. Gokhale, P. Trischberger, D. Menzel, W. Widdra, H. Dröge, H.-P. Steinrück, U. Birkenheuer, U. Gutdeutsch, N. Rösch
Electronic structure of benzene adsorbed on single domain Si(001)-(2x1): A combined experimental and theoretical study
J. Chem. Phys. 108 (1998) 5554-5564.

66) M. Nagelstraßer, H. Dröge, H.-P. Steinrück, F. Fischer, T. Litz, A. Waag, G. Landwehr, A. Fleszar, W. Hanke
Band structure of BeTe: A combined experimental and theoretical study
Phys. Rev. B 58 (1998) 10394-10400.

67) H. Koschel, G. Held, P. Trischberger, W. Widdra, U. Birkenheuer, H.-P. Steinrück
Electronic Properties of a Pseudomorphic Cu-Layer on Ni(111)
Appl. Surf. Sci. 142 (1999) 18-22.

68) W. Sklarek, G. Held, C. Ammon, H.-P. Steinrück
The growth of ultrathin Cr films on benzene-covered Ni(111)
Appl. Surf. Sci. 142 (1999) 327-331.

69) S. Kneitz, J. Gemeinhardt, H. Koschel, G. Held, H.-P. Steinrück
Energy and temperature dependent sticking coefficients of CO on ultrathin copper layers on Ru(001)
Surf. Sci. 433-435 (1999) 27-31.

70) H. Dröge, A. Fleszar, W. Hanke, M. Sing, M. Knupfer, J. Fink, F. Goschenhofer, C. R. Becker, R. Kargerbauer, H.-P. Steinrück
Complex loss function of CdTe
Phys. Rev. B 59 (1999) 5544-5550.

71) H. Koschel, G. Held, P. Trischberger, W. Widdra, H.-P. Steinrück
Benzene adsorption on a pseudomorphic Cu monolayer on Ni(111) - a combined TPD and ARUPS study
Surf. Sci. 437 (1999) 125-136.

72) S. Kneitz, J. Gemeinhardt, H.-P. Steinrück
A molecular beam study of the adsorption dynamics of CO on Ru(0001), Cu(111) and a pseudomorphic Cu monolayer on Ru(0001)
Surf. Sci. 440 (1999) 307-320.

73) H. Koschel, G. Held, H.-P. Steinrück
The orientation of benzene on bimetallic surfaces
Surf. Rev. Lett. 6 (1999) 893-901.

74) H. Koschel, G. Held, H.-P. Steinrück
Electronic structure and orientation of benzene adsorbed on a pseudomorphic Cu monolayer on Ru(0001)
Surf. Sci. 454-456 (2000) 83-87.

75) H. Dröge, M. Nagelstraßer, J. Nürnberger, W. Faschinger, A. Fleszar, H.-P. Steinrück
The electronic band structure of ZnSe(100)
Surf. Sci. 454-456 (2000) 477-482.

76) H. Koschel, G. Held, H.-P. Steinrück
The growth of thin Cu layers on Ni(111) studied by CO titration and photoelectron spectroscopy
Surf. Sci. 453 (2000) 201-213.

77) W. Braun, G. Held, H.-P. Steinrück, Ch. Stellwag, D. Menzel
Coverage-dependent changes in the adsorption geometries of ordered benzene layers on Ru(0001)
Surf. Sci. 475 (2001) 18-36.

78) Th. Gleim, C. Heske, E. Umbach, C. Schumacher, W. Faschinger, Ch. Ammon, M. Probst, H.-P. Steinrück
Reduction of the ZnSe/GaAs(100) Valence Band Offset by a Te Interlayer
Appl. Phys. Lett. 78 (2001) 1867-1869.

79) H. Koschel, U. Birkenheuer, G. Held, H.-P. Steinrück
Correlation between chemical properties and electronic structure of pseudomorphic Cu monolayers on Ni(111) and Ru(0001)
Surf. Sci. 477 (2001) 113-125.

80) M. Probst, M. Voß, R. Denecke, L. Viscido, J. M. Heras, D. Borgmann, H.-P. Steinrück
Electron spectroscopic studies of vapor-deposited Co layers on MoO_3 surfaces
J. Electron Spectrosc. Relat. Phenom. 114-116 (2001) 539-544.

81) J. Pantförder, R. Domnick, Ch. Ammon, G. Held, H.-P.Steinrück
Formation of a new type of chromium oxide by deposition of chromium onto water precovered Cu(111)
Surf. Sci. 480 (2001) 73-83.

82) R. Domnick, G. Held, H. Koschel, Ch. Ammon, H.-P. Steinrück
Segregation effects and chemical properties of nickel monolayers on Cu(111)
Surf. Sci. 482-485 (2001) 1292-1297.

83) Ch. Ammon, G. Held, J. Pantförder, H.-P, Steinrück
Growth and electronic properties of thin Zn layers on Cu(111)
Surf. Sci. 482-485 (2001) 886-890.

84) R. Domnick, G. Held, P. Witte, H.-P. Steinrück
The transition from oxygen chemisorption to oxidation of ultra-thin Ni layers on Cu(111)
J. Chem. Phys. 115 (2001) 1902-1908.

85) G. Held and H.-P. Steinrück
Surface structure analysis based on the exclusive use of the specular LEED spot - a theoretical study
Surf. Sci. 490 (2001) 274-284.

86) C. M. Whelan, R. Neubauer, D. Borgmann, R. Denecke, H.-P. Steinrück
A fast X-ray photoelectron spectroscopy study of the adsorption and temperature-dependent decomposition of propene on Ni(100)
J. Chem. Phys. 115 (2001) 8133-8140.

87) M. Zharnikov and H.-P. Steinrück
Holography with photoelectrons: a direct approach
J. Phys. Condens. Matter 13 (2001)10533-10560 (Invited Article).

88) G. Held, W. Braun, H.-P. Steinrück, S. Yamagishi, S. J. Jenkins, D. A. King
Light-atom location in adsorbed benzene by experiment and theory
Phys. Rev. Lett. 87 (2001) 216102 1-4.

89) C. M. Whelan, R. Neubauer, R. Denecke, H.-P. Steinrück
A temperature programmed x-ray photoelectron spectroscopy study of the decomposition reactions of unsaturated hydrocarbons on Ni(100)
Surf. Rev. Lett. 9 (2002) 789-795.

90) R. Denecke, M. Kinne, C. M. Whelan, H.-P. Steinrück
In-situ core-level photoelectron spectroscopy of adsorbates on surfaces involving a molecular beam - general setup and first experiments
Surf. Rev. Lett. 9 (2002) 797-801.

91) M. Probst, R. Denecke, C. Whelan, M. Kinne, D. Borgmann, H.-P. Steinrück
Electron spectroscopic studies of iron and iridium silicides
Surf. Interface Anal. 34 (2002) 744-748.

92) R. Neubauer, C. M. Whelan, R. Denecke, H.-P. Steinrück
An in situ photoemission study of the dehydrogenation reaction of methanol on Ni(100)
Surf. Sci. 507-510 (2002) 832-837.

93) Ch. Ammon, A. Bayer, G. Held, B. Richter, Th. Schmidt, H.-P. Steinrück
Dissociation and oxidation of methanol on Cu(110)
Surf. Sci. 507-510 (2002) 845-850.

94) M. P. Engelhardt, T. Fuhrmann, G. Held, R. Denecke, H.-P. Steinrück
Adsorption of CO on ultrathin Cr layers on Ru(0001)
Surf. Sci. 512 (2002) 107-116.

95) S. H. Payne, J. Kreuzer, M. Kinne, R. Denecke, H.-P. Steinrück
Strong repulsion and site exclusion in a system with on top and bridge sites on a one-dimensional lattice: equilibrium and kinetics
Surf. Sci. 513 (2002) 174-202.

96) R. Domnick, G. Held, H.-P. Steinrück
Temperature dependent oxidation of thin Ni layers on Cu(111)
Surf. Sci. 516 (2002) 95-102.

97) Th. Gleim, L. Weinhardt, Th. Schmidt, R. Fink, C. Heske, E. Umbach, P. Grabs, G. Schmidt, L. Molenkamp, B. Richter, A. Fleszar, H.-P. Steinrück
Energy level alignment at zinc blende Cd(Mn)Se/ZnTe/InAs(100) interfaces
Appl. Phys. Lett. 81 (2002) 3813-3815.

98) M. Kinne, T. Fuhrmann, C. M. Whelan, J. F. Zhu, J. Pantförder, M. Probst, G. Held, R. Denecke, H.-P. Steinrück
Kinetic parameters of CO adsorbed on Pt(111) studied by in situ high resolution x-ray photoelectron spectroscopy
J. Chem. Phys. 117 (2002) 10852-10859.

99) J. F. Zhu, M. Kinne, T. Fuhrmann, R. Denecke, H.-P. Steinrück
In situ high-resolution XPS studies on adsorption of NO on Pt(111)
Surf. Sci. 529 (2003) 384-396.

100) Th. Gleim, C. Heske, E. Umbach, C. Schumacher, S. Gundel, W. Faschinger, A. Fleszar, Ch. Ammon, M. Probst, H.-P. Steinrück
Formation of the ZnSe/(Te/)GaAs(100) Heterojunction
Surf. Sci. 531 (2003) 77-85.

101) R. Denecke, B. Tränkenschuh, M. P. Engelhardt, H.-P. Steinrück
Adsorption kinetics of CO on Cr/Ru surfaces
Surf. Sci. 532-535 (2003) 173-178.

102) Th. Gleim, L. Weinhardt, Th. Schmidt, R. Fink, C. Heske, E. Umbach, L. Hansen, G. Landwehr, A. Waag, A. Fleszar, B. Richter, Ch. Ammon, M. Probst, H.-P. Steinrück
Influence of As passivation on the electronic level alignment at BeTe/Si(111) interfaces
Phys. Rev. B 67 (2003) 205315 1-6.

103) R. Neubauer, C. M. Whelan, R. Denecke, H.-P. Steinrück
The thermal chemistry of saturated layers of acetylene and ethylene on Ni(100) studied by in situ synchrotron x-ray photoelectron spectroscopy
J. Chem. Phys. 119 (2003) 1710-1718.

104) Ch. Ammon, A. Bayer, H.-P. Steinrück, G. Held
Low temperature partial dissociation of water on Cu(110)
Chem. Phys. Letters 377 (2003) 163-169.

105) J.-S. McEwen, S. H. Payne, H. J. Kreuzer, M. Kinne, R. Denecke, H.-P. Steinrück
Adsorption and desorption of CO on Pt(111): a comprehensive analysis
Surf. Sci. 545 (2003) 47-69.

106) J. F. Zhu, M. Kinne, T. Fuhrmann, B. Tränkenschuh, R. Denecke, H.-P. Steinrück
The adsorption of NO on an oxygen pre-covered Pt(111) surface: in situ high-resolution XPS combined with molecular beam studies
Surf. Sci. 547 (2003) 410-420.

107) M. Kinne, T. Fuhrmann, J. F. Zhu, C. M. Whelan, R. Denecke, H.-P. Steinrück
Kinetics of the CO oxidation reaction on Pt(111) studied by in situ high resolution x-ray photoelectron spectroscopy
J. Chem. Phys. 120 (2004) 7113-7122.

108) M. Kinne, T. Fuhrmann, J. F. Zhu, B. Tränkenschuh, R. Denecke, H.-P. Steinrück
Coadsorption of D_2O and CO on Pt(111) studied by in situ high-resolution x-ray photoelectron spectroscopy
Langmuir 20 (2004) 1819-1826.

109) T. Fuhrmann, M. Kinne, C.M. Whelan, J. F. Zhu, R. Denecke, H.-P. Steinrück
Vibrationally resolved in situ XPS study of activated adsorption of methane on Pt(111)
Chem. Phys. Lett. 390 (2004) 208-213.

110) W. Braun, H.-P. Steinrück, G. Held
The surface geometry of carbon monoxide and oxygen co-adsorbed on Ni(111)
Z. Phys. Chem. 218 (2004) 915-927.

111) S. Pöllmann, A. Bayer, Ch. Ammon, H.-P. Steinrück
Adsorption and reaction of methanol on clean and oxygen precovered Cu(111)
Z. Phys. Chem. 218 (2004) 957-971.

112) W. Braun, H.-P. Steinrück, G. Held
The surface geometry of carbon monoxide and hydrogen co-adsorbed on Ni(111)
Surf. Sci. 574 (2005) 193-204.

113) J. Pantförder, S. Pöllmann, J. F. Zhu, D. Borgmann, R. Denecke, H.-P. Steinrück
New set-up for in situ x-ray photoelectron spectroscopy from ultrahigh vacuum to 1 mbar
Rev. Sci. Instrum. 76 (2005) 014102 1-9.

114) W. Braun, H.-P. Steinrück, G.Held
The surface geometries of the medium and high coverage carbon monoxide structures c(2x4)-(2CO) and p(√7x√7)R19°-(4CO) on Ni(111)
Surf. Sci. 575 (2005) 343-357.

115) M. P. Engelhardt, M. Schmid, A. Biedermann, R. Denecke, H.-P. Steinrück, P. Varga
An STM study of growth and alloying of Cr on Ru(0001) and CO adsorption on the alloy
Surf. Sci. 578 (2005) 124-135.

116) T. Fuhrmann, M. Kinne, B. Tränkenschuh, C. Papp, J. F. Zhu, R. Denecke, H.-P. Steinrück
Activated adsorption of methane on Pt(111) - an in situ XPS study
New J. Phys. 7 (2005) 107 1-19 (Invited Contribution).

117) A. Bayer, K. Flechtner, R. Denecke, H.-P. Steinrück, K. M. Neyman, N. Rösch
Electronic Properties of Thin Zn Layers on Pd(111) During Growth and Alloying
Surf. Sci. 600 (2006) 78-94.

118) B. Tränkenschuh, N. Fritsche, T. Fuhrmann, C. Papp, J. F. Zhu, R. Denecke, H.-P. Steinrück
A site-selective in situ study of CO adsorption and desorption on Pt(355)
J. Chem. Phys. 124 (2006) 074712 1-9.

119) J. M. Gottfried, K. Flechtner, A. Kretschmann, T. Lukasczyk, H.-P. Steinrück
Direct synthesis of a metalloporphyrin complex on a surface
J. Am. Chem. Soc. 128 (2006) 5644-5645.

120) C. Papp, T. Fuhrmann, B. Tränkenschuh, R. Denecke, H.-P. Steinrück
Site selectivity of benzene adsorption on Ni(111) studied by high resolution x-ray photoelectron spectroscopy
Phys. Rev. B 73 (2006) 235426 1-9.

121) F. Maier, J.M. Gottfried, J. Rossa, D. Gerhard, P. S. Schulz, W. Schwieger, P. Wasserscheid, H.-P. Steinrück
Surface enrichment and depletion effects of ions dissolved in an ionic liquid: An X-ray photoelectron spectroscopy study
Angew. Chem. Int. Ed. 45 (2006) 7778-7780.
Angew. Chem. 118 (2006) 7942-7944.

122) J. M. Gottfried, F. Maier, J. Rossa, D. Gerhard, P. S. Schulz, P. Wasserscheid, H.-P. Steinrück
Surface studies on the Ionic Liquid 1-Ethyl-3-Methylimidazolium Ethylsulfate Using X-ray Photo-electron Spectroscopy (XPS)
Z. Phys. Chem. 220 (2006) 1439-1453.

123) H.-P. Steinrück, T. Fuhrmann, C. Papp, B. Tränkenschuh, R. Denecke
A detailed analysis of vibrational excitations in x-ray photoelectron spectra of adsorbed small hydrocarbons
J. Chem. Phys. 125 (2006) 204706 1-8.

124) A. Kretschmann, M.-M. Walz, K. Flechtner, H.-P. Steinrück, J. M. Gottfried
Tetraphenylporphyrin picks up zinc atoms from a silver surface
Chem. Commun. (2007) 568-570.

125) B. Tränkenschuh, C. Papp, T. Fuhrmann, R. Denecke, H.-P. Steinrück
The dissimilar twins - a comparative, site-selective in situ study of CO adsorption and desorption on Pt(322) and Pt(355)
Surf. Sci. 601 (2007) 1108-1117.

126) C. Papp, B. Tränkenschuh, R. Streber, T. Fuhrmann, R. Denecke, H.-P. Steinrück
Influence of steps on the adsorption of methane on platinum surfaces
J. Phys. Chem. C 111 (2007) 2177-2184.

127) F. Buchner, V. Schwald, K. Comanici, H.-P. Steinrück, Hubertus Marbach
Microscopic Evidence of the Metalation of a Free-base Porphyrin Monolayer with Iron
ChemPhysChem 8 (2007) 241-243.

128) T. Lukasczyk, K. Flechtner, L. R. Merte, N. Jux, F. Maier, J. M. Gottfried, H.-P. Steinrück
Interaction of Co(II) tetraarylporphyrins with a Ag(111) surface studied with photoelectron spectroscopy
J. Phys. Chem. C 111 (2007) 3090-3098.

129) C. Papp, R. Denecke, H.-P. Steinrück
Adsorption and reaction of cyclohexene on a Ni(111) surface
Langmuir 23 (2007) 5541-5547.

130) K. Flechtner, A. Kretschmann, L. R. Bradshaw, M.-M. Walz, F. Maier, H.-P. Steinrück, J. M. Gottfried
Surface-Confined Two-Step Synthesis of the Complex (Ammine)(meso-tetraphenylporphyrinato)-zinc(II) on Ag(111)
J. Phys. Chem. C 111 (2007) 5821-5824.

131) K. M. Neyman, K. H. Lim, Z.-X. Chen, L. V. Moskaleva, A. Bayer, A. Reindl, D. Borgmann, R. Denecke, H.-P. Steinrück, N. Rösch,
Microscopic Models of PdZn Alloy Catalysts: Structure and Reactivity in Methanol Decomposition
Phys. Chem. Chem. Phys. 9 (2007) 3470-3482.

132) C. Papp, T. Fuhrmann, B. Tränkenschuh, R. Denecke, H.-P. Steinrück
Kinetic isotope effects and reaction intermediates in the decomposition of methyl on flat and stepped platinum (111) surfaces
Chem. Phys. Lett. 442 (2007) 176-181 (Editors Choice).

133) T. E. Shubina, H. Marbach, K. Flechtner, A. Kretschmann, N. Jux, F. Buchner, H.-P. Steinrück, T. Clark, J. M. Gottfried
Principle and Mechanism of Direct Porphyrin Metalation: Joint Experimental and Theoretical Investigation
J. Am. Chem. Soc. 129 (2007) 9476-9783.

134) F. Buchner, K. Comanici, N. Jux, H.-P. Steinrück, H. Marbach
Polymorphism of Porphyrin Molecules on Ag(111) and How to Weave a Rigid Monolayer
J. Phys. Chem. C 111 (2007) 13531-13538.

135) K. Flechtner, A. Kretschmann, H.-P. Steinrück, J. M. Gottfried
NO-induced reversible switching of the electronic interaction between a porphyrin-coordinated cobalt ion and a silver surface
J. Am. Chem. Soc. 129 (2007) 12110-12111.

136) K. Comanici, F. Buchner, K. Flechtner, T. Lukasczyk, J. M. Gottfried, H.-P. Steinrück, H. Marbach
Understanding the Contrast Mechanism in Scanning Tunneling Microscopy (STM) Images of an Intermixed Tetraphenylporphyrin Layer on Ag(111)
Langmuir 24 (2008) 1897-1901.

137) R. Streber, C. Papp, M. P. A. Lorenz, A. Bayer, R. Denecke, H.-P. Steinrück
Kinetic passivation of steps with sulfur and CO/S site exchange processes on stepped Pt surfaces
Chem. Phys. Lett. 452 (2008) 94-98.

138) A. Desikusumastuti, M. Happel, K. Dumbuya, T. Staudt, M. Laurin, J. M. Gottfried, H.-P. Steinrück, J. Libuda
Modeling NO_x Storage Materials: On the Formation of Surface Nitrites and Nitrates and Their Identification by Vibrational Spectroscopy
J. Phys. Chem. C 112 (2008) 6477-6486.

139) Y. Bai, F. Buchner, M. T. Wendahl, I. Keller, A. Bayer, H.-P. Steinrück, H. Marbach, J. M. Gottfried
Direct metalation of a phthalocyanine monolayer on Ag(111) with co-adsorbed iron atoms
J. Phys. Chem. C 112 (2008) 6087-6092.

140) T. Lukasczyk, M. Schirmer, H.-P. Steinrück, H. Marbach
Electron-beam induced deposition in ultrahigh vacuum: lithographic fabrication of clean iron nano-structures
Small 4 (2008) 841-846.

141) N. Paape, W. Wei, A. Bösmann, C. Kolbeck, F. Maier, H.-P. Steinrück, P. Wasserscheid, P. S. Schulz
Chloroalkylsulfonate ionic liquids by ring opening of sultones with organic chloride salts
Chem. Commun. (2008) 3867-3869.

142) C. Kolbeck, M. Killian, F. Maier, N. Paape, P. Wasserscheid, H.-P. Steinrück
Surface characterization of functionalized imidazolium-based ionic liquids
Langmuir 24 (2008) 9500-9507.

143) K. Dumbuya, R. Denecke, H.-P. Steinrück
Surface analysis of Pd/ZnO catalysts dispersed on micro-channeled Al-foils by XPS
Appl. Catal. A 348 (2008) 209-213.

144) F. Buchner, K. Flechtner, Y. Bai, E. Zillner, I. Kellner, H.-P. Steinrück, H. Marbach, J. M. Gottfried
Coordination of Iron Atoms by Tetraphenylporphyrin Monolayers and Multilayers on Ag(111) and Formation of Iron-Tetraphenylporphyrin
J. Phys. Chem. C 112 (2008) 15458-15465.

145) H.-P. Steinrück, J. Libuda, D.A. King
Chemistry at surfaces
Chem. Soc. Rev. 37 (2008) 2153-2154.

146) F. Neatu, Z. Li, R. Richards, P. Y. Toullec, J.-P. Genet, K. Dumbuya, J. M. Gottfried, H.-P. Steinrück, V. I. Parvulescu, V. Michelet
Heterogeneuos Gold Catalysts for Efficient Access to Functionilzed Lactones
Chem Eur. J. 14 (2008) 9412-9418.

147) T. Cremer, M. Killian, J. M. Gottfried, N. Paape, P. Wasserscheid, F. Maier, H.-P. Steinrück
Physical Vapor Deposition of [EMIM][Tf_2N]: A New Approach to the Modification of Surface Properties with Ultrathin Ionic Liquid Films
ChemPhysChem 9 (2008) 2185-2190.

148) F. Buchner, I. Kellner, H.-P. Steinrück, H. Marbach
Modification of the Growth of Iron on Ag(111) by Predeposited Organic Monolayers
Z. Phys. Chem. 223 (2009) 131-144.

149) R. Streber, C. Papp, M. P. A. Lorenz, A. Bayer, S. Wickert, M. Schöppke, R. Denecke, H.-P. Steinrück
Site blocking and CO/sulfur site exchange processes on stepped Pt surfaces
J. Phys. Condens. Matter 21 (2009) 134018 1-13.

150) K. R. J. Lovelock, C. Kolbeck, T. Cremer, N. Paape, P. S. Schulz, P. Wasserscheid, F. Maier, H.-P. Steinrück
Influence of Different Substituents on the Surface Composition of Ionic Liquids Studied Using ARXPS
J. Phys. Chem. B 113 (2009) 2854-2864.

151) A. Wittstock, B. Neumann, A. Schaefer, K. Dumbuya, C. Kübel, M. M. Biener, V. Zielasek, H.-P. Steinrück, J. M. Gottfried, J. Biener, A. Hamza, M. Bäumer
Nanoporous Au: an unsupported pure gold catalyst?
J. Phys. Chem. C 113 (2009) 5593-5600.

152) C. H. Schmitz, C. Rang, Y. Bai, I. Kossev, J. Ikonomov, Y. Su, K. Kotsis, S. Soubatch, O.Neucheva, F. S. Tautz, F. Neese, H.-P. Steinrück, J. M. Gottfried, K. H. Dötz, M. Sokolowski
A comparative study of a triphenylene tricarbonyl chromium complex and its uncoordinated arene ligand on the Ag(111) surface: Influence of the complexation on the adsorption
J. Phys. Chem C 113 (2009) 6014-6021.

153) B. Cojocaru, S. Neatu, V. I. Pârvulescu, K. Dumbuya, H.-P. Steinrück, J. M. Gottfried, C. Aprile, H. Garcia, J. C. Scaiano
Band gap effect on the photocatalytic activity of supramolecular structures obtained by entrapping photosensitizers in different inorganic supports
Phys. Chem. Chem. Phys. 11 (2009) 5569-5577.

154) C. Kolbeck, T. Cremer, K. R. J. Lovelock, N. Paape, P. S. Schulz, P. Wasserscheid, F. Maier, H.-P. Steinrück
Influence of Different Anions on the Surface Composition of Ionic Liquids Studied Using ARXPS
J. Phys. Chem. B 113 (2009) 8682-8688.

155) F. Buchner, K. Seufert, W. Auwärter, D. Heim, J. V. Barth, K. Flechtner, J. M. Gottfried, H.-P. Steinrück, H. Marbach
NO-induced reorganization of porphyrin arrays
ACS Nano 3 (2009) 1789-1794.

156) R. Streber, B. Tränkenschuh, J. Schöck, C. Papp, H.-P. Steinrück, J.-S. McEwen, P. Gaspard, R. Denecke
Interaction between silver nanowires and CO on a stepped platinum surface
J. Chem. Phys. 131 (2009) 064702 1-9.
ERRATUM: J. Chem. Phys. 131 (2009) 179901 1.

157) T. Lukasczyk, M. Schirmer, H.-P. Steinrück, H. Marbach
Generation of Clean Iron Structures by Electron-Beam-Induced Deposition and Selective Catalytic Decomposition of Iron Pentacarbonyl on Rh(110)
Langmuir 25 (2009) 11930-11939.

158) F. Buchner, K.-G. Warnick, T. Wölfle, A. Görling, H.-P. Steinrück, W. Hieringer, H. Marbach
Chemical fingerprints of large organic molecules in scanning tunneling microscopy: imaging adsorbate - substrate coupling of metalloporphyrins
J. Phys. Chem. C 113 (2009) 16450-16457.

159) J. Zhu, F. Bebensee, W. Hieringer, W. Zhao, J. H. Baricuatro, J. A. Farmer,Y. Bai, H.-P. Steinrück, J. M. Gottfried, C. T. Campbell
Formation of the Calcium / Poly(3-Hexylthiophene) Interface: Structure and Energetics
J. Am. Chem. Soc. 131 (2009) 13498-13507.

160) Y. Bai, F. Buchner, I. Kellner, M. Schmid, F. Vollnhals, H.-P. Steinrück, H. Marbach, J. M. Gottfried
Adsorption of Cobalt(II) Octaethylporphyrin and 2H-Octaethylporphyrin on Ag(111): New Insight into the Surface Coordinative Bond
New J. Physics 11 (2009) 125004 1-15.

161) R. Streber, C. Papp, M. P. A. Lorenz, A. Bayer, R. Denecke, H.-P. Steinrück
Sulfur Oxidation on Pt(355): It is the Steps!
Angew. Chem. Int. Ed. 48 (2009) 9743-9746.
Schwefeloxidation auf Pt(355) - Es sind die Stufen!
Angew. Chem. 121 (2009) 9925-9929.

162) F. Maier, T. Cremer, C. Kolbeck, K. R. J. Lovelock, N. Paape, P. S. Schulz, P. Wasserscheid, H.-P. Steinrück
Insights into the surface composition and enrichment effects of ionic liquids and ionic liquid mixtures
Phys. Chem. Chem. Phys. 12 (2010) 1905-1915 (Invited Contribution).

163) H.-P. Steinrück
Surface Science goes liquid !
Surf. Sci. 604 (2010) 481-484 (Invited Prospective Article).

164) Y. Bai, M. Sekita, M. Schmid, T. Bischof, H.-P. Steinrück, J. M. Gottfried
Interfacial Coordination Interactions Studied on Cobalt Octaethylporphyrin and Cobalt Tetraphenylporphyrin Monolayers on Au(111)
Phys. Chem. Chem. Phys. 12 (2010) 4336-4344.

165) Y. Lykhach, T. Staudt, M. P. A. Lorenz, R. Streber, A. Bayer, H.-P. Steinrück, J. Libuda
Microscopic insights into methane activation and related processes on Pt/ceria model catalysts
ChemPhysChem 11 (2010) 1496-1504.

166) M. Sobota, I. Nikiforidis, W. Hieringer, N. Paape, M. Happel, H.-P. Steinrück, A. Görling, P. Wasserscheid, M. Laurin, J. Libuda
Toward Ionic-Liquid-Based Model Catalysis: Growth, Orientation, Conformation, and Interaction Mechanism of the $[Tf_2N]^-$ Anion in [BMIM][Tf_2N] Thin Films on a Well-Ordered Alumina Surface
Langmuir 26 (2010) 7199-7207.

167) Y. Lykhach, T. Staudt, R. Streber, M. P. A. Lorenz, A. Bayer, H.-P. Steinrück, J. Libuda
CO_2 activation on single crystal based ceria and magnesia/ceria model catalysts
Eur. Phys. J. B 75 (2010) 89-100.
Special Issue dedicated to Prof. Andrea Levi

168) F. Bebensee, J. Zhu, J. H. Baricuatro, J. A. Farmer, Y. Bai, H.-P. Steinrück, C.T. Campbell, J. M. Gottfried
Interface Formation between Calcium and Electron-Irradiated Poly(3-hexylthiophene)
Langmuir 26 (2010) 9632-9639.

169) F. Viñes,Y. Lykhach, T. Staudt, M.P A. Lorenz, C. Papp, H.-P. Steinrück, J. Libuda, K. M. Neyman, A. Görling
Methane Activation by Platinum: Critical Role of Edge and Corner Sites of Metal Nanoparticles
Chem. Eur. J. 16 (2010) 6530-6539.

170) M.-M. Walz, M. Schirmer, F. Vollnhals, T. Lukasczyk, H.-P. Steinrück, H. Marbach
Electrons as "Invisible Ink": Fabrication of Nanostructures by Local Electron Beam Induced Activation of SiO_x
Angew. Chem. Int. Ed. 49 (2010) 4669-4673 (VIP article - COVER).
Elektronen als "unsichtbare Tinte": Herstellung von Nanostrukturen durch lokale elektronenstrahl-induzierte Aktivierung von SiO_x
Angew. Chem. 122 (2010) 4774-4778 (COVER).

171) R. Streber, C. Papp, M. P. A. Lorenz, O. Höfert, E. Darlatt, A. Bayer, R. Denecke, H.-P. Steinrück
SO_2 adsorption and thermal evolution on clean and oxygen precovered Pt(111)
Chem. Phys. Lett. 494 (2010) 188-192.

172) M. P. A. Lorenz, T. Fuhrmann, R. Streber, A. Bayer, F. Bebensee, K. Gotterbarm, M. Kinne, B. Tränkenschuh, J. F. Zhu , C. Papp, R. Denecke, H.-P. Steinrück
Ethene adsorption and dehydrogenation on clean and oxygen precovered Ni(111) studied by high resolution x-ray photoelectron spectroscopy
J. Chem. Phys. 133 (2010) 014706 1-6.

173) M. Sobota, M. Schmid, M. Happel, M. Amende, F. Maier, H.-P. Steinrück, N. Paape, P. Wasserscheid, M. Laurin, J. M. Gottfried, J. Libuda
Ionic Liquid Based Model Catalysis: Interaction of [BMIM][Tf_2N] with Pd Nanoparticles Supported on an Ordered Alumina Film
Phys. Chem. Chem. Phys. 12 (2010) 10610-10621.

174) T. Cremer, C. Kolbeck, K. R. J. Lovelock, N. Paape, R. Wölfel, P. S. Schulz, P. Wasserscheid, H. Weber, J. Thar, B. Kirchner, F. Maier, H.-P.-Steinrück
Towards a Molecular Understanding of Cation-Anion Interactions - Probing the Electronic Structure of Imidazolium Ionic Liquids by NMR Spectroscopy, X-ray Photoelectron Spectroscopy and Theoretical Calculations
Chem. Eur. J. 16 (2010) 9018-9033 (COVER).

175) F. Bebensee, M. Schmid, H.-P. Steinrück, C. T. Campbell, J. M. Gottfried
Toward Well-Defined Metal-Polymer Interfaces: Temperature-Controlled Suppression of Subsurface Diffusion and Reaction at the Calcium/Poly(3-Hexylthiophene) Interface
J. Am. Chem. Soc. 132 (2010) 12163-12165.

176) K. R. J. Lovelock, I. J. Villar-Garcia, F. Maier, H.-P. Steinrück, P. Licence
Photoelectron Spectroscopy of Ionic Liquid-Based Interfaces
Chem. Rev. 110 (2010) 5158-5190.

177) C. Kolbeck, N. Paape, T. Cremer, P. S. Schulz, F. Maier, H.-P. Steinrück, P. Wasserscheid
Ligand Effects on the Surface Composition of Rh-Containing Ionic Liquid Solutions Used in Hydroformylation Catalysis
Chem. Eur. J. 16 (2010) 12083-12087.

178) I. Jipa, F. W. Heinemann, A. Schneider, N. Popovska, M. A. Siddiqi, R. A. Siddiqui, B. Atakan, H. Marbach, C. Papp, H.-P. Steinrück, U. Zenneck
[cis-(1,3-Diene)$_2$W(CO)$_2$] Complexes as MOCVD Precursors for the Deposition of Thin Tungsten - Tungsten Carbide Films
Chem. Vap. Deposition 16 (2010) 239-247.

179) F. Buchner, I. Kellner, W. Hieringer, A. Görling, H.-P. Steinrück, H. Marbach
Ordering aspects and intramolecular conformation of tetraphenylporphyrins on Ag(111)
Phys. Chem. Chem. Phys. 12 (2010) 13082-13090.

180) R. Streber, C. Papp, M. P. A. Lorenz, O. Höfert, W. Zhao, S. Wickert, E. Darlatt, A. Bayer, R. Denecke, H.-P. Steinrück
Influence of Steps on the Adsorption and Thermal Evolution of SO_2 on Clean and Oxygen Precovered Pt Surfaces
J. Phys. Chem. C 114 (2010) 19734-19743.

181) C. Kolbeck, J. Lehmann, K. R. J. Lovelock, T. Cremer, N. Paape, P. Wasserscheid, A. P. Fröba, F. Maier, H.-P. Steinrück
Density and Surface Tension of Ionic Liquids
J. Phys. Chem. B 114 (2010) 17025-17036.

182) A. Ramakrishnan, K. Dumbuya, J. Ofili, H.-P. Steinrück, J. M. Gottfried, W. Schwieger
Highly dispersed Pd nanoparticles within silica: Synthesis and characterization
Appl. Clay Sci. 51 (2011) 8-14.

183) I. Jipa, K. Danova, N. Popovska, M. A. Siddiqi, R. A. Siddiqui, B. Atakan, T. Cremer, F. Maier, H. Marbach, H.-P. Steinrück, F. W. Heinemann, U. Zenneck
Methylated [(arene)(1,3-cyclohexadiene)Ru(0)] complexes as low-melting MOCVD precursor complexes with a controlled follow-up chemistry of the ligands
J. Mater. Chem. 21 (2011) 3014-3024.

184) M. Schirmer, M.-M. Walz, F. Vollnhals, T. Lukasczyk, A. Sandmann, C. Chen, H.-P. Steinrück, H. Marbach
Electron-beam-induced deposition and post-treatment processes to locally generate clean titanium oxide nanostructures on Si(100)
Nanotechnology 22 (2011) 085301 1-10.

185) J. M. Englert, C. Dotzer, G. Yang, M. Schmid, C. Papp, J. M. Gottfried, H.-P. Steinrück, E. Spiecker, F. Hauke, A. Hirsch
Covalent Bulk Functionalization of Graphene
Nat. Chem. 3 (2011) 279-286 (Cover).

186) T. Cremer, M. Stark, A. Deyko, H.-P. Steinrück, F. Maier
Liquid / solid interface of ultrathin ionic liquid films: [C_1C_1Im][Tf_2N] and [C_8C_1Im][Tf_2N] on Au(111)
Langmuir 27 (2011) 3662-3671.

187) I. Jipa, M. A. Siddiqi, R. A. Siddiqui, B. Atakan, H. Marbach, T. Cremer, F. Maier, H.-P. Steinrück, K. Danova, N. Popovska, F. W. Heinemann, U. Zenneck
Methylated [(benzene)(1,3-butadiene)Ru^0] Derivatives as Novel MOCVD Precursors with Favorable Properties
Chem. Vap. Deposition 17 (2011) 15-21.

188) W. Zhao, S. M. Kozlov, O. Höfert, K. Gotterbarm, M. P. A. Lorenz, F. Viñes, C. Papp, A. Görling, H.-P. Steinrück
Graphene on Ni(111): Coexistence of Different Surface Structures
J. Phys. Chem. Lett. 2 (2011) 759-764.

189) W. Hieringer, K. Flechtner, A. Kretschmann, K. Seufert, W. Auwärter, J. V. Barth, A. Görling, H.-P. Steinrück, J. M. Gottfried
The Surface Trans Effect: Influence of Axial Ligands on the Surface Chemical Bonds of Adsorbed Metalloporphyrins
J. Am. Chem. Soc. 133 (2011) 6206-6222.

190) J. Bandlow, P. Kaghazchi, T. Jacob, C. Papp, B. Tränkenschuh, R. Streber, M. P. A. Lorenz, T. Fuhrmann, R. Denecke, H.-P. Steinrück
Oxidation of stepped Pt(111) studied by x-ray photoelectron spectroscopy and density functional theory
Phys. Rev. B 83 (2011) 174107 1-5.

191) H.-P. Steinrück, J. Libuda, P. Wasserscheid, T. Cremer, C. Kolbeck, M. Laurin, F. Maier, M. Sobota, P. S. Schulz, M. Stark
Surface Science and Model Catalysis with Ionic Liquid-Modified Materials
Adv. Mater. 23 (2011) 2571-2587.

192) M. Schmid, W. Hieringer, C. H. Schmitz, H.-P. Steinrück, M. Sokolowski, J. M. Gottfried
Adsorption and Reaction of Terephthaloyl Chloride on Ag(111): X-ray Photoelectron Spectroscopy and Density Functional Theory Investigations
J. Phys. Chem. C 115 (2011) 14869-14875.

193) F. Buchner, E. Zillner, M. Röckert, S. Gläßel, H.-P. Steinrück, H. Marbach
Substrate-Mediated Phase Separation of Two Porphyrin Derivatives on Cu(111)
Chem. Eur. J. 17 (2011) 10226-10229.

194) M. Schmid, J. Zirzlmeier, H.-P. Steinrück, J. M. Gottfried
Interfacial Interactions of Iron(II) Tetrapyrrole Complexes on Au(111)
J. Phys. Chem. C 115 (2011) 17028-17035.

195) N. Luckas, K. Gotterbarm, R. Streber, M. P. A. Lorenz, O. Höfert, F. Viñes, C. Papp, A. Görling, H.-P. Steinrück
Adsorption and reaction of SO_2 on clean and oxygen precovered Pd(100) - a combined HR-XPS and DF study
Phys. Chem. Chem. Phys. 13 (2011) 16227-16235.

196) M.-M. Walz, F. Vollnhals, M. Schirmer, H.-P. Steinrück, H. Marbach
Generation of clean iron nanocrystals on an ultra-thin SiO_x film on Si(001)
Phys. Chem. Chem. Phys. 13 (2011) 17333-17338.

197) M. Sobota, I. Nikiforidis, M. Amende, B. Sanmartín Zanón, T. Staudt, O. Höfert, Y. Lykhach, C. Papp, W. Hieringer, M. Laurin, D. Assenbaum, P. Wasserscheid, H.-P. Steinrück, A. Görling, J. Libuda
Dehydrogenation of Dodecahydro-N-ethylcarbazole on Pd/Al_2O_3 Model Catalysts
Chem. Eur. J. 17 (2011) 11542-11552.

198) F. Porrati, R. Sachser, M.-M. Walz, F. Vollnhals, H.-P. Steinrück, H. Marbach, M. Huth
Magnetotransport properties of iron microwires fabricated by focused electron beam induced auto-catalytic growth
J. Phys. D Appl. Phys. 44 (2011) 425001 1-6.

199) C. H. Schmitz, M. Schmid, S. Gärtner, H.-P. Steinrück, J. M. Gottfried, M. Sokolowski
Surface Polymerization of Poly(p-phenylene-terephthalamide) on Ag(111) Investigated by X-ray Photoelectron Spectroscopy and Scanning Tunneling Microscopy
J. Phys. Chem. C 115 (2011) 18186-18194.

200) M. Schirmer, M.-M. Walz, C. Papp, F. Kronast, A. X. Gray, B. Balke, S. Cramm, C. S. Fadley, H.-P. Steinrück, H. Marbach
Fabrication of layered nanostructures by successive electron beam induced deposition with two precursors: protective capping of metallic iron structures
Nanotechnology 22 (2011) 457304 1-7.

201) F. Buchner, J. Xiao, E. Zillner, M. Chen, M. Röckert, S. Ditze, M. Stark, H.-P. Steinrück, J. M. Gottfried, H. Marbach
Diffusion, Rotation, and Surface Chemical Bond of Individual 2H-Tetraphenylporphyrin Molecules on Cu(111)
J. Phys. Chem. C 115 (2011) 24172-24177 (COVER).

202) K. Dumbuya, G. Cabailh, R. Lazzari, J. Jupille, L. Ringel, M. Pistor, O. Lytken, H.-P. Steinrück, J. M. Gottfried
Evidence for an active oxygen species on Au/TiO_2 model catalysts during investigation with in situ X-ray photoelectron spectroscopy
Catal. Today 181 (2012) 20-25.
Special Issue on the occasion of 80th birthday (March 31.2011) of Prof. Frigyes Solymosi

203) M.-M. Walz, F. Vollnhals, F. Rietzler, M. Schirmer, H.-P. Steinrück, H. Marbach
Investigation of proximity effects in electron microscopy and lithography
Appl. Phys. Lett. 100 (2012) 053118 1-4.

204) K. Gotterbarm, N. Luckas, O. Höfert, M. P. A. Lorenz, R. Streber, C. Papp, F. Viñes, H.-P. Steinrück, A. Görling
Kinetics of the sulfur oxidation on palladium: A combined in situ x-ray photoelectron spectroscopy and density-functional study
J. Chem. Phys. 136 (2012) 094702 1-7.

205) C. Kolbeck, I. Niedermaier, N. Taccardi, P. S. Schulz, F. Maier, P. Wasserscheid, H.-P. Steinrück
Monitoring of Liquid-Phase Organic Reactions by Photoelectron Spectroscopy
Angew. Chem. Int. Ed. 51 (2012) 2610-2613 (VIP article - INSIDE BACK COVER).
Angew. Chem. 124 (2012) 2664-2667 (INSIDE BACK COVER).

206) W. Zhao, O. Höfert, K. Gotterbarm, J. F. Zhu, C. Papp, H.-P. Steinrück
Production of Nitrogen-Doped Graphene by Low Energy Nitrogen Implantation
J. Phys. Chem. C 116 (2012) 5062-5066.

207) I. Niedermaier, C. Kolbeck, N. Taccardi, P. S. Schulz, J. Li, T. Drewello, P. Wasserscheid, H.-P. Steinrück, F. Maier
Organic Reactions in Ionic Liquids Studied by in Situ XPS
ChemPhysChem 13 (2012) 1725-1735 (INSIDE COVER).

208) M. Schmid, A. Kaftan, H.-P. Steinrück, J. M. Gottfried
The electronic structure of cobalt(II) phthalocyanine adsorbed on Ag(111)
Surf. Sci. 606 (2012) 945-949.

209) T. Cremer, L. Wibmer, S. Krick Calderón, A. Deyko, F. Maier, H.-P. Steinrück
Interfaces of ionic liquids and transition metal surfaces - adsorption, growth, and thermal reactions of ultrathin [C_1C_1m][Tf_2N] films on metallic and oxidised Ni(111) surfaces
Phys. Chem. Chem. Phys. 14 (2012) 5153-5163.

210) H.-P. Steinrück
Recent developments in the study of ionic liquid interfaces using X-ray photoelectron spectroscopy and potential future directions
Phys. Chem. Chem. Phys. 14 (2012) 5010-5029 (Invited Perspective Article - COVER).

211) Y. Li, J. Xiao, T. E. Shubina, M. Chen, Z. Shi, M. Schmid, H.-P. Steinrück, J. M. Gottfried, N. Lin
Coordination and Metalation Bifunctionality of Cu with 5,10,15,20-Tetra(4-pyridyl)porphyrin: Toward a Mixed-Valence Two-Dimensional Coordination Network
J. Am. Chem. Soc. 134 (2012) 6401-6408.

212) A. Vittadini, M. Schirmer, M.-M. Walz, F. Vollnhals, T. Lukasczyk, H.-P. Steinrück, H. Marbach, A. Riss, M. J. Elser, B. Schürer, O. Diwald
Defects in Oxygen-Depleted Titanate Nanostructures
Langmuir 28 (2012) 7851-7858.

213) M.-M. Walz, F. Vollnhals, F. Rietzler, M. Schirmer, A. Kunzmann, H.-P. Steinrück, H. Marbach
Thin membranes vs. bulk substrates: investigation of proximity effects in focused electron beam induced processing
J. Phys. D Appl. Phys. 45 (2012) 225306 1-8.

214) J. Xiao, S. Ditze, M. Chen, F. Buchner, M. Stark, M. Drost, H.-P. Steinrück, J. M. Gottfried, H. Marbach
Temperature-Dependent Chemical and Structural Transformations from 2H-Tetraphenylporphyrin to Cu(II)-Tetraphenylporphyrin on Cu(111)
J. Phys. Chem. C 116 (2012) 12275-12282.

215) N. Taccardi, I. Niedermaier, F. Maier, H.-P. Steinrück, P. Wasserscheid
Cyclic Thiouronium Ionic Liquids: Physicochemical Properties and their Electronic Structure Probed by X-Ray Induced Photoelectron Spectroscopy
Chem. Eur. J. 18 (2012) 8288-8291.

216) R. J. Koch, M. Weser, W. Zhao, F. Viñes, K. Gotterbarm, S. M. Kozlov, O. Höfert, M. Ostler, C. Papp, J. Gebhardt, H.-P. Steinrück, A. Görling, Th. Seyller
Growth and electronic structure of nitrogen-doped graphene on Ni(111)
Phys. Rev. B 86 (2012) 075401 1-6.

217) S. Ditze, M. Stark, M. Drost, F. Buchner, H.-P. Steinrück, H. Marbach
Activation Energy for the Self-Metalation Reaction of 2H-tetraphenylporphyrin on Cu(111)
Angew. Chem. Int. Ed. 51 (2012) 10898-10901.
Bestimmung der Aktivierungsenergie für die Selbstmetallierungsreaktion von 2H-Tetraphenylporphy-rin auf Cu(111)
Angew. Chem. 124 (2012) 11056-11059.

218) S. Bajus, A. Deyko, A. Bösmann, F. Maier, H.-P. Steinrück, P. Wasserscheid
Low melting Li/K/Cs acetate salt mixtures as new ionic media for catalytic applications – first physico-chemical characterization
Dalton Trans. 41 (2012) 14433-14438.

219) S. Schernich, M. Laurin, Y. Lykhach, H.-P. Steinrück, N. Tsud, T. Skála, K. C. Prince, N. Taccardi, V. Matolín, P. Wasserscheid, J. Libuda
Functionalization of Oxide Surfaces through Reaction with 1,3-Dialkylimidazolium Ionic Liquids
J. Phys. Chem. Lett. 4 (2013) 30–35.

220) M. Schmidt, A. M. Cubillas, N. Taccardi, T. G. Euser, T. Cremer, F. Maier, H.-P. Steinrück, P. St. J. Russell, P. Wasserscheid, B. J. M. Etzold
Chemical and (Photo)-catalytical Transformations in Photonic Crystal Fibers
ChemCatChem 5 (2013) 641-650 (COVER).

221) A. Deyko, T. Cremer, F. Rietzler, S. Perkin, L. Crowhurst, T. Welton, H.-P. Steinrück, F. Maier
Interfacial Behavior of Thin Ionic Liquid Films on Mica
J. Phys. Chem. C 117 (2013) 5101-5111.

222) M. Stark, S. Ditze, M. Drost, F. Buchner, H.-P. Steinrück, H. Marbach
Coverage Dependent Disorder - Order Transition of 2H-Tetraphenylporphyrin on Cu(111)
Langmuir 29 (2013) 4104-4110.

223) S. Ditze, M. Röckert, F. Buchner, E. Zillner, M. Stark, H.-P. Steinrück, H. Marbach
Towards the engineering of molecular nanostructures: local anchoring and functionalization of porphyrins on model-templates
Nanotechnology 24 (2013) 115305 1-11.

224) J. Gebhardt, R. J. Koch, W. Zhao, O. Höfert, K. Gotterbarm, S. Mammadov, C. Papp, A. Görling, H.-P. Steinrück, Th. Seyller
Growth and Electronic Structure of Boron-Doped Graphene
Phys. Rev. B 87 (2013) 155437 1-9.

225) C. Gleichweit, M. Amende, S. Schernich, W. Zhao, M. P. A. Lorenz, O. Höfert, N. Brückner, P. Wasserscheid, J. Libuda, H.-P. Steinrück, C. Papp
Dehydrogenation of Dodecahydro-N-ethylcarbazole on Pt(111)
ChemSusChem 6 (2013) 974-977.

226) S. Eigler, M. Enzelberger-Heim, S. Grimm, P. Hofmann, W. Kroener, A. Geworski, C. Dotzer, M. Röckert, J. Xiao, C. Papp, O. Lytken, H.-P. Steinrück, P. Müller, A. Hirsch
Wet Chemical Synthesis of Graphene
Adv. Mater. 25 (2013) 3583–3587.

227) M. Amende, S. Schernich, M. Sobota, I. Nikiforidis, W. Hieringer, D. Assenbaum, C. Gleichweit, H.-J. Drescher, C. Papp, H.-P. Steinrück, A. Görling, P. Wasserscheid, M. Laurin, J. Libuda
Dehydrogenation mechanism of liquid organic hydrogen carriers: dodecahydro-N-ethylcarbazole on Pd(111)
Chem. Eur. J. 19 (2013) 10854-10865.

228) I. Niedermaier, N. Taccardi, P. Wasserscheid, F. Maier, H.-P. Steinrück
Probing a Gas/Liquid Acid-Base Reaction by X-ray Photoelectron Spectroscopy
Angew. Chem. Int. Ed. 52 (2013) 8904-8907.
Angew. Chem. 125 (2013) 9072-9075.

229) L. Óvári, S. Krick Calderon, Y. Lykhach, J. Libuda, A. Erdőhelyi, C. Papp, J. Kiss, H.-P. Steinrück
Near ambient pressure XPS investigation of the interaction of ethanol with Co/CeO_2 (111)
J. Catal. 307 (2013) 132-139.

230) F. Vollnhals, T. Woolcot, M.-M. Walz, S. Seiler, H.-P. Steinrück, G. Thornton, H. Marbach
Electron Beam-Induced Writing of Nanoscale Iron Wires on a Functional Metal Oxide
J. Phys. Chem. C 117 (2013) 17674-17679.

231) W. Zhao, J. Gebhardt, K. Gotterbarm, O. Höfert, C. Gleichweit, C. Papp, A. Görling, H.-P. Steinrück
Gold intercalation of boron-doped graphene on Ni(111): XPS and DFT Study
J. Phys. Condens. Matter 25 (2013) 44502 1-8.

232) B. Uhl, T. Cremer, M. Roos, F. Maier, H.-P. Steinrück, R. J. Behm
At the ionic liquid | metal interface: Structure formation and temperature dependent behavior of an ionic liquid adlayer on Au(111)
Phys. Chem. Chem. Phys. 15 (2013) 17295-17302.

233) O. Höfert, C. Gleichweit, H.-P. Steinrück, C. Papp
Ultrafast x-ray photoelectron spectroscopy in the microsecond time domain
Rev. Sci. Instrum. 84 (2013) 093103 1-7.

234) F. Vollnhals, P. Wintrich, M.-M. Walz, H.-P. Steinrück, H. Marbach
Electron Beam Induced Surface Activation of Ultrathin Porphyrin Layers on Ag(111)
Langmuir 29 (2013) 12290-12297.

235) O. Höfert, M. P. A. Lorenz, R. Streber, W. Zhao, A. Bayer, H.-P. Steinrück, C. Papp
Adsorption and reaction of acetylene on clean and oxygen-precovered Pd(100) studied with high-resolution X-ray photoelectron spectroscopy
J. Chem. Phys. 139 (2013) 164706 1-7.

236) K. Gotterbarm, W. Zhao, O. Höfert, C. Gleichweit, C. Papp, H.-P. Steinrück
Growth and oxidation of graphene on Rh(111)
Phys. Chem. Chem. Phys. 15 (2013) 19625-19631.

237) C. Kolbeck, A. Deyko, T. Matsuda, F. T. U. Kohler, P. Wasserscheid, F. Maier, H.-P. Steinrück
Temperature-dependent surface-enrichment effects of imidazolium-based ionic liquids
ChemPhysChem 14 (2013) 3726-3730.

238) S. Schernich, M. Laurin, Y. Lykhach, N. Tsud, M. Sobota, T. Skála, K. C. Prince, N. Taccardi, V. Wagner, H.-P. Steinrück, V. Matolín, P. Wasserscheid, J. Libuda
Interactions of Imidazolium-Based Ionic Liquids with Oxide Surfaces Controlled by Alkyl Chain Functionalization
ChemPhysChem 14 (2013) 3673-3677.

239) A. Deyko, S. Bajus, F. Rietzler, A. Bösmann, P. Wasserscheid, H.-P. Steinrück, F. Maier
Interface Properties and Physico-Chemical Characterization of the Low-Temperature Molten Salt Li/K/Cs Acetate
J. Phys. Chem. C 117 (2013) 22939-22946.

240) R. Zhang, A. J. Hensley, J.-S. McEwen, S. Wickert, E. Darlatt, K. Fischer, M. Schöppke, R. Denecke, R. Streber, M. Lorenz, C. Papp, H.-P. Steinrück
Integrated X-ray photoelectron spectroscopy and DFT characterization of benzene adsorption on Pt(111), Pt(355) and Pt(322) surfaces
Phys. Chem. Chem. Phys. 15 (2013) 20662-20671.

241) C. Papp and H.-P. Steinrück
In situ high-resolution X-ray photoelectron spectroscopy - Fundamental insights in surface reactions
Surf. Sci. Rep. 68 (2013) 446-487.

242) J. C. Sharp, F. Bebensee, J. H. Baricuatro, H.-P. Steinrück, J. M. Gottfried, C. T. Campbell
Calcium Thin Film Growth on a Cyano-Substituted Poly(p-phenylene vinylene): Interface Structure and Energetics
J. Phys. Chem. C 117 (2013) 23781-23789.

243) I. Niedermaier, M. Bahlmann, C. Papp, C. Kolbeck, W. Wei, S. Krick Calderón, M. Grabau, P. S. Schulz, P. Wasserscheid, H.-P. Steinrück, F. Maier
Carbon Dioxide Capture by an Amine Functionalized Ionic Liquid: Fundamental Differences of Surface and Bulk Behavior
J. Am. Chem. Soc. 136 (2014) 436-441.

244) M. Röckert, S. Ditze, M. Stark, J. Xiao, H.-P. Steinrück, H. Marbach, O. Lytken
Abrupt Coverage-Induced Enhancement of the Self-Metalation of Tetraphenylporphyrin with Cu(111)
J. Phys. Chem. C 118 (2014) 1661-1667.

245) C. Kolbeck, N. Taccardi, N. Paape, P. S. Schulz, P. Wasserscheid, H.-P. Steinrück, F. Maier
Redox chemistry, solubility, and surface distribution of Pt(II) and Pt(IV) complexes dissolved in ionic liquids
J. Mol. Liq. 192 (2014) 103-113.

246) M. Amende, C. Gleichweit, K. Werner, S. Schernich, W. Zhao, M. P. A. Lorenz, O. Höfert, C. Papp, M. Koch, P. Wasserscheid, M. Laurin, H.-P. Steinrück, J. Libuda
Model Catalytic Studies of Liquid Organic Hydrogen Carriers: Dehydrogenation and Decomposition Mechanisms of Dodecahydro-N-ethylcarbazole on Pt(111)
ACS Catal. 4 (2014) 657-665.

247) F. Rietzler, M. Piermaier, A. Deyko, H.-P. Steinrück, F. Maier
Electrospray Ionization Deposition of Ultrathin Ionic Liquid Films: $[C_8C_1Im]Cl$ and $[C_8C_1Im][Tf_2N]$ on Au(111)
Langmuir 30 (2014) 1063-1071.

248) S. Ditze, M. Stark, F. Buchner, A. Aichert, N. Jux, N. Luckas, A. Görling, W. Hieringer, J. Hornegger, H.-P. Steinrück, Hubertus Marbach
On the Energetics of Conformational Switching of Molecules at and Close to Room Temperature
J. Am. Chem. Soc. 136 (2014) 1609-1616.

249) J. C. Sharp, X. Feng, J. A. Farmer, Y. Guo, F. Bebensee, J. H. Baricuatro, E. Zillner, J. Zhu, H.-P. Steinrück, J. M. Gottfried, C. T. Campbell
Calcium Thin Film Growth on Polyfluorenes: Interface Structure and Energetics
J. Phys. Chem. C 118 (2014) 2953-2962.

250) C. Kolbeck, I. Niedermaier, A. Deyko, K. R. J. Lovelock, N. Taccardi, W. Wei, P. Wasserscheid, F. Maier, H.-P. Steinrück
Influence of substituents and functional groups on the surface composition of ionic liquids
Chem. Eur. J. 20 (2014) 3954-3965 (BACK COVER).

251) M. Chen, J. Xiao, H.-P. Steinrück, S. Wang, W. Wang, N. Lin, W. Hieringer, J. M. Gottfried
Combined Photoemission and Scanning Tunneling Microscopy Study of the Surface-Assisted Ullmann Coupling Reaction
Chem. Eur. J. 118 (2014) 6820-6830.

252) Z. Ferencz, A. Erdőhelyi, K. Baán, A. Oszkó, L. Óvári, Z. Kónya, C. Papp, H.-P. Steinrück, J. Kiss
Effects of Support and Rh Additive on Co-Based Catalysts in the Ethanol Steam Reforming Reaction
ACS Catal. 4 (2014) 1205-1218.

253) M. Amende, C. Gleichweit, S. Schernich, O. Höfert, M. P. A. Lorenz, W. Zhao, M. Koch, K. Obesser, C. Papp, P. Wasserscheid, H.-P. Steinrück, J. Libuda
Size and Structure Effects Controlling the Stability of the Liquid Organic Hydrogen Carrier Dodeca-hydro-N-ethylcarbazole during Dehydrogenation over Pt Model Catalysts
J. Phys. Chem. Lett. 5 (2014) 1498-1504.

254) M. Chen, M. Röckert, J. Xiao, H.-J. Drescher, H.-P. Steinrück, O. Lytken, J. M. Gottfried
Coordination Reactions and Layer Exchange Processes at a Buried Metal–Organic Interface
J. Phys. Chem. C 118 (2014) 8501-8507.

255) C. Gleichweit, M. Amende, U. Bauer, S. Schernich, O. Höfert, M. P. A. Lorenz, W. Zhao, M. Müller, M. Koch, P. Bachmann, P. Wasserscheid, J. Libuda, H.-P. Steinrück, C. Papp
Alkyl chain length-dependent surface reaction of dodecahydro-N-alkylcarbazoles on Pt model catalysts
J. Chem. Phys. 140 (2014) 204711 1-9.

256) M. Röckert, M. Franke, Q. Tariq, S. Ditze, M. Stark, P. Uffinger, D. Wechsler, U. Singh, J. Xiao, H. Marbach, H.-P. Steinrück, O. Lytken
Coverage- and Temperature-Dependent Metalation and Dehydrogenation of Tetraphenylporphyrin on Cu(111)
Chem. Eur. J. 20 (2014) 8948-8953.

257) H. Marbach and H.-P. Steinrück
Studying the dynamic behaviour of porphyrins as prototype functional molecules by scanning tunnelling microscopy close to room temperature
Chem. Commun. 50 (2014) 9034-9048 (Feature Article on Invitation).

258) M. Schmid, H.-P. Steinrück, J. M. Gottfried
A new asymmetric Pseudo-Voigt function for more efficient fitting of XPS lines
Surf. Interface Anal. 46 (2014) 505-511.
ERRATUM: Surf. Interface Anal. 47 (2015) 1080.

259) F. Vollnhals, M. Drost, F. Tu, E. Carrasco, A. Späth, R. H. Fink, H.-P. Steinrück, H. Marbach
Electron-beam induced deposition and autocatalytic decomposition of $Co(CO)_3NO$
Beilstein J. Nanotechnol. 5 (2014) 1175–1185.

260) C. Papp, P. Wasserscheid, J. Libuda, H.-P. Steinrück
Liquid Organic Hydrogen Carriers: Surface Science Studies of Carbazole Derivatives
Chem. Rec. 14 (2014) 879-896 (Invited Contribution).

261) M. Stark, S. Ditze, M. Lepper, L. Zhang, H. Schlott, F. Buchner, M. Röckert, M. Chen, O. Lytken, H.-P. Steinrück, H. Marbach
Massive conformational changes during thermally induced self-metalation of 2H-tetrakis-(3,5-di-tert-butyl)-phenylporphyrin on Cu(111)
Chem. Commun. 50 (2014) 10225-10228.

262) K. Gotterbarm, C. Steiner, C. Bronnbauer, U. Bauer, H.-P. Steinrück, S. Maier, C. Papp
Graphene-Templated Growth of Pd Nanoclusters
J. Phys. Chem. C 118 (2014) 15934-15939.

263) J. Kirschner, Z. Wang, S. Eigler, H.-P. Steinrück, C. M. Jäger, T. Clark, A. Hirsch, M. Halik
Driving forces for the self-assembly of graphene oxide on organic monolayers
Nanoscale 6 (2014) 11344-11350.

264) C. Papp, P. Wasserscheid, J. Libuda, H.-P. Steinrück
Wasserstoff, chemisch gespeichert
Nachr. Chem. 62 (2014) 963-969.

265) K. Gotterbarm, C. Bronnbauer, U. Bauer, C. Papp, H.-P. Steinrück
Graphene-Supported Pd Nanoclusters Probed by Carbon Monoxide Adsorption
J. Phys. Chem. C 118 (2014) 25097-25103.

266) M. Röckert, M. Franke, Q. Tariq, D. Lungerich, N. Jux, M. Stark, A. Kaftan, S. Ditze, H. Marbach, M. Laurin, J. Libuda, H.-P. Steinrück, O. Lytken
Insights in Reaction Mechanistics: Isotopic Exchange during the Metalation of Deuterated Tetra-phenyl-21,23D-porphyrin on Cu(111)
J. Phys. Chem. C 118 (2014) 26729-26736.

267) W. Zhao, J. Gebhardt, F. Späth, K. Gotterbarm, C. Gleichweit, H.-P. Steinrück, A. Görling, C. Papp
Reversible Hydrogenation of Graphene on Ni(111) – Synthesis of "Graphone"
Chem. Eur. J. 21 (2015) 3347-3358.

268) H.-P. Steinrück and P. Wasserscheid
Ionic Liquids in Catalysis
Catal. Lett. 145 (2015) 380-397 (Invited Review).

269) F. Späth, W. Zhao, C. Gleichweit, K. Gotterbarm, U. Bauer, O. Höfert, H.-P. Steinrück, C. Papp
Hydrogenation and Dehydrogenation of Nitrogen-doped Graphene investigated by X-Ray Photo-electron Spectroscopy
Surf. Sci. 634 (2015) 89-94.

270) M. Stark, J. Träg, S. Ditze, W. Brenner, N. Jux, H.-P. Steinrück, H. Marbach
Supramolecular order and structural dynamics: A STM study of 2H-tetraphenylporphycene on Cu(111)
J. Chem. Phys. 142 (2015) 101925 1-6.

271) K. Gotterbarm, F. Späth, U. Bauer, C. Bronnbauer, H.-P. Steinrück, C. Papp
Reactivity of Graphene-Supported Pt Nanocluster Arrays
ACS Catal. 5 (2015) 2397-2403.

272) L. Zhang, M. Lepper, M. Stark, D. Lungerich, N. Jux, W. Hieringer, H.-P. Steinrück, H. Marbach
Self-assembly and coverage dependent thermally induced conformational changes of Ni(II)-mesotetrakis (4-tert-butylphenyl) benzoporphyrin on Cu(111)
Phys. Chem. Chem. Phys. 17 (2015) 13066-13073.

273) T. Matsuda, N. Taccardi, J. Schwegler, P. Wasserscheid, H.-P. Steinrück, F. Maier
Vacuum Surface Science Meets Heterogeneous Catalysis: Dehydrogenation of a Liquid Organic Hydrogen Carrier in the Liquid State
ChemPhysChem 16 (2015) 1873-1879.

274) G. Vári, L. Óvári, C. Papp, H.-P. Steinrück, J. Kiss, Z. Kónya
The Interaction of Cobalt with CeO_2 (111) Prepared on Cu(111)
J. Phys. Chem. C 119 (2015) 9324-9333.

275) K. Gotterbarm, F. Späth, U. Bauer, H.-P. Steinrück, C. Papp
Adsorption and Reaction of SO_2 on Graphene-Supported Pt Nanoclusters
Top. Catal. 58 (2015) 573-579.

276) E. C. H. Sykes and H.-P. Steinrück
Taking a Nanoscale "Look" at Chemical Reactions on Surfaces
Acc. Chem. Res. 48 (2015) 2661-2661.

277) M. Röckert, M. Franke, Q. Tariq, H.-P. Steinrück, O. Lytken
Evidence for a Precursor Adcomplex During the Metalation of 2HTPP with Iron on Ag(100)
Chem. Phys. Lett. 635 (2015) 60-62.

278) A. Dees, N. Jux, O. Tröppner, K. Dürr, R. Lippert, M. Schmid, B. Küstner, S. Schlücker, H.-P. Steinrück, J. M. Gottfried, I. Ivanović-Burmazović
Reactions of superoxide with iron porphyrins in the bulk and the near-surface region of ionic liquids
Inorg. Chem. 54 (2015) 6862-6872.

279) M. Ledendecker, S. Krick Calderón, C. Papp, H.-P. Steinrück, M. Antonietti, M. Shalom
The Synthesis of Nanostructured Ni_5P_4 Films and their Use as a Non-noble Bifunctional Electro-catalyst for Full Water Splitting
Angew. Chem. Int. Ed. 54 (2015) 12361-12365.
Angew. Chem. 127 (2015) 12538-12542.

280) M. Franke, F. Marchini, H.-P. Steinrück, O. Lytken, F. J. Williams
Surface Porphyrins Metalate with Zn Ions from Solution
J. Phys. Chem. Lett. 6 (2015) 4845-4849.

281) C. Gleichweit, C. Neiß, S. Maisel, U. Bauer, F. Späth, O. Höfert, F. Vollnhals, M. Drost, H. Marbach, A. Görling, H.-P. Steinrück, C. Papp
Comparative study of the carbide-modified surfaces C/Mo(110) and C/Mo(100) using high-resolution x-ray photoelectron spectroscopy
Phys. Rev. B 92 (2015) 014114 1-13.

282) Z. Wang, S. Eigler, Y. Ishii, Y. Hu, C. Papp, O. Lytken, H.-P. Steinrück, M. Halik
A facile approach to synthesize an oxo-functionalized graphene/polymer composite for low-voltage operating memory devices
J. Mater. Chem. C 3 (2015) 8595-8604.

283) C. Gleichweit, M. Amende, O. Höfert, T. Xu, F. Späth, N. Brückner, P. Wasserscheid, J. Libuda, H.-P. Steinrück, C. Papp
Surface reactions of dicyclohexylmethane on Pt(111)
J. Phys. Chem. C 119 (2015) 20299-20311.

284) M. Lepper, L. Zhang, M. Stark, S. Ditze, D. Lungerich, N. Jux, W. Hieringer, H.-P. Steinrück, H. Marbach
Role of specific intermolecular interactions for the arrangement of Ni(II)-5, 10, 15, 20-tetraphenyl-tetrabenzoporphyrin on Cu(111)
J. Phys. Chem. C 119 (2015) 19897-19905.

285) M. Franke, F. Marchini, L. Zhang, Q. Tariq, N. Tsud, M. Vorokhta, M. Vondráček, K. Prince, M. Röckert, F. J. Williams, H.-P. Steinrück, O. Lytken
Temperature-Dependent Reactions of Phthalic Acid on Ag(100)
J. Phys. Chem. C 119 (2015) 23580-23585.

286) E. Varga, P. Pusztai, L. Óvári, A. Oszkó, A. Erdőhelyi, C. Papp, H.-P. Steinrück, Z. Kónya, J. Kiss
Probing the interaction of Rh, Co and bimetallic Rh–Co nanoparticles with the CeO_2 support: catalytic materials for alternative energy generation
Phys. Chem. Chem. Phys. 17 (2015) 27154-27166.

287) F. Rietzler, J. Nagengast, H.-P. Steinrück, F. Maier
Interface of Ionic Liquids and Carbon: Ultrathin $[C_1C_1Im][Tf_2N]$ Films on Graphite and Graphene
J. Phys. Chem. C 119 (2015) 28068-28076.

288) J. Schneider, M. Franke, M. Gurrath, M. Röckert, T. Berger, J. Bernardi, B. Meyer, H.-P. Steinrück, O. Lytken, O. Diwald
Porphyrin Metalation at MgO Surfaces: A Spectroscopic and Quantum Mechanical Study on Complementary Model Systems
Chem. Eur. J. 22 (2016) 1744-1749.

289) L. Zhang, M. Lepper, M. Stark, R. Schuster, D. Lungerich, N. Jux, H.-P. Steinrück, H. Marbach
2H-Tetrakis(3,5-di-tert-butyl)phenylporphyrin on a Cu(110) Surface: Room-Temperature Self-Metalation and Surface-Reconstruction-Facilitated Self-Assembly
Chem. Eur. J. 22 (2016) 1744-1749.

290) F. Späth, K. Gotterbarm, M. Amende, U. Bauer, C. Gleichweit, O. Höfert, H.-P. Steinrück, C. Papp
Keeping argon under a graphene lid - Argon intercalation between graphene and nickel(111)
Surf. Sci. 643 (2016) 223-226.

291) C. Wöckel, A. Eilert, M. Welke, M. Schöppke, H.-P. Steinrück, R. Denecke
Pyridine on flat Pt(111) and stepped Pt(355) - An in situ HRXPS investigation of adsorption and thermal evolution
J. Chem. Phys. 144 (2016) 014702 1-9.

292) S. Mohr, T. Döpper, T. Xu, Q. Tariq, O. Lytken, M. Laurin, H.-P. Steinrück, A. Görling, J. Libuda
Organic Linkers on Oxide Surfaces: Adsorption and Chemical Bonding of Phthalic Anhydride on MgO(100)
Surf. Sci. 646 (2016) 90-100.

293) M. Stark, S. Ditze, M. Thomann, D. Lungerich, N. Jux, H.-P. Steinrück, H. Marbach
Reversible thermally induced phase transition in ordered domains of Co(II)-5,10,15,20-tetrakis-(3,5-di-tert-butylphenyl)-porphyrin on Cu(111)
Surf. Sci. 650 (2016) 255-262 - Madix Issue.

294) I. Levchuk, C. Würth, F. Krause, A. Osvet, M. Batentschuk, U. Resch-Genger, C. Kolbeck, P. Herre, H.-P. Steinrück, W. Peukert, C. J. Brabec
Industrially scalable and cost-effective Mn^{2+} doped $Zn_xCd_{1-x}S/ZnS$ nanocrystals with 70% photo-luminescence quantum yield, as efficient down-shifting material in photovoltaics
Energy Environ. Sci. 9 (2016) 1083-1094.

295) S. Krick Calderón, M. Grabau, L. Óvári, B. Kress, H.-P. Steinrück, C. Papp
CO oxidation on Pt(111) at near ambient pressures
J. Chem. Phys. 144 (2016) 044706 1-9.

296) I. Niedermaier, C. Kolbeck, H.-P. Steinrück, F. Maier
Dual analyzer system for surface analysis dedicated for angle-resolved photoelectron spectroscopy at liquid surfaces and interfaces
Rev. Sci. Instrum. 87 (2016) 045105 1-14.
ERRATUM: Rev. Sci. Instrum. 88 (2017) 059902 1.

297) M. Amende, C. Gleichweit, T. Xu, O. Höfert, M. Koch, P. Wasserscheid, H.-P. Steinrück, C. Papp, J. Libuda
Dicyclohexylmethane as a liquid organic hydrogen carrier: a model study on the dehydrogenation mechanism over Pd(111)
Catal. Lett. 146 (2016) 851-860.

298) A. Weiß, M. Munoz, A. Haas, F. Rietzler, H.-P. Steinrück, M. Haumann, P. Wasserscheid, B. J. M. Etzold
Boosting the Activity in Supported Ionic Liquid-Phase-Catalyzed Hydroformylation via Surface Functionalization of the Carbon Support
ACS Catal. 6 (2016) 2280-2286.

299) M. Grabau, S. Krick Calderón, F. Rietzler, I. Niedermaier, N. Taccardi, P. Wasserscheid, F. Maier, H.-P. Steinrück, C. Papp
Surface enrichment of Pt in Ga_2O_3 films grown on liquid Pt/Ga alloys
Surf. Sci. 651 (2016) 16-21.

300) O. Brummel, D. Besold, T. Döpper, Y. Wu, S. Bochmann, F. Lazzari, F. Waidhas, U. Bauer, P. Bachmann, C. Papp, H.-P. Steinrück, A. Görling, J. Libuda, J. Bachmann
Energy storage in strained organic molecules: (Spectro)Electrochemical characterization of norbornadiene and quadricyclane
ChemSusChem 9 (2016) 1424-1432.

301) M. Franke, F. Marchini, N. Jux, H.-P. Steinrück, O. Lytken, F. J. Williams
Zinc Porphyrin Metal-Center Exchange at the Solid-Liquid Interface
Chem. Eur. J. 22 (2016) 8520-8524.

302) M. Scheuermeyer, M. Kusche, F. Agel, P. Schreiber, F. Maier, H.-P. Steinrück, J. H. Davis, Jr., F. Heym, A. Jess, P. Wasserscheid
Thermally stable bis(trifluoromethylsulfonyl)imide salts and their mixtures
New J. Chem. 40 (2016) 7157-7161.

303) F. Rietzler, B. May, H.-P. Steinrück, F. Maier
Switching adsorption and growth behavior of ultrathin [C_2C_1Im][OTf] films on Au(111) by Pd deposition
Phys. Chem. Chem. Phys. 18 (2016) 25143-25150.

304) X. Tang, M. Brandl, B. May, I. Levchuk, Y. Hou, M. Richter, H. Chen, S. Chen, S. Kahmann, A. Osvet, F. Maier, H.-P. Steinrück, R. Hock, G. J. Matt, C. J. Brabec
Photoinduced degradation of methylammonium lead triiodide perovskite semiconductors
J. Mater. Chem. A 4 (2016) 15896-15903 (Hot Paper).

305) J. Köbl, T. Wang, C. Wang, M. Drost, F. Tu, Q. Xu, H. Ju, D. Wechsler, M. Franke, H. Pan, H. Marbach, H.-P. Steinrück, J. Zhu, O. Lytken
Hungry Porphyrins: Protonation and Self-Metalation of Tetraphenylporphyrin on TiO_2(110) - 1x1
ChemistrySelect 1 (2016) 6103-6105.

306) S. Krick Calderón, M. Grabau, J. E. Yoo, M. S. Killian, P. Schmuki, H.-P. Steinrück, C. Papp
Reactivity of TiO_2 Nanotube-Supported Platinum Particles in the CO Oxidation Reaction
ChemCatChem 9 (2017) 564-572.

307) X. Du, O. Lytken, M. S. Killian, J. Cao, T. Stubhan, M. Turbiez, P. Schmuki, H.-P. Steinrück, L. Ding, R. H. Fink, N. Li, C. J. Brabec
Overcoming Interfacial Losses in Solution-Processed Organic Multi-Junction Solar Cells
Adv. Energy Mater. 7 (2017) 1601959 1-10.

308) U. Bauer, S. Mohr, T. Döpper, P. Bachmann, F. Späth, F. Düll, M. Schwarz, O. Brummel, L. Fromm, U. Pinkert, A. Görling, A. Hirsch, J. Bachmann, H.-P. Steinrück, J. Libuda, C. Papp
Catalytically triggered energy release from strained organic molecules: The surface chemistry of quadricyclane and norbornadiene on Pt(111)
Chem. Eur. J. 23 (2017) 1613-1622.

309) S. Schindler, F. Vollnhals, C. E. Halbig, H. Marbach, H.-P. Steinrück, C. Papp, S. Eigler
Focused electron beam based direct-write fabrication of graphene and amorphous carbon from oxo-functionalized graphene on silicon dioxide
Phys. Chem. Chem. Phys. 19 (2017) 2683-2686.

310) F. Düll, F. Späth, P. Bachmann, U. Bauer, H.-P. Steinrück, C. Papp
Reactivity of CO on Sulfur-Passivated Graphene-Supported Palladium Nanocluster Arrays
J. Phys. Chem. C 121 (2017) 1734−1741.

311) D. Fantauzzi, S. Krick Calderón, J. E. Mueller, M. Grabau, C. Papp, H.-P. Steinrück, T. P. Senftle, A. C. T. van Duin, T. Jacob
Growth of Stable Surface Oxides on Pt(111) at Near-Ambient Pressures
Angew. Chem. Int. Ed. 56 (2017) 2594-2598.
Angew. Chem. 129 (2017) 2638-2642.

312) C. Gleichweit, C. Neiss, S. Maisel, U. Bauer, F. Späth, O. Höfert, A. Görling, H.-P. Steinrück, C. Papp
Surface Reaction of CO on Carbide-Modified Mo(110)
J. Phys. Chem. C 121 (2017) 3133-3142.

313) B. May, M. Hönle, B. Heller, F. Greco, R. Bhuin, H.-P. Steinrück, F. Maier
Surface-Induced Changes in the Thermochromic Transformation of an Ionic Liquid Cobalt Thiocyanate Complex
J. Phys. Chem. Lett. 8 (2017) 1137-1141.

314) D. Wechsler, M. Franke, Q. Tariq, L. Zhang, T.-L. Lee, P. K. Thakur, N. Tsud, S. Bercha, K. C. Prince, H.-P. Steinrück, O. Lytken
Adsorption Structure of Cobalt Tetraphenylporphyrin on Ag(100)
J. Phys. Chem. C 121 (2017) 5667-5674.

315) M. Franke, D. Wechsler, Q. Tariq, M. Röckert, L. Zhang, P. K. Thakur, N. Tsud, S. Bercha, K. Prince, T.-L. Lee, H.-P. Steinrück, O. Lytken
Interfacial interactions between CoTPP molecules and MgO(100) thin films
Phys. Chem. Chem. Phys. 19 (2017) 11549-11553.

316) F. Maier, I. Niedermaier, H.-P. Steinrück
Perspective: Chemical reactions in ionic liquids monitored through the gas (vacuum)/liquid interface
J. Chem. Phys. 146 (2017) 170901 1-15 (Invited Perspective Article - COVER).

317) O. Lytken, D. Wechsler, H.-P. Steinrück
Removing photoemission features from Auger-yield NEXAFS spectra
J. Electron Spectrosc. Relat. Phenom. 218 (2017) 35-38.

318) O. Brummel, F. Waidhas, U. Bauer, Y. Wu, S. Bochmann, H.-P. Steinrück, C. Papp, J. Bachmann, J. Libuda
Photochemical Energy Storage and Electrochemically Triggered Energy Release in the Norbornadiene-Quadricyclane System: UV Photochemistry and IR Spectroelectrochemistry in a Combined Experiment
J. Phys. Chem. Lett. 8 (2017) 2819-2825.

319) N. Taccardi, M. Grabau, J. Debuschewitz, M. Distaso, M. Brandl, R. Hock, F. Maier, C. Papp, J. Erhard, C. Neiss, W. Peukert, A. Görling, H.-P. Steinrück, P. Wasserscheid
Gallium-rich Pd–Ga phases as supported liquid metal catalysts
Nat. Chem. 9 (2017) 862-867.

320) M. Lepper, J. Köbl, T. Schmitt, M. Gurrath, A. de Siervo, M. A. Schneider, H. Steinrück, B. Meyer, H. Marbach, W. Hieringer
"Inverted" porphyrins: a distorted adsorption geometry of freebase porphyrins on Cu(111)
Chem. Commun. 53 (2017) 8207-8210.

321) F. Späth, J. Gebhardt, F. Düll, U. Bauer, P. Bachmann, C. Gleichweit, A. Görling, H.-P. Steinrück, C. Papp
Hydrogenation and hydrogen intercalation of hexagonal-boron nitride on Ni(111): reactivity and electronic structure
2D Mater. 4 (2017) 035026 1-13.

322) A. Farkas, D. Fantauzzi, J. E. Mueller, T. Zhu, C. Papp, H.-P. Steinrück, T. Jacob
On the platinum-oxide formation under gas-phase and electrochemical conditions
J. Electron Spectrosc. Relat. Phenom. 221 (2017) 44-57.

323) L. Zhang, M. Lepper, M. Stark, T. Menzel, D. Lungerich, N. Jux, W. Hieringer, H.-P. Steinrück, H. Marbach
On the critical role of the substrate: the adsorption behaviour of tetrabenzoporphyrins on different metal surfaces
Phys. Chem. Chem. Phys. 19 (2017) 20281-20289.

324) M. Schwarz, P. Bachmann, T. Nascimento Silva, S. Mohr, M. Scheuermeyer, F. Späth, U. Bauer, F. Düll, J. Steinhauer, C. Hohner, T. Döpper, H. Noei, A. Stierle, C. Papp, H.-P. Steinrück, P. Wasserscheid, A. Görling, J. Libuda
Model Catalytic Studies of Novel Liquid Organic Hydrogen Carriers: Indole, Indoline and Octahydroindole on Pt(111)
Chem. Eur. J. 23 (2017) 14806-14818.

325) M. Grabau, J. Erhard, N. Taccardi, S. Krick Calderón, P. Wasserscheid, A. Görling, H.-P.- Steinrück, C. Papp
Spectroscopic Observation and Molecular Dynamics Simulation of Ga Surface Segregation in Liquid Pd-Ga Alloys
Chem. Eur. J. 23 (2017) 17701-17706.

326) M. Lepper, T. Schmitt, M. Gurrath, M. Raschmann, L. Zhang, M. Stark, H. Hölzel, N. Jux, B. Meyer, M. A. Schneider, H.-P. Steinrück, H. Marbach
Adsorption Behavior of a Cyano-Functionalized Porphyrin on Cu(111) and Ag(111): From Molecular Wires to Ordered Supramolecular Two-Dimensional Aggregates
J. Phys. Chem. C 121 (2017) 26361-26371.

327) Y. Hou, X. Du, S. Scheiner, D. P. McMeekin, Z. Wang, N. Li, M. S. Killian, H. Chen, M. Richter, I. Levchuk, N. Schrenker, E. Spiecker, T. Stubhan, N. A. Luechinger, A. Hirsch, P. Schmuki, H.-P. Steinrück, R. H. Fink, M. Halik, H. J. Snaith, C. J. Brabec
A generic interface to reduce the efficiency-stability-cost gap of perovskite solar cells
Science 358 (2017) 1192-1197.

328) A. Hensley, C. Wöckel, C. Gleichweit, K. Gotterbarm, C. Papp, H.-P. Steinrück, Y. Wang, R. Denecke, J.-S. McEwen
Identifying the Thermal Decomposition Mechanism of Guaiacol on Pt(111): An Integrated X-ray Photoelectron Spectroscopy and Density Functional Theory Study
J. Phys. Chem. C 122 (2018) 4261-4273.

329) U. Bauer, C. Gleichweit, O. Höfert, F. Späth, K. Gotterbarm, H.-P. Steinrück, C. Papp
Reactivity studies of ethylene, benzene and cyclohexane on carbide-modified Mo(110) using high resolution X-ray photoelectron spectroscopy
Surf. Sci. 678 (2018) 11-19.

330) P. Bachmann, M. Schwarz, J. Steinhauer, F. Späth, F. Düll, U. Bauer, T. Nascimento Silva, S. Mohr, C. Hohner, M. Scheuermeyer, P. Wasserscheid, J. Libuda, H.-P. Steinrück, C. Papp
Dehydrogenation of the Liquid Organic Hydrogen Carrier System Indole/Indoline/Octahydroindole on Pt(111)
J. Phys. Chem. C 122 (2018) 4470-4479.

331) D. Wechsler, C. C. Fernández, H.-P. Steinrück, O. Lytken, F. J. Williams
Covalent Anchoring and Interfacial Reactions of Adsorbed Porphyrins on Rutile TiO_2 (110)
J. Phys. Chem. C 122 (2018) 4261-4273.

332) K. Shimizu, B. Heller, F. Maier, H.-P. Steinrück, J. N. Canongia Lopes
Probing the surface tension of ionic liquids using the Langmuir Principle
Langmuir 34 (2018) 4408-4416.

333) U. Bauer, F. Späth, F. Düll, P. Bachmann, J. Steinhauer, H.-P. Steinrück, C. Papp
Reactivity of CO and C_2H_4 on bimetallic Pt_xAg_{1-x}/Pt(111) surface alloys investigated by high-resolution X-ray photoelectron spectroscopy
ChemPhysChem 19 (2018) 1432-1440.

334) B. S. J. Heller, C. Kolbeck, I. Niedermaier, S. Dommer, J. Schatz, P. Hunt, F. Maier, H.-P. Steinrück
Surface enrichment in equimolar mixtures of non-functionalized and functionalized imidazolium-based ionic liquids
ChemPhysChem 19 (2018) 1733-1745.

335) M. Lexow, T. Talwar, B. S. J. Heller, B. May, R. G. Bhuin, F. Maier, H.-P. Steinrück
Time-dependent changes in the growth of ultrathin ionic liquid films on Ag(111)
Phys. Chem. Chem. Phys. 20 (2018) 12929-12938.

336) M. Lepper, J. Köbl, L. Zhang, M. Meusel, H. Hölzel, D. Lungerich, N. Jux, A. de Siervo, B. Meyer, H.-P. Steinrück, H. Marbach
Controlling the Self-Metalation Rate of Tetraphenylporphyrins on Cu(111) via Cyano Functionalization
Angew. Chem. Int. Ed. 57 (2018) 10074-10079.
Kontrolle der Selbstmetallierungsrate von Tetraphenylporphyrinen auf Cu(111) durch Funktionali-sierung mit Cyangruppen
Angew. Chem. 130 (2018) 10230-10236.

337) F. Düll, F. Späth, U. Bauer, P. Bachmann, J. Steinhauer, H.-P. Steinrück, C. Papp
Reactivity of CO on Sulfur-Passivated Graphene-Supported Platinum Nanocluster Arrays
J. Phys. Chem. C 122 (2018) 16008-16015.

338) P. Bachmann, F. Düll , F. Späth, U. Bauer, H.-P. Steinrück, C. Papp
A HR-XPS study of the formation of h-BN on Ni(111) from the two precursors, ammonia borane and borazine
J. Chem. Phys. 149 (2018) 164709 1-7.

339) M. Grabau, H.-P. Steinrück, C. Papp
Physical vapor deposition of Ga on polycrystalline Au surfaces studied using X-ray photoelectron spectroscopy
Surf. Sci. 677 (2018) 254-257.

340) F. Düll, U. Bauer, F. Späth, P. Bachmann, J. Steinhauer, H.-P. Steinrück, C. Papp
Bimetallic Pd–Pt alloy nanocluster arrays on graphene/Rh(111): formation, stability, and dynamics
Phys. Chem. Chem. Phys. 20 (2018) 21294-21301.

341) F. Düll, V. Schwaab, F. Späth, U. Bauer, P. Bachmann, J. Steinhauer, H.-P. Steinrück, C. Papp
Sulfur oxidation on graphene-supported platinum nanocluster arrays
Chem. Phys. Lett. 708 (2018) 165-169.

342) J. Kuliga, L. Zhang, M. Lepper, D. Lungerich, H. Hölzel, N. Jux, H.-P. Steinrück, H. Marbach
Metalation and coordination reactions of 2H-meso-trans-di(p-cyanophenyl)porphyrin on Ag(111) with coadsorbed cobalt atoms
Phys. Chem. Chem. Phys. 20 (2018) 25062-25068.

343) M. Lexow, B. S. J. Heller, F. Maier, H.-P. Steinrück
Anion Exchange at the Liquid/Solid Interface of Ultrathin Ionic Liquid Films on Ag(111)
ChemPhysChem 19 (2018) 2978-2984.

344) R. G. Bhuin, P. Schreiber, B. S. J. Heller, M. Scheuermeyer, P. Wasserscheid, H.-P. Steinrück, F. Maier
Surface behavior of low-temperature molten salt mixtures during the transition from liquid to solid
J. Mol. Liq. 275 (2019) 290-296.

345) B. May, M. Lexow, N. Taccardi, H.-P. Steinrück, F. Maier
Reactions of a Polyhalide Ionic Liquid with Copper, Silver, and Gold
ChemistryOpen 8 (2019) 15-22.

346) U. Bauer, L. Fromm, C. Weiß, P. Bachmann, F. Späth, F. Düll, J. Steinhauer, W. Hieringer, A. Görling, A. Hirsch, H.-P. Steinrück, C. Papp
Controlled catalytic energy release of the norbornadiene/quadricyclane molecular solar thermal energy storage system on Ni(111) – a photoemission and DFT study
J. Phys. Chem. C 123 (2019) 7654-7664.

347) M. Lexow, B. S. J. Heller, G. Partl, R. G. Bhuin, F. Maier, H.-P. Steinrück
Cation Exchange at the Interfaces of Ultrathin Films of Fluorous Ionic Liquids on Ag(111)
Langmuir 35 (2019) 398-405 (COVER).

348) V. Lloret, M. Á. Rivero-Crespo, J. A. Vidal-Moya, S. Wild, A. Doménech-Carbó, B. S. J. Heller, S. Shin, H.-P. Steinrück, F. Maier, F. Hauke, M. Varela, A. Hirsch, A. Leyva-Pérez, G. Abellán
Few layer 2D pnictogens catalyze the alkylation of soft nucleophiles with esters
Nat. Commun. 10 (2019) 509 1-11.

349) S. Wild, M. Fickert, A. Mitrovic, V. Lloret, C. Neiss, J. A. Vidal-Moya, M. Á. Rivero-Crespo, A. Leyva-Pérez, K. Werbach, H. Peterlik, M. Grabau, H. Wittkämper, C. Papp, H.-P. Steinrück, T. Pichler, A. Görling, F. Hauke, G. Abellán, A. Hirsch
Lattice Opening upon Bulk Reductive Covalent Functionalization of Black Phosphorus
Angew. Chem. Int. Ed. 58 (2019) 5763-5768.
Gitteröffnung durch reduktive kovalente Volumen-Funktionalisierung von schwarzem Phosphor
Angew. Chem. 131 (2019) 5820-5826.

350) C. C. Fernández, D. Wechsler, T. C. R. Rocha, H.-P. Steinrück, O. Lytken, F. J. Williams
Adsorption of Phosphonic-Acid-Functionalized Porphyrin Molecules on TiO_2 (110)
J. Phys. Chem. C 123 (2019) 10974-10980.

351) F. Späth, H. R. Soni, J. Steinhauer, F. Düll, U. Bauer, P. Bachmann, W. Hieringer, A. Görling, H.-P. Steinrück, C. Papp
Oxygen Functionalization of Hexagonal Boron Nitride on Ni(111)
Chem. Eur. J. 25 (2019) 8884-8893.

352) U. Bauer, L. Fromm, C. Weiß, F. Späth, P. Bachmann, F. Düll, J. Steinhauer, S. Matysik, A. Pominov, A. Görling, A. Hirsch, H.-P. Steinrück, C. Papp
Surface chemistry of 2,3-dibromosubstituted norbornadiene/quadricyclane as molecular solar thermal energy storage system on Ni(111)
J. Chem. Phys. 150 (2019) 184706 1-13.

353) C. C. Fernández, D. Wechsler, T. C. R. Rocha, H.-P. Steinrück, O. Lytken, F. J. Williams
Adsorption geometry of carboxylic acid functionalized porphyrin molecules on TiO_2 (110)
Surf. Sci. 689 (2019) 121462 1-7.

354) F. Greco, S. Shin, F. J. Williams, B. S. J. Heller, F. Maier, H.-P. Steinrück
Potential Screening at Electrode/Ionic Liquid Interfaces from In Situ X-ray Photoelectron Spectroscopy
ChemistryOpen 8 (2019) 1365-1368.

355) D. Wechsler, C. C. Fernández, Q. Tariq, N. Tsud, K. Prince, F. J. Williams, H.-P. Steinrück, O. Lytken
Interfacial Reactions of Tetraphenylporphyrin with Cobalt-Oxide Thin Films
Chem. Eur. J. 25 (2019) 13197-13201.

356) N. Raman, S. Maisel, M. Grabau, N. Taccardi, J. Debuschewitz, M. Wolf, H. Wittkämper, T. Bauer, M. Wu, M. Haumann, C. Papp, A. Görling, E. Spiecker, J. Libuda, H.-P. Steinrück, P. Wasserscheid
Highly Effective Propane Dehydrogenation Using Ga-Rh Supported Catalytically Active Liquid Metal Solutions
ACS Catal. 9 (2019) 9499-9507.

357) P. Bachmann, J. Steinhauer, F. Späth, F. Düll, U. Bauer, R. Eschenbacher, F. Hemauer, M. Scheuermeyer, A. Bösmann, M. Büttner, C. Neiß, A. Görling, P. Wasserscheid, H.-P. Steinrück, C. Papp
Dehydrogenation of the Liquid Organic Hydrogen Carrier System 2-methylindole/2-methylindoline/2-methyl-octahydroindole on Pt(111)
J. Chem. Phys. 151 (2019) 144711 1-15.

358) F. Düll, M. Meusel, F. Späth, S. Schötz, U. Bauer, P. Bachmann, J. Steinhauer, H.-P. Steinrück, A. Bayer, C. Papp
Growth and stability of Pt nanoclusters from 1 to 50 atoms on h-BN/Rh(111)
Phys. Chem. Chem. Phys. 21 (2019) 21287-21295.

359) T. Schwob, P. Kunnas, N. de Jonge, C. Papp, H.-P. Steinrück, R. Kempe
General and selective deoxygenation by hydrogen using a reusable earth-abundant metal catalyst
Sci. Adv. 5 (2019) eaav3680 1-8.

360) M. Lexow, S. Massicot, F. Maier, H.-P. Steinrück
Stability and Exchange Processes in Ionic Liquid/Porphyrin Composite Films on Metal Surfaces
J. Phys. Chem. C 123 (2019) 29708-29721.

361) B. S. J. Heller, M. Lexow, F. Greco, S. Shin, G. Partl, F. Maier, H.-P. Steinrück
Temperature-Dependent Surface Enrichment Effects in Binary Mixtures of Fluorinated and Non-Fluorinated Ionic Liquids
Chem. Eur. J. 26 (2020) 1117-1126.

362) J. Kuliga, S. Massicot, R. Adhikari, M. Ruppel, N. Jux, H.-P. Steinrück, H. Marbach
Conformation controls mobility: 2H-Tetranaphthylporphyrins on Cu(111)
ChemPhysChem 21 (2020) 423-427.

363) C. Hohner, M. Kettner, C. Stumm, D. Blaumeiser, H. Wittkämper, M. Grabau, M. Schwarz, C. Schuschke, Y. Lykhach, C. Papp, H.-P. Steinrück, J. Libuda
Pt-Ga Model SCALMS on Modified HOPG: Thermal Behavior and Stability in UHV and Under Near-Ambient Conditions
J. Phys. Chem. C 124 (2020) 2562-2573.

364) A. Ceccatto dos Santos, R. C. de Campos Ferreira, J. C. Moreno-López, L. Barreto, M. Lepper, R. Landers, H.-P. Steinrück, H. Marbach, A. de Siervo
Cyano-Functionalized Porphyrins on Cu(111) from One-Dimensional Wires to Two-Dimensional Molecular Frameworks: On the Role of Co-Deposited Metal Atoms
Chem. Mater. 32 (2020) 2114-2122.

365) B. S. J. Heller, U. Paap, F. Maier, H.-P. Steinrück
Pronounced surface enrichment of fluorinated ionic liquids in binary mixtures with methoxy-functionalized ionic liquids
J. Mol. Liq. 305 (2020) 112783 1-9.

366) M. Lexow, F. Maier, H.-P. Steinrück
Ultrathin ionic liquid films on metal surfaces: adsorption, growth, stability and exchange phenomena
Adv. Phys.: X 5 (2020) 1761266 1-47.

367) J. Köbl, D. Wechsler, E. Y. Kataev, F. J. Williams, N. Tsud, S. Franchi, H.-P. Steinrück, O. Lytken
Adsorption of Phenylphosphonic Acid on rutile TiO_2 (110)
Surf. Sci. 698 (2020) 121612 1-6.
CORRIGENDUM: Surf. Sci. 717 (2022) 122004 1.

368) F. Düll, J. Steinhauer, F. Späth, U.Bauer, P. Bachmann, H.-P.Steinrück, S. Wickert, R. Denecke, C. Papp
Ethylene: Its adsorption, reaction, and coking on Pt/h-BN/Rh(111) nanocluster arrays
J. Chem. Phys. 152 (2020) 224710 1-8.

369) R. Adhikari, G. Siglreithmaier, M. Gurrath, M. Meusel, J. Kuliga, M. Lepper, H. Hölzel, N. Jux, B. Meyer, H.-P. Steinrück, H. Marbach
Formation of highly ordered molecular porous 2D networks from cyano-functionalized porphyrins on Cu(111)
Chem. Eur. J. 26 (2020) 13408-13418.

370) M. Meusel, M. Lexow, A. Gezmis, S. Schötz, M. Wagner, A. Bayer, F. Maier, H.-P. Steinrück
Atomic Force and Scanning Tunneling Microscopy of Ordered Ionic Liquid Wetting Layers from 110 K up to Room Temperature
ACS Nano 14 (2020) 9000-9010.

371) R. G. Bhuin, L. Winter, M. Lexow, F. Maier, H.-P. Steinrück
On the Dynamic Interaction of n-Butane with Imidazolium-Based Ionic Liquids
Angew. Chem. Int. Ed. 59 (2020) 14429-14433.
Die dynamische Wechselwirkung von n-Butan mit Imidazolium-basierten ionischen Flüssigkeiten
Angew. Chem. 132 (2020) 14536-14541.

372) T. M. Koller, F. D. Lenahan, P. S. Schmidt, T. Klein, J. Mehler, F. Maier, M. H. Rausch, P. Wasserscheid, H.-P. Steinrück, A. P. Fröba
Surface Tension and Viscosity of Binary Mixtures of the Fluorinated and Non-fluorinated Ionic Liquids [PFBMIm][PF_6] and [C_4C_1Im][PF_6] by the Pendant Drop Method and Surface Light Scattering
Int. J. Thermophys. 41 (2020) 144 1-24.

373) F. Späth, J. Steinhauer, F. Düll, U. Bauer, P. Bachmann, H.-P. Steinrück and C. Papp
Reaction of Hydrogen and Oxygen on h-BN
J. Phys. Chem. C 124 (2020) 18141-18146.

374) E. Kataev, D. Wechsler, F. J. Williams, J. Köbl, N. Tsud, S. Franchi, H.-P. Steinrück, O. Lytken
Probing the roughness of porphyrin thin films with X-ray photoelectron spectroscopy
ChemPhysChem 21 (2020) 2293-2300

375) H. Wittkämper, S. Maisel, M. Wu, J. Frisch, R. G. Wilks, M. Grabau, E. Spiecker, M. Bär, A. Görling, H.-P. Steinrück, C. Papp
Oxidation induced restructuring of Rh-Ga SCALMS model catalyst systems
J. Chem. Phys. 153 (2020) 104702 1-13.

376) J. Steinhauer, P. Bachmann, M. Freiberger, U. Bauer, H.-P. Steinrück, C. Papp
Model Catalytic Studies of Liquid Organic Hydrogen Carriers: Indole/Indoline/Octahydroindole on Ni(111)
J. Phys. Chem. C 124 (2020) 22559-22567.

377) M. Meusel, M. Lexow, A. Gezmis, A. Bayer, F. Maier, H.P. Steinrück
Growth of Multilayers of Ionic Liquids on Au(111) Investigated by Atomic Force Microscopy in Ultrahigh Vacuum
Langmuir 36 (2020) 13670-13681.

378) L. Winter, R. Bhuin, M. Lexow, F. Maier, H.-P. Steinrück
On the adsorption of n-butane on alkyl imidazolium ionic liquids with different anions using a new molecular beam setup
J. Chem. Phys. 153 (2020) 214706 1-10.

379) J. Kuliga, R. C. de Campos Ferreirra, R. Adhikari, S. Massicot, M. Lepper, H. Hölzel, N. Jux, H. Marbach, A. de Siervo, H.-P. Steinrück
Metalation of 2HTCNPP on Ag(111) with Zn: Evidence for the Sitting atop Complex at Room Temperature
ChemPhysChem 22 (2021) 396-403.
Special Issue on Interface Science, honoring the 70th birthday of Prof. Jürgen Behm

380) C. C. Fernández, M. Franke, H.-P. Steinrück, O. Lytken, F. J. Williams
Demetalation of Surface Porphyrins at the Solid-Liquid Interface
Langmuir 37 (2021) 852-857.

381) S. Ninova, O. B. Malcıoğlu, P. Auburger, M. Franke, O. Lytken, H.-P. Steinrück, M. Bockstedte
Morphology dependent interaction between Co(II)-tetraphenylporphyrin and the MgO(100) surface
Phys. Chem. Chem. Phys. 23 (2021) 2105-2116.

382) D. Wechsler, P. Vensaus, N. Tsud, H.-P. Steinrück, O. Lytken, F. J. Williams
Surface Reactions and Electronic Structure of Carboxylic Acid Porphyrins Adsorbed on TiO_2 (110)
J. Phys. Chem. C 125 (2021) 6708-15.

383) R. Adhikari, J. Kuliga, M. Ruppel, N. Jux, H. Marbach, H.-P. Steinrück
Self-Assembled 2D-Coordination Kagome, Quadratic, and Close-Packed Hexagonal Lattices Formed from a Cyano-Functionalized Benzoporphyrin on Cu(111)
J. Phys. Chem. C 125 (2021) 7204-7212.

384) S. Shin, F. Greco, F. Maier, H.-P. Steinrück
Enrichment effects of ionic liquid mixtures at polarized electrode interfaces monitored by potential screening
Phys. Chem. Chem. Phys. 23 (2021) 10756-10762.

385) J. Steinhauer, P. Bachmann, U. Bauer, F. Düll, H.-P. Steinrück, C. Papp
Model Catalytic Studies of the LOHC System 2,2'-Bipiperidine/2,2'-Bipyridine on Ni(111)
J. Phys. Chem. C 125 (2021) 8216-8223.

386) D. Wechsler, C. C. Fernández, J. Köbl, L.-M. Augustin, C. Stumm, N. Jux, H.-P. Steinrück, F. J. Williams, O. Lytken
Wet-Chemically Prepared Porphyrin Layers on Rutile TiO_2 (110)
Molecules 26 (2021) 2871 1-13.

387) H. Wittkämper, S. Maisel, M. Moritz, M. Grabau, A. Görling, H.-P. Steinrück, C. Papp
Surface oxidation-induced restructuring of liquid Pd-Ga SCALMS model catalysts
Phys. Chem. Chem. Phys. 23 (2021) 16324-16333.

388) E. M. Freiberger, F. Späth, U. Bauer, F. Düll, P. Bachmann, J. Steinhauer, F. Hemauer, N. J. Waleska, V. Schwaab, H.-P. Steinrück, C. Papp
Selective Oxygen and Hydrogen Functionalization of the h-BN/Rh(111) Nanomesh
Chem. Eur. J. 27 (2021) 13172-13180.

389) J. Mehler, M. Ermer, U. Paap, B. S. J. Heller, F. Maier, H.-P. Steinrück, M. Hartmann, C. Korted, P. S. Schulz, P. Wasserscheid
B/N-doped carbon sheets from a new ionic liquid with excellent sorption properties for methylene blue
J. Ionic Liquids 1 (2021) 100004 1-9.

390) M. Meusel, A. Gezmis, S. Jaekel, M. Lexow, A. Bayer, F. Maier, H.-P. Steinrück
Time- and Temperature-Dependent Growth Behavior of Ionic Liquids on Au(111) Studied by Atomic Force Microscopy in Ultrahigh Vacuum
J. Phys. Chem. C 125 (2021) 20439-20449.

391) S. Massicot, T. Sasaki, M. Lexow, S. Shin, F. Maier, S. Kuwabata, H.-P. Steinrück
Adsorption, Wetting, Growth, and Thermal Stability of the Protic Ionic Liquid Diethylmethylammonium Trifluoromethanesulfonate on Ag(111) and Au(111)
Langmuir 37 (2021) 11552-11560.

392) M. Wagner, J. Planer, B. S. J. Heller, J. Langer, A. Limbeck, L. A. Boatner, H.-P. Steinrück, J. Redinger, F. Maier, F. Mittendorfer, M. Schmid, U. Diebold
Oxygen-rich, tetrahedral surface phase on high-temperature rutile $VO_2(110)_T$ single crystals
Phys. Rev. Mater. 5 (2021) 125001 1-5.

393) L. Winter, R. G. Bhuin, F. Maier, H.-P. Steinrück
n-Butane, iso-Butane and 1-Butene Adsorption on Imidazolium-Based Ionic Liquids Studied with Molecular Beam Techniques
Chem. Eur. J. 27 (2021) 17059-17065.

394) J. Köbl, C. C. Fernández, L.-M. Augustin, E. Y. Kataev, S. Franchi, N.Tsud, C. Pistonesi, M. E. Pronsato, N. Jux, O. Lytken, F. J. Williams, H.-P. Steinrück
Benzohydroxamic Acid on Rutile TiO_2 (110)-(1×1)– A Comparison of Ultrahigh-Vacuum Evaporation with Deposition from Solution
Surf. Sci. 716 (2022) 121955 1-10.

395) A. Wolfram, Q. Tariq, C. C. Fernández, M. Muth, M. Gurrath, D. Wechsler, M. Franke, F. J. Williams, H.-P. Steinrück, B. Meyer, O. Lytken
Adsorption energies of porphyrins on MgO(100): An experimental benchmark for dispersion-corrected density-functional theory
Surf. Sci. 717 (2022) 121979 1-8.

396) C. C. Fernández, D. Wechsler, O. Lytken, H.-P. Steinrück, F. J. Williams
Self-metalation of monophosphonic acid tetraphenylporphyrin on TiO_2 (110)-(1×1)
Surf. Sci. 717 (2022) 122005 1-6.

397) H. Wittkämper, S. Maisel, M. Moritz, M. Grabau, A. Görling, H.-P. Steinrück, C. Papp
Temperature-dependent XPS studies on Ga-In alloys through the melting-point
Surf. Sci. 717 (2022) 122008 1-8.

398) F. Greco, D. Hemmeter, S. Shin, H.-P. Steinrück, F. Maier
The Effect of Ambient Conditions on the Potential Screening at Ionic Liquid - Electrode Interfaces
J. Ionic Liquids 2 (2022) 100019 1-7.

399) E. Y. Kataev, L. Fromm, Q. Tariq, D. Wechsler, F. J. Williams, N. Tsud, S. Franchi, H.-P. Steinrück, A. Görling, O. Lytken
Anchoring of phthalic acid on MgO(100)
Surf. Sci. 720 (2022) 122007 1-12.

400) J. Brox, R. Adhikari, M. Shaker, M. Ruppel, N. Jux, H. Marbach, S. Jaekel, H.-P. Steinrück
On the adsorption of different tetranaphthylporphyrins on Cu(111) and Ag(111)
Surf. Sci. 720 (2022) 122047 1-6.

401) E. Bilgilisoy, J.-C. Yu, C. Preischl, L. McElwee-White, H.-P. Steinrück, H. Marbach
Nanoscale Ruthenium-Containing Deposits from $Ru(CO)_4I_2$ via Simultaneous Focused Electron Beam-Induced Deposition and Etching in Ultrahigh Vacuum: Mask Repair in Extreme Ultraviolet Lithography and Beyond
ACS Appl. Nano Mater. 5 (2022) 3855-3865.

402) E. M. Freiberger, F. Düll, C. Wichmann, U. Bauer, H.-P. Steinrück, C. Papp
A High-Resolution X-Ray Photoelectron Spectroscopy Study on the Adsorption and Reaction of Ethylene on Rh(111)
Chem. Phys. Lett. 797 (2022) 139595 1-6.

403) S. Massicot, T. Sasaki, M. Lexow, F. Maier, S. Kuwabata, H.-P. Steinrück
On-surface metathesis of an ionic liquid on Ag(111)
Chem. Eur. J. 28 (2022) e202200167 1-10.

404) M. Muth, A. Wolfram, E. Kataev, J. Köbl, H.-P. Steinrück, O. Lytken
Accurate Determination of Adsorption-Energy Differences of Metalloporphyrins on Rutile TiO_2 (110) 1×1
Langmuir 38 (2022) 8643-8650.

405) T. Wei, X. Liu, M. Kohring, S. Al-Fogra, M. Moritz, D. Hemmeter, U. Paap, C. Papp, H.-P. Steinrück, J. Bachmann, H. B. Weber, F. Hauke, A. Hirsch
Molecular Stacking on Graphene
Angew. Chem. Int. Ed. 61 (2022) e202201169 1-7.
Angew. Chem. 134 (2022) e202201169 1-7.

406) F. Hemauer, U. Bauer, L. Fromm, C. Weiß, A. Leng, P. Bachmann, F. Düll, J. Steinhauer, V. Schwaab, R. Grzonka, A. Hirsch, A. Görling, H.-P. Steinrück, C. Papp
Surface Chemistry of the Molecular Solar Thermal Energy Storage System 2,3-Dicyano-Norbornadiene/Quadricyclane on Ni(111)
ChemPhysChem 23 (2022) e202200199 1-11.
ChemPhysChem 23 (2022) e202200552 1-2 (FRONT COVER)

407) V. Seidl, M. Bosch, U. Paap, M. Livraghi, Z. Zhai, C. R. Wick, T. M. Koller, P. Wasserscheid, F. Maier, A.-S. Smith, J. Bachmann, H.-P. Steinrück, K. Meyer
Bis-polyethylene glycol-functionalized imidazolium ionic liquids: A multi-method approach towards bulk and surface properties
J. Ionic Liquids 2 (2022) 100041 1-13.

408) U. Paap, B. Kreß, H.-P. Steinrück, F. Maier
Probing Surface and Interfacial Tension of Ionic Liquids in Vacuum with the Pendant Drop and Sessile Drop Method
Int. J. Mol. Sci. 23 (2022) 13158 1-16.

409) U. Paap, V. Seidl, K. Meyer, F. Maier, H.-P. Steinrück
Direct correlation of surface tension and surface composition of ionic liquid mixtures – A combined vacuum pendant drop and angle-resolved X-ray photoelectron spectroscopy study
Molecules 27 (2022) 8561 1-16.

410) D. Hemmeter, U. Paap, N. Taccardi, J. Mehler, P. Schulz, P. Wasserscheid, F. Maier, H.-P. Steinrück
Formation and Surface Behavior of Pt and Pd Complexes with Ligand Systems Derived from Nitrile-functionalized Ionic Liquids Studied by XPS
ChemPhysChem 24 (2023) e202200391 1-11.
ChemPhysChem 24 (2023) e202200915 1 (FRONT COVER)

411) D. Hemmeter, D. Kremitzl, P. Schulz, P. Wasserscheid, F.Maier, H.-P. Steinrück
The Buoy Effect: Surface Enrichment of a Pt Complex in IL Solution by Ligand Design
Chem. Eur. J. 29 (2023) e202203325 1-7.
Chem. Eur. J. 29 (2023) e202204022 1 (FRONT COVER).

412) H. Wittkämper, R. Hock, M. Weißer, J. Dallmann, C. Vogel, N. Raman, N. Taccardi, M. Haumann, P. Wasserscheid, T.-E. Hsieh, S. Maisel, M. Moritz, C. Wichmann, J. Frisch, M. Gorgoi, R. G. Wilks, M. Bär, M. Wu, E. Spiecker, A. Görling, T. Unruh, H.-P. Steinrück, C. Papp
Isolated Rh atoms in dehydrogenation catalysis
Sci. Rep. 13 (2023) 4458 1-8.

413) F. Hemauer, V. Schwaab, E. M. Freiberger, N. J. Waleska, A. Leng, C. Weiß, J. Steinhauer, F. Düll, P. Bachmann, A. Hirsch, H.-P. Steinrück, C. Papp
Surface Studies on the Energy Release of the MOST System 2-Carbethoxy-3-Phenyl-Norbornadiene/ Quadricyclane (PENBD/PEQC) on Pt(111) and Ni(111)
Chem. Eur. J. 29 (2023) e202203759 1-10.

414) R. Adhikari, S. Massicot, L. Fromm, T. Talwar, A. Gezmis, M. Meusel, A. Bayer, S. Jaekel, F. Maier, A. Görling, H.-P. Steinrück
Structure and Reactivity of the Ionic Liquid [C_1C_1Im][Tf_2N] on Cu(111)
Top. Catal. 66 (2023) 1178-1195.

415) M. Wang, S. Fu, P. Petkov, Y. Fu, Z. Zhang, Y. Liu, J. Ma, G. Chen, S. M. Gali, L. Gao, Y. Lu, S. Paasch, H. Zhong, H.-P. Steinrück, E. Cánovas, E. Brunner, D. Beljonne, M. Bonn, H. I. Wang, R. Dong, X. Feng

Exceptionally high charge mobility in phthalocyanine-based poly(benzimidazobenzophenanthroline)-ladder-type two-dimensional conjugated polymers
Nat. Mater. 22 (2023) 880-887.

416) D. Hemmeter, U. Paap , F. Maier, H.-P. Steinrück
Structure and Surface Behavior of Rh Complexes in Ionic Liquids Studied Using Angle-Resolved X-ray Photoelectron Spectroscopy
Catalysts 13 (2023) 871 1-18.

417) V. Schwaab, F. Hemauer, E. M. Freiberger, N. J. Waleska-Wellnhofer, H.-P. Steinrück, C. Papp
Liquid Organic Hydrogen Carriers: Model Catalytic Studies on the Thermal Dehydrogenation of 1-Cyclohexylethanol on Pt(111)
J. Phys. Chem. C 127 (2023) 11058-11066.

418) Z. Zhai, U. Paap, A. Gezmis, F. Maier, H.-P. Steinrück, T. M. Koller
Surface tension and viscosity of binary ionic liquid mixtures from high vacuum up to pressures of 10 MPa
J. Mol. Liq. 386 (2023) 122388 1-9.

419) R. Adhikari, J. Brox, S. Massicot, M. Ruppel, N. Jux, H. Marbach, H.-P. Steinrück
Structure and Conformation of Individual Molecules upon Adsorption of a Mixture of Benzoporphyrins on Ag(111), Cu(111), and Cu(110) Surfaces
ChemPhysChem 24 (2023) e202300355 1-14.
ChemPhysChem 24 (2023) e202300540 1 (FRONT COVER).

420) L. Winter, S. Trzeciak, C. C. Fernández, S. Massicot, T. Talwar, F. Maier, D. Zahn, H.-P. Steinrück
Tailoring the Selectivity of 1,3-Butadiene versus 1-Butene Adsorption on Pt(111) by Ultrathin Ionic Liquid Films
ACS Catal. 13 (2023) 10866-10877.

421) F. Hemauer, D. Krappmann, V. Schwaab, Z. Hussain, E. M. Freiberger, N. J. Waleska-Wellnhofer, E. Franz, F. Hampel, O. Brummel, J. Libuda, A. Hirsch, H.-P. Steinück, C. Papp
Surface science and liquid phase investigations of oxanorbornadiene/oxaquadricyclane ester deriva-tives as molecular solar thermal energy storage systems on Pt(111)
J. Chem. Phys. 159 (2023) 074703 1-15.

422) S. Massicot, A. Gezmis, T. Talwar, M. Meusel, S. Jaekel, R. Adhikari, L. Winter, C. C. Fernández, A. Bayer, F. Maier, H.-P. Steinrück
Adsorption and Thermal Evolution of $[C_1C_1Im][Tf_2N]$ on Pt(111)
Phys. Chem. Chem. Phys. 25 (2023) 27953-27966.

423) M. Wang, G. Wang, C. Naisa, Y. Fu, S. M. Gali, S. Paasch, M. Wang, H. Wittkämper, C. Papp, E. Brunner, S. Zhou, D. Beljonne, H.-P. Steinrück, R. Dong, X. Fen
Poly(benzimidazobenzophenanthroline)-Ladder-Type Two-Dimensional Conjugated Covalent Organic Framework for Fast Proton Storage
Angew. Chem. Int. Ed. 62 (2023) e202310937 1-7.
Ein Zweidimensionales Konjugiertes Poly(benzimidazobenzophenanthrolin) Leiter-Covalent Organic Framework für schnelle Protonenspeicherung
Angew. Chem. 135 (2023) e202310937 1-7.

424) E. M. Freiberger, J. Steffen, N. J. Waleska-Wellnhofer, A. Harrer, F. Hemauer, V. Schwaab, A. Görling, H.-P. Steinrück, C. Papp
Bromine adsorption and thermal stability on Rh(111): A combined XPS, LEED and DFT study
ChemPhysChem 24 (2023) e202300510 1-8.
ChemPhysChem 24 (2023) e202300745 (COVER).

425) E. Bilgilisoy, A. Kamali, T. X. Gentner, G. Ballmann, S. Harder, H.-P. Steinrück, H. Marbach, O. Ingólfsson
A combined gas-phase dissociative ionization, dissociative electron attachment and deposition study on the potential FEBID precursor $[Au(CH_3)_2Cl]_2$
Beilstein J. Nanotechnol. 14 (2023) 1178–1199.

426) D. Hemmeter, U. Paap, N. Wellnhofer, A. Gezmis, D. Kremitzl, P. Wasserscheid, H.-P. Steinrück, F. Maier
Understanding the Buoy Effect of Surface-Enriched Pt Complexes in Ionic Liquids: A Combined ARXPS and Pendant Drop Study
ChemPhysChem 24 (2023) e202300612 1-11.

427) R. Eschenbacher, F. Hemauer, E. Franz, A. Leng, V. Schwaab, N. J. Waleska-Wellnhofer, E. M. Freiberger, L. Fromm, T. Xu, A. Görling, A. Hirsch, H.-P. Steinrück, C. Papp, O. Brummel, J. Libuda
Au-Catalyzed Energy Release in a Molecular Solar Thermal (MOST) System: A Combined Liquid-Phase and Surface Science Study
ChemPhotoChem 8 (2024) e202300155 1-14.

428) E. M. Freiberger, J. Steffen, N. J. Waleska-Wellnhofer, F. Hemauer, V. Schwaab, A. Görling, H.-P. Steinrück, C. Papp
Bromination of 2D Materials
Nanotechnology 35 (2024) 145703 1-16.

429) A. Ceccatto, E. M. Freiberger, N. J. Waleska-Wellnhofer, S. Jaekel, D. J. Mowbray, C. Papp, H.-P. Steinrück, A. de Siervo
Engineering large nanoporous networks with size and shape selected by appropriate precursors
Carbon 221 (2024) 118945 1-10.

430) D. Hemmeter, L. Sanchez Merlinsky, L. M. Baraldo, F. Maier, F. J. Williams, H.-P. Steinrück
Exploring the interfacial behavior of ruthenium complexes in ionic liquids: implications for supported ionic liquid phase catalysts
Phys. Chem. Chem. Phys 26 (2024) 7602-7610.

431) F. Hemauer, H.-P. Steinrück, C. Papp
The Norbornadiene/Quadricyclane Pair as Molecular Solar Thermal Energy Storage System: Surface Science Investigations
ChemPhysChem 25 (2024) e202300806 1-22 (Invited Review).

432) M. Moritz, S. Maisel, N. Raman, H. Wittkämper, C. Wichmann, M. Grabau, D. Kahraman, J. Steffen, N. Taccardi, A. Görling, M. Haumann, P. Wasserscheid, H.-P. Steinrück, C. Papp
Supported Catalytically Active Liquid Metal Solutions: Liquid Metal Catalysis with Ternary Alloys, Enhancing Activity in Propane Dehydrogenation
ACS Catal. 14 (2024) 6440-6450.

433) D. Hemmeter, A. Gezmis, D. Kremitzl, P. Wasserscheid, F. Maier, H.-P. Steinrück
Tailoring the Surface Enrichment of a Pt Catalyst in Ionic Liquid Solutions by Choice of the Solvent
Adv. Mater. Interfaces 11 (2024) 2301085 1-13.

434) L. S. Merlinsky, D. Hemmeter, L. M. Baraldo, F. Maier, H.-P. Steinrück, F. J. Williams
Unlocking the Fluorine-Free Buoy Effect: Surface-Enriched Ruthenium Polypyridine Complexes in Ionic Liquids
ChemistryOpen 13 (2024) e202400092 1-6.
ChemistryOpen 13 (2024) e202480702 1 (COVER FEATURE).

435) E. M. Freiberger, F. Düll, P. Bachmann, J. Steinhauer, F. Williams, H.-P. Steinrück, C. Papp
h-BN in the making: The surface chemistry of borazine on Rh(111)
J. Chem. Phys. 160 (2024) 154706 1-9.

436) H. Bühlmeyer, T. Talwar, R. Eschenbacher, J. Baretto, J. Hauner, L. Knörr, H.-P. Steinrück, F. Maier, J. Libuda
Surface Chemistry of a [C_2C_1Im][OTf] (Sub)Wetting Layer on Pt(111): A Combined XPS, IRAS and STM study
ACS Appl. Mater. Interfaces 16 (2024) 24063-24074.

437) C. Wichmann, M. Moritz, H. Wittkämper, T.-E. Hsieh, J. Frisch, M. Bär, H.-P. Steinrück, C. Papp
Poisoning Resistance of Liquid GaPt Supported Catalytically Active Liquid Metal Solutions Model Systems
J. Phys. Chem. C 128 (2024) 9024-9033.

438) S. K. Antara, D. Hemmeter, Z. Zhai, D. Kremitzl, F. Maier, T. M. Koller, H.-P. Steinrück, M. Haumann
Hydrogenation with dissolved Pt-complexes homogenously distributed in the ionic liquid or enriched at the gas/ionic liquid interface
ChemCatChem 16 (2024) e202400574 1-11.

439) A. Wolfram, M. Muth, J. Köbl, A. Mölkner, S. Mehl, N. Tsud, H.-P. Steinrück, B. Meyer, O. Lytken
Phenylphosphonic Acid on Rutile TiO_2(110): Using Theoretically Predicted O 1s Spectra to Identify the Adsorption Binding Modes
J. Phys. Chem. C 128 (2024) 12735-12753.

440) A. Wolfram, M. Muth, F. J. Williams, S. Mehl, N. Tsud, H.-P. Steinrück, O. Lytken
Adsorption of Phenylboronic Acid Derivatives on Rutile TiO_2(110)
J. Phys. Chem. C 128 (2024) 12450-12470.

441) T. Talwar, J. Barreto, C. C. Fernández, H.-P. Steinrück, F. Maier
Ultrathin Films of a Nitrile-Functionalized Ionic Liquid [C_3CNC_1Im][Tf_2N] on Au(111) and Pt(111): Adsorption, Growth, and Thermal Behavior
Langmuir 40 (2024) 27565-27578.

442) V. Schwaab, F. Hemauer, J. Steffen, N. J. Waleska-Wellnhofer, E. M. Freiberger, M. Steinmetz, A. Görling, P. Wasserscheid, H.-P. Steinrück, C. Papp
Model Catalytic Studies on the Thermal Dehydrogenation of the Benzaldehyde/Cyclohexylmethanol LOHC System on Pt(111)
Chem. Eur. J. 30 (2024) e202402793 1-10.

443) M. Shaker, M. Muth, J. Steffen, A. Ceccatto dos Santos, S. Jaekel, R. Adhikari, P. Gazetas, C. Oleszak, A. de Siervo, N. Jux, A. Görling, O. Lytken, H.-P. Steinrück
Coverage- and temperature-induced self-metalation of tetraphenyltransdibenzoporphyrin on Cu(111)
J. Phys. Condens. Matter 37 (2025) 085001 1-20.

444) M. Muth, A. Wolfram, H.-P. Steinrück, O. Lytken
Coadsorption of ZnTPP and 2HMCTPP on Rutile TiO_2 (110)
ChemPhysChem 26 (2025) e202400795 1-7.

445) A. Bergen, D. Hemmeter, J. Barreto, F. Maier, A. Scheurer, F. W. Heinemann, H.-P. Steinrück, K. Meyer
A Surface-Active Pt(II) Bis-N-Heterocyclic Carbene (NHC) Complex for Interface-Enhanced Supported Ionic Liquid Phase (SILP) Catalysis
Chem. Eur. J. 31 (2025) e202402827 1-7.

446) J. Barreto, T. Talwar, H.-P. Steinrück, F. Maier
Ultrathin $[C_1C_1Im][Tf_2N]$ Layers Supported on Mn_3O_4 (001) Films
Top. Catal. 68 (2025) 2016-2026.

447) D. Hemmeter, M. Haumann, F. J. Williams, T. M. Koller, P. Wasserscheid, K. Meyer, F. Maier, H.-P. Steinrück
Towards Surface-Enhanced Homogeneous Catalysis: Tailoring the Enrichment of Metal Complexes at Ionic Liquid Surfaces
Angew. Chem. Int. Ed. 64 (2025) e202422693 1-26.
Auf dem Weg zur oberflächenverstärkten homogenen Katalyse: Maßgeschneiderte Anreicherung von Metallkomplexen an der Oberfläche von ionischen Flüssigkeiten
Angew. Chem. 37 (2025) e202422693 1-28.

448) A. Ceccatto, G. R. Campi, V. Carreño Diaz, E. B. da Costa Ferreira, N. J. Waleska-Wellnhofer, E. M. Freiberger, S. Jaekel, C. Papp, H.-P. Steinrück, D. J. Mowbray, A. de Siervo
Engineering two-dimensional supramolecular self-assembly: The role of Cl atoms
FlatChem 50 (2025) 1-7.

449) Z. Zhai, J. Barreto, D. Hemmeter, F. Maier, H.-P. Steinrück, T. M. Koller
Correlation of Macroscopic Surface Tension and Microscopic Surface Composition of Binary Ionic Liquid Mixtures with Common Cations and Anions of Different Size
J. Phys. Chem. B 129 (2025) 2789-2800.

450) L. Ulm, C. C. Fernández, L. Winter, F. Maier, H.-P. Steinrück
A molecular beam study of olefin adsorption on ultrathin ionic liquid films on Pt(111)
J. Chem. Phys. 162 (2025) 124705 1-9.

451) V. Schwaab, F. Düll, P. Bachmann, F. Hemauer, H.-P. Steinrück, C. Papp
Effect of the Ru concentration on the CO tolerance and the oxidizability of a composition spread PtRu/Pt(111) near-surface alloy
Phys. Chem. Chem. Phys. 27 (2025) 10670-10678.

452) A. Gezmis, T. Talwar, M. Meusel, A. Bayer, F. Maier, H.-P. Steinrück
Flexible 2D structure formation of $[C_1C_1Im][Tf_2N]$ on Ag(111)
ChemPhysChem 26 (2025) e202500163 1-10.

453) M. Muth, M. Shaker, J. Steffen, A. Wolfram, S. Steinbach, L.-P. Gazetas, N. Jux, A. Görling, H.-P. Steinrück, O. Lytken
Coverage- and Temperature-Dependent Rates of Metalation, Ring Fusion, and Polymerization of Benzoporphyrins on Cu(111)
Chem. Eur. J. 31 (2025) e202500998 1-13.

454) J. Steffen, M. Shaker, M. Muth, S. Steinbach, P. Gazetas, C. Oleszak, N. Jux, A. Görling, H.-P. Steinrück, O. Lytken
Using Steric Repulsion to Reduce the Coordination of Metal Centers in Adsorbed Transdibenzoporphyrins
J. Phys. Chem. C 129 (2025) 12391-12404.

455) H.-P. Steinrück
60 years of surface science: Achievements and perspectives
Surf. Sci. 761 (2025) 122791 1-4.
Editorial, Special Issue in Surface Science

456) A. Ceccatto, L. Sanchez Merlinsky, L. M. Baraldo, F. J. Williams, F. Maier, H.-P. Steinrück
Influence of ionic liquid composition on surface enrichment of fluorine-free Ru complexes
RSC Adv. 15 (2025) 36137–36144.

457) M. Shaker, M. Muth, J. Steffen, A. Ceccatto, P. Gazetas, C. Oleszak, A. de Siervo, N. Jux, A. Görling, H.-P. Steinrück, O. Lytken
Site Preferences of Copper and Cobalt Monobenzo Porphyrins in a Trans-Dibenzo Adsorption Structure on Cu(111)
ChemPhysChem 26 (2025) e202500524 1-6.

458) L. Ulm, C. C. Fernández, H.-P. Steinrück, F. Maier
Interfacial Processes in Ionic Liquid-Modified Catalysts: Olefin Replacement and Desorption on Pt(111)
ChemCatChem 17 (2025) e01157 1-9.

459) M. Moritz, C. Wichmann, M. Steinmetz, H.-P. Steinrück, C. Papp
Operando Study of the Active Phase in Liquid GaPt Alloy Catalysts
Small Science 6 (2026) 1-8.

460) V. Carreño-Diaz, A. Ceccatto, E. Brenda da Costa Ferreira, M. Shaker, H.-P. Steinrück, A. de Siervo
Tailoring Pt-Based Organometallic Porous Network on Ag(111): A Model System for "Host-Guest" Chemistry
ACS Nanosci. Au 6 (2026) 139-147.

461) T. Talwar, H.-P. Steinrück, F. Maier
Water co-adsorption in ultrathin films of ionic liquids on Pt(111)
Chemistry Open 15 (2026) e202500571 1-18.

462) T.-E. Hsieh, M. S. Moritz, A. Mölkner, C. Wichmann, J. Frisch, J. Steffen, C. J. Parker, V. Krishnamurthi, T. Daeneke, H.-P. Steinrück, A. Görling, C. Papp, M. Bär
Surface properties of Ga–Cu based liquid-metal alloys: impact of Cu dilution, topography, and alloy liquefaction
RSC Appl. Interfaces 3 (2026) 413-419.

463) A. Ceccatto, F. J. Williams, F. Maier, H.-P. Steinrück
Interfacial Enrichment and Demetallation of a Zinc Porphyrin in the Ionic Liquid $[C_4C_1Im][PF_6]$
ChemPhysChem 27 (2026) e70318 1-8.

464) T. Talwar, H.-P. Steinrück, F. Maier
The interplay of water and the hydrophilic ionic liquid $[C_4C_1Im][BF_4]$ on Pt(111)
Surf. Sci. 770 (2026) 122978 1-9.

465) A. Gezmis, S. Steinbach, J. Steffen, A. Ceccatto, I. Tonon, N. Waleska-Wellnhofer, A. de Siervo, H.-P. Steinrück
Reversible Structure Formation in 4,4-Bipyridine-Fe 2D Metal-Organic Frameworks on Au(111)
Adv. Charact. 1 (2026) 40-58.

466) A. Mölkner, M. S. Moritz, C. Wichmann, J. Steffen, A. Görling, H.-P. Steinrück, C. Papp
Tuning Surface Enrichment in Liquid Metal Catalysts: A Combined DFT, ML-FF, and XPS Study of GaAgPt and GaCuPt
ChemCatChem 18 (2026) e71143 1-12.

467) S. Steinbach, A. Ceccatto, M. Muth, H.-P. Steinrück, O. Lytken
Using Displacement-Assisted Desorption to Identify Reactive Intermediates: Ring-Fused Porphyrins on Cu(111)
Chem. Eur. J. (2026) e71740 1-13.

List of Publications

Prof. Dr. Hans-Peter Steinrück
Physical Chemistry, University Erlangen-Nürnberg, Germany

Book Chapters & Other Publications (not ISI Web-of-Knowledge listed)

B1) M. Luger, A. Winkler, K. D. Rendulic, H.-P. Steinrück
Temperature dependence of the sticking coefficient for H_2 on various nickel surfaces
Proc. Symposium on Surface Science, 3S'85, Eds. G. Betz, H. Störi, W. Husinsky and P. Varga, (Obertraun 1985) p.107-112.

B2) H.-P. Steinrück, K. D. Rendulic, A. Winkler
An experimental investigation of detailed balancing for the systems H_2/nickel and CO/nickel
Proc. Symposium on Surface Science, 3S'85, Eds. G. Betz, H. Störi, W. Husinsky and P. Varga, Obertraun 1985, pp.101-106.

B3) H.-P. Steinrück
Das Prinzip der Detaillierten Gleichgewichte im System H_2/Nickel und CO/Nickel
Mitteilungsblatt der Österreichischen Physikalischen Gesellschaft 4/1986, Dezember 1986.

B4) H.-P. Steinrück
Angle resolved UV-photoelectron spectroscopy of adsorbed molecules
INVITED contribution to Proc. Symposium on Surface Science, 3S'91, Eds. P. Varga, G. Betz, Obertraun 1991, pp. 67-74.

B5) M. Weinelt, P. Zebisch, W. Huber, M. Pabst, U. Birkenheuer, B. Reichert, N. Rösch, H.-P. Steinrück
On the adsorption of ethylene on Ni(110)
Proc. Symposium on Surface Science, 3S'92, Eds. M. Alnot, J. J. Ehrhardt, C. Launois, B. Mutaftschiev, M. R. Tempère, La Plagne/Savoie 1992, pp. 276-279.

B6) H.-P. Steinrück
Angle-resolved UV-photoelectron spectroscopy
"Surface Science Techniques", Eds. J. M. Walls and R. Smith, Pergamon (1994) 67-83.
INVITED contribution
ISBN: 978-0-08-042148-3

B7) D. Mehl, M. Zharnikov, P. Zebisch, M. Weinelt, H.-P. Steinrück
Photoelectron diffraction and holography of clean metal surfaces
Proc. Symposium on Surface Science, 3S'94, Eds. T. Rosenblatt and B. Mutaftschiev, Les Arcs/Savoie 1994, pp. 60-63.

B8) R. Girwidz, J. Schmidt, H.-P. Steinrück
Geometrische Optik am Computer
Phys. Unserer Zeit 30 (1999) 216-218.
DOI: 10.1002/piuz.19990300507

B9) R. Girwidz, O. Gößwein, H.-P. Steinrück
Atomphysik am Computer
Phys. Unserer Zeit 31 (2000) 165-167.
DOI: 10.1002/1521-3943(200004)31:4<165::AID-PIUZ165>3.0.CO;2-0

B10) J. F. Zhu, M. Kinne, T. Fuhrmann, B. Tränkenschuh, R. Denecke, H.-P. Steinrück
Coadsorption of NO and CO on a Pt(111) surface studied by high-resolution synchrotron radiation photoemission
Chapter in: “Surface Science: New Research”, Editor: Charles P. Norris, pp. 217-235, 2005 Nova Science Publishers, Inc.
ISBN: 978-1-59454-404-0

B11) G. Held and H.-P. Steinrück
Cyclic hydrocarbons
Landolt-Börnstein “*Physics of Covered Solid Surfaces - Adsorbed Layers on Surfaces*”, Editor: H. P. Bonzel, Vol. III/42, Subvolume A4, Chapter 3.8.7. (2005) pp. 300-369.
INVITED contribution
ISBN: 978-3-540-20281-3
DOI: 10.1007/b12050 (Volume)
DOI: 10.1007/10932216_11 (Text)
DOI: 10.1007/10932216_12 (Tables)
DOI: 10.1007/10932216_13 (Figures)

B12) W. Zhao, C. Papp, H.-P. Steinrück
Heterographenes
Encyclopedia of Polymeric Nanomaterials, Springer (2015) 924-936.
ISBN: 978-3-642-36199-9
DOI: 10.1007/978-3-642-29648-2_340

B13) R. Denecke and H.-P. Steinrück
Adsorption of (Small) Molecules on Metals
Chapter 38 in: "Surface and Interface Science", Vol. 5, Editor: K. Wandelt, pp. 391-458, 2016 Wiley-VCH.
ISBN: 978-3-527-41158-0

B14) Hans-Peter Steinrück, Florian Maier, Christian Papp
Molecules in Energy Storage and Release – A Surface Science Perspective
Bunsenmagazin 25 (2023) 112-117.

List of Publications

Prof. Dr. Hans-Peter Steinrück
Physical Chemistry, University Erlangen-Nürnberg, Germany

Academic Theses

T1) H.-P. Steinrück
Diplomarbeit (Diploma Thesis):
Die experimentelle Bestimmung der Winkelverteilung desorbierender Moleküle
Technische Universität Graz, 1983.

T2) H.-P. Steinrück
Doktorarbeit (PhD Thesis):
Das Prinzip der Detaillierten Gleichgewichte im System H_2/Nickel und CO/Nickel
Technische Universität Graz, 1985.

T3) H.-P. Steinrück
Habilitationsschrift (Habilitation Thesis):
Elektronische Struktur, Symmetrie und laterale Wechselwirkung adsorbierter Moleküle
Technische Universität München, 1992.