List of Publications

Dr. Shamil SHAIKHUTDINOV

   Initial stages of CO₂ adsorption on CaO: A combined experimental and computational study
   PCCP, submitted

184. Li L, Tissot H, Shaikhutdinov S, Freund HJ
   Transition metal induced crystallization of ultrathin silica films
   Chem Mater, submitted

183. Freund HJ, Heyde M, Kuhlenbeck H, Nilius N, Risse T, Schauermann S, Schmidt T, Shaikhutdinov S, Sterrer M
   Thin oxide films as model systems for heterogeneous catalysts
   in Springer Handbook Surface Science, accepted

182. Weng X, Zhang K, Pan Q, Martynova Y, Shaikhutdinov S, Freund HJ
   Support effects on CO oxidation on metal-supported ultrathin FeO(111) films
   ChemCatChem, accepted

181. Shaikhutdinov S
   Surface structures of gold and gold-based bimetallic nanoparticles

   Nanoscale Patterns on Polar Oxide Surfaces
   Chem Mater 28 (2016) 7433

179. Tissot H, Li L, Shaikhutdinov S, Freund HJ
   Preparation and structure of Fe-containing aluminosilicate thin films

   Local electronic structure, work function, and line defect dynamics of ultrathin epitaxial ZnO layers on a Ag(111) surface

   Supports and modified nanoparticles in designing model catalysts
   Faraday Discussions 188 (2016) 309

   Electron stimulated hydroxylation of a metal supported silicate film
175. Emmez E, Boscoboinik JA, Tenney S, Sutter P, Shaikhutdinov S, Freund HJ
Oxidation of the Ru(0001) surface covered by weakly bound, ultrathin silicate films
Surface Science 646 (2016) 19

174. Shaikhutdinov S, Freund HJ
Ultra-thin silicate films on metals

Ultrathin Ti-silicate film on a Ru(0001) surface

Enhanced CO oxidation on oxide/metal interface: From ultra-high vacuum to near-atmospheric pressures

171. Zhang K, Shaikhutdinov S, Freund HJ
Does Surface Structure of Oxide Affect Strong Metal-Support Interaction with Pt? Pt on Fe₂O₄(001) vs Fe₂O₄(111)

170. Davis EM, Zhang K, Cui Y, Kuhlenbeck H, Shaikhutdinov S, Freund HJ
Growth of Fe₂O₄(100) thin films on Pt(100): Tuning surface termination with an Fe buffer layer
Surface Science, 636 (2015) 42

169. Liu BH, Boscoboinik JA, Cui Y, Shaikhutdinov S, Freund HJ
Stabilization of ultrathin zinc oxide films on metals: Reconstruction versus hydroxylation

168. Liu BH, McBriarty ME, Bedzyk M, Shaikhutdinov S, Freund HJ
Structural transformations of zinc oxide layers on Pt(111)

167. Boscoboinik JA, Shaikhutdinov S
Exploring zeolite chemistry with the tools of surface science: Challenges, opportunities, and limitations

Local characterization of ultrathin ZnO layers on Ag(111) by scanning tunneling microscopy and atomic force microscopy

165. Freund HJ, Shaikhutdinov S, Nilius N
Model studies on heterogeneous catalysts at the atomic scale
164. Yang B, Shaikhutdinov S, Freund HJ
Ultrathin silicatene/silicon-carbide hybrid film on a metal substrate
Surface Science 632 (2014) 9-13

163. Yang B, Shaikhutdinov S, Freund HJ
Tuning spatial distribution of surface hydroxyls on a metal-supported single layer silica

162. Emmez E, Yang B, Shaikhutdinov S, Freund HJ
Permeation of a single layer SiO\textsubscript{2} membrane and chemistry in confined space

Ultrathin silica films: The atomic structure of two-dimensional crystals and glasses

Combining Advanced Microscopies and Model Systems to Elucidate the Atomic Structure of Interfaces: A Case of Strong Metal/Support Interaction

159. Uhlrich JJ, Yang B, Shaikhutdinov S
Methanol reactivity on silica-supported ceria nanoparticles
Topics Catal, 57 (2014) 1229 – 1235

Reactivity of ultrathin ZnO films supported by Ag(111) and Cu(111): A comparison to ZnO/Pt(111)

Model catalysts based on Au clusters and nanoparticles

156. Boscoboinik JA, Yu X, Shaikhutdinov S, Freund HJ
Preparation of an ordered ultrathin aluminosilicate framework composed of hexagonal prisms forming a percolated network
MICROPOR MESOPOR MATER 189 (2014) 91-96

CO oxidation over monolayer manganese oxide films on Pt(111)

Atomic structure of an ultrathin Fe-silicate film grown on a metal: A monolayer of clay?
Patterned defect structures predicted for graphene are observed on single-layer silica films
Nano Letters 13 (2013) 4422

Interaction of probe molecules with bridging hydroxyls of two-dimensional zeolites: a surface science approach
J PHYS CHEM C 117 (2013) 13547

151. Freund HJ, Heyde M, Nilius N, Schauermann S, Shaikhutdinov S, Sterrer M
Model Studies on Heterogeneous Catalysts at the Atomic Scale: From Supported Metal Particles to Two-dimensional Zeolites
J CATAL, 308 (2013) 154

150. Martynova Y, Shaikhutdinov S, Freund HJ
CO oxidation on metal-supported ultrathin oxide films: What makes them active?
CHEMCATCHEM, 5 (2013) 2162

Hydroxylation of Metal Supported Sheet-Like Silica Films
J PHYS CHEM C 117 (2013) 8336

CO oxidation over ZnO films on Pt(111) at near-atmospheric pressures
J CATAL 301 (2013) 227

147. Schauermann S, Nilius N, Shaikhutdinov S, Freund HJ
Nanoparticles for Heterogeneous Catalysis: New Mechanistic Insights
ACC CHEM RES, 46(2013) 1673

146. Nilius N, Sterrer M, Shaikhutdinov S, Menzel D, Freund HJ
Model systems in catalysis for energy economy
in "Chemical Energy Storage", Ed. R. Schlögl, de Gruyter Verlag, 2012

145. Shaikhutdinov S, Freund HJ
Ultra-thin silica films on metals: The long and winding road to understanding the atomic structure
ADVANCED MATERIALS, 25 (2013) 49

144. Shaikhutdinov S, Freund HJ
Metal supported aluminosilicate ultra-thin films as a versatile tool for studying surface chemistry of zeolites
CHEMPHYSCHEN, 14 (2012) 71

143. Kuhlenbeck H, Shaikhutdinov S, Freund HJ
Well-ordered transition metal oxide layers in model catalysis- a series of case studies
CHEM REVIEWS, 113 (2013) 3986

142. Shaikhutdinov S
Surface structures of gold nanoparticles

141. Martynova Y, Yang B, Yu X, Boscoboinik JA, Shaikhutdinov S, Freund HJ
Low temperature CO oxidation on ruthenium oxide thin films at near-atmospheric pressures
CATAL LETT 142 (2012) 657

140. Heyde M, Shaikhutdinov S, Freund HJ
Two-dimensional silica: Crystalline and vitreous.
CHEM PHYS LETT 550 (2012) 1

Partial oxidation of ethanol on vanadia catalysts on supporting oxides with different redox properties compared to propane.
J CATAL 296 (2012) 120

Building blocks of zeolites on an aluminosilicate ultra-thin film.
MICROPOR MESOPOR MATER 165 (2012) 158

Surface structure of γ-Fe₂O₃(111)
SURFACE SCIENCE 606 (2012) 1594

Modeling zeolites with metal-supported two-dimensional aluminosilicate films.
ANGEWANDTE CHEMIE INT. ED. 51 (2012) 6005

135. Yu X, Yang B, Boscoboinik JA, Shaikhutdinov S, Freund HJ
Support effects on the atomic structure of ultra-thin silica films on metals
APPL PHYS LETT 100 (2012) 151608

Thin silica films on Ru(0001): monolayer, bilayer and three-dimensional networks of [SiO₄] tetrahedra
PHYS CHEM CHEM PHYS 14 (2012) 11344

Absolute surface step energy: Accurate theoretical methods applied to ceria nanoislands
J CHEM PHYS LETT 3 (2012) 1956

Formation of one-dimensional electronic states along the step edges of CeO$_2$(111)

ACS NANO 6 (2012) 1126

Tuning the electronic structure of ultrathin crystalline silica films on Ru(0001)
PHYSICAL REVIEW B 85 (2012) 085403

130. Sala A, Marchetto H, Qin Z-H, Shaikhutdinov S, Schmidt T, Freund HJ
Defects and inhomogeneities in Fe$_3$O$_4$ thin film grown on Pt(111)
PHYSICAL REVIEW B 86 (2012) 155430

129. Shaikhutdinov S, Freund HJ
Ultrathin oxide films on metal supports: Structure-reactivity relations
ANNUAL REVIEW OF PHYSICAL CHEMISTRY, 63 (2012) 619

The atomic structure of a metal supported vitreous thin silica film
ANGEWANDTE CHEMIE INT. ED. 51 (2012) 404

127. Lewandowski M, Groot IMN, Shaikhutdinov S, Freund HJ
Scanning tunneling evidence for the Mars-van Krevelen type mechanism of low temperature CO oxidation on an FeO(111) film on Pt(111).
CATALYSIS TODAY 181 (2012) 52

126. McInroy A. R., Uhl A., Lear T., ... Shaikhutdinov S, Freund HJ...
Morphological and chemical influences on alumina-supported Pd catalysts active for the gas phase hydrogenation of crotonaldehyde.
JOURNAL OF CHEMICAL PHYSICS 134 (2011) 214704

Preparation and characterization of iron-molybdate thin films
SURFACE SCIENCE, 605 (2011) 1550

CO + NO vs CO + O$_2$ reaction on monolayer FeO(111) films on Pt(111)
CHEMCATCHEM 3 (2011) 671

123. Nilius N, Risse T, Schauermann S, Shaikhutdinov S, Freund HJ
Model Studies in Catalysis
TOPICS IN CATALYSIS 54 (2011) 4

122. Lewandowski M, Sun YN, Qin ZH, Shaikhutdinov S, Freund HJ
Promotional effect of metal encapsulation on reactivity of iron oxide supported Pt catalysts
APPLIED CATALYSIS A 391 (2011) 407

121. Löffler D, Uhlrich JJ, Baron M, Lichtenstein L, Heinke L, Büchner C, Heyde M,
Shaikhutdinov S, Freund HJ, Wlodarczyk, Sierka M, Sauer J
Growth and structure of crystalline silica sheet on Ru(0001)
PHYS REV LETT 105 (2010) 146104

Oxygen-induced transformations of an FeO(111) film on Pt(111): A combined DFT and STM study.
J PHYS CHEM C 114 (2010) 21504

CO adsorption on monometallic and bimetallic Au-Pd nanoparticles supported on oxide thin films
J PHYS CHEM C 114 (2010) 17099

118. Freund HJ, Nilius N, Risse T, Shaikhutdinov S, Sterrer M
Ultradünne Oxidschichten auf Metallsubstraten: eine interessante Materialkombination
JAHRESBERICHT DER MAX-PLANCK-GESELLSCHAFT 2009

117. Sun YN, Giordano L, Goniakowski J, Lewandowski M, Qin ZH, Noguera C, Shaikhutdinov S, Pacchioni G, Freund HJ
The interplay between structure and CO oxidation catalysis on metal supported ultrathin oxide films
ANGEWANDTE CHEMIE INT. ED., 49 (2010) 4418

Relating methanol oxidation to the structure of ceria-supported vanadia monolayer catalysts
J CATAL 272 (2010) 82

115. Bagus PS, Nelin CJ, Ilton ES, Baron M, Abbott H, Primorac E, Kuhlenbeck H, Shaikhutdinov S, Freund HJ,
The Complex Core Level Spectra of CeO₂: An Analysis in Terms of Atomic and Charge Transfer Effects
CHEM PHYS LETT, 487 (2010) 237

The role of ceria in oxidative dehydrogenation on supported vanadia catalysts
J AMER CHEM SOC, 132 (2010) 2345

Particle size dependent interaction of NO2 with Pd nanoparticles supported On model NOx storage materials
J PHYS CHEM C 113 (2009) 9755

112. Sun YN, Qin ZH, Lewandowski M, Carrasco E, Sterrer M, Shaikhutdinov S, Freund HJ
CO adsorption and dissociation on iron oxide supported Pt particles
111. Sun YN, Qin ZH, Lewandowski M, Carrasco E, Sterrer M, Shaikhutdinov S, Freund HJ
Monolayer iron oxide film on platinum promotes low temperature CO oxidation
J CATAL, 266 (2009) 359

Resolving the atomic structure of vanadia monolayer catalysts: Monomers, trimers and oligomers on ceria
ANGEWANDTE CHEMIE INT. ED. 48 (2009) 8006

Nitrite and nitrate formation on model NOx storage materials: On the influence of particle size and composition
PHYS CHEM CHEM PHYS, 11 (2009) 2514

108. Baron M, Bondarchuk O, Stacchiola D, Shaikhutdinov S, Freund HJ,
Interaction of gold with cerium oxide supports: CeO2(111) thin films vs CeOx nanoparticles
J PHYS CHEM C 113 (2009) 6042

107. Qin ZH, Lewandowski M, Sun YN, Shaikhutdinov S, Freund HJ,
Morphology and CO adsorption on Pt supported on thin Fe3O4(111) films

Controlling metal/oxide interactions in bifunctional nanostructured model catalysts: Pd and Bao on Al2O3/NiAl(110)
SURFACE SCIENCE LETTERS, 603 (2008) L9

Interaction of NO2 with model NSR catalysts: Metal oxide interaction controls initial NOx storage mechanism
CHEM PHYS CHEM, 9 (2008) 2191

104. Sun YN, Qin ZH, Lewandowski M, Kaya S, Shaikhutdinov S, Freund HJ
When an encapsulating oxide layer promotes reaction on noble metals: Dewetting and in situ formation of an “inverted” FeOx/Pt catalyst
CATALYSIS LETTERS, 126 (2008) 31

Formation of one dimensional molybdenum oxide on Mo(112)
SURFACE SCIENCE, 602 (2008) 3338

102. Risse T, Shaikhutdinov S, Nilius N, Sterrer M, Freund HJ
Gold supported on thin oxide films: from single atom to nanoparticles
Selectivity in methanol oxidation as studied on model systems involving vanadium oxides

TOPICS IN CATALYSIS, 50 (2008) 106

Encapsulation of Pt nanoparticles as a result of strong metal-support interaction with Fe3O4(111)

J PHYS CHEM C 112 (2008) 10209

Adsorption of Au and Pd atoms on thin SiO2 films: the role of atomic structure

J PHYS CHEM C 112 (2008) 3405

Extreme size effects in supported ionic nanoparticles: tailoring the stability of NOx storage catalysts

CATALYSIS LETTERS, 121 (2008) 311

Growth of stoichiometric sub-nm silica films

APPL PHYS LETT, 92 (2008) 011911

Preparation and structure of alumina supported niobia model catalysts

SURFACE SCIENCE, 601 (2007) 5605

Surface metal-insulator transition on a vanadium pentoxide (001) single crystal

PHYS REV LETT, 99 (2007) 226103

Structure, thermal stability and CO adsorption properties of Pd nanoparticles supported on an ultrathin SiO2 film

SURF REV LETT, 14 (2007) 927

On geometrical and electronic structure of an ultra-thin silica film grown on Mo(112)

SURFACE SCIENCE, 601 (2007), 4849

Oxygen adsorption on Mo(112) surface studied by ab initio genetic algorithm and experiment
91. Lu JL, Gao HJ, Shi DX, Shaikhutdinov S, Freund HJ
   Heterogeneous catalysis on an atomic scale
   WUH (PHYSICS) 36 (2007) 370

90. Gonzales S, Neyman KM, Shaikhutdinov S, Freund HJ, Illas F
   On the promoting role of Ag in selective hydrogenation reactions over Pd-Ag
   bimetallic catalysts: a theoretical study.
   J PHYS CHEM C, 111(2007) 6852

89. Schalow T, Brandt B, Starr DE, Laurin M, Shaikhutdinov SK, Schauermann S,
   Libuda J, Freund HJ
   Particle size dependent adsorption and reaction kinetics on reduced and
   partially oxidized Pd nanoparticles
   PHYS CHEM CHEM PHYS, 9 (2007) 1347

   Ice assisted preparation of silica supported vanadium oxide particles
   J PHYS CHEM C 111 (2007) 5337

87. Lu JL, Gao HJ, Shaikhutdinov SK, Freund HJ
   Gold supported on well-ordered ceria films: Nucleation, growth and
   morphology in CO oxidation reaction.
   CATALYISS LETTERS, 114 (2007) 8

86. Kaya S, Weissenrieder J, Stacchiola D, Shaikhutdinov S, Freund HJ
   Formation of an ordered ice layer on a thin silica film
   J PHYS CHEM C 111 (2007) 759

85. Schalow T, Brandt B, Laurin M, Guimond S, Kuhlenbeck H, Starr DE,
   Shaikhutdinov SK, Schauermann S, Libuda J, Freund HJ
   Formation and catalytic activity of partially oxidized Pd nanoparticles
   TOPICS CATALYSIS, 42-43 (2007) 387

84. Stacchiola D, Kaya S, Weissenrieder J, Kuhlenbeck H, Shaikhutdinov S,
   Freund HJ, Sierka M, Todorova TK, Sauer J
   Synthesis and structure of an ultra-thin aluminosilicate film
   ANGEWANDTE CHEMIE INT. ED. 45 (2006) 7636

83. Stacchiola D, Kaya S, Weissenrieder J, Kuhlenbeck H, Shaikhutdinov S,
   Freund HJ, Sierka M, Todorova TK, Sauer J
   Synthese und Struktur eines ultradünnen Alumosilicatfilms
   ANGEWANDTE CHEMIE 45 (2006) 7636

82. Lu JL, Gao HJ, Shaikhutdinov SK, Freund HJ
   Morphology and defect structure of the CeO$_2$(111) films grown on Ru(0001)
   as studied by scanning tunneling microscopy
   SURFACE SCIENCE  600 (2006) 5004

81. Mendes FMT, Uhl A, Starr DE, Guimond S, Schmal M., Kuhlenbeck H,
   Shaikhutdinov S, Freund HJ
   Strong metal support interaction on Co/niobia model catalysts
vanadium oxide surfaces and supported vanadium oxide nanoparticles
TOPICS IN CATALYSIS, 38 (2006) 117

formation of one-dimensional crystalline silica on a metal substrate
SURFACE SCIENCE LETTERS, 600 (2006), L164

interplay between theory and experiment in the quest for silica with reduced dimensionality grown on a Mo(112) surface
CHEMICAL PHYSICS LETTERS 424 (2006), 115

77. Lu JL, Kaya S, Weissenrieder J, Gao HJ, Shaikhutdinov S, Freund HJ
low temperature CO induced growth of Pd supported on a monolayer silica film
SURFACE SCIENCE LETTERS, 600 (2006), L153

76. Khan NA, Uhl A, Shaikhutdinov S, Freund HJ
alumina supported model Pd-Ag catalysts: A combined STM, XPS, TPD and IRAS study
SURFACE SCIENCE 600 (2006), 1849

atomic structure of a thin silica film on a Mo(112) substrate: A combined experimental and theoretical study
PHYSICAL REVIEW B 73 (2006), 165414

74. Khan NA, Shaikhutdinov S, Freund HJ
acetylene and ethylene hydrogenation on alumina supported Pd-Ag model catalysts
CATALYSIS LETTERS 108 (2006), 159

73. Starr DE, Pazhetnov EM, Stadnichenko AI, Boronin AI, Shaikhutdinov S
Carbon films grown on Pt(111) as supports for gold model catalysts
SURFACE SCIENCE, 600 (2006), 2688

size-dependent oxidation mechanism of supported Pd nanoparticles
ANGEW CHEM INT ED 45 (2006), 3693

Größenabhängiger Oxidationsmechanismus trägerfixierter Pd-Nanopartikel
ANGEW CHEM, 118 (2006), 3755
70. Schalow T, Brandt B, Starr DE, Laurin M, Schauermann S, Shaikhutdinov SK, Libuda J, Freund HJ
    *Oxygen-Induced Restructuring of a Pd/Fe₃O₄ Model Catalyst*

    *Sauerstoffspeicherung an der Metall-Oxid-Grenzfläche von Katalysatornanopartikeln*

    *Oxygen Storage at the Metal/Oxide Interface of Catalyst Nanoparticles*
    ANGEWANDTE CHEMIE INT ED, 44 (2005) 7601.

67. Starr DE, Shaikhutdinov S, Freund HJ
    *Gold Supported on Oxide Surfaces: Environmental Effects as Studied by STM*
    TOPICS IN CATALYSIS 36 (2005) 33

    *Preparation and characterization of well-ordered, thin niobia films on a metal substrate*
    SURFACE SCIENCE 599 (2005), 14

    *Atomic structure of a thin silica film on a Mo(112) substrate: A two-dimensional network of SiO₄ tetrahedra*
    PHYSICAL REVIEW LETTERS 95 (2005), 076103

    *CO adsorption and thermal stability of Pd deposited on a thin FeO(111) film*
    SURFACE SCIENCE 586 (2005), 174

63. Lemire C, Bertarione S, Zecchina A, Scarano D., Chaka A., Shaikhutdinov S., Freund HJ.
    *Ferryl (Fe=O) termination of the hematite α-Fe₂O₃(0001) surface*
    PHYSICAL REVIEW LETTERS 94 (2005), 166101

62. Doyle AM, Shaikhutdinov SK, Freund HJ
    *Surface Bonded Precursor Determines Particle Size Effects for Alkene Hydrogenation on Pd Nanoparticles*
    ANGEWANDTE CHEMIE INT ED, 44 (2005) 629

61. Doyle AM, Shaikhutdinov SK, Freund HJ
    *Oberflächengebundene Intermediate verursachen Teilchengrößeinflüsse bei Alkenhydrierung auf Palladium*
    ANGEWANDTE CHEMIE 117 (2005), 635
60. Henrich V, Shaikhutdinov SK
   Atomic geometry of steps on metal-oxide single crystals
   SURFACE SCIENCE 574 (2005) 306

   The surface structure of Fe$_3$O$_4$(111) films as studied by CO adsorption
   SURFACE SCIENCE 572 (2004), 103

58. Meyer R, Lemire C, Shaikhutdinov SK, Freund HJ
   Surface chemistry of catalysis by gold
   GOLD BULLETIN 37 (2004), 72

57. Meyer R, Shaikhutdinov SK, Freund HJ
   CO oxidation on a Pd/Fe$_3$O$_4$(111) model catalyst
   ZEITSCHRIFT FUR PHYSIKALISCHE CHEMIE, 218 (2004), 905

56. Doyle AM, Shaikhutdinov SK, Freund HJ
   Alkene chemistry on the palladium surface: nanoparticles vs single crystals
   JOURNAL OF CATALYSIS 223 (2004), 444

55. Lemire C, Meyer R, Shaikhutdinov SK, Freund HJ
   CO adsorption on oxide supported gold: from small clusters to monolayer islands and three-dimensional nanoparticles
   SURFACE SCIENCE 552 (2004), 27

   Imaging surface topographical changes during plastic deformation of a metal with chemical wave patterns
   SURFACE SCIENCE 548 (2004), 163

   Do quantum size effects control CO adsorption on gold nanoparticles?
   ANGEWANDTE CHEMIE INT ED 43 (2004), 118

52. Lemire C, Meyer R, Shaikhutdinov S, Freund HJ
   Steuern Größenquantisierungseffekte die CO-Adsorption auf Au-Nanopartikeln?
   ANGEWANDTE CHEMIE 116(2003), 121

51. Meyer R, Bäumer M, Shaikhutdinov SK, Freund HJ
   Two-dimensional growth of Pd on a thin FeO(111) film: a physical manifestation of strong metal-support interaction
   SURFACE SCIENCE LETTERS 546 (2003), L813

50. Doyle AM, Shaikhutdinov SK, Jackson SD, Freund HJ
   Hydrogenation on metal surfaces: Why are nanoparticles more active than single crystals?
   ANGEWANDTE CHEMIE INT ED 42 (2003), 5240

49. Doyle AM, Shaikhutdinov SK, Jackson SD, Freund HJ
   Hydrierung an Metalloberflächen: Warum sind Nanoteilchen aktiver als Einkristalle?
   ANGEWANDTE CHEMIE 115 (2003), 5398
   Determination of atomic structure of the metal-oxide interface: Pd nanodeposits on an FeO(111) film  
   PHYSICAL REVIEW LETTERS 91 (2003), 076102

47. Freund HJ, Bäumer M, Libuda J, Risse T, Rupprechter G, Shaikhutdinov SK  
   Preparation and characterization of model catalysts: from ultrahigh vacuum to in situ conditions at the atomic dimension  
   JOURNAL OF CATALYSIS 216 (2003), 223

   Size and support effects for CO adsorption on gold model catalysts  
   CATALYSIS LETTERS 86 (2003), 211

   On the thermal stability of metal particles supported on a thin alumina film  
   SURFACE SCIENCE 523 (2003), 103

   Effect of carbon deposits on reactivity of supported Pd model catalysts  
   CATALYSIS LETTERS 80 (2002), 115

   Interaction of oxygen with palladium deposited on a thin alumina film  
   SURFACE SCIENCE 501 (2002), 270

42. Shaikhutdinov SK, Heemeier M, Bäumer M, et al.  
   Particle size effects in adsorption and reaction of ethene and hydrogen on palladium model catalysts.  
   ABSTRACTS OF PAPERS OF THE AMERICAN CHEMICAL SOCIETY 221 (2001), 334

   Structure-reactivity relationships on supported metal model catalysts: Adsorption and reaction of ethene and hydrogen on Pd/Al2O3/NiAl(110)  
   JOURNAL OF CATALYSIS 200 (2001), 330

   Ex situ scanning tunneling microscopy study of under-potential oxidation of a Ag(111) electrode in an alkaline electrolyte  
   J ELECTROANAL CHEM 500 (2001), 208

39. Shaikhutdinov S, Ritter M, Weiss W  
   Hexagonal heterolayers on a square lattice: A combined STM and LEED study of FeO(111) on Pt(100)  
   PHYSICAL REVIEW B 62 (2000), 7535

38. Shaikhutdinov S, Weiss W  
   Adsorbate dynamics on iron oxide surfaces studied by scanning tunneling microscopy  
   J MOL CATAL A 158 (2000), 129
37. Shaikhutdinov SK, Weiss W, Schlogl R
Interaction of potassium with Fe3O4(111) at elevated temperatures
APPLIED SURFACE SCIENCE 161 (2000), 497

Structure and reactivity of iron oxide surfaces
FARADAY DISCUSSIONS 114 (1999), 363

Defect structures on epitaxial Fe3O4(111) films
PHYSICAL REVIEW B 60 (1999), 11062

34. Shaikhutdinov SK, Weiss W
Oxygen pressure dependence of the $a$-Fe$_2$O$_3$(0001) surface structure
SURFACE SCIENCE LETTERS 432 (1999), L627

Platinum colloid supported on graphite: X-ray photoelectron spectroscopy study
REACT KINET CATAL LETT 67 (1999), 129

32. Schaak A, Shaikhutdinov S, Imbihl R
H/D-isotope effects in chemical wave propagation on surfaces: the O$_2$+H$_2$ and NO+H$_2$ reactions on Rh(110) and Rh(111)
SURFACE SCIENCE 421 (1999), 191

31. Avdeeva LB, Kochubey DI, Shaikhutdinov SK
Cobalt catalysts of methane decomposition: accumulation of the filamentous carbon
APPLIED CATALYSIS A 177 (1999), 43

The hematite $a$-Fe$_2$O$_3$ (0001) surface: evidence for domains of distinct chemistry.
PHYSICAL REVIEW LETTERS, 81 (1998), 1038

29. Kochubey DI, Kim TK, Babenko VP, Shaikhutdinov SK
Charge density waves in 1T-TaS$_2$: an EXAFS study
PHYSICA B 252 (1998), 15

28. Shaikhutdinov SK, Aires FJCS
Evolution of the rhodium colloid supported on graphite studied by atomic force microscopy in the tapping mode
LANGMUIR 14 (1998), 3501

27. Kim TK, Babenko VP, Novgorodov BN, Shaikhutdinov SK, Kochubey DI
Destruction of the charge density wave structure in 1T-TaS2 under pyridine intercalation
NUCL INSTR & METHODS IN PHYS RES A 405 (1998), 348
26. Shaikhutdinov SK
STM observation of the Ni(100) surface with segregated carbon
SURFACE SCIENCE LETTERS 395 (1998), L215

25. Kvon RI, Boronin AI, Shaikhutdinov SK, Buyanov RA.
XPS and STM study of carbon deposits at the surface of platinum (110)
APPLIED SURFACE SCIENCE 120 (1997), 239

24. Shaikhutdinov SK, Schaak A, Imbihl R
Formation of low work function patches in the NO+H-2 reaction on a
roughened Rh(110) surface
SURFACE SCIENCE LETTERS 391 (1997), L1172

Nickel catalysts supported on carbon nanofibers: structure and activity in
methane decomposition
CATALYSIS LETTERS 47 (1997), 35

22. Fenelonov VB, Derevyankin AY, Okkel LG, Shaikhutdinov SK....
Structure and texture of filamentous carbons produced by methane
decomposition on Ni and Ni-Cu catalysts
CARBON 35 (1997), 1129

21. Shaikhutdinov SK, Boronin AI, Kvon RI
Carbon on the Pt(110) surface: A scanning tunnelling microscopy study
SURFACE SCIENCE 382 (1997), 187

20. Shaikhutdinov SK, Babenko VP, Kochubey DI
Bias dependent corrugation of charge density waves in 1T-TaS2 studied by
scanning tunneling microscopy and spectroscopy
PHYSICS OF LOW DIMENSIONAL STRUCTURES 11/12 (1996),109

19. Shaikhutdinov SK, Zaikovskii VI, Avdeeva LB
Coprecipitated Ni-alumina and Ni-Cu-alumina catalysts of methane
decomposition and carbon deposition .3. Morphology and surface structure of
the carbon filaments
APPLIED CATALYSIS A 148 (1996), 123

18. Shaikhutdinov SK, Möller FA, Mestl G, Behm RJ
Electrochemical deposition of platinum hydrosol on graphite observed by
scanning tunneling microscopy
JOURNAL OF CATALYSIS 163 (1996) 492

17. Avdeeva LB, Goncharova OV, Kochubey DI,... Shaikhutdinov SK
Coprecipitated Ni-alumina and Ni-Cu-alumina catalysts of methane
decomposition and carbon deposition: 2. Evolution of the catalysts in reaction
APPLIED CATALYSIS A-GENERAL 141 (1996) 117

Interaction of platinum colloids with single crystalline oxide and graphite
substrates: A combined AFM, STM and XPS study
CATALYSIS LETTERS 37 (1996) 35
15. Shaikhutdinov SK
**Applicability of scanning-tunneling-microscopy for studying metal-catalysts supported on carbon supports**
KINETICS AND CATALYSIS 36 (1995), 549

**Coprecipitated Ni-Al and Ni-Cu-Al catalysts for methane decomposition and carbon deposition:1. Genesis of calcined and reduced catalysts**
APPLIED CATALYSIS A-GENERAL 126 (1995), 125

13. Shaikhutdinov SK, Shupik AN, Trukhan EM, Turte KI
**Microwave dielectric loss and dynamic electron delocalization in trinuclear μ-3-oxo-iron clusters**
MENDELEEV COMMUNICATIONS 4 (1994), 217

12. Shaikhutdinov SK, Kochubey DI
**Scanning-tunneling-microscopy studies of heterogenous catalysts and their models**
USPEKHI KHIMII (RUSSIAN CHEMICAL REVIEWS) 62 (1993), 443

11. Shaikhutdinov SK, Kochubey DI
**Scanning-tunneling-microscopy study of porous carbon impregnated with palladium-chloride**
CATALYSIS LETTERS 28 (1994), 343

10. Kuznetsov VL, Chuvilin AL, Moroz EM,...Shaikhutdinov SK
**Effect of explosion conditions on the structure of detonation soots - ultradisperse diamond and onion carbon**
CARBON 32 (1994), 873

9. Shaikhutdinov SK, Kochubey DI
**Scanning tunnelling microscope based on an Auger-spectrometer and its application to studying highly dispersed carbon materials**
JOURNAL OF STRUCTURAL CHEMISTRY 34 (1993), 956

8. Shaikhutdinov SK, Shupik AN, Trukhan EM
**Microwave dielectric loss in polycrystalline 3d metal-complexes**
JOURNAL OF THE CHEMICAL SOCIETY-FARADAY TRANSACTIONS 89 (1993), 3959

7. Ilyinich OM, Shaikhutdinov SK
**A membranous method for pretreating the blood for analysis of low-molecular metabolites**
LABORATORNOE DELO 4 (1990), 64

**On chemical nature of defects in polyphenylacetylene**
VYSOKOMOLEKULYARNYE SOEDINENIYA (RUS. J. POLYMER SCIENCE) A 30 (1988), 257

5. Astanina AN, Volkov VI, Smirnova GL, Shaikhutdinov SK
**Perfluorated Cu-containing membranes in the process of sodium sulfide**
4. Shaikhutdinov SK et al.  
Correlation between microwave conductivity and Mössbauer spectra of iron containing compounds  
KOORDINATCIONNAYA KHIMIYA (RUS. J. COORDINATION CHEMISTRY), 1986

Microwave conductivity of copper(II) chelates with Schiff bases  
ZHURNAL FIZICHESKOGO KHIMII (RUS. J. PHYS. CHEM.) 61 (1987), 228

2. Astanina AN, Trukhan EM, Tutte KI, Shaikhutdinov SK  
Conductivity of some poly-nuclear ferrum carboxylates  
DOKLADY AKADEMII NAUK SSSR 288 (1986), 1391

Microwave conductivity and catalytic activity of copper-complexes with anionites  
ZHURNAL FIZICHESKOGO KHIMII (RUS. J. PHYS. CHEM.) 60 (1986), 997