

## List of Publications

Ulrike Diebold

### 2017

211. Martin Setvin, Thomas Simschitz, Honghong Wang, Cristiana Di Valentin, Gareth Parkinson, Jan Hulva, Michael Schmid, Annabella Selloni, and Ulrike Diebold  
"Formaldehyde Adsorption on the Anatase TiO<sub>2</sub> (101) Surface – Experimental and Theoretical Investigation"  
*Journal of Physical Chemistry C*, in press (April 2017)  
[DOI: 10.1021/acs.jpcc.7b01434](https://doi.org/10.1021/acs.jpcc.7b01434)
210. Daniel Halwidl, Wernfried Mayr-Schmölzer, David Fobes, Jin Peng, Zhiqiang Mao, Michael Schmid, Florian Mittendorfer, Josef Redinger, and Ulrike Diebold  
"Ordered Hydroxyls on Ca<sub>3</sub>Ru<sub>2</sub>O<sub>7</sub>(001)"  
*Nature Communications*, in press (March 2017)
209. Martin Setvin, Margareta Wagner, Michael Schmid, Gareth S. Parkinson, and Ulrike Diebold  
"Point Defects on Bulk Oxides, Characterized by Atomically-Resolved Scanning Probe Microscopy (Tutorial Review)"  
*Chemical Society Reviews*, 46 (March 2017) 1772 - 1784  
[DOI: 10.1039/c7cs00076f](https://doi.org/10.1039/c7cs00076f)
208. Martin Setvin, Jan Hulva, Gareth S. Parkinson, Michael Schmid, and Ulrike Diebold  
"Electron Transfer between Anatase TiO<sub>2</sub> and an Adsorbed O<sub>2</sub> Molecule: Direct Observation by Atomic Force Microscopy"  
*Proceedings of the National Academy of Sciences*, 114 (13) (2017) E2556–E2562  
[www.pnas.org/cgi/doi/10.1073/pnas.1618723114](http://www.pnas.org/cgi/doi/10.1073/pnas.1618723114)
207. Jiri Pavelec, Jan Hulva, Daniel Halwidl, Roland Bliem, Oscar Gamba, Zdenek Jakub, Florian Brunbauer, Michael Schmid, Ulrike Diebold, and Gareth S. Parkinson  
"A Multi-Technique Study of CO<sub>2</sub> Adsorption on Fe<sub>3</sub>O<sub>4</sub> Magnetite"  
*Journal of Chemical Physics* 146 (2017) 014701  
<http://dx.doi.org/10.1063/1.4973241>
206. Oscar Gamba, Jan Hulva, Jiri Pavelec, Roland Bliem, Michael Schmid, Ulrike Diebold, and Gareth Parkinson  
"The Role of Surface Defects in the Adsorption of Methanol on Fe<sub>3</sub>O<sub>4</sub>(001)"  
*Topics in Catalysis*, accepted (May 2016)  
[DOI: 10.1007/s11244-016-0713-9](https://doi.org/10.1007/s11244-016-0713-9)

### 2016

205. Margareta Wagner, Peter Lackner, Steffen Seiler, Stefan Gerhold, Jan Osiecki, Karina Schulte, Lynn A. Boatner, Michael Schmid, Bernd Meyer, and Ulrike Diebold  
"Well-Ordered In Atoms at the In<sub>2</sub>O<sub>3</sub>(111) Surface Created by Fe Deposition"  
*Physical Review Letters*, 117(2016) 20610  
[DOI: 10.1103/PhysRevLett.117.206101](https://doi.org/10.1103/PhysRevLett.117.206101)
204. Martin Setvin, Ulrich Aschauer, Jan Hulva, Thomas Simschitz, Benjamin Daniel, Michael Schmid, Annabella Selloni, Ulrike Diebold  
"Water Dissociation on Anatase TiO<sub>2</sub>(101) via Reaction with Oxygen"  
*Journal of the American Chemical Society*, 138 (2016) 9565 - 9571  
[DOI: 10.1021/jacs.6b04004](https://doi.org/10.1021/jacs.6b04004)

203. Roland Bliem, Jessi E.S. van der Hoeven, Jan Hulva, Jiri Pavelec, Oscar Gamba, Petra E. de Jongh, Michael Schmid, Peter Blaha, Ulrike Diebold, and Gareth S. Parkinson  
*"The dual role of CO in the stability of sub-nano Pt clusters at the Fe<sub>3</sub>O<sub>4</sub>(001) surface"*  
Proceedings of the National Academy of Sciences, 113 (9) (2016) 8921-8926  
[10.1073/pnas.1605649113](https://doi.org/10.1073/pnas.1605649113)
202. Björn Arndt, Roland Bliem, Oscar Gamba, Jessi E.S. van der Hoeven, Heshmat Noei, Ulrike Diebold, Gareth S. Parkinson, and Andreas Stierle  
*"Atomic structure and stability of magnetite Fe<sub>3</sub>O<sub>4</sub>(001): an x-ray view"*  
Surface Science, 653 (2016) 76  
[doi:10.1016/j.susc.2016.06.002](https://doi.org/10.1016/j.susc.2016.06.002)
201. Oscar Gamba, Jan Hulva, Jiri Pavelec, Roland Bliem, Michael Schmid, Ulrike Diebold, and Gareth Parkinson  
*"The Role of Surface Defects in the Adsorption of Methanol on Fe<sub>3</sub>O<sub>4</sub>(001)"*  
Topics in Catalysis, in press (May 2016)  
[DOI: 10.1007/s11244-016-0713-9](https://doi.org/10.1007/s11244-016-0713-9)
200. Joong Il Jake Choi, Wernfried Mayr-Schmölzer, Ilaria Valenti, Paola Luches, Florian Mittendorfer, Josef Redinger, Ulrike Diebold, and Michael Schmid  
*"Metal adatoms and clusters on ultra-thin zirconia films"*  
Journal of Physical Chemistry C, 120 (2016) 9920 - 9932  
<http://dx.doi.org/10.1021/acs.jpcc.6b03061>
199. Stefan Gerhold, Michele Riva, Bilge Yildiz, Michael Schmid, Ulrike Diebold  
*"Adjusting Island Density and Morphology of the SrTiO<sub>3</sub>(110)-(4x1) Surface: Pulsed Laser Deposition Combined with Scanning Tunneling Microscopy"*  
Surface Science, 651 (2016) 76–83.  
[DOI: 10.1016/j.susc.2016.03.010](https://doi.org/10.1016/j.susc.2016.03.010)
198. Z. Wang, A. Loon, A. Subramanian, E. McDermott, J.A. Enterkin, M. Hieckel, B.C. Russell, R.J. Green, A. Moewes, J. Guo, P. Blaha, M.R. Castell, U. Diebold, and L.D. Marks  
*"Transition from Tetrahedral to Octahedral Coordination for High TiO<sub>2</sub> Coverages of the (110) Surface of Strontium Titanate"*  
Nano Letters, 16 (2016) 2407 – 2412  
[DOI: 10.1021/acs.nanolett.5b05211](https://doi.org/10.1021/acs.nanolett.5b05211)
197. Z. Wang, S. McKeown Walker, A. Tamai, Y. Wang, Z. Ristic, F.Y. Bruno, A. de la Torre, S. Riccò, N.C. Plumb, M. Shi, P. Hlawenka, J. Sánchez-Barriga, A. Varykhalov, T.K. Kim, M. Hoesch, P.D.C. King, W. Meevasana, U. Diebold, J. Mesot, B. Mesot, T.P. Devereaux, M. Radovic, and F. Baumberger  
*"Tailoring the nature and strength of electron–phonon interactions in the SrTiO<sub>3</sub>(001) 2D electron liquid "*  
Nature Materials, 15 (2016) 835 - 840  
[DOI: 10.1038/NMAT4623](https://doi.org/10.1038/NMAT4623)
196. Gareth Parkinson, Peter Lackner, Oscar Gamba, Sebastian Maaß, Oscar Gamba, Stefan Gerhold, Michele Riva, Roland Bliem, Ulrike Diebold, and Michael Schmid  
*"Fe<sub>3</sub>O<sub>4</sub>(110)-(1x3) Revisited: Periodic (111) Nano-Facets"*  
Surface Science Letters, in press (February 2016)  
[DOI:10.1016/j.susc.2016.02.020](https://doi.org/10.1016/j.susc.2016.02.020)
195. Luis A. Miccio, Martin Setvin, Moritz Müller, Mikel Abadía, Ignacio Piquero, Jorge Lobo-Checa, Frederik Schiller, Celia Rogero, Michael Schmid, Daniel Sánchez-Portal, Ulrike Diebold, and J. Enrique Ortega  
*"Interplay between steps and oxygen vacancies on curved TiO<sub>2</sub>(110)"*  
Nano Letters, 16(3) (2016) 2017–2022  
[DOI: 10.1021/acs.nanolett.5b05286](https://doi.org/10.1021/acs.nanolett.5b05286)

194. Daniel Halwidl, Bernhard Stöger, Wernfried Mayr-Schmölzer, Jiri Pavelec, David Fobes, Jin Peng, Zhiqiang Mao, Gareth Parkinson, Michael Schmid, Florian Mittendorfer, Josef Redinger, Ulrike Diebold  
“*Water Adsorption at the SrO Surface of Ruthenates*”  
Nature Materials, 15 (2016) 450 - 455  
[DOI:10.1038/nmat4512](https://doi.org/10.1038/nmat4512)

## 2015

193. Yan-Yan Yu, Ulrike Diebold, Xue-Qing Gong  
„*NO adsorption and diffusion on hydroxylated rutile TiO<sub>2</sub>(110)*”  
Physical Chemistry Chemical Physics, 17 (2015) 26594 – 26598  
[DOI: 10.1039/c5cp04584c](https://doi.org/10.1039/c5cp04584c)
192. Roland Bliem, Jessica van der Hoeven, Adam Zavondy, Oscar Gamba, Jiri Pavelec, Petra de Jongh, Michael Schmid, Ulrike Diebold, and Gareth S. Parkinson  
“*An Atomic Scale View of Metal-Assisted Redox Reactions on a Pt-Fe<sub>3</sub>O<sub>4</sub> Model Catalyst*”  
Angewandte Chemie, International Edition, 54 (2015) 54, 13999 –14002  
[DOI: 10.1002/anie.201507368](https://doi.org/10.1002/anie.201507368)
191. Martin Setvin, Maria Buchholz, Weiyi Hou, Cui Zhang, Bernhard Stöger, Jan Hulva, Thomas Simschitz, Xiao Shi, Jiri Pavelec, Gareth S. Parkinson, Mingchun Xu, Yuemin Wang, Michael Schmid, Christof Wöll, Annabella Selloni, Ulrike Diebold  
“*A Multi-Technique Study of CO Adsorption on TiO<sub>2</sub> Anatase (101) Surface*”  
Journal of Physical Chemistry C, 119 (2015) 21044-21052  
[DOI: 10.1021/acs.jpcc.5b07999](https://doi.org/10.1021/acs.jpcc.5b07999)
190. Giulia Serrano, Beatrice Bonanni, Tomasz Kosmala, Marco Di Giovannantonio, Ulrike Diebold, Aldo Di Carlo, Klaus Wandelt and Claudio Goletti  
“*Molecular Ordering at the Interface Between Liquid Water and TiO<sub>2</sub> Rutile (110)*”  
Advanced Functional Materials Interfaces (2015) 1500246 (6p.)  
[DOI: 10.1002/admi.201500246](https://doi.org/10.1002/admi.201500246)
189. Stefan Gerhold, Michele Riva, Zhiming Wang, Roland Bliem, Margareta Wagner, Jacek Osiecki, Karina Schulte, Michael Schmid, and Ulrike Diebold  
“*Nickel-Oxide-Modified SrTiO<sub>3</sub>(110)-(4×1) Surfaces and their Interaction with Water*”  
Journal of Physical Chemistry C, 119 (2015) 20481-20487  
[DOI: 10.1021/acs.jpcc.5b06144](https://doi.org/10.1021/acs.jpcc.5b06144)
188. Oscar Gamba, Heshmat Noei, Jiri Pavelec, Roland Bliem, Michael Schmid, Ulrike Diebold, Andreas Stierle and Gareth S. Parkinson.  
“*Adsorption of Formic Acid and Methanol on the Fe<sub>3</sub>O<sub>4</sub> (001) Surface*”  
Journal of Physical Chemistry C, 119 (2015) 20459–20465  
[DOI: 10.1021/acs.jpcc.5b05560](https://doi.org/10.1021/acs.jpcc.5b05560)
187. Roland Bliem, Jiri Pavelec, Oscar Gamba, Eamon McDermott, Zhiming Wang, Stefan Gerhold, Margareta Wagner, Jacek Osiecki, Karina Schulte, Michael Schmid, Peter Blaha, Ulrike Diebold, and Gareth S. Parkinson  
“*Adsorption and Incorporation of Transition Metals at the Magnetite Fe<sub>3</sub>O<sub>4</sub>(001) Surface*”  
Physical Review B, 92 (2015) 075440  
[DOI: 10.1103/PhysRevB.92.005400](https://doi.org/10.1103/PhysRevB.92.005400)
186. Martin Setvin, Michael Schmid and Ulrike Diebold  
“*Aggregation and Electronically-Induced Migration of Oxygen Vacancies in TiO<sub>2</sub> Anatase*”  
Physical Review B 91 (2015) 195403  
[DOI:10.1103/PhysRevB.91.195403](https://doi.org/10.1103/PhysRevB.91.195403)

185. Gareth Parkinson and Ulrike Diebold  
*"Adsorption on Oxide Surfaces"*  
Chapter 44 (p. 793 – 817) in Vol. 5/6 of Series "Surface and Interface Science" edited by Klaus Wandelt, WILEY-VCH, 2015
184. Xianfeng Hao, Zhiming Wang, Michael Schmid, Ulrike Diebold, and Cesare Franchini  
*"Coexistence of trapped and free excess electrons in SrTiO<sub>3</sub>"*  
*Physical Review B*, 91 (2015) 085204  
[DOI:10.1103/PhysRevB.91.085204](https://doi.org/10.1103/PhysRevB.91.085204)
183. Giulia Serrano, Beatrice Bonanni, Tomasz Kosmala, Marco Di Giovannantonio, Ulrike Diebold, Klaus Wandelt, and Claudio Goletti  
*"In-situ Scanning Tunneling Microscopy study of the Ca-modified rutile TiO<sub>2</sub>(110) surface in bulk water"*  
*Beilstein Journal of Nanotechnology*, 6 (2015) 438–443  
[DOI:10.3762/bjnano.6.44](https://doi.org/10.3762/bjnano.6.44)
- 2014**
182. Roland Bliem, Eamon McDermott, Pascal Ferstl, Martin Setvin, Oscar Gamba, M. A. Schneider, Michael Schmid, Ulrike Diebold, Peter Blaha, Lutz Hammer, Gareth S. Parkinson  
*"Subsurface Cation Vacancy Stabilization of the Magnetite (001) Surface"*  
*Science*, 346 (2014) 1215  
[DOI: 10.1126/science.1260556](https://doi.org/10.1126/science.1260556)  
*Paper highlighted in a Perspectives Article: S.A. Chambers, Science 346, (2014), 1186*
181. Bernhard Stöger, Marcel Hieckel, Florian Mittendorfer, Zhiming Wang, Michael Schmid, Gareth S. Parkinson, David Fobes, Jin Peng, Zhiqiang Mao, Josef Redinger, Ulrike Diebold  
*"Point Defects at Cleaved Sr<sub>n+1</sub>Ru<sub>n</sub>O<sub>3n+1</sub> (001) Surfaces"*  
*Physical Review B*, 90 (2014) 165438  
[DOI: 10.1103/PhysRevB.90.165438](https://doi.org/10.1103/PhysRevB.90.165438)
180. Bernhard Stöger, Marcel Hieckel, Zhiming Wang, Florian Mittendorfer, Michael Schmid, David Fobes, Jin Peng, Raimund Podlucky, Zhiqiang Mao, Josef Redinger, and Ulrike Diebold  
*"A strong chemical reaction of CO with the surface of Sr<sub>3</sub>Ru<sub>2</sub>O<sub>7</sub>"*  
*Physical Review Letters*, 113 (2014) 116101  
[DOI: 10.1103/PhysRevLett.113.116101](https://doi.org/10.1103/PhysRevLett.113.116101)
179. Martin Setvin, Benjamin Daniel, Ulrich Aschauer, Weyji Hou, Ye-Fei Li, Michael Schmid, Annabella Selloni, and Ulrike Diebold  
*"Identification of Adsorbed Molecules Via Tip Manipulation: CO, H<sub>2</sub>O, and O<sub>2</sub> on TiO<sub>2</sub> Anatase (101)"*  
*Physical Chemistry Chemical Physics*, 16 (2014) 21524–21530  
[DOI: 10.1039/c4cp03212h](https://doi.org/10.1039/c4cp03212h)
178. M. Setvin, Cesare Franchini, Xianfeng Hao, Michael Schmid, Cesare Franchini, , Anderson Jacotti, Chris G. Van de Walle, Georg Kresse, and Ulrike Diebold  
*"A direct view of polarons in TiO<sub>2</sub> rutile and anatase"*  
*Physical Review Letters*, 113 (2014) 086402  
[DOI: 10.1103/PhysRevLett.113.086402](https://doi.org/10.1103/PhysRevLett.113.086402)
177. Zhiming Wang, Xianfeng Hao, Stefan Gerhold, Petr Mares, Margareta Wagner, Roland Bliem, Karina Schulte, Michael Schmid, Cesare Franchini, and Ulrike Diebold  
*"Stabilizing Single Ni adatoms on a Two-dimensional Porous Titania on SrTiO<sub>3</sub>(110) Surface"*  
*Journal of Physical Chemistry C*, 118 (34) 2014, 19904–19909  
[dx.doi.org/10.1021/jp506234r](https://doi.org/10.1021/jp506234r)

176. Zhiming Wang, Xianfeng Hao, Stefan Gerhold, Michael Schmid, Cesare Franchini, Ulrike Diebold  
*"Vacancy Clusters at Domain Boundaries and Band Bending at the SrTiO<sub>3</sub>(110) Surface"*  
Physical Review B 90 (2014) 035436  
[DOI: 10.1103/PhysRevB.90.035436](https://doi.org/10.1103/PhysRevB.90.035436)
175. Margareta Wagner, Steffen Seiler, Bernd Meyer, Lynn A. Boatner, Michael Schmid, and Ulrike Diebold  
*"Reducing the In<sub>2</sub>O<sub>3</sub>(111) Surface Results in Ordered Indium Adatoms"*  
Advanced Materials Interfaces (2014) 1400289  
[DOI: 10.1002/admi.201400289](https://doi.org/10.1002/admi.201400289)
174. J.J. Spivey, K.S. Krishna, K. Challa, K. Dooley, J. Flake, L. Haber, M. Janik, S.B. Sinnott, Y-T. Cheng, T. Liang, D. Sholl, T. Manz, U. Diebold G.S. Parkinson, D. Bruce, P. de Jogh, Y. Xu,  
*"Synthesis, Characterization and Computation of Catalysts at the Center for Atomic-level Catalyst Design"*  
Journal of Physical Chemistry C, 118 (35) (2014) 20043–20069  
[DOI: 10.1021/jp502556u](https://doi.org/10.1021/jp502556u)
173. Roland Bliem, Rukan Kosak, Lukas Perneckzy, Zbynek Novotny, Oscar Gamba, David Fobes, Zhiqiang Mao, Michael Schmid, Peter Blaha, Ulrike Diebold, and Gareth S. Parkinson  
*"Cluster Nucleation and Growth from a Highly Supersaturated Adatom Phase: Silver on Magnetite"*  
ACS Nano 8(7) (2014), 7531–7537  
[DOI: 10.1021/nn502895s](https://doi.org/10.1021/nn502895s)
172. F.F. Sanchez, G. Mallia, L. Liborio, U. Diebold, and N.M. Harrison  
*"A hybrid exchange density functional study of vicinal anatase TiO<sub>2</sub> surfaces"*  
Physical Review B, 89 (2014) 245309  
[DOI:10.1103/PhysRevB.89.245309](https://doi.org/10.1103/PhysRevB.89.245309)
171. Martin Setvin, Benjamin Daniel, Vera Mansfeldova, Ladislav Kavan, Philipp Scheiber, Martin Fidler, Michael Schmid, and Ulrike Diebold  
*"Surface Preparation of TiO<sub>2</sub> Anatase (101): Pitfalls and how to avoid them"*  
Surface Science, 626 (2014) 61 – 67  
<http://dx.doi.org/10.1016/j.susc.2014.04.001>
170. Joong Il Jake Choi, Wernfried Mayr-Schmölzer, Florian Mittendorfer, Josef Redinger, Ulrike Diebold and Michael Schmid  
*"Growth of ultrathin zirconia films on Pd<sub>3</sub>Zr(0001)"*  
Journal of Physics: Condensed Matter, 26 (2014) 225003  
[doi:10.1088/0953-8984/26/22/225003](https://doi.org/10.1088/0953-8984/26/22/225003)
169. Martin Setvin, Xianfeng Hao, Jiri Pavelec, Benjamin Daniel, Zbynek Novotny, Gareth Parkinson, Michael Schmid, Cesare Franchini, and Ulrike Diebold  
*"Charge Trapping at the step edges of TiO<sub>2</sub> anatase (101)"*  
Angewandte Chemie, International Edition, 53 (2014) 4714 – 4716  
[DOI: 10.1002/anie.201309796](https://doi.org/10.1002/anie.201309796)
168. Zhiming Wang, Zhicheng Zhong, Xianfeng Hao, Stefan Gerhold, Bernhard Stöger, Michael Schmid, Jaime Sanchez-Barriga, Andrei Varykhalov, Cesare Franchini, Karsten Held, and Ulrike Diebold  
*"Anisotropic two-dimensional electron gas at SrTiO<sub>3</sub>(110)"*  
Proceedings of the National Academy of Sciences, 111 (2014) 3933 – 3937  
[www.pnas.org/cgi/doi/10.1073/pnas.1318304111](http://www.pnas.org/cgi/doi/10.1073/pnas.1318304111)
167. Stefan Gerhold, Zhiming Wang, Michael Schmid, and Ulrike Diebold  
*"Stoichiometry-Driven Switching between Surface Reconstructions on SrTiO<sub>3</sub>(001)"*  
Surface Science Letters, 621 (214) L1-L4  
<http://dx.doi.org/10.1016/j.susc.2013.10.015>

## 2013

166. Zhiming Wang, Xianfeng Hao, Stefan Gerhold, Zbyněk Novotný, Cesare Franchini, Eamon McDermott, Karina Schulte, Michael Schmid, and Ulrike Diebold  
“*Water adsorption at the tetrahedral titania surface layer of SrTiO<sub>3</sub>(110)-4x1*”  
*Journal of Physical Chemistry C*, 117 (49) (2013) 26060-26069  
<http://dx.doi.org/10.1021/jp407889h>
165. Stefan Gerhold, Zhiming Wang, Michael Schmid, and Ulrike Diebold  
“*Stoichiometry-Driven Switching between Surface Reconstructions on SrTiO<sub>3</sub>(001)*”  
*Surface Science Letters*, in press (September 2013)
164. Juan de la Figuera, Zbynek Novotny, Martin Setvin, Zhiqiang Mao, Gong Chen, Alpha T. N'Diaye, Michael Schmid, Ulrike Diebold, Andreas K. Schmid, and Gareth S. Parkinson  
“*Real Space Imaging of the Verwey Transition at the (100) Surface of Magnetite*”  
*Physical Review B* 88 (2013) 161410(R)  
DOI: 10.1103/PhysRevB.88.161410
163. Martin Setvin, Ulrich Aschauer, Philipp Scheiber, Michael Schmid, Annabella Selloni, Ulrike Diebold  
“*Reaction of O<sub>2</sub> with Subsurface Oxygen Vacancies on TiO<sub>2</sub> Anatase (101)*”  
*Science*, 341 (2013) 988  
Dol: 10.1126/science.1239879
162. Zhiming Wang, Fengmiao Li, Sheng Meng, Jiandi Zhang, E. Ward Plummer, Ulrike Diebold, and Jiandong Guo  
“*Strain-Mediated Defect Superstructure on the SrTiO<sub>3</sub>(110) surface*”  
*Physical Review Letters*, 111 (2013) 056101  
DOI: 10.1103/PhysRevLett.111.056101
161. Gareth S. Parkinson, Z. Novotny, G. Argentero, M. Schmid, J. Pavelec, R. Kosak, P. Blaha, and U. Diebold  
“*CO Induced Adatom Sintering in a Model Catalyst: Pd/Fe<sub>3</sub>O<sub>4</sub>*”  
*Nature Materials*, 12 (2013) 724 - 728  
DOI: 10.1038/NMAT3667
160. Zbyněk Novotný, Narasimham Mulakaluri, Zoltan Edes, Michael Schmid, Rossitza Pentcheva, Ulrike Diebold, and Gareth S. Parkinson  
“*Probing the surface phase diagram of Fe<sub>3</sub>O<sub>4</sub>(001) towards the Fe rich limit: Evidence for progressive reduction of the surface*”  
*Physical Review B*, 87 (2013) 195410  
DOI: 10.1103/PhysRevB.87.195410
159. M. J. Uddin, M. M. Alam, M. A. Islam, S. Rahman, S. Das, M. M. Rahman, C. A. Morris, R. D. Gonzalez, U. Diebold, T. J. Dickens, O. I. Okoli  
“*Tailoring the photocatalytic reaction rate of a nanostructured TiO<sub>2</sub> matrix using additional gas phase oxygen*”  
*International Nanoletters*, 3 (2013) 16  
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## 2012

158. Philipp Scheiber, Martin Fidler Olga Dulub, Michael Schmid, Ulrike Diebold, Ulrich Aschauer, Weiyi Hou, Annabella Selloni  
“*(Sub)surface mobility of oxygen vacancies at the TiO<sub>2</sub> anatase (101) surface*”  
*Physical Review Letters*, 109 (2012) 136103  
DOI: 10.1103/PhysRevLett.109.136103

157. Moritz Antlanger, Wernfried My-Schmölzer, Jiri Pavelec, Florian Mittendorfer, Josef Redinger, Peter Varga, Ulrike Diebold, and Michael Schmid  
*"Pt<sub>3</sub>Zr(001): A substrate for growing well-ordered ultrathin zirconia films by oxidation"*  
Physical Review B, 86 (3) (2012) 035451  
 DOI: 10.1103/PhysRevB.86.035451  
 Featured as 'Editors' Suggestion'
156. D.A. Bonnell, D. Basov, M. Bode, U. Diebold, S. Kalinin, V. Madhavan, L. Novotny, M. Salmeron, U.D. Schwartz, P. Weiss  
*"Imaging Phenomena with Local Probes - from electrons to photons"*  
Reviews in Modern Physics, 84 (March 2012) 1343 – 1381  
 DOI: 10.1103/RevModPhys.84.1343
155. Zbyněk Novotný, Giacomo Argentero, Zhiming Wang, Michael Schmid, Ulrike Diebold and Gareth S. Parkinson  
*"Ordered Array of Single Au Adatoms with Remarkable Thermal Stability: Au/Fe<sub>3</sub>O<sub>4</sub>(001)"*  
Physical Review Letters, 108 (2012) 216103  
 DOI: [10.1103/PhysRevLett.108.216103](https://doi.org/10.1103/PhysRevLett.108.216103)  
 Featured in C&EN News, as a Highlight at [physics.aps.org](http://physics.aps.org), in several Austrian newspapers (der standard, die presse, etc.) and at multiple webpages
154. Gareth S. Parkinson, Thomas A. Manz, Zbyněk Novotný, Phillip T. Sprunger, Richard L. Kurtz, Michael Schmid, David S. Sholl, and Ulrike Diebold  
*"Antiphase Domain Boundaries at the Fe<sub>3</sub>O<sub>4</sub>(001) Surface"*  
Physical Review B, 85 (2012) 195450  
 DOI: 10.1103/PhysRevB.85.195450
153. Peter Jacobson, Bernhard Stöger, Andreas Garhofer, Gareth S. Parkinson, Michael Schmid, Roman Caudillo, Florian Mittendorfer, Josef Redinger, Ulrike Diebold  
*"Nickel Carbide as a Source of Grain Rotation in Epitaxial Graphene"*  
ACS nano, 6 (2012) 3564-3572  
 DOI: 10.1021/nn300625y
152. Daniel Hagleitner, Peter Jacobson, Sara Blomberg, Karina Schulte, Edvin Lundgren, Markus Kubicek, Jürgen Fleig, Frank Kubel, Christoph Puls, Andreas Limbeck, Herbert Hutter, Lynn A. Boatner, Michael Schmid, Ulrike Diebold  
*"Bulk characterization and surface properties of In<sub>2</sub>O<sub>3</sub> (100) single crystals"*  
Physical Review B, 85 (2012) 115441  
 DOI: 10.1103/PhysRevB.85.115441
151. Ya. B. Losovyj, Shao-Chun Li, Natalia Lozova, Daniel Stellwagen, Ulrike Diebold, Lingmei Kong, Challa Kumar  
*"Evidence for p – d hybridization Au<sub>38</sub> gold nanoclusters"*  
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