Ulrike Diebold

List of Publications by Citations

Source: https://exaly.com/author-pdf/7333586/ulrike-diebold-publications-by-citations.pdf

Version: 2024-04-20

This document has been generated based on the publications and citations recorded by exaly.com. For the latest version of this publication list, visit the link given above.

The third column is the impact factor (IF) of the journal, and the fourth column is the number of citations of the article.

248 papers

24,888 citations

70 h-index 155 g-index

268 ext. papers

26,649 ext. citations

7.6 avg, IF

7.52 L-index

#	Paper	IF	Citations
248	The surface science of titanium dioxide. Surface Science Reports, 2003, 48, 53-229	12.9	6317
247	The surface and materials science of tin oxide. <i>Progress in Surface Science</i> , 2005 , 79, 47-154	6.6	1903
246	Influence of nitrogen doping on the defect formation and surface properties of TiO2 rutile and anatase. <i>Physical Review Letters</i> , 2006 , 96, 026103	7.4	561
245	Novel stabilization mechanism on polar surfaces: ZnO(0001)-Zn. <i>Physical Review Letters</i> , 2003 , 90, 0161	10 7 .4	451
244	Interaction of Molecular Oxygen with the Vacuum-Annealed TiO2(110) Surface: Molecular and Dissociative Channels. <i>Journal of Physical Chemistry B</i> , 1999 , 103, 5328-5337	3.4	433
243	Reaction of O2 with subsurface oxygen vacancies on TiO2 anatase (101). Science, 2013, 341, 988-91	33.3	377
242	Epitaxial growth and properties of ferromagnetic co-doped TiO2 anatase. <i>Applied Physics Letters</i> , 2001 , 79, 3467-3469	3.4	359
241	Steps on anatase TiO2(101). <i>Nature Materials</i> , 2006 , 5, 665-70	27	357
240	STM study of the geometric and electronic structure of ZnO()-Zn, ()-O, (), and () surfaces. <i>Science</i> , 2002 , 519, 201-217	1.8	352
239	Intrinsic defects on a TiO2(110)(11) surface and their reaction with oxygen: a scanning tunneling microscopy study. <i>Surface Science</i> , 1998 , 411, 137-153	1.8	333
238	Evidence for the Tunneling Site on Transition-Metal Oxides: TiO2(110). <i>Physical Review Letters</i> , 1996 , 77, 1322-1325	7.4	331
237	Experimental Investigation of the Interaction of Water and Methanol with AnataselliO2(101). Journal of Physical Chemistry B, 2003, 107, 2788-2795	3.4	329
236	Imaging cluster surfaces with atomic resolution: the strong metal-support interaction state of Pt supported on TiO2(110). <i>Physical Review Letters</i> , 2000 , 84, 3646-9	7.4	314
235	Competing stabilization mechanism for the polar ZnO(0001)-Zn surface. <i>Physical Review B</i> , 2003 , 68,	3.3	306
234	Direct view at excess electrons in TiO2 rutile and anatase. <i>Physical Review Letters</i> , 2014 , 113, 086402	7.4	300
233	Local ordering and electronic signatures of submonolayer water on anatase TiO2(101). <i>Nature Materials</i> , 2009 , 8, 585-9	27	265
232	Evidence for oxygen adatoms on TiO2(110) resulting from O2 dissociation at vacancy sites. <i>Surface Science</i> , 1998 , 412-413, 333-343	1.8	259

(2003-2008)

231	Small Au and Pt clusters at the anatase TiO2(101) surface: behavior at terraces, steps, and surface oxygen vacancies. <i>Journal of the American Chemical Society</i> , 2008 , 130, 370-81	16.4	254
230	Titanium and reduced titania overlayers on titanium dioxide(110). <i>Journal of Electron Spectroscopy and Related Phenomena</i> , 1995 , 73, 1-11	1.7	241
229	Partial dissociation of water leads to stable superstructures on the surface of zinc oxide. <i>Angewandte Chemie - International Edition</i> , 2004 , 43, 6642-5	16.4	232
228	One step towards bridging the materials gap: surface studies of TiO2 anatase. <i>Catalysis Today</i> , 2003 , 85, 93-100	5.3	224
227	Evidence for the predominance of subsurface defects on reduced anatase TiO2(101). <i>Physical Review Letters</i> , 2009 , 102, 106105	7.4	211
226	Hydrogen bonding controls the dynamics of catechol adsorbed on a TiO2(110) surface. <i>Science</i> , 2010 , 328, 882-4	33.3	193
225	Ultrathin metal film growth on TiO2(110): an overview. Surface Science, 1995, 331-333, 845-854	1.8	192
224	Carbon monoxide-induced adatom sintering in a Pd-Fe3O4 model catalyst. <i>Nature Materials</i> , 2013 , 12, 724-8	27	191
223	TiO2 by XPS. Surface Science Spectra, 1996 , 4, 227-231	1.2	189
222	The Influence of the Bulk Reduction State on the Surface Structure and Morphology of Rutile TiO2(110) Single Crystals. <i>Journal of Physical Chemistry B</i> , 2000 , 104, 4944-4950	3.4	188
221	Gas-phase-dependent properties of SnO2 (110), (100), and (101) single-crystal surfaces: Structure, composition, and electronic properties. <i>Physical Review B</i> , 2005 , 72,	3.3	185
220	Influence of Subsurface Defects on the Surface Reactivity of TiO2: Water on Anatase (101). <i>Journal of Physical Chemistry C</i> , 2010 , 114, 1278-1284	3.8	184
219	Subsurface cation vacancy stabilization of the magnetite (001) surface. Science, 2014, 346, 1215-8	33.3	181
218	Oxygen-induced restructuring of the TiO2(110) surface: a comprehensive study. <i>Surface Science</i> , 1999 , 437, 173-190	1.8	170
217	Growth mode of ultrathin copper overlayers on TiO2(110). Physical Review B, 1993, 47, 3868-3876	3.3	168
216	Observation of the dynamical change in a water monolayer adsorbed on a ZnO surface. <i>Physical Review Letters</i> , 2005 , 95, 136101	7.4	164
215	Correlation between bonding geometry and band gap states at organic-inorganic interfaces: catechol on rutile TiO2(110). <i>Journal of the American Chemical Society</i> , 2009 , 131, 980-4	16.4	159
214	Structure and properties of TiO2 surfaces: a brief review. <i>Applied Physics A: Materials Science and Processing</i> , 2003 , 76, 681-687	2.6	156

213	Oxide surface science. Annual Review of Physical Chemistry, 2010, 61, 129-48	15.7	151
212	(Sub)surface mobility of oxygen vacancies at the TiO2 anatase (101) surface. <i>Physical Review Letters</i> , 2012 , 109, 136103	7.4	149
211	High-affinity adsorption leads to molecularly ordered interfaces on TiO in air and solution. <i>Science</i> , 2018 , 361, 786-789	33.3	135
210	Surface reconstruction of Fe3O4(001). Surface Science, 2000, 448, 49-63	1.8	133
209	Surface studies of gas sensing metal oxides. <i>Physical Chemistry Chemical Physics</i> , 2007 , 9, 2307-18	3.6	131
208	Tailoring the nature and strength of electron-phonon interactions in the SrTiO3(001) 2D electron[liquid. <i>Nature Materials</i> , 2016 , 15, 835-9	27	126
207	Scanning tunneling microscopy investigation of the TiO2 anatase (101) surface. <i>Physical Review B</i> , 2000 , 62, R16334-R16336	3.3	123
206	Room temperature water splitting at the surface of magnetite. <i>Journal of the American Chemical Society</i> , 2011 , 133, 12650-5	16.4	105
205	Adsorption of water on reconstructed rutile TiO2(011)-(2 x 1): Ti=O double bonds and surface reactivity. <i>Journal of the American Chemical Society</i> , 2005 , 127, 9895-903	16.4	104
204	Electron-induced oxygen desorption from the TiO2(011)-2x1 surface leads to self-organized vacancies. <i>Science</i> , 2007 , 317, 1052-6	33.3	102
203	Ordered array of single adatoms with remarkable thermal stability: Au/Fe3O4(001). <i>Physical Review Letters</i> , 2012 , 108, 216103	7.4	97
202	The 2 th reconstruction of the rutile TiO2(011) surface: A combined density functional theory, X-ray diffraction, and scanning tunneling microscopy study. <i>Surface Science</i> , 2009 , 603, 138-144	1.8	96
201	Growth and organization of an organic molecular monolayer on TiO2: catechol on anatase (101). Journal of the American Chemical Society, 2011 , 133, 7816-23	16.4	93
200	Surface studies of nitrogen implanted TiO2. <i>Chemical Physics</i> , 2007 , 339, 36-43	2.3	92
199	Charge trapping at the step edges of TiO(2) anatase (101). <i>Angewandte Chemie - International Edition</i> , 2014 , 53, 4714-6	16.4	90
198	Reactivity of TiO2 rutile and anatase surfaces toward nitroaromatics. <i>Journal of the American Chemical Society</i> , 2010 , 132, 64-6	16.4	89
197	Surface structure and morphology of Mg-segregated epitaxial Fe3O4(001) thin films on MgO(001). <i>Physical Review B</i> , 1997 , 56, 9902-9909	3.3	89
196	Surface structure of TiO2(011)-(2x1). Physical Review Letters, 2004, 93, 036104	7.4	87

(2002-1993)

195	Structural study of ultrathin metal films on TiO2 using LEED, ARXPS and MEED. <i>Surface Science</i> , 1993 , 291, 381-394	1.8	87
194	Dual role of CO in the stability of subnano Pt clusters at the Fe3O4(001) surface. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2016 , 113, 8921-6	11.5	85
193	Anisotropic two-dimensional electron gas at SrTiO3(110). <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2014 , 111, 3933-7	11.5	83
192	Characterization of the natural barriers of intergranular tunnel junctions: Cr2O3 surface layers on CrO2 nanoparticles. <i>Applied Physics Letters</i> , 2000 , 77, 2840-2842	3.4	82
191	Straightforward self-assembly of porphyrin nanowires in water: harnessing adamantane/beta-cyclodextrin interactions. <i>Journal of the American Chemical Society</i> , 2010 , 132, 9966-	7 ^{16.4}	78
190	SemiconductorBalf metal transition at the Fe3O4(001) surface upon hydrogen adsorption. <i>Physical Review B</i> , 2010 , 82,	3.3	77
189	Pure and cobalt-doped SnO2(101) films grown by molecular beam epitaxy on Al2O3. <i>Thin Solid Films</i> , 2005 , 484, 132-139	2.2	76
188	STM study of Cu growth on the ZnO() surface. Surface Science, 2002, 504, 271-281	1.8	75
187	Nickel carbide as a source of grain rotation in epitaxial graphene. ACS Nano, 2012, 6, 3564-72	16.7	7 ²
186	STM Study of Copper Growth on ZnO(0001)In and ZnO(0001)ID Surfaces. <i>Journal of Physical Chemistry B</i> , 2003 , 107, 10583-10590	3.4	72
185	Adsorption of sulfur on TiO2(110) studied with STM, LEED and XPS: temperature-dependent change of adsorption site combined with OB exchange. <i>Surface Science</i> , 2000 , 461, 87-97	1.8	7 ²
184	Unraveling CO adsorption on model single-atom catalysts. <i>Science</i> , 2021 , 371, 375-379	33.3	72
183	Surface point defects on bulk oxides: atomically-resolved scanning probe microscopy. <i>Chemical Society Reviews</i> , 2017 , 46, 1772-1784	58.5	71
182	Imaging physical phenomena with local probes: From electrons to photons. <i>Reviews of Modern Physics</i> , 2012 , 84, 1343-1381	40.5	70
181	Enhanced tunneling magnetoresistance and high-spin polarization at room temperature in a polystyrene-coated Fe3O4 granular system. <i>Physical Review B</i> , 2006 , 73,	3.3	70
180	Structure of an ultrathin TiOx film, formed by the strong metal support interaction (SMSI), on Pt nanocrystals on TiO2(110). <i>Surface Science</i> , 2001 , 492, L677-L687	1.8	70
179	Scanning tunneling microscopy study of the anatase (100) surface. Surface Science, 2003, 529, L239-L24	41.8	69
178	Variations of the local electronic surface properties of TiO2(110) induced by intrinsic and extrinsic defects. <i>Physical Review B</i> , 2002 , 66,	3.3	69

177	Coexistence of trapped and free excess electrons in SrTiO3. <i>Physical Review B</i> , 2015 , 91,	3.3	68
176	Photocatalysts: closing the gap. <i>Nature Chemistry</i> , 2011 , 3, 271-2	17.6	68
175	Observation and destruction of an elusive adsorbate with STM: OITiOI(110). <i>Physical Review Letters</i> , 2010 , 105, 216101	7.4	68
174	Morphology change of oxygen-restructured TiO2(110) surfaces by UHV annealing: Formation of a low-temperature (12) structure. <i>Physical Review B</i> , 2000 , 61, 4926-4933	3.3	68
173	High Transient Mobility of Chlorine on TiO2(110): Evidence for ''Cannon-Ball'' Trajectories of Hot Adsorbates. <i>Physical Review Letters</i> , 1998 , 81, 405-408	7.4	67
172	Ultrathin reactive metal films on TiO2(110): growth, interfacial interaction and electronic structure of chromium films. <i>Surface Science</i> , 1993 , 295, 411-426	1.8	66
171	Electron transfer between anatase TiO and an O molecule directly observed by atomic force microscopy. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2017 , 114, E2556-E2562	11.5	65
170	Oxygen-induced restructuring of the rutile TiO2(110)(111) surface. Surface Science, 1998, 414, L951-L956	51.8	64
169	Growth, structure and thermal properties of chromium oxide films on Pt(111). <i>Surface Science</i> , 1997 , 375, 1-12	1.8	63
168	Methanol on Anatase TiO (101): Mechanistic Insights into Photocatalysis. ACS Catalysis, 2017, 7, 7081-7	093.1	62
167	Disorder and Defect Healing in Graphene on Ni(111). Journal of Physical Chemistry Letters, 2012, 3, 136-	-16.9	62
166	Adsorption and incorporation of transition metals at the magnetite Fe3O4(001) surface. <i>Physical Review B</i> , 2015 , 92,	3.3	61
165	Molecular Ordering at the Interface Between Liquid Water and Rutile TiO2(110). <i>Advanced Materials Interfaces</i> , 2015 , 2, 1500246	4.6	61
164	Probing the surface phase diagram of Fe3O4(001) towards the Fe-rich limit: Evidence for progressive reduction of the surface. <i>Physical Review B</i> , 2013 , 87,	3.3	61
163	Structures of sulfur on TiO2() determined by scanning tunneling microscopy, X-ray photoelectron spectroscopy and low-energy electron diffraction. <i>Surface Science</i> , 2001 , 470, 347-360	1.8	61
162	Surface structure of Sn-doped In2O3(111) thin films by STM. <i>New Journal of Physics</i> , 2008 , 10, 125030	2.9	60
161	Structure, defects, and impurities at the rutile TiO2(0 1 1)-(2 🗓) surface: A scanning tunneling microscopy study. <i>Surface Science</i> , 2006 , 600, 4407-4417	1.8	59
160	Atomic-Scale Structure of the Hematite FeO(11 02) "R-Cut" Surface. <i>Journal of Physical Chemistry C</i> , 2018 , 122, 1657-1669	3.8	59

(2014-1999)

159	Oxygen-induced restructuring of rutile TiO2(110): formation mechanism, atomic models, and influence on surface chemistry. <i>Faraday Discussions</i> , 1999 , 114, 245-258	3.6	58
158	Polarons in materials. <i>Nature Reviews Materials</i> , 2021 , 6, 560-586	73.3	58
157	Polarity compensation mechanisms on the perovskite surface KTaO(001). <i>Science</i> , 2018 , 359, 572-575	33.3	57
156	Water agglomerates on FeO(001). <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2018 , 115, E5642-E5650	11.5	57
155	Surface morphologies of SnO2(110). Surface Science, 2003, 529, 295-311	1.8	56
154	Growth of Copper on Single Crystalline ZnO: Surface Study of a Model Catalyst. <i>Topics in Catalysis</i> , 2005 , 36, 65-76	2.3	56
153	Following the Reduction of Oxygen on TiO2 Anatase (101) Step by Step. <i>Journal of the American Chemical Society</i> , 2016 , 138, 9565-71	16.4	56
152	Local Structure and Coordination Define Adsorption in a Model Ir /Fe O Single-Atom Catalyst. <i>Angewandte Chemie - International Edition</i> , 2019 , 58, 13961-13968	16.4	55
151	Surface oxygen chemistry of a gas-sensing material: SnO 2 (101). Europhysics Letters, 2004, 65, 61-67	1.6	55
150	Bulk and surface characterization of In2O3(001) single crystals. <i>Physical Review B</i> , 2012 , 85,	3.3	54
149	Electronic structure of ultrathin Fe films on TiO2(110) studied with soft-x-ray photoelectron spectroscopy and resonant photoemission. <i>Physical Review B</i> , 1994 , 50, 14474-14480	3.3	54
148	An Atomic-Scale View of CO and H2 Oxidation on a Pt/Fe3 O4 Model Catalyst. <i>Angewandte Chemie - International Edition</i> , 2015 , 54, 13999-4002	16.4	52
147	Adsorption of water at the SrO surface of duthenates. <i>Nature Materials</i> , 2016 , 15, 450-455	27	50
146	A search for surface alloy formation in faceting induced by monolayer metal films: Pd/W (111) and Ni/W (111). <i>Surface Science</i> , 1995 , 322, 221-229	1.8	49
145	A Multitechnique Study of CO Adsorption on the TiO2 Anatase (101) Surface. <i>Journal of Physical Chemistry C</i> , 2015 , 119, 21044-21052	3.8	48
144	THE RELATIONSHIP BETWEEN BULK AND SURFACE PROPERTIES OF RUTILE TiO2(110). <i>Surface Review and Letters</i> , 2000 , 07, 613-617	1.1	46
143	Interplay between Adsorbates and Polarons: CO on Rutile TiO_{2}(110). <i>Physical Review Letters</i> , 2019 , 122, 016805	7.4	44
142	Cluster nucleation and growth from a highly supersaturated adatom phase: silver on magnetite. <i>ACS Nano</i> , 2014 , 8, 7531-7	16.7	43

141	Tuning the chemical functionality of a gas sensitive material: Water adsorption on SnO2(1 0 1). <i>Surface Science</i> , 2006 , 600, 29-32	1.8	43
140	Ab initio and experimental studies of chlorine adsorption on the rutile TiO2 (110) surface. <i>Physical Review B</i> , 2002 , 65,	3.3	43
139	Formation and dynamics of small polarons on the rutile TiO2(110) surface. <i>Physical Review B</i> , 2018 , 98,	3.3	42
138	Identification of adsorbed molecules via STM tip manipulation: CO, HD, and Olbn TiOlanatase (101). <i>Physical Chemistry Chemical Physics</i> , 2014 , 16, 21524-30	3.6	42
137	Pt3Zr(0001): A substrate for growing well-ordered ultrathin zirconia films by oxidation. <i>Physical Review B</i> , 2012 , 86,	3.3	41
136	Adsorption of Formic Acid on the Fe3O4(001) Surface. <i>Journal of Physical Chemistry C</i> , 2015 , 119, 20459	- 3.8 46!	5 40
135	Mixed dissociated/molecular monolayer of water on the TiO2(011)-(211) surface. <i>Surface Science</i> , 2005 , 591, L267-L272	1.8	40
134	Influence of surface atomic structure demonstrated on oxygen incorporation mechanism at a model perovskite oxide. <i>Nature Communications</i> , 2018 , 9, 3710	17.4	40
133	A multi-technique study of CO adsorption on FeO magnetite. <i>Journal of Chemical Physics</i> , 2017 , 146, 014701	3.9	39
132	Aggregation and electronically induced migration of oxygen vacancies in TiO2 anatase. <i>Physical Review B</i> , 2015 , 91,	3.3	39
131	Current-controlled channel switching and magnetoresistance in an Fe3C island film supported on a Si substrate. <i>Journal of Applied Physics</i> , 2002 , 91, 8411	2.5	39
130	Surface preparation of TiO2 anatase (101): Pitfalls and how to avoid them. <i>Surface Science</i> , 2014 , 626, 61-67	1.8	37
129	Adsorption-site-dependent electronic structure of catechol on the anatase TiO2(101) surface. <i>Langmuir</i> , 2011 , 27, 8600-4	4	36
128	A metastable Fe(A) termination at the Fe3O4(001) surface. Surface Science, 2011 , 605, L42-L45	1.8	36
127	Perspective: A controversial benchmark system for water-oxide interfaces: HO/TiO(110). <i>Journal of Chemical Physics</i> , 2017 , 147, 040901	3.9	35
126	Tuning the oxide/organic interface: Benzene on SnO2(101). <i>Applied Physics Letters</i> , 2004 , 85, 5766-5768	3.4	35
125	Antiphase domain boundaries at the Fe3O4(001) surface. <i>Physical Review B</i> , 2012 , 85,	3.3	34
124	The structure of the polar Sn-doped indium oxide (001) surface. <i>Applied Physics Letters</i> , 2009 , 95, 25310	53.4	34

123	Stoichiometry-driven switching between surface reconstructions on SrTiO(001). <i>Surface Science</i> , 2014 , 621, L1-L4	1.8	33	
122	Water-soluble nanorods self-assembled via pristine C60 and porphyrin moieties. <i>Chemical Communications</i> , 2009 , 4209-11	5.8	33	
121	Trapping Nitric Oxide by Surface Hydroxyls on Rutile TiO2(110). <i>Journal of Physical Chemistry C</i> , 2012 , 116, 1887-1891	3.8	32	
120	Nucleation and Growth of 1D Water Clusters on Rutile TiO2 (011)-2¶. <i>Journal of Physical Chemistry C</i> , 2009 , 113, 10329-10332	3.8	32	
119	The growth of ultra-thin zirconia films on Pd(3)Zr(0 0 0 1). <i>Journal of Physics Condensed Matter</i> , 2014 , 26, 225003	1.8	31	
118	Atomic structure and stability of magnetite Fe3O4(001): An X-ray view. Surface Science, 2016, 653, 76-8	11.8	30	
117	Strain-induced defect superstructure on the SrTiO3(110) surface. <i>Physical Review Letters</i> , 2013 , 111, 056101	7.4	30	
116	Resolving the Structure of a Well-Ordered Hydroxyl Overlayer on InO(111): Nanomanipulation and Theory. <i>ACS Nano</i> , 2017 , 11, 11531-11541	16.7	29	
115	Water Adsorption at the Tetrahedral Titania Surface Layer of SrTiO(110)-(4 🗓). <i>Journal of Physical Chemistry C</i> , 2013 , 117, 26060-26069	3.8	29	
114	Local Structure and Coordination Define Adsorption in a Model Ir1/Fe3O4 Single-Atom Catalyst. <i>Angewandte Chemie</i> , 2019 , 131, 14099-14106	3.6	28	
113	The Role of Surface Defects in the Adsorption of Methanol on FeO(001). <i>Topics in Catalysis</i> , 2017 , 60, 420-430	2.3	27	
112	Surface Structure of TiO Rutile (011) Exposed to Liquid Water. <i>Journal of Physical Chemistry C</i> , 2017 , 121, 26424-26431	3.8	27	
111	Partielle Dissoziation von Wasser fürt zu stabilen Berstrukturen auf der Oberfühe von Zinkoxid. <i>Angewandte Chemie</i> , 2004 , 116, 6809-6814	3.6	26	
110	Growth and structure of ultrathin Cr films on Pt(111). Surface Science, 1997, 371, 223-234	1.8	25	
109	Tuning surface properties of SnO2(1 0 1) by reduction. <i>Journal of Physics and Chemistry of Solids</i> , 2006 , 67, 1923-1929	3.9	25	
108	Transition from Reconstruction toward Thin Film on the (110) Surface of Strontium Titanate. <i>Nano Letters</i> , 2016 , 16, 2407-12	11.5	25	
107	Partially Dissociated Water Dimers at the WaterHematite Interface. ACS Energy Letters, 2019, 4, 390-396	62 0.1	25	
106	Surface segregation of silicon in platinum(111). <i>Journal of Vacuum Science and Technology A:</i> Vacuum, Surfaces and Films, 1996 , 14, 1679-1683	2.9	24	

105	Stability and Catalytic Performance of Reconstructed Fe3O4(001) and Fe3O4(110) Surfaces during Oxygen Evolution Reaction. <i>Journal of Physical Chemistry C</i> , 2019 , 123, 8304-8311	3.8	24
104	Interplay between Steps and Oxygen Vacancies on Curved TiO2(110). <i>Nano Letters</i> , 2016 , 16, 2017-22	11.5	23
103	Using photoelectron spectroscopy to observe oxygen spillover to zirconia. <i>Physical Chemistry Chemical Physics</i> , 2019 , 21, 17613-17620	3.6	23
102	Influence of subsurface, charged impurities on the adsorption of chlorine at TiO2(1 1 0). <i>Chemical Physics Letters</i> , 2003 , 367, 319-323	2.5	23
101	Supression of electron-induced positive ion emission by a molecular overlayer: Ion-molecule charge exchange at a surface. <i>Physical Review Letters</i> , 1994 , 72, 1116-1119	7.4	23
100	Formaldehyde Adsorption on the Anatase TiO2(101) Surface: Experimental and Theoretical Investigation. <i>Journal of Physical Chemistry C</i> , 2017 , 121, 8914-8922	3.8	22
99	Polaron-Driven Surface Reconstructions. <i>Physical Review X</i> , 2017 , 7,	9.1	22
98	Reducing the In2O3(111) Surface Results in Ordered Indium Adatoms. <i>Advanced Materials Interfaces</i> , 2014 , 1, 1400289	4.6	22
97	Direct assessment of the acidity of individual surface hydroxyls. <i>Nature</i> , 2021 , 592, 722-725	50.4	20
96	Probing the geometry of copper and silver adatoms on magnetite: quantitative experiment versus theory. <i>Nanoscale</i> , 2018 , 10, 2226-2230	7.7	19
95	Adjusting island density and morphology of the SrTiO3(110)-(4 🗈) surface: Pulsed laser deposition combined with scanning tunneling microscopy. <i>Surface Science</i> , 2016 , 651, 76-83	1.8	19
94	Real-space imaging of the Verwey transition at the (100) surface of magnetite. <i>Physical Review B</i> , 2013 , 88,	3.3	19
93	An in vitro controlled release study of valproic acid encapsulated in a titania ceramic matrix. <i>Applied Surface Science</i> , 2011 , 257, 7920-7927	6.7	19
92	Oxygen adsorption on CuឱnO(0001)᠒n. <i>Physical Review B</i> , 2008 , 77,	3.3	19
91	Water adsorption at zirconia: from the ZrO2(111)/Pt3Zr(0001) model system to powder samples. Journal of Materials Chemistry A, 2018 , 6, 17587-17601	13	19
90	Adsorption and thermal stability of Mn on TiO2(110): 2p X-ray absorption spectroscopy and soft X-ray photoemission. <i>Surface Science</i> , 1995 , 343, 53-60	1.8	18
89	Synthesis, Characterization, and Computation of Catalysts at the Center for Atomic-Level Catalyst Design. <i>Journal of Physical Chemistry C</i> , 2014 , 118, 20043-20069	3.8	17
88	Epitaxial growth of ultrathin films of chromium and its oxides on Pt(111). <i>Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films</i> , 1997 , 15, 1576-1580	2.9	17

87	Highly ordered nanoscale surface alloy formed through Cr-induced Pt(111) reconstruction. <i>Physical Review B</i> , 1998 , 57, R4285-R4288	3.3	17
86	Epitaxially Grown Fe3O4 Thin Films: An XPS Study. <i>Surface Science Spectra</i> , 1996 , 4, 266-272	1.2	17
85	Resolving the adsorption of molecular O on the rutile TiO(110) surface by noncontact atomic force microscopy. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2020 , 117, 14827-14837	11.5	16
84	Adsorption of CO on the FeO(001) Surface. <i>Journal of Physical Chemistry B</i> , 2018 , 122, 721-729	3.4	16
83	Metal Adatoms and Clusters on Ultrathin Zirconia Films. <i>Journal of Physical Chemistry C</i> , 2016 , 120, 9920)-9 .9 32	16
82	High chemical activity of a perovskite surface: reaction of CO with Sr(3)Ru(2)O(7). <i>Physical Review Letters</i> , 2014 , 113, 116101	7.4	16
81	Self-Limiting Adsorption of WO Oligomers on Oxide Substrates in Solution. <i>Journal of Physical Chemistry C</i> , 2017 , 121, 19743-19750	3.8	16
80	Adsorbate-induced structural evolution changes the mechanism of CO oxidation on a Rh/FeO(001) model catalyst. <i>Nanoscale</i> , 2020 , 12, 5866-5875	7.7	15
79	Growth of one-dimensional Pd nanowires on the terraces of a reduced SnO2(101) surface. <i>Physical Review Letters</i> , 2007 , 98, 186102	7.4	15
78	Small Polarons in Transition Metal Oxides 2019 , 1-39		15
77	NO adsorption and diffusion on hydroxylated rutile TiO2(110). <i>Physical Chemistry Chemical Physics</i> , 2015 , 17, 26594-8	3.6	14
76	Stabilizing Single Ni Adatoms on a Two-Dimensional Porous Titania Overlayer at the SrTiO(110) Surface. <i>Journal of Physical Chemistry C</i> , 2014 , 118, 19904-19909	3.8	14
76 75	Stabilizing Single Ni Adatoms on a Two-Dimensional Porous Titania Overlayer at the SrTiO(110) Surface. <i>Journal of Physical Chemistry C</i> , 2014 , 118, 19904-19909 Photoemission Study of Azobenzene and Aniline Adsorbed on TiO2 Anatase (101) and Rutile (110) Surfaces. <i>Journal of Physical Chemistry C</i> , 2011 , 115, 10173-10179	3.8	14
	Surface. Journal of Physical Chemistry C, 2014, 118, 19904-19909 Photoemission Study of Azobenzene and Aniline Adsorbed on TiO2 Anatase (101) and Rutile (110) Surfaces. Journal of Physical Chemistry C, 2011, 115, 10173-10179 Hybrid exchange density functional study of vicinal anatase TiO2 surfaces. Physical Review B, 2014.		
75	Surface. <i>Journal of Physical Chemistry C</i> , 2014 , 118, 19904-19909 Photoemission Study of Azobenzene and Aniline Adsorbed on TiO2 Anatase (101) and Rutile (110) Surfaces. <i>Journal of Physical Chemistry C</i> , 2011 , 115, 10173-10179 Hybrid exchange density functional study of vicinal anatase TiO2 surfaces. <i>Physical Review B</i> , 2014 ,	3.8	14
75 74	Photoemission Study of Azobenzene and Aniline Adsorbed on TiO2 Anatase (101) and Rutile (110) Surfaces. <i>Journal of Physical Chemistry C</i> , 2011 , 115, 10173-10179 Hybrid exchange density functional study of vicinal anatase TiO2 surfaces. <i>Physical Review B</i> , 2014 , 89, Thermal Stability of Ultrathin Cr Films on Pt(111). <i>Journal of Physical Chemistry B</i> , 1997 , 101, 4588-4596	3.8	14
75 74 73	Photoemission Study of Azobenzene and Aniline Adsorbed on TiO2 Anatase (101) and Rutile (110) Surfaces. <i>Journal of Physical Chemistry C</i> , 2011 , 115, 10173-10179 Hybrid exchange density functional study of vicinal anatase TiO2 surfaces. <i>Physical Review B</i> , 2014 , 89, Thermal Stability of Ultrathin Cr Films on Pt(111). <i>Journal of Physical Chemistry B</i> , 1997 , 101, 4588-4596 Nickel Doping Enhances the Reactivity of Fe3O4(001) to Water. <i>Journal of Physical Chemistry C</i> , 2019 , 123, 15038-15045 A full monolayer of superoxide: oxygen activation on the unmodified CaRuO(001) surface. <i>Journal</i>	3.8 3.3 3.4	14 13 13

69	Characterizing solid state gas responses using surface charging in photoemission: water adsorption on SnO2(101). <i>Journal of Physics Condensed Matter</i> , 2006 , 18, L129-L134	1.8	12
68	Apparatus for dosing liquid water in ultrahigh vacuum. Review of Scientific Instruments, 2018, 89, 08390	061.7	12
67	Self-limited growth of an oxyhydroxide phase at the FeO(001) surface in liquid and ambient pressure water. <i>Journal of Chemical Physics</i> , 2019 , 151, 154702	3.9	11
66	Vacancy clusters at domain boundaries and band bending at the SrTiO3(110) surface. <i>Physical Review B</i> , 2014 , 90,	3.3	11
65	Decomposition of catechol and carbonaceous residues on TiO2(110): A model system for cleaning of extreme ultraviolet lithography optics. <i>Journal of Vacuum Science & Technology B</i> , 2008 , 26, 2236-226	40	11
64	Are the surfaces of CrO2metallic?. <i>Journal of Physics Condensed Matter</i> , 2007 , 19, 315207	1.8	11
63	Dispersed Au atoms, supported on TiO2(1 1 0). Surface Science, 2005, 578, 1-3	1.8	11
62	Electrochemical Stability of the Reconstructed Fe O (001) Surface. <i>Angewandte Chemie - International Edition</i> , 2020 , 59, 21904-21908	16.4	11
61	Ordered hydroxyls on CaRuO(001). <i>Nature Communications</i> , 2017 , 8, 23	17.4	10
60	Nickel-Oxide-Modified SrTiO(110)-(4 🗈) Surfaces and Their Interaction with Water. <i>Journal of Physical Chemistry C</i> , 2015 , 119, 20481-20487	3.8	10
59	Point defects at cleaved Srn+1RunO3n+1(001) surfaces. <i>Physical Review B</i> , 2014 , 90,	3.3	10
58	Optimization of synthesis variables in the preparation of active sulfated zirconia catalysts. <i>Catalysis Letters</i> , 2005 , 101, 5-13	2.8	10
57	Decay channels for the Ti(2p1/2) core hole excitations in TiO2 observed by x-ray Raman scattering. <i>Physical Review B</i> , 2002 , 65,	3.3	10
56	Incipient ferroelectricity: A route towards bulk-terminated SrTiO3. <i>Physical Review Materials</i> , 2019 , 3,	3.2	10
55	Pushing the detection of cation nonstoichiometry to the limit. <i>Physical Review Materials</i> , 2019 , 3,	3.2	10
54	A Model System for Photocatalysis: Ti-Doped FeO(11 02) Single-Crystalline Films. <i>Chemistry of Materials</i> , 2020 , 32, 3753-3764	9.6	9
53	Scanning Tunneling Microscopy Study of a Vicinal Anatase TiO2 Surface. <i>Journal of Physical Chemistry C</i> , 2008 , 112, 16166-16170	3.8	9
52	Surface and Interface Properties of Metal-Organic Chemical Vapor Deposition Grown a-Plane Mg x Zn1🛮 O (0 /k /D.3) Films. <i>Journal of Electronic Materials</i> , 2007 , 36, 446-451	1.9	9

51	The Locus of Sulfate Sites on Sulfated Zirconia. Catalysis Letters, 2003, 86, 151-156	2.8	8
50	IrO_{2} Surface Complexions Identified through Machine Learning and Surface Investigations. <i>Physical Review Letters</i> , 2020 , 125, 206101	7.4	8
49	Atomically resolved surface phases of La0.8Sr0.2MnO3(110) thin films. <i>Journal of Materials Chemistry A</i> , 2020 , 8, 22947-22961	13	8
48	Fe3O4(110)[11 [B) revisited: Periodic (111) nanofacets. <i>Surface Science</i> , 2016 , 649, L120-L123	1.8	8
47	Surface structures of ZrO2 films on Rh(111): From two layers to bulk termination. <i>Surface Science</i> , 2019 , 679, 180-187	1.8	8
46	Construction and evaluation of an ultrahigh-vacuum-compatible sputter deposition source. <i>Review of Scientific Instruments</i> , 2017 , 88, 103904	1.7	7
45	In situ scanning tunneling microscopy study of Ca-modified rutile TiO2(110) in bulk water. <i>Beilstein Journal of Nanotechnology</i> , 2015 , 6, 438-43	3	7
44	Evidence for st Hybridization in Au38Clusters. <i>Journal of Physical Chemistry C</i> , 2012 , 116, 5857-5861	3.8	7
43	Preparation of a pristine TiO2 anatase (101) surface by cleaving. <i>Journal of Physics Condensed Matter</i> , 2010 , 22, 084014	1.8	7
42	Growth of In2O3(111) thin films with optimized surfaces. <i>Physical Review Materials</i> , 2019 , 3,	3.2	7
41	Well-Ordered In Adatoms at the In_{2}O_{3}(111) Surface Created by Fe Deposition. <i>Physical Review Letters</i> , 2016 , 117, 206101	7:4	6
40	An Atomic-Scale View of CO and H2 Oxidation on a Pt/Fe3O4 Model Catalyst. <i>Angewandte Chemie</i> , 2015 , 127, 14205-14208	3.6	6
39	Characterization of individual SnO2 nanobelts with STM. Surface Science, 2008, 602, L112-L114	1.8	6
38	The Structure of TiO2 surfaces. <i>Chemical Physics of Solid Surfaces</i> , 2001 , 9, 443-484		6
37	The influence of preadsorbed K on the adsorption of PF3 on Ru(0001) studied by soft x-ray photoelectron spectroscopy. <i>Journal of Chemical Physics</i> , 1994 , 100, 5301-5313	3.9	6
36	Epitaxial growth of complex oxide films: Role of surface reconstructions. <i>Physical Review Research</i> , 2019 , 1,	3.9	6
35	Quest for a pristine unreconstructed SrTiO3(001) surface: An atomically resolved study via noncontact atomic force microscopy. <i>Physical Review B</i> , 2021 , 103,	3.3	6
34	Substoichiometric ultrathin zirconia films cause strong metal upport interaction. <i>Journal of Materials Chemistry A</i> , 2019 , 7, 24837-24846	13	6

33	Ni-modified Fe3O4(001) surface as a simple model system for understanding the oxygen evolution reaction. <i>Electrochimica Acta</i> , 2021 , 389, 138638	6.7	6
32	Tailoring the Interface Properties of Magnetite for Spintronics 2012 ,		5
31	Small Polarons in Transition Metal Oxides 2020 , 1035-1073		5
3 0	Surface Reduction State Determines Stabilization and Incorporation of Rh on ⊞e2O3(11□02). **Advanced Materials Interfaces, 2021 , 8, 2001908	4.6	5
29	Atomic-Scale Studies of Fe O (001) and TiO (110) Surfaces Following Immersion in CO -Acidified Water. <i>ChemPhysChem</i> , 2020 , 21, 1788-1796	3.2	4
28	Prototypical Organic-Oxide Interface: Intramolecular Resolution of Sexiphenyl on InO(111). <i>ACS Applied Materials & Discrete Section</i> , 10, 14175-14182	9.5	4
27	Adsorption on Metal Oxide Surfaces 2016 , 793-817		4
26	Defects and Pd growth on the reduced SnO2(1 0 0) surface. Surface Science, 2008, 602, 1699-1704	1.8	4
25	Dynamics of the TiO2 (110) surface and step: Onset of defects in the ordered structure. <i>Physical Review B</i> , 2003 , 68,	3.3	4
24	Two-dimensional surface phase diagram of a multicomponent perovskite oxide: La0.8Sr0.2MnO3(110). <i>Physical Review Materials</i> , 2021 , 5,	3.2	4
23	CO oxidation by Pt/FeO: Metastable dimer and support configurations facilitate lattice oxygen extraction <i>Science Advances</i> , 2022 , 8, eabn4580	14.3	4
22	Fast low-noise transimpedance amplifier for scanning tunneling microscopy and beyond. <i>Review of Scientific Instruments</i> , 2020 , 91, 074701	1.7	3
21	Movable holder for a quartz crystal microbalance for exact growth rates in pulsed laser deposition. <i>Review of Scientific Instruments</i> , 2020 , 91, 065003	1.7	3
20	Charge Trapping an Stufenkanten von Anatas-TiO2(101). Angewandte Chemie, 2014 , 126, 4804-4807	3.6	3
19	Surface Structure and Morphology of Mg-Segregated, Epitaxial Fe3O4 Thin Films on MgO(001). <i>Materials Research Society Symposia Proceedings</i> , 1997 , 474, 265		3
18	Why and How Savitzky-Golay Filters Should Be Replaced ACS Measurement Science Au, 2022 , 2, 185-19	6	3
17	Single Rh Adatoms Stabilized on FeO(11 02) by Coadsorbed Water ACS Energy Letters, 2022, 7, 375-38	 B Q :0.1	3
16	Few-monolayer yttria-doped zirconia films: Segregation and phase stabilization. <i>Journal of Chemical Physics</i> , 2020 , 152, 064709	3.9	2

15	Sexiphenyl on Cu(100): nc-AFM tip functionalization and identification. Surface Science, 2018, 678, 124-1	278	2
14	Understanding Metal Oxide Surfaces at the Atomic Scale: STM Investigations of Bulk-defect Dependent Surface Processes. <i>Materials Research Society Symposia Proceedings</i> , 2000 , 654, 511		2
13	Rapid oxygen exchange between hematite and water vapor. <i>Nature Communications</i> , 2021 , 12, 6488	17.4	2
12	In memoriam of Theodore Eugene MadeyOctober 24, 1937 Iuly 27, 2008. <i>Surface Science Reports</i> , 2009 , 64, iii-iv	12.9	1
11	Wiggling its way out of surface polarity: Fe3O4(100) (A Perspectives on the article: A combined DFT/LEED approach for complex oxide surface structure determination: Fe3O4(011)Iby R. Pentcheva, W. Moritz, J. Rundgren, S. Frank, D. Schrupp, M. Scheffler). <i>Surface Science</i> , 2008 , 602, 1297-	1.8 1 298	1
10	Specimen Treatments: Surface Preparation of Metal Compound Materials (Mainly Oxides) 2002 , 145-17	1	1
9	Adsorption of CO on the Ca3Ru2O7(001) surface. Surface Science, 2019, 680, 18-23	1.8	1
8	Reconstruction changes drive surface diffusion and determine the flatness of oxide surfaces. <i>Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films</i> , 2022 , 40, 023206	2.9	1
7	Intrinsic Point Defects on a TiO2(110) Surface and Their Reaction with Oxygen: A Scanning Tunneling Microscopy Study. <i>Materials Research Society Symposia Proceedings</i> , 1997 , 474, 359		
6	Highlights of the Science and Life of Peter Varga (1946\(\mathbb{Q}\)018). E-Journal of Surface Science and Nanotechnology, 2020, 18, 8-11	0.7	
5	Nanosession: Scanning Probe Microscopy on Oxides177-184		
4	Nanosession: 2D Electron Systems - Correlation Effects and Transport81-88		
3	Electrochemical Stability of the Reconstructed Fe3O4(001) Surface. <i>Angewandte Chemie</i> , 2020 , 132, 220) §.& -22	2092
2	Surface Science of Metal Oxides: Examining What Happens at the Atomic Scale. <i>Proceedings (mdpi)</i> , 2020 , 56, 22	0.3	
1	Single Atom Catalysts: Surface Reduction State Determines Stabilization and Incorporation of Rh on #Fe2O3(11D2) (Adv. Mater. Interfaces 8/2021). <i>Advanced Materials Interfaces</i> , 2021 , 8, 2170045	4.6	