Adam Kiejna

List of Publications by Year
in descending order

98 papers	2,552 citations	172207 29 h-index	214527 47 g-index
102 all docs	102 docs citations	102 times ranked	2282 citing authors

#	Article	IF	Citations
1	Simulation of STM Images of Hematite Î±-Fe₂O₃(0001) Surfaces: Dependence on Distance and Bias. Journal of Physical Chemistry C, 2021, 125, 26711-26717.	1.5	3
2	Gold nanostructures on iron oxide surfaces and their interaction with CO. Journal of Physics Condensed Matter, 2020, 32, 433001.	0.7	1
3	Incipient adsorption of water and hydroxyl on hematite (0001) surface. Journal of Physics Communications, 2019, 3, 035023.	0.5	7
4	Effect of substrate relaxation on adsorption energies: The example of Î±-Fe2O3(0001) and Fe3O4(111). Surface Science, 2019, 679, 225-229.	0.8	10
5	Comparison of the Performance of van der Waals Dispersion Functionals in the Description of Water and Ethanol on Transition Metal Surfaces. Journal of Physical Chemistry C, 2018, 122, 1577-1588.	1.5	36
6	Water adsorption on the stoichiometric and defected Fe(110) surfaces. Surface Science, 2018, 668, 144-149.	0.8	15
7	Water Adsorption on bcc Iron Surfaces. , 2018, , 298-303.		0
8	On the Structure of Ultrathin FeO Films on Ag(111). Nanomaterials, 2018, 8, 828.	1.9	9
9	DFT study of stepped 4H-SiC{0001} surfaces. Applied Surface Science, 2017, 420, 129-135.	3.1	8
10	Towards understanding MgO/Fe interface formation: Adsorption of O and Mg atoms on an Fe(001) surface. Physical Review B, 2017, 96, .	1.1	6
11	CO adsorption on small Aun (n = 1â€“4) structures supported on hematite. II. Adsorption on the O-rich termination of Î±-Fe2O3(0001) surface. Journal of Chemical Physics, 2016, 144, 044705.	1.2	9
12	CO adsorption on small Aun (n = 1â€“4) structures supported on hematite. I. Adsorption on iron terminated Î±-Fe2O3 (0001) surface. Journal of Chemical Physics, 2016, 144, 044704.	1.2	10
13	The role of the cationic Pt sites in the adsorption properties of water and ethanol on the Pt4/Pt(111) and Pt4/CeO2(111) substrates: A density functional theory investigation. Journal of Chemical Physics, 2016, 145, 124709.	1.2	10
14	Oxygen Adsorption on the Fe(110) Surface: The Old System â€“ New Structures. Journal of Physical Chemistry C, 2016, 120, 3807-3813.	1.5	7
15	Adsorption of water and ethanol on noble and transition-metal substrates: a density functional investigation within van der Waals corrections. Physical Chemistry Chemical Physics, 2016, 18, 29526-29536.	1.3	30
16	Nanoscale Patterns on Polar Oxide Surfaces. Chemistry of Materials, 2016, 28, 7433-7443.	3.2	20
17	Adsorption of gold subnano-structures on a magnetite(111) surface and their interaction with CO. Physical Chemistry Chemical Physics, 2016, 18, 18169-18179.	1.3	14
18	First-principles study of the adsorption of MgO molecules on a clean Fe(001) surface. Physical Review B, 2015, 92, .	1.1	11

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19	Oxygen adsorption on Fe(110) surface revisited. Surface Science, 2015, 637-638, 35-41.	0.8	39
20	The role of charge transfer in the oxidation state change of Ce atoms in the TM₁₃â€“CeO₂(111) systems (TM = Pd, Ag, Pt, Au): a DFT + U investigation. Physical Chemistry Chemical Physics, 2015, 17, 13520-13530.	1.3	41
21	Fe adsorption on hematite (Î±-Fe2O3) (0001) and magnetite (Fe3O4) (111) surfaces. Journal of Chemical Physics, 2014, 141, 134707.	1.2	14
22	Adsorption of Rh, Pd, Ir, and Pt on the Au(111) and Cu(111) Surfaces: A Density Functional Theory Investigation. Journal of Physical Chemistry C, 2014, 118, 19051-19061.	1.5	38
23	Mixed Termination of Hematite (Î±-Fe₂O₃)(0001) Surface. Journal of Physical Chemistry C, 2013, 117, 24339-24344.	1.5	48
24	The role of van der Waals interaction in the tilted binding of amine molecules to the Au(111) surface. Journal of Physics Condensed Matter, 2012, 24, 222001.	0.7	6
25	Surface properties of the mixed oxide Fe<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:msub><mml:mrow /><mml:mn>3</mml:mn></mml:msub></mml:math>O<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:msub><mml:mrow /><mml:mn>4</mml:mn></mml:msub></mml:math>(111): DFT andDFT+<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mi>U</mml:mi></mml:math>	1.1	68
26	Surface properties of clean and Au or Pd covered hematite (Î±-Fe₂O₃) (0001). Journal of Physics Condensed Matter, 2012, 24, 095003.	0.7	50
27	Structure and energetics changes during hydrogenation of 4H-SiC{0001} surfaces: a DFT study. Journal of Physics Condensed Matter, 2012, 24, 385801.	0.7	10
28	Grain boundary segregation in low Cr Feâ€“Cr alloys: The effect of radiation induced vacancies studied by metropolis Monte Carlo simulations. Nuclear Instruments & Methods in Physics Research B, 2011, 269, 1679-1683.	0.6	8
29	Stability of gold nanostructures on rutile TiO2(110) surface. Surface Science, 2011, 605, 668-674.	0.8	7
30	Effect of impurities on structural, cohesive and magnetic properties of grain boundaries in Î±-Fe. Modelling and Simulation in Materials Science and Engineering, 2011, 19, 025001.	0.8	56
31	Cohesive and magnetic properties of grain boundaries in bcc Fe with Cr additions. Physical Review B, 2010, 81, .	1.1	79
32	First-principles study of Au nanostructures on rutile<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mrow><mml:msub><mml:mrow><mml:mtext>TiO</mml:mtext></mml:mrow><mml:mn>2</mml:mn></mml:msu Physical Review B, 2009, 79, .	1.1	32
33	Effect of iron additions on intergranular cohesion in chromium. Journal of Physics Condensed Matter, 2009, 21, 485002.	0.7	12
34	Monte Carlo study of oxidation of the 3Câ€“SiC(001) surface. Applied Surface Science, 2008, 254, 4352-4356.	3.1	2
35	Density functional study of surface properties of chromium. Surface Science, 2008, 602, 517-524.	0.8	27
36	Effect of impurities on grain boundary cohesion in bcc iron. Computational Materials Science, 2008, 43, 736-743.	1.4	62

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37	Dissociative adsorption of<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:msub><mml:mi mathvariant="normal">O</mml:mi><mml:mn>2</mml:mn></mml:msub></mml:math>molecules on O-precovered Fe(110) and Fe(100): Density-functional calculations. Physical Review B, 2008, 77, .	1.1	34
38	Segregation of Cr impurities at bcc iron surfaces: First-principles calculations. Physical Review B, 2008, 78, .	1.1	44
39	Oxygen adsorption on the clean and O-precovered Fe (110) and (100) surfaces. Journal of Physics Condensed Matter, 2007, 19, 096011.	0.7	23
40	Surface modification of oxides by electron-stimulated desorption for growth-mode control of metal films: Experiment and density-functional calculations. Physical Review B, 2007, 76, .	1.1	21
41	One-dimensional Au on TiO2. Journal of Physics Condensed Matter, 2007, 19, 082202.	0.7	22
42	Energetics of oxygen vacancies at rutile TiO2(110) surface. Solid State Communications, 2007, 144, 324-328.	0.9	32
43	Structural, electronic, and magnetic properties of bcc iron surfaces. Surface Science, 2007, 601, 123-133.	0.8	197
44	Comparison of the full-potential and frozen-core approximation approaches to density-functional calculations of surfaces. Physical Review B, 2006, 73, .	1.1	80
45	Comparative study of Ag, Au, Pd, and Pt adsorption on Mo andTa(112)surfaces. Physical Review B, 2006, 74, .	1.1	10
46	The energetics and structure of rutile TiO2(110). Journal of Physics Condensed Matter, 2006, 18, 4207-4217.	0.7	69
47	Theoretical study of oxygen adsorption at the Fe(110) and (100) surfaces. Surface Science, 2005, 590, 88-100.	0.8	138
48	Ab initio simulation of copper and silver adsorption on the MgO(111) surface. Surface Science, 2005, 589, 114-119.	0.8	8
49	Surface atomic structure and energetics of tantalum. Surface Science, 2005, 598, 276-284.	0.8	29
50	Density-functional study of oxygen adsorption on Mo(112). Journal of Chemical Physics, 2005, 122, 044712.	1.2	26
51	Energetics ofSradatom interactions on theMo(112)surface. Physical Review B, 2004, 69, .	1.1	22
52	O adsorption and incipient oxidation of the Mg(0001) surface. Physical Review B, 2004, 69, .	1.1	33
53	Mg(0001) surface oxidation: A two-dimensional oxide phase. Physical Review B, 2004, 69, .	1.1	18
54	Calculation of surface properties of bcc iron. Vacuum, 2004, 74, 179-183.	1.6	69

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55	Alkali metals adsorption on the Mg() surface. Surface Science, 2004, 548, 22-28.	0.8	19
56	Low-coverage K adsorption on Mg(0001) surface. Surface Science, 2004, 566-568, 983-988.	0.8	6
57	Density functional study of alkali metals adsorption on the MgO(111) surface. Surface Science, 2003, 538, 240-248.	0.8	11
58	Vacancy formation and O adsorption at the Al(111) surface. Physical Review B, 2003, 68, .	1.1	22
59	First-principles calculation of Li adatom structures on the Mo(112) surface. Physical Review B, 2002, 66, .	1.1	30
60	Stability of oxygen adsorption sites and ultrathin aluminum oxide films on Al(). Surface Science, 2002, 504, 1-10.	0.8	36
61	Energetics of finite metallic nanowires. Surface Science, 2001, 472, 172-178.	0.8	8
62	Bulk and surface properties of hexagonal-close-packed Be and Mg. Journal of Physics Condensed Matter, 2001, 13, 10767-10776.	0.7	89
63	Sum-rule approach in the theory of charged self-compressed dielectric droplets. Physica A: Statistical Mechanics and Its Applications, 2001, 293, 59-70.	1.2	1
64	First-principles study of surface and subsurface O structures at Al(111). Physical Review B, 2001, 63, .	1.1	93
65	Multilayer relaxations at the (0001) surface of Be and Mg. Solid State Communications, 2000, 116, 17-20.	0.9	12
66	Simple theory of elastically deformed metals: Surface energy, stress, and work function. Physical Review B, 2000, 62, 10445-10450.	1.1	40
67	FACE-DEPENDENT WORK FUNCTION DERIVED FROM THE LOCAL POLARIZATION OF PLASMA AND THE IMAGE FORCE ACTION NEAR A METAL SURFACE. Modern Physics Letters B, 1999, 13, 1081-1085.	1.0	6
68	Stabilized jelliumâ€"simple model for simple-metal surfaces. Progress in Surface Science, 1999, 61, 85-125.	3.8	25
69	Quantum-size effect in thin Al(110) slabs. Surface Science, 1999, 432, 54-60.	0.8	52
70	Adhesion between simple metal surfaces. Journal of Physics Condensed Matter, 1998, 10, 6621-6628.	0.7	2
71	Polarization of a metal surface by an external proton. Physical Review B, 1998, 58, 1633-1642.	1.1	1
72	Stress sum rules for the flat surface of stabilized jellium. Physical Review B, 1997, 56, 1095-1098.	1.1	4

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73	Trends in atom/molecule-surface van der Waals interactions. Surface Science, 1997, 383, 88-94.	0.8	16
74	On the temperature dependence of the ionization potential of self-compressed solid- and liquid-metallic clusters. Journal of Physics Condensed Matter, 1996, 8, 4245-4257.	0.7	21
75	Response of a stabilized-jellium surface to a static electric field. Surface Science, 1995, 331-333, 1167-1171.	0.8	12
76	Surface plasmon dispersion in simple metals: a sum rule approach. Surface Science, 1994, 320, 355-360.	0.8	5
77	Surface stress of stabilized jellium. Solid State Communications, 1993, 88, 143-147.	0.9	12
78	Image plane position at a charged surface of stabilized jellium. Surface Science, 1993, 287-288, 618-621.	0.8	6
79	Sum rules for the planar surface of stabilized jellium. Physical Review B, 1993, 48, 4811-4815.	1.1	11
80	Electron-positron annihilation characteristics at a metal surface: simple metals. Journal of Physics Condensed Matter, 1993, 5, 8195-8210.	0.7	4
81	Surface properties of simple metals in a structureless pseudopotential model. Physical Review B, 1993, 47, 7361-7364.	1.1	70
82	Effect of the ionic potential on the potential barrier for the metalâ€“vacuumâ€“metal tunneling electrons. Physica Status Solidi A, 1992, 131, 117-121.	1.7	1
83	Potential barrier for the metal-vacuum-metal tunneling electrons. Ultramicroscopy, 1992, 42-44, 231-235.	0.8	1
84	Image potential matched self-consistently to an effective potential for simple-metal surfaces. Physical Review B, 1991, 43, 14695-14698.	1.1	26
85	Field emission from a metal covered with a semiconducting layer: A model calculation. Applied Physics A: Solids and Surfaces, 1990, 50, 331-338.	1.4	1
86	Work function of K and Rb submonolayers adsorbed on Al(111) and Mg(0001). Vacuum, 1990, 41, 580-582.	1.6	4
87	Comment on the surface segregation in alkali-metal alloys. Journal of Physics Condensed Matter, 1990, 2, 6331-6333.	0.7	11
88	Adhesive Energies at Potassium Alloys Interfaces. Physica Scripta, 1987, 35, 738-741.	1.2	3
89	On the temperature dependence of the work function. Surface Science, 1986, 178, 349-358.	0.8	37
90	On adhesive energies at bimetallic interfaces. Surface Science, 1985, 159, L411-L415.	0.8	4

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91	The effect of strong electric field on lattice relaxation at metal surface. Solid State Communications, 1984, 50, 349-352.	0.9	5
92	Surface properties of alkali-metal alloys. Journal of Physics C: Solid State Physics, 1983, 16, 6883-6896.	1.5	18
93	A note on face-dependent surface properties of simple metals. Journal of Physics C: Solid State Physics, 1982, 15, 4717-4725.	1.5	14
94	Simple Nonâ€Local Calculation of Jellium Metal Surface Properties. Physica Status Solidi (B): Basic Research, 1981, 105, 147-153.	0.7	9
95	Work function of metals: Relation between theory and experiment. Progress in Surface Science, 1981, 11, 293-338.	3.8	64
96	Work function changes on single crystal planes. Solid State Communications, 1979, 31, 857-859.	0.9	7
97	The temperature dependence of metal work functions. Journal of Physics F: Metal Physics, 1979, 9, 1361-1366.	1.6	39
98	Ostwald Ripening in an Oxideâ€onâ€Metal System. Advanced Materials Interfaces, 0, , 2200222.	1.9	3