

3. Literaturtabellen

3.1. TDS-Daten

System	β [K/s]	Zu- stand*	T_{\max} [K]	ΔT^{**} [K]	Form ***	E_0	$E_{0,5}/E$	E_1	OF	Lit.
						[kJ/mol]				
Kupfer										
Cu/Re(0001)	7,7	1	1115	65	A	200	300	300	dicht gepackt	[Wag97/d] [WSC99/1]
		2	1050	/	A	300	325	350		
	/	1	1180	/	/	/	/	/		[Rod96/1] [RoG92/1] [OSM88/1]
		2	1100	/	A	/	310	/		[HeG90/1]
Cu/Ru(0001)	/	1	1210	/	/	/	/	/		[Rod96/1] [RoG92/1] [OSM88/1]
		2	/	/	/	/	330	/		[KSC93/1]
	/	1	1300	80	A	310	360	360		[KPS91/1]
		2	1220	/	A	330	330	330		[VCE83/1]
	/	1	1225	93	A	200	380	380		[CES80/1]
		2	1132	/	A	/	/	/		[SRH94/1]
	10	1	1230	60	A	/	351	/	[SC93/1]	
		2	1170	/	A	/	334	/	[KSC93/1]	
7,4	1	1220	/	A	290	296	296	[KoB86/1]		
	1	/	/	/	/	293	/	[BBP75/1]		
Cu/O/Ru(0001)	/	1	1150	70	A	/	310	/	[LCC96/1] [KSC93/1]	
		2/M	1120	/	A	/	304	/	[Rod96/1] [RoG92/1] [OSM88/1]	
Cu/W(110)	4,3	1	/	/	A	309	367	367	[PaB87/1]	
	3,6	1	1238	/	A	367	415	367	[Rod96/1] [RoG92/1] [OSM88/1]	
		2	/	/	/	367	444	386	[PaB87/1]	
/	1	/	/	/	/	344	/	[Rod96/1] [RoG92/1] [OSM88/1]		
	Cu/Mo(110)	1	1220	/	/	/	/	/	[PaB87/1]	
2,4		1	1150	100	A	241	337	212	[Rod96/1] [RoG92/1] [OSM88/1]	
	2	1050	/	A	212	300	300	[PaB87/1]		
Cu/Ta(110)	/	/	1260	/	/	/	/	/	[Rod96/1] [RoG92/1] [OSM88/1]	
		1	1265	105	A	/	331	/	[KCG93/1]	
/	2/M	1160	/	A	/	306	/	[RCG94/1]		
	Cu/Pt(111)	1	1400	/	/	/	/	/	[RCG92/1]	
Cu/Re(0001) -st	/	1	1180	50	T	/	306	/	[Rod96/1] [RoG92/1] [OSM88/1]	
		2/M	1130	/	T	/	/	/	[JiG91/1]	
Cu/Rh(100)	/	1	1265	/	/	/	/	/	[VPM97/1]	
		1	1255	80	T	/	327	/		
/	2	1175	/	T	/	/	/			
	1	1170	45	T	/	/	/			
Cu/V(100)	/	M	1125	/	A	/	/	/		

System	β [K/s]	Zu- stand*	T_{\max} [K]	ΔT^{**} [K]	Form ***	E_0	$E_{0,5}/E$	E_1	OF	Lit.	
						[kJ/mol]					
Silber											
Ag/Re(0001)	2,5	1	990	60	A	250	293	293	dicht gepackt	[SPC98/1] [Sch98/d]	
		2	930	20	A	250	250	273			
		M	925	/	A	/	273	/			
Ag/Ru(0001)	3,2	1	1020	75	A	240	280	240		dicht gepackt	[NDM87/1]
		2	945	/	A	/	/	/			
		M	/	/	/	/	255	/			
	/	1	1090	/	+	/	207	/			[NSW95/1]
	7,4	1	1080	/	A	/	260	/			[SRH94/2]
	9,6	1	1050	90	A	/	258	/			[MiW98/1]
		2	960	/	A	/	228	/			
/	1	1030	90	A	240	258	/	[MDN88/1]			
Ag/W(110)	4,3	1	/	/	/	270	347	347	[KoB86/1]		
		2	1050	/	A	/	/	/			
	4,5	1	1120	70	A	328	430	376	[BBP75/1]		
Ag/Mo(110)	1,21	1	1000	90	A	220	299	191	[PaB87/2]		
		2	910	/	A	211	274	249			
Ag/Ni(111)	/	/	/	/	/	/	347	/	[MNJ97/1]		
Ag/Re(10-10)	7,4	1	1110	120	+	200	260	160	offen/Stufen	[Vol99/d]	
		M	890	/	A	160	270	270			
Ag/Ru(10-10)	/	1	990	115	+	260	310	250		[LeC96/1]	
		2/M	875	/	A	/	260	/			
Ag/Ru(10-117)	7,2	1	970	60	T	/	333	/		[SCP94/1]	
		2	910	/	T	/	/	/			
Ag/W(100)	/	1a	1175	/	/	434	/	/		[BBP75/1]	
		1b	1100	75	/	/	/	193			
		2	1025	/	/	/	289	/			
Ag/W(211)	4,3	1	1040	100	T	357	396	309		[KoB84/1]	
		2/M	940	/	/	/	/	/			
Ag/Mo(111)	/	1	1120	160	T	/	/	/	[SCY01/1]		
		M	960	/	A	/	/	/			
Ag/V(110)	4	1	1000	50	/	/	/	/	[VaM94/		
		M	950	/	A	/	/	/			

System	β [K/s]	Zu- stand*	T_{\max} [K]	ΔT^{**} [K]	Form ***	E_0	$E_{0,5}/E$		E_1	OF	Lit.
							[kJ/mol]				
Gold											
Au/Ru(0001)	/	1	1420	110	T	390	440	440	dicht gepackt	[KPS91/1]	
		2	1310	/	A	/	360	/			
	3,2	1	1270	90	T	380	360	/		[NOM87/1]	
		2	1180	/	A	/	/	/			
		M	/	/	/	/	323	/			
	10	1	1320	90	T	300	370	360		[Har87/d] [HCH86/1]	
		2	1230	/	A	/	/	/			
	/	1	1320	90	T	/	/	/		[SBI91/1]	
		2	1230	/	A	/	/	/			
	9,4	1	1430	90	T+	/	380	/		[MiW98/1]	
		2	1340	/	A	/	350	/			
	/	1	1260	/	T	390	350	/		[MDN88/1]	
		2/M	1200	/	A	/	/	/		[Bau90/1]	
	/	1	1340	140	T	/	/	/		[NDM87/1]	
2/M		1175	/	A	/	233	/				
/	/	/	/	/	/	373	/	[KSC93/1]			
Au/W(110)	4,3	1	1130	/	/	253	292	322	[KoB86/1]		
	/	1	1440	140	T	276	303	253	[BBP75/1]		
		2	1300	/	A	/	/	/			
Au/Mo(110)	5,2	1	1345	115	T	357	396	270	[PSB88/1]		
		2	1230	40	A	306	387	421			
		M	1190	/	A	/	355	/			
Au/Ru(10-10)	10	1	1360	130	T	350	340	330	[Har87/d] [HCH86/1]		
		M	1230	/	A	/	/	/			
Au/W(211)	4,3	1	1400	220	T	357	385	309	[KoB84/1]		
		2/M	1180	/	/	/	/	/			
Au/W(111)	/	1	1420	180	T	/	/	/	[MSD91/1]		
		M	1240	/	A	/	/	/			
Au/W(100)	/	1a	1475	75	/	531	338	/	[BBP75/1]		
		1b	1400	160	/	/		/			
		2a	1240	60	/	/	/	/			
		2b	1180	/	/	/	/	482			

System	β [K/s]	Zu- stand*	T_{\max} [K]	ΔT^{**} [K]	Form ***	E_0	$E_{0.5}/E$	E_1	OF	Lit.
						[kJ/mol]				
Palladium, Nickel, Platin										
Pd/Ru(0001)	/	1	1440	/	/	/	/	/	dicht gepackt	[KPS91/1]
	/	1	1425	95	T	/	/	/		[CRG92/1]
		M	1330	/	A	/	/	/		[ScB80/1]
3,8	1	1470	235	+	347	415	/			
	M	1225	/	A	/	405	/			
Pd/W(110)	/	1	1510	/	/	/	/	/		[KSB90/1]
Pd/Ta(110)	/	1	1540	90	T	/	406	/		[CRG92/1]
		M	1450	/	#	/	/	/		[RoM96/1]
	/	1	1540	/	/	/	/	/		[CRG92/1]
Pd/Rh(111)	/	1	1390	/	/	/	/	/		[CRG92/1]
Ni/Ru(0001)	/	1	1435	/	/	/	/	/		[KoB86/1]
Ni/W(110)	/	1	1510	/	/	/	/	/	[TiB90/1]	
	4,3	1	1440	/	A	415	482	473	[CRG92/1]	
Ni/Mo(110)	/	1	1455	70	+	390	463	425	[CRG92/1]	
		M	1380	/	A	/	463	/	[KoB94/1]	
Ni/Ta(110)	/	1	1540	/	/	/	/	/	[RCG92/1]	
Pt/W(110)	7	1	1950	/	T	/	/	/	[RCG92/1]	
		M	/	/	S	/	/	/	[CRG92/1]	
Pd/Re(0001)-st	/	1	1450	200	T	/	415	/	[RCG92/1]	
		2/M	1250	/	+	/	377	/	[CRG92/1]	
Pd/W(100)	/	1a	1630	170	+	/	/	/	[HKG92/1]	
		1b	1460	140	T				[PRB81/1]	
		M	1320	/	T				/	7
Pd/W(221)	10	1a	1600	220	/	/	/	/	[KPA98/1]	
		1b	1380	80	/					
		M	1300	/	/				/	/
Pd/Mo(111)	7	1	1500	180	-	/	/	/	[GCM95/2]	
		M	1320	/	A	/	350	/	[CRG92/1]	
Ni/Re(0001)-st	/	1	1450	/	/	/	/	/	[CRG92/1]	
Ni/W(211)	/	1	1455	100	T	425	487	434	[KoB84/3]	
		M	1355	/	T	434	434	396		
Ni/W(111)	/	1	1370	90	T	/	/	/	offen/Stufen	[KoB99/1]
		2	1280	100	S	/	/	/		
		M	1180	/	T	/	/	/		

System	β [K/s]	Zu- stand*	T_{\max} [K]	ΔT^{**} [K]	Form ***	E_0	$E_{0.5}/E$	E_1	OF	Lit.				
						[kJ/mol]								
sonstige														
Co/Re(0001)	2,5	1	1340	55	+	330	400	380	dicht gepackt	[KPS91/1]				
		2	1285	15	S	380	310	340						
		M	1270	/	S	/	480	/						
Mn/Ru(0001)	/	1	1100	80	-	/	293	/		dicht gepackt	[HSS87/1]			
		2	1020	120	S	/	/	/						
		M	900	/	T	/	225	/						
Fe/W(110)	3,4	1	1375	100	+	/	/	/			dicht gepackt	[KoB00/1]		
	/	2	1275	/	/	/	/	/						
		M	1300	/	A	/	360	/						
Co/W(110)	/	1	1450	90	A	/	/	/				dicht gepackt	[JBG89/1]	
		M	1360	/	A	/	/	/						
V/W(110)	3,4	1	1430	50	T	/	/	/	dicht gepackt				[KoB00/1]	
		2	1380	/	S	/	/	/						
Rh/W(110)	6,6	1	1870	170	+	/	/	/					dicht gepackt	[KoB94/1]
		M	1700	/	/	/	/	/						
Fe/Mo(110)	6,8	1	1400	90	+	367	415	434		dicht gepackt				[TiB90/1]
		M	1310	/	A	/	402	/						
Co/Mo(110)	6,8	1	1410	30	+	335	434	386			dicht gepackt			[TiB90/1]
		M	1380	/	A	/	507	/						
Fe/W(100)	/	1	1480	130	T	/	/	/						offen/Stufen
		M	1330	/	A	/	364	/						
Co/W(100)	/	1	1530	180	T	/	/	/				offen/Stufen		
		M	1350	/	T	/	/	/						
Fe/W(111)	/	1	1300	70	T	/	/	/	offen/Stufen					
		2	1230	90	S	/	/	/						
		M	1140	/	A	/	/	/						
Rh/W(111)	/	1a	1760	40	-	/	/	/		dicht gepackt			[KoB99/2]	
		1b	1720	50	T	/	/	/						
		2	1570	140	T	/	/	/						
		M	1530	/	A	/	/	/						
Sn/Mo(110)	/	1a	1510	160	-	531	338	/			dicht gepackt		[KPS91/1]	
		1b	1350	210	A	/	/	309						
		M	1140	/	A	/	270	/						
Pb/Mo(110)	/	1a	1250	400	/	193	256	213				dicht gepackt	[KPS91/1]	
		1b	850	200	S									
		M	650	/	A	/	146	/						
Al/Re(10-10)	8,5	1	1800	250	T	/	440	/	Stufen				[PaC96/1]	
		2	1550	200	S/T	/	375	/						
		M	1350	/	+/A	/	345	/						

* 1 ... 1. Lage, 2 ... 2. Lage, M Multilagen

** Temperaturdifferenz zwischen dem Maximum dieses und dem des nächsten LT-Zustandes

*** A ... gemeinsame Anstiegsflanke, T ... gemeinsames Temperaturmaximum, +(-) ... gemeinsames Temperaturmaximum mit Verschiebung zu höheren (tieferen) Temperaturen, S ... LT-Schulter des vorherigen Zustandes

verschiebt bis zu 1800 K (45 ML), also erheblich weiter als Zustand 1

3.2. Thermodynamische Parameter

System	T_c [K]	Θ_c [ML]	E_{ww}	V_0	Methode*	Lit.
			[kJ/mol]			
Cu/Re(0001)	1120	0,48	7,6	/	F	[Wag97/d]
Cu/Ru(0001)	/	/	7,6	/	S	[SRH94/1] [SCP93/1]
	/	/	10	360	S	[SCK93/1]
Cu/W(110)	1150	0,215	/	/	A	[KoB86/1]
	1170	0,284	7,9	309	$\Delta\Phi$ -QCA	[Kol87/1] [KoB85/1] [KoB85/2]
Cu/Mo(110)	1125	/	16,6	309	S	PKP96/1]
	940	0,191	6,27	/	$\Delta\Phi$ -QCA	[Kol87/1] [KoB85/1] [KoB85/2]
	1125	0,2			A	[PaB87/1]
	1362		7,6	290	S-B	
	1185		8	294	S-QCA	
Ag/Re(0001)	986 /	/	5,47	/	F /	[SPC98/1] [Sch98/d]
	970	/	/	/	A	
	/	/	10,8	227(t) 316(st)**	S	
Ag/Ru(0001)	/	/	8	/	$\Delta\Phi$	[NSW95/1]
	/	/	6,5	/	S	[SRH94/2] [SCP93/1]
	/	/	8,3	/	S	[MiW98/1]
	/	/	8,5	295	S	[SCK93/1]
Ag/W(110)	980	0,35	/	/	A	[KoB86/1]
	980	0,35	6,7	270	$\Delta\Phi$	[Kol87/1] [KoB85/1] [KoB85/2]
	/	/	24,1	212	STM	[JNM90/1]
Ag/Mo(110)	850	0,237	5,7	/	$\Delta\Phi$ -QCA	[Kol87/1]
	980		5,9	220	A	[PaB87/2]
	1074		5,9	281	S-BWA	
	969	/	6,5	279	S-QCA	
Au/Ru(0001)	/	/	11	/	S	[MiW98/1]
Au/W(110)	1130	0,26	7,6	323	$\Delta\Phi$ -QCA	[KoB85/1] [KoB85/2] [KoB84/2]
Au/Mo(110)	1080	/	5,8	387	S	[PKP96/1]
	1110	0,25	/	/	$\Delta\Phi$	[Bau90/1]
	1165	1,35	/	/	S	
	1160	1,3	15,8	326	/	[PSB88/1]
Pd/W(110)	1170	0,28	7,92	347	$\Delta\Phi$ -QCA	[KoB85/1]
	1360	/	5 ... 11	347	A	[ScB80/1]
Ni/Ru(0001)	1400	0,2	9,46	425	$\Delta\Phi$ -QCA	[KoB85/1]
Ni/W(110)	1375	0,2	/	415	A	[KoB86/1]
Fe/W(110)	1290	0,15	/	347	A	[KoB00/1]
Pb/Mo(110)	730	/	/	193	$\Delta\Phi$ -QCA, A	[TiB88/1]

* F ... TDS_Flankenmethode, S ... TDS-Simulation, A ... TDS-Arrheniusgeradenknick, $\Delta\Phi$... Smoluchowski-Effekt, BWA ... Bragg-Williams-Näherung, QCA ... Quasichemische Näherung, STM ... Auswertung von STM-Aufnahmen

** t ... Terrassenplätze, st ... Stufenplätze

3.3. AES- und $\Delta\Phi$ -Daten

System	AES/ XPS-Knick* [(ML)]	$I(T+)^{**}$ [(ML;K)]	$\Delta\Phi$, lok. Ex. [mV(ML)]***	$\Delta\Phi(\Theta_\infty)$ [mV(ML)]	Lit.
Kupfer					
Cu/Re(0001)	$A_A1, S_A1(1,0)$	/	/	/	[Wag97/d]
	$A_X1, S_X1(2,0)$	A_X-, S_X- (2,0)	/	/	[Wag97/d] [WSC99/1]
	$V_A1(2,0)$	V_A- (2,0)	/	/	[HeG90/1]
Cu/Ru(0001)	$V_A2(1; 2,0)$	V_A- (2,0)	-1000(1,0; LT), -800(1,0; HT), -800(2,0; LT)	-1200(LT) -800(HT)	[HPB86/1]
	/	/	-750(1,0)	-650	[SWS93/1] [WSW93/1],
	$A_A1(1,0)$	/	-700(1,0)	-500	[CES80/1]
Cu/W(110)	/	/	-80(1,0; RT), -400(1,0; HT)	/	[KoB85/2]
	/	/	-700(1,0)	-800	[KoB85/3]
Cu/Mo(110)	$A_A1(0,8, LT)$, $A_A1(1,0, HT)$	V_A-	/	/	[Kol88/1]
Cu/Co(0001)	$A_A3(1,0; 2,0; 3,0)$	/	/	/	[PRM98/1]
Cu/V(100)	$A_A2(0,5; 1,0)$	V_A- (1,0)	/	/	[VPM97/1]
Cu/Rh(100)	A_A2	V_A- (2,0)	/	/	[JiG91/1]
Cu/Pt(100)	A_A2	/	/	/	[OSM95/1] [RWO96/1],
Silber					
Ag/Re(0001)	A_A2, S_A2 , $A_X2, S_X2(1; 2)$	/	-600(1,0; RT), -650(1,0; HT)	-750	[SPC98/1] [Sch98/d],
Ag/Re(10-10)	V_A0 (RT), V_A1 (HT)	V_A-	/	/	[Vol99/d]
Ag/Ru(0001)	$V_A3(1,0; 2,0; 3,0)$	/	-100(0,7)	-160	[Par88/d]
	/	/	-300(0,6; RT) -350(0,6; HT)	-350	[NSW95/1]
Ag/Ru(10-10)	A_A2	/	/	/	[LeC96/1]
Ag/W(110)	V_A2	0	-580(0,8; RT), -600(0,8; HT), -700(2,0; RT), -720(2,0; HT)	-600	[BPI77/1]
	/	/	-900(1,0)	-900	[FEE00/2]
	/	/	-550(0,8)	-600	[KoB85/3]
Ag/W(100)	A_A1	/	/	-300	[FEE00/2]
Ag/W(211)	V_A1	/	-650(2)	-550	[KoB84/1]
Ag/Mo(110)	/	7	-50(0,1; RT), -140(0,1; HT)	/	[Kol90/1]
Ag/Mo(111)	V_A0	$V_A+(4,0)$	/	/	[SCY01/1]
Ag/V(100)	V_A1	V_A-	/	/	[VaM94/1]

System	AES/ XPS-Knick* [(ML)]	$I(T+)^{**}$ [(ML;K)]	$\Delta\Phi$, lok. Ex. [mV(ML)]***	$\Delta\Phi(\Theta_\infty)$ [mV(ML)]	Lit.
Gold					
Au/Re(10-10)	V_A0 (RT), V_A2 (HT)	/	/	/	[Vol99/d]
Au/Ru(0001)	V_A3	/	-70(1,5)	-50	[Par88/d]
	V_A1 (1,0)	/	+130(1,0)	/	[Har87/d] [HCH86/1]
	V_A2	/	-50(1,5)	/	[Par88/d],
Au/Ru(10-10)	V_A0	/	/	/	[Har87/d] [HCH86/1]
Au/W(110)	V_A3	V_A- (2,0)	+220(3,0, HT)	+200	[BP177/1]
	/	/	+200(0,1)	+100	[KoB85/3]
	/	/	-90(0,6;RT), -200(0,6;HT)	/	[KoB85/2]
Au/W(100)	V_A3	/	-90(0,3;HT), +400(1,0), +250(1,7;HT)	+600	[BP177/1]
Au/W(211)	V_A5	/	+600(1,3), +200(2,0)	+650	[KoB84/1]
Palladium, Nickel, Platin					
Pd/Ru(0001)	A_A4, S_A4	/	-20(0,6)	+100(3,0)	[Par88/1]
	A_A3, S_A3	A_A-, S_A+	-40(2,0;LT) +40(1,0;RT)	-40(2,0 LT) +150(4,0; RT)	[KoB99/1]
Pd/W(110)	/	/	-450(0,8)	+300(2,0)	[KoB85/2] [KoB85/3]
	/	/	-600(1,0)	/	[Bau82/1]
	A_A3, S_A3 (LT), A_A1, S_A1 (HT)	A_A-, S_A+ (1,0; 700)	-450(1,0; RT) -600(1,0; HT)	+250(3,0; RT)	[ScB80/1]
	A_A1	A_A- (1,0; 800)	/	7	[CRG90/1]
Pd/Mo(110)	A_A2, S_A2	A_A-, S_A+ (1,0; 770; 1090)	-200(1,0; LT) -250(1,1; HT)	+600(3,0; LT) -100(3,0; HT)	[PBP85/1]
Pd/Ta(110)	A_A1	A_A- (1,3)	/	/	[KSB90/1]
Ni/Ru(0001)	A_A3, S_A3	A_A-, S_A+ (1,5; 750)	-310(1,0; HT) -230(1,0; LT)	-220(3,0; HT) -100(2,0; LT)	[KoB99/1]
Ni/W(110)	A_A2	A_A-	-800(0,7)	-350(1,0; HT)	[KoB84/3]
	A_A1	A_A- (3,5; 800)	/	/	[CRG90/1]
	/	/	-750(1,0)	-300(1,5)	[KoB85/2]
Ni/Mo(110)	A_A2	A_A-, S_A+ (1,0)	-350(1,0)	+250(3,0)	[TiB90/1]
Ni/Rh(111)	A_A2	A_A- (600)	/	/	[WBM93/1]
Pt/W(110)	V_A2	V_A- (4,0; 500)	/	/	[MSD91/1]
	A_A2, S_A2	A_A- (1,0)	-400(0,5, LT) -100(0,5, HT)	+500(2,0; LT)	[KoB94/1]
	A_An, S_An	V_A- (600)	/	/	[MSD91/1]
Pd/W(100)	A_A3, S_A3	A_A-, S_A+ (3,5)	+300(1,0 RT) -50(0,2), +300 (1,0)-150 (1,8; HT)	+900(10,0)	[PRB81/1]
Pd/W(111)	0	V_A- (1,0)	+250(1,0), +180(2,0)	+700(9,0;RT) +280(3,0;HT)	[KoB99/1]
Ni/W(111)	A_A4, S_A4	A_A-, S_A+	/	/	

System	AES/ XPS-Knick* [(ML)]	$I(T+)^{**}$ [(ML;K)]	$\Delta\Phi$, lok. Ex. [mV(ML)]***	$\Delta\Phi(\Theta_\infty)$ [mV(ML)]	Lit.
sonstige					
Co/Re(0001)	A _X 1	A _X ⁻ , S _X ⁺ (<740) A _X ⁺ , S _X ⁻ (>740)	-420(0,9;RT), - 520(1,1;HT)	-400(2,0;RT) -300(4,0;HT)	[Sch98/d]
Mn/Ru(0001)	V _A 3	V _A ⁻	/	/	[HSS87/1]
Fe/Ru(0001)	A _A 4, S _A 4	A _A ⁻ , S _A ⁺ (800; 850; 1200)	-400(1,0)	-600(4,0;HT) -300(4,0;LT)	[KoB99/1]
Rh/Ru(0001)	A _A 4, S _A 4	A _A ⁻ , S _A ⁺	/	+15(1,0;HT) +60(1,0;LT)	
Al/Ru(0001)	A _A 1	V _A ⁻ (600)	/	/	[CTP95/1]
Fe/W(110)	A _A 4, S _A 4	A _A ⁻ (600; 800)	-550(1,0), -650(2,0)	-500(4,0)	[KoB00/1]
	A _A 1, S _A 1	V _A ⁻ (1,0; 500)	/	/	[BHG90/1]
Rh/W(110)	A _A 1, S _A 1(HT) A _A 2, S _A 2(LT)	A _A ⁻ , S _A ⁺ (1,0)	-700(0,6;LT), -500(1,0; HT)	+100(2,0; LT) -800(4,0; HT)	[KoB94/1]
V/W(110)	A _A 3, S _A 3	/	-1500(LT), -1000(HT)	(3,0)	[KoB00/1]
Fe/Mo(110)	0	A _A ⁻ , S _A ⁺	-500(1,8)	-150(4,0)	[TiB90/1]
Co/Mo(110)	A _A 1	A _A ⁻ , S _A ⁺ (1,0)	-350(1,0), +100(1,4)	+200(4,0;LT) -100(4,0;HT)	
Pb/Mo(110)	A _A 2, S _A 2	/	-500(0,6), -450(1,0)	-800	[TiB88/1]
Sn/Mo(110)	A _A 1, S _A 1	/	-300(0,6), +150(1,0)	-1000	
Al/Re(10-10)	V _A 2	S _A ⁻	-1200(1,2)	/	[PaC96/1]
Fe/W(100)	V _A 2	V _A ⁻ (600)	/	/	[BHG90/1]
Fe/W(111)	A _A 3, S _A 3	A _A ⁻ , S _A ⁺	+30(0,3), -200(1,0)	+50(4,0)	[KoB99/2]
Rh/W(111)	A _A 1, S _A 1	A _A ⁻ , S _A ⁺ (1,0)	+300(1,0), +200 (2,0;HT), +280 (2,0;LT)	+1000(10,0)	

* Anzahl # der Knicke in $I = f(\Theta)$: A_{A/X} ... Adsorbatintensität, S_{A/X} ... Substratintensität, V_{A/X} ... Intensitätenverhältnis im A ... AES oder X ... XPS

** A/S/V_{A/X}+/- ansteigende/abfallende Intensität bei Temperaturerhöhung, s. o.

*** Ausbildung eines lokalen Extrempunktes im $\Delta\Phi(T)$ -Verlauf

3.4. Daten zur Epitaxie

System	ps-cp [ML]*	cp-Form ^{2*}	Wachstumsmodi ^{3*}	Methode	OF	Lit.
Kupfer						
Cu/Re(0001)	1	U	-	LEED	dicht gepackt	[HeG90/1]
Cu/Ru(0001)	1	U	SK ₂ , SK ₁ (LT)	STM		[PSG91/1]
	-	-	SK ₂	STM		[GGK93/1]
	-	-	FM ₃	AES		[KSC93/1]
	1	? (hex)	-	LEED		[KPS91/1]
	-	-	SK ₁ (LT), FM ₃ (HT)	AES		[VCE83/1]
	1,3	? (hex)	SK ₂	LEED		[HPB86/1]
	< 1	dl, U	FM ₂	STM		[PöB91/1]
	1	U	SK ₂ (LT), SK ₃ (HT)	XRD		[ZGB00/1]
	1	U, dl, M	SK ₁	STM		[GVH95/1]
	1	U, dl/M	SK ₁	LEED, AES		[CES80/1]
	1	U, dl, M	-	LEED		[AMW97/1]
-	M	-	STM	[WMA97/1]		
Cu/O/Ru(0001)	-	-	FM ₈₀	$\Delta\Phi$ -Osc.		[WSW93/1]
Cu/Co(0001)	-	-	SK ₄	LEED-IV, AES, STM		[PRM98/1]
Cu/W(110)	1	U	SK ₂	STM, LEED		[RJK99/1]
	2	3D	SK ₂	RHEED, UPS	[WKH97/1]	
	1	? (hex)	-	LEED	[CCC96/1]	
Cu/Mo(110)	1 (LT), 0,8 (HT)	-	-	AES	[Bau90/1] [Kol88/1]	
	-	-	SK ₂	TDS	[PaB87/1]	
Cu/Ta(110)	1	U	SK ₁	LEED, XPS	[KCG93/1]	
Cu/V(110)	2	3D	SK ₂	LEED, UPS, AES	[KPM99/1]	
Cu/Pt(111)	1	dl	-	STM	[HNW97/1] [HNW98/1]	
Cu/V(100)	-	-	SK ₁	AES, LEED	[VPM97/1]	
Cu/Rh(100)	1	? (hex)	FM ₃	AES, LEED	[JiG91/1]	
Cu/Pt(100)	1	Leg.	FM ₂	LEED, PAX	[OSM95/1] [RWO96/1]	
Cu/Pd(100)	3 (LT), 1 (HT)	M/U	FM ₇	STM	[HWK95/1]	
Cu/Pd(110)	3 (LT), 1 (HT)	M/U	FM ₅			
Silber						
Ag/Re(0001)	1	U, dl, M	SK ₂ (LT), FM ₄ (HT)	STM, LEED	dicht gepackt	[PSC97/1]
Ag/Ru(0001)	< 1	dl, U	-	-		[StH95/1]
	< 1	? (hex)	-	LEED		[KRS86/1]
	1	U	-	STM		[HHJ95/1]
	0,3	? (hex)	FM ₃ (LT), SK ₂ (HT)	AES, LEED		[BPT77/1]
Ag/Mo(110)	-	-	FM ₄ (LT), SK ₂ (HT)	ELS, AES		[PaB87/2]
Ag/Pt(111)	< 1	dl/M	-	STM		[BRB95/1]
	1	U, M	SK ₁ (LT), SK _{6,9} (HT)	STM		[RBB97/1]
Ag/Re(10-10)	< 1	2D	SK ₁	LEED, AES		[VoI99/d]
Ag/Ru(10-10)	1	U, dl/M	FM ₂	LEED, AES		[LeC96/1]
Ag/W(100)	-	2D	SK ₂	LEED	[BPT77/1]	
Ag/W(211)	1,3	? (hex)	-	-	[KoB84/1]	
Ag/Mo(111)	0,8	dl/M, 2D	-	LEED	[SCY01/1]	
Ag/V(100)	-	-	SK ₁	AES	[VaM94/1]	

System	ps-cp [ML]*	cp-Form ^{2*}	Wachstumsmodi ^{3*}	Methode	OF	Lit.
Gold						
Au/Ru(0001)	<1	? (hex)	-	LEED	dicht gepackt	[KRS86/1]
	0,3	U	SK ₂	STM		[PSG91/1]
	-	-	SK ₂	STM		[CGK93/1] [HGS92/1]
	1	U	FM ₂	LEED, AES		[Har87/d] [HCH86/1]
	-	-	SK ₂	STM		[HSB97/1]
	-	-	FM ₃	AES		[Par88/1]
Au/W(110)	-	dl/M	-	LEED		[BP177/1]
	1	U, M (dl)	SK ₂	STM		[HJW97/1]
Au/Mo(110)	1	U	SK ₂	LEED, TDS		[PSB88/1]
Au/Re(10-10)	< 1	2D	SK ₁	LEED, TDS		[Vo199/d]
Au/Ru(10-10)	< 1	2D	-	LEED	offen/ Stufen	[Har87/d] [HCH86/1]
Au/W(211)	< 1	2D	FM ₅	AES, LEED		[KoB84/1]
Au/W(100)	-	2D	-	LEED		[BP177/1]
Palladium, Nickel, Platin						
Pd/Ru(0001)	/	/	FM ₄	AES, LEED, $\Delta\phi$	dicht gepackt	[KRS86/1]
	/	/	FM ₃	AES		[KoB99/1]
Pd/W(110)	1 (LT), 2 (HT)	/	FM ₃ (LT), SK ₁ (HT)	AES, LEED		[ScB80/1]
	/	/	SK ₁	XPS		[CRG90/1]
Pd/Mo(110)	0,9 (cp-ps)	2D	FM ₂ , Leg	AES, LEED, XPS, $\Delta\phi$		[PBP85/1]
Pd/Ta(110)	/	/	Leg	/		[Rod96/1]
	0,5	U	Leg+1ML Pd	LEED, AES		[RMS86/1]
	1	/	Leg+1ML Pd	LEED, AES		[KSB90/1]
Ni/Re(0001)	2	M	SK ₂	STM		[SFR97/1]
	1	M	SK ₂	LEED, AES		[BeG84/1]
Ni/Ru(0001)	0,5	M	FM ₃	AES, LEED		[KoB99/1]
	1	M	SK ₁	STM		[MSB95/1]
Ni/W(110)	/	/	SK ₁	XPS		[CRG90/1]
	0,7	U	FM ₂ , Leg	AES, LEED, $\Delta\phi$		[KoB84/3]
Ni/Mo(110)	0,5	U	SK ₁ , Leg	EELS, LEED		[TiB90/1]
Ni/Rh(111)	1	? (hex)	FM ₃ , Leg	AES, LEED		[WBM93/1]
Pt/Re(0001)	/	/	FM ₁ , Leg	AES, LEED, XPS		[GoS88/1] [AGC85/1]
Pt/Ru(0001)	/	/	Leg	STM		[MSG98/1]
Pt/W(110)	1	U	SK ₁ , Leg	AES, LEED		[KoB84/1]
	/	/	FM ₂ (LT), SK ₁ (HT)	AES		[MSD91/1]
Pd/W(100)	2,5	2D	SK ₃ , Leg	AES, LEED, $\Delta\phi$		[PRB81/1]
Pd/W(221)	-	/	Leg	AES, LEED, $\Delta\phi$		[KPA98/1]
Pd/W(111)	1	? (hex)	/	LEED, AES	[KoB99/1]	
Pd/Mo(111)	0	M	SK ₁ , Fac, Leg	LEED, AES	[GCM95/2]	
Ni/W(221)	/	/	Leg	AES, $\Delta\phi$, LEED	[KoB84/3]	
Ni/W(111)	2	/	SK ₄ , Fac	AES, LEED	[KoB99/1]	

System	ps-cp [ML]*	cp-Form ^{2*}	Wachstumsmodi ^{3*}	Methode	OF	Lit.
sonstige						
Co/Re(0001)	1	U/M	SK ₁ , Leg	STM, LEED, XPS	dicht gepackt	[KRS86/1]
Co/Ru0001)	/	/	SK ₁	/		[GCK93/1]
Mn/Ru(0001)	3	2D	SK ₃	UPS, AES		[HSS87/1]
Al/Ru(0001)	/	/	SK ₁ , Leg	LEED, AES, Xe-TDS		[CTP95/1]
Fe/Ru(0001)	1	M, dl	FM ₄ , Leg	LEED, AES		[KoB99/2]
Rh/Ru(0001)	-	-	FM ₄ , Leg	LEED, AES		[KoB99/1]
Fe/W(110)	1	? (hex)	SK ₄	AES, LEED		[KoB00/1]
	1,3	M, dl	/	STM		[BHJ95/1]
	0,83	U, M	FM ₂	AES, LEED		[G+W82/1]
	1	/	SK ₂	LEED, AES		[BHG90/1]
Co/W(110)	1	U	FM (LT), SK ₁ (HT)	LEED		[JBG89/1]
Rh/W(110)	0	U	SK ₁ , Leg	LEED, AES		[KoB94/1]
V/W(110)	/	? (hex)	SK ₃ , Leg	AES, LEED		[KoB00/1]
Fe/Mo(110)	1	dl	SK ₁	STM		[MPG98/1]
	1,8	? (hex)	SK ₁ , Leg	LEED, AES, $\Delta\phi$		[TiB90/1]
Co/Mo(110)	1	U	SK ₁ , Leg	LEED, AES, $\Delta\phi$		
Pb/Mo(110)	/	/	SK ₂	AES		[TiB88/2]
	/	/	Leg	TDS		[Bau90/1]
Sn/Mo(110)	/	/	SK ₂ , Leg	AES, TDS		[TiB88/2]
	/	/	Leg	TDS		[Bau90/1]
Re/Pt(111)	/	/	FM ₁ , Leg	/	[RSR99/1]	
Pb/Cu(111)	/	2D	SK ₁	STM	[CCC99/1]	
Al/Re(10-10)	/	/	SK ₂	STM	[PaC96/1]	
Co/W(100)	1	2D	FM (LT), SK ₁ (HT), Leg	LEED	[JBG89/1]	
Fe/W(100)	1	/	SK ₂	LEED, AES	[BHG90/1]	
Fe/W(111)	2	U, M	SK ₂ , Leg	LEED, AES	[KoB99/2]	
Rh/W(111)	1	? (hex)	SK ₁	LEED, AES		
Cr/Fe(100)	/	/	SK ₁ (LT), FM ₂ (HT)	STS, STM, LEIS	[PIW97/1] [DSP96/1]	

* Bedeckungsgrad, bei dem der ps-cp-Übergang auftritt

** Art der Überwindung der Spannung innerhalb der Adlage: U ... uniaxiale Wellung, dl ... Dislokationen, M ... Moiré-Strukturen, ? (hex) ... (quasi)hexagonale Überstruktur im LEED, 3D ... offenes 3D-Wachstum, 2D ... ein- oder zweidimensionale, kurzreichweitige Anordnung auf gestuften oder offenen Oberflächen

*** SK# ... Lage+Inselwachstum mit # Lagen, FM# ... Lagenwachstum mit # detektierten Lagen, Leg ... Legierungsbildung, Fac ... Facettierung,

3.5. Daten zur Legierungsbildung

3.5.1. Zweikomponentensysteme

System	Vol.- Leg. [%]	<i>misfit</i> [%]	T_c [K]	Bemerkung	Methode	Lit.
Pd/Mo(110)	0 ... 48	-1,4	1090	/	AES, LEED, XPS, $\Delta\phi$	[PBP85/1]
Pd/Mo(111)			800	/	AES, LEED	[GCM95/2]
Pd/Ta(110)	0 ... 72	-8,1	550	/	/	[Rod96/1]
			1300	Leg. +1 ML Pd	LEED, AES	[RMS86/1]
			775	Leg. +1 ML Pd	LEED, AES	[KSB90/1]
Pd/W(100)	0 ... 14,5	-2,8	1000	/	AES, LEED, $\Delta\phi$	[PRB81/1]
Pd/W(221)			800	/	AES, LEED, $\Delta\phi$	[KPA98/1]
Ni/W(110)	0 ... 47	-12	1100	/	AES, LEED, $\Delta\phi$	[KoB84/3]
Ni/W(211)			< RT	Ni ₄ W-Doppellage	AES, LEED, $\Delta\phi$	
Ni/Mo(110)	unbegr.	-11	640	/	EELS, LEED	[TiB90/1]
Ni/Rh(111)	?	-7,5	< RT	/	AES, LEED	[WBM93/1]
Pt/Re(0001)	unbegr.	+1,5	1400	/	PAX	[AGC85/1]
			700	/	AES, LEED, XPS	[GoS88/1]
Pt/Ru(0001)	0 ... 80	+3,7	1250	/	STM	[MSG98/1]
Pt/W(110)	unbegr.	-1,4	800	/	AES, LEED	[KoB94/1]
Re/Pt(111)	unbegr.	-1,4	1000	/	/	[RSR99/1]
Fe/Ru(0001)	0 ... 20	-6,0	< RT,	> 4 ML	AES, LEED	[KoB94/1]
Fe/Mo(110)	unbegr.	-9,4	900	/	AES, LEED, $\Delta\phi$	[TiB90/1]
Co/Re(0001)	unbegr.	-8,6	400	(2 x 2) + Entmischung	STM, LEED, TDS, XPS, $\Delta\phi$	[PaC99/1] [Sch98/d]
Co/W(100)	unbegr.	-11	< RT	c(2 x 2)	LEED	[JBG89/1]
Co/Mo(110)	unbegr.	-10	850	8 ... 10 ML	AES, LEED, $\Delta\phi$	[TiB90/1]
Rh/Ru(0001)	?	0	1250	/	AES, LEED	[KoB99/1]
V/W(110)	0 ... 22	-5,0	900	geordn. Leg	AES, LEED	[KoB00/1]
Cr/Fe(100)	unbegr.	+3,2	300	stat. Leg.	STS, STM, LEIS	[PIW97/1] [DSP96/1]
Au/Ni(111)	unbegr.	+18	< RT		STM	[AGM01/1]
Al/Ru(0001)	?	+6,7	880	/	PAX	[CPR95/1]
Al/Ru(0001)	?	+6,7	900	/	AES, LEED, Xc-TDS	[CTP95/1]
Sn/Mo(110)	0	+17	700	(Mo ₃ Sn)?	AES, TDS	[TiB88/2]
			1600	/	TDS	[Bau90/1]
Pb/Mo(110)	80 ... 100	+26	1200	/	TDS	
Cu(Ag)(111)	0 ... 14, 95 ... 100	+15,1	788	/	SAM	[LiW93/1]
			750	/	MC-EA	[LiW90/1]
Cu(Ag)(100)			523	/	SAM	[LiW93/1]
			400	/	MC-EA	[LiW90/1]
Ag/Cu(111)			650	/	AES, LEED	[MN]97/1]
Ag/Cu(100)			540	/		

3.5.2. Quasidreikomponentensysteme

System* (A ₁ +A ₂ /S(hkl))	Vol., OF-Leg.	<i>misfit</i> * (A ₁ S A ₂ S A ₁ A ₂)	<i>T_c</i> [K]	1. ML	Methode	Lit.
Au+Cs/ Ru(0001)	++	+-	< RT	ungeordn.	TDS, UPS	[SBI91/1]
Ni+Mn/ W(110)	?+	---	550	ungeordn., ab 550 K Ni ₃ Mn, NiMn	-	[AIV01/1]
Pd+Mn/ W(110)	?+	---	570	PdMn-c(2 x 2)	-	[JaS01/1]
Co+Cr/ W(110)	?+	---	> 320	ungeordn.	-	[KPK99/1]
Co+Cr/ Ru(0001)	500 K	---	580	ungeordn.	STM	[SHB96/1]
Co+Ag/ Ru(0001)	++	-+-	< RT	ungeordn.	STM	[Hwa96/1]
Cu+Au/ Ru(0001)	++	-+-	< RT	ungeordn.	LEED, TDS	[KPS91/1]
				Cu ₃ Au bei > 75 % Cu	UPS	[KRS87/1]
Ag+Au/ Ru(0001)	++	++0	< RT	ungeordn.	UPS	[BKS94/1] [BKS99/1] [KRS87/1]
					PAX	[WMD87/1] [MDN87/1]
					TDS, Sim.	[MDN88/1] [MW98/1] [KPS91/1]
Ag+Cu/ Ru(0001)	(-) +	+-+	< 550	ungeordn., Domai- nen	STM	[StH95/1]
			-	ungeordn.,	PAX, UPS, Xe- TDS	[SCR94/1] [SCP94/1]
			-		TDS	[SCK93/1]
			198		TDS, Sim.	[SCP94/1],
			110		Sim.	[SRH94/1]

* A₁ ... Adsorbat 1, A₂ ... Adsorbat 2, S ... Substrat