

Bibliography

- [1] D.P. Woodruff and T.A. Delchar, *Modern Techniques of Surface Science - Second Edition* (CUP, 1994), chapters 2-4.
- [2] M. Prutton, *An Introduction to Surface Science* (Oxford, 1994), chapters 2-3.
- [3] H. Niehus in: D. Briggs and M.P. Seah, *Practical Surface Analysis, Volume 2: Ion and Neutral Spectroscopy, Second Edition* (J. Wiley and Sons, 1992).
- [4] J.M. Walls, *Methods of Surface Analysis* (CUP, 1989).
- [5] N.S. Kaijaks, *PhD Thesis* (University of Warwick, 2000).
- [6] T. Engel and G. Ertl in: D.A. King and D.P. Woodruff (Eds.), *The Chemical Physics of Solid Surfaces and Heterogeneous Catalysis, Volume 4* (Elsevier, 1982).
- [7] P. Beccat, J.C. Bertolini, Y. Gauthier, J. Massardier and P. Ruiz, *J. Catal.* **126** (1990) 451.
- [8] M. Ohring, *Materials Science of Thin Films - Second Edition* (Academic Press, 2002).
- [9] R.L. Park and H.H. Madden Jr, *Surf. Sci.* **11** (1968) 188.
- [10] E.A. Wood, *J. Appl. Phys.* **35** (1964) 1306.
- [11] J.F. van der Veen, *Surf. Sci. Rep.* **5** (1985) 199.
- [12] A.M. Rodríguez, G. Bozzolo and J. Ferrante, *Surf. Sci.* **289** (1993) 100.
- [13] R.M. Tromp and E.J. van Loenen, *Phys. Rev. B* **30** (1984) 7352.
- [14] S. Titmuss, A. Wander and D.A. King, *Chem. Rev.* **96** (1996) 1291.
- [15] K.R. Lawless, *Rep. Prog. Phys.* **37** (1974) 231.
- [16] V.E. Henrich and P.A. Cox, *The Surface Science of Metal Oxides* (CUP, 1994).
- [17] A.M. Horgan and D.A. King, *Surf. Sci.* **23** (1970) 259.
- [18] N.R. Avery, *Chem. Phys. Lett.* **96** (1983) 371.

- [19] M. Bowker, M.A. Barteau and R.J. Madix, Surf. Sci. **92** (1980) 528.
- [20] M.A.H. Lanyon and B.M.W. Trapnell, Proc. R. Soc. A **227** (1955) 387.
- [21] M.W. Roberts and B.R. Wells, Surf. Sci. **8** (1967) 453.
- [22] M.W. Roberts and B.R. Wells, Surf. Sci. **15** (1969) 325.
- [23] C.T. Kirk and E.E. Huber Jr., Surf. Sci. **9** (1968) 217.
- [24] C.M. Quinn and M.W. Roberts, Trans. Faraday Soc. **60** (1964) 899.
- [25] M.W. Roberts, Recent Progress in Surface Science **3** (1970) 1.
- [26] D. Brennan, D.O. Hayward and B.M.W. Trapnell, Proc. Roy. Soc. A **256** (1960) 81.
- [27] D.D. Eley and P.R. Wilkinson, Proc. R. Soc. A **254** (1960) 327.
- [28] F.P. Fehlner and N.F. Mott, Oxidation of Metals **2** (1970) 59.
- [29] C.I. Carlisle, T. Fujimoto, W.S. Sim and D.A. King, Surf. Sci. **470** (2000) 15.
- [30] M.A. Muñoz-Márquez, R.E. Tanner and D.P. Woodruff, Surf. Sci. **565** (2004) 1.
- [31] G.R. Bell, N.S. Kaijaks, R.J. Dixon and C.F. McConville, Surf. Sci. **401** (1998) 125.
- [32] A. Khatiri, J.M. Ripalda, T.J. Krzyzewski, G.R. Bell, C.F. McConville and T.S. Jones, Surf. Sci. **548** (2004) L1.
- [33] T. Sugaya and M. Kawabe, Jpn. J. Appl. Phys. **30** (1991) L402.
- [34] Y.J. Chun, T. Sugaya, Y. Okada and M. Kawabe, Jpn. J. Appl. Phys. **32** (1993) L287.
- [35] R. Kosiba, G. Ecke, V. Cimalla, L. Spiess, S. Krischok, J.A. Schaefer, O. Ambacher and W.J. Schaff, Nucl. Instr. and Meth. B **215** (2004) 486.
- [36] T. Ohashi, Y. Saito, T. Maruyama and Y. Nanishi, J. Crystal Growth **237-239** (2002) 1022.
- [37] D.P. Woodruff, *The Chemical Physics of Solid Surfaces, Volume 10* (Elsevier, 2002).
- [38] J.A. Venables, *Introduction to Surface and Thin Film Processes* (CUP, 2001).
- [39] C.T. Campbell, Ann. Rev. Phys. Chem. **41** (1990) 775.
- [40] J.A. Rodriguez, Surf. Sci. Rep. **24** (1996) 223.

- [41] E. Bauer, *Appl. Surf. Sci.* **11-12** (1982) 479.
- [42] G.W.R. Leibbrandt, R. van Wijk, and F.H.P.M. Habraken, *Phys. Rev. B* **47** (1993) 6630.
- [43] P.C. McIntyre, C.J. Maggiore and M. Nastasi, *Acta Mater.* **45** (1997) 879.
- [44] H. Itoh, S. Narui, A. Sayama and T. Ichinokawa, *Phys. Rev. B* **45** (1992) 11136.
- [45] T.J. Raeker and A.E. DePristo, *Phys. Rev. B* **39** (1989) 9967.
- [46] D.J. Eaglesham, A.E. White, L.C. Feldman, N. Moriya and D.C. Jacobson, *Phys. Rev. Lett.* **70** (1993) 1643.
- [47] J.J. Gilman, *J. Appl. Phys.* **31** (1960) 2208.
- [48] C.T. Chan, K.P. Bohnen and K.M. Ho, *Phys. Rev. Lett.* **69** (1992) 1672.
- [49] D. Spišák and J. Hafner, *Phys. Rev. B* **67** (2003) 235403.
- [50] M. Wuttig, Y. Gauthier and S. Blügel, *Phys. Rev. Lett.* **70** (1993) 3619.
- [51] H. Röder, R. Schuster, H. Brune and K. Kern, *Phys. Rev. Lett.* **71** (1993) 2086.
- [52] S. Rousset, S. Chiang, D. E. Fowler and D. D. Chambliss, *Phys. Rev. Lett.* **69** (1992) 3200.
- [53] L.P. Nielsen, F. Besenbacher, I. Stensgaard, E. Laegsgaard, C. Engdahl, P. Stolze, K.W. Jacobsen and J.K. Nørskov, *Phys. Rev. Lett.* **71** (1993) 754.
- [54] R.M. Tromp, *Phys. Rev. B* **47** (1993) 7125.
- [55] R. Paniago, A. de Siervo, E.A. Soares, H.-D. Pfannes and R. Landers, *Surf. Sci.* **560** (2004) 27.
- [56] A. Christensen, A.V. Ruban, P. Stoltze, K.W. Jacobsen, H.L. Skriver, J.K. Nørskov and F. Besenbacher, *Phys. Rev. B* **56** (1997) 5822.
- [57] P. Légaré, G.F. Cabeza and N.J. Castellani, *Surf. Sci.* **441** (1999) 461.
- [58] G.F. Cabeza, P. Légaré, A. Sadki and N.J. Castellani, *Surf. Sci.* **457** (2000) 121.
- [59] W. Kim, S.-J. Oh, J. Seo, H.G. Min, S.C. Hong and J.-S. Kim, *Phys. Rev. B* **65** (2002) 205407.

- [60] S.M. Foiles, M.I. Baskes and M.S. Daw, Phys. Rev. B **33** (1986) 7983.
- [61] H.N.G. Wadley, X. Zhou, R.A. Johnson and M. Neurock, Prog. Mater. Sci. **46** (2001) 329.
- [62] M.J. Harrison, D.P. Woodruff and J. Robinson, Surf. Sci. **572** (2004) 309.
- [63] J.D. Weeks and G.H. Gilmer, Adv. Chem. Phys. **40** (1979) 157.
- [64] P. Zhang, X. Zheng, S. Wu and D. He, Comput. Mater. Sci. **30** (2004) 331.
- [65] G. Bozzolo, J. Ferrante and R. Ibañez-Meier, Surf. Sci. **352-354** (1996) 577.
- [66] G. Bozzolo and J. Ferrante, Thin Solid Films **317** (1998) 1.
- [67] W. Fan and X.G. Gong, Surf. Sci. **562** (2004) 219.
- [68] M. Asta and S.M. Foiles, Phys. Rev. B **53** (1996) 2389.
- [69] M. Schneider, I.K. Schuller and A. Rahman, Phys. Rev. B **36** (1987) 1340.
- [70] W. Kohn and L.J. Sham, Phys. Rev. **140** (1965) A1133.
- [71] P. Torelli, F. Sirotti and P. Ballone, Phys. Rev. B **68** (2003) 205413.
- [72] I.Yu. Sklyadneva, G.G. Rusina, and E.V. Chulkov, Phys. Rev. B **68** (2003) 045413.
- [73] J.A. Sprague, F. Montalenti, B.P. Uberuaga, J.D. Kress, and A.F. Voter, Phys. Rev. B **66** (2002) 205415.
- [74] V. Blum, L. Hammer, K. Heinz, C. Franchini, J. Redinger, K. Swamy, C. Deisl and E. Bertel, Phys. Rev. B **65** (2002) 165408.
- [75] S.M. Foiles, Phys. Rev. B **32** (1985) 3409.
- [76] M.S. Daw, M.I. Baskes and W.G. Wolfer in *Proceedings of the Special Symposium on Modelling Environmental Effects on Crack Initiation and Propagation, Toronto, 1985* (AIME, New York).
- [77] M.S. Daw and M.I. Baskes, Phys. Rev. Lett. **50** (1983) 1285.
- [78] M.S. Daw and M.I. Baskes, Phys. Rev. B **29** (1984) 6443.
- [79] S.M. Foiles, Phys. Rev. B **32** (1985) 7685.

- [80] M. Aono, M. Katayama, E. Nomura, T. Chassé, D. Choi and M. Kato, Nucl. Instr. Meth. B **37/38** (1989) 264.
- [81] T.C.Q. Noakes, *PhD Thesis* (University of Warwick, 1995).
- [82] R.J. Dixon, *PhD Thesis* (University of Warwick, 1998).
- [83] W. Wach and K. Wittmaack, Nucl. Instr. and Meth. **228** (1984) 1.
- [84] J.L. Wiza, Nucl. Instrum. Meth. **162** (1979) 587.
- [85] S.B. Luitjens, A.J. Algra, E.P.T.M. Suurmeijer and A.L. Boers, Appl. Phys. A **21** (1980) 205.
- [86] K. Tobita, H. Takeuchi, Y. Kusama, M. Nemoto and H. Kimura, Jap. J. Appl. Phys. **26** (1987) 509.
- [87] H. Niehus, W. Heiland and E. Taglauer, Surf. Sci. Rep. **17** (1993) 213.
- [88] O.B. Firsov, Sov. Phys.-JETP **33** (1957) 696.
- [89] J. Lindhard, M. Scharff and H.E. Schiott, K. Dan. Vidensk. Selsk. Mat. Fys. Medd. **33** (1963) No. 14.
- [90] D.J. O'Connor and J.P. Biersack, Nucl. Instr. Meth. B **15** (1986) 14.
- [91] Th. Fauster, Vacuum **38** (1988) 129.
- [92] R.M. Charatan and R.S. Williams, Surf. Sci. Lett. **264** (1992) L207.
- [93] L. Houssiau and P. Bertrand, Vacuum **45** (1994) 409.
- [94] E. Hulpke, Surf. Sci. **52** (1975) 615.
- [95] H.P. Myers, *Introductory Solid State Physics - Second Edition* (Taylor & Francis, London, 1997), chapter 5.
- [96] L.J. Clarke, *Surface Crystallography* (John Wiley & Sons, Chichester, UK, 1985).
- [97] M. Alonso and E.J. Finn, *Physics* (Addison-Wesley, Harlow, UK, 1996), chapter 36.
- [98] C.J. Davisson and L.H. Germer, Phys. Rev. **30** (1927) 705.
- [99] J.J. Quinn, Phys. Rev. **126** (1962) 1453.

- [100] D.R. Penn, J. Electron Spectrosc. Rel. Phenom. **9** (1976) 29.
- [101] T.E. Madey, J.T. Yates and N.E. Erickson, Chem. Phys. Lett. **19** (1973) 487.
- [102] A.F. Carley and M.W. Roberts, Proc. R. Soc. Lond. A **363** (1978) 403.
- [103] R.F. Reilman, A. Msezane and S.T. Manson, J. Electron. Spectrosc. **8** (1976) 389.
- [104] J.H. Scofield, J. Electron Spectrosc. Rel. Phenom. **8** (1976) 129.
- [105] M. Hou, Vacuum **39** (1989) 309.
- [106] H. Niehus and R. Spitzl, Surf. Interf. Anal. **17** (1991) 287.
- [107] M.T. Robinson and I.M. Torrens, Phys. Rev. B **9** (1974) 5008.
- [108] D.M. Goodstein, S.A. Langer and B.H. Cooper, J. Vac. Sci. Technol. A **6** (1988) 703.
- [109] Y.G. Shen, J. Yao, D.J. O'Connor, B.V. King and R.J. MacDonald, J. Phys. Condens. Matter **8** (1996) 4903.
- [110] Y. Yamamura and W. Takeuchi, Nucl. Instrum. Meth. B **29** (1987) 461.
- [111] M.H. Langelaar, M. Breeman, A.V. Mijiritskii and D.O. Boerma, Nucl. Instrum. Meth. B **132** (1997) 578.
- [112] V. Bykov, C. Kim, M.M. Sung, K.J. Boyd, S.S. Todorov and J.W. Rabalais, Nucl. Instrum. Meth. B **114** (1996) 371.
- [113] R. Smith and R.P. Webb, Nucl. Instrum. Meth. B **67** (1992) 373.
- [114] R.M. Tromp and J.F. van der Veen, Surf. Sci. **133** (1983) 159.
- [115] R.S. Daley, J.H. Huang and R.S. Williams, Surf. Sci. **215** (1989) 281.
- [116] M.A. Muñoz-Márquez, *PhD thesis* (University of Warwick, 2005).
- [117] H. Niehus, *FAN - Computer simulation for particle backscattering*, available from <http://asp2.physik.hu-berlin.de/main.html> .
- [118] D. Brown, P.D. Quinn, D.P. Woodruff, P. Bailey and T.C.Q. Noakes, Phys. Rev. B **61** (2000) 7706.
- [119] J.B. Pendry, J. Phys. C **13** (1980) 937.

- [120] S.P. Tear, K. Roll and M. Prutton, *J. Phys. C* **14** (1981) 3297.
- [121] Y. Kuk, L.C. Feldman and I.K. Robinson, *Surf. Sci.* **138** (1984) L168.
- [122] Y. Kuk and L.C. Feldman, *Phys. Rev. B* **30** (1984) 5811.
- [123] H.-J. Freund, H. Kuhlenbeck and V. Staemmler, *Rep. Prog. Phys.* **59** (1996) 283.
- [124] S.A. Chambers, *Surf. Sci. Rep.* **39** (2000) 105.
- [125] H. Ohtani, C.-T. Kao, M.A. Van Hove and G.A. Somorjai, *Prog. Surf. Sci.* **23** (1986) 155.
- [126] F. Besenbacher and J.K. Nørskov, *Prog. Surf. Sci.* **44** (1993) 5.
- [127] H. Over, *Prog. Surf. Sci.* **58** (1998) 249.
- [128] A. Eichler and J. Hafner, *Surf. Sci.* **433-435** (1999) 58.
- [129] W. D. Mieher and W. Ho, *Surf. Sci.* **322** (1995) 151.
- [130] C. Puglia, A. Nilsson, B. Hernaäs, O. Karis, P. Bennich and N. Mårtensson, *Surf. Sci.* **342** (1995) 119.
- [131] J.L. Gland, B.A. Sexton and G.B. Fisher, *Surf. Sci.* **95** (1980) 587.
- [132] D.H. Parker, M.E. Bartram and B.E. Koel, *Surf. Sci.* **217** (1989) 489.
- [133] G.N. Derry and P.N. Ross, *Surf. Sci.* **140** (1984) 165.
- [134] J.L. Gland, *Surf. Sci.* **93** (1980) 487.
- [135] H. Steininger, S. Lehwald and H. Ibach, *Surf. Sci.* **123** (1982) 1.
- [136] J. Segner, W. Vielhaber and G. Ertl, *Israel J. Chem.* **22** (1982) 375.
- [137] M.V. Ganduglia-Pirovano and M. Scheffler, *Phys. Rev. B* **59** (1999) 15533.
- [138] J.F. Weaver, J.-J. Chen and A.L. Gerrard, *Surf. Sci.* **592** (2005) 83.
- [139] C.R. Parkinson, M. Walker and C.F. McConville, *Surf. Sci.* **545** (2003) 19.
- [140] P. Légaré, L. Hilaire and G. Maire, *Surf. Sci.* **141** (1984) 604.
- [141] P.J. Berlowitz, C.H.F. Peden and D.W. Goodman, *J. Phys. Chem.* **92** (1988) 5213.

- [142] J. Chastain and R.C. King Jr., Editors, *Handbook of X-ray photoelectron spectroscopy*, Physical Electronics (Eden Prairie, 1995).
- [143] TC-50 Thermal Gas Cracker Operation Manual, Oxford Applied Research, <http://www.oaresearch.co.uk> .
- [144] S.M. Foiles, M.I. Baskes, and M.S. Daw, Phys. Rev. B **33** (1986) 7983.
- [145] R. Feder, H. Pleyer, P. Bauer and N. Müller, Surf. Sci. **109** (1981) 419.
- [146] J.A. Davies, D.P. Jackson, P.R. Norton, D.E. Posner and W.N. Unertl, Solid State Commun. **34** (1980) 41.
- [147] K. Mortensen, C. Klink, F. Jensen, F. Besenbacher and I. Stensgaard, Surf. Sci. **220** (1989) L701.
- [148] N. Materera, U. Starke, A. Barbieri, R. Döll, K. Heinz, M.A. Van Hove and G. A. Somorjai, Surf. Sci. **325** (1995) 207.
- [149] N. Saliba, D. H. Parker and B. E. Koel, Surf. Sci. **410** (1998) 270.
- [150] T.E. Madey and J.T. Yates Jr., J. Vac. Sci. Technol. **8** (1971) 525.
- [151] R.D. Ramsier and J.T. Yates Jr., Surf. Sci. Rep. **12** (1991) 246.
- [152] G. Apai, R. C. Baetzold and E. Shustorovich, Surf. Sci. **116** (1982) L191.
- [153] K.T. Park, G.W. Simmons and K. Klier, Surf. Sci. **367** (1996) 307.
- [154] Y. Wu, E. Garfunkel and T.E. Madey, Surf. Sci. **365** (1996) 337.
- [155] M. Peuckert and H.P. Bonzel, Surf. Sci. **145** (1984) 239.
- [156] M.-C. Jung, H.-D. Kim, M. Han, W. Jo and D.C. Kim, Jpn. J. Appl. Phys. **38** (1999) 4872.
- [157] E. Taglauer, W. Heiland and U. Beitat, Surf. Sci. **89** (1979) 710.
- [158] A. Sagara and K. Kamada, J. Nucl. Mater. **111-112** (1982) 812.
- [159] E. Taglauer, G. Marin, W. Heiland and U. Beitat, Surf. Sci. **63** (1977) 507.
- [160] E. Taglauer and U. Beitat, J. Nucl. Mater. **111-112** (1982) 800.
- [161] S.R. Kasi, H. Kang, C.S. Sass and J.W. Rabalais, Surf. Sci. Rep. **10** (1989) 1.

- [162] M. Abbate, O. Grizzi and E.V. Alonso, *J. Nucl. Mater.* **175** (1990) 1.
- [163] A.A. Dzhurakhalov and S. Rahmatov, *Surface and Coatings Technology* **158-159** (2002) 277.
- [164] R. Souda, H. Kawanowa, S. Otani and T. Aizawa, *Phys. Rev. B* **60** (1999) 14412.
- [165] M.V. Ganduglia-Pirovano, K. Reuter and M. Scheffler, *Phys. Rev. B* **65** (2002) 245426.
- [166] C.-J. Lin, G.L. Gorman, C.H. Lee, R.F.C. Farrow, E.E. Marinero, H.V. Do, H. Notarys and C.J. Chien, *J. Magn. Magn. Mater.* **93** (1991) 194.
- [167] W.B. Zeper, H.W. van Kesteren, B.A.J. Jacobs, J.H.M. Spruit and P.F. Carcia, *J. Appl. Phys.* **70** (1991) 2264.
- [168] J. Radnik, B.D. Wagner, K. Oster and K. Wandelt, *Surf. Sci.* **357-358** (1996) 943.
- [169] N.M. Markovic, B.N. Grgur, C.A. Lucas and P.N. Ross, *Electrochim. Acta* **44** (1998) 1009.
- [170] J.S. Tsay, T. Mangen and K. Wandelt, *Thin Solid Films* **397** (2001) 152.
- [171] J.S. Tsay, T. Mangen, R.-J. Linden and K. Wandelt, *Surf. Sci.* **482-485** (2001) 866.
- [172] Y.G. Shen, D.J. OConnor, K. Wandelt and R.J. MacDonald, *Surf. Sci.* **328** (1995) 21.
- [173] Y.G. Shen, D.J. OConnor and K. Wandelt, *Surf. Sci.* **410** (1998) 1.
- [174] Y.G. Shen, D.J. OConnor, B.V. King and R.J. MacDonald, *Nucl. Instrum. Meth. B* **115** (1996) 191.
- [175] U. Schröder, R. Linke, J.-H. Boo and K. Wandelt, *Surf. Sci.* **352-354** (1996) 211.
- [176] U. Schröder, R. Linke, J.-H. Boo and K. Wandelt, *Surf. Sci.* **357-358** (1996) 873.
- [177] Y.G. Shen, D.J. OConnor, K. Wandelt and R.J. MacDonald, *Surf. Sci.* **357-358** (1996) 921.
- [178] Y.G. Shen, D.J. OConnor and K. Wandelt, *Nucl. Instrum. Meth. B* **135** (1998) 361.
- [179] J.-H. Boo, S.-Y. Lee, S.-B. Lee, H.-T. Kwak, U. Schröder, R. Linke and K. Wandelt, *J. Korean Phys. Soc.* **35** (1999) S554.

- [180] P.C. Dastoor, D.J. O'Connor, D.A. MacLaren, W. Allison, T.C.Q. Noakes and P. Bailey, *Surf. Sci.* **588** (2005) 101.
- [181] G.W. Graham, P.J. Schmitz and P.A. Thiel, *Phys. Rev. B* **41** (1990) 3353.
- [182] E. Al Shamaileh, H. Younis, C.J. Barnes, K. Pussi and M. Lindroos, *Surf. Sci.* **515** (2002) 94.
- [183] J.P. Reilly, D. O'Connell and C.J. Barnes, *J. Phys.: Condens. Matter* **11** (1999) 8417.
- [184] R. Belkhou, J. Thiele and C. Guillot, *Surf. Sci.* **377-379** (1997) 948.
- [185] T.D. Pope, M. Vos, H.T. Tang, K. Griffiths, I.V. Mitchell, P.R. Norton, W. Liu, Y.S. Li, K.A.R. Mitchell, Z.-J. Tian and J.E. Black, *Surf. Sci.* **337** (1995) 79.
- [186] S. Deckers, S. Offerhaus, F.H.P.M. Habraken and W.F. van der Weg, *Surf. Sci.* **237** (1990) 203.
- [187] O. Robach, H. Isérn, P. Steadman, K.F. Peters, C. Quirós and S. Ferrer, *Phys. Rev. B* **68** (2003) 214416.
- [188] S. Deckers, F. Bisschop, D. de Jager, S.H. Offerhaus, J. van Roijen, F.H.P.M. Habraken and W.F. van der Weg, *Surf. Sci.* **258** (1991) 82.
- [189] G.L. Kellogg, *Phys. Rev. Lett.* **67** (1991) 216.
- [190] L. Eierdal, F. Besenbacher, E. Lzegsgaard and I. Stensgaard, *Surf. Sci.* **312** (1994) 31.
- [191] R.G. Smeenk, R.M. Tromp, J.F. van der Veen and F.W. Saris, *Surf. Sci.* **95** (1980) 156.
- [192] R.L. Park and H.E. Farnsworth, *J. Appl. Phys.* **35** (1964) 2220.
- [193] K. Yagi-Watanabe, Y. Ikeda, Y. Ishii, T. Inokuchi and H. Fukutani, *Surf. Sci.* **482-485** (2001) 128.
- [194] K. Suzuki, A. Yamane, R. Ozawa, Y. Gunji, K. Higashiyama and H. Fukutani, *Surf. Sci.* **365** (1996) 248.
- [195] J.F. van der Veen, R.G. Smeenk, R.M. Tromp and F.W. Saris, *Surf. Sci.* **79** (1979) 212.

- [196] S. Deckers, F.H.P.M. Habraken, W.F. van der Weg and J.W. Geus, *Appl. Surf. Sci.* **45** (1990) 207.
- [197] N. Ting, Y. Qingliang and Y. Yiyang, *Surf. Sci.* **206** (1988) L857.
- [198] F. Favot, A. Del Corso and A. Baldereschi, *Phys. Rev. B* **63** (2001) 115416.
- [199] P.R. Norton, P. E. Bindner and T. E. Jackman, *Surf. Sci.* **175** (1986) 313.
- [200] R. Fischer and F. Schröder, *Ber. Deutsch. Chem. Ges.* **43** (1910) 1465.
- [201] S. Yamaguchi, M. Kariya, S. Nitta, T. Takeuchi, C. Wetzel, H. Amano and I. Akasaki, *J. Appl. Phys.* **85** (1999) 7682.
- [202] H. Lu, W.J. Schaff, J. Hwang, H. Wu, G. Koley and L.F. Eastman, *Appl. Phys. Lett.* **79** (2001) 1489.
- [203] M. Higashiwaki and T. Matsui, *Jpn. J. Appl. Phys.* **41** (2002) L540.
- [204] V.Yu. Davydov, A.A. Klochikhin, R.P. Seisyan, V.V. Emtsev, S.V. Ivanov, F. Bechstedt, J. Furthmüller, H. Harima, A.V. Mudryi, J. Aderhold, O. Semchinova, J. Graul, *Phys. Stat. Solidi (b)* **229** (2002) R1.
- [205] J. Wu, W. Walukiewicz, K. M. Yu, J. W. Ager III, E. E. Haller, H. Lu, W. J. Schaff, Y. Saito and Y. Nanishi, *Appl. Phys. Lett.* **80** (2002) 3967.
- [206] T. Matsuoka, H. Okamoto, M. Nakao, H. Harima and E. Kurimoto, *Appl. Phys. Lett.* **81** (2002) 1246.
- [207] K. Xu, N. Hashimoto, B. Cao, T. Hata, W. Terashima, M. Yoshitani, Y. Ishitani and A. Yoshikawa, *Phys. Stat. Sol.* **0** (2003) 2790.
- [208] H. Lu, W. J. Schaff, L. F. Eastman and C. E. Stutz, *Appl. Phys. Lett.* **82** (2003) 1736.
- [209] I. Mahboob, T. D. Veal, C. F. McConville, H. Lu and W. J. Schaff, *Phys. Rev. Lett.* **92** (2004) 036804.
- [210] T. D. Veal, L. F. J. Piper, I. Mahboob, Hai Lu, W. J. Schaff and C. F. McConville, *Phys. Stat. Sol. (c)* **2** (2005) 2246.
- [211] J. Wu, W. Walukiewicz, W. Shan, K. M. Yu, J. W. Ager III, E. E. Haller, H. Lu and W. J. Schaff, *Phys. Rev. B* **66** (2002) 201403.

- [212] T. Araki, S. Ueta, K. Mizuo, T. Yamaguchi, Y. Saito and Y. Nanishi, Phys. Stat. Sol. (c) **0** (2003) 2798.
- [213] D. Muto, T. Araki, H. Naoi, F. Matsuda and Y. Nanishi, Phys. Stat. Sol. (a) **202** (2005) 773.
- [214] Y. Nanishi, Y. Saito, T. Yamaguchi, M. Hori, F. Matsuda, T. Araki, A. Suzuki and T. Miyajima, Phys. Stat. Sol. (a) **200** (2003) 202.
- [215] L.F.J. Piper, T.D. Veal, M. Walker, I. Mahboob, C.F. McConville, H. Lu and W.J. Schaff, J. Vac. Sci. Technol. A **23** (2005) 617.
- [216] S. Krischok, V. Yanev, O. Balykov, M. Himmerlich, J.A. Schaefer, R. Kosiba, G. Ecke, I. Cimalla, V. Cimalla, O. Ambacher, H. Lu, W.J. Schaff and L.F. Eastman, Surf. Sci. **566-568** (2004) 849.
- [217] T.D. Veal and C.F. McConville, Appl. Phys. Lett. **77** (2000) 1665.
- [218] M. Draxler, M. Walker and C.F. McConville, accepted into Nucl. Instr. and Meth. B (2006).
- [219] A. Schüller, S. Wethekam, A. Mertens, K. Maass, H. Winter and K. Gärtner, Nucl. Instr. and Meth. B **230** (2005) 172.