

## C. BARRY CARTER GROUP PUBLICATIONS: THIN FILMS

Including Oxides and AlN  
Excluding YBCO and Glass

- J030 Ostyn, K.M. and Carter, C.B., 1982, Surf. Sci. **121**, 360–374. “On the Reduction of Nickel Oxide.”
- J037 Morrissey, K.J., Czanderna, K.K., Carter, C.B. and Merrill, R.P., 1984, J. Am. Ceram. Soc. **67** (5), C88–90. “Growth of  $\alpha$ -Al<sub>2</sub>O<sub>3</sub> Within a Transition Alumina Matrix.”
- J038 Czanderna, K.K., Morrissey, K.J., Carter, C.B. and Merrill, R.P., 1984, J. Catalysis **89**, 182–184. “High-Resolution TEM Observations of  $\gamma$ -Al<sub>2</sub>O<sub>3</sub> in Transition Alumina Films.”
- J060 Simpson, Y.K. and Carter, C.B., 1986, Phil. Mag. **A53** (1), L1–6. “A New Approach to the Study of Solid-State Reactions.”
- J061 Susnitzky, D.W. and Carter, C.B., 1986, J. Am. Ceram. Soc. **69** (2), C25–27. “The Topotactic Growth of  $\beta$ -Alumina on  $\alpha$ -Alumina.”
- J064 Carter, C.B. and Simpson, Y. K., 1986, Ber. Bunsenges. Phys. Chem. **90**, 676–680. “Thin-Film Reactions.”
- J068 Simpson, Y.K., Colgan, E.G. and Carter, C.B., 1987, J. Am. Ceram. Soc. **70** (7), C149–C151. “Kinetics of the Growth of Spinel on Alumina Using Rutherford Backscattering Spectroscopy.”
- J076 Czanderna, K.K., Morrissey, K.J., Palmstrøm, C.J., Carter, C.B. and Merrill, R.P., 1989, J. Mat. Sci. **24** (2), 515–522. “Growth of  $\gamma$ -Alumina in Crystallographically Distinct Aluminum Substrates.”
- J085 Summerfelt, S.R. and Carter, C.B., 1989, Ultramicroscopy **30**, 150–156. “The Movement of the Spinel–NiO Interface in Thin Films.”
- J088 Susnitzky, D.W., Hertl, W. and Carter, C.B., 1988, J. Am. Ceram. Soc. **71** (11), 992–1004. “Destabilization of Zirconia Thermal Barriers in the Presence of V<sub>2</sub>O<sub>5</sub>.”
- J089 Susnitzky, D.W., Summerfelt, S.R. and Carter, C.B., 1988, Scripta Met. **22** (7), 1149–1154. “Thin-Film NiO–Al<sub>2</sub>O<sub>3</sub> Reaction Couples Prepared by CVD.”
- J090 Susnitzky, D.W., Summerfelt, S.R. and Carter, C.B., 1989, Ultramicroscopy **30**, 249–255. “Reaction Couples of Ceramic Thin Films Prepared by CVD.”
- J091 Susnitzky, D.W., Hertl, W. and Carter, C.B., 1989, Ultramicroscopy **30**, 223–241. “Vanadia-Induced Transformations in Ytria-Stabilized Zirconia.”
- J105 Tietz, L.A., Summerfelt, S.R., English, G.R. and Carter, C.B., 1989, Appl. Phys. Lett. **55** (12), 1202–1204. “Early Stages of the Heteroepitactic Growth of Hematite on (0001) Al<sub>2</sub>O<sub>3</sub> by Transmission Electron Microscopy.”
- J108 Simpson, Y. K. and Carter, C.B., 1990, J. Am. Ceram. Soc. **73** (8), 2391–2398. “Faceting Behavior of Alumina in the Presence of a Glass.”
- J127 Susnitzky, D.W. and Carter, C.B., 1991, J. Mater. Res. **6** (11), 2403–2411. “Defect/Surface Interactions in Heat-Treated Ceramic Thin Films.”

- J128 Susnitzky, D.W. and Carter, C.B., 1991, *Mat. Lett.* **12**, 27–31. “Growth of Thoria on Heat-Treated SiC.”
- J129 Norton, M.G., Fleischer, E.L., Hertl, W., Carter, C.B. and Mayer, J.W., 1991, *J. Nucl. Instr. and Meth.* **B59/60**, 1215–1218. “Transmission-Electron Microscopy Study of Ion Beam Implanted Single-Crystal Ceramics.”
- J132 Susnitzky, D.W. and Carter, C.B., 1992, *Surf. Sci.* **265**, 127–138. “Metal Particles on the Surfaces of Heat-Treated Ceramic Thin Films.”
- J134 Norton, M.G., Hellman, E.S., Hartford, E.H. and Carter, C.B., 1991, *J. Cryst. Growth* **113**, 716–721. “Early Stages of Growth of Epitaxial \* Barium Bismuth Oxide Films on Single-Crystal MgO.”
- J136 Norton, M.G., Scarfone, C., Li, J., Carter, C.B. and Mayer, J.W., 1991, *J. Mater. Res.* **6** (10), 2022–2025. “Epitaxy of Barium Titanate Thin Films Grown on MgO by Pulsed-Laser Ablation.”
- J137 Norton, M.G., Kotula, P.G. and Carter, C.B., 1991, *J. Appl. Phys.* **70** (5), 2871–2873. “Oriented Aluminum Nitride Thin Films Deposited by Pulsed-Laser Ablation.”
- J142 Susnitzky, D.W. and Carter, C.B., 1992, *J. Am. Ceram. Soc.* **75** (9), 2463–2478. “Surface Morphology of Heat-Treated Ceramic Thin Films.”
- J144 Summerfelt, S.R. and Carter, C.B., 1992, *Acta Metall. Mater.* **40** (10), 2799–2804. “Dissolution of NiFe<sub>2</sub>O<sub>4</sub> Particles in a NiO Matrix.”
- J145 Summerfelt, S.R. and Carter, C.B., 1992, *Acta Metall. Mater.* **40** (5), 1051–1067. “Morphology of NiFe<sub>2</sub>O<sub>4</sub> Precipitation in NiO.”
- J146 Summerfelt, S.R. and Carter, C.B., 1992, *Phil. Mag.* **A65** (6), 1503–1519. “Coarsening and Shape Transformation of NiFe<sub>2</sub>O<sub>4</sub> Precipitates in a NiO Matrix.”
- J147 Summerfelt, S.R. and Carter, C.B., 1992, *Acta Metall. Mater.* **40** (10), 2805–2812. “Interaction Between Dislocations and NiFe<sub>2</sub>O<sub>4</sub> Precipitates in a NiO Matrix.”
- J155 Tietz, L.A. and Carter, C.B., 1992, *J. Am. Ceram. Soc.* **75** (5), 1097–1102. “Imaging and Diffraction Study of Continuous  $\alpha$ -Fe<sub>2</sub>O<sub>3</sub> Films on (0001)Al<sub>2</sub>O<sub>3</sub>.”
- J156 Norton, M.G., Cracknell, K.P.D. and Carter, C.B., 1992, *J. Am. Ceram. Soc.* **75** (7), 1999–2002. “Pulsed-Laser Deposition of Barium Titanate Thin Films.”
- J157 Norton, M.G., Hellman, E.S., Hartford Jr., E.H. and Carter, C.B., 1993, *Physica C* **205**, 347–353. “Compositionally Modulated Nucleation and Growth of Barium Bismuth Oxide Thin Films on MgO.”
- J159 Tietz, L.A. and Carter, C.B., 1993, *Phil. Mag.* **A67** (3), 699–727. “Structure of the Fe<sub>2</sub>O<sub>3</sub>-Al<sub>2</sub>O<sub>3</sub> (0001) Interface.”
- J160 Tietz, L.A. and Carter, C.B., 1993, *Phil. Mag.* **A67** (3), 729–744. “Structure of the Fe<sub>2</sub>O<sub>3</sub>-Al<sub>2</sub>O<sub>3</sub> (10 $\bar{1}$ 2) Interface.”
- J163 Carter, C.B. and Rasmussen, Y.K., 1994, *Acta Metall. Mater.* **42** (8), 2729–2740. “Growth of Spinel Particles on Alumina Thin Films. I. Orientation Relationships and Shape of the Particles.”

- J164 Carter, C.B. and Rasmussen, Y.K., 1994, *Acta Metall. Mater.* **42** (8), 2741–2752. “Growth of Spinel Particles on Alumina Thin Films. II. Morphology and Crystallography of the Interface.”
- J166 Kotula, P.G., Norton, M.G. and Carter, C.B., 1994, *J. Mat. Sci. Lett.* **13**, 1275–1277. “Surface Morphology of Pulsed-Laser Deposited Aluminum Nitride Thin Films.”
- J167 Kotula, P.G., Erickson, D.D. and Carter, C.B., 1994, *J. Am. Ceram. Soc.* **77** (12), 3287–3291. “Use of Thin-Film Substrates to Study Enhanced Solid-State Transformations.”
- J184 Kotula, P.G. and Carter, C.B., 1996, *Phys. Rev. Lett.* **77** (16), 3367–3370. “Interfacial Control of Reaction Kinetics in Oxides.”
- J188 Johnson, M.T., Heffelfinger, J.R., Kotula, P.G. and Carter, C.B., 1997, *J. Microscopy* **185**(2), 225–232. “Microscopy of Interfaces in Model Oxide Composites.”
- J193 Heffelfinger, J.R. and Carter, C.B., 1997, *Phil. Mag. Lett.*, **76** (3), 223–232 “The Effect of Surface Structure on the Growth of Ceramic Thin Films.”
- J195 Bench, M.W., Kotula, P.G. and Carter, C.B., 1997 *Surf. Sci.* **391**, 183–195 “Influence of the Nature of the (0001)  $\alpha$ -Alumina Surface on Thin Film Growth.”
- J196 Johnson, M.T., Schmalzried, H. and Carter, C.B., 1997, *Solid State Ionics* **101–103**, 1327–1333. “The Effect of an Applied Electric Field on a Heterogeneous Solid- State Reaction Between MgO and  $\text{Fe}_2\text{O}_3$ .”
- J199 Mallamaci, M.P., Sartain, K.B. and Carter, C.B., 1998, *Phil. Mag.* **77**, 562–575, “Crystallization of Calcium-Hexaluminate on Basal Alumina.”
- J200 Kotula, P.G., Johnson, M.T. and Carter, C.B., 1998, *Z. Phys. Chemie*, **206 S**, 73–99 “Thin-Film Reactions.”
- J202 Johnson M.T., and Carter, C.B., 1998 *Microscopy and Microanalysis* **4**(2), 141–145 “Thin-Film Reaction Between  $\alpha$ - $\text{Fe}_2\text{O}_3$  and (001) MgO”
- J203 Johnson, M.T., Gilliss, S.R., and Carter, C.B., 1998, *Microscopy and Microanalysis* **4**, 158–163, “Use of Pt Markers in the Study of Solid-State Reactions in the Presence of an Electric Field”
- J205 Kotula, P.G. and Carter, C.B., 1998, *J. Am. Ceram. Soc.* **81**, 2869–76 “Kinetics of Thin-Film Reactions of NiO with  $\text{Al}_2\text{O}_3$ I: (0001) and  $\{11\bar{2}0\}$  Reaction Couples.”
- J206 Kotula, P.G. and Carter, C.B., 1998, *J. Am. Ceram. Soc.* **81**, 2877–84 “Kinetics of Thin-Film Reactions of NiO with  $\text{Al}_2\text{O}_3$  II:  $\{1\bar{1}00\}$  and  $\{1\bar{1}02\}$  Reaction Couples.”
- J208 Mallamaci, M.P. and Carter, C.B., 1999, *J. Am. Ceram. Soc.* **82**(1), 33–42, “Crystallization of Pseudo-Orthorhombic Anorthite on Basal Sapphire.”
- J209 Johnson, M.T. and Carter, C.B., 1999, *Thin Solid Films* **339**, 117–119, “AlN Films Grown by Electric-Field Induced Flux of Al Cations.”
- J212 Johnson, M.T., Carter, C.B. and Michael, J., 1999, *J. Am. Ceram. Soc. Commun.* **82**(6), 1644–46, “SEM Analysis of Oxide Thin Films and Reactions.”
- J214 Johnson, M.T. and Carter, C.B., 1999, *Phil. Mag. Lett.* **79**, 609–617, “Movement of Pt

Markers in MgO During a Solid-State Reaction.”

- J217 Johnson, M.T., Kotula, P.G. and Carter, C.B., 1999, J Crystal Growth **206** 299–307 “Growth of Nickel Ferrite Thin Films Using Pulsed-Laser Deposition.”
- J219 Johnson, M.T., Michael, J.R., Gilliss, S.R. and Carter, C.B., 1999, Phil. Mag. A. **79**(12) 2887–2898, “Iron Oxide on (001) MgO.”
- J220 Johnson, M.T., Schmalzried, H. and Carter, C.B., 2000, J. Am. Ceram. Soc., **83**(7), 1768–1772, “Behavior of MgFe<sub>2</sub>O<sub>4</sub> Films on MgO in an Electric Field.”