

C. BARRY CARTER GROUP PUBLICATIONS: SPECIAL

First paper—from MSc Thesis

- J001 Carter, C.B. and Williams, P.M., 1972, *Phil. Mag.* **26** (2), 393–398. “An Electron Microscopy Study of Intercalation in Transition Metal Dichalcogenides.”

Only journal paper with Prof. Hirsch—from D.Phil. Thesis

- J006 Carter, C.B. and Hirsch, P.B., 1977, *Phil. Mag.* **35** (6), 1509–1522. “The Formation and Glide of Jogs in Low Stacking-Fault Energy Face-Centered Cubic Materials.”

A favorite paper

- J007 Carter, C.B. and Holmes, S.M., 1977, *Phil. Mag.* **35** (5), 1161–1172. “The Stacking-Fault Energy of Nickel.”

First paper on grain boundaries and HRTEM

- J009 Cosandey, F., Komem, Y., Bauer, C.L. and Carter, C.B., 1978, *Scripta Met.* **12**, 577–582. “Lattice Imaging of Low-Angle [001] Tilt Boundaries in Bicrystalline Films of Gold.”

A favorite paper

- J015 Carter, C.B., 1980, *Phil. Mag.* **A42**, 31–46. “Observations on the Climb of Extended Dislocations Due to Irradiation in the HVEM.”

First paper with Prof. Sass

- J011 Carter, C.B., Donald, A.M., and Sass, S.L., 1979, *Phil. Mag.* **A39** (5), 533–549. “Diffraction Effects and Images from Inclined Grain Boundaries in Polycrystalline Thin Films.”

First paper on thickness measurement in TEM

- J017 Carter, C.B., Donald, A.M. and Sass, S.L., 1980, *Phil. Mag.* **A41** (4), 467–476. “The Study of Grain Boundary Thickness Using Electron Diffraction Techniques.”

First paper on ceramics

- J023 Carter, C.B., Kohlstedt, D.L. and Sass, S.L., 1980, *J. Amer. Cer. Soc.* **63** (11–12), 623–627. “Electron Diffraction and Microscopy Studies of the Structure of Grain Boundaries in Al₂O₃.”

First paper on compound semiconductors

- J026 Carter, C.B., Roberts, J.S. and Wood, C.E.C., 1981, *Appl. Phys. Lett.* **38** (10), 805–807. “Glide of Dissociated Dislocations in III–V Compounds.”

Special paper

- J044 Carter, C.B. and Schmalzried, H., 1985, *Phil. Mag.* **A52** (2), 207–224. “The Growth of Spinel into Al₂O₃.”

A favorite paper

- J056 Carter, C.B., Elgat, Z. and Shaw, T.M., **1987**, *Phil. Mag.* **A55** (1), 21–38. “Lateral Twin Boundaries in Spinel.”

First paper with Jim Bentley

- J059 Simpson, Y.K., Carter, C.B., Morrissey, K.J., Angelini, P. and Bentley, J., 1986, *J. Mat. Sci.* **21**, 2689–2696. “The Identification of Thin Amorphous Films at Grain-Boundaries in Al_2O_3 .”

First paper on using thin films for reaction studies

- 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.”

First paper with Joe Michael

- J103 Tietz, L.A., Carter, C.B., Lathrop, D.K., Russek, S.E., Buhrman, R.A. and Michael, J.R., 1989, *J. Mater. Res.* **4** (5), 1072–1081. “Crystallography of $\text{YBa}_2\text{Cu}_3\text{O}_{6+x}$ Thin Film-Substrate Interfaces.”

First paper with a Nobel Laureate

- J168 Colbert, T.D., Zhang, J., McClure, S.M., Nikolaev, P., Chen, Z., Hafner, J.H., Owens, D.W., Kotula, P.G., Carter, C.B., Weaver, J.H., Rinzler, A.G. and Smalley, E.R., 1994, *Science* **266**, 1218–1222. “Growth and Sintering of Fullerene Nanotubes.”

First paper with Bob Hwang

- J176 Carter, C.B. and Hwang, R.Q., 1995, *Phys. Rev.* **B51** (7), 4730–4733. “Dislocations and the Reconstruction of (111) fcc Metal Surfaces.”

First paper with Doug Medlin

- J186 Medlin, D.L., Carter, C.B., Angelo, J.E., Mills, M.J., 1997, *Phil. Mag. A*, **75**(3), 733–747. “Climb and Glide of $a/3\langle 111 \rangle$ Dislocations in an Aluminum $\bar{3}$ Boundary.”

First papers on quantitative solid-state reactions

- J205 Kotula, P.G. and Carter, C.B., 1998, *J. Am. Ceram. Soc.* **81**, 2869–76 “Kinetics of Thin-Film Reactions of NiO with Al_2O_3 I: (0001) and $\{11\bar{2}0\}$ Reaction Couples.” Kotula, P.G. and Carter, C.B., 1998, *J. Am. Ceram. Soc.* **81**, 2877–84 “Kinetics of Thin-Film Reactions of NiO with Al_2O_3 II: $\{1\bar{1}00\}$ and $\{1\bar{1}02\}$ Reaction Couples.”