Short CV

Name	**Efstathios K. Polychroniadis**
Position	Professor, Department of Physics, AUTH
Studies	• BSc in Physics, Department of Physics, AUTH • PhD in Physics, Department of Physics, AUTH • Postdoctoral research fellowship, Electron Microscopy Laboratory, Material Science Department, Nuclear Energy Centre SCK/CEN, Belgium (1981-1982)
Scientific expertise	• Professor, Solid State Physics Section, Department of Physics, AUTH, 2006-today • Associate Professor, Solid State Physics Section, Department of Physics, AUTH, 1991-2006 • Assistant Professor, Solid State Physics Section, Department of Physics, AUTH, 1984-1991 • Lecturer, Solid State Physics Section, Department of Physics, AUTH, 1982-1984 • Assistant, 2nd Chair of Physics, School of Science, AUTH, 1973-1981
Research activities	• 169 papers in International Refereed Journals • 49 papers in International Refereed Scientific Conferences • 117 papers in Local and Bilateral Scientific Conferences • 9 Books/Book Chapters • 1900 third-party citations in referred journals • 14 Invited Lectures • Supervision of 9 PhDs • 17 research projects as coordinator on behalf of AUTH • Organization of 10 International Scientific Events (Conferences, Summer Schools) • Referee in 12 International Scientific Journals • Member of the Editorial Board of the a) Balkan Physics Letters and b) Analele Universitatii "Al. I. Cuza", Iasi, Fizica Research Topics: • Growth and microstructural characterization of crystalline materials by TEM (bulk, thin and thick films, coatings) • Study of phase transitions in crystalline and amorphous solids • Morphological characterization in micro- and nano-scale, phase identification in composite materials using electron diffraction
Five most important publications	1. Hsu, K.F., Loo, S., Guo, F., Chen, W., Dyck, J.S., Uher, C., Hogan, T., Polychroniadis, E.K., Kanatzidis, M.G., Cubic $AgPb_mSbTe_{2+m}$: Bulk thermoelectric materials with high figure of merit, *Science*, **303**, 818-821 (2004) (*Citations: 1058*) 2. Quarez, E., Hsu, K.F., Pcionek, R., Frangis, N., Polychroniadis, E.K., Kanatzidis, M.G., Nanostructuring, compositional fluctuations and atomic ordering in the thermoelectric materials $AgPb_mSbTe_{2+m}$. The myth of solid solutions, *Journal of The American Chemical Society*, **127**, 9177-90 (2005) (*Citations: 171*) 3. Miyasaka, M., Makihira, K., Asano, T., Polychroniadis, E., Stoemenos, J., In situ observation of nickel metal-induced lateral crystallization of amorphous silicon thin films, *Applied Physics Letters*, **80**, 944-946 (2002) (*Citations: 51*) 4. Kelaidopoulou, A., Abelidou, E., Papoutsis, A., Polychroniadis, E.K., Kokkinidis, G., Electrooxidation of ethylene glycol on Pt-based catalysts dispersed in polyaniline, *Journal of Applied Electrochemistry*, **28**, 1101-1106 (1998) (*Citations: 49*) 5. Polychroniadis, E., Syvajarvi, M., Yakimova, R., Stoemenos, J., Microstructural characterization of very thick freestanding 3C-SiC wafers, *Journal of Crystal Growth*, **263**, 68-75 (2004) (*Citations: 47*)