

Clifford T. Tanaka

Education:

Massachusetts Institute of Technology Cambridge, MA Ph.D. Electronic Materials 1999
Massachusetts Institute of Technology Cambridge, MA S.M. Materials Science 1996
Carnegie Mellon University Pittsburgh, PA B.S. Physics 1994

Professional Experience:

2005-present Senior Supervisory Scientist
1999- 2005 present Senior Staff Scientist Trex Enterprises Corporation

Publications:

.Spin-polarized tunneling in a half-metallic ferromagnet. C. Tanaka, J. Nowak, J. S. Moodera, Journal of Applied Physics, 86, 6239, 1999.

X. Gao, J. A. Woollam, R. D. Kirby, D. J. Sellmyer, C. T. Tanaka, J. Nowak, and J. S. Moodera, Dielectric Tensor for Magneto-Optic NiMnSb, Physical Review B, 59, 9965 (1999).

. Measuring the spin polarization of a metal with a superconducting point contact., R.J. Soulen Jr., J.M. Byers, M.S. Osofsky, B. Nadgorny, T. Ambrose, S.F. Cheng, P.R. Broussard, C.T. Tanaka, J. Nowak, J.S. Moodera, A. Barry and J.M.D. Coey, Science, 282, 85-8 (1998).

.Magnetoresistance in ferromagnet-insulator-ferromagnet tunnel junctions with half-metallic ferromagnet NiMnSb compound., C. T. Tanaka, J. Nowak and J. S. Moodera, J. Appl. Phys., 81, 5515-17 (1996)

Other Activities:

Co-chair, Visiting Lecturers Committee, Kauai County High Technology Education & Workforce Development

Summary:

Clifford Tanaka is a senior staff scientist with Trex Enterprises Corporation at its Advanced Materials facility in Lihue, HI. He is the program manager for Trex.s ferroelectric materials program, which he started in 2001. He also serves as engineering manager For Trex.s CVD silicon carbide operation. In his prior work as a graduate student at M.I.T., Dr. Tanaka investigated thin film tunneling devices using half-metallic NiMnSb alloy and successfully measured the spin-polarization of the material. He also fabricated a novel four-state memory device using the cubic magneto-crystalline anisotropy of the NiMnSb film.