

## Nanotechnology Research Publication Trends, 1990 Through Mid-2008

Given the rapid growth and multidisciplinary nature of nanotechnology, the ability to map the boundaries of this emerging field is central to understanding its research paths and commercialization prospects. CNS-ASU partners at Georgia Institute of Technology's Program on Nanotechnology Research and Innovation Systems Assessment have developed a search strategy that enables them to create real-time databases of nanotechnology research activity in the U.S. and globally.

Nano research publications are identified using Science Citation Index (SCI) records from the Web of Science (WOS). Nano publications can then be represented as a percentage of overall SCI publications.

This nano research database has recently been updated to reflect nanotechnology publications from 1990 through June 2008.

The data indicate that there has been growth in absolute annual publication numbers for every year from 1990 through mid-2008. However, there have been fluctuations in the rate of growth, with four observable periods: the first



period (1990-1996) represented a steadily increasing share of nano publications; the second period (2001-2005) saw a steep rise in share; the third period (2005-2007) showed a slight downturn in the rate of nano publication growth in 2006-2007; but the percentage is again larger in the fourth period (first half of 2008).



Similar updates to databases indicating nanotechnology publications in China show that China continues to gain on U.S. nanotechnology research and engineering activity.

the Center for Nanotechnology in Society

at Arizona State University are supported

by the National Science Foundation under cooperative agreement #0531194.

Dr. Philip Shapira, Professor of Public Policy, Georgia Institute of Technology Dr. Jan Youtie
Principal Research Associate, Economic Development Institute
Georgia Institute of Technology