List of Publications

- **46 invited book chapters and publications.**

- **Over 3000 citations from first author and second author papers alone.**
- **Total number of citations over 13000.**
- **H-index = 57.**
- **i10 = 272.**

An independent analysis of the field of high-temperature superconductors conducted by Thompson-Reuters’s Essential Science Indicators (ESI) and ScienceWatch.com, which tracks global trends and performance in research, **ranks Amit Goyal No. 1 worldwide in the total number of citations during the last decade (1999-2009).** He also ranks no. 4 worldwide in the total number of papers published in same timeframe (this is still the highest number of papers by anyone outside of Japan). A recent interview with Amit is posted on ScienceWatch (http://sciencewatch.com/ana/st/hts/09maySTHTSGoya/). The analysis, conducted by ScienceWatch.com ranked authors, institutions, and countries worldwide by no. of citations, no. of papers, and average citations per paper.

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**List of Publications**


13. “Robust superconducting FeSe$_{0.5}$Te$_{0.5}$ coated conductors at 30 tesla,” Weidong Si, Su Jung Han, Xiaoya Shi, Steven N. Ehrlich, J. Jaroszynski, Amit Goyal, and Qiang Li, Nature Communications, 4, Article number: 1347, 2013, doi:10.1038/ncomms2337.


22. “Nanotechnologies to enable high-performance superconductors for energy applications”, C. Cantoni and A. Goyal to be published in second edition of book


36. “Enhanced and uniform in-field performance in long (Gd, Y)-Ba-Cu-O tapes with...


56. “Extraction of misorientation components from the total misorientation at grain boundaries using electron diffraction in a Y0.9Sm0.1Ba2Cu3O7 film,” J. Li and A. Goyal, J. of Am. Cer. Soc., 91 (2008) 3045-3051.


64. “Control of Flux Pinning in MOD YBCO Coated Conductor,” Zhang W., Huang Y., Li X., Kodenkandath T., Rupich M. W., Schoop U., Verebelyi D. T., Thieme C. L.


78. “Analysis of flux pinning in YBa$_2$Cu$_3$O$_x$ films by nanoparticle-modified substrate


82. “Method to separate in-plane and out-of-plane misorientation from the total misorientation at grain boundaries in polycrystalline YBCO films,” J. Li and A. Goyal, published in the Proceedings of the Microscopy Society of America, July 30-Aug 6, 2006, Chicago, IL.


158. “Fabrication of high-critical current density YBa2Cu3O7-δ films using a fluorine-free


193. “Progress towards a low-cost commercial coated conductor,” S. Annavarapu, N.


247. “Demonstration of High Current Density YBCO Coated Conductors on Re$_2$O$_3$-
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276."Epitaxial Film Growth of Tl$_{0.78}$Bi$_{0.22}$Sr$_{1.6}$Ba$_{0.4}$Ca$_2$Cu$_3$O$_9$-y on Rolling Assisted Biaxially Textured Nickel Substrates with YSZ and CeO$_2$ Buffer Layers”, Z. F. Ren, J. Y. Lao, L. P. Guo, J. H. Wang, J. D. Budai, D. K. Christen, A. Goyal, M. Paranthaman, E. D. Specht and J. R. Thompson, *J. of Superconductivity*, vol. 1, pgs 159-161, 1998.


283."Grain Boundary Studies of High Temperature Superconducting Materials Using
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<td>341</td>
<td>“Stacking Faults Associated with 211 Particles and other Likely Pinning Centers in Melt-processed YBa$_2$Cu$<em>3$O$</em>{7-δ}$”, A. Goyal, Z. L. Wang, K. B. Alexander and D. M. Kroeger, Published in the Proceedings of the <em>International Workshop on Superconductivity</em>, June 23-26, 1992, Honolulu, Hawaii, U. S. A.</td>
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International Workshop on Superconductivity, June 23-26, 1992, Honolulu, Hawaii, U. S. A.


List of Invited Publications / Book Chapters


8. Invited Paper, titled “Effects on Jc of Pining Center Morphology for Multiple-in-


