

## List of Recent Papers

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Crystal Growth of Single-Domain YBCO Superconductors for Wireless Telecommunications

Donglu Shi

Invited article to be published in the 2001 YEARBOOK OF SCIENCE & TECHNOLOGY by McGraw-Hill

Effects of Oxygen Disorder on the Microwave Surface Resistance of Single Domain YBCO

D. Qu, Brian Tent, D. Shi, S. L. Lu, A. M. Ferendeci, and D. Mast  
Cryogenics, 2000, in press.

Structural Effects on Bioactivity of Hydroxyapatite

Donglu Shi, Gengwei Jiang, and Jennifer Bauer  
Submitted to Appl. Biomaterials, 2000

Sol Gel Synthesis of YBCO Film on Single Domain YBCO substrate for rf Development

Donglu Shi and David Qu  
Physica C, 353, 258—264, 2001

*In vitro* Behavior of Hydroxylapatite Prepared by a Thermal Deposition Method

Donglu Shi, Gengwei Jiang, and Xuejun Wen  
“Processing and Fabrication of Advanced Materials VIII,” eds K. Khor et al.  
(World Scientific, Singapore), p. 117, 2001.

Direct deposition of *c*-axis textured YBCO thick film on unoriented

metallic substrate for the development of long superconducting tapes  
X. J. Wen, D. Qu, B. A. Tent, Donglu Shi, M. Tomsic, L. Cowey, M. White,  
IEEE Transactions on Applied Superconductivity  
9: (2) 1506-1509, (1999).

Uniform Deposition of Ultrathin Polymer Films on the Surface of Alumin Nanoparticles by a Plasma Treatment

Donglu Shi and W. J. van Ooij  
Appl. Phys. Lett., 78, 1234 (2001)

Deposition of Extremely Thin Polymer Films on Carbon Nanotube Surfaces by a Plasma Treatment

Donglu Shi and W. J. van Ooij  
Appl. Phys. Lett., (2002) in press

Interfacial Bonding via an Ultrathin Polymer Film on Al<sub>2</sub>O<sub>3</sub> Nanoparticles For Low-Temperature Consolidation of Ceramics

Donglu Shi, S. X. Wang, Wim J. van Ooij, L. M. Wang, Jiangang Zhao  
J. of Mat Res., 17, 981-990, 2002

Plasma Deposition and Characterization of Acrylic Acid Thin Film on ZnO Nanoparticles

Donglu Shi Peng He, Jie Lian, L. M. Wang, Wim J. van Ooij  
J. of Mat Res., 17, 2555-2560, 2002

Multi-Layer Coating of Ultrathin Polymer Films on Nanoparticles of Alumina by a Plasma Treatment

Donglu Shi, S. X. Wang, Wim J. van Ooij, L. M. Wang, Jiangang Zhao  
Mat. Res.Soc. Symp. Vol. 635 (2001)

Deposition of Polymer Thin Films on ZnO Nanoparticles by a Plasma Treatment

Peng He, Jie Lian, M. Wang, Wim J. van Ooij, and Donglu Shi  
*Mat. Res. Soc. Symp.* Vol. 703 (2002)

Deposition and Interface Structures of YBCO Thin Films via a Non-Fluorine Sol Gel Route

Donglu Shi, Yongli Xu, S. X. Wang, J. Lian, L. M. Wang, S. M. McClellan, R Buchanan, and K. C. Goretta  
*Physica C* 371 97-103 (2002)

Interface Structure of YBCO Thin Films Prepared by a Non-Fluorine Sol Gel Route on a Single Crystal Substrate

Donglu Shi, Yongli Xu, J. Lian, Lumin Wang and S. McClellan  
*Supercon Sci&Tech.* 15 660-664 (2002)

Kinetics Study of *ab*-Plane Crack Propagation by a Modulus Measurement in Single-Domain  $\text{YBa}_2\text{Cu}_3\text{O}_x$

Donglu Shi, Philippe Odier<sup>1</sup>, Andre Sulpice<sup>1</sup>, D. Isfort<sup>1</sup>, X. Chaud<sup>1</sup>, R. Tournier<sup>1</sup>, P. He, and R. Singh  
*Physica C* (2002) in press

Preparation of YBCO Films on  $\text{CeO}_2$ -Buffered (001) YSZ Substrates by a Non-Fluorine MOD Method

Yongli Xu, A. Goyal, N.A. Rutter, D. Shi, P. M. Martin, and D. M. Kroeger  
*Physica C* (2002)

Fluorine-Free Sol Gel Deposition of Epitaxial YBCO Thin Films for Coated Conductors

Bing Zhao, Haibo Yao, Kai Shi, Zhenghe Han, Y. Xu, and D. Shi  
*Physica C* (2002)

Fabrication of High  $J_c$   $\text{YBa}_2\text{Cu}_3\text{O}_{7-\delta}$  Films Using A Fluorine-Free Sol Gel Approach

Yongli Xu, A. Goyal, N.A. Rutter, D. Shi, M. Paranthaman, S.Sathyamurthy<sup>2</sup>, P.M. Martin<sup>2</sup>, and D. M. Kroeger  
*Appl. Phys. Lett.* (2002)