**REFEREED JOURNAL ARTICLES Dr. DONGLU SHI**

|  |  |
| --- | --- |
|  | Progress in Circulating Tumor Cell Isolation: A Biomarkerless Approach  Zicheng Deng, Shengming Wu, Yilong Wang, Donglu Shi  eBioMedicine, (2022) in press |
|  | Solar harvesting and energy generating building skins with photothermal-photovoltaic modality based on porphyrin thin films  Jou Lin, John Krupczak, Donglu Shi  Submitted to *MRS Communications*, (2022) |
|  | Ultralong-Term Super-Resolution Tracking of Lysosomes in Brain Organoids by Near-Infrared Noble Metal Nanoclusters  Kangqiang Qiu, Aditya Yadav, Zhiqi Tian, Ziyuan Guo, Donglu Shi, Chayan K. Nandi,  and Jiajie Diao  *ACS Materials Lett*. <https://doi.org/10.1021/acsmaterialslett.2c00436> (2022) |
|  | Entrapment of Airborne Particles via Simulated Highway Noise-Induced Piezoelectricity in PMMA and EPDM  Mengyao Lyu, Som V. Thomas, Heng Wei, Julian Wang, Tiina A. Reponen,  Patrick H. Ryan, and Donglu Shi  Energies, 2022, 15, 4935. https://doi.org/10.3390/en15144935 (2022) |
|  | Transparent porphyrin-based hybrid films for spectral selective solar harvesting and energy generation  Jou Lin, Yuxin Wang, Mengyao Lyu, Donglu Shi  Solar Energy Materials and Solar Cells, 243 15 (2022) |
|  | Solar Harvesting through Multilayer Spectral Selective Iron Oxide and Porphyrin Transparent Thin Films for Photothermal Energy Generation  Mengyao Lyu, Jou Lin, John Krupczak, Donglu Shi  *Adv. Sustainable Systems*, <https://doi.org/10.1002/adsu.202100006> (2021) |
|  | Dual targeting with cell surface electrical charge and folic acid via superparamagnetic Fe3O4@Cu2-xS for photothermal cancer cell killing  Zicheng Deng, Jou Lin, Sergey L. Bud’ko4, Brent Webster, Tanya V. Kalin, Vladimir V.  Kalinichenko, and Donglu Shi  *Cancers* 2021, 13(21), 5275; https://doi.org/10.3390/cancers13215275 |
|  | Effect of Dipole Interactions on Blocking Temperature and Relaxation Dynamics of Superparamagnetic Iron-Oxide (Fe3O4) Nanoparticle Systems  M.E. Sadat1, Sergey L. Bud’ko, Rodney C. Ewing, Hong Xu, Giovanni M Pauletti,  David B. Mast, Donglu Shi  Submitted to *J of Magnetism and Magnetic Materials* (2022) |
|  | Solar Desalination via Multilayers of Transparent Photothermal Fe3O4@Cu2–xS Thin Films  Mengyao Lyu, Jou Lin, and Donglu Shi  *Energy Technology*, 2100590, DOI: 10.1002/ente.202100590 (2021) |
|  | Photothermal and photovoltaic properties of transparent thin films of porphyrin compounds for energy applications  Jou Lin and Donglu Shi  *Applied Physics Reviews*, 8, 011302 (2021); https://doi.org/10.1063/5.0036961 |
|  | Photonically-Activated Molecular Excitations for Thermal Energy Conversion in  Porphyrinic Compounds  Yuan Zhao, Jou Lin, David M. Kundrat, Mathias Bonmarin, John Krupczak Jr.,  Som V. Thomas, Mengyao Lyu, Donglu Shi,  *J. Phys. Chem*. C 2020, 124, 2, 1575-1584 (2020) |
|  | Nanoparticle Delivery Systems with Cell-specific Targeting for Pulmonary Diseases  Zicheng Deng, Gregory T Kalin, Donglu Shi, Vladimir V Kalinichenko  American Journal of Respiratory Cell and Molecular Biology  doi: 10.1165/rcmb.2020-0306TR (2020) |
|  | Processing of soft magnetic fine powders directly from as-spun partial crystalline Fe77Ni5.5Co5.5Zr7B4Cu ribbon via ball mill without devitrification  Som V. Thomas; Matthew A. Willard; Anthony Martone; Michael J. Heben; C.  Virgil Solomon; Aaron Welton; Punit Boolchand; Rodney C. Ewing; Chenxu Wang;  Sergey L. Bud’ko, Donglu Shi  *IEEE Transactions on Magnetics*, PP(99):1-1 (2020)  DOI: 10.1109/TMAG.2020.2984967 |
|  | Light angle dependence of photothermal properties in oxide and porphyrin thin ﬁlms for energy-efﬁcient window applications  Mengyao Lyu, Jou Lin, John Krupczak Jr., Donglu Shi  *MRS Communications*, doi:10.1557/mrc.2020.39 (2020) |
|  | Positively Charged Magnetic Nanoparticles for Capture of Circulating Tumor  Cells from Clinical Blood Samples  Shengming Wu, Yilong Wang, and Donglu Shi  *Nano LIFE*, DOI: 10.1142/S1793984419710016 |
|  | Optical thermal insulation via the photothermal effects of Fe3O4 and  Fe3O4@Cu2−xS thin ﬁlms for energy-efﬁcient single-pane windows  Jou Lin, Yuan Zhao, and Donglu Shi,  *MRS Communications* Volume 10, Issue 1, pp. 155-163 (2020) |
|  | Nanoparticle Delivery of Proangiogenic Transcription Factors into the  Neonatal Circulation Inhibits Alveolar Simplification Caused by Hyperoxia  Craig Bolte , Vladimir Ustiyan , Xiaomeng Ren , Andrew W. Dunn , Arun  Pradhan , Guolun Wang , Olena A. Kolesnichenko , Zicheng Deng ,  Yufang Zhang , Donglu Shi , James M Greenberg , Alan H Jobe ,  Tanya V. Kalin , and Vladimir V. Kalinichenko  *American Journal of Respiratory and Critical Care Medicine*,  <https://doi.org/10.1164/rccm.201906-1232OC> (2020) |
|  | Nanocrystallites via Direct Melt Spinning of Fe77Ni5.5Co5.5Zr7B4Cu for  Enhanced Magnetic Softness  Som V. Thomas Matthew A. Willard Anthony Martone Michael J. Heben  Virgil Solomon Aaron Welton Punit Boolchand Rodney C. Ewing  Chenxu Wang Sergey L Bud'ko Jie Song Donglu Shi  *Physica Status Solidi*, <https://doi.org/10.1002/pssa.201900680> (2020) |
|  | Rapid Label-Free Isolation of Circulating Tumor Cells from Patients’  Peripheral Blood Using Electrically Charged Fe3O4 Nanoparticles  Shengming Wu, Lei Gu, Jingwen Qin, Lei Zhang, Fenyong Sun, Zhongchen Liu,  Yilong Wang, and Donglu Shi  *ACS Appl. Mater. Interfaces*, 12, 4193−4203 (2020) |
|  | Remodeling of Cellular Surfaces via Fast DisulfideThiol Exchange to  Regulate Cell Behaviors  Lianghua He, Huaiji Wang, Yi Han, Kun Wang, Haiqing Dong, Yan Li,  Donglu Shi, and Yongyong Li  *ACS Appl. Mater. Interfaces*, 10.1021/acsami.9b17550 (2019) |
|  | Suppression of the innate cancer-killing activity in human granulocytes by stress reaction as a possible mechanism for affecting cancer development  Xin Huang, Wenjun Le, Qian Chen, Jingyao Chen, Yuqian Zhu, Donglu Shi,  Bingdi Chen & Zheng Cui  *Stress*, <https://doi.org/10.1080/10253890.2019.1645112> (2019) |
|  | A new DNA sensor system for specific and quantitative detection of mycobacteria  Franch, Oskar; Han, Xiao; Marcussen, Lærke Bay; Givskov, Asger; Andersen,  Marie Bech; Godbole, Adwait Anand; Harmsen, Charlotte; Nørskov-Lauritsen,  Niels; Thomsen, Jonas; Pedersen, Finn Skou; Wang, Yilong; Shi, Donglu;  Wejse, Christian; Pødenphant, Lone; Nagaraja, Valakunja; Bertl, Johanna;  Stougaard, Magnus; Ho, Yi-Ping; Hede, Marianne Smedegaard; Labouriau,  Rodrigo; Knudsen, Birgitta Ruth  *Nanoscale*, 11 (2), 587-597 (2019) DOI: 10.1039/c8nr07850e |
|  | Bioelectricity, Its Fundamentals, Characterization Methodology, and Applications in Nano-Bioprobing and Cancer Diagnosis  Yilong Wang, Xiao Han, Zheng Cui, and Donglu Shi  *Adv. Biosys*. 2019, 1900101 |
|  | Effective reduction of building heat loss without insulation materials via the photothermal effect of a chlorophyll thin ﬁlm coated “Green Window”,  Yuan Zhao, Andrew W. Dunn, and Donglu Shi  *MRS Communications* Volume 9, Issue 2 June 2019, pp. 675-681 |
|  | Nano Engineering of Artificial Granulocytes for Cancer Diagnosis and Therapeutics.  Shi, Donglu. https://doi.org/10.1142/S1793984418710010  *Nano Life* 8, no. 03 (2018): 1871001. |
|  | Detection of cancer cells based on glycolytic-regulated surface electrical charges  Wenjun Le, Bingdi Chen, Zheng Cui, Zhongmin Liu & Donglu Shi  Biophysics Reports volume 5, pages10–18 (2019) |
|  | “Minimalist” Nanovaccine Constituted from Near Whole Antigen for Cancer Immunotherapy.  Wang, Kun, Shuman Wen, Lianghua He, Ang Li, Yan Li, Haiqing Dong, Wei Li, Tianbin Ren, Donglu Shi, and Yongyong Li.  *ACS nano*, 12, no. 7 (2018): 6398-6409. |
|  | Glypican-1-antibody-conjugated gd–au nanoclusters for FI/MrI dual-modal targeted detection of pancreatic cancer.  Huang, Xin, Chengqi Fan, Huanhuan Zhu, Wenjun Le, Shaobin Cui, Xin Chen,  Wei Li, Donglu Shi  *International journal of nanomedicine*, 13 (2018): 2585. |
|  | Highly Efficient In Vivo Targeting of the Pulmonary Endothelium Using Novel Modifications of Polyethylenimine: An Importance of Charge.  Dunn, Andrew W., Vladimir V. Kalinichenko, and Donglu Shi.  *Advanced healthcare materials*,(2018): 1800876. |
|  | Electrical-charge mediated cancer cell targeting via protein corona decorated superparamagnetic nanoparticles in simulated physiological environment.  Zhao, Jian, Shengming Wu, Jingwen Qin, Donglu Shi, and Yilong Wang.  *ACS applied materials & interfaces*, (2018). |
|  | A titanium-based photo-Fenton bifunctional catalyst of mp-MXene/TiO 2− x nanodots for dramatic enhancement of catalytic efficiency in advanced oxidation processes.  Cheng, Xiaomei, Lianhai Zu, Yue Jiang, Donglu Shi, Xiaoming Cai, Yonghong Ni,  Sijie Lin, and Yao Qin.  *Chemical Communications*,54, no. 82 (2018): 11622-11625. |
|  | [Nanomaterials for Cancer Precision Medicine](https://onlinelibrary.wiley.com/doi/abs/10.1002/adma.201705660)  Yilong Wang, Shuyang Sun, Zhiyuan Zhang, Donglu Shi,  *Advanced Materials*, 2018, 30, 1705660 |
|  | Fever-Inspired Immunotherapy Based on Photothermal CpG Nanotherapeutics: The Critical Role of Mild Heat in Regulating Tumor Microenvironment  Yan Li, Lianghua He, Haiqing Dong, Yiqiong Liu, Kun Wang, Ang Li, Tianbin Ren, Donglu Shi, Yongyong Li  *Advanced Science* (2018) |
|  | Cancer Cell Surface Negative Charges: A Bio-Physical Manifestation of the Warburg Effect  Donglu Shi  *Nano LIFE* (2017), Vol. 7, No. 3&4, 1771001 |
|  | Spectral selective and photothermal nano structured thin films for energy efficient windows  Julian Wang, Donglu Shi  *Applied Energy*, Vol. 208 (2017) 83-96 |
|  | Targeting and Regulating of an Oncogene via Nanovector Delivery of MicroRNA using Patient-Derived Tumor Xenografts  Shuyang Sun, Yilong Wang, Rong Zhou, Zicheng Deng, Yong Han, Xiao Han,  Wenjie Tao, Zi Yang, Chaoji Shi, Duo Hong, Jiang Li, Donglu Shi, and Z. Zhang  *Theranostics* Vol. 7, Issue 3, p. 677 (2017) |
|  | Photothermal effect on Fe3O4 nanoparticles irradiated by white-light for energy-efficient window applications  Yuan Zhao, M.E. Sadat, Andrew Dunn, Hong Xu, Chien-Hung Chen, Wagner  Nakasuga, Rodney C. Ewing, Donglu Shi  *Solar Energy Materials & Solar Cells* 161 (2017) 247–254 |
|  | *In Situ* Synthesis of Graphene Oxide/Gold Nanorods Theranostic Hybrids for Efficient Tumor CT Imaging and Photothermal Therapy   * Bingmei Sun, Jinrui Wu, Shaobin Cui, Huanhuan Zhu, Wei An, Qingge Fu, * Chengwei Shao, Aihua Yao, Bingdi Chen, Donglu Shi * *Nano Research* 2017, Volume 10, [Issue 1](https://link.springer.com/journal/12274/10/1/page/1), pp 37–48 |
|  | Biomarkerless targeting and photothermal cancer cell killing by surface-electrically-charged superparamagnetic Fe3O4 composite nanoparticles  Xiao Han, Zicheng Deng, Zi Yang, Yilong Wang, Huanhuan Zhu, Bingdi Chen,  Zheng Cui, Rodney C. Ewing and Donglu Shi  *Nanoscale* 2017, **9**, 1457-1465 |
|  | Polymeric Vectors for Strategic Delivery of Nucleic Acids  Andrew Dunn, Donglu Shi  *Nano LIFE* (2017), Vol. 7, No. 2, 1730003 |
|  | Green Synthesis of Sub-10 nm Gadolinium-Based Nanoparticles for Sparkling Kidneys, Tumor, and Angiogenesis of Tumor-Bearing Mice in Magnetic Resonance Imaging  Bingbo Zhang, Weitao Yang, Jiani Yu, Weisheng Guo, Jun Wang, Shiyuan Liu,  Yi Xiao, and Donglu Shi  *Adv. Healthcare Mater.* 2017, 6. 1600865 |
|  | Site-specific Biomimetic Precision Chemistry of Bimodal Contrast Agent with Modular Peptides for Tumor-targeted Imaging  Zhang B, Wang J, Yu J, Fang X, Wang X, Shi D  *Bioconjug Chem.* 2017 Feb 15;28(2):330-335 |
|  | Human Periodontal Ligament Stem Cell Spheroids Afford Enhanced Osteogenic Potency In vitro and In vivo,  Jing Chen, Peng Zhao Ph.D, Lingyun Gao M.M., Chao Lin Ph.D, Yuhui  Wang, Xuejun Wen, Donglu Shi, Yuehua Liu  *Journal of Biomaterials and Tissue Engineering*, Volume  6, Number 11, November 2016, pp. 890-901(12) |
|  | A Graphene Quantum Dot (GQD) Nanosystem with Redox-Triggered Cleavable PEG Shell Facilitating Selective Activation of Photosensitiser for Photodynamic Therapy  Yan Li, Zhiyong Wu, Dou Du,Haiqing Dong, Donglu Shi,and Yongyong Li  *RSC Advances* **6**, 6516-6522 (2016) |
|  | Redox-mediated dissociation of PEG–polypeptide-based micelles for on-demand release of anticancer drugs  Huiyun Wen, Haiqing Dong, Jie Liu, Aijun Shen, Yongyong Li and Donglu Shi  *J. Mater. Chem. B****,*** 2016, 4, 7859 |
|  | In-vitro depth-dependent hyperthermia of human mammary gland adenocarcinoma  Andrew W. Dunn, Yu Zhang, David Mast, Giovanni M. Pauletti, Hong Xu,  Jiaming Zhang, Rodney C. Ewing, Donglu Shi  *Materials Science and Engineering C* 69 (2016) 12–16 |
|  | Drug loaded nanoparticle coating on totally bioresorbable PLLA stents to prevent in-stent restenosis  Jian Zhao, Zhichao Mo, Fangfang Gu, Donglu Shi, Qian Qian Han, Qing Liu  *J of Biomedical Materials Research Part. B* JBMR-B-16-0160.R1 |
|  | Targeting Negative Surface Charges of Cancer Cells by Multifunctional Nanoprobes  Bingdi Chen,Wenjun Le,Yilong Wang, Zhuoquan Li, Dong Wang, Lei Ren,  Ling Lin, Shaobin Cui,Jennifer J. Hu, Yihui Hu, Pengyuan Yang,  Rodney C. Ewing, Donglu Shi, Zheng Cui  *Theranostics*, 2016; 6(11): 1887–1898. |
|  | Enhanced mechanical properties of PLA/PLAE blends via well-dispersed and compatilized nanostructures in the matrix  Shenyang Cai, Chao Zeng,Naiwen Zhang, Jianbo Li,Markus Meyer,  Rainer H. Fink, Donglu Shi and Jie Ren  RSC Adv., 2016, 6, 25531 |
|  | A multimodal system with synergistic effects of magneto-mechanical, photothermal, photodynamic and chemo therapies of cancer in graphene-quantum dot-coated hollow magnetic nanospheres  Fangjie Wo, Rujiao Xu, Yuxiang Shao, Zheyu Zhang, Maoquan Chu, Donglu Shi,  Shupeng Liu  *Theranositcs* 6 (4), 485-500 (2016) |
|  | Design and development of anisotropic inorganic/polystyrene nanocomposites by surface modification of zinc oxide nanoparticles  [Xiao Han](http://www.sciencedirect.com/science/article/pii/S0928493116302326), [Shiming Huang](http://www.sciencedirect.com/science/article/pii/S0928493116302326), [Yilong Wang](http://www.sciencedirect.com/science/article/pii/S0928493116302326), Donglu Shi  *Materials Science and Engineering: C*, [64](http://www.sciencedirect.com/science/journal/09284931/64/supp/C), 1, 87 (2016) |
|  | Photo-fluorescent and magnetic properties of iron oxide nanoparticles for biomedical applications  Donglu Shi, M. E. Sadat, Andrew W. Dunn, David B. Mast  *Nanoscale*(2015) 7 8209-8232 |
|  | Photothermal effects and toxicity of Fe3O4 nanoparticles via near infrared laser irradiation for cancer therapy  Andrew W. Dunn, Sadat M. Ehsan, David Mast, Giovanni M. Pauletti, Hong Xu,  Jiaming Zhang, Rodney C. Ewing, Donglu Shi  *Materials Science and Engineering C* 46 (2015) 97–102 |
|  | An “imaging-biopsy” strategy for colorectal tumor reconfirmation by  multipurpose paramagnetic quantum dots  Xiaohong Xing, Bingbo Zhang, Xiaohui Wang, Fengjun Liu,  Donglu Shi,Yingsheng Cheng  *Biomaterials* 48 (2015) 16e25 |
|  | Reversible PEGylation and Schiff-base linked imidazole modification of polylysine for highperformance gene delivery  Xiaojun Cai, Yongyong Li, Dong Yue, Qiangying Yi, Shuo Li,  Donglu Shi, and Zhongwei Gu  *J. Mater. Chem. B*, 2015, 3, 1507–1517, 1507 |
|  | Development of a Highly Active Electrocatalyst via Ultrafine Pd Nanoparticles Dispersed on Pristine Graphene  Jian Zhao, Zhensheng Liu, Hongqi Li, Wenbin Hu, Changzhi Zhao, Peng Zhao,  and Donglu Shi  *Langmuir* 2015, 31, 2576−2583 |
|  | Magnetothermally responsive star-block copolymeric micelles for controlled drug delivery and enhanced thermo-chemotherapy  Li Deng, Jie Ren, Jianbo Li, Junzhao Leng, Yang Qu, Chao Lin and Donglu Shi  *Nanoscale*(2015), 7, 9655 |
|  | Disulfide-Bridged Cleavable PEGylation in Polymeric Nanomedicine for Controlled Therapeutic Delivery  Haiqing Dong, Bin He, Yan Li, Min Tang, Yongyong Li, Donglu Shi  *Nanomedicine*(2015) 10(1258 ): 1941- 58 |
|  | Nanospherical Surface-supported Seeded Growth of Au Nanowires: Investigation on A New Growth Mechanism and High-performance Hydrogen Peroxide Sensors  Ying Li, Lianhai Zu, Guanglei Liu, Yao Qin, Donglu Shi, Jinhu Yang  *Particle & Particle Systems Characterization* (2015) 32 498-504 |
|  | Particle Systems for Stem Cell Applications  Xiaowei Li, Xiaoyan Liu, Donglu Shi, Xuejun Wen  *Journal of Biomedical Nanotechnology* (2015) 11 1107-1123 |
|  | Graphene-based nanovehicles for photodynamic medical therapy    Yan Li, Haiqing Dong, Yongyong Li, Donglu Shi  *International Journal of Nanomedicine* (2015) 10 2451-2459 |
|  | An advanced electrocatalyst with exceptional eletrocatalytic activity via ultrafine Pt-based trimetallic nanoparticles on pristine graphene  Jian Zhao, Hongqi Li, Zhensheng Liu, Wenbin Hu, Changzhi Zhao, Donglu Shi  *Carbon* (2015) 87 116-127 |
|  | Detection of Mycobacterium tuberculosis based on H37Rv binding peptides using surface functionalized magnetic microspheres coupled with quantum dots – a nano detection method for Mycobacterium tuberculosis  Hua Yang, Hui Ma, Yilong Wang, Bingbo Zhang, Lianhua Qin,  Zhonghua Liu, Junmei Lu, Xiaochen Huang, Jie Wang,  Donglu Shi, Zhongyi Hu  *International Journal of Nanomedicine* (2015) 10 77-88 |
|  | Light-Concentrating Plasmonic Au Superstructures with Signiﬁcantly Visible-Light-Enhanced Catalytic Performance  Jinhu Yang, Ying Li, Lianhai Zu, Lianming Tong, Guanglei Liu, Yao Qin, Donglu Shi  *ACS Applied Materials & Interfaces* (2015) *7* (15), 8200-8208 |
|  | Preparation of Spherical Caged Superparamagnetic Nanocomposites with Completed Inorganic Shell via a Modified Miniemulsion Technology  Tian Li, Xiao Han, Yilong Wang, Feng Wang, Donglu Shi  *Colloids Surf Physicochem Eng Aspects* (2015) 477 84-89 |
|  | Historical and Practical Perspective of the Unique Surface Electrical Properties of Cancer Cells  Dong Wang, Wen-ying Wang, Zheng Cui, Dong-lu Shi  *Science Insights* 2015; 11(3):346-354 |
|  | Photoluminescence and photothermal effect of Fe3O4 nanoparticles for medical imaging and therapy  M. E. Sadat,Masoud Kaveh, Andrew W. Dunn, H. P.Wagner, Rodney Ewing,Jiaming Zhang, Hong Xu, Giovanni M Pauletti, David B. Mast, Donglu Shi  *Applied Physics Letters*, 105, 091903 (2014) |
|  | Three-dimensional graphitized carbon nanovesicles for high-performance supercapacitors based on ionic liquids    Chengxin Peng, Zubiao Wen, Yao Qin, Lukas Schmidt-Mende,  Chongzhong Li, Shihe Yang, Donglu Shi, and Jinhu Yang  *ChemSusChem* (2014) 7 777-784 |
|  | Fabrication of hierarchical core–shell Au@ZnO heteroarchitectures initiated by heteroseed assembly for photocatalytic applications  Yao Qin, Yanjie Zhou, Jie Li, Jie Ma, Donglu Shi, Junhong Chen, Jinhu Yang  *J Colloid Interface Sci* (2014) 418 171-177 |
|  | Spinous TiO2 and Au@TiO2 octahedral nanocages: Amorphisity-to-crystallinity transition-driven surface structural construction and photocatalytic study  Jie Li, Lianhai Zu, Ying Li, Chao Jin, Yao Qin, Donglu Shi, Jinhu Yang  *J Colloid Interface Sci* (2014) 426 90-98 |
|  | Suppression of VEGF by Reversible-PEGylated Histidylated Polylysine in Cancer Therapy  Xiaojun Cai, Haiyan Zhu, Haiqing Dong, Yongyong Li,  Jiansheng Su, Donglu Shi  *Advanced Healthcare Materials* (2014) 3 1818-1827 |
|  | Enhanced synergism of thermo-chemotherapy by combining highly efficient magnetic hyperthermia with magnetothermally-facilitated drug release  Yang Qu, Jianbo Li, Jie Ren, Junzhao Leng, Chao Lin, and Donglu Shi  *Nanoscale* (2014) 6 12408-12413 |
|  | Inhibition of glioma proliferation and migration by magnetic nanoparticle mediated JAM-2 silencing  Lifeng Qi, Jing Liu, Haiyan Zhu, Zhuoquan Li, Kun Lu, Tian Li, Donglu Shi  *J Mater Chem B.The Royal Society of Chemistry* (2014) 2 7168-7175 |
|  | Effect of physiochemical property of Fe3O4 particle on magnetic lateral flow immunochromatographic assay  Jun Yan, Yingying Liu, Yilong Wang, Xiaowei Xu, Ying Lu,  Yingjie Pan, Fangfang Guo, Donglu Shi  *Sensors Actuators B: Chem* (2014) 197 129-136 |
|  | Pluronic-encapsulated natural chlorophyll nanocomposites for in vivo cancer imaging and photothermal/photodynamic therapies  Maoquan Chu, Haikuo Li, Qiang Wu, Fangjie Wo, Donglu Shi  *Biomaterials* 35 (2014) 8357e8373 |
|  | Stem Cell-Based Tissue Engineering for Regenerative Medicine  Donglu Shi, Rigwed Tatu, Qing Liu, Hossein Hosseinkhani  *Nano LIFE* (2014), Vol. 4, No. 2, 1430001 |
|  | Surface engineered antifouling optomagnetic SPIONs for bimodal targeted imaging  of pancreatic cancer cells  Xiaohui Wang, Xiaohong Xing, Bingbo Zhang, Fengjun Liu,  Yingsheng Cheng, Donglu Shi  *International Journal of Nanomedicine* (2014) 9 1601–1615 |
|  | Nanostructured Mesoporous Silica Wires with Intrawire Lamellae via Evaporation-Induced Self-Assembly in Space-Confined Channels  Michael Z. Hu, Donglu Shi, and Douglas A. Blom  *Journal of Nanomaterials*, Volume (2014), Article ID 932160 |
|  | Effect of spatial confinement on magnetic hyperthermia via dipolar interactions in Fe3O4 nanoparticles for biomedical applications  M.E. Sadat, Ronak Patel, Jason Sookoor, Sergey L. Bud'ko, Rodney C. Ewing, Jiaming Zhang, Hong Xu, Yilong Wang, Giovanni M. Pauletti, David B. Mast, Donglu Shi  *Materials Science and Engineering C* 42 (2014) 52–63 |
|  | Dipole-interaction mediated hyperthermia heating mechanismof nanostructured Fe3O4 composites  M.E. Sadat, Ronak Patel, Sergey L. Bud'ko, Rodney C. Ewing, Jiaming Zhang, Hong Xu, David B. Mast, Donglu Shi  *Materials Letters* 129 (2014) 57–60 |
|  | Dual Surface-functionalized Janus Nanocomposites of Polystyrene/Fe3O4@SiO2 for Simultaneous Tumor Cell Targeting and Stimulus-induced Drug Release  Feng Wang, G. M. Pauletti, Juntao Wang, J. M. Zhang, R. C. Ewing, Y L Wang, Donglu Shi  *Advanced Materials* (2013), 25, 3485–3489 (2013) |
|  | JAM-2 siRNA intracellular delivery and real-time imaging by proton-sponge coated quantum dots  Lifeng Qi,Weijun Shao and Donglu Shi  *J. Mater. Chem. B*, (2013), 1, 654–660 |
|  | Near-infrared laser light mediated cancer therapy by photothermal effect of Fe3O4 magnetic nanoparticles  Maoquan Chu, Yuxiang Shao, Jinliang Peng, Xiangyun Dai, Haikuo Li, Qingsheng Wu, Donglu Shi  *Biomaterials* 34 (2013) 4078e4088 |
|  | Effect of lanthanum content and substrate strain on structural and electrical properties of lead lanthanum zirconate titanate thin films Films  Sheng Tong, Manoj Narayanan, Beihai Ma, Shanshan Liu, Rachel E. Koritala, Uthamalingam Balachandran, and Donglu Shi  [*Materials Chemistry and Physics*](http://www.sciencedirect.com/science/journal/02540584), [140, 2–3](http://www.sciencedirect.com/science/journal/02540584/140/2), (2013), p. 427–430 |
|  | Dual Surface-Functionalized Superparamagnetic Janus Nanocomposites of Polystyrene/Fe3O4@SiO2 Via a One-Pot Miniemulsion Method  Feng Wang, Yilong Wang, Donglu Shi  *Nano LIFE* (2017), Vol. 3, No. 4, 1343006 |
|  | Lead Lanthanum Zirconate Titanate Ceramic Thin Films for Energy Storage  Sheng Tong, Beihai Ma, Manoj Narayanan, Shanshan Liu, Rachel Koritala, Uthamalingam Balachandran, and Donglu Shi  *ACS Appl. Mater. Interfaces* (2013), 5, 1474−1480 |
|  | Highly Ordered Monolayer/Bilayer TiO2 Hollow Sphere Films with Widely Tunable Visible-light Reflection and Absorption Band  Jie Li, Yao Qin, Chao Jin, Ying Li, Donglu Shi, Lihua Gan, and Jinhu Yang  *Nanoscale*, (2013), DOI:10.1039/C3NR00778B. |
|  | Double-side ZnO nanorod arrays on single-crystal Ag holed microdisks with enhanced photocataltytic efficiency  Yuanhui Zuo, Yao Qin, Chao Jin, Donglu Shi, Q. H. Wu and Jinhu Yang  *Nanoscale*, (2013), 5, 4388-4394 |
|  | Dielectric behavior of lead lanthanum zirconate titanate thin films deposited on different electrodes/substrates  Sheng Tong, Beihai Ma, Manoj Narayanan, Shanshan Liu, Uthamalingam Balachandran, Donglu Shi  *Materials Letters* 106 (2013) 405–408 |
|  | Effective Reduction of Nonspecific Binding by Surface Engineering of Quantum Dots with Bovine Serum Albumin for Cell-Targeted Imaging  Bingbo Zhang, X. H. Wang, Fengjun Liu, Yingsheng Cheng, and Donglu Shi  *Langmuir* 2012, 28, 16605−16613 |
|  | Magnetocaloric effect in magnetothermally-responsive nanocarriers for hyperthermia-triggered drug release  Jianbo Li, Yang Qu, Jie Ren, Weizhong Yuan, and Donglu Shi  *Nanotechnology* 23 (2012) 505706 (10pp) |
|  | Engineered Multifunctional Nanocarriers for Cancer Diagnosis and Therapeutics  Donglu Shi,Hoon Song Cho, Nick Bedford  *Small*,7, 18, 2549–2567, (2011) |
|  | A Versatile Multicomponent Assembly via β -cyclodextrin Host–Guest Chemistry on Graphene for Biomedical Applications  Dong, Yongyong Li, Jinhai Yu, Yanyan Song, Xiaojun Cai, Jiaqiang Liu, Jiaming Zhang, Rodney C. Ewing, and Donglu Shi  *Small*, 9, 3, 446-456, 2012 |
|  | Bioinspired synthesis of gadolinium-based hybrid nanoparticles as MRI blood pool contrast agents with high relaxivity  Bingbo Zhang, H. T. Jin, Yan Li, Bingdi Chen, Shiyuan Liu and Donglu Shi  *J. Mater. Chem.*, (2012), 22, 14494–14501 |
|  | Engineered Redox-Responsive PEG Detachable Mechanism in PEGylated Nano-graphene Oxide for Intracellular Drug Delivery  Huiyun Wen, Chunyan Dong, Haiqing Dong, Aijun Shen, Wenjuan Xia,  Xiaojun Cai, Yanyan Song, Xuequan Li, Yongyong Li,\* and  Donglu Shi\*  *Small*, 8, 5, 760-769 (2012) |
|  | Effective Gene Delivery Using Stimulus-Responsive Catiomer Designed with Redox-Sensitive Disulfide and Acid-Labile Imine Linkers  Xiaojun Cai, Chunyan Dong, Haiqing Dong, Gangmin Wang, Giovanni M. Pauletti, X. J. Pan, Huiyun Wen, Isaac Mehl, Yongyong Li, and Donglu Shi  *Biomacromolecules* (2012), 13, 1024−1034 |
|  | Engineered Redox-Responsive PEG Detachable Mechanism in PEGylated Nano-graphene Oxide for Intracellular Drug Delivery  Huiyun Wen, Haiqing Dong, Aijun Shen, Wenjuan Xia, Xuequan Li, Jinhai Yu, Xiaojun Cai, Yongyong Li, and Donglu Shi  *Small,* 7, 18, p. 2549–2567, (2011) |
|  | Improving colloidal properties of quantum dots with combined silica and polymer coatingsfor in vitro immuofluorenscence assay  Bingbo Zhang, Da Xing, Chao Lin, Fangfang Guo, Peng Zhao, Xuejun Wen, Zhihao Bao, Donglu Shi  *J Nanopart Res* (2011) 13:2407–2415 |
|  | Preparation of highly fluorescent magnetic nanoparticles for analytes-enrichment and subsequent biodetection  Bingbo Zhang, Bingdi Chen, Yilong Wang, F. F. Guo, Z. Li, Donglu Shi  *Journal of Colloid and Interface Science* 353 (2011) 426–432 |
|  | Magnetic alignment of Ni/Co-coated carbon nanotubes in polystyrene composites  Donglu Shi, Peng He, Peng Zhao, Fang Fang Guo, Feng Wang, Chris Huth, Xavier Chaud,Sergey L. Bud’ko , Jie Lian  *Composites Part B: Engineering*, 42, 6, p. 1532-1538, (2011) |
|  | Preparation of highly ﬂuorescent magnetic nanoparticles for analytes-enrichment and subsequent biodetection  Bingbo Zhang, Bingdi Chen, Yilong Wang, Fangfang Guo, Zhuoquan Li, Donglu Shi  *Journal of Colloid and Interface Science* 353 (2011) 426–43 |
|  | Improving colloidal properties of quantum dots with combined silica and polymer coatingsfor in vitro immuoﬂuorenscence assay  Bingbo Zhang, Da Xing, Chao Lin, Fangfang Guo, Peng Zhao, Xuejun Wen, Zhihao Bao, Donglu Shi  *J Nanopart Res* (2011) 13:2 |
|  | Engineered Multifunctional Nanocarriers for Cancer Diagnosis and Therapeutics  Donglu Shi, Nicholas M. Bedford, and Hoon-Sung Cho  *Small*, 7, 18, p. 2549–2567, (2011) |
|  | Rapidly disassembling nanomicelles with disulfide-linked PEG shells for glutathione-mediated intracellular drug delivery  Hui-Yun Wen, Hai-Qing Dong, Wen-juan Xie, Yong-Yong Li,Kang Wang,Giovanni M. Paulettic and Donglu Shi  *Chem. Commun.*, 47, 3 (2011) |
|  | The potential of magnetic nanocluster and dual-functional protein-based strategy for noninvasive detection of HBV surface antibodies  Hengyao Hu, Hao Yang, Ding Li, Kan Wang, Jing Ruan, Xueqing Zhang, Jun Chen, Chenchen Bao, Jiajia Ji, Donglu Shi, and D.X. Cui  *Analyst*, (2010) *4* (9), 5398–5404 |
|  | Unique role of ionic liquid in microwave-assisted synthesis of monodisperse magnetite nanoparticles  Hengyao Hu, Hao Yang, Peng Huang, Daxiang Cui, Yanqing Peng, Jingchang Zhang, Fengyuan Lu, Jie Liand and Donglu Shi  *Chem. Commun*, (2010), 1-3, 1 |
|  | A Molecular Mechanics Study on the Effect of Surface Modification on the Interfacial Properties in Carbon Nanotube/Polystyrene Nanocomposites  Dong Qian,Peng He, Donglu Shi  *Journal for Multiscale Computational Eng.*, (2010), 8(2) |
|  | Phospholipid Assembly on Superparamagnetic Nanoparticles for Thermoresponsive Drug Delivery Applications  Christopher Huth, Donglu Shi, Feng Wang, Donald Carrahar, Jie Lian, Fengyuan Lu, Jiaming Zhang, Rodney C. Ewing, Giovanni M. Pauletti  *Nano LIFE* (2010), Vol. 01 No. 3&4, 251-261 |
|  | Fluorescent, Superparamagnetic Nanospheres for Drug Storage, Targeting, and Imaging: A Multifunctional Nanocarrier System for Cancer Diagnosis and Treatment  Hoon-Sung Cho,Zhongyun Dong,Giovanni M. Pauletti, Jiaming Zhang, Hong Xu, Hongchen Gu, Lumin Wang, Rodney C. Ewing, Christopher Huth, Feng Wang, and Donglu Shi  *ACS Nano* (2010) Vol. 4, NO. 9, p.5398 |
|  | Fluorescent Magnetic Nanoprobes for in vivo Targeted Imaging and Hyperthermia Therapy of Prostate Cancer  Daxiang Cui, Yuedong Han, Zhiming Li, Hua Song, Kan Wang, Rong He, Bing Liu, Heliang Liu, C. C. Bao，Peng Huang, Jin Ruan, Feng Gao, Hao Yang, Hoon Sung Cho, Qiushi Ren, Donglu Shi  *Nano Biomedicine And Engineering* (2009), 1, 94-112 |
|  | Surface charge induced Stark effect on luminescence of quantum dots conjugated on functionalized carbon nanotubes  W. Wang, G.K. Liu, H.S. Cho, Y. Guo, Donglu Shi, J. Lian, R.C. Ewing  *Chemical Physics Letters* (2009), 469, 149–152 |
|  | Small angle light scattering study of improved dispersion of carbon nanofibers in water by plasma treatment  Jian Zhao, Donglu Shi, Jie Lian  *Carbon* 47, (2009), 2329 –2336 |
|  | Anti-tumor activity of paclitaxel-loaded chitosan nanoparticles: An in vitro study  Fang Li, Jianing Li, Xuejun Wen, Shenghu Zhou, Xiaowen Tong, Pingping Su, Hong Li, Donglu Shi  *Mater. Sci & Eng C*, (2009) |
|  | Integrated Multifunctional Nanosystems for Medical Diagnosis and Treatment  Donglu Shi  *Advanced Functional Materials*, (2009), 19, 3356–3373 |
|  | 5f-6d orbital hybridization of trivalent uranium in crystals of hexagonal symmetry: Effects on electronic energy levels and transition intensities  Wei Wang, Guokui Liu, M. G. Brik, L. Seijo, and Donglu Shi,  *Phys Rev. B.* (2009), 80, 1 |
|  | Anti-tumor activity of paclitaxel-loaded chitosan nanoparticles: An in vitro study  Fang Li, Jianing Li, Xuejun Wen, Shenghu Zhou, Xiaowen Tong, Pingping Su, Hong Li and Donglu Shi  *Mater. Sci. Eng. C* (2009), doi:10.1016/j.msec.2009.07.001 |
|  | Improved dispersion of PEG-functionalized carbon nanofibers in toluene  Jian Zhao, Guangzhe Piao, XinWang, Jie Lian, ZhaoboWang, Hongqi Hu, Li Chen, XuyunWang, Yong Tao, Donglu Shi  *Mater. Sci. Eng. C* 29 (2009), 742-745 |
|  | Small angle light scattering study of improved dispersion of carbon nanofibers in water by plasma treatment  Jian Zhao, Donglu Shi, Jie Lian  *Carbon* 47 (2009) 2329-2336 |
|  | Fluorescent Polystyrene–Fe3O4 Composite Nanospheres for In Vivo Imaging and Hyperthermia  Donglu Shi, Hoon Sung Cho, Yan Chen, Hong Xu, Hongchen Gu, Jie Lian, Wei Wang, Guokui Liu, Christopher Huth, Lumin Wang, Rodney, C. Ewing, Sergei Budko, Giovanni M. Pauletti, and Zhongyun Dong  *Advanced Materials* 2009, 21, 1–4 |
|  | Asymmetric Composite Nanoparticles with Anisotropic Surface Functionalities  YilongWang, Hong Xu, Weili Qiang, Hongchen Gu, and Donglu Shi  *Journal of Nanomaterials* V. 2009, Article ID 620269, 5 pp |
|  | Nanoscale Solute Partitioning in Bulk Metallic Glasses  Ling Yang, Michael K. Miller, Xun-Li Wang, Chain T. Liu, Alexandru, D. Stoica, Dong Ma, Jonathan Almer, and Donglu Shi  *Advanced Materials* 2008, 20, 1–4 |
|  | Size-independent residual magnetic moments of colloidal Fe3O4-polystyrene nanospheres detected by ac susceptibility measurements  Du-Xing Chen, Alvaro Sanchez, Hong Xu, Hongchen Gu, and Donglu Shi  *J of Appl. Phys.* 104, 093902 (2008) |
|  | Quantum dot conjugated hydroxylapatite nanoparticles for in vivo imaging  Yan Guo, Donglu Shi, Jie Lian, Zhongyun Dong, Wei Wang, Hoonsung Cho, Guokui Liu, LuminWang and Rodney C Ewing  *Nanotechnology* 19 (2008) 175102 (6pp) |
|  | Low-Temperature Preparation of Amorphous-Shell/Nanocrystalline-Core Nanostructured TiO2 Electrodes for Flexible Dye-Sensitized Solar Cells  Dongshe Zhang, Hengyao Hu, Laifeng Li, and Donglu Shi  *Journal of Nanomaterials* Volume 2008, 271631 |
|  | Enhanced Thermal Stability of Carbon Nanotubes via Surface Plasma Polymerization in Al2O3 Composites  H. Cho, D. Shi, Yan Guo, Jie Lian, Z. Ren, Bed Poudel, Y. Song, J. L. Abot, Dileep Singh, Jules Routbort, Lumin Wang, and Rodney C. Ewing  *Journal of Applied Physics*, 104, 074302-1 (2008) |
|  | Synthesis of Asymmetric Inorganic/Polymer Nanocomposite Particles via Localized Substrate Surface Modification and Miniemulsion Polymerization  Weili Qiang, Yilong Wang, Ping He, Hong Xu, Hongchen Gu, and D. Shi  *Langmuir*, 24, 606-608 (2008) |
|  | STEM characterization on silica nanowires with new mesopore structures by space-confined self-assembly within nano-scale channels  Peng Lai, Michael Z. Hu, Donglu Shi and Douglas Blom  *Chem. Commun*., 1-3, (2008) |
|  | In vivo Imaging by Luminescent Carbon Nanotubes with Surface Conjugated Quantun Dots  Donglu Shi, Jie Lian, H. Peng, Wei Wang, Zhongyun Dong, L. M. Wang, and Rodney C. Ewing  *Advanced Functional Materials*, 18, 1-9 (2008) |
|  | Effects of plasma surface modification on interfacial behaviors and mechanical properties of carbon nanotube-Al2O3 nanocomposites  Yan Guo, Hoonsung Cho, Donglu Shi, Jie Lian, Yi Song, Jandro Abot, Bed Poudel, Zhifeng Ren, Lumin Wang and Rodney C. Ewing  *Appl. Phys Lett.* 91, 261903 (2007) |
|  | Neutron diffraction study of the structure and low-temperature phase transformation in ternary NiAl + M (M = Ni, Fe,Co) alloys  L. Yang, X.-L. Wang, C.T. Liu, J.A. Fernandez-Baca, C.L. Fu, J.W. Richardsond and D. Shi  *Scripta Materialia* 56 (2007) |
|  | Quantum-Dot-Activated Luminescent Carbon Nanotubes via a Nano Scale Surface Functionalization for in vivo Imaging  Donglu Shi, Yan Guo, Zhongyun Dong, Jie Lian, Wei Wang, Guokui Liu, Lumin Wang, and Rodney C. Ewing  *Advanced Materials* 2007, 19, 4033–403 |
|  | In vivo Imaging by Luminescent Carbon Nanotubes  Donglu Shi, Jie Lian, H. Peng, Wei Wang, Zhongyun Dong, L. M. Wang, and Rodney C. Ewing  *Advanced Materials*, 19, 4033–4037, (2007) |
|  | Coating nanothickness degradable films on nanocrystalline hydroxyapatite particles to improve the bonding strength between nanohydroxyapatite and degradable polymer matrix  Heather L. Nichols, Ning Zhang, Jing Zhang, Donglu Shi, Sarit Bhaduri, Xuejun Wen  *Journal of Biomedical Materials Research Part A,* [**Volume 82A, Issue 2**](http://www3.interscience.wiley.com/cgi-bin/jissue/114279846) **, Pages 373 – 382 (2007)** |
|  | Sintering of High Density Carbon Nanotube/Alumina Composites via Surface Plasma Polymerization  Yan Guo, D. Shi. J. Lian, Hoon Sung Cho, Lumin Wang, and Rod Ewing  *Appl Phys Lett*, 91, 261903-1, (2007) |
|  | High-Pressure Preparation and Thermoelectric Properties of Bi0.85Sb0.15  H.J. Liu, L.F. LI, and Donglu Shi  *Journal of Electronic Materials*, Vol. 35, No. 7, 2006 |
|  | Carbon Nanofiber Hybrid Actuators: Part II – Solid Electrolyte-based Based  Y. Y. Heung, A. Miskin, P. Kang, S. Jain, S. Arasimhadevara, D. Hurd, V. Shinde, M. J. Schulz, V. Shanov, P. He, F. J. Boerio, Donglu Shi, and S. Srivinas  *J. of Intelligent Materials Systems and structures*, Vol. 17 (2006) 191-197 |

|  |  |
| --- | --- |
|  | A carbon nanotube strain sensor for structural health monitoring  Inpil Kang, Mark J Schulz, JayHKim, Vesselin Shanov and Donglu Shi  *Smart Mater. Struct.* 15 (2006) 737–748 |
|  | Synthesis and characterization of superparamagnetic composite nanorings  Longlan Cui, Hongchen Gu, Hong Xu, Donglu Shi  *Materials Letters* 60 (2006) 2929–2932 |
|  | Processing Dependence of Texture, and Critical Properties of YBa2Cu3O7-δ Films on RABiTS Substrates by a Non-Fluorine MOD Method  Y. Xu,w,z A. Goyal, K.J. Leonard, and E.D. Specht, D. Shi, M. Paranthaman  *J. Am. Ceram. Soc.*, 89 [3] 914–920 (2006) |
|  | In situ high temperature optical microscopy study of phase evolution in YBa2Cu3O7d films prepared by a fluorine-free sol–gel route  Yulong Zhang, Xin Yao, Jie Lian, Lumin Wang, Aihua Li, H.K. Liu, Haibo Yao, Zhenghe Han, Laifeng Li, Yongli Xu, Donglu Shi  *Physica C* 436 (2006) 62–67 |
|  | Luminescent Hydroxlapatite Nanoparticles by Surface Functionalization  W. Wang, D. Shi, J. Lian, Yan Guo, Lumin Wang, and Rod Ewing  *Appl Phys Lett*, 89, 183306 (2006) |
|  | High-Pressure Preparation and Thermoelectric Properties of Bi0.85Sb0.15  H. Liu, L. Li, and D. Shi  *J. of Electronic Materials*, 35 L7 (2006). |
|  | Introduction to Carbon nanotube and nanofiber smart materialsInpil Kang, Y. Heung, J. Kim, J. Lee, R. Gollapudi, S. Subramaniam, S. Narasimhadevara,  D. Hurd, G. Kirkera, V. Shanov, M. Schulz, D. Shi, J. Boerio, S. Mall, and M. Ruggles-Wren  *Composites, Part B*, 37, 382-394 (2006). |
|  | Improved Mechanical Properties of Carbon Nanotube-Polycarbonate Composites by Plasma Surface Modification  Yong Gao, Peng He, Donglu Shi, Jie Lian, Lumin Wang, Dong Qian, Jian Zhao, Wei Wang, Mark J. Schulz  *Journal of Macromolecular Science, Part B: Physic*, 45:671679 |
|  | Surface Modification of the MWNT and the dependence of the Mechanical Properties of MWNTs-Polycarbonate Composites on Ultrasonication Time  Y. Gao, Peng He, Jie Liang, Mark J. Schulz, J. Zhao, Wei Wang, Donglu Shi  *Composite A* , 37 1270-1275 |
|  | Modulus study of microcracks in single domain in YBa2Cu3Ox with c-axis pressure during oxygen anneal  D. Shi, D. Isfort, X. Chaud, P. Odie, A. Sulpice, R. Tournier, Y. Guo, P. He, L. Guo, L. Li, and R. Sing  *Physica C*, 443, 18-22 (2006) |
|  | In-situ High Temperature Optical Microscopy Study of Phase Evolution in YBa2Cu3O7-d Films Prepared by a Fluorine -free Sol-gel Route  Y. Zhang, X. Yao, and D. Shi  *Physica C*, 436, 62-67 (2006) |
|  | Deposition of ultrathin Eu-doped Y2O3 on alumina nanoparticles  Jie Lian, H. Peng, Wei Wang, Zhongyun Dong, L. M. Wang, and Donglu Shi  *Nanotechnology*, 17, 1351-1354 (2006) |
|  | Luminescent Carbon Nanotubes  Donglu Shi, Jie Lian, H. Peng, Wei Wang, Zhongyun Dong, L. M. Wang, and Rodney C. Ewing  *Advanced Materials*, 18, 189-193 (2006) |
|  | Effects of surface modification, carbon nanofiber concentration, and dispersion time on the mechanical properties of carbon-nanofiber-polycarbonate composites  Yong Gao, Peng He, Jie Lian, Lumin Wang, Wang Dong Qian, Jian Zhao,Wei Wang, Mark J. Schulz, Xing Ping Zhou, Donglu Shi  *Journal of Applied Polymer Science*, 103, 6**,** 3792-3797 (2006). |
|  | How Does Surface Modification Aid in the Dispersion of Carbon Nanofibers  Jian Zhao, Dale W. Schaefer, Donglu Shi, Jie Lian, Janis Brown,Gregory Beaucage, Lumin Wang, and Rodney C. Ewing  *J. Phys. Chem. B* , 109, 23351-23357 (2005) |
|  | Functionalization of single-walled carbon nanotubes using isotropic plasma treatment: Resonant Raman spectroscopy study  Zhandos N. Utegulos, David B. Mast, Peng He, Donglu Shi and Robert F. Gilland  *J. of Appl. Phys*., 97 (2005) |
|  | Plasma deposition of thin carbonfluorine films on aligned carbon nanotube  H. Peng, Donglu Shi, Jie Lian, L. M. Wang, and Rodney C. Ewing, Wim Van Ooij, W Li, Z. Ren  *Appl. Phys. Lett.*, 86, 043107 (2005) |
|  | Single-crystalline polytetrafluoroethylene-like nanotubes prepared from atmospheric plasma discharge  J. Zhang, Y. Guo, J. Z. Xu, X. S. Fang, and H. K. Xie, Donglu Shi, P. He. Wim Van Ooij  *Appl. Phys. Lett*., 86, 131501, (2005) |
|  | Coating of Silver Film onto the Inner Pore Surfaces of Reticulated Alumina Substrate by an Electroless Plating Method  Donglu Shi and Fang Mei  *Tsinghua Science and Technology*, 10, 277-281 (2005) |
|  | Magnetic alignment of carbon nanofibers in polymer composites and anisotropy of mechanical properties  Donglu Shi, P. He. Xavier Chaud, and Robert Tournier  *J. of Appl. Phys*., 97 064321 (2005) |
|  | The development of YBa2Cu3Ox thin films using a fluorine-free sol–gel approach for coated conductors  Donglu Shi, Yongli Xu, HaiboYao, Z. Han, Jie Lan, Lumin Wang, Aihua Li, H K Liu and S X Dou  *Supercond. Sci. Technol*. 17 (2004) 1–6 |
|  | Applications of Nanotechnology in Tissue Engineering  Xuejun Wen, Donglu Shi, Ning Zhang  Invited review paper by John Wiley & Sons, Inc. (2004) |
|  | Surface Resistance Measurements of Single Domain YBCO  A. K. Mishra, N. Hari Babu, P. He, D. Isfort, X. Chaud, A. M. Ferendeci, D. A. Cardwell, R. Tournier, D. Mast, and D. Shi  *Physica C*, 402, 277-282 (2004) |
|  | Suppression of ab-Plane Crack Formation in Single Domain YBCO by uniaxial c-axis Pressure  D. Shi, D. Isfort, X. Chaud, P. Odie, D. Mast, and R. Tournier  *Physica C*, 402, 72-29, (2004). |
|  | Preparation of YBCO Films on CeO2-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  *J. of American Ceramic Society*, 87, 1669–1676 (2004) |
|  | High Tc Superconductor Re-entrant Cavity Filter Structures  Himanshu Pandit1, N. Hari Babu, X. Chaud, Donglu Shi, D. A. Cardwell, P. He, D. Isfort, Robert Tournier, David Mast, and Altan M. Ferendeci  *Physica C* 425, 44-51, (2004) |
|  | Crystallization, phase transition and optical properties of the rare-earth-doped nanophosphors synthesized by chemical deposition  X. Y. Chen, L. Yang, R. E. Cook, S. Skanthakumar, D. Shi, G. K. Liu  *Nanotechnology*, 14, 670-674 (2003) |
|  | Plasma Coating of Carbon Nanofibers for Enhanced Dispersion and Interfacial Bonding in Polymer Composites  Donglu Shi, P. He, Jie Lian, Lumin Wang, D. Mast, Mark Schultz  *Appl. Phys. Lett*., 83, (2003) |
|  | Fabrication of high-critical current density YBa2Cu3O7-δ films using a fluorine-free sol gel approach  Y. Xu, A. Goyala, N.A. Rutter, D. Shi, M. Paranthaman, S. Sathyamurthy, P.M. Martin, and D.M. Kroeger  *J. Mater. Res*., Vol. 18, No. 3, Mar 2003 |
|  | A Review of Coated Conductor Development  Y. L. Xu and D. Shi  *Tsinghua Science and Technology*, 8, 342-369 (2003) |
|  | Structural Characterization of Epitaxial YBCO Thin Films Prepared by a Fluorine-Free Solution Synthesis  Jie Lian, H. Yao, Donglu Shi, Y. Xu, Lumin Wang, Z. Han  *Supercon Sci & Tech*. 16, 838 (2003) |
|  | Fabrication of High Jc YBa2Cu3O7-d Films Using A Fluorine-Free Sol Gel Approach  Yongli Xu, A. Goyal, N.A. Rutter, D. Shi, M. Paranthaman, S.Sathyamurthy, P.M. Martin, and D. M. Kroeger  *J of Mat Res*. 18, 677-681 (2003) |
|  | Interfacial particle bonding via an ultrathin polymer film on Al2O3 nanoparticles by plasma polymerization  Donglu Shi, Peng He, S.X. Wang, Wim J. van Ooij, L.M. Wang, Jiangang Zhao and Zhou Yu  *J. Mater. Res*., Vol. 17, No. 5, May 2002 |
|  | Plasma deposition of Ultrathin polymer films on carbon nanotubes  Donglu Shi, Jie Lian, Peng He, L. M. Wang, Wim J. van Ooij, Mark Schulz, Yijun Liu, David B. Mast  *Appl. Phys. Lett.*, Vol. 81, No. 27, 30 December 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) |
|  | Kinetics Study of ab-Plane Crack Propagation by a Modulus Measurement in Single-Domain YBa2Cu3Ox  Donglu Shi, Philippe Odier1, Andre Sulpice1, D. Isfort1, X. Chaud1, R. Tournier1, P. He, and R. Singh  *Physica C* 384, 149-158 (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) |
|  | 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) |
|  | Plasma Deposition and Characterization of Acrylic Acid Thin Film on ZnO Nanoparticles  Donglu Shi, Peng He, Jie Lian, L. M. Wang, Wim J. van OoijJ. of  *Mat Res.* 17, 2555-2560, 2002 |
|  | Interfacial Bonding via an Ultrathin Polymer Film on Al2O3 Nanoparticles For Low-Temperature Consolidation of Ceramics  D. Shi, S. X. Wang, Wim J. van Ooij, L. M. Wang, J. Zhao, and Zhou Yu  *J. of Mat Res.* 17, 981-990, 2002 |
|  | Deposition of Extremely Thin Polymer Films on Carbon Nanotube Surfaces by a Plasma Treatment  Donglu Shi and W. J. van Ooij  *Appl. Phys. Lett*., 81, (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 (2001) |
|  | 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, and Zhou Yu  *Mat. Res.Soc. Symp*. Vol. 635 (2001) |
|  | 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) |
|  | In vitro Bahavior 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. |
|  | 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 |
|  | Interface Structural Evolution of and YBCO from a Randomly Oriented Silver Alloy Substrate  Donglu Shi, S. X. Wang, X. Wen, D. Qu, Lumin Wang, Y. Xu, S. M. McClellan, B. A. Tent  *Physica C* 353, 258-264 2001 |
|  | Crystal Growth of Single-Domain YBCO Superconductors for Wireless Telecommunications  Donglu Shi  Invited article in the 2001 YEARBOOK OF SCIENCE & TECHNOLOGY by McGraw-Hill |
|  | Structural Effects on Bioactivity of Hydroxyapatite  Donglu Shi, Gengwei Jiang, and Jennifer Bauer  *Appl. Biomaterials*, 2000 |
|  | Scalling Behavior of RF Surface Resistance in Oxygen Deficient Single Domain YBCO  D. Qu, Brian Tent, D. Shi, A. M. Ferendeci, and D. Mast, H. A. Blackstead, and I Maartense  *Superton. Sci Technol*, 13, 902, 2000 |
|  | Surface Resistance of Single Domain YBCO  D. Qu, D. Shi, H. A. Blackstead, A. M. Ferendeci, and D. Mast  *Physica C*, 341, 2657 (2000) |
|  | 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* 07/1999; DOI: 10.1109/77.784679 |
|  | Development of C-Axis Textured YBCO on Unoriented Metallic Substrate  Xuejun Wen, David Qu, and Donglu Shi  *Crygenics*, 1999, in press |
|  | In vitro Bioactive Behavior of Hydroxylaptite-Coated Porous Alumina  Donglu Shi, Gengwei Jiang, and Xuejun wen  *Applied Biomaterials*, 53, 1999 |
|  | A Scaling Behavior of Surface resistance in the Oxygen-defficient Single Domain YBCO  D. Qu, Brian Tent, Donglu Shi, S. L. Lu, A. M. Ferendeci, and D. Mast  *Superconducting Sci & Tech* (2000),13 902 [doi:10.1088/0953-2048/13/6/356](http://dx.doi.org/10.1088/0953-2048/13/6/356) |
|  | Effect of Oxygen Anneal on rf properties in a Single Domain YBCO Cavity Resonator for Microwave Applications  D. Qu, Brian Tent, Donglu Shi, S. L. Lu, A. M. Ferendeci, and D. Mast  *IEEE-Superconductivity* 9: (2) 892-895, Part 1 JUN 1999 |
|  | Net-Shape Processing of Single Domain YBCO for a Novel High Q Millimeter Wave Resonator  D. Qu, Donglu Shi, S. L. Lu, A. M. Ferendeci, and D. Mast  *Physica C* 315, 36-44 (1999) |
|  | Angle Dependence of Levitation Force in a YBCO Sphere  B. A. Tent, D. Qu, and Donglu Shi  *Physica C* 309 p. 89-97, (1998) |
|  | Direct Peritectic Growth of c-Axis Textured YBCO for Development of Long Conductors  Donglu Shi, D. Qu, X. Wen, B. A. Tent, and M. Tomsic  *J. of Superconductivity*, 11 (1998) |
|  | Angle Dependence of Magnetization in a Single Domain YBCO Sphere  B. A. Tent, D. Qu, Donglu Shi, W. J. Bresser, P. Boolchand, and Z. X. Cai  *Phys. Rev. B*, 58 p. 11761 (1998) |
|  | Growth Anisotropy in Seeded Melt Growth of YBa2Cu3Ox  Donglu Shi, David Qu, and Brian Tent  Invited article: *Materials Science and Eng. B* 53, 18-22 (1998) |
|  | Effect of Oxygenation on the Levitation Force In Seeded Melt Grown YB2Cu3Ox  Donglu Shi, David Qu, and Brian Tent  *Physica C* 291, 181-187 (1997) |
|  | Synthesis of Hydroxyapatitie Films on Porous Alumina Substrate for Hard Tissue Prosthetics  Donglu Shi and Genwei Jiang  *Materials Science & Engineering C* 6, 175-182 (1998) |
|  | Coating of Hydroxyapatite on Highly Porous Alumina Substrate through Thermal Decomposition Method  Gengwei Jiang and Donglu Shi  *J. of Biomaterials* 619, (1997) |
|  | Coating of Hydroxyapatite onto Highly Porous Al2O3 for Structural Bone Substitutes  Gengwei Jiang and Donglu Shi  *J. of Biomaterials* 564, (1997) |
|  | Surface Nucleation, Domain Growth Mechanisms, and Factors Dominating Superconducting Properties in Seeded Melt Grown YB2Cu3Ox  Donglu Shi, K. Lahiri, S. Sagar, D. Qu, V. Pan, V. F. Solovjov, and J. R. Hull.  *J. of Materials Research* 12, 3036-3045 |
|  | Effect of Extremely Fine Y2BaCuO5 Precipitates on the Critical Current Density of Melt-Processed YBa2Cu3Ox  S. Sengupta, Donglu Shi, J. S. Luo, A. Buzdin, V. Gorin, V. R. Todt, C. Varanasi, and P. J. McGinn  *J. Appl. Phys.* 81, 7396-7408, (1997) |
|  | Domain Orientation Dependence of Levitation Force in Seede Melt Grown YB2Cu3Ox  Donglu Shi, D. Qu, K. Lahiri, and S. Sagar  *Appl. Phys. Lett.* 70, 3606 (1997) |
|  | Seeded-Melt Texturing and Melt Joining of YBa2Cu3Ox  Krishanu Lahiri, Sandhya Sagar, and Donglu Shi  *Crystal Growth of Novel Electronic Materials*, 60, 115-126, (1996) |
|  | Effect of Sample Geometry on Lefitation Force in Single-Domain YBCO  Sandhya Sagar, Krishanu Lahiri, David Qu, and Donglu Shi  *IEEE Magnetics*, 7, 1929 (1996) |
|  | A New Method to Determine the Interface Coupling Strength in Seeded-Melt Textured YBa2CuOx  Donglu Shi, Krishanu Lahiri, and Sandhya Sagar  *Cryogenics*, 42, 567-572 (1995) |
|  | Flux Pinning by Precipitates in YBa2Cu3Ox - A Cavity Model  S. Sengupta, Donglu Shi, C. Varanasi, P. J. McGinn, V. Gorin, A. Busdin, and J. Luo  *Cryogenics*, 42, 609-616 (1995). |
|  | Formation of a Strongly Coupled YBa2Cu3Ox Domain by a Melt-Joining Method  Donglu Shi  *Appl. Phys. Lett.,* 66, 2573 (1995). |
|  | Avalanche Flux Dynamics in the Vortex State of Type-II Superconductors  Donglu Shi and Z. Wang  *IEEE Trans. Appl. Supercond*, 5, 1721 (1995). |
|  | Initial Crystallization and Growth in Melt Processing of Large-Domain YBa2Cu3Ox for Magnetic Levitation  Donglu Shi, et al.  *IEEE Trans. Appl. Supercond*, 5, 1627 (1995). |
|  | Growth of Large-Domain YBa2Cu3 with New Seeding Crystals of CaNdAlO4 and SrLaGaO4  Donglu Shi and Krishanu Lahiri, et al.  *Physica C*, 246, 253 (1995) |
|  | A New Method for Net-Shape Forming of Large, Single-Domain YBa2Cu3Ox  Y. L. Chen, H. M. Chan, M. P. Harmer, V. R. Todt, S. Sengupta, and D. Shi  *Physica C*, 234, 232 (1994) |
|  | Processing of Large YBaCu3Ox-Domain for Levitation Applications by a NdBa2Cu3Ox-seeded Melt-Growth Technique  V. R. Todt, S. Sengupta, Donglu Shi, J. R. Hull, P. R. Sahm, P. J. McGinn. R. Peoppel  *J. Electronic Materials*, 23, 1127 (1994) |
|  | Transport Resistive Broadening via Flux avalanches: SOC in a Driven System  Z. Wang and Donglu Shi  *Solid State Comm.*, 91, 741 (1994) |
|  | Self-organized Criticality near the Bean Critical State: A Power Law Behavior of Flux Motion  Z. Wang and Donglu Shi  *Solid State Comm.,* 90, 405 (1994) |
|  | Enhanced Flux Pinning through a Phase Formation-Decomposition-Recovery Process in Ag Sheathed Bi(Pb)SrCaCuO Wires  S. X. Dou, H. K. Liu, Y. C. Guo, and Donglu Shi  *IEEE Trans. Appl. Supercond*. 3, 1135-1137 (1993) |
|  | Factors Dominating Transport Critical Current Behavior in High-Tc Superconductors  Donglu Shi  Invited article: *J. of Electronic Materials,* ***22*** 1211, 1993 |
|  | Nonlinear U(j) Law from Magnetic Relaxation in Bi2Sr2CaCu2Oxi Single Crystals  S. Sengupta, Donglu Shi, S. Sergeenkov, and P. J. Mcginn  *Phys. Rev. B (Rapid Comm.),* 48, 6736 (1993) |
|  | Thermally Activated Avalanche Flux Motion in a Single Crystal of Bi2Sr2CaCu2Ox  Z. Wang and Donglu Shi  *Phys. Rev. B* 48, 9782 (1993) |
|  | Effect of Flux Avalanches on Activation Energy in Type II Superconductors: Evidence for Self-Organized Criticality  Z. Wang and Donglu Shi  *Phys. Rev. B* 48, 4208 (1993) |
|  | Critical Current Density and Irreversibility Behavior in Ag-Sheathed Bi-Based Superconducting Wires Fabricated using a Controlled Melt Procedure  S. X. Dou, H. K. Liu, Y. C. Guo, X. Jin, Q. Y. Hu, Donglu Shi, S. Salem-Sugui, Jr., and Z. Wang  *Appl. Supercond. 1*, 1515-1522 (1993) |
|  | Effects of Bi-Substution for Tl in 1222-Type Cuprate TlSr2(Nd,Ce)2Cu2Oz  Z. Chen, Z. Shen, Y. Tang, Y. Li, D. Pederson, K. Goretta, P. Kostic, and Donglu Shi  *Physica C* 212, 206-210 (1993) |
|  | Evolution of the Low-Energy Excitations and Dielectric of Ba1-xKxBiO3  Y. Y. Wang, H. Zhang, V. P. Dravid, Donglu Shi, D. G. Hinks, Y. Zheng, and J. Jorgensen  *Phys. Rev. B* 47, 14503-14509 (1993) |
|  | Penetration Field Studies on Textured YBCO from Low Field Ultrasonic Measurements  Z. Li, M. Levy, B. Sarma, S. Salem-Sugui, Jr., Donglu Shi, and G. Crabtree  *IEEE Trans. Appl. Supercond*. 3, 1406-1408 (1993) |
|  | An Expression for the Time Dependence of Current Density with Avalanche Dynamics in Type II Superconductors  Z. Wang and Donglu Shi  *Phys. Rev. B*, 48 16176 (1993) |
|  | An Alternative Method to Introduce Fine Y2BaCuO5 Precipitates into YBa2Cu3Ox with Enhanced Flux Pinning  C. Varanasi, S. Sengupta, P. J. McGinn, and Donglu Shi  *Appl. Supercond*. 2, 117-121, (1993) |
|  | Flux Creep Activation Energy in High-Tc Superconductors  S. Salem-Sugui, Jr. and Donglu Shi  *Phys. Rev. B* 46, 6618-6621 (1992) |
|  | Point Defects in Materials, Part II: Applications to Different Materials Problems  D. N. Seidman and Donglu Shi  *MRS Bulletin* XVI, 18 (1991) |
|  | Point Defects in Materials, Part I: Behavior and Characteristics in Different Material Classes  D. N. Seidman and Donglu Shi  *MRS Bulletin* XVI, 28 (1991) |
|  | Effective Flux-Creep Activation Energy and Anisotropy in a Bi2Sr2CaCu2Ox Single Crystal  M. E. Smith, Donglu Shi, S. Sengupta, and Z. Wang  *Appl. Supercond*. 1, 151-158 (1993) |
|  | Flux Pinning in Hot Isostatically PressedBi2Sr2CaCu2Ox  D. J. Miller, S. Sengupta, J. D. Hettinger, D. Shi, K. E. Gray, A. S. Nash, and K. C. Goretta  *Appl. Phys. Lett*. 61, 2823-2825 (1992) |
|  | Effective Activation Energy in the Bi-Sr-Ca-Cu-O System  S. Sengupta, Donglu Shi, Z. Wang, M. Smith, and P. J. McGinn  *IEEE Trans. Appl. Supercond*. 3, 1226-1228 (1993) |
|  | Critical Current Density, Irreversibility Line, and Flux-Creep Activation Energy in Silver-Sheathed Bi2Sr2Ca2Cu3Ox  Donglu Shi, Z. Wang, S. Sengupta, M. E. Smith, L. F. Goodrich, S. X. Dou, H. K. Liu, and Y. C. Guo  *IEEE Trans. Appl. Supercond. 3*, 1194-1196 (1993) |
|  | Flux Pinning by 211 Precipitates in Melt-Textured YBa2Cu3Ox  Donglu Shi, S. Sengupta, M. E. Smith, Z. Wang, A. C. Biondo, U. Balachandran, and K. C. Goretta  *IEEE Trans. Appl. Supercond.* 3, 1034-1036 (1993) |
|  | A TEM Study of Grain Boundaries in Zone-Melted YBa2Cu3Ox  J. G. Chen, Donglu Shi, C. M. Wayman, P. J. McGinn, W. H. Chen, and N. Zhu  *Mater. Lett*. 14, 177-182 (1992) |
|  | Magnetic Relaxation and Intrinsic Pinning in a Single Crystal of Bi2Sr2CaCu3Ox  S. Sengupta, Donglu Shi, S. Salem-Sugui,Jr., Z. Wang, M. E. Smith, and P. J. McGinn  *Phy. Rev. B* 47, 5414-5417 (1993) |
|  | U-j Relationship inType II Superconductors  S. Sengupta, Donglu Shi, Z. Wang, M. E. Smith, and P. J. McGinn  *Phys. Rev. B* 47, 5165-5170 (1993) |
|  | Effect of Y2BaCuOx Precipitates on Flux Pinning in Melt-Processed YBa2Cu3Ox  S. Sengupta, Donglu Shi, Z. Wang, A. C. Biondo, U. Balachandran, and K. C. Goretta.  *Physica C* 199, 43-48 (1992) |
|  | Current Density Dependence of the Activation Energy in Type II Superconductors  S. Sengupta, Donglu Shi, S. Salem-Sugui, Jr., Zuning Wang, J. I. Budnick, and K. DeMoranville  *J. Appl. Phys*. 72, 592-596 (1992) |
|  | Flux-Creep Activation Energy in High-Tc Superconductors  S. Salem-Sugui, Jr. and Donglu Shi  *Phys. Rev. B* 46, 6618-6622 (1992) |
|  | High-Tc Superconductors: Fabricating Technologies and Future Perspectives  K. C. Goretta, W. Wu, C. T. Wu, D. Xu, C. A. Youngdahl, Donglu Shi, J. P. Singh, J. J. Picciolo, M. T. Lanagan, J. R. Hull, J. T. Dusek, S. E. Dorris, N.Chen, A. C. Biondo, U. Balachandran, and R. B. Poeppel  Invited article: *Mater. Chem. Phys. 31*, 73-78 (1992) |
|  | Magnetic Relaxation in YBa2Cu3Ox  Donglu Shi and S. Salem-Sugui,Jr.  *Phys. Rev. B*, 44, 7647-7650 (1991) |
|  | Increased Irreversibility line by Precipitates Pinning in the Bi-Sr-Ca-Cu-O System  S. Salem-Sugui,Jr., Donglu Shi, and S. E. McFarland  *Supercond. Sci. Technol*. 5, 73-78 (1992) |
|  | Flux Creep and Pinning Energy Distribution in Zone-Melted YBa2Cu3Ox  Donglu Shi, K. C. Goretta, J. G. Chen, and S. Salem-Sugui,Jr.  *Appl. Phys. Lett*. 59, 225-227 (1991) |
|  | Critical Current and Flux Pinning by Crystal Defects in Melt-Textured YBa2Cu3Ox  Donglu Shi, K. C. Goretta, J. G. Chen, and A. C. Biondo,  Invited article: 2nd Int. Ceramic Science & Technology Congress,  Nov. 12-15, 1990, Orlando, FL, *Ceram. Trans. 18*, 373-382 (1991) |
|  | Strontium-Induced Oxygen Defect Structure and Hole Doping in La2-xSrxCu O4  Zhengquan Tan, M. E. Filipkowski, J. I. Budnick, E. K. Heller, D. L. Brewe, B. L. Chamberland, C. E. Bouldin, J. C. Woicik, and Donglu Shi  *Phys. Rev. Lett*. 64, 2715-2718 (1991) |
|  | Critical Currents, Magnetic Relaxation, andMicrostructure in Zone-Melted YBa2Cu3Ox  Donglu Shi, J. G. Chen, M. Xu, P. J. McGinn, W. H. Chen, and K. C. Goretta  *IEEE Trans. Magn*. 27, 1080-1082 (1991) |
|  | Transport Critical Current Behavior and Grain Boundary Microstructure in YBa2Cu3Ox  Donglu Shi, J. G. Chen, M. Xu , A. L. Cornelius, U. Balachandran, and K. C. Goretta  *Supercond. Sci. Technol*. 3, 222-226 (1990) |
|  | Nonlinear Logarithmic Time Decay of Magnetization and in a Single Crystal of Bi2Sr2CaCu2Ox  Donglu Shi and M. Xu  *Phys. Rev. B* 44, 4548-4553 (1991) |
|  | Calculations of Magnetic Relaxation in Type II Superconductors Based on Various Critical-State Models  M. Xu and Donglu Shi  *Physica C* 168, 303-308 (1990) |
|  | Transport Critical Current Density and Microstructure in Extruded YBa2Cu3O7-x Wires Processed by Zone Melting  Donglu Shi, M. Xu, J. G. Chen, M. M. Fang H. Krishnan, U. Welp, P. J. McGinn, W. H. Chen, M. T. Langan, K. C. Goretta, J. T. Dusek, J. J. Picciolo, J. M. Hong, D. Miller, and U. Balachandran  *J. Appl. Phys. 68*, 228-232 (1990) |
|  | YBa2Cu3Ox Toughened by ZrO2 Additions  K. C. Goretta, O. D. Lacy, U. Balachandran, Donglu Shi, and J. L. Routbort  *J. Mater. Sci. Lett*. 9, 380-381 (1990) |
|  | Oxygen Stoichiometry and Flux Creep Activation Energy in YBa2Cu3O7-x  Donglu Shi and Mark S. Boley  *Supercond. Sci. Technol*. 3, 285-288 (1990) |
|  | Temperature and Field Dependence of Magnetic Relaxation in a Bi2Sr2CaCu2Ox Single Crystal  Donglu Shi, M. Xu, A. Umezawa, and R. F. Fox  *Phys. Rev. B*.42, 2062-2065 (1990) |
|  | Superconducting Transition Broadening and Flux Creep Activation Energy in Tl2Ca2Ba2Cu3Ox  Donglu Shi and M. S. Boley  *Supercond. Sci. Technol*. 3, 289-292 (1990) |
|  | Irreversibility in BiK0.375Ba0.625O3  Donglu Shi, X. S. Ling, M. Xu, M. M. Fang, S. Luo, J. I. Budnick, B. Dabrowski, D. G. Hinks, D. R. Richards, and Y. Zheng  *Phys. Rev. B* 43, 3684-3687 (1991) |
|  | Crystal Defects and Critical Currents in YBa2Cu3Ox  Donglu Shi, J. G. Chen, M. Xu, H. E. Kourous, Y. Fang, Y. H. Li, and M. S. Boley  *Supercond. Sci. Technol*. 3, 457-463 (1990) |
|  | Full Penetration Temperature and Magnetic Relaxation in a Single Crystal of Bi2Sr2CaCu2Ox  M. Xu, Donglu Shi, A. Umezawa, K. G. Vandervoort, and G. W. Crabtree  *Phys. Rev. B* 43, 13049-13053 (1991) |
|  | High Critical Current Density in Grain-Oriented Bulk YBa2Cu3Ox Processed by Partial-Melt Growth  Donglu Shi, M. M. Fang, J. Akujieze, M. Xu, and J. G. Chen  *Appl. Phys. Lett.* 57, 2606-2608 (1990) |
|  | Thermally Activated Dissipation in a Long-Term Annealed Single Crystal of Bi2Sr2CaCu2Ox  Donglu Shi, H. E. Kourous, M. Xu, and D. H. Kim  *Phys. Rev. B.* 43, 514-518 (1991) |
|  | Generalized Critical-State Model for Hard Superconductors  M. Xu, Donglu Shi, and R. F. Fox  *Phys. Rev. B* 42, 10773-10776 (1990) |
|  | Effect of Microstructural Changes on Thermally Activated Flux-Creep Behavior in the Bi-Sr-Ca-Cu-O System  Donglu Shi, Ming Xu, M. M. Fang, J. G. Chen, A. L. Cornelius, and S. G. Lanan  *Phys. Rev. B* 41 8833-8837 (1990) |
|  | Microstructure and Electrical Properties of Bulk High-Tc Superconductors  U. Balachandran, M. J. McGuire, K. C. Goretta, C. A. Youngdahl, Donglu Shi, R. B. Poeppel, and S. Danyluk  *Superconductivity and Appl.*, Plenum Press, NY, 1990, pp. 265 |
|  | Effect of Microstructural Changes on Thermally Activated Flux-Creep in the Bi-Sr-Ca-Cu-O System  D. Shi, M. Xu, M. M. Fang, J. G. Chen, A. L. Cornelius, and S. G. Lanan  *Phys. Rev. B* 41, 8833-8837 (1990) |
|  | Transport Critical Currents and Grain Boundary Weak Links in High-Tc Superconductors  Donglu Shi *Appl. Supercond*. 1, 61-70 (1993) |
|  | Isothermal Shear Transformation in YBa2Cu3O7-∂  Donglu Shi *Physica C* 156, 359-362 (1988) |
|  | Phase Transformations in YBa2Cu3O7-∂  Donglu Shi  *Phys. Rev. B*. 39, 4299-4305 (1989) |
|  | Transport Critical Current Density in Bi2Sr2CaCu2Ox Single Crystals  D. Shi, Ming Tang Y. C. Chang, P. Z. Jiang, K. Vandervoort, B. Malecki, and D. J. Lam  *Appl. Phys. Lett*. 54, 2358-2360 (1989) |
|  | Formation of the 110 K Superconducting Phase via the Amorphous State in the Bi-Sr-Ca-Cu-O System  Donglu Shi, Ming Tang, K. Vandervoort, and H. Claus  *Phys. Rev. B.* 39, 9091-9098 (1989) |
|  | Crystallization of Metal Oxide Glasses in Bi-Sr-Ca-Cu-O Systems  Donglu Shi, M. Tang, M. S. Boley, M. Hash, K. Vandervoort, and H. Claus  *Phys. Rev. B*. 40, 2247-2253 (1989) |
|  | Origin of Enhanced Growth of the 110 K Superconducting Phase by Pb Doping in the Bi-Sr-Ca-Cu-O System  Donglu Shi, J. Akujieze, M. S. Boley, J. G. Chen, M. Xu, and C. U. Segre  *Appl. Phys. Lett.* 55, 699-701 (1989) |
|  | Flux Pinning by Precipitates in the Bi-Sr-Ca-Cu-O System  Donglu Shi, M. S. Boley , U. Welp, and J. G. Chen  *Phys. Rev. B* 40, 5255-5258 (1989) |
|  | Lattice Defects and Flux Pinning in Crystallized Metal Oxide Glasses in the Bi-Sr-Ca-Cu-O System  Donglu Shi, J. G. Chen, U. Welp, M. S. Boley, and A. Zangvil  *Appl. Phys. Lett.* 55, 1354-1356 (1989) |
|  | Effect of Oxygen Stoichiometry on Superconducting Transition Broadening in YBa2Cu3Ox  Donglu Shi, M. Patel, M. S. Boley, R. K. Kalia, and P. Vashishta  *J. Appl. Phys*. 66, 2074-2078 (1989) |
|  | Effect of Heat Treatment Time and Temperature on the Properties of YBa2Cu3Ox  I. Bloom, B. S. Tani, M. C. Hash, Donglu Shi, M. A. Patel, K. C. Goretta, N. Chen, and D. W. Capone  *J. Mater. Res.* 4, 1093-1098 (1989) |
|  | Synthesis and Sintering of Tl2Ca2Ba2Cu3Ox  K. C. Goretta, Donglu Shi, B. S. Malecki, M. C. Hash, and I. Bloom *Supercond. Sci. Technol*. 2, 192-194 (1989) |
|  | Temperature Dependence of Flux Pinning Behavior in YBa2Cu3Ox  Donglu Shi, M. Xu, M. S. Boley, and U. Welp  *Physica C* 160, 417-423 (1989) |
|  | Highly Textured Thick Films by a Melt-Annealing Technique in the Bi-Sr-Ca-Cu-O  M. Xu, A. L. Cornelius, Donglu Shi, J. G. Chen, B. Dabrowski, D. Miller  *Appl. Phys. Lett.* 55, 2236-2238 (1989) |
|  | Effect of Silver and Silver Oxide Additions on the Mechanical and Superconducting Properties of YBa2Cu3O7-∂ Superconductors  J. P. Singh, H. J. Leu, R. B. Poeppel, E. Van Voorhees, G. T. Goudey, K. Winsley, and Donglu Shi  *J. Appl. Phys*. **66**, 3154 (1989) |
|  | Anisotropy of Oxygen Tracer Diffusion in YBa2Cu3O7-∂ Single Crystals  S. J. Rothman, J. L. Routbort, J.-Z. Liu, J. W. Downey, L. J. Thompson, Y. Fang, Donglu Shi, J. E. Baker, J. P. Rice, D. M. Ginsberg, P. D. Han, and D. A. Payne  *Def. Diff. Forum 75*, 57-68 (1991) |
|  | Oxygen Diffusion and Phase Transformation in YBa2Cu3O7-x  Donglu Shi, J. Krucpzak , Ming Tang, Nan Chen, and R. Bhadra  *J. Appl. Phys.* 66, 4325-4328 (1989) |
|  | Influence of Oxygen Concentration on Processing YBa2Cu3O7-x  N. Chen, Donglu Shi, and K. C. Goretta  *J. Appl. Phys.* 66, 2485-2488 (1989) |
|  | A Superconducting Coil Made of Filamentary Composites  Donglu Shi, M. Xu, J. G. Chen, S. G. Lanan, D. Miller, and K. C. Goretta  *Mater. Lett.* 9, 1-4 (1989) |
|  | Flux Pinning and Twin Boundaries in YBa2Ca3O7-x  Donglu Shi, M. Boley J. G. Chen, M. Tang, U. Welp, W. K. Kwok, B. Malecki  *Supercond. Sci. Technol*. 2, 255-260 (1989) |
|  | Synthesis of a Phase-Pure Orthorhombic YBa2Cu3Ox under Low Oxygen Pressure  U. Balachandran, R. B. Poeppel, J. E. Emerson, S. A. Johnson, M. T. Lanagan, C. A. Youngdahl, Donglu Shi, K. C. Goretta, and N. G. Eror  *Mater. Lett*. 8, 454-456 (1989) |
|  | Swaged Superconducting Wires  Donglu Shi and K. C. Goretta  *Mater. Lett.* 7, 428-432 (1989) |
|  | Synthesis of 85 K Bi-Sr-Ca-Cu-O Superconductor  F. A. Karbarz, O. D. Lacy, K. C. Goretta, U. Balachandran, D. Shi, J. G. Chen, Ming Xu, and M. C. Hash  *Mater. Res. Bull*. 25, 251-256 (1989) |
|  | Kinetics of the Orthorhombic to Tetragonal Phase Transition in YBa2Cu3O7-∂  Donglu Shi and D. W. Capone II  High Temperature Superconductors II, ed. D. W. Capone II et al. (MRS, Pittsburgh, PA, 1988) pp. 175 |
|  | Microstructural Analysis of Superconducting Ceramics  Donglu Shi and R. H. Lee  *Microscopy* 36, 191-203 (1988) |
|  | 120 K Superconductivity in the (Bi,Pb)-Sr-Ca-Cu-O System  U. Balachandran, Donglu Shi, D. I. Dos Santos, S. W. Graham, M. A. Patel, B. S. Tani, K. Vandervoort, H. Claus, and R. B. Poeppel  *Physica C* 156, 649-651 (1988) |
|  | Sintering of YBa2Cu3O7-x Compacts  Donglu Shi, D. W. Capone II, G. T. Goudey, J. P. Singh, N. J. Zaluzec, and K. C. Goretta  *Mater. Lett.* 6, 217-221 (1988) |
|  | A Time-Temperature-Transformation Diagram for the Orthorhombic to Tetragonal Phase Transition in YBa2Cu3O7-∂  Donglu Shi, D. W. Capone II, K. C. Goretta, K. Zhang, and G. T. Goudey  *J. Appl. Phys*. 63, 5411-5414 (1988) |

|  |  |
| --- | --- |
|  | 60 K to 90 K Superconducting Phase Transition in YBa2Cu3O7-∂  Donglu Shi and D. W. Capone II  *Appl. Phys. Lett.* 53, 159-161 (1988) |
|  | Mechanical and Superconducting Properties of Sintered Composite YBa2Cu307-∂ Tape on Silver Substrate  J. P. Singh, Donglu Shi, and D. W. Capone II  *Appl. Phys. Lett*. 53, 237-239 (1988) |
|  | Nucleation and Growth Kinetics of the Tetragonal to Orthorhombic Transition in YBa2Cu3O7x  Donglu Shi, K. Zhang, and D. W. Capone II  *J. Appl. Phys*. 64, 1995-1998 (1988) |
|  | Synthesis, Structure, and Superconductivity in the Ba1-xKxBiO3-y System,  D. G. Hinks, B. Dabrowski, J. D. Jorgensen, A. W. Mitchell, D. R. Richards, Shiyou Pei, and Donglu Shi  *Nature* 333, 836-838 (1988) |
|  | 110 K Superconductivity in Crystallized Bi-Sr-Ca-Cu-O Glasses  Donglu Shi, Monica Blank, Mita Patel, David G. Hinks, A. W. Mitchell, K. Vandervoort, and H. Claus  *Physica C* 156, 822-826 (1988) |
|  | Preparation of Bi-Sr-Ca-Cu-O Superconductors from Oxide-Glass Precursors  D. G. Hinks, L. Soderholm, D. W. Capone II, B. Dabrowski, A. W. Mitchell, and Donglu Shi  *Appl. Phys. Lett*. 53, 423-425 (1988) |
|  | Observations of Preferred Orientation in High-Tc Oxide Superconductor Tapes  J. P. Singh, U. Balachandran, Donglu Shi, J. K. Degener, and R. B. Poeppel  *Mater. Lett.* 7, 72-74 (1988) |
|  | Upper Critical Fields of YBa2Cu3O7-∂ with 60 K and 90 K Superconductivity and the Weak Link Effect in the System  Donglu Shi  *Appl. Phys.* 64, 4624-4626 (1988) |
|  | 120 K Superconductivity in the (Bi,Pb)-Sr-Ca-Cu-O System  U. Balachandran, Donglu Shi, D. I. Dos Santos, S. W. Graham, M. A. Patel, B. S. Tani, K. Vandervoort, H. Claus, and R. B. Poeppel  *Physica C* 156, 649-651 (1988) |
|  | Calcination of YBa2Cu3O7-x Powder  K. C. Goretta, Ira Bloom, N. Chen, G. T. Goudey, M. C. Hash, G. Klassen, M. T. Lanagan, R. B. Poeppel, J. P. Singh, Donglu Shi, U. Balachandran, J. T. Dusek, and D. W. Capone II  *Mater. Lett.* 7, 161-164 (1988) |
|  | Effect of Heating Rate on Properties of YBa2Cu3O7-x  N. Chen, K. C. Goretta, M. T. Lanagan, Donglu Shi, M. A. Patel, I. Bloom, M. C. Hash, B. S. Tani , and D. W. Capone II  *Supercond. Sci. Technol.* 1, 177-179 (1988) |
|  | Observations of Preferred Orientation in High Tc Oxide Superconductor Tapes  J. P. Singh, U. Balachandran, Donglu Shi, J. K. Degener, and R. B. Poeppel  *Mater. Lett.* 7, 72-75 (1988) |
|  | Mechanical and Superconducting Properties of Sintered Composite YBa2Cu3O7-∂ Tape on Silve Substrate  J. P. Singh, Donglu Shi, and D. W. Capone  *Appl. Phys. Lett.* 53, 239-241 (1987) |
|  | New Processing Technique for Forming Flexible A-15 Superconducting Tapes with Extremely High Critical Current Densities and Magnetic Fields  M. T. Clapp and Donglu Shi  *Appl. Phys. Lett.* 49, 1305-1307 (1986) |
|  | A Flexible A-15 Superconducting Tape in the Nb3(AlSiB) System  M. T. Clapp and Donglu Shi  *Adv. Cryog. Eng. Mater*. 32, 1067-1072 (1986) |
|  | Flexible A-15 Superconducting Tapes via the Amorphous State  M. T. Clapp and Donglu Shi  *J. Appl. Phys*. 57, 4672-4678 (1985) |