Selected Representative Publications

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(Updated on February 16, 2023)

BOOKS
https://homepages.uc.edu/~shid/publications/publications.htm

1. Biomaterials and Tissue Engineering (Springer-Verlag, 2004)
2. Medical Devices and Their Applications (Springer-Verlag, 2004)
3. Nanostructured Magnetic Materials and Their Applications (Springer-Verlag, 2002)
4. Functional Thin Films-New Concepts and Technologies (Springer and TUP, 2002)
5. High Temperature Superconducting Materials Sci. and Eng. (Pergamon Press, 1994)
6. Introduction to Biomaterials (Tsinghua University Press and World Scientific, 2006)
7. Nanoscience in Biomedicine (Springer-Verlag, 2008)
8. Nanomaterials and Devices (Elsevier, 2014)
9. Bio-Inspired Nano Materials (World Scientific 2014)
10. Tissue Engineering and Nano Theranostics (World Scientific 2017)
11. The World Scientific Encyclopedia of Nanomedicine and Bioengineering I (World Scientific 2016)
12. The World Scientific Encyclopedia of Nanomedicine and Bioengineering II (World Scientific 2017)
13. Advanced Materials in Smart Building Skins for Sustainability: Nano to Macroscale (Springer 2022)

JOURNAL PUBLICATIONS
> 300 refereed SCI-indexed journal papers, including ones in *Nature* and *Phys. Rev. Lett.*,
The impact factors of the selected journals in the publication list: *Nature*: 69.5, *Physical Review Letters*: 9.185, *Applied Physics Reviews*: 19.16, *Advanced Materials*: 32.09, *Advanced Functional Materials*: 19.92, *ASC Nano*: 18.03, *Biomaterials*: 15.3, *eBioMedicine*: 11.2, *Small*:15.15, *ACS applied materials & interfaces*: 10.38 *Solar Energy Materials and Solar Cells*: 7.267, *Applied Energy*: 9.746, *Carbon*: 11.31

For complete publications:
https://homepages.uc.edu/~shid/publications/REFEREED%20JOURNAL%20ARTICLES%20D%20SHI%207%2025%202020.docx (My graduate students are marked with "*" in the publication list below)

Google Scholar h-index: 70 https://scholar.google.com/citations?hl=en&user=i7XAYhwAAAAJ

REPRESENTITEVE PUBLICATIONS IN ENERGY AND FUNCTIONAL MATERIALS

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Materials, 16, 496. https://doi.org/10.3390/ma16020496 (2023)

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**
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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, and **Donglu Shi**
Advanced Sustainable Systems, Volume5, Issue 6, 2100006 (2021)

Photothermal and photovoltaic properties of transparent thin films of porphyrin compounds for energy applications, Jou Lin* and **Donglu Shi**
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MRS Communications, doi:10.1557/mrc.2020.39 (2020)

Photonically-Activated Molecular Excitations for Thermal Energy Conversion in Porphyrinic Compounds, Y. Zhao,* Jou Lin,* D. Kundrat, M. Bonmarin, J. Krupczak, S. V. Thomas,* Mengyao Lyu,* **Donglu Shi**
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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**
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Spectral selective and photothermal nano structured thin films for energy efficient windows, Julian Wang and **Donglu Shi**
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Small angle light scattering study of improved dispersion of carbon nanofibers in water by plasma treatment, Jian Zhao,* **Donglu Shi**, Jie Lian
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Low-Temperature Preparation of Amorphous-Shell/Nanocrystalline-Core Nanostructured TiO2 Electrodes for Flexible Dye-Sensitized Solar Cells. D. Zhang, Hengyao Hu, Laifeng Li, and **Donglu Shi**
Journal of Nanomaterials Volume 2008, 271631

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 **Donglu Shi**
Scripta Materialia 56 (2007)

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Advanced Materials 18, 189-193, (2006)

REPRESENTITIVE PUBLICATIONS IN NANO BIOMEDICINE

Progress in Circulating Tumor Cell Isolation: A Biomarkerless Approach
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2. High Temperature Crystalline Superconductor from Crystallized Glasses, Donglu Shi Patent Number: 5157014
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4. Method for Harvesting Single Crystals from a Peritectic Melt, V. Todt, S. Sengupta, and Donglu Shi Patent number: 5549748
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