

## Selected Publication List

1. **“Progress in Development on CdZnTe X-ray Detector”**  
Yongdong Zhou, Ning Zhou, Linhu Zhang, Jin Wang, Aihua Wan, Proceedings of SPIE, “Semiconductor Photodetectors III”, Vol. 6119, 2006, PP61190H-1~8
2. **“HgTe/HgCdTe Superlattices Grown on CdTe/Si by Molecular Beam Epitaxy for Infrared Detection”**  
Y. SELAMET, Y.D. ZHOU, J. ZHAO, Y. CHANG, C.R. BECKER, R. ASHOKAN, C.H. GREIN, and S. SIVANANTHAN, “Journal of ELECTRONIC MATERIALS”, Vol. 33, No. 6, 2004, PP503-508
3. **“Near-Bandgap Infrared Absorption Properties of HgCdTe”**  
Y. CHANG, G. BADANO, J. ZHAO, Y.D. ZHOU, R. ASHOKAN, C.H. GREIN, and V. NATHAN, “Journal of ELECTRONIC MATERIALS”, Vol. 33, No. 6, 2004, PP709-713
4. **“HgCdTe Photoconductive Mixers for 3-15 Terahertz”**  
Albert Betz, Rita Boreiko, Yongdong Zhou, Jun Zhao, Yusuf Selamet, Yong Chang, Renganathan Ashokan, Charlie Bucker, and Sivalingam Sivananthan, “Proceedings of the 14th International Symposium on Space Terahertz Technology”, 2003
5. **“HgCdTe for far-infrared heterodyne detection”**  
Y. D.Zhou, J. Zhao, R. Boreiko, Y. Chang, Y. Selamet, R. Ashokan, C.R. Becker, Albert Betz, S. Sivananthan, Proceedings of SPIE, “Materials for Infrared Detectors III”, Vol. 5209, 2003, PP99-106
6. **“Photovoltaic Infrared Detectors Based on HgTe/HgCdTe Superlattices Grown on CdTe/Si by Molecular Beam Epitaxy”**  
Y.-D. Zhou, J. Zhao, Y. Chang, R. Ashokan, R.T. Boreiko, C.H. Grein, A.L. Betz and S. Sivananthan, the Extended Abstract proceeding of 2003 U.S. Workshop on the Physics and Chemistry of II-VI Materials, September 17-19, 2003, New Orleans, Louisiana, PP.13-16
7. **“Gold Diffusion in Mercury Cadmium Telluride Grown by Molecular Beam Epitaxy”**  
Y. Selamet, R. Singh, J. Zhao, Y. D. Zhou, S. Sivananthan and N. Dhar, Proceedings of SPIE, “Materials for Infrared Detectors III”, 2003

8. **“Far-infrared Detector based on HgTe/HgCdTe Superlattices”**  
Y. D. Zhou, C.R. Becker, Y. Selamet, Y. Chang, R. Ashokan, R.T. Boreiko, T. Aoki, David J. Smith, A.L. Betz, S. Sivananthan, Journal of Electronic Materials, Vol 32(7), July 2003, PP 608-614
9. **“Far-Infrared Focal Plane Arrays”**  
A.L. Betz, R.T. Boreiko, S. Sivananthan and Y.D. Zhou, in Proceedings FAR-IR, SUB-MM & MM DETECTOR TECHNOLOGY WORKSHOP, Wolf J., Farhoomand J. and McCreight C.R. (eds.). NASA/CP-211408, 2002
10. **“Progress in Far-infrared Detection Technology”**  
Y.D. Zhou, C.R. Becker, R. Ashokan, Y. Selamet, Y. Chang, R.T. Boreiko, A.L. Betz, S. Sivananthan, Proceedings of SPIE, “Materials for Infrared Detectors II”, Vol.4795, PP121-128, 2002
11. **“MBE growth of HgCdTe HOT detector heterostructures”**  
J. Zhao, Y.D. Zhou, G. Banano, Y. Selamet, C.H. Grein, S. Sivananthan, Proceedings of SPIE, “Materials for Infrared Detectors II”, Vol.4795, PP82-87, 2002
12. **“FAR-INFRARED DETECTOR BASED ON HgTe/HgCdTe SUPERLATTICES”**  
Y. D. Zhou, C.R. Becker, Y. Selamet, Y. Chang, R. Ashokan, R.T. Boreiko, T. Aoki, D. J. Smith, A.L. Betz, S. Sivananthan, the Extended Abstract proceeding of 2002 U.S. Workshop on the Physics and Chemistry of II-VI Materials, November 13-15, 2002, San Diego, California, PP.21-24
13. **“COMPOSITION, THICKNESS AND URBACH SLOPE DISTRIBUTION OF HgCdTe MBE WAFERS BY Infrared microscope mapping”**  
Y. Chang, G. Badano, J. Zhao, Y. D. Zhou, C.H. Grein and S. Sivananthan, the Extended Abstract proceeding of 2002 U.S. Workshop on the Physics and Chemistry of II-VI Materials, November 13-15, 2002, San Diego, California, PP.123`
14. **“The Material Construction Design and Numerical Simulation of GaInAsSb Multi-junction PIN Photovoltaic Infrared Detector”**  
LIANG Bangli<sup>1,2</sup>, XIA Guanqun<sup>1</sup>, ZHOU Yongdong<sup>2</sup>, FAN Shuping<sup>2</sup>  
*Chinese Journal of Research and Progress of Solid State Electronics*, 2002, Vol(1)

15. **“Sputtering Growth of BaTiO<sub>3</sub> Thin Films and The Films’ Property Studies”**  
WU Cai-Yun JI Xiao-Bing FAN Shu-Ping ZHOU Yong-Dong CHU Jun-Hao  
WANG Kang-Jie, *Chinese Journal of Research and Progress of Solid State Electronics*, 2001. Vol (3), pp.361-365
16. **“The Sputtering Deposition and the X-ray Photoelectron Spectroscopy Study for the CdTe Thin Film”**  
ZHOU Yong-Dong Li Yan-Jing Wu Xiao-shan XU Guo-Sheng FANG Jia-Xiong  
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17. **“The Fabrication and Study of the HgCdTe MIS Device of CdTe+ZnS Double Insulator Films”**  
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18. **“The Sputtering Deposition and the X-ray Photoelectron Spectroscopy Study for the ZnS Dielectric Thin Film”**  
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19. **“THE STUDY OF THE INTERFACE OF THE SPUTTERING CDTE DIELECTRIC FILM AND HGCDE CRYSTAL”**  
ZHOU Yong-Dong ZHAO Jun LI Yan-Jin FANG Jia-Xiong,  
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20. **“The study of the Influence of Surface Coating of ZnS on the HgCdTe Device”**  
ZHOU Yong-Dong FANG Jia-Xiong TANG Ding-Yuan,  
*Chinese Journal of Infrared Technology*, Vol.22, No.3, May, 2000, PP31-34
21. **“The Study of the Two Kinds of Surface Passivation Ways for the n-HgCdTe Photoconductor device”**  
ZHOU Yong-Dong FANG Jia-Xiong TANG Ding-Yuan,  
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22. **“Effects of Oxygen Pressure and Substrate Temperature on ZnO: Al Film by Pulsed Laser Deposition”**  
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23. **“EFFECTS OF DOPANT RATIO ON ZnO:Al FILM BY PULSED LASER DEPOSITION”**  
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24. **“Surface Recombination Velocity of the HgCdTe Surface Passivated with Sputtering CdTe Film”**  
ZHOU Yong-Dong Zhao Jun GONG Hai-Mei LI Yan-Jin FANG Jia-Xiong, *Chinese Journal of Infrared Millimeter Waves*, Vol.19, No.1, February, 2000, PP71-74
25. **“The first exploration to the teaching of the ceramic semiconductor and its application”**  
ZHOU Yong-Dong,  
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26. **“Photoconductivity Decay Study on the ZnS Passivated HgCdTe Surface”**  
ZHOU Yong-Dong Zhao Jun GONG Hai-Mei LI Yan-Jin FANG Jia-Xiong, *Chinese Journal of ACTA PHOTONICA SINICA*, Vol.27, No.z2, September, 1998, PP102-106
27. **“The Device Passivation Study for the Use of HgCdTe Focal Plance Arrays”**  
ZHOU Yong-Dong FANG Jia-Xiong Ye Hua-Wei Fan Guang-Yu TANG Ding-Yuan, *Chinese Journal of Functional Materials*, Vol.29, Supplement, September, 1998, PP113-114
28. **“The Sputtering Deposition of CdTe Film and the Use of the Film for the Surface Passivation of n-HgCdTe Photoconductor device”**

ZHOU Yong-Dong FANG Jia-Xiong JIN Xiu-Fang Wang Ji-Yuan TANG Ding-Yuan, *Chinese Journal of Functional Materials*, Vol.29, Supplement, September, 1998, PP467-469

29. **“The sputtering growth of ZnS and the effects on the carrier transfer property in the n-HgCdTe Hall device”**

ZHOU Yong-Dong FANG Jia-Xiong Ye Hua-Wei Fan Guang-Yu TANG Ding-Yuan, *Chinese Journal of Functional Materials*, Vol.29, Supplement, September, 1998, PP470-472

30. **“Temperature Induced Quenching of the Raman Scattering on CdTe Crystal Surface”**

ZHOU Yong-Dong, FANG Jia-Xiong, Sheng Jie, Zhao Jun, Lu Hui-Qing, TANG Ding-Yuan, *Chinese Journal of ACTA OPTICA SINICA*, Vol.17, No.3, March, 1997, PP382-384

31. **“The Influence of Surface Treatment on the CdTe Raman Spectra”**

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32. **“The Efficient Visible Light from the Surface Layer of Porous Silicon”**

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33. **“The Raman Scattering Spectra of the Surface of CdTe Bulk”**

ZHOU Yong-Dong, FANG Jia-Xiong, Sheng Jie, Zhao Jun, Lu Hui-Qing, TANG Ding-Yuan, *The Research and Progress of the Chinese Solid State Optical property*, ISBN7-309-01791-9/0-173, PP129, The Proceedings of the 8<sup>th</sup> National Conference on Chinese Solid State Optical Property, 1996, PP129

34. **“The Microstructure and the Luminescence Origin of the Porous Silicon”**

ZHOU Yong-Dong, JIN Yi-Xin, *Chinese Journal of Research and Progress of Solid State Electronics*, Vol.16, No.4, November, 1996, PP331-335

35. **“Luminescence of Rare-Earth Erbium Ion-implanted porous silicon”**

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36. **“The Intensified Er<sup>3+</sup> Emission from Porous Silicon”**  
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37. **“The Influence of Anodization on the Er<sup>3+</sup> Luminescence from Si:Er<sup>3+</sup> Material”**  
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38. **“1.54μm EMISSION FROM POROUS SILICON”**  
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39. **“MICROSTRUCTURE AND LATTICE DISTORTION OF EFFICIENT VISIBLE LIGHT-EMITTING POROUS SILICON”**  
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40. **“INFLUENCE OF ION IMPLANTATION ON THE EFFICIENT VISIBLE PHOTOLUMINESCENCE OF POROUS SILICON”**  
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44. **“Visible Luminescence on the Unpolished Surface of Polycrystal Silicon Wafer after Anodization”**  
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45. **“The Anodization Induced 1.54 $\mu$ m Luminescent Intensification of the Si:Er<sup>3+</sup> Material”**  
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46. **“The IR Photoluminescence Characterization of the Efficient Visible Light-Emitting Porous Silicon”**  
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