张希珍

副教授

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教育背景

日本产业技术综合研究所 博士后、访问研究员（2008-2012）
吉林大学理学 博士（2002-2007）
吉林大学工学 学士（1998-2002）

研究领域

固体发光材料与器件(当前研究领域)；小尺寸 MOS 电容模型及其测量方法；铁电场存储器材料与器件；聚合物光波导器件

代表性成果

论文类：

[1] **X. Zhang***, C. Cheng, H. Zhu, et al., A new MOS capacitance correction method based on five-element model by combining double-frequency C-V and I-V measurements, IEEE Electron Device Lett., 37, 1328-1331, 2016.

[2] **X. Zhang*,** H. Zhu, C. Cheng et al., Single frequency correction based on three-element model for thin dielectric MOS capacitor, Solid-State Electron., 129, 97-102, 2017.

[3] **X. Zhang***, S. Zhang, H. Zhu et al., Frequency dispersion analysis of thin dielectric MOS capacitor in a five-element model, J. Phys. D: Appl. Phys., 51, 055105, 2018.

[4] **X． Zhang***, S. Zhang, H. Zhu et al., J. Nanosci. Nanotechnol., 18, 7473–7478, 2018. https://doi.org/10.1166/jnn.2018.16039.

[5] **Xizhen Zhang***, Sujuan Zhang, Xiuyu Pan et al., Error analysis and frequency selection guidelines for three-frequency correction in MOS capacitors, Semicond. Sci. Technol., 33, 115006, 2018.

[6] **Xizhen Zhang***, Xiuyu Pan, Yi Cheng* et al., Electric and dielectric characteristics of Al/ZrO_2/IL/n-Si MOS capacitors using three-frequency

correction method, Results in Physics, 12, 681–686, 2019.
[7] **Xizhen Zhang**, Lizhu Guo, Yuhang Zhang et al., Improved photoluminescence quantum yield of $CsPbBr_3$ quantum dots glass ceramics, Journal of the American Ceramic Society, 103, 5028-5035, 2020.
[8] **Xizhen Zhang**, Lizhu Guo, Yuhang Zhang et al., Excellent exciton luminescence of $CsPbI_3$ red quantum dots in borate glass, Journal of Non-Crystalline Solids, 541, 120066, 2020.
[9] Lizhu Guo, **Xizhen Zhang***, Yuhang Zhang et al., Color-adjustable $CsPbBr_{3-x}I_x$ quantum dots glasses for wide color gamut display, Journal of Non-Crystalline Solids, 551, 120432, 2021.
[10] **Xizhen Zhang,** Mengqi Lin, Lizhu Guo et al., Long-wavelength pass filter using green $CsPbBr_3$ quantum dots glass, Optics and Laser Technology, 138, 106857, 2021.
[11] Mengqi Lin, **Xizhen Zhang***, Lizhu Guo et al., Blue and green light exciton emission of chloro-brominated perovskite quantum dots glasses, Optical Materials, 122, 111654, 2021.
[12] Lizhu Guo, **Xizhen Zhang***, Mengqi Lin et al., Wide gamut white LED device using green $CsPbBr_3$ quantum dots glass and red K_2SiF_6: Mn^{4+} phosphor, Optik, 2021.

专利：

[1]张希珍，陈宝玖，于涛，一种基于五元素模型的MOS电容测量方法，中国发明专利, ZL201610522936.X。
[2]张希珍，陈宝玖，于涛，一种LED结合钙钛矿量子点微晶玻璃的显示用宽色域背光源，中国发明专利，ZL201910838827.2。
[3]张希珍，陈宝玖，孙佳石，一种绿色钙钛矿量子点玻璃滤光片，发明专利，申请号 202010479838.9。

代表性项目

(1) 辽宁省博士启动基金,20170520082, 超薄 MOS 电容模型及测量方法研究, 2017.09-2019.08，主持，已结题。
(2) 横向项目，技术开发（委托）合同，MOD 材料在 MOS 电容应用中的技术开发，2018.04-2019.04，主持，已结题。
(2) 辽宁省自然科学基金面上项目，2021-MS-137，LED 显示光源用绿光钙钛矿量子点和窄带红光荧光粉融合的复合荧光玻璃，2021.8.1-2023.7.31，主持，在研。

荣誉奖励

（1）2018 年辽宁省自然科学优秀成果奖-优秀论文三等奖，A new MOS capacitance correction method based on five-element model by combining double-frequency C-V and I-V measurements，辽宁省科学技术协会。
（2）2018 年 Semiconductor Science and Technolog Outstanding Reviewer Award 优秀审稿人奖，奖励部门 IOP Pressing.

社会兼职	IEEE 电气电子工程师学会会员; JPD、SST 等杂志审稿人
其他	