



多功能有机光电量测系统,整合稳态、瞬态以及交流阻抗多种量测技术,是OLED,钙钛矿/晶硅叠层电池,PeQD-X研究人员最佳的量测工具!

- Charge Extraction
- Photo-CELIV
- Capacitance-Voltage
- IMPS / IMVS
- Impedance Spectroscopy
- MELS
- Current-Voltage-Luminance
- Emission Spectrum
- Transient Electroluminescence
- Transient Photocurrent
- Transient Photovoltage
- User-Defined Signals

Paios



我们的光伏PV产业技术全面升级方案:

*****SPI: Setfos + Laoss / Paios + Phelos + Litos Integration**
无缝整合独特功能,拟合提取分析载子动力学和衰退老化机制!

*****Pero/Si Tandem Solar Cell** 模拟优化Tandem结构,创新功能材料,加速推进次世代钙钛矿/晶硅叠层太阳电池的批量大尺寸商业化。

我们提出纳米原子尺度--非平衡条件类费米能级失配(Quasi Fermi Level Splitting QFLS)关键参数,在实际叠层太阳能电池结构/各个子电池分析辅助以瑞士Fluxim公司Setfos动态仿真模拟

Perovskite钙钛矿/晶硅Si叠层太阳电池设计优化,首先掌握系统性关键因素QFLS Quasi Fermi Level Splitting,减少Voc Loss。进而Isc最优匹配/稳定寿命增强

20230504 德国HZB, Potsdam大学等联合paper: Interface engineering for high-performance, triple-halide perovskite-silicon tandem solar cells 32.5%

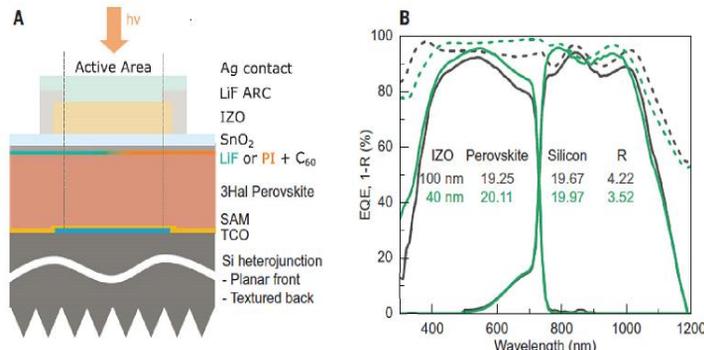
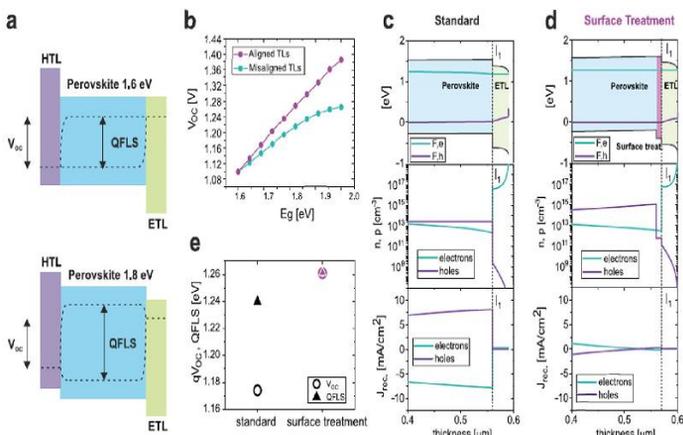


Table S1. PLQY and QFLS obtained from PL measurements on three different device configurations.

Sample	PLQY (QFLS)	
	No surface treatm.	Surface treatment
Quartz/Perovskite	3.75e-2 (1.305 eV)	9.94e-2 (1.330 eV)
Glass/ITO/2PACz/3Hal/Surf.Treatm.	5.43e-3 (1.255 eV)	2.47e-2 (1.294 eV)
Glass/ITO/2PACz/3Hal/Surf.Treatm./C60	2.66e-4 (1.177 eV)	2.34e-3 (1.233 eV)
Glass/ITO/Me4PACz/3Hal/Surf.Treatm.	4.10e-2 (1.308 eV)	-
Glass/ITO/Me4PACz/3Hal/Surf.Treatm./C60	2.43e-3 (1.175 eV)	-

Fig. 1 | Drift-diffusion simulations with SETFOS.