Supporting Information

Hydrophobic and luminescent polydimethylsiloxane PDMS-Y_2O_3:Eu^{3+} coating for power enhancement and UV protection of Si solar cells

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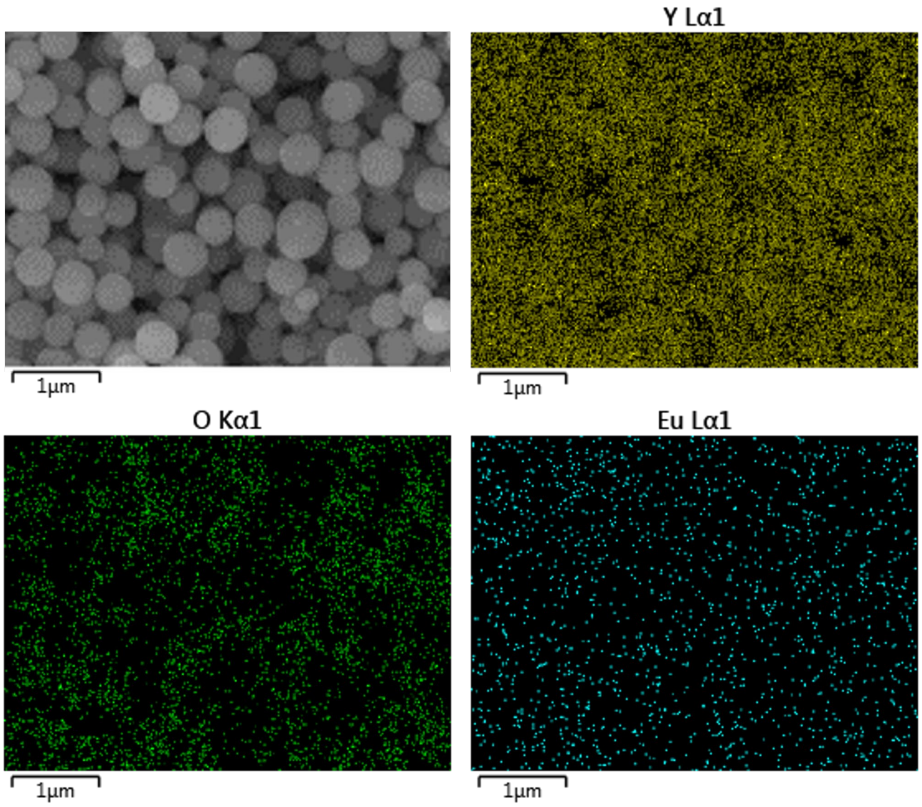

Figure S1. EDS elemental mapping of Y_2O_3:Eu^{3+} particles.

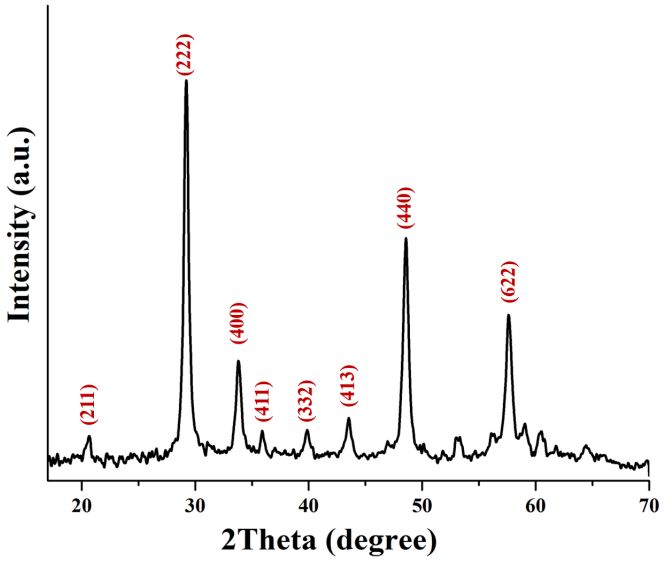

Figure S2. XRD pattern of Y_2O_3:Eu^{3+} particles.

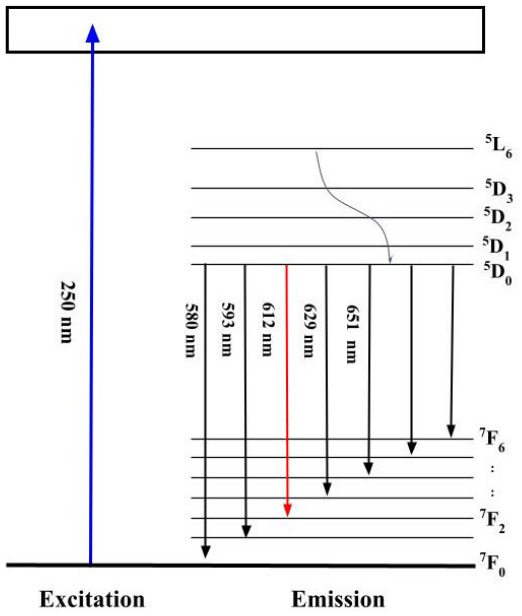

Figure S3. Schematic representation of transitions within Eu^{3+}

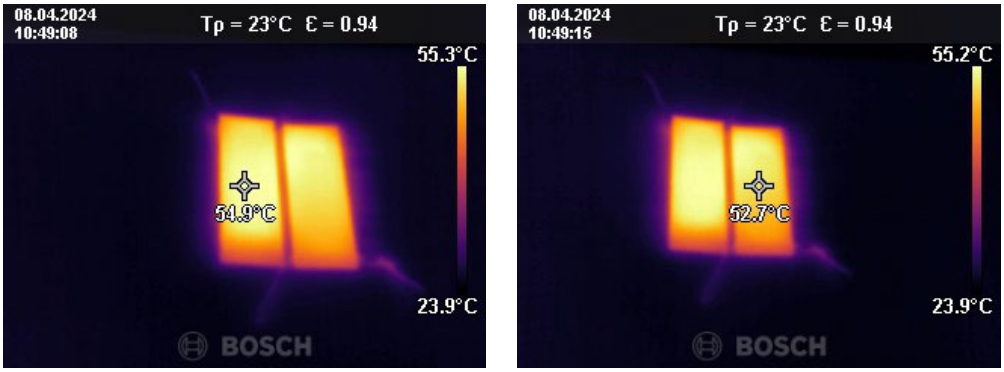

Figure S4. Heating of Si cells within 5 min under simulated solar light illumination. Uncoated Si cell reached ~ 54.9 ºC, while coated Si cell reached ~ 52.7 ºC under the same conditions. Temperature was measured using Bosch GTC 600 C thermal imaging camera.