Supporting Information

Shape-Controlled Silicon Microwire Arrays from Au–Ag-Catalyzed Metal-Assisted Chemical Etching for Radial Junction Solar Cells

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Figure S1. Auger corrected inverse carrier lifetime $1/\tau_{corr}$ versus excess carrier density Δn used for J_0 extraction of three samples with different structures after double-side indirect doping process. Inset is the structure diagram of passivation samples, and

phosphorous silicate glass (PSG) is the product in doping process. The data was analyzed by a microwave photoconductivity decay system (WCT-120, Sinton Consulting).



Figure S2. The minority carrier lifetime of samples with different structure or passivation layer at excess carrier density of 1×10^{15} cm⁻³, where the bars from left to right are pillar (Au), pillar (Ag/Au) and planar Si with the same passivation layer of diffused N⁺-Si layer together with phosphorosilicate glass (PSG) layer. More details concerning this structure can refer to the inset of Figure S1. The fourth bar is the planar Si wafer with N+-Si layer but without the PSG passivation layer, while the rightmost is the planar Si without any passivation.