

Supporting Information

Eco-friendly and Efficient Processes for Silicon Powder Recovery from End-of-life Photovoltaic Modules

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Table S1. Weight loss temperature and percentage compared to Reclaimed Si after WGS process using D.I. water, HNO₃, and NaCl 15 wt% aqueous solution

Sample	Weight (mg)	Weight loss temperature (°C) and percentage			
		Total	1st	2nd	3rd
D.I water 5k rpm_10min	10.446	20.472%	239.9 ~389.8 (3.944%)	392.8 ~465.0 (9.026%)	466.1 ~545.4 (7.137%)
HNO ₃ 5k rpm_10min	2.739	32.448%	301.9 ~377.2 (2.403%)	382.8~521.9 (29.741%)	
NaCl 15 wt% 5k rpm_10 min	10.907	3.808%	307.3~450.4 (0.465%)		451.5~513.3 (3.343%)
Reclaimed Si powder	18.29	27.936 %	265.0 ~399.1 (6.112%)		408.7~540.3 (21.824%)

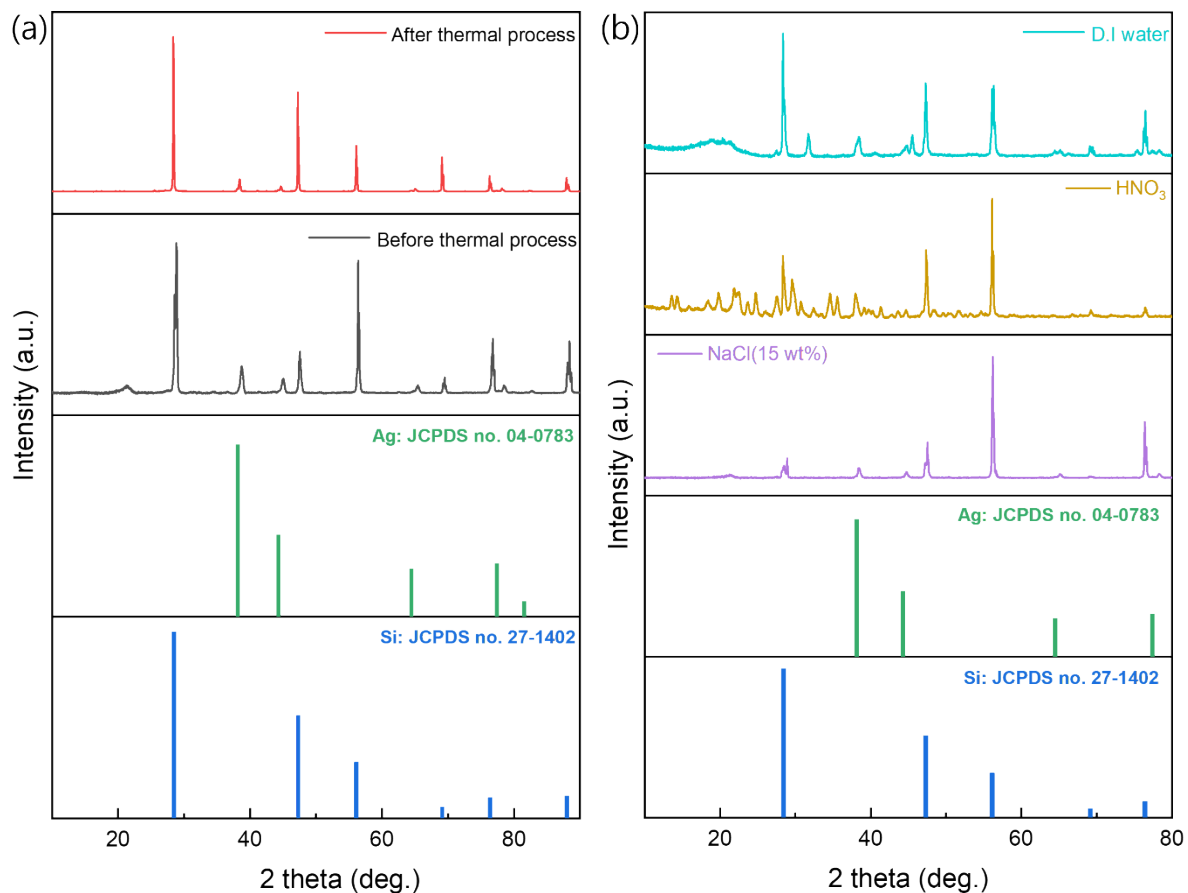


Fig. S1. XRD results after (a) thermal process and (b) WGS process using various solutions

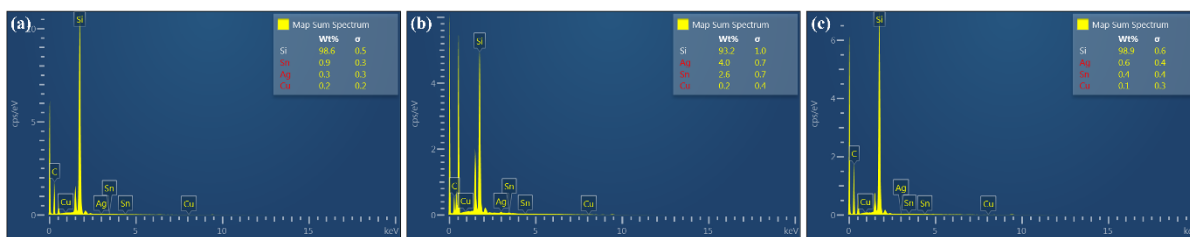


Fig. S2. EDS measurement results after the WGS process using (a) D.I. water, (b) HNO_3 , and (c) NaCl 15 wt% aqueous solution