

Supplementary Information: Transformation of glass fiber reinforced epoxy from waste printed circuit boards to adsorbents for effective CO₂ storage in abandoned mines

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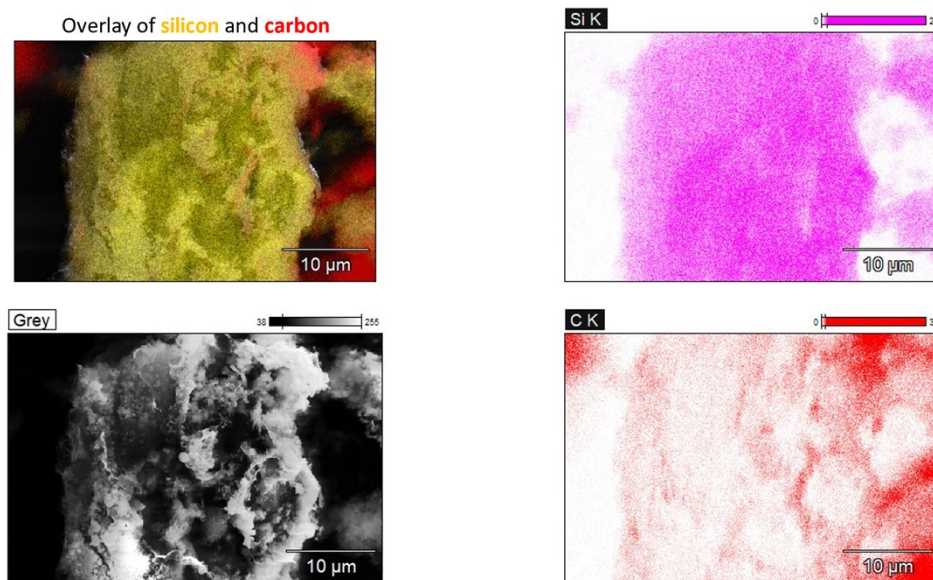
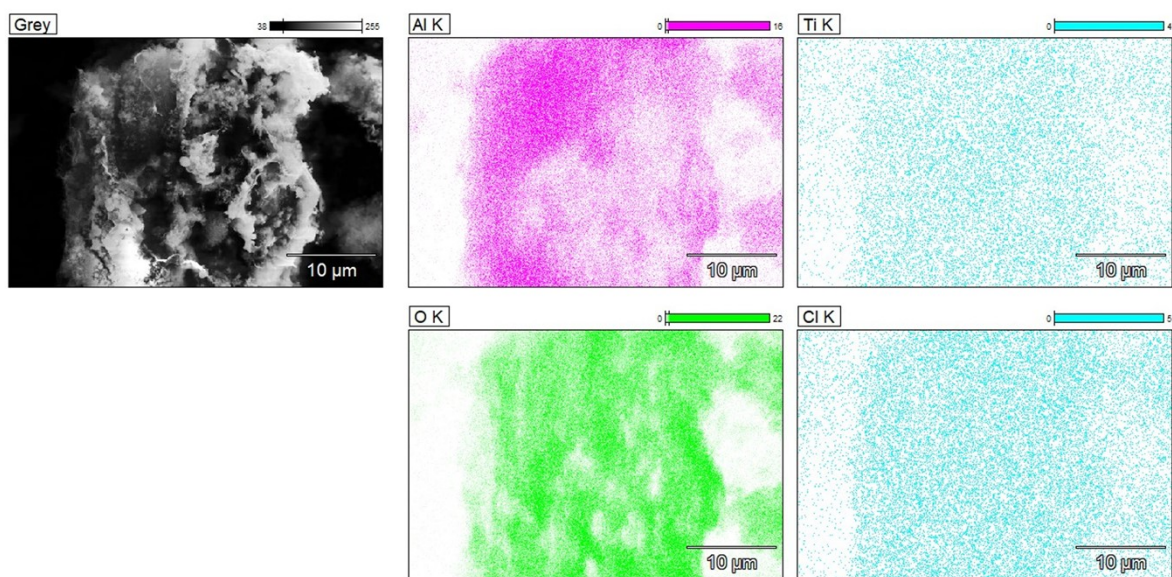
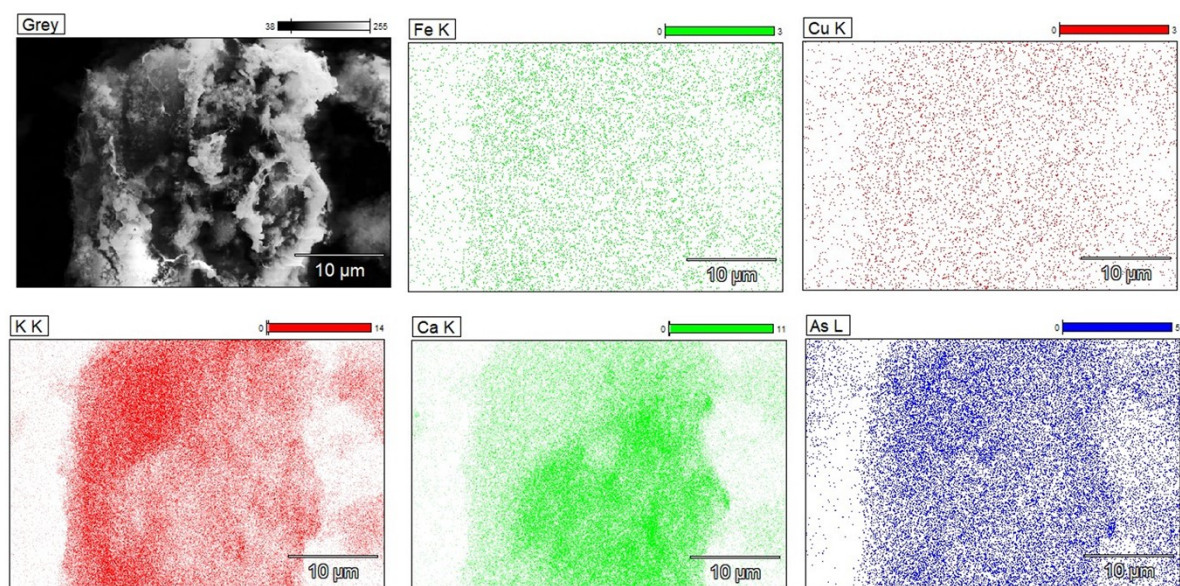


Figure S 1 EDS Mapping of PCB650 for carbon and silicon



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Figure S 2EDS Mapping of PCB650 for aluminum, titanium, oxygen, and chlorine



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Figure S 3 EDS Mapping of PCB650 for iron, copper, potassium, calcium, and arsenic

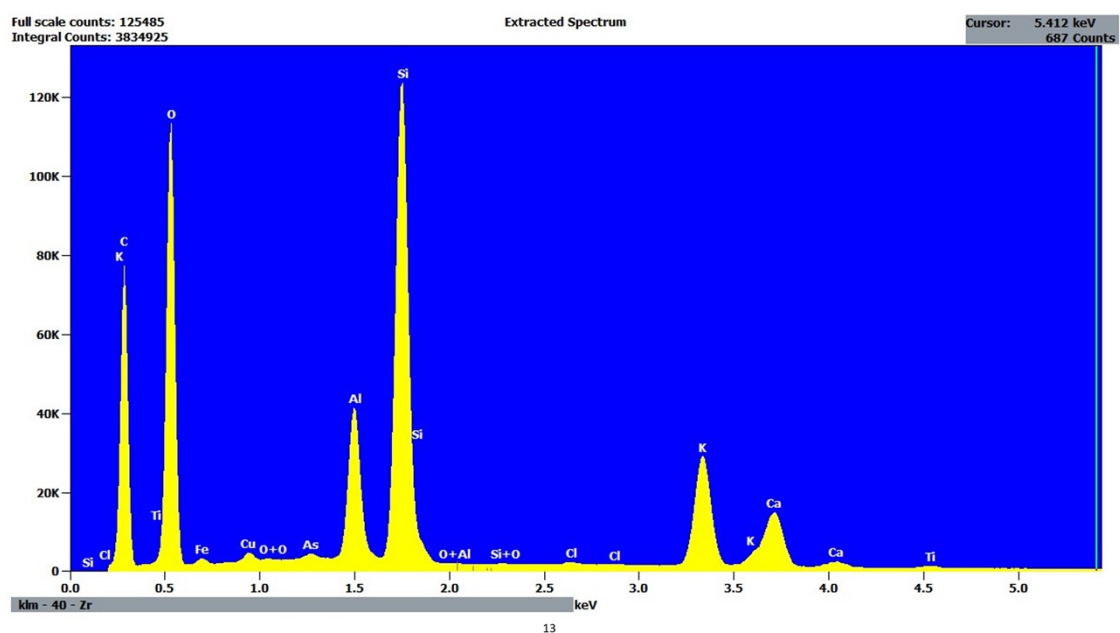


Figure S 4 Elemental spectrum of PCB650

Element	Extracted Spectrum	Extracted Spectrum	Extracted Spectrum	Extracted Spectrum	Extracted Spectrum
	Intensity	Net Counts	Weight %	Atom %	Norm. Wt. %
C K	0.00	395626	22.76	33.62	22.76
O K	0.00	578174	42.45	47.07	42.45
Al K	0.00	295744	4.50	2.96	4.50
Si K	0.00	1038953	16.30	10.29	16.30
Si L	0.00	0	0.00	0.00	0.00
Cl K	0.00	8741	0.17	0.09	0.17
Cl L	0.00	3323	0.00	0.00	0.00
K K	0.00	325394	7.71	3.50	7.71
K L	0.00	0	0.00	0.00	0.00
Ca K	0.00	165580	4.53	2.01	4.53
Ca L	0.00	0	0.00	0.00	0.00
Ti K	0.00	6361	0.26	0.10	0.26
Ti L	0.00	15367	0.00	0.00	0.00
Fe K	0.00	4312	0.36	0.11	0.36
Fe L	0.00	23974	0.00	0.00	0.00
Cu K	0.00	4150	0.74	0.21	0.74
Cu L	0.00	11065	0.00	0.00	0.00
As K	0.00	21	0.00	0.00	0.00
As L	0.00	7841	0.21	0.05	0.21
			100.00	100.00	100.00

Table S 1 elemental data for PCB650

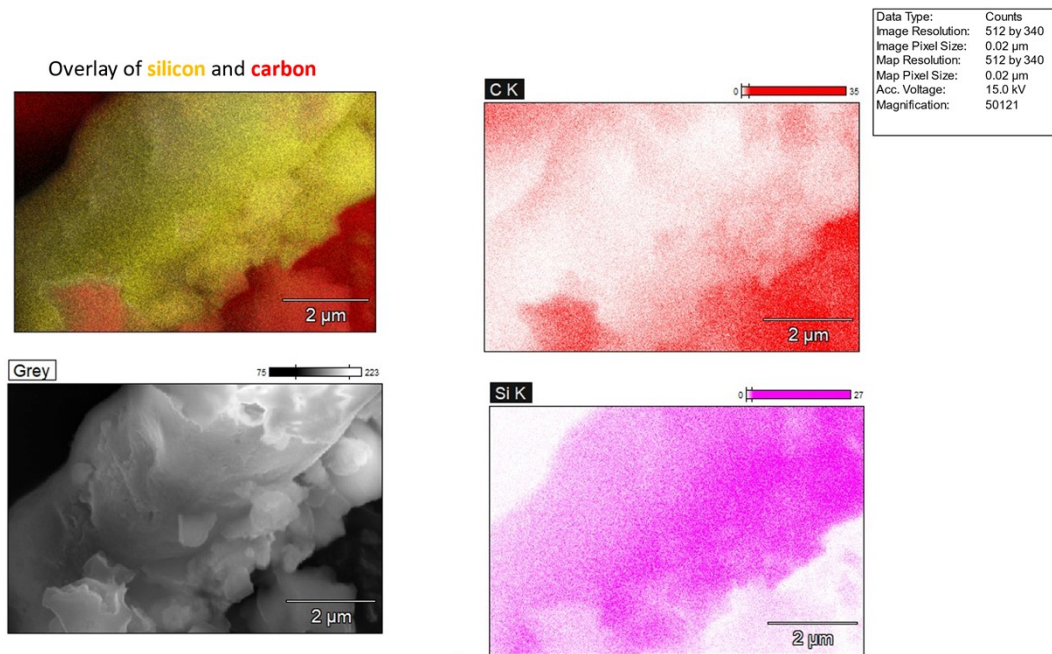
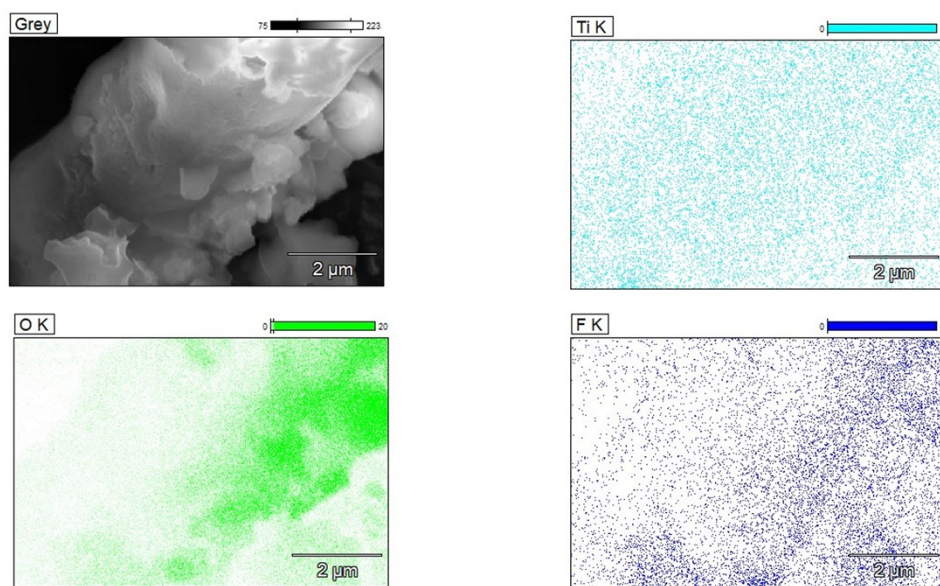
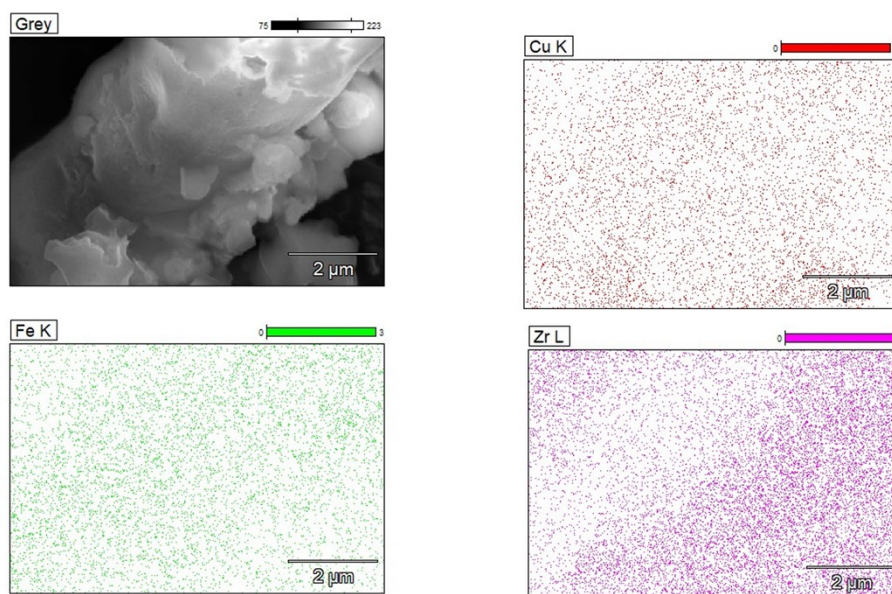


Figure S 5 EDS Mapping of US-PCB650 for carbon and silicon



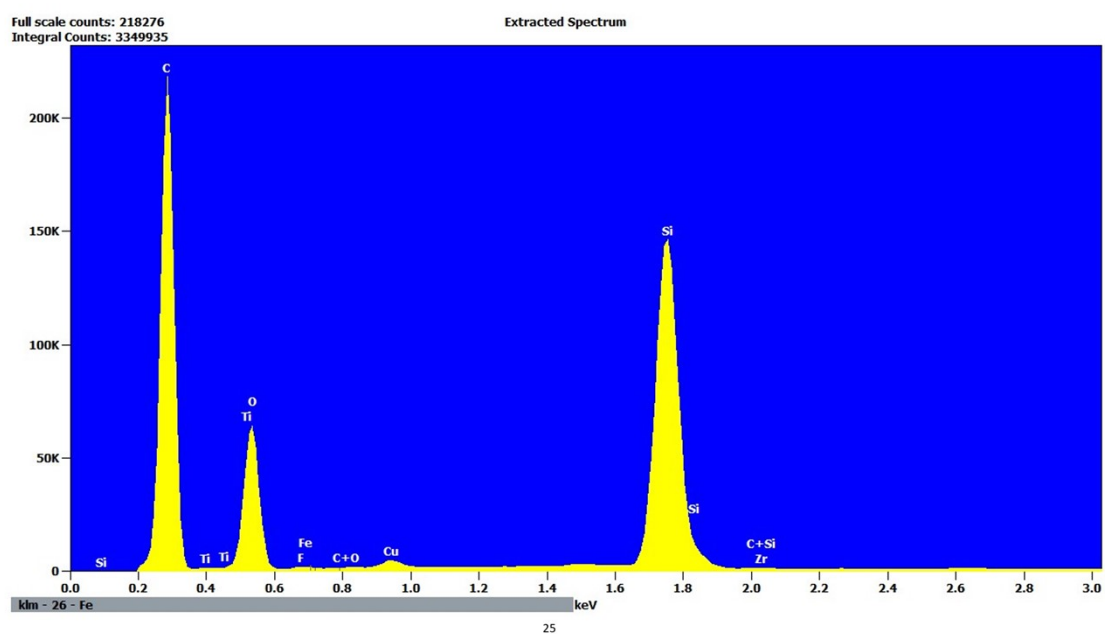
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Figure S 6 EDS Mapping of US-PCB650 for titanium, oxygen, and fluorine



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Figure S 7 EDS Mapping of US-PCB650 for copper, iron, and zirconium



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Figure S 8 Elemental spectrum of US-PCB650

Element	Extracted Spectrum Intensity	Extracted Spectrum Net Counts	Extracted Spectrum Weight %	Extracted Spectrum Atom %	Extracted Spectrum Norm. Wt. %
C K	0.00	1090312	52.91	64.70	52.91
O K	0.00	326674	27.97	25.68	27.97
F K	0.00	0	0.00	0.00	0.00
Si K	0.00	1237997	17.79	9.31	17.79
Si L	0.00	0	0.00	0.00	0.00
Ti K	0.00	7166	0.29	0.09	0.29
Ti L	0.00	97573	0.00	0.00	0.00
Fe K	0.00	855	0.07	0.02	0.07
Fe L	0.00	12468	0.00	0.00	0.00
Cu K	0.00	4399	0.79	0.18	0.79
Cu L	0.00	19879	0.00	0.00	0.00
Zr L	0.00	5935	0.17	0.03	0.17
Zr M	0.00	6556	0.00	0.00	0.00
			100.00	100.00	100.00

Figure S 9 Elemental data for US-PCB650