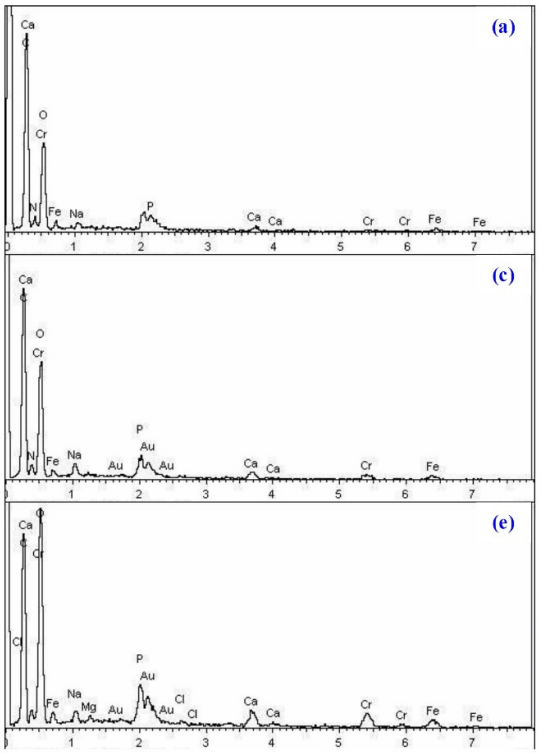
Supplementary Materials

New Insight into the Performance and Self-Defensive Responses of Algal-Bacterial Granular Sludge Process under Cr(VI)-Induced Stress



Cr (VI) (mg/L)	C (%)	N (%)	O (%)	P (%)	Ca (%)	Cr (%)	Fe (%)
(a) 0.5	41.57	17.93	35.69	1.27	0.75	**0.35**	1.78
(b) 1.0	35.97	19.47	38.63	1.11	0.73	**0.93**	2.27
(c) 1.5	42.65	14.40	38.12	1.02	0.73	**1.01**	1.23
(d) 2.0	40.84	12.10	41.40	1.32	0.78	**1.06**	1.79
(e) 2.5	44.45	—	45.87	1.78	1.38	**2.98**	2.37

Figure S1 Energy dispersive X-ray spectra (EDS) of algal-bacterial granular sludge.

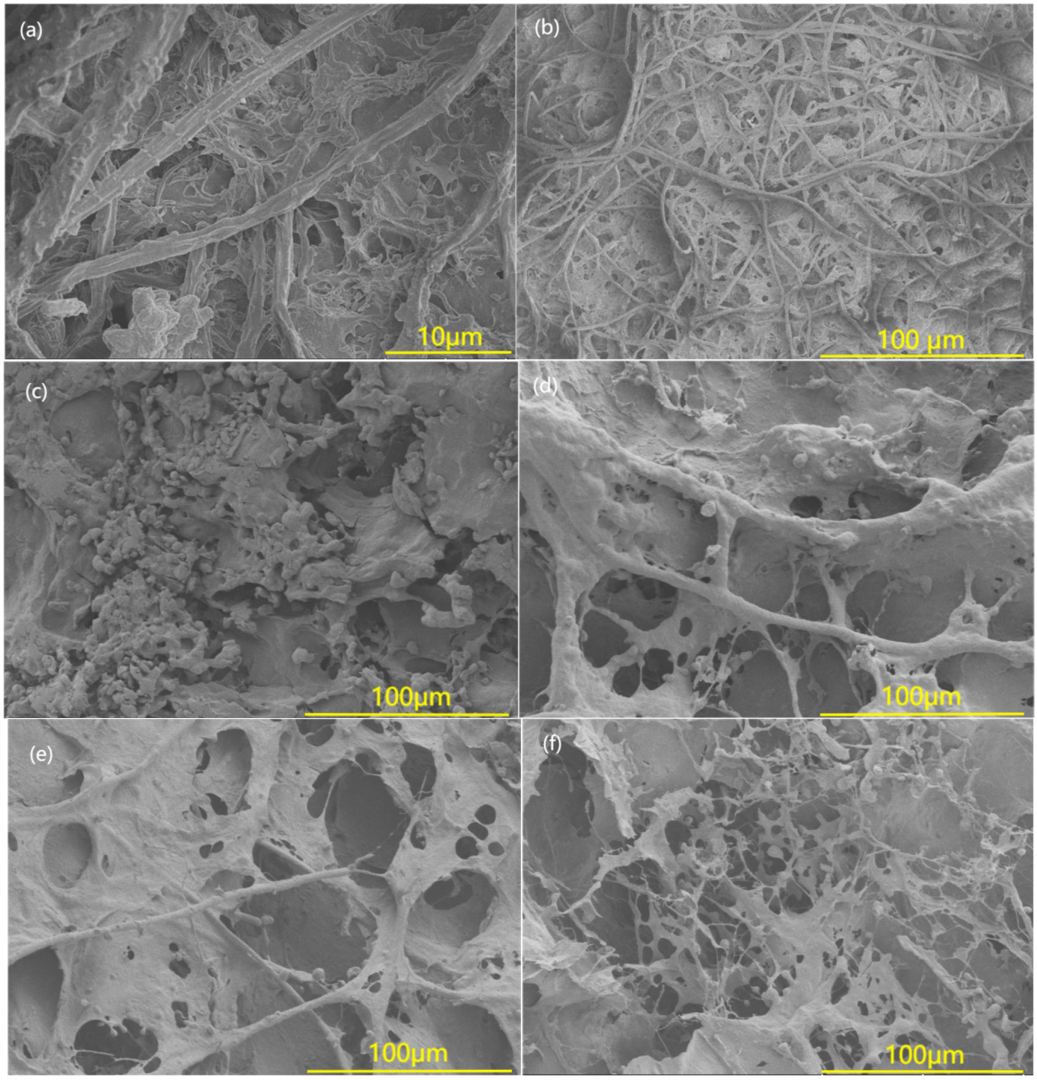


Figure S2 SEM images of algal-bacterial granular sludge at the initial Cr(VI) concentration of 0 (a), 0.5 (b), 1.0 (c), 1.5 (d), 2.0(e) and 2.5 mg/L (f).

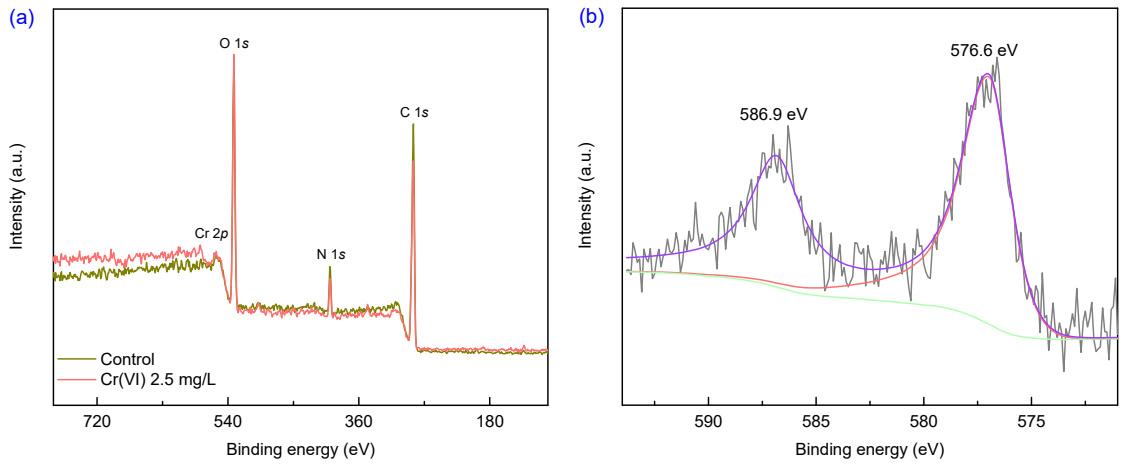


Figure S3 Full spectrometric surveying (a) and Cr 2*p* XPS spectra of algal-bacterial granular sludge cultivated with 2.5 mg/L of Cr (VI) for ninety days (b).

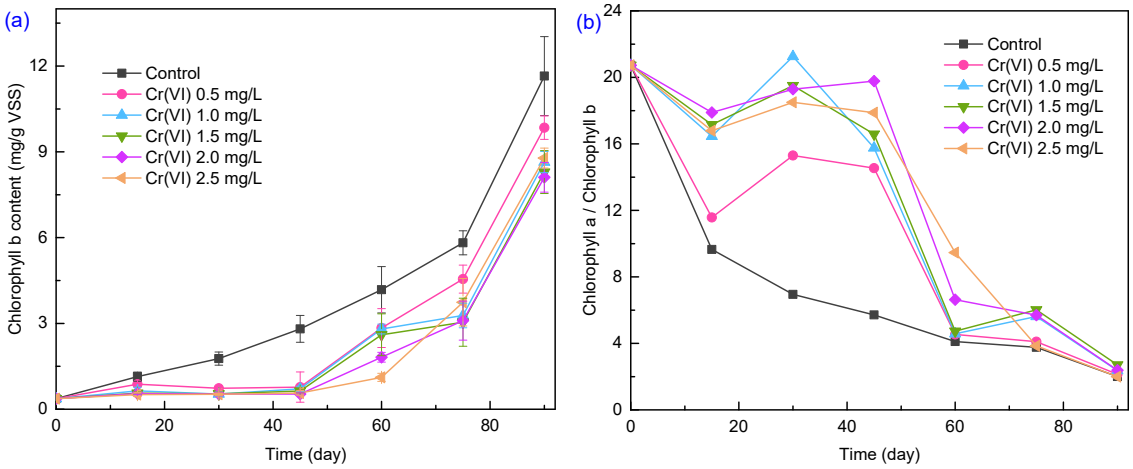


Figure S4 Chlorophyll b content (a) and the ratio of chlorophyll a and chlorophyll b (b) of the algal-bacterial granular sludge.

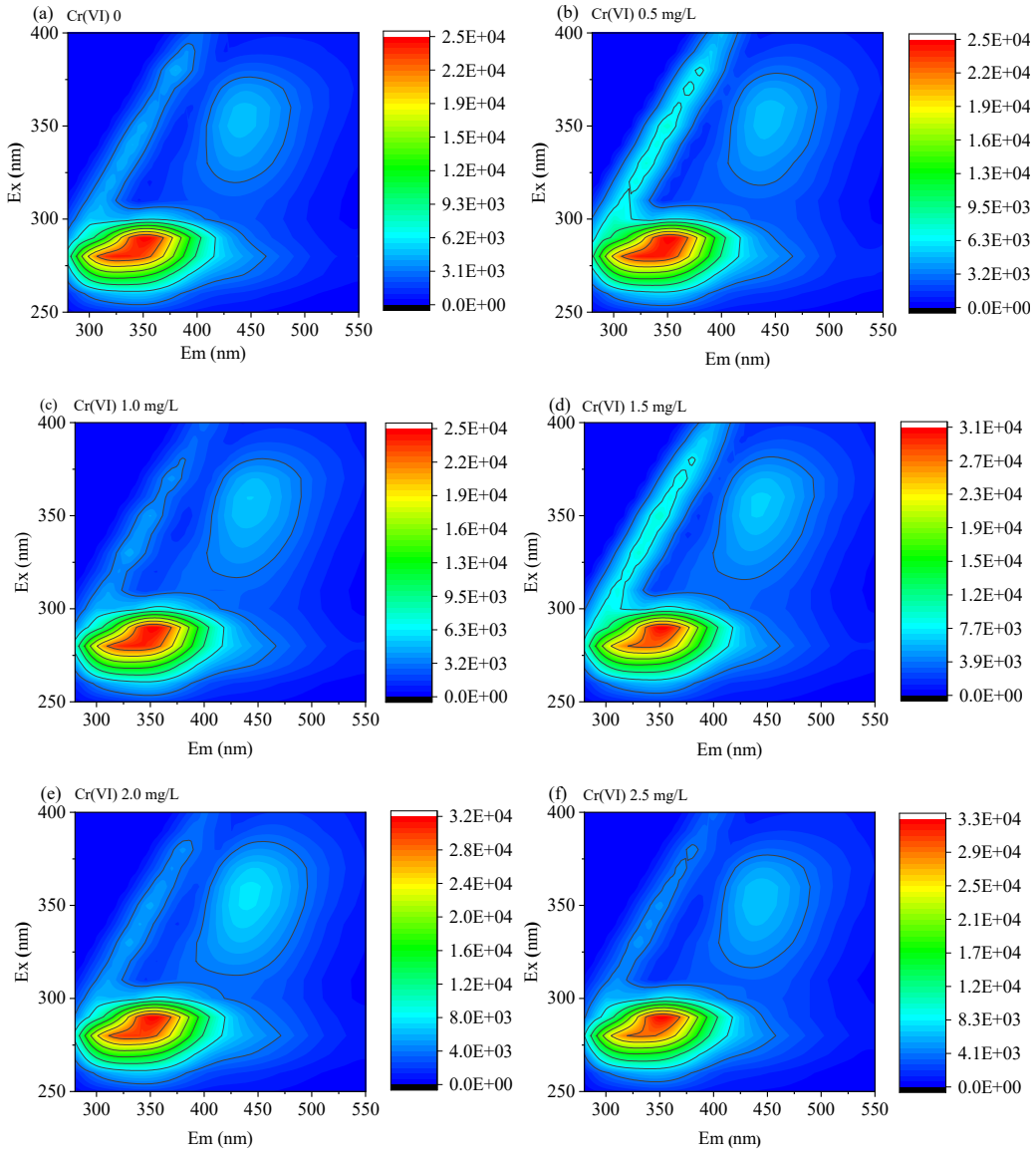


Figure S5 3D-EEM fluorescence spectra of EPS after ninety day-operation at Cr(VI) concentrations of 0 (a), 0.5 (b), 1.0 (c), 1.5 (d), 2.0 (e) and 2.5 mg/L (f).

Table S1 Fluorescence spectra parameters of EPS in algal-bacterial granular sludge.

Cr (VI)-exposed concentration (mg/L)	Peak A		Peak B	
	Ex/Em	Intensity	Ex/Em	Intensity
0	290/352	24645	360/444	4827
0.5	290/352	25161	360/444	5014
1.0	290/352	25253	360/444	5289
1.5	290/352	30756	360/444	6619
2.0	290/352	31757	360/442	7516
2.5	290/352	33020	360/444	6726