

## Supporting Information

### Preparation of the hydrophilic and antifouling coatings via tannic acid and zwitterionic polymers

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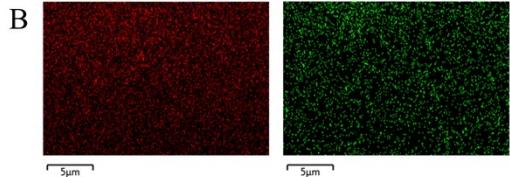
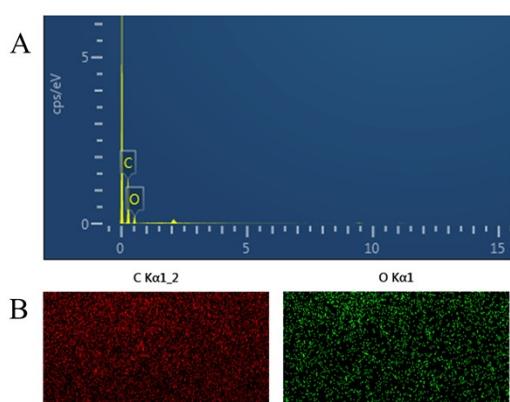
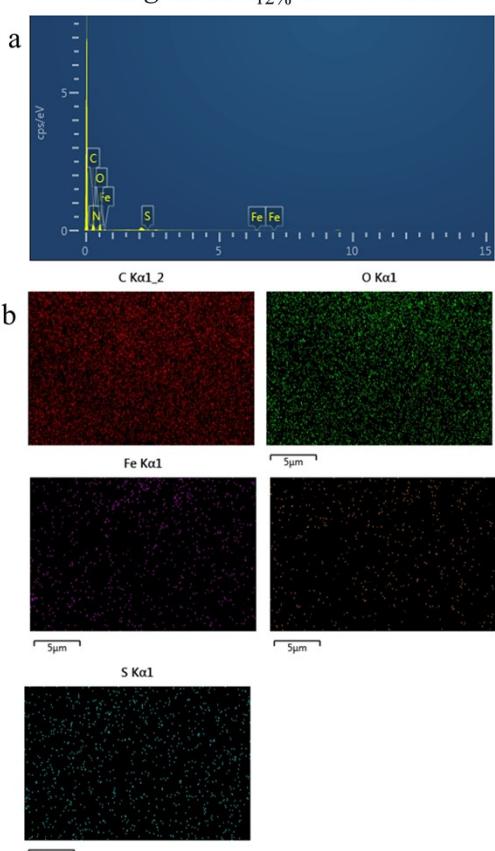
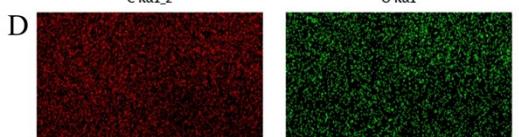
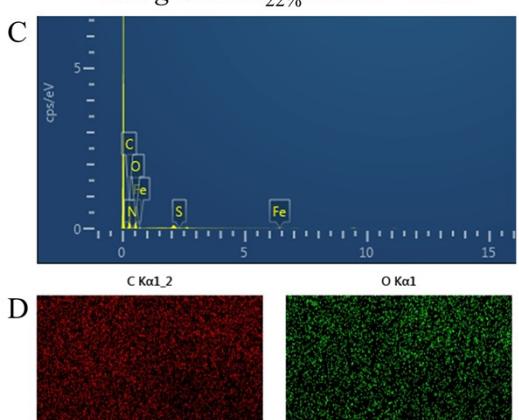
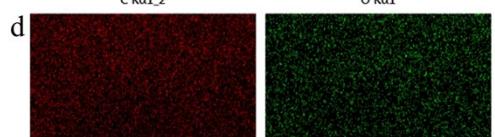
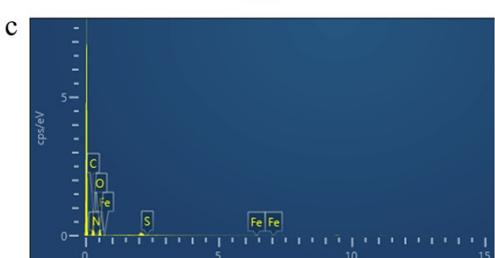
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## EDS analysis

**Table S1** The raw data of surface elemental compositions for PEI-g-SBMA<sub>x</sub>/TA-Fe<sup>3+</sup>/PET by EDS analysis.

	Element	wt (%)	wt (%) Sigma	Atom ratio (%)
PET	C	61.14	0.56	67.74
	O	38.86	0.56	32.26
	Total	100.00		100.00
	C	51.71	0.82	60.38
	O	38.44	0.62	33.70
	Fe	5.04	0.09	1.26
	N	4.54	0.99	4.54
	S	0.27	0.04	0.12
	Total	100.00		100.00
PEI-g-SBMA <sub>12%</sub> /TA-Fe <sup>3+</sup> /PET	C	50.75	0.82	59.31
	O	39.46	0.62	34.62
	Fe	4.72	0.09	1.19
	N	4.71	0.99	4.72
	S	0.36	0.04	0.16
	Total	100.00		100.00
PEI-g-SBMA <sub>22%</sub> /TA-Fe <sup>3+</sup> /PET	C	50.75	0.82	59.31
	O	39.46	0.62	34.62
	Fe	4.72	0.09	1.19
	N	4.71	0.99	4.72
	S	0.36	0.04	0.16
	Total	100.00		100.00
PEI-g-SBMA <sub>40%</sub> /TA-Fe <sup>3+</sup> /PET	C	50.75	0.82	59.31
	O	39.46	0.62	34.62
	Fe	4.72	0.09	1.19
	N	4.71	0.99	4.72
	S	0.36	0.04	0.16
	Total	100.00		100.00

PET

PEI-g-SBMA<sub>12%</sub>/TA-Fe<sup>3+</sup>/PETPEI-g-SBMA<sub>22%</sub>/TA-Fe<sup>3+</sup>/PETPEI-g-SBMA<sub>40%</sub>/TA-Fe<sup>3+</sup>/PET

**Fig. S1** Element image (A) (a) (C) (c); element surface distribution image (B) (b) (D) (d) obtained by EDS scanning of PET, PEI-*g*-SBMA<sub>12%</sub>/TA-Fe<sup>3+</sup>/PET, PEI-*g*-SBMA<sub>22%</sub>/TA-Fe<sup>3+</sup>/PET, PEI-*g*-SBMA<sub>40%</sub>/TA-Fe<sup>3+</sup>/PET.