Electronic Supplementary Material (ESI) for.

This journal is

## **Supporting Information**

## Synthesis and antibiofouling properties of crosslinkable copolymers

## grafted with fluorinated aromatic side chains

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## <sup>1</sup>H NMR, <sup>19</sup>F NMR, Mass,GPC Spectra of Products



Figure 2. <sup>19</sup>F NMR spectrum of **1a** 







Figure 4. <sup>19</sup>F NMR spectrum of **1b** 



Figure 6. <sup>19</sup>F NMR spectrum of **1c** 











Figure 10. <sup>19</sup>F NMR spectrum of **2f** 







Figure 14. <sup>19</sup>F NMR spectrum of **5** 



Figure 16. HRMS (ESI-TOF) data of 1a





National Center for Organic Mass Spectrometry in Shanghai. Shanghai Institute of Organic Chemistry. Chinese Academic of Sciences. High Resolution MS DATA REPORT.



Instrument: Thermo Fisher Scientific LTQ FT Ultra 🚽

Card Serial Number : M160928+

Sample Serial Number: ZPC-002↔

Operator : HUAQIN Date: 2016/03/284

Operation Mode: MALDI-FT\_DHB₽

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Elemental composition search on mass 657.00

n/z= 652.	00-662.00			
m/z	Theo.	Delta	RDB	Composition
	Mass	(ppm)	equiv.	
656.9975	656.9976	-0.14	4.5	C17 H6 O3 F 21
	656.9978	-0.38	15.5	C25H5O3F16
	656.9966	1.36	19.5	C28 H4 O2 F 15
	656.9965	1.60	8.5	C20 H5 O2 F 20
	656.9989	-2.12	11.5	C22 H6 O4 F 17
	656.9991	-2.36	22.5	C30 H5 O4 F 12
	656.9953	3.34	12.5	C23 H4 O F19
	657.0001	-3.86	7.5	C19H7 O5 F 18
	657.0002	-4.10	18.5	C27 H6 O5 F 13
	657.0003	-4.22	9.0	C20 H4 N F21

Figure 18. HRMS (ESI-TOF) data of 1b



Figure 19.GPC spectra of 2a



Figure 20.GPC spectra of 2a



Figure 21.GPC spectra of 2b



Figure 22.GPC spectra of 2b



Figure 23.GPC spectra of 2c



Figure 24.GPC spectra of 2c



Figure 25.GPC spectra of 2d



Figure 26.GPC spectra of 2d







Figure 28.GPC spectra of 2e



Figure 29.GPC spectra of 2f



Figure 30.GPC spectra of 2f



Figure 31.GPC spectra of 2g



Figure 32.GPC spectra of 2g



Figure 33.GPC spectra of 2h



Figure 34.GPC spectra of 2h



Figure 35.GPC spectra of 2i



Figure 36.GPC spectra of 2i



Figure 37.GPC spectra of 5



Figure 38.GPC spectra of 5



Figure 39. SEM images of biofouling assay of coatings of polymer 2d



with E.coli (left) and S.aureus (right).

Figure 40. SEM images of biofouling assay of coatings of polymer 2a

with E.coli (left) and S.aureus (right).