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Electronic Supporting Information

On the effects of microplasma array treatment on polymer and biological materials

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Table 1: Summary of XPS results of untreated and treated PS, LDPE, ETFE and BSA surfaces. Elemental concentrations are presented in at.% (Values in parentheses represent SD).

Substrate	Treatment Time (s)	%C	%O	%F	%N	O/C
PS	Untreated	99.0 (0.3)	1.0 (0.3)	-	-	0.01
	10	96.1 (0.1)	3.9 (0.1)	-	-	0.04
	30	88.2 (0.3)	11.8 (0.3)	-	-	0.13
	60	86.3 (1.4)	13.5 (1.0)	-	-	0.16
	180	84.0 (0.5)	16.0 (0.5)	-	-	0.19
	300	84.7 (0.4)	15.3 (0.5)	-	-	0.18
	600	84.1 (0.4)	15.9 (0.4)	-	-	0.19
LDPE	Untreated	99.6 (0.1)	0.4 (0.1)	-	-	0.004
	10	97.4 (0.3)	2.6 (0.4)	-	-	0.03
	30	94.9 (0.5)	5.1 (1.1)	-	-	0.05
	60	91.6 (0.3)	8.4 (0.8)	-	-	0.09
	180	89.2 (0.2)	10.3 (0.3)	-	-	0.12
	300	88.6 (0.2)	11.4 (0.5)	-	-	0.13
	600	88.3 (0.5)	11.7 (0.3)	-	-	0.13
ETFE	Untreated	52.6 (0.5)	0.6 (0.1)	46.8 (0.4)	-	0.01
	10	50.7 (0.1)	1.4 (0.1)	47.9 (0.1)	-	0.03
	30	50.4 (0.5)	4.0 (0.6)	45.6 (0.1)	-	0.08
	60	50.2 (0.1)	4.5 (0.9)	45.3 (0.8)	-	0.09
	180	50.3 (0.2)	5.8 (0.5)	43.9 (0.4)	-	0.12
	300	50.1 (0.1)	6.7 (0.4)	43.2 (0.3)	-	0.13
	600	49.3 (0.3)	6.9 (0.3)	43.8 (0.1)	-	0.14
BSA	Untreated	76.5 (0.6)	11.8 (0.4)	-	10.4 (0.1)	0.15
	10	80.0 (0.6)	11.9 (0.1)	-	8.0 (0.8)	0.15
	30	85.9 (0.6)	8.9 (0.7)	-	5.1 (0.1)	0.10
	60	86.9 (0.3)	7.9 (0.3)	-	5.2 (0.1)	0.09
	180	92.3 (0.4)	6.4 (0.1)	-	1.3 (0.5)	0.07
	300	91.6 (0.6)	7.0 (0.7)	-	1.4 (0.0)	0.08
	600	93.0 (0.2)	6.3 (0.1)	-	0.5 (0.2)	0.07