

ARTICLE

Towards graphene bromide: Bromination of graphite oxide

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SUPPORTING INFORMATION

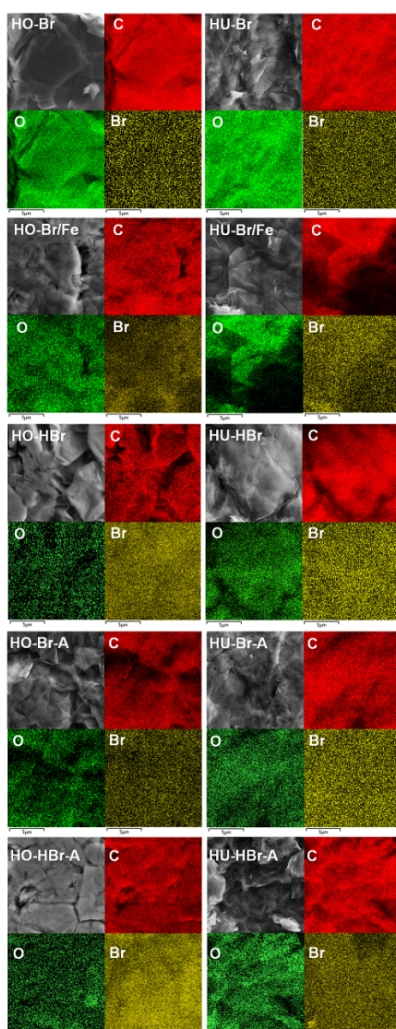


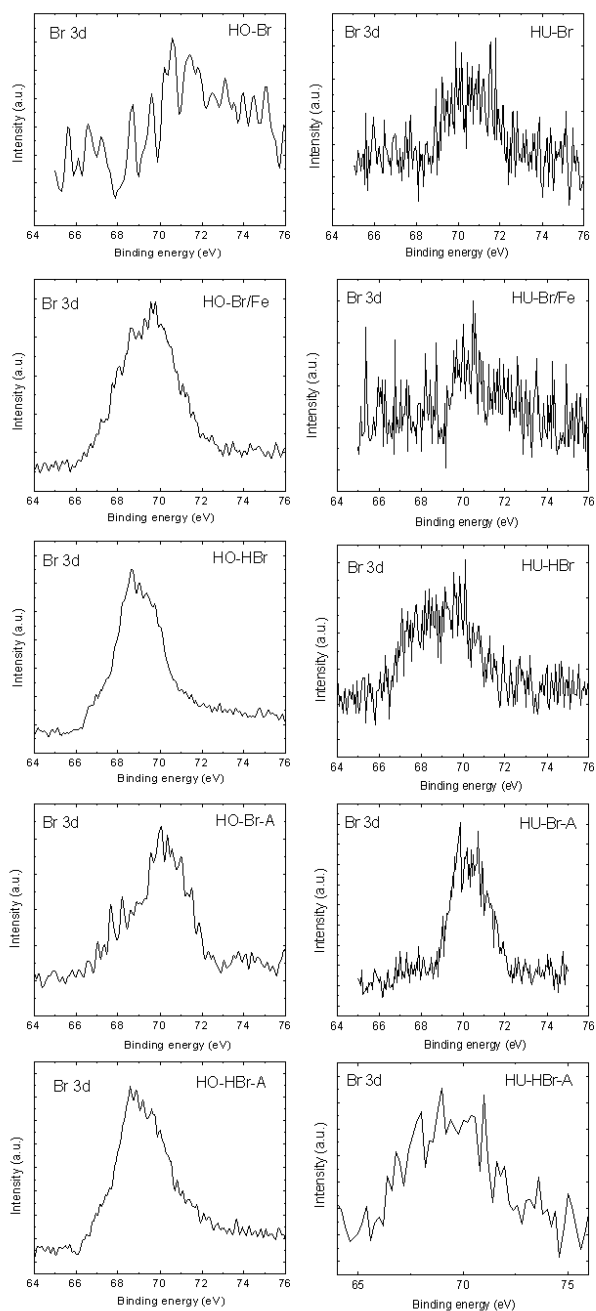
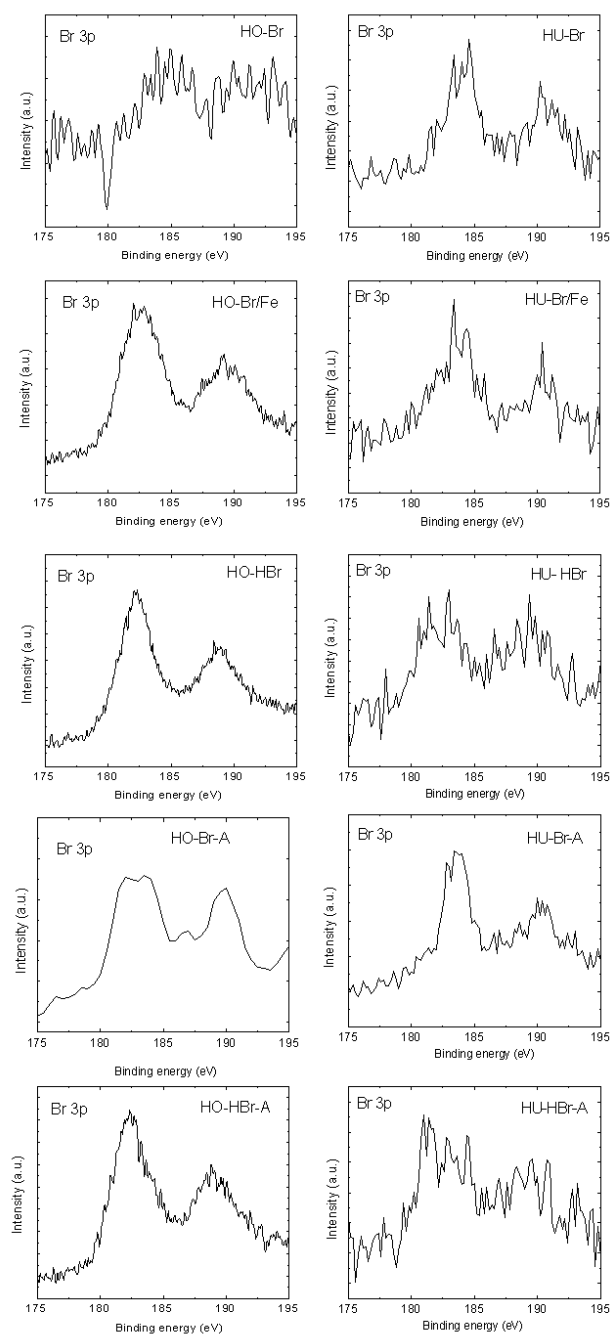
Fig. S11 SEM-EDS of all brominated graphenes, scale bar 5 μm

Table SI A Elemental composition of brominated graphenes obtained by elemental combustible analysis in at%

Sample	at.% C	at.% H	at.% N	at.% Br	at.% O
HO-Br	53.23	18.21	0.00	0.00	28.56
HU-Br	45.58	26.17	0.35	0.50	27.40
HO-Br/Fe	66.34	12.64	0.00	3.56	17.46
HU-Br/Fe	48.20	27.43	1.95	0.47	21.96
HO-HBr	88.08	4.42	0.00	5.57	1.92
HU-HBr	85.66	5.35	0.00	1.23	7.77
HO-Br-A	85.15	4.39	0.00	1.13	9.33
HU-Br-A	81.43	9.59	0.21	1.26	7.51
HO-HBr-A	93.93	1.32	0.00	4.35	0.41
HU-HBr-A	87.92	4.82	0.17	1.62	5.47

Table SI B Resistivity measurements of brominated graphenes

Sample	I (mA)	Resistivity (Ω.cm)
HO-Br	10	1.03×10^4
HU-Br	10	1.38×10^2
HO-Br/Fe	10	2.24×10^{-2}
HU-Br/Fe	10	3.99×10^0
HO-HBr	10	6.61×10^{-4}
HU-HBr	10	5.05×10^{-3}
HO-Br-A	10	5.84×10^{-2}
HU-Br-A	10	2.37×10^{-2}
HO-HBr-A	10	4.63×10^{-3}
HU-HBr-A	10	4.73×10^{-2}

**Fig. S12** High resolution XPS spectrum of Br 3d**Fig. S13** High resolution XPS spectrum of Br 3p

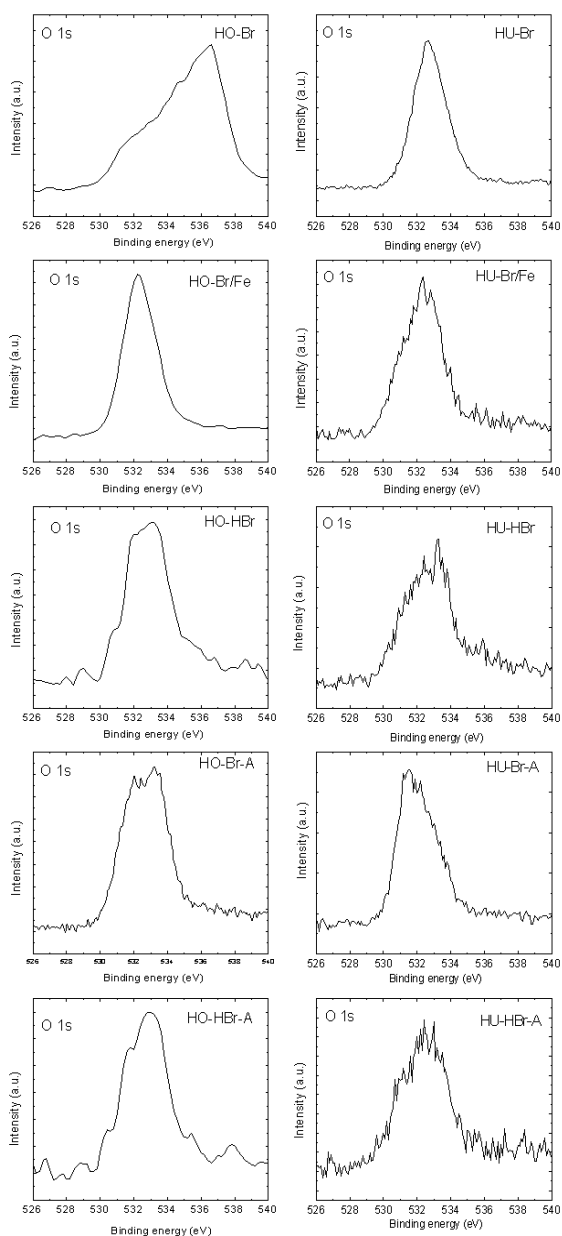


Fig. S14 High resolution XPS spectrum of O 1s

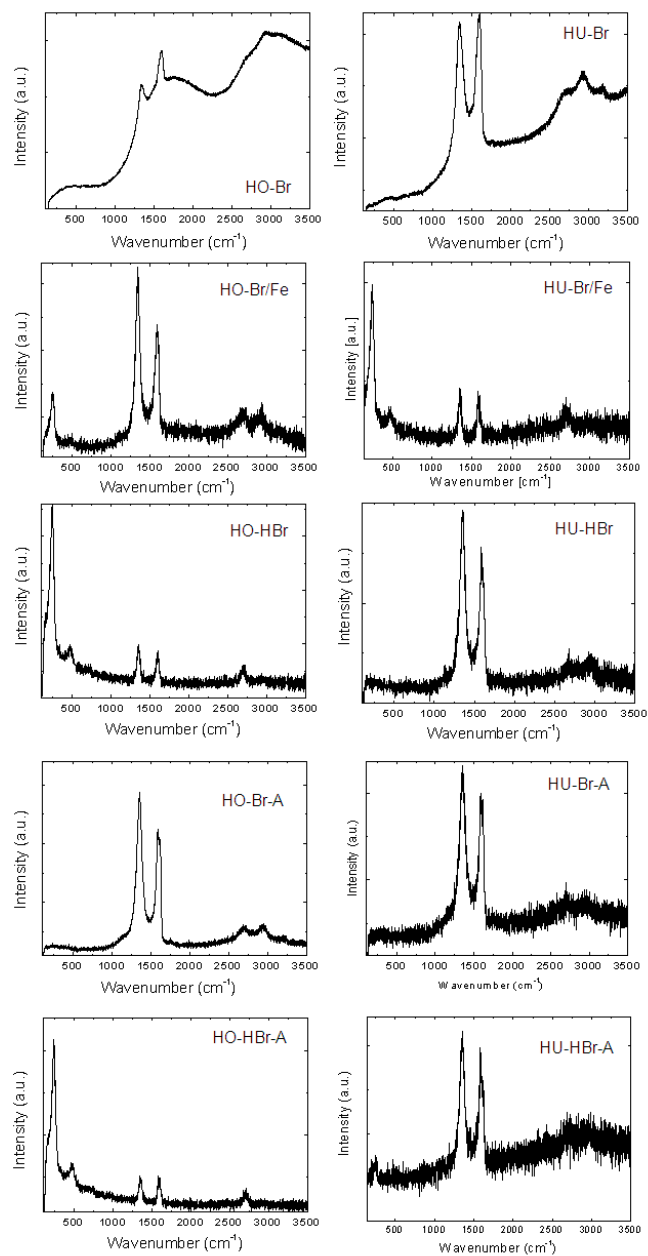


Fig. S15 Raman spectra of brominated graphenes (0.5 mW)

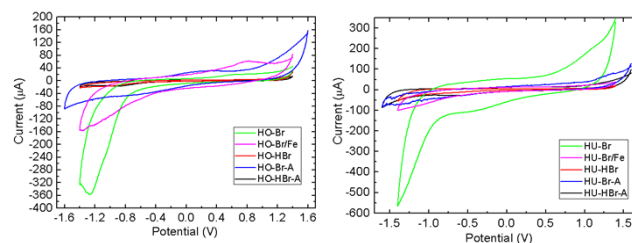


Fig. S16 Inherent electrochemistry of brominated graphenes. The measurements were performed in 50 mM PBS, pH=7.0. Ag/AgCl electrode was used as reference electrode.