

Electronic Supplementary Information

Synthesis of copper oxide/reduced graphene oxide nanocomposite and its enhanced catalytic activity towards reduction of 4-nitrophenol

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Table S1: Standard deviation values for reduction of 4-NP by CuO_{0.01}-rGO (for fig.6(a))

Time (min)	lnC/C ₀	Standard deviation	Time (min)	lnC/C ₀	Standard deviation
0.5	-0.0513 -0.0566 -0.0408	0.008	7	-0.9416 -0.9163 -0.8916	0.025
1	-0.0834 -0.0726 -0.0619	0.0108	8	-1.0498 -1.0789 -1.0216	0.0286
2	-0.1625 -0.17435 -0.1508	0.0118	9	-1.1712 -1.1744 -1.1584	0.0085
3	-0.4308 -0.4231 -0.4155	0.0076	12	-1.5141 -1.5606 -1.5325	0.0234
4	-0.5276 -0.4943 -0.5108	0.0167	17	-2.2073 -2.1892 -2.1628	0.0226
5	-0.7032 -0.6931 -0.6733	0.01519	18	-2.3026 -2.2926 -2.2538	0.0258
6	-0.755 -0.7339 -0.7657	0.01615			

Table S2: Standard deviation values for reduction of 4-NP by CuO_{0.05}-rGO (for fig.6(b))

Time(min)	lnC/C ₀	Standard deviation
0.05	-0.7012 -0.7133 -0.6733	0.02
0.1	-1.3471 -1.3093 -1.3509	0.023
0.2	-2.8134 -2.7969 -2.8302	0.0167
0.33	-0.7012 -0.7133 -0.6733	0.02

Table S3: Standard deviation values for reduction of 4-NP by CuO_{0.1}-rGO (for fig.6(c))

Time (min)	lnC/C ₀	Standard deviation	Time (min)	lnC/C ₀	Standard deviation
0.1	-0.16842 -0.1508 -0.16960	0.0105	1.5	-1.6094 -1.5606 -1.5654	0.0269
0.5	-0.5276 -0.5447 -0.5259	0.0104	2	-2.3026 -2.2828 -2.2349	0.0348
0.7	-0.755 -0.734 -0.7444	0.0105	2.5	-2.8134 -2.8002 -2.83021	0.0151
1	-1.1712 -1.1776 -1.1394	0.0204	3	-3.35241 -3.3553 -3.3242	0.0172

Table S4: Standard deviation values for recycling test by CuO_{0.05}-rGO (for fig.7(a))

Time (min)	Cycle1		Cycle2		Cycle3		Cycle4		Cycle5	
	lnC/C ₀	Standard deviation	lnC/C ₀	Standard deviation	lnC/C ₀	Standard deviation	lnC/C ₀	Standard deviation	lnC/C ₀	Standard deviation
0.05	-0.7012 -0.7133 -0.6733	0.02	-0.4780 -0.4796 -0.4748	0.0025	-0.5798 -0.5762 -0.5834	0.0036	-0.5447 -0.5378 -0.5276	0.0086	-0.5108 -0.4943 -0.5276	0.0167
0.1	-1.3471 -1.3093 -1.3509	0.023	-1.204 -1.1973 -1.2006	0.0033	-1.1394 -1.1363 -1.1087	0.01694	-1.1394 -1.1712 -1.1489	0.0163	-1.1087 -1.1178 -1.1026	0.0076

0.2	-2.8134 -2.7969 -2.8302	0.0167	-2.6593 -2.6736 -2.6451	0.0143	-2.5257 -2.5010 -2.4651	0.0305	-2.408 -2.4534 -2.386	0.0344	-2.3228 -2.3126 -2.333	0.0102
0.33	-4.6052 -4.5564 -4.5952	0.0258	-4.1997 -4.1865 -4.2199	0.0168	-4.0174 -4.0063 -4.023	0.0085	-3.9120 -3.8971 -3.9633	0.0347	-3.5066 -3.442 -3.4738	0.03227