

Supporting Information

Unique Lead Adsorption Behavior of Ions Sieves in Pellet-like Reduced

Graphene Oxide

Dejian Chen,^a Shunxing Li,^{*,a,b} Liling Zou,^a Fengying Zheng^{a,b}

^a Department of Chemistry and Environment, Minnan Normal University, Zhangzhou,
Fujian (P. R. China)

^b Fujian Province Key Laboratory of Modern Analytical Science and Separation
Technology Minnan Normal University, Zhangzhou, Fujian (P. R. China)

E-mail: lishunxing@mnnu.edu.cn; shunxing_li@aliyun.com

Figure S1. Element mapping of core-shell α -Fe₂O₃@ reduced graphene oxide nanoparticles.

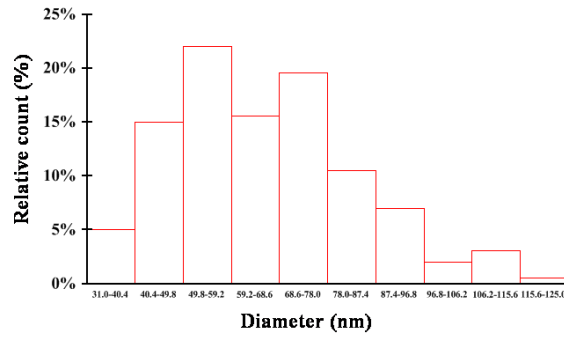


Figure S2. Size distribution of pellet like reduced graphene oxide spheres.

Figure S3. XRD pattern of RGO and P-RGO.

Figure S4. Zeta potential of the P-RGO at different pH.

Table S1. Specific surface area of RGO and P-RGO determined by BET method.

Sample	Specific surface area ($\text{m}^2 \text{g}^{-1}$)	Pore volume ($\text{cm}^3 \text{g}^{-1}$)
RGO	16.75	0.053
P-RGO	288.85	0.23

Table S2 Adsorption capacity of lead ions on various adsorbents.

Sorbent	Sorption Capacity (mg/g)	S _{BET} (m ³ /g)	Reference
amino-functionalized hexagonal mesoporous silica	90.7,	1042.7	1
Activated carbons obtained from sawdust	17.5	1100	2
Peanut shell activated carbon	35.5	1019	3
chitosan	77.02	6.22,	4
activated carbon-chitosan complex	125.4	152.8	4
activated carbon	40.119	1053	5
Graphene nanosheets	35.46	N.G.	6
Titanium Carbide	140.1	484	7
Tourmaline	108	2.64	8
diatomite	25.01	4.11	9
Activated carbon	147	1688	10
Titanium dioxide/carbon nanotube composites	137	N.G.	11
carbon nanotube	33	N.G.	11
Pellet-like Reduced Graphene Oxide	184.5	288.85	This work

Note: "N.G." refer to no given of S_{BET}.

Reference

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