

Accepted Manuscript

Title: Graphene-metal interaction and its effect on the interface stability under ambient conditions

Authors: Aiyi Dong, Qiang Fu, Mingming Wei, Xinhe Bao

PII: S0169-4332(17)30936-4
DOI: <http://dx.doi.org/doi:10.1016/j.apsusc.2017.03.240>
Reference: APSUSC 35616

To appear in: *APSUSC*

Received date: 27-2-2017
Revised date: 24-3-2017
Accepted date: 26-3-2017



Please cite this article as: Aiyi Dong, Qiang Fu, Mingming Wei, Xinhe Bao, Graphene-metal interaction and its effect on the interface stability under ambient conditions, *Applied Surface Science* <http://dx.doi.org/10.1016/j.apsusc.2017.03.240>

This is a PDF file of an unedited manuscript that has been accepted for publication. As a service to our customers we are providing this early version of the manuscript. The manuscript will undergo copyediting, typesetting, and review of the resulting proof before it is published in its final form. Please note that during the production process errors may be discovered which could affect the content, and all legal disclaimers that apply to the journal pertain.

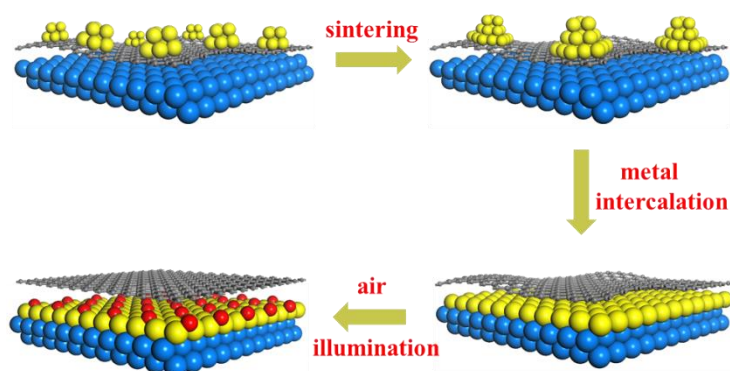
Graphene-metal interaction and its effect on the interface stability under ambient conditions

Aiyi Dong, Qiang Fu,* Mingming Wei, Xinhe Bao

State Key Laboratory of Catalysis, Dalian Institute of Chemical Physics, iChEM, the Chinese Academy of Sciences, Dalian 116023, P.R. China

*Corresponding author. Tel.: +86-411-84379253; fax: +86-411-84694447; email: qfu@dicp.ac.cn.

Graphitic abstract



Highlights

1. Graphene (Gr)/transition metal (TM: Fe, Co, Pt, and Au) interfaces form through TM intercalation at Gr/Ru(0001) surface;
2. Graphene-metal interaction strength follows the order of $\text{Ru} \approx \text{Fe} \approx \text{Co} > \text{Pt} > \text{Au}$;
3. Oxygen intercalation occurs at Gr/Fe, Gr/Co, Gr/Pt, and Gr/Ru interfaces but not at Gr/Au interface in air around 100 °C;

Download English Version:

<https://daneshyari.com/en/article/5347034>

Download Persian Version:

<https://daneshyari.com/article/5347034>

[Daneshyari.com](https://daneshyari.com)