

Graphene: In Our Food Stuffs since Mesolithic Age

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Fire is one of the five elements by which the universe has been created as per the mythologies of Hindu, Babylonian, Greece, Chinese, Japanese, Buddhist, and Tibetan [1]. Fire is an important discovery by human which revolutionized their life. The use of fire pushed up the evolution of human from *Homo erectus* to *Homo sapiens* during the Mesolithic age (200,000-40,000 years ago). Fire allowed human to manipulate their surrounding environment. Cooking gave a variety of food and Possibility of the fatal diseases from taking raw and uncooked meat was controlled.

Roasting is a method that uses dry heat whether an open flame or other heat sources. It is the first known method of cooking. Roasting technique is very popular among us in day-today life. This is the roasting that unknowingly giving us a material, named Graphene, of too much value, in free of cost. Recently in 2011, a low cost method to synthesize graphene was reported by G. Ruan and co-workers [2]. They had chosen much less expensive carbon sources, such as food, insects, and waste.

The author here will explain the presence of graphene in our daily food stuffs as shown in figure 1. The synthesis and presence of graphene and graphene type materials in food stuffs give us two very important future scopes: (a) new solutions for recycling of carbon from impure sources, like low-valued foods and negative-valued solid wastes, into high-valued graphene [2]; and (b) the knowledge that our food contains graphene, graphene type material will help us in *in-vivo* study from a different direction that might produce concrete results as regards to the toxicity of graphene and graphene type materials.

References

[1] en.wikipedia.org/wiki/classical_element.

[2] G. Raun, Z. Sun, Z. Peng, J. M. Tour, *ACS Nano*, **5**, (2011) 7601-7607.

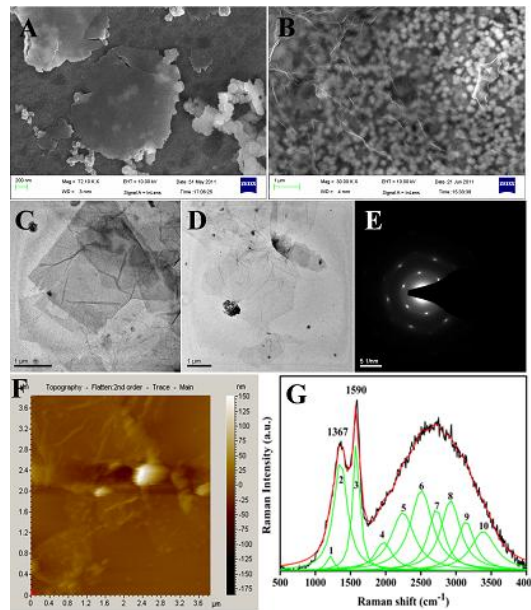
Figure 1

Figure caption: (A, B) FESEM image; (C, D) TEM image; (E) SAED confirms hexagonal lattice; (F) AFM image; and (G) Raman spectra (Black: experimental Raman spectra; Red: fitted spectra; Green: deconvoluted peaks) of graphene and graphene type materials present in our food.