Review of: "distribution of nanotubes by NIR-vis-UV absorption spectroscopyresulting in preparation like valence electrons (dopingP)"

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Potential competing interests: No potential competing interests to declare.

> ***Note: Nanotube distribution by absorption spectroscopy. Of two adjacent nanotubes, the interaction of carbons with van der Waals bond energy of about can cause the formation of clusters or threads to be parallel. Creating bunches in the electronic structure of the tubes creates disturbance and causes the red shift of their absorption peaks, which affects the placement of peaks and their fading, and finally the spectrum structure becomes ambiguous.***

In addition to that, the presence of particles prevents the selective reaction of internal nanotubes, and this issue of purity confuses nanotubes based on their size, type, or use as macromolecular species. Absorption spectroscopy (NIR-Vis-UV) can be used to check the population of the sample or the degree of grouping of the sample. If how to distribute nanotubes by NIR-Vis-UV absorption spectroscopy is desired, the sample should be dispersed or in the form of a thin layer. Optical absorption measurements provide useful information about the electronic properties of SWCNTs, and this information can be used to study covalent and non-covalent interactions between molecules and nanotubes. When functional groups are covalently placed on the nanotube, the absorption peaks completely, clearly weaken, or even disappear because the structure of nanotubes changes from some SP2 hexagonal structure to parts of the structure a> and selectivity towards nanosheets /span>, or saturation of the conduction band like the weakening of electron transfers, create NIR-vis-UV, and both cause (doping-n) such as (Cs, K) or electron acceptors, very similar changes in the spectrum (Br2, leading to the preparation of valence electrons like (dopingPNon-covalent doping or molecular absorption, different, has two important uses: the rate of covalent reactions and NIR-VIS-UV absorption spectroscopy SP3 changes. Absorption spectroscopy should be used to estimate the abundance of metal and semiconductor species by comparing the intensity of the corresponding peaks; because the position of these resonance peaks depends on chirality and diameter. For qualitative analysis, absorption spectroscopy is excellent because it shows the overall composition of the sample; but the quantitative evaluation depends on several possible reasons. The absorption of nanotubes depends on (m,n). It has been reported that the ratio of extinction coefficients for metal-to-semiconductor SWCNTs is + 0.352, which should be independent of the method. >- 0.009, separation, or starting materials. But the values of SWCNTs' extinction coefficients reported in scientific sources are not consistent, and there are still

better measurement methods to determine the extinction coefficient. /span> Different (m,n) nanotubes are required. Secondly, the strong π absorption in the short wavelength region causes the resonant transitions to not be separate.

> ***Conclusion :***
>
> ***Some samples have many impurities, such as polyhedral graphite particles, amorphous carbon, and catalyst particles. 3> The optical absorption of these impurities is related to the spectrum, and it is necessary to quantitatively evaluate the removal of background absorption, which in this case is not possible, and quantitative analysis will be accompanied by an error . The third problem is caused by the presence of the dispersant, which spreads when dispersing the nanotubes. Its presence causes confusion in the quantitative detection of the amount of SWCNTs in the sample. In addition, the complexity related to the overlap of the peaks is problematic. a> An estimate of (m,n) in the sample is difficult, and only the data of that the quantitative evaluation of the concentration of the special species of various errors with data analysis. It causes with unknown frequency along with As a result of the existence of a large number of SWCNTs with different (m,n)***

[1][2][3][4][5][6][7][8][9][10][11][12][13]

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