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Title:	Synthesis of germanium encapsulated fullerene
Authors:	Sathyamurthy, N. (/jspui/browse?type=author&value=Sathyamurthy%2C+N.)
Keywords:	Fullerenes Quantum localization Atom Molecule and ion impact
Issue Date:	2009
Publisher:	Elsevier B.V.
Citation:	Solid State Communications, 149 (31-32), pp. 1244-1247.
Abstract:	A method has been described for encapsulating Ge in a fullerene cage using GeO <sub>2</sub> and a graphite composite rod as anode and graphite as cathode. Annealing in an inert atmosphere before arcing, and the amount of GeO <sub>2</sub> in the rod determined the yield of Ge doped metallofullerene. Solvent extraction using soxlet in inert atmosphere followed by calcination in air was used to isolate metallofullerene from the soot. The insertion of Ge inside the fullerene was proven by ultra violet-visible absorption spectroscopy, matrix assisted laser desorption ionization-time of flight mass spectroscopy, Fourier transform infrared spectroscopy, energy-dispersive X-ray spectroscopy and X-ray photoelectron spectroscopy.
Description:	Only IISERM authors are available in the record.
URI:	<a href="http://www.sciencedirect.com/science/article/pii/S0038109809003159">http://www.sciencedirect.com/science/article/pii/S0038109809003159</a> ( <a href="http://www.sciencedirect.com/science/article/pii/S0038109809003159">http://www.sciencedirect.com/science/article/pii/S0038109809003159</a> ) <a href="http://dx.doi.org/10.1016/j.ssc.2009.05.039">http://dx.doi.org/10.1016/j.ssc.2009.05.039</a> ( <a href="http://dx.doi.org/10.1016/j.ssc.2009.05.039">http://dx.doi.org/10.1016/j.ssc.2009.05.039</a> )
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