



第〇回 GMSI公開セミナー

Graphene-based, Graphene-derived,
and new Carbon Materials
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会場:東京大学工学部2号館 3階 232講義室

要旨

Graphene-based materials are promising because of their electronic and thermal transport, mechanical properties, high specific surface area, that they can act as an atom thick layer, barrier, or membrane, among other reasons. (Our micromechanical exfoliation approaches [1,2] conceived of in 1998 yielded multilayer graphene and one paper described in detail how monolayer graphene could be obtained [1]). In addition to describing some of our recent work on graphene, I will also discuss new materials as yet not made that are important targets for materials synthesis: (i) the negative curvature carbons [3,4] and their likely applications, and (ii) ultrathin and large area sp^3 carbon films [4].
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References

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2. Lu XK, Huang H, Nemchuk N, and Ruoff RS, Appl. Phys. Lett. 75, 193-195 (1999).
3. Zhu, Y. et al., Science 332, 1537-1541 (2011).
4. Ruoff, RS, MRS Bulletin 37, 1314-1318 (2012).

