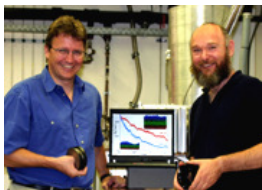


Welcome

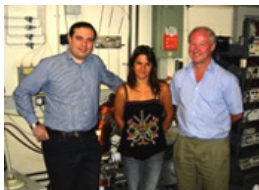
Supporting Material for »The Ultrasmoothness of Diamond-like Carbon Surfaces«



(1024x768 pixel, jpg), 494 kB

Peter Gumbsch^{1,3} and
Michael Moseler^{1,2}

(from left to right)



(1024x742 pixel, jpg), 601kB

Andrea C. Ferrari⁴, Cinzia Casiraghi⁴,
and John Robertson⁴

(from left to right)

- 1 [Fraunhofer Institute of Mechanics of Materials,
Wöhlerstr. 11, 79108 Freiburg, Germany](#)
- 2 [Freiburg Materials Research Center,
Stefan-Meier-Str. 21, 79104 Freiburg, Germany](#)
- 3 [IZBS, University of Karlsruhe,
Kaiserstr. 12, 76131 Karlsruhe, Germany](#)
- 4 [Engineering Department, Cambridge University,
Cambridge CB2 1PZ, United Kingdom](#)

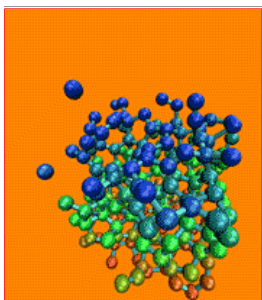
Contact



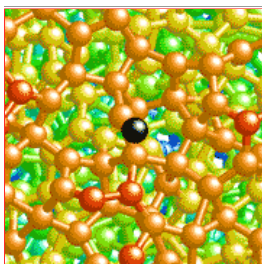
(523x615 pixel, jpg), 54 kB

Commercial applications of DLC films

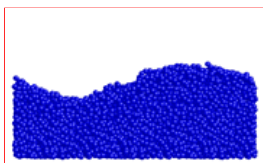
Animation: Single impact of C onto DLC



within tight binding
[Animation, avi-file 5.6 MB](#)



Classical potential
(Brenner)
[Animation, avi-file 4 MB](#)



Growth simulation: deposition of 4000 carbon atoms on a rough substrate (Brenner)
 Animation, avi-file 14 MB

You will need the Apple QuickTime Player to view this file.
 It is available at <http://www.apple.com/quicktime/download/>

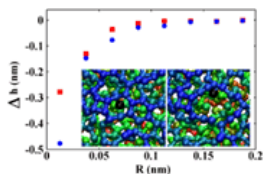


Figure 1:
[more info](#)
[pdf download, 499 kB](#)

(1024x656 pixel, jpg), 749 kB

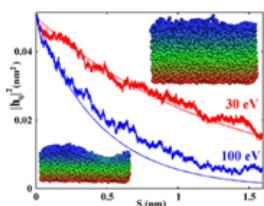


Figure 2:
[more info](#)
[pdf download, 425 kB](#)

(1024x797 pixel, jpg), 820 kB

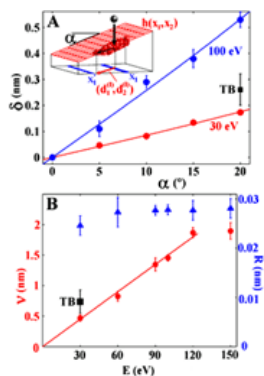


Figure 3:
[more info](#)
[pdf download, 93 kB](#)

(1024x1463 pixel, jpg), 443 kB

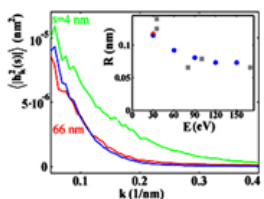


Figure 4:
[more info](#)
[pdf download, 136 kB](#)

(1024x770 pixel, jpg), 221 kB

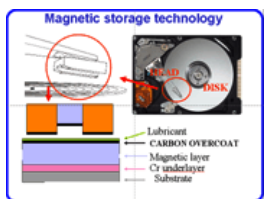


Figure 5:
 Magnetic storage technology
[pdf download, 196 kB](#)

Figure 6:
 Filtered cathodic vacuum arc (FCVA)
[pdf download, 268 kB](#)

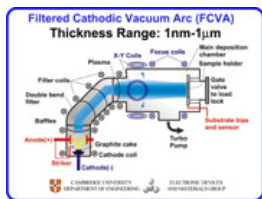


Figure 7:
Cross-section of head-disk interface
[pdf download, 90 kB](#)

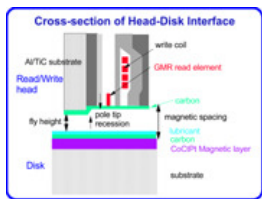


Figure 8:
Spacing vs. storage density
[pdf download, 89 kB](#)

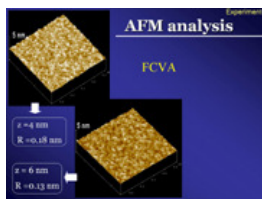
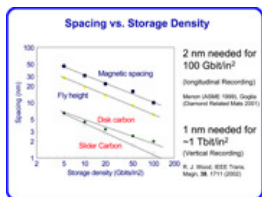


Figure 9:
Atomic force microscope analysis of the DLC films
[pdf download, 541 kB](#)

Contact

Physical Modeling of Materials
Head: PD Dr. Michael Moseler
E-mail: michael.moseler@iwm.fraunhofer.de
Telephone: +49 (0) 761 / 5142-332

Department of Engineering,
Cambridge University
Andrea Ferrari
E-mail: acf26@eng.cam.ac.uk
Telephone: +44 1223 3 32659