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# Pexeso Nano

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# Pexeso Nano

1 – carbon balls of diameter 1.1 μm with organized magnetic iron oxide nanoparticles
2 – forest of carbon nanotubes ruffled using tweezers
3 – catalytic nanoparticles at the ends of carbon nanotubes revealed using backscattered electrons
4 – local fault of ultrananocrystalline diamond growth (area radius 70 μm)
5 – nucleation of nanocrystalline diamond with crystal size about 0.1 to 1 μm
6 – film formed by iron oxide nanoparticles of typical size 150 nm
7 – chains of superparamagnetic iron oxide nanoparticles imaged using transmission electron microscopy
8 – carbon nanowalls formed by several graphene layers
9 – structures formed by microcrystalline diamond (field of view 18 μm)
10 – end of carbon nanotube with an inner catalytic particle imaged using transmission electron microscopy
11 – growth of bundles of carbon nanotubes on a catalyst patterned using electron litography
12 – nucleation of ultrananocrystalline diamond film growth (field of view 35 μm)
13 – diamond microcrystal in the shape of an icosahedron with 2.8 μm long edge
14 – coalescence of nucleation centres in ultrananocrystalline diamond (field of view 14 μm)
15 – diamond microcrystal with 2 μm long edge in a matrix formed by nanocrystalline diamond
16 – detail of local fault of ultrananocrystalline (ballas) diamond growth (field of view 5 μm)
17 – forest of carbon nanotubes with radius of 10 to 20 nm and length of 80 μm
18 – ballas diamond containing graphitic lamellas (radius 6 μm)
Micrographs were obtained using scanning electron microscopy if not stated otherwise.

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EVROPSKÁ UNIE
MINISTERSTVO ŠKOLSTVÍ, MLÁDEŽE A TĚLOVÝCHOVY
OP Vzdělávání pro konkurenceschopnost
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UNIVERSITAS MASARYKIANA BRUNENSIS
INVESTICE DO ROZVOJE VZDĚLÁVÁNÍ