

Nanoindenter G200 Agilent - KLA



Technical description:

Testing machine for hardness and Young's modulus on the nanometre scale, with a load range of up to 9.8 N (in high load mode). Equipped with a CSM (Continuous Stiffness Measurement) module for continuous measurement of Young's modulus and hardness as a function of depth from the surface. Allows Scratch tests to be carried out on a nanometre scale, together with measurement of the coefficient of friction thanks to a lateral force module. The instrument allows imaging of the surface topography of materials, as well as the effects of indenter interaction with the material. It performs measurements in accordance with ISO 14577 and allows the influence of strain rate on the above-mentioned parameters to be studied.

Trade name: G200 Agilent - KLA

More details: </equipment/nanoindenter/>

Access type: External

Type of accreditation / certificate: Not applicable

Contact person: Cios Grzegorz

Contact person url: <https://skos.agh.edu.pl/osoba/grzegorz-cios-7871.html>

Responsible body: Academic Centre for Materials and Nanotechnology

Group / laboratory / team: Department of Materials Engineering

Last update date: Jan. 24, 2024, 11:04 a.m.

Year of commissioning: 2013

IDUB research areas:

(PRA 7) Design, production, and testing of modern materials and the technologies of the future based on a multidisciplinary approach combining materials engineering with chemistry, physics, mathematics, and medicine

Research capabilities:

Hardness measurement

Young's modulus measurement

Spot measurements

Line measurements

Surface mapping

Scratch tests

Conditions for providing infrastructure:

Equipment is made available under the Regulations for the Use of ACMiN Research Infrastructure. Regulations are available here: <https://acmin.agh.edu.pl/acmin/dokumenty/>