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Fighting Counterfeit Drugs Using Micro-X-Ray Diffraction

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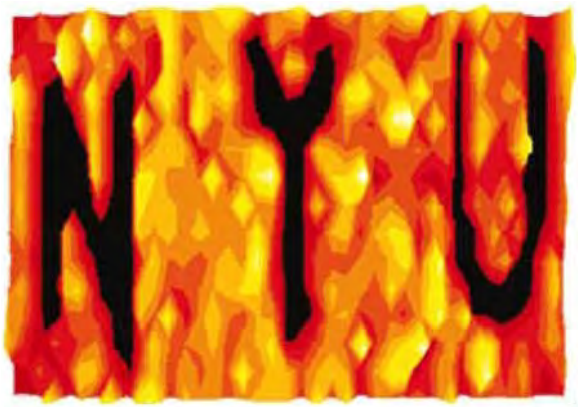
A new protocol using micro-X-ray diffraction is developed to certify the authenticity of drug tablets, and therefore to prevent, deter, or detect counterfeit medicinal products. The method uses X-ray to map hidden patterns printed under the tablet coating and on packages. The patterns such as barcodes and logos are made of compounds approvoved by the Food and Drug Administration. The method is nondestructive, automated and user-friendly. The protocol relies on verification of phase, composition, and pattern readout in a single measurement, which reduces the risk of circumvention.

[1] *D. Musumeci, C. Hu, M. D. Ward, Anal. Chem., 2011, 83, 7444–7450*



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