GRAPHENE-SPIKED SILLY PUTTY CAN DETECT HUMAN PULSE

By mixing graphene with silly putty, made from a silicon-based polymer, researchers produced a putty which conducts electricity. Its resistance changes with even slight amounts of pressure, meaning changes could be used to detect a human pulse or spider steps.

FRANKLIN EXPEDITION: FINGERNAILS RULE OUT LEAD POISONING

The death of all crew on John Franklin's ill-fated 1845 arctic expedition has been suggested to be as the result of lead poisoning from food tins or water pipes. New analysis of a dead sailor's nails shows zinc deficiency, not lead exposure, may have led to their deaths.

CHEMOLUMINESCENT NANOPARTICLES DETECT VIRUSES IN BLOOD

A new system can identify three viruses (HIV and hepatitis B and C) in blood for transfusions. After the viruses’ DNA is amplified, nanoparticles with nucleic acids matching up to parts of virus DNA are added. The nanoparticles emit light if the viruses are detected.

CHEMISTS HELP IDENTIFY EGYPTIAN QUEEN’S MUMMIFIED LEGS

Gas chromatography has identified that a pair of linen wrapped mummified legs in the Egyptian museum in Turin belong to Queen Nefertari. Chemical analysis of the wrappings confirmed their age, and also identified particular animal fats used in royal mummification.

GREENER SOLVENT TAMES FIERY ORGANOLITHIUM CHEMISTRY

By using a solvent made from choline chloride and glycerol, chemists have been able to carry out organolithium chemistry in air. This usually isn’t possible as organolithium compounds are pyrophoric (spontaneously catch fire in air). The solvent is also non-flammable.

Links to articles & studies for the featured stories are provided at: https://goo.gl/qKQMo6