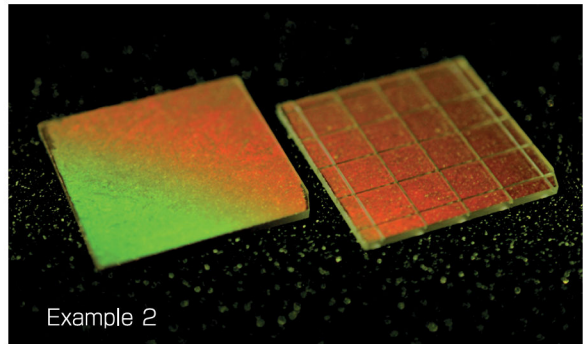
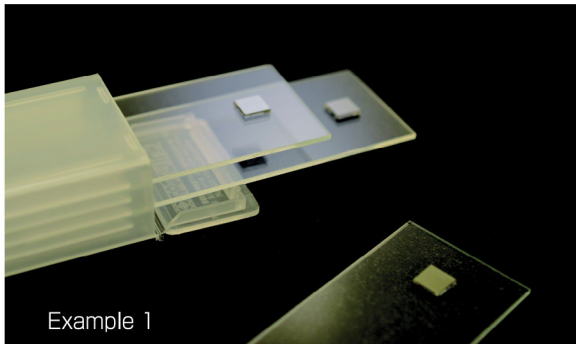


High Sensitive SERS Substrates for Raman Spectroscopy (Au, Ag type)

(Development Samples)

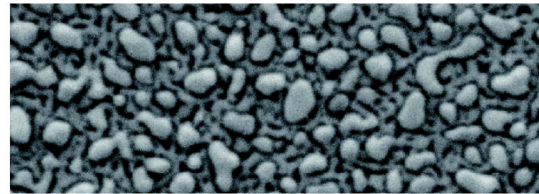
N A N O D O T A R R A Y

High Sensitive SERS Substrates Fabricated by Nano Dot Array Lithography.



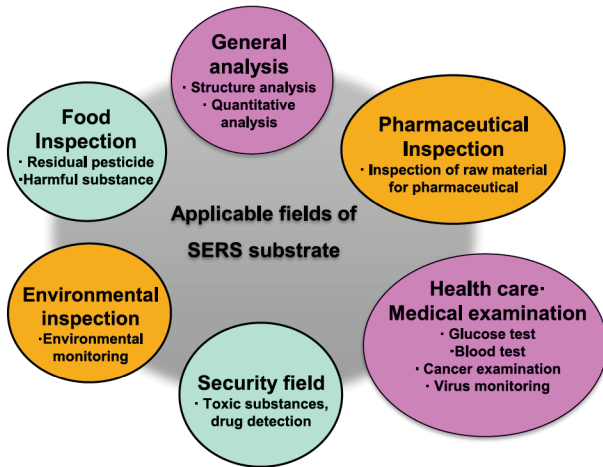
What's SERS (Surface Enhanced Raman Scattering) ?

When light enters metal nanostructured surfaces, electromagnetic field is amplified by surface plasmon resonance. In this field, the Raman intensity of analyte is significantly enhanced (Surface Enhanced Raman Scattering), and it is used for high sensitive Raman spectroscopy analysis.



A SEM image of development samples

Applicable Fields of SERS

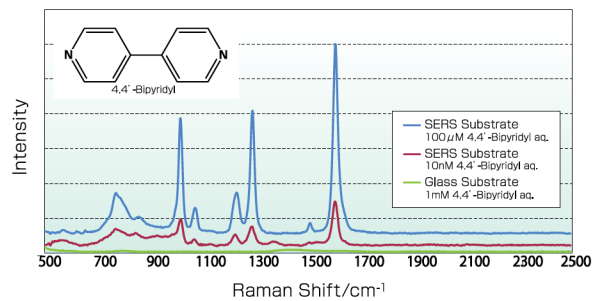


Aqueous Samples for Medical and Environmental inspections can be analyzed by Raman spectroscopy whereas Infrared Spectroscopy is inapplicable. Further, with SERS substrates, Raman spectroscopy enables high sensitive measurements even for dilute aqueous samples, and becomes widely used in a various range of analytical fields.

Features of Development Samples

High Sensitivity and Reproducibility

Highly amplified Raman scattering intensity is obtained by applying the high sensitive SERS substrates, as can be seen in the detection of dilute 10nM aqueous 4,4'-bipyridyl at 785 nm incident laser.



Enhanced Raman scattering intensity by SERS substrates

To purchase the SERS substrates, please contact us by email below.

[Technical information /contact us]
https://www.ojiholdings.co.jp/r_d/theme/nano_dot_array.html



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