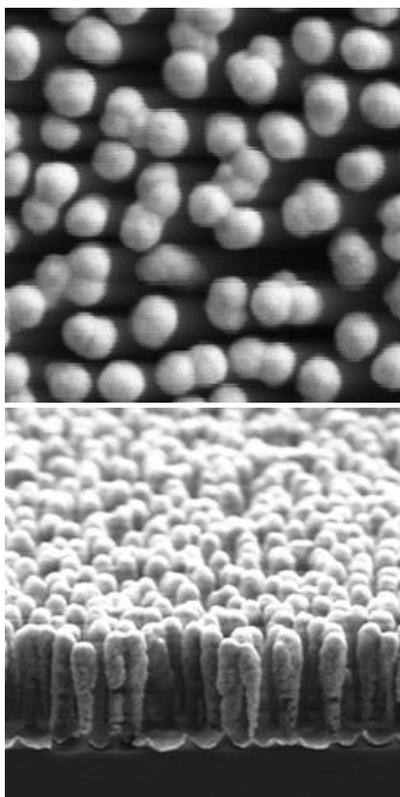


Silmeco SERS substrate - SERStrate

Ultrasensitive molecular detection

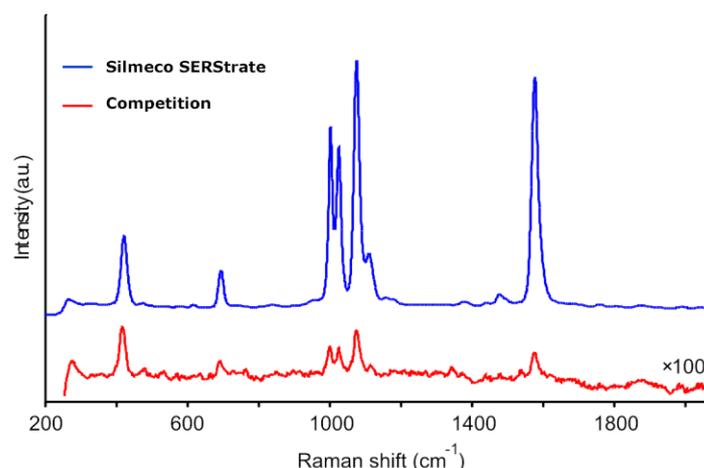
SILMECO SERS SUBSTRATE



What is Silmeco SERStrate?

An extremely effective SERS substrate that enables ultrasensitive molecular detection for a wide area range of applications and R&D-purposes.

Comparison



Why Choose Silmeco SERStrates?

- 1) Superior Quality. Performs better than other famous SERS substrates on the market.
- 2) SERS signal uniformity over large areas (up to 4").
- 3) Very low background signal.
- 4) Fabrication procedure is compatible with high volume manufacturing (HVM) process flows.

Order now and find pricing at <http://www.silmeco.com/order>

Applications

- Pharmaceutical industry
- Biotech industry
- Food industry
- Research institutions
- - your industry

Why choose Silmeco SERStrates over competition?

Majority of device fabrication techniques involve polymer mask deposition (some form of lithography) or complex chemistry that dramatically increases device manufacturing costs.

Silmeco is different. We utilize patented nanofabrication technologies that exclude lithography and involve only 2

PRICING

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New customer? Get 5 additional SERS substrates free of charge on your first purchase. Order here <http://www.silmeco.com/order>

simple process steps. By combining our simple, high-volume manufacturing processes and specific nanostructure patterns, Silmeco gives you superior SERS substrates.

Choosing Silmeco products does not have to be a “*buy and do-it-yourself process*” – we are here to help and provide support should you need it. Just call or write us. Our team of experts have extensive experience with R&D and application development, nanofabrication, SERS, Raman Scattering and plasmonic nanomaterials.

Specific examples from our customers

- Melamine detection (food safety)
- Detection of toxic polychlorinated biphenyls (PCBs) and HCN
- Detection of hormones in water
- Explosives detection (DNT)
- pH sensing of subcellular structures with living cells
- Detection of TAMRA-labeled vasopressin molecules in the pM regime

SERSTRATE Specifications

| | |
|-------------------------------|--|
| Dimensions | 3x3 mm <i>(other dimensions are available on custom request)</i> |
| SERS active area | 9 mm ² |
| Sensitivity | ppm to ppb |
| Surface metals | Gold or Silver, <i>customization available</i> |
| Substrate material | Nanostructured Si |
| Measurement area | Arbitrary |
| Sampling methods* | Vapor deposition, drop deposition, substrate incubation (immersion) |
| Laser excitation wavelengths* | 514 (silver), 532 (silver), 633 (silver), 780-785 (silver + gold) nm |
| Laser power density* | < 10 W/cm ² |

**) recommended*

| | |
|---|--|
| <p>SERS Substrates in vials</p> <p>Silmeco ships SERS substrates in vials for handling purposes. The vials are put in antistatic bags filled with an inert gas. When needed simply take the SERS substrate out of the vial and use them.</p> |  |
| <p>Color tones</p> <p>The standard SERS substrates from Silmeco are coated with silver or gold. We offer custom solutions as well.</p> <p>SERS substrates with a brownish/bronze/reddish tone are gold coated. SERS substrates with a light/beige color tone are coated with silver.</p> |  |
| <p>Production</p> <p>SERS substrates from the production. SERS substrates from Silmeco are compatible with high-volume manufacturing processes.</p> |  |

Questions related to SERS, pricing, options etc.

Order SERS substrates at www.silmeco.com/order

FAQ available at www.silmeco.com/faq

Knowledge Base available at www.silmeco.com/knowledge-base

Email: info@silmeco.com