Supporting Information

Distribution of silica-coated silver/gold nanostars in soft- and hardwood applying SERS-based imaging

C. Geers, † L. Rodríguez-Lorenzo, † MI. Placencia Peña, ‡ P. Brodard, $^{\$}$ T. Volkmer, ‡ B. Rothen-Rutishauser, † A. Petri-Fink *,†

[†]Adolphe Merkle Institute, University of Fribourg, Chemin des Verdiers 4, 1700 Fribourg, Switzerland

*Bern University of Applied Sciences, Architecture, Wood and Civil Engineering,
Solothurnstrasse 102, 2500 Biel, Switzerland

§HES-SO Haute école d'ingénierie et d'architecture, Pérolles 80, 1705 Fribourg, Switzerland

TEM images of NSs

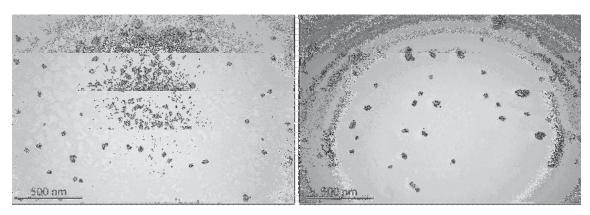


Figure SI. TEM micrographs of (left) Au NSs and (right) AgAu NSs.

RAMAN mapping of control samples

As shown in Figure S2 the map shows no signal in the case of a beech wood vessel (Figure S2A *ii*) and only a very small signal induced by noise on the spectrum for pine earlywood tracheids (Figure S2B *ii*).

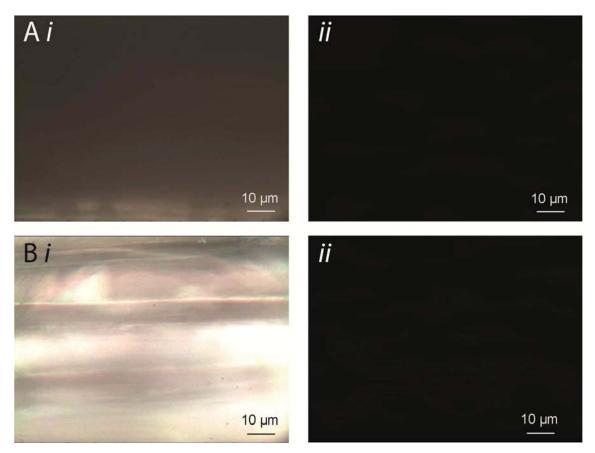


Figure S2: SERRS analysis of beech and pine wood, split in the longitudinal direction, impregnated with milliQ water. (A) SERRS mapping of beech wood vessels. *i*. Optical image. *ii*. Corresponding SERRS map (B) SERRS mapping of pine wood tracheids. *i*. Optical image. *ii*. Corresponding SERRS map. The SERRS maps were acquired upon excitation with a 633 nm laser line and a spectral window from 1450 cm⁻¹ to 1700 cm⁻¹ to identify the characteristic peaks of NBA (ring stretching 1643, 1600, 1492 cm⁻¹).