CLAIMS

1. A plasmonic chip, which comprises a region of meso-crystal including nanocrystals of silver oxides containing silver peroxides wherein the meso-crystal is able to have a function to generate a negative polarity in contact to sera or biological samples to selectively capture or absorb a cancer-related substance having a positive polarity and to have a function to show an effect of localized surface plasmon resonance by light irradiation.

2. A method of observing a cancer-related substance, which comprises providing the plasmonic chip which comprises a region of meso-crystal including nanocrystals of silver oxides containing silver peroxides, dropping a serum or biological sample by itself or dilutied state on the crystal region of the plasmonic chips, to generate a negative polarity in contact to the serum or biological sample so as to selectively capture or adsorb cancer-related substances in the serum or sample, and image observing the cancer-related substance enhanced l by localized surface plasmon resonance.

3. A method of observing a cancer-related substance according to claim 2, wherein the cancer-related substance is a nucleosome or chromatin including the histone wrapped around with DNA.

4. A method of observing a cancer-related substance according to claim 3, which further comprises a step of irradiating a laser light on a nucleosome or chromatin including the histone wrapped around with DNA.

5. A plasmonic chip, according to claim 1 which is used for observing a cancer-related substance wherein the meso-crystal including nanocrystals of silver oxides containing silver peroxides is a needle-like crystal made from silver complex quantum crystal by alkali treatment .