| Properties | Various effects | Uses |
|---|---|---|
| Surface area effect | • Surface area per weight is over 100 times higher than that of usual fibers.<br>• Very large adsorption. | • Adsorption material<br>• Biochemical hazard prevention material<br>• Ion-exchange material |
| Slip effect | • Flow of molecules changes and pressure loss becomes much smaller. | • Air filter<br>• Biochemical hazard prevention material |
| Light effect | • Structure color appearance with transparent fiber with diameter less than wavelength of visible light. | • Organic EL<br>• Electronic paper<br>• Fashion material<br>• Polarizer |
| Surface tension effect | • Low surface tension force, water repelling of hydrophilic polymer. | • Coating material<br>• Paint |
| Three-dimensional effect | • Three-dimensional growth of cells on non-weaved textile. | • Reclamation medical |
| Sub-micron object catching effect | • Catching sub-micron-sized particles. | • Biochemical hazard prevention material<br>• Suit<br>• Engine filter<br>• Boiler<br>• Air cleaner<br>• Air conditioner |

Table 1: Uses of nanofiber itilizing its properties (adapted from Ref. [**?**]).