CLAIMS

1. Use of a nanoparticle or nanoparticles' aggregate in the manufacture of a medicament for ~~prevention or~~ treatment of a neurological disease selected from Parkinson's disease, Alzheimer's disease, epilepsy, obsessive compulsive disorder, autism spectrum disorder, depression disorder, dystonia, Tourette's syndrome, schizophrenia, stroke, aphasia, dementia, tinnitus, Huntington's disease, essential tremor, bipolar disorder, anxiety disorder, addiction disorder, consciousness vegetative state, or at least one symptom thereof in a subject when the nanoparticle or nanoparticles' aggregate is exposed to an electric field, wherein the nanoparticle's or nanoparticles' aggregate's material is ~~selected from a semiconductor material with a band gap Eg below 3.0 eV selected from of an element from group IVA of the Mendeleev's periodic table, a mixed composition of elements from group III and V of the Mendeleev's periodic table, a mixed composition of elements from group II and VI of the Mendeleev's periodic table, an insulator material with a band gap Eg equal to or above 3.0 eV and with a relative dielectric constant ε_{ijk} equal to or above 200, and~~ an insulator material with a band gap Eg equal to or above 3.0 eV and with a relative dielectric constant ε_{ijk} equal to or below 100, the relative dielectric constant ε_{ijk} being measured between 20°C and 30°C and between 10^2 Hz up to the infrared frequency, selected from $LaAlO_3$, La_2O_3, CeO_2, SiO_2, SnO_2, Ta_2O_5, ZrO_2 and HfO_2.

2. The use according to claim 1, wherein the electric field is to be applied through deep brain stimulation, transcranial electric stimulation or transcranial magnetic stimulation.

~~3. The use according to claim 1, wherein the nanoparticle's or nanoparticles' aggregate's material consists of an element from group IVA of the Mendeleev's periodic table selected from Silicon (Si) and Germanium (Ge).~~

~~4. The use according to claim 1, wherein the nanoparticle's or nanoparticles' aggregate's material consists of an element from group IVA of the Mendeleev's periodic table and is doped with a charge carrier selected from Al, B, Ga, In and P.~~

~~5. The use according to anyone of claims 1 to 4, wherein the neurological disease is selected from Parkinson's disease, Alzheimer's disease, epilepsy, obsessive compulsive disorder, autism spectrum disorder, depression disorder, dystonia, Tourette's syndrome, schizophrenia, stroke, aphasia, dementia, tinnitus, Huntington's disease, essential tremor, bipolar disorder, anxiety disorder, addiction disorder, consciousness vegetative state, and at least one symptom thereof.~~

~~63~~. Use of a composition in the manufacture of a medicament for prevention or treatment of a neurological disease selected from Parkinson's disease, Alzheimer's disease, epilepsy, obsessive compulsive disorder, autism spectrum disorder, depression disorder, dystonia, Tourette's syndrome, schizophrenia, stroke, aphasia, dementia, tinnitus, Huntington's disease, essential tremor, bipolar disorder, anxiety disorder, addiction disorder, consciousness vegetative state, or at least one symptom thereof in a subject to be exposed to an electric field, wherein the composition comprises nanoparticles and/or nanoparticles' aggregates and a pharmaceutically acceptable support, and wherein the nanoparticle's or nanoparticles' aggregate's material is an insulator material selected from $LaAlO_3$, La_2O_3, CeO_2, SiO_2, SnO_2, Ta_2O_5, ZrO_2 and HfO_2 ~~selected from a semiconductor material with a band gap Eg below 3.0 eV selected from Silicon (Si) or Germanium (Ge), a mixed composition of elements from group III and V of the Mendeleev's periodic table, a mixed composition of elements from group II and VI of the Mendeleev's periodic table, and an insulator material selected from $BaTiO_3$, $KTaNbO_3$, $KTaO_3$, $SrTiO_3$ and BaSrTiO~~.

~~74~~. The use of claim ~~63~~, wherein the composition comprises at least two distinct nanoparticles and/or nanoparticles' aggregates, each nanoparticle or nanoparticles' aggregate consisting of a distinct material.