

**CPC****COOPERATIVE PATENT CLASSIFICATION****B82B****NANO-STRUCTURES FORMED BY MANIPULATION OF INDIVIDUAL ATOMS, MOLECULES, OR LIMITED COLLECTIONS OF ATOMS OR MOLECULES AS DISCRETE UNITS; MANUFACTURE OR TREATMENT THEREOF****NOTE**

This subclass does not cover chemical or biological nano-structures per se, provided for elsewhere, e.g. in classes [C08](#) or [C12](#).

Attention is drawn to the Note following the title of class [B82](#), which defines the meaning of the terms "nano-size", "nano-scale" and "nano-structure" in this subclass.

Subject matter classified in this subclass is further classified in subclass [B82Y](#), in order to enable a comprehensive search of nano-structure technology using classification symbols of [B82Y](#) in combination with classification symbols of [B82B](#).

Nano-structures having specialised features or functions are further classified in appropriate places in other subclasses that provide for those features or functions, e.g. in [G01Q](#), [G02F 1/017](#), [H01L 29/775](#).

**Guidance heading:****B82B 1/00**

**Nano-structures formed by manipulation of individual atoms or molecules, or limited collections of atoms or molecules as discrete units**

- B82B 1/001 . { Devices without movable or flexible elements }
- B82B 1/002 . { Devices comprising flexible or deformable elements }
- B82B 1/003 . { Devices comprising elements which are movable in relation to each other, e.g. slidable or rotatable }
- B82B 1/005 . { Constitution or structural means for improving the physical properties of a device }
- B82B 1/006 . { Controlling the movement of the flexible or movable, e.g. slidable or rotatable, elements }
- B82B 1/007 . { Processes for preserving or protecting existing structures }
- B82B 1/008 . { Nano-structures not provided for in groups [B82B 1/001](#) to [B82B 1/007](#) }

**B82B 3/00**

**Manufacture or treatment of nano-structures by manipulation of individual atoms or molecules, or limited collections of atoms or molecules as discrete units**

- B82B 3/0004 . { Apparatus specially adapted for the manufacture or treatment of nano-structural devices or systems or methods for manufacturing the same }

- B82B 3/0009 . { Forming specific nano-structures }
- B82B 3/0014 .. { Array or network of similar nano-structural elements }
- B82B 3/0019 .. { without movable or flexible elements }
- B82B 3/0023 .. { comprising flexible or deformable elements }
- B82B 3/0028 .. { comprising elements which are movable in relation to each other, e.g. slidable or rotatable }
- B82B 3/0033 .. { Manufacture or treatment of substrate-free structures, i.e. not connected to any support }
- B82B 3/0038 .. { Manufacturing processes for forming specific nano-structures not provided for in groups [B82B 3/0014](#) to [B82B 3/0033](#) }
  
- B82B 3/0042 . { Assembling discrete nano-structures into nano-structural devices }
- B82B 3/0047 .. { Bonding two or more elements }
- B82B 3/0052 .. { Aligning two or more elements }
- B82B 3/0057 .. { Processes for assembling discrete nano-structures not provided for in groups [B82B 3/0047](#) to [B82B 3/0052](#) }
  
- B82B 3/0061 . { Methods for manipulating nanostructures }
- B82B 3/0066 .. { Orienting nanostructures }
- B82B 3/0071 .. { Sorting nanostructures }
- B82B 3/0076 .. { Methods for manipulating nanostructures not provided for in groups [B82B 3/0066](#) to [B82B 3/0071](#) }
  
- B82B 3/008 . { Processes for improving the physical properties of a device }
  
- B82B 3/0085 . { Testing nano-structures }
  
- B82B 3/009 . { Characterizing nano-structures, i.e. measuring and identifying electrical or mechanical constants }
  
- B82B 3/0095 . { Manufacture or treatments or nano-structures not provided for in groups [B82B 3/0009](#) to [B82B 3/009](#) }