

CPC COOPERATIVE PATENT CLASSIFICATION

C CHEMISTRY; METALLURGY

(NOTES omitted)

CHEMISTRY

C01 INORGANIC CHEMISTRY

(NOTES omitted)

C01P INDEXING SCHEME RELATING TO STRUCTURAL AND PHYSICAL ASPECTS OF SOLID INORGANIC COMPOUNDS

NOTES

1. This subclass constitutes an internal scheme for indexing only.
2. The indexing scheme is used to identify structural and physical aspects of solid inorganic compounds, already classified in class [C01](#) or subclass [C09C](#).

2002/00 Crystal-structural characteristics

- 2002/01 . depicted by a TEM-image
- 2002/02 . Amorphous compounds
- 2002/04 . Compounds with a limited amount of crystallinity, e.g. as indicated by a crystallinity index
- 2002/08 . Intercalated structures, i.e. with atoms or molecules intercalated in their structure
- 2002/10 . One-dimensional structures
- 2002/20 . Two-dimensional structures
- 2002/22 . . layered hydroxide-type, e.g. of the hydrotalcite-type
- 2002/30 . Three-dimensional structures
- 2002/32 . . spinel-type (AB_2O_4)
- 2002/34 . . perovskite-type (ABO_3)
- 2002/36 . . pyrochlore-type ($A_2B_2O_7$)
- 2002/50 . Solid solutions
- 2002/52 . . containing elements as dopants
- 2002/54 . . . one element only
- 2002/60 . Compounds characterised by their crystallite size
- 2002/70 . defined by measured X-ray, neutron or electron diffraction data
- 2002/72 . . by d-values or two theta-values, e.g. as X-ray diagram
- 2002/74 . . by peak-intensities or a ratio thereof only
- 2002/76 . . by a space-group or by other symmetry indications
- 2002/77 . . by unit-cell parameters, atom positions or structure diagrams
- 2002/78 . . by stacking-plane distances or stacking sequences
- 2002/80 . defined by measured data other than those specified in group [C01P 2002/70](#)
- 2002/82 . . by IR- or Raman-data
- 2002/84 . . by UV- or VIS- data
- 2002/85 . . by XPS, EDX or EDAX data
- 2002/86 . . by NMR- or ESR-data
- 2002/87 . . by chromatography data, e.g. HPLC, gas chromatography
- 2002/88 . . by thermal analysis data, e.g. TGA, DTA, DSC
- 2002/89 . . by mass-spectroscopy
- 2002/90 . Other crystal-structural characteristics not specified above

2004/00 Particle morphology

- 2004/01 . depicted by an image
- 2004/02 . . obtained by optical microscopy
- 2004/03 . . obtained by SEM
- 2004/04 . . obtained by TEM, STEM, STM or AFM
- 2004/10 . extending in one dimension, e.g. needle-like
- 2004/11 . . with a prismatic shape
- 2004/12 . . with a cylindrical shape
- 2004/13 . . Nanotubes
- 2004/133 . . . Multiwall nanotubes
- 2004/136 . . . Nanoscrolls, i.e. tubes having a spiral section
- 2004/16 . . Nanowires or nanorods, i.e. solid nanofibres with two nearly equal dimensions between 1-100 nanometer
- 2004/17 . . Nanostrips, nanoribbons or nanobelts, i.e. solid nanofibres with two significantly differing dimensions between 1-100 nanometer
- 2004/20 . extending in two dimensions, e.g. plate-like
- 2004/22 . . with a polygonal circumferential shape
- 2004/24 . . Nanoplates, i.e. plate-like particles with a thickness from 1-100 nanometer
- 2004/30 . extending in three dimensions
- 2004/32 . . Spheres
- 2004/34 . . . hollow
- 2004/36 . . . fragmented
- 2004/38 . . cube-like
- 2004/39 . . parallelepiped-like
- 2004/40 . . prism-like
- 2004/41 . . octahedron-like
- 2004/42 . . (bi)pyramid-like
- 2004/45 . . Aggregated particles or particles with an intergrown morphology
- 2004/50 . Agglomerated particles
- 2004/51 . Particles with a specific particle size distribution
- 2004/52 . . highly monodisperse size distribution
- 2004/53 . . bimodal size distribution
- 2004/54 . Particles characterised by their aspect ratio, i.e. the ratio of sizes in the longest to the shortest dimension
- 2004/60 . Particles characterised by their size
- 2004/61 . . Micrometer sized, i.e. from 1-100 micrometer
- 2004/62 . . Submicrometer sized, i.e. from 0.1-1 micrometer

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- 2004/64 . . Nanometer sized, i.e. from 1-100 nanometer
- 2004/80 . Particles consisting of a mixture of two or more inorganic phases
- 2004/82 . . two phases having the same anion, e.g. both oxidic phases
- 2004/84 . . . one phase coated with the other
- 2004/86 Thin layer coatings, i.e. the coating thickness being less than 0.1 time the particle radius
- 2004/88 Thick layer coatings
- 2004/90 . Other morphology not specified above

2006/00 Physical properties of inorganic compounds

NOTES

1. Compounds having molecular sieve properties are classified in [C01B 37/00](#), [C01B 39/00](#).
2. The following codes are only to be used for physical values deviating significantly from the average usual values.

- 2006/10 . Solid density
- 2006/11 . Powder tap density
- 2006/12 . Surface area
- 2006/13 . . thermal stability thereof at high temperatures
- 2006/14 . Pore volume
- 2006/16 . Pore diameter
- 2006/17 . . Pore diameter distribution
- 2006/19 . Oil-absorption capacity, e.g. DBP values
- 2006/20 . Powder free flowing behaviour
- 2006/21 . Attrition-index or crushing strength of granulates
- 2006/22 . Rheological behaviour as dispersion, e.g. viscosity, sedimentation stability
- 2006/32 . Thermal properties
- 2006/33 . . Phase transition temperatures
- 2006/34 . . . Melting temperatures
- 2006/35 . . . Boiling temperatures
- 2006/36 . . . Solid to solid transition temperatures
- 2006/37 . . Stability against thermal decomposition
- 2006/40 . Electric properties
- 2006/42 . Magnetic properties
- 2006/44 . Alpha, beta or gamma radiation related properties
- 2006/60 . Optical properties, e.g. expressed in CIELAB-values
- 2006/62 . . L* (lightness axis)
- 2006/63 . . a* (red-green axis)
- 2006/64 . . b* (yellow-blue axis)
- 2006/65 . . Chroma (C*)
- 2006/66 . . Hue (H*)
- 2006/80 . Compositional purity
- 2006/82 . . water content
- 2006/88 . Isotope composition differing from the natural occurrence
- 2006/90 . Other properties not specified above