

CPC**COOPERATIVE PATENT CLASSIFICATION****C01G****COMPOUNDS CONTAINING METALS NOT COVERED BY SUBCLASSES [C01D](#) OR [C01F](#)**

(metal hydrides {monoborane, diborane or addition complexes thereof} [C01B 6/00](#); salts of oxyacids of halogens [C01B 11/00](#); peroxides, salts or peroxyacids [C01B 15/00](#); thiosulfates, dithionites, polythionates [C01B 17/64](#); compounds containing selenium, or tellurium [C01B 19/00](#); binary compounds of nitrogen with metals [C01B 21/06](#); azides [C01B 21/08](#); {compounds containing nitrogen, other non-metals and metal [C01B 21/082](#)}; metal amides [C01B 21/092](#); nitrites [C01B 21/50](#); {compounds of noble gases [C01B 23/0005](#)}; phosphides [C01B 25/08](#); salts of oxyacids of phosphorus [C01B 25/16](#); carbides [C01B 31/30](#); compounds containing silicon [C01B 33/00](#); compounds containing boron [C01B 35/00](#); compounds having molecular sieve properties but not having base-exchange properties [C01B 37/00](#); compounds having molecular sieve and base-exchange properties, e.g. crystalline zeolites, [C01B 39/00](#); cyanides [C01C 3/08](#); salts of cyanamide [C01C 3/16](#); thiocyanates [C01C 3/20](#))

C01G 1/00

Methods of preparing compounds of metals not covered by subclasses [C01B](#), [C01C](#), [C01D](#), or [C01F](#), in general (electrolytic production of inorganic compounds [C25B 1/00](#))

[C01G 1/02](#)

. Oxides

[C01G 1/04](#)

. Carbonyls

[C01G 1/06](#)

. Halides

[C01G 1/08](#)

. Nitrates

[C01G 1/10](#)

. Sulfates

[C01G 1/12](#)

. Sulfides

[C01G 1/14](#)

. Sulfites

C01G 3/00**Compounds of copper**[C01G 3/003](#)

. {Preparation involving a liquid-liquid extraction, an adsorption or an ion-exchange}

[C01G 3/006](#)

. {Compounds containing, besides copper, two or more other elements, with the exception of oxygen or hydrogen}

[C01G 3/02](#)

. Oxides; Hydroxides

[C01G 3/04](#)

. Halides

[C01G 3/05](#)

. . Chlorides

[C01G 3/06](#)

. . Oxychlorides

[C01G 3/08](#)

. Nitrates

[C01G 3/10](#)

. Sulfates

[C01G 3/12](#)

. Sulfides

[C01G 3/14](#)

. Complexes with ammonia

C01G 5/00**Compounds of silver**

C01G 5/003	<ul style="list-style-type: none"> • {Preparation involving a liquid-liquid extraction, an adsorption or an ion-exchange}
C01G 5/006	<ul style="list-style-type: none"> • {Compounds containing, besides silver, two or more other elements, with the exception of oxygen or hydrogen}
C01G 5/02	<ul style="list-style-type: none"> • Halides
C01G 7/00	Compounds of gold
C01G 7/003	<ul style="list-style-type: none"> • {Preparation involving a liquid-liquid extraction, an adsorption or an ion-exchange}
C01G 7/006	<ul style="list-style-type: none"> • {Compounds containing, besides gold, two or more other elements, with the exception of oxygen or hydrogen}
C01G 9/00	Compounds of zinc
C01G 9/003	<ul style="list-style-type: none"> • {Preparation involving a liquid-liquid extraction, an adsorption or an ion-exchange}
C01G 9/006	<ul style="list-style-type: none"> • {Compounds containing, besides zinc, two or more other elements, with the exception of oxygen or hydrogen}
C01G 9/02	<ul style="list-style-type: none"> • Oxides; Hydroxides
C01G 9/03	<ul style="list-style-type: none"> • . . Processes of production using dry methods, e.g. vapour phase processes
C01G 9/04	<ul style="list-style-type: none"> • Halides
C01G 9/06	<ul style="list-style-type: none"> • Sulfates
C01G 9/08	<ul style="list-style-type: none"> • Sulfides
C01G 11/00	Compounds of cadmium
C01G 11/003	<ul style="list-style-type: none"> • {Preparation involving a liquid-liquid extraction, an adsorption or an ion-exchange}
C01G 11/006	<ul style="list-style-type: none"> • {Compounds containing, besides cadmium, two or more other elements, with the exception of oxygen or hydrogen}
C01G 11/02	<ul style="list-style-type: none"> • Sulfides
C01G 13/00	Compounds of mercury
C01G 13/003	<ul style="list-style-type: none"> • {Preparation involving a liquid-liquid extraction, an adsorption or an ion-exchange}
C01G 13/006	<ul style="list-style-type: none"> • {Compounds containing, besides mercury, two or more other elements, with the exception of oxygen or hydrogen}
C01G 13/02	<ul style="list-style-type: none"> • Oxides
C01G 13/04	<ul style="list-style-type: none"> • Halides
C01G 15/00	Compounds of gallium, indium or thallium
C01G 15/003	<ul style="list-style-type: none"> • {Preparation involving a liquid-liquid extraction, an adsorption or an ion-exchange}
C01G 15/006	<ul style="list-style-type: none"> • {Compounds containing, besides gallium, indium, or thallium, two or more other elements, with the exception of oxygen or hydrogen}
C01G 17/00	Compounds of germanium

- C01G 17/003 . {Preparation involving a liquid-liquid extraction, an adsorption or an ion-exchange}
- C01G 17/006 . {Compounds containing, besides germanium, two or more other elements, with the exception of oxygen or hydrogen}
- C01G 17/02 . Germanium dioxide
- C01G 17/04 . Halides of germanium

C01G 19/00**Compounds of tin**

- C01G 19/003 . {Preparation involving a liquid-liquid extraction, an adsorption or an ion-exchange}
- C01G 19/006 . {Compounds containing, besides tin, two or more other elements, with the exception of oxygen or hydrogen}
- C01G 19/02 . Oxides
- C01G 19/04 . Halides
- C01G 19/06 . . Stannous chloride
- C01G 19/08 . . Stannic chloride

C01G 21/00**Compounds of lead**

- C01G 21/003 . {Preparation involving a liquid-liquid extraction, an adsorption or an ion-exchange}
- C01G 21/006 . {Compounds containing, besides lead, two or more other elements, with the exception of oxygen or hydrogen}
- C01G 21/02 . Oxides
- C01G 21/04 . . Lead suboxide (Pb_2O)
- C01G 21/06 . . Lead monoxide (PbO)
- C01G 21/08 . . Lead dioxide (PbO_2)
- C01G 21/10 . . Red lead (Pb_3O_4)
- C01G 21/12 . Hydroxides
- C01G 21/14 . Carbonates
- C01G 21/16 . Halides
- C01G 21/18 . Nitrates
- C01G 21/20 . Sulfates
- C01G 21/21 . Sulfides
- C01G 21/22 . Plumbates; Plumbites

C01G 23/00**Compounds of titanium** {(preparation of Ti-compounds from ores or scraps [C22B 34/12](#))}

- C01G 23/001 . {Preparation involving a liquid-liquid extraction, an adsorption or an ion-exchange}
- C01G 23/002 . {Compounds containing, besides titanium, two or more other elements, with the exception of oxygen or hydrogen ([C01G 23/001](#) takes precedence)}
- C01G 23/003 . {Titanates, e.g. titanates of two or more metals other than titanium ([C01G 23/001](#) takes precedence)}
- C01G 23/005 . . {Alkali titanates}

- C01G 23/006 . . {Alkaline earth titanates}
- C01G 23/007 . {Titanium sulfides (C01G 23/001 takes precedence)}
- C01G 23/008 . {Titanium- and titanyl sulfate (C01G 23/001 takes precedence)}
- C01G 23/02 . Halides of titanium
- C01G 23/022 . . {Titanium tetrachloride}
- C01G 23/024 . . . {Purification of tetrachloride}
- C01G 23/026 . . {Titanium trichloride}
- C01G 23/028 . . {Titanium fluoride}
- C01G 23/04 . Oxides; Hydroxides
- C01G 23/043 . . {Titanium sub-oxides}
- C01G 23/047 . . Titanium dioxide
- C01G 23/0475 . . . {Purification}
- C01G 23/053 . . . Producing by wet processes, e.g. hydrolysing titanium salts
- C01G 23/0532 {by hydrolysing sulfate-containing salts}
- C01G 23/0534 {in the presence of seeds}
- C01G 23/0536 {by hydrolysing chloride-containing salts}
- C01G 23/0538 {in the presence of seeds}
- C01G 23/07 . . . Producing by vapour phase processes, e.g. halide oxidation
- C01G 23/075 {Evacuation and cooling of the gaseous suspension containing the oxide; Desacidification and elimination of gases occluded in the separated oxide}
- C01G 23/08 . . . Drying; Calcining; {After treatment of titanium oxide}

C01G 25/00**Compounds of zirconium**

- C01G 25/003 . {Preparation involving a liquid-liquid extraction, an adsorption or an ion-exchange}
- C01G 25/006 . {Compounds containing, besides zirconium, two or more other elements, with the exception of oxygen or hydrogen}
- C01G 25/02 . Oxides
- C01G 25/04 . Halides
- C01G 25/06 . Sulfates

C01G 27/00**Compounds of hafnium**

- C01G 27/003 . {Preparation involving a liquid-liquid extraction, an adsorption or an ion-exchange}
- C01G 27/006 . {Compounds containing, besides hafnium, two or more other elements, with the exception of oxygen or hydrogen}
- C01G 27/02 . Oxides
- C01G 27/04 . Halides
- C01G 27/06 . Sulfates

C01G 28/00**Compounds of arsenic**

- C01G 28/001 . {Preparation involving a solvent-solvent extraction, an adsorption or an ion-exchange}
- C01G 28/002 . {Compounds containing, besides arsenic, two or more other elements, with the exception of oxygen or hydrogen ([C01G 28/001 takes precedence](#))}
- C01G 28/004 . . {containing halogen}
- C01G 28/005 . {Oxides; Hydroxides; Oxyacids ([C01G 28/001 takes precedence](#))}
- C01G 28/007 . {Halides ([C01G 28/001 takes precedence](#))}
- C01G 28/008 . {Sulfides ([C01G 28/001 takes precedence](#))}
- C01G 28/02 . Arsenates; Arsenites {([C01G 28/001 takes precedence](#))}
- C01G 28/023 . . {of ammonium, alkali or alkaline-earth metals or magnesium}
- C01G 28/026 . . {containing at least two metals}

C01G 29/00**Compounds of bismuth**

- C01G 29/003 . {Preparations involving a liquid-liquid extraction, an adsorption or an ion-exchange}
- C01G 29/006 . {Compounds containing, besides bismuth, two or more other elements, with the exception of oxygen or hydrogen}

C01G 30/00**Compounds of antimony**

- C01G 30/001 . {Preparation involving a solvent-solvent extraction, an adsorption or an ion-exchange}
- C01G 30/002 . {Compounds containing, besides antimony, two or more other elements, with the exception of oxygen or hydrogen ([C01G 30/001 takes precedence](#))}
- C01G 30/003 . . {containing halogen}
- C01G 30/004 . {Oxides; Hydroxides; Oxyacids ([C01G 30/001 takes precedence](#))}
- C01G 30/005 . . {Oxides}
- C01G 30/006 . {Halides ([C01G 30/001 takes precedence](#))}
- C01G 30/007 . . {of binary type SbX_3 or SbX_5 with X representing a halogen, or mixed of the type $SbX_3X'_2$ with X,X' representing different halogens}
- C01G 30/008 . {Sulfides ([C01G 30/001 takes precedence](#))}
- C01G 30/02 . Antimonates; Antimonites {([C01G 30/001 takes precedence](#))}
- C01G 30/023 . . {of ammonium, alkali or alkaline-earth metals or magnesium}
- C01G 30/026 . . {containing at least two metals}

C01G 31/00**Compounds of vanadium**

- C01G 31/003 . {Preparation involving a liquid-liquid extraction, an adsorption or an ion-exchange}
- C01G 31/006 . {Compounds containing, besides vanadium, two or more other elements, with the exception of oxygen or hydrogen}
- C01G 31/02 . Oxides
- C01G 31/04 . Halides

C01G 33/00**Compounda of niobium**

C01G 33/003	<ul style="list-style-type: none"> • {Preparation involving a liquid-liquid extraction, an adsorption or an ion-exchange}
C01G 33/006	<ul style="list-style-type: none"> • {Compounds containing, besides niobium, two or more other elements, with the exception of oxygen or hydrogen}
C01G 35/00	Compounds of tantalum
C01G 35/003	<ul style="list-style-type: none"> • {Preparation involving a liquid-liquid extraction, an adsorption or an ion-exchange}
C01G 35/006	<ul style="list-style-type: none"> • {Compounds containing, besides tantalum, two or more other elements, with the exception of oxygen or hydrogen}
C01G 35/02	<ul style="list-style-type: none"> • Halides
C01G 37/00	Compounds of chromium
C01G 37/003	<ul style="list-style-type: none"> • {Preparation involving a liquid-liquid extraction, an adsorption or an ion-exchange}
C01G 37/006	<ul style="list-style-type: none"> • {Compounds containing, besides chromium, two or more other elements, with the exception of oxygen or hydrogen}
C01G 37/02	<ul style="list-style-type: none"> • Oxides or hydrates thereof
C01G 37/027	<ul style="list-style-type: none"> • . Chromium dioxide
C01G 37/033	<ul style="list-style-type: none"> • . Chromium trioxide; Chromic acid
C01G 37/04	<ul style="list-style-type: none"> • Chromium halides
C01G 37/06	<ul style="list-style-type: none"> • . Chromylhalides
C01G 37/08	<ul style="list-style-type: none"> • Chromium sulfates
C01G 37/10	<ul style="list-style-type: none"> • . Chrome alum
C01G 37/14	<ul style="list-style-type: none"> • Chromates; Bichromates
C01G 39/00	Compounds of molybdenum
C01G 39/003	<ul style="list-style-type: none"> • {Preparation involving a liquid-liquid extraction, an adsorption or an ion-exchange}
C01G 39/006	<ul style="list-style-type: none"> • {Compounds containing, besides molybdenum, two or more other elements, with the exception of oxygen or hydrogen}
C01G 39/02	<ul style="list-style-type: none"> • Oxides; Hydroxides
C01G 39/04	<ul style="list-style-type: none"> • Halides
C01G 39/06	<ul style="list-style-type: none"> • Sulfides
C01G 41/00	Compounds of tungsten
C01G 41/003	<ul style="list-style-type: none"> • {Preparation involving a liquid-liquid extraction, an adsorption or an ion-exchange}
C01G 41/006	<ul style="list-style-type: none"> • {Compounds containing, besides tungsten, two or more other elements, with the exception of oxygen or hydrogen}
C01G 41/02	<ul style="list-style-type: none"> • Oxides; Hydroxides
C01G 41/04	<ul style="list-style-type: none"> • Halides
C01G 43/00	Compounds of uranium

- C01G 43/003 . {Preparation involving a liquid-liquid extraction, an adsorption or an ion-exchange}
- C01G 43/006 . {Compounds containing, besides uranium, two or more other elements, with the exception of oxygen or hydrogen}
- C01G 43/01 . Oxides; Hydroxides
- C01G 43/025 . . Uranium dioxide
- C01G 43/04 . Halides of uranium
- C01G 43/06 . . Fluorides
- C01G 43/063 . . . {Hexafluoride (UF₆)}
- C01G 43/066 {Preparation}
- C01G 43/08 . . Chlorides
- C01G 43/10 . . Bromides
- C01G 43/12 . . Iodides

C01G 45/00 **Compounds of manganese**

- C01G 45/003 . {Preparation involving a liquid-liquid extraction, an adsorption or an ion-exchange}
- C01G 45/006 . {Compounds containing, besides manganese, two or more other elements, with the exception of oxygen or hydrogen (manganates, manganites or permanganates [C01G 45/12](#))}
- C01G 45/02 . Oxides; Hydroxides
- C01G 45/04 . Carbonyls
- C01G 45/06 . Halides
- C01G 45/08 . Nitrates
- C01G 45/10 . Sulfates
- C01G 45/12 . Manganates {manganites or} permanganates
- C01G 45/1207 . . {Permanganates ([MnO₄]⁻) or manganates ([MnO₄]²⁻)}
- C01G 45/1214 . . . {containing alkali metals}
- C01G 45/1221 . . {Manganates or manganites with a manganese oxidation state of Mn(III), Mn(IV) or mixtures thereof}
- C01G 45/1228 . . . {of the type [MnO₂]ⁿ⁻, e.g. LiMnO₂, Li[M_xMn_{1-x}]O₂}
- C01G 45/1235 . . . {of the type [Mn₂O₄]²⁻, e.g. Li₂Mn₂O₄, Li₂[M_xMn_{2-x}]O₄}
- C01G 45/1242 . . . {of the type [Mn₂O₄]⁻, e.g. LiMn₂O₄, Li[M_xMn_{2-x}]O₄}
- C01G 45/125 . . . {of the type [MnO₃]ⁿ⁻, e.g. Li₂MnO₃, Li₂[M_xMn_{1-x}O₃], (La,Sr)MnO₃}
- C01G 45/1257 {containing lithium, e.g. Li₂MnO₃, Li₂[M_xMn_{1-x}O₃]}
- C01G 45/1264 {containing rare earth, e.g. La_{1-x}CaxMnO₃, LaMnO₃}
- C01G 45/1271 . . . {of the type [Mn₂O₈]ⁿ⁻, e.g. (LaSr₃)Mn₂O₈}
- C01G 45/1278 . . . {of the type [Mn₂O₇]ⁿ⁻, e.g. (Sr_{2-x}Ndx)Mn₂O₇, Ti₂Mn₂O₇}
- C01G 45/1285 . . . {of the type [Mn₂O₅]ⁿ⁻}
- C01G 45/1292 . . . {of the type [Mn₅O₁₂]ⁿ⁻}

C01G 47/00 **Compounds of rhenium**

C01G 47/003	<ul style="list-style-type: none"> • {Preparation involving a liquid-liquid extraction, an adsorption or an ion-exchange}
C01G 47/006	<ul style="list-style-type: none"> • {Compounds containing, besides rhenium, two or more other elements, with the exception of oxygen or hydrogen}
C01G 49/00	Compounds of iron
C01G 49/0009	<ul style="list-style-type: none"> • {Preparation involving a liquid-liquid extraction, an adsorption or an ion-exchange}
C01G 49/0018	<ul style="list-style-type: none"> • {Mixed oxides or hydroxides, e.g. ferrites (C01G 49/0009 takes precedence)}
C01G 49/0027	<ul style="list-style-type: none"> • . {containing one alkali metal}
C01G 49/0036	<ul style="list-style-type: none"> • . {containing one alkaline earth metal, magnesium or lead}
C01G 49/0045	<ul style="list-style-type: none"> • . {containing aluminium}
C01G 49/0054	<ul style="list-style-type: none"> • . {containing one rare earth metal, yttrium or scandium}
C01G 49/0063	<ul style="list-style-type: none"> • . {containing zinc}
C01G 49/0072	<ul style="list-style-type: none"> • . {containing manganese}
C01G 49/0081	<ul style="list-style-type: none"> • . {containing iron in unusual valence state (IV, V, VI), e.g. ferrates}
C01G 49/009	<ul style="list-style-type: none"> • {Compounds containing, besides iron, two or more other elements, with the exception of oxygen or hydrogen}
C01G 49/02	<ul style="list-style-type: none"> • Oxides; Hydroxides {(C01G 49/0018 takes precedence)}
C01G 49/04	<ul style="list-style-type: none"> • . Ferrous oxide (FeO)
C01G 49/06	<ul style="list-style-type: none"> • . Ferric oxide (Fe₂O₃)
C01G 49/08	<ul style="list-style-type: none"> • . Ferroso-ferric oxide (Fe₃O₄)
C01G 49/10	<ul style="list-style-type: none"> • Halides {(C01G 49/0018 takes precedence)}
C01G 49/12	<ul style="list-style-type: none"> • Sulfides {(C01G 49/0018 takes precedence)}
C01G 49/14	<ul style="list-style-type: none"> • Sulfates {(C01G 49/0018 takes precedence)}
C01G 49/16	<ul style="list-style-type: none"> • Carbonyls {(C01G 49/0018 takes precedence)}
C01G 51/00	Compounds of cobalt
C01G 51/003	<ul style="list-style-type: none"> • {Preparation involving a liquid-liquid extraction, an adsorption or an ion-exchange}
C01G 51/006	<ul style="list-style-type: none"> • {Compounds containing, besides cobalt, two or more other elements, with the exception of oxygen or hydrogen (cobaltates C01G 51/40)}
C01G 51/02	<ul style="list-style-type: none"> • Carbonyls
C01G 51/04	<ul style="list-style-type: none"> • Oxides; Hydroxides
C01G 51/06	<ul style="list-style-type: none"> • Carbonates
C01G 51/08	<ul style="list-style-type: none"> • Halides
C01G 51/085	<ul style="list-style-type: none"> • . {Chlorides}
C01G 51/10	<ul style="list-style-type: none"> • Sulfates
C01G 51/12	<ul style="list-style-type: none"> • Complexes with ammonia
C01G 51/30	<ul style="list-style-type: none"> • {Sulfides}
C01G 51/40	<ul style="list-style-type: none"> • {Cobaltates}
C01G 51/42	<ul style="list-style-type: none"> • . {containing alkali metals, e.g. LiCoO₂}

- C01G 51/44 . . . {containing manganese}
- C01G 51/50 {of the type $[\text{MnO}_2]_n^-$, e.g. $\text{Li}(\text{CoxMn}_{1-x})\text{O}_2$, $\text{Li}(\text{MyCoxMn}_{1-x-y})\text{O}_2$ }
- C01G 51/52 {of the type $[\text{Mn}_2\text{O}_4]_2^-$, e.g. $\text{Li}_2(\text{CoxMn}_{2-x})\text{O}_4$, $\text{Li}_2(\text{MyCoxMn}_{2-x-y})\text{O}_4$ }
- C01G 51/54 {of the type $[\text{Mn}_2\text{O}_4]^-$, e.g. $\text{Li}(\text{CoxMn}_{2-x})\text{O}_4$, $\text{Li}(\text{MyCoxMn}_{2-x-y})\text{O}_4$ }
- C01G 51/56 {of the type $[\text{MnO}_3]_2^-$, e.g. $\text{Li}_2[\text{CoxMn}_{1-x}\text{O}_3]$, $\text{Li}_2[\text{MyCoxMn}_{1-x-y}\text{O}_3]$ }
- C01G 51/58 {of the type $[\text{Mn}_2\text{O}_8]_n^-$ }
- C01G 51/60 {of the type $[\text{Mn}_2\text{O}_7]_n^-$ }
- C01G 51/62 {of the type $[\text{Mn}_2\text{O}_5]_n^-$ }
- C01G 51/64 {of the type $[\text{Mn}_5\text{O}_{12}]_n^-$ }
- C01G 51/66 . . {containing alkaline earth metals, e.g. SrCoO_3 }
- C01G 51/68 . . . {containing rare earth, e.g. $\text{La}_{0.3}\text{Sr}_{0.7}\text{CoO}_3$ }
- C01G 51/70 . . {containing rare earth, e.g. LaCoO_3 ([C01G 51/68](#) takes precedence)}

C01G 53/00**Compounds of nickel**

- C01G 53/003 . {Preparation involving a liquid-liquid extraction, an adsorption or an ion-exchange}
- C01G 53/006 . {Compounds containing, besides nickel, two or more other elements, with the exception of oxygen or hydrogen ([nickelates C01G 53/40](#))}
- C01G 53/02 . Carbonyls
- C01G 53/04 . Oxides; Hydroxides
- C01G 53/06 . Carbonates
- C01G 53/08 . Halides
- C01G 53/09 . . Chlorides
- C01G 53/10 . Sulfates
- C01G 53/11 . Sulfides
- C01G 53/12 . Complexes with ammonia
- C01G 53/40 . {[Nickelates](#)}

WARNING

Groups [C01G 53/40](#) to [C01G 53/70](#) are not complete pending a reorganisation, see also [C01G 53/006](#) and [C01G 53/00](#)

- C01G 53/42 . . {containing alkali metals, e.g. LiNiO_2 }
- C01G 53/44 . . . {containing manganese}
- C01G 53/50 {of the type $[\text{MnO}_2]_n^-$, e.g. $\text{Li}(\text{NixMn}_{1-x})\text{O}_2$, $\text{Li}(\text{MyNixMn}_{1-x-y})\text{O}_2$ }
- C01G 53/52 {of the type $[\text{Mn}_2\text{O}_4]_2^-$, e.g. $\text{Li}_2(\text{NixMn}_{2-x})\text{O}_4$, $\text{Li}_2(\text{MyNixMn}_{2-x-y})\text{O}_4$ }
- C01G 53/54 {of the type $[\text{Mn}_2\text{O}_4]^-$, e.g. $\text{Li}(\text{NixMn}_{2-x})\text{O}_4$, $\text{Li}(\text{MyNixMn}_{2-x-y})\text{O}_4$ }
- C01G 53/56 {of the type $[\text{MnO}_3]_2^-$, e.g. $\text{Li}_2[\text{NixMn}_{1-x}\text{O}_3]$, $\text{Li}_2[\text{MyNixMn}_{1-x-y}\text{O}_3]$ }
- C01G 53/58 {of the type $[\text{Mn}_2\text{O}_8]_n^-$ }
- C01G 53/60 {of the type $[\text{Mn}_2\text{O}_7]_n^-$ }
- C01G 53/62 {of the type $[\text{Mn}_2\text{O}_5]_n^-$ }
- C01G 53/64 {of the type $[\text{Mn}_5\text{O}_{12}]_n^-$ }

C01G 53/66	<ul style="list-style-type: none"> • {containing alkaline earth metals, e.g. SrNiO_3, SrNiO_2}
C01G 53/68	<ul style="list-style-type: none"> • {containing rare earth, e.g. $\text{La}_{1.62}\text{Sr}_{0.38}\text{NiO}_4$}
C01G 53/70	<ul style="list-style-type: none"> • {containing rare earth, e.g. LaNiO_3 (C01G 53/68 takes precedence)}
C01G 55/00	Compounds of ruthenium, rhodium, palladium, osmium, iridium, or platinum
C01G 55/001	<ul style="list-style-type: none"> • {Preparation involving a liquid-liquid extraction, an adsorption or an ion-exchange}
C01G 55/002	<ul style="list-style-type: none"> • {Compounds containing, besides ruthenium, rhodium, palladium, osmium, iridium, or platinum, two or more other elements, with the exception of oxygen or hydrogen (C01G 55/007 takes precedence)}
C01G 55/004	<ul style="list-style-type: none"> • {Oxides; Hydroxides}
C01G 55/005	<ul style="list-style-type: none"> • {Halides}
C01G 55/007	<ul style="list-style-type: none"> • {Compounds containing at least one carbonyl group}
C01G 55/008	<ul style="list-style-type: none"> • {Carbonyls}
C01G 56/00	Compounds of transuranic elements
C01G 56/001	<ul style="list-style-type: none"> • {Preparation involving a liquid-liquid extraction, an adsorption or an ion-exchange}
C01G 56/002	<ul style="list-style-type: none"> • {by adsorption or by ion-exchange on a solid support}
C01G 56/003	<ul style="list-style-type: none"> • {Compounds comprising, besides transuranic elements, two or more other elements, with the exception of oxygen or hydrogen (C01G 56/001 takes precedence)}
C01G 56/004	<ul style="list-style-type: none"> • {Compounds of plutonium (C01G 56/001 takes precedence)}
C01G 56/005	<ul style="list-style-type: none"> • {Oxides; Hydroxides}
C01G 56/006	<ul style="list-style-type: none"> • {Halides}
C01G 56/007	<ul style="list-style-type: none"> • {Compounds of transuranic elements (C01G 56/001 and C01G 56/004 take precedence)}
C01G 56/008	<ul style="list-style-type: none"> • {Compounds of neptunium}
C01G 56/009	<ul style="list-style-type: none"> • {Compounds of americium}
C01G 99/00	Subject matter not provided for in other groups of this subclass
C01G 99/003	<ul style="list-style-type: none"> • {Preparation involving a liquid-liquid extraction, an adsorption or an ion-exchange}
C01G 99/006	<ul style="list-style-type: none"> • {Compounds containing, besides a metal not provided for elsewhere in this subclass, two or more other elements other than oxygen or hydrogen (C01G 99/003 takes precedence)}