

Retraction of articles

This article reports the retraction of 39 articles published in *Acta Crystallographica Section E* between 2004 and 2009.

After thorough investigation (see Harrison *et al.*, 2010), 39 additional articles are retracted as a result of problems with the data sets or incorrect atom assignments. Full details of all the articles are given in Table 1.

Table 1

Details of articles to be retracted, in order of publication.

Title	Reference	Retracted by	DOI	Refcode
<i>trans</i> -Bis[1-[3-(cyclohexylamino)propyliminomethyl]-2-naphtholato]copper(II) dichloride dihydrate	Zhang (2004)	Journal	10.1107/S1600536804028296	BIPDUA
Bis(4-bromo-2-formylphenolato-κ ² O,O')copper(II)	Sun & Gao (2005)	Author	10.1107/S160053680500187X	FEYSUY
Bis(salicylaldehyde)zinc(II)	Xiong & Liu (2005)	Journal	10.1107/S1600536805010913	GAMDUU
Bis(4-bromo-2-formylphenolato-κ ² O,O')zinc(II)	Chen (2006)	Journal	10.1107/S1600536805040432	SAZCUS
Bis(2-formylphenolato-κ ² O,O')nickel(II)	Li & Chen (2006)	Journal	10.1107/S1600536806012931	IDAZAP
Bis(2-formylphenolato)cobalt(II)	Qiu (2006)	Journal	10.1107/S1600536806015704	GEJDUV
Bis(2-formylphenolato-κ ² O,O')manganese(II)	Wang & Fang (2006)	Journal	10.1107/S1600536806021039	IDOVED
Tetraaqua(1,10-phenanthroline-κ ² N,N')copper(II) naphthalene-1,5-disulfonate dihydrate	Liu <i>et al.</i> (2006)	Author	10.1107/S1600536806030637	GENYOO
Tetraaqua(1,10-phenanthroline-κ ² N,N')nickel(II) naphthalene-1,5-disulfonate dihydrate	Liu & Fan (2006)	Author	10.1107/S1600536806035410	KERBEP
{6,6'-Diethoxy-2,2'-[ethane-1,2-diylbis(nitrilomethylidyne)]diphenolato}-trinitratolutetium(III)copper(II)	Sui <i>et al.</i> (2006)	Journal	10.1107/S160053680604565X	HESPEP
Bis(2-formylphenolato-κ ² O,O')iron(II)	Yang <i>et al.</i> (2007)	Author	10.1107/S1600536807021721	PIFCAJ
2,6-Dimethoxybenzohydrazide	Qadeer <i>et al.</i> (2007a)	Journal	10.1107/S1600536807022593	PIFHES
2-(2,4-Dichlorophenylsulfanyl)acetohydrazide	Qadeer <i>et al.</i> (2007b)	Journal	10.1107/S1600536807022891	YIFSOW
{6,6'-Diethoxy-2,2'-[ethane-1,2-diylbis(nitrilomethylidyne)]diphenolato}-trinitratoeuropium(III)zinc(II)	Hu <i>et al.</i> (2007)	Author	10.1107/S1600536807031121	WIHKEE
{μ-6,6'-Diethoxy-2,2'-[ethane-1,2-diylbis(nitrilomethylidyne)]diphenolato}-trinitratocerium(III)zinc(II)	Sui, Zhang, Hu & Yin (2007)	Author	10.1107/S1600536807032564	WIHREL
{μ-6,6'-Diethoxy-2,2'-[ethane-1,2-diylbis(nitrilomethylidyne)]diphenolato}-trinitratopraseodymium(III)zinc(II)	Chen <i>et al.</i> (2007)	Author	10.1107/S1600536807032540	WIHRIP
{μ-6,6'-Diethoxy-2,2'-[ethane-1,2-diylbis(nitrilomethylidyne)]diphenolato}-trinitratopraseodymium(III)nickel(II)	Sui, Li <i>et al.</i> (2007)	Author	10.1107/S1600536807032618	UFACUA
{6,6'-Dimethoxy-2,2'-[ethane-1,2-diylbis(nitrilomethylidyne)]diphenolato-1κ ⁴ O ¹ ,O ² ,O ³ :2κ ² O ¹ ,N,N',O ¹ }(methanol-1κO)-μ-nitrato-1:2κ ² O:O'-dinitrato-1κ ⁴ O,O'-cerium(III)zinc(II)	Sui, Fang, Hu & Lin (2007)	Author	10.1107/S1600536807033314	UDUYIC
{6,6'-Dimethoxy-2,2'-[ethane-1,2-diylbis(nitrilomethylidyne)]diphenolato}-methanol-μ-nitrato-dinitratosamarium(III)nickel(II)	Sui, Zhang, Hu & Jiang (2007)	Author	10.1107/S1600536807037130	AFECEU
{6,6'-Dimethoxy-2,2'-[ethane-1,2-diylbis(nitrilomethylidyne)]diphenolato}-methanol-μ-nitrato-dinitratopraseodymium(III)zinc(II)	Sui, Fang & Yuan (2007)	Author	10.1107/S1600536807037488	AFICEY
{6,6'-Dimethoxy-2,2'-[ethane-1,2-diylbis(nitrilomethylidyne)]diphenolato}-methanol-μ-nitrato-dinitratolutetium(III)zinc(II)	Sui, Sui <i>et al.</i> (2007)	Author	10.1107/S1600536807037737	AFEF0H
catena-Poly[[chloridonickel(II)]-di-μ-chlorido-[chloridonickel(II)]-μ-4,4'-methylenebis(3,5-dimethylpyrazole)-κ ² N ² :N ²]	Huang & Chen (2007)	Author	10.1107/S1600536807039384	VIJYOD
[2,2'-[o-Phenylenebis(nitrilomethylidyne)]diphenolato]zinc(II)	Liu <i>et al.</i> (2007a)	Author	10.1107/S1600536807040640	DIKYUS
<i>trans</i> -Bis(ethylenediamine-κ ² N,N')bis(nitrato-κO)zinc(II)	Liu, Zeng & Chen (2007)	Author	10.1107/S1600536807042390	XIKYEW
[N,N'-(o-Phenylene)bis(picolinamido)-κ ² N,N',N'',N''']cobalt(II)	Liu & Zeng (2007a)	Author	10.1107/S1600536807044571	XILFII
[N,N'-(o-Phenylene)dipicolinamide-κ ² N]nickel(II)	Liu & Zeng (2007b)	Author	10.1107/S1600536807048386	WINWEW
[2,2'-[o-Phenylenebis(nitrilomethylidyne)]diphenolato}manganese(II)	Liu <i>et al.</i> (2007b)	Author	10.1107/S1600536807052993	VIQPIV
<i>N</i> -(2-Amino-3-pyridyl)urea monohydrate	Li <i>et al.</i> (2007)	Author	10.1107/S1600536807047526	SIMFEA
<i>N</i> -(2-Fluorophenyl)carbamic acid monohydrate	Yang (2007)	Author	10.1107/S1600536807052464	WINMOW
Aqua(dimethylglyoxime-κ ² N,N')(3,5-dinitro-2-oxidobenzooato-κ ² O ¹ ,O ²)-copper(II)	Liu & Wen (2007)	Author	10.1107/S1600536807054244	HIQCAM
μ-Acetato-tri-μ-ferrocenecarboxylatobis[(N,N-dimethylformamide)-copper(II)]	Liu, Lin <i>et al.</i> (2007)	Journal	10.1107/S1600536807059041	HIQQEE

Table 1 (continued)

Title	Reference	Retracted by	DOI	Refcode
{ μ -6,6'-Dimethoxy-2,2'-[ethane-1,2-diylbis(nitrilomethylidyne)]diphenolato}- μ -nitrate-dinitratoeuropium(III)zinc(II)	Hu <i>et al.</i> (2008)	Author	10.1107/S160053680706151X	MIRPAF
Bis(4-chloro-2-formylphenolato)nickel(II)	Li <i>et al.</i> (2008)	Author	10.1107/S1600536807056309	RISTET
{ μ -6,6'-Dimethoxy-2,2'-[ethane-1,2-diylbis(nitrilomethylidyne)]diphenolato}- μ -nitrate-dinitratoerbium(III)zinc(II)	Chen <i>et al.</i> (2008)	Author	10.1107/S1600536808006958	QIXHIP
Bis(2-ethoxy-6-formylphenolato- $\kappa^2 O^1, O^6$)nickel(II)	Han (2008)	Journal	10.1107/S160053680800809X	QIXLIT
{ μ -6,6'-Dimethoxy-2,2'-[ethane-1,2-diylbis(nitrilomethylidyne)]diphenolato}- μ -nitrate-dinitratoholmium(III)zinc(II)	Xiao, Sui <i>et al.</i> (2008)	Author	10.1107/S1600536808013743	BIZTUA
{ μ -6,6'-Diethoxy-2,2'-[ethane-1,2-diylbis(nitrilomethylidyne)]diphenolato}-trinitratoholmium(III)nickel(II)	Xiao, Fu <i>et al.</i> (2008)	Author	10.1107/S1600536808013755	BIZVAI
Hydrogen-bonding patterns in the cocrystal terephthalic acid-4,4'-bipyridine (2I)	Wang <i>et al.</i> (2009)	Journal	10.1107/S160053680903236X	DUCZEH
{6,6'-Dimethoxy-2,2'-[ethane-1,2-diylbis(nitrilomethylidyne)]diphenolato-1 $\kappa^4 O^1, O^1, O^6, O^6$:2 $\kappa^4 O^1, N, N, O^1$ } (ethanol-1 κO)- μ -nitrate-1:2 $\kappa^2 O$:O'-dinitrato-1 $\kappa^4 O, O'$ -samarium(III)zinc(II)	Huang <i>et al.</i> (2009)	Journal	10.1107/S1600536809033558	YUCWAV

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Bis(2-formylphenolato- κ^2O,O')nickel(II)

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Key indicators

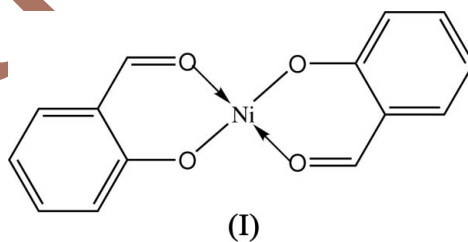
Single-crystal X-ray study
 $T = 293$ K
Mean $\sigma(C-C) = 0.006$ Å
 R factor = 0.046
 wR factor = 0.100
Data-to-parameter ratio = 13.8For details of how these key indicators were
automatically derived from the article, see
<http://journals.iucr.org/e>.

The title compound, $[Ni(C_7H_5O_2)_2]$, exhibits a mononuclear structure in which the central Ni^{II} atom is located on an inversion centre and is coordinated by four O atoms from two salicylaldehyde ligands in a distorted square-planar geometry. The complex was obtained by the reaction of salicylaldehyde and nickel(II) nitrate hexahydrate in ethanol, using 3-amino-1,2-propanediol as a growth-directing reagent.

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Comment

Research effort has been devoted to the study of substituted bis(salicylaldehydato)nickel(II) complexes, due to their catalytic activity in the dimerization of propylene and in olefin oligomerization when used together with an aluminium co-catalyst and/or phosphine ligand (Wu & Lu, 2003). Crystal structure analysis showed that the central Ni^{II} atom has an octahedral configuration in diaquabis(salicylaldehydato)nickel(II) (Stewart *et al.*, 1961). Interest in the magnetic properties of transition metal complexes encouraged us to prepare the title mononuclear complex, (I). As the Ni^{II} atom in a square-planar configuration has two available coordination positions for further bonding with metals, we intend to use this compound for synthesizing other heteropolynuclear complexes.



In compound (I), the Ni^{II} atom lies on an inversion centre and is coordinated by a pair of O atoms from the two salicylaldehyde ligands (Fig. 1). The bond distance between the Ni^{II} atom and the phenolic O atom is shorter than that between the Ni^{II} atom and the aldehyde O atom.

The IR spectrum of (I) shows a strong band at 1619 cm^{-1} , which is assigned to the stretching frequency of the bonded aldehyde group (Gupta *et al.*, 1999). A medium strong band appears at 1219 cm^{-1} , which is assigned to the C—O stretching frequency.

Experimental

An aqueous solution (5 ml) containing nickel(II) nitrate hexahydrate (0.19 g, 0.41 mmol) was added to a hot ethanol solution (10 ml) containing salicylaldehyde (0.10 g, 0.80 mmol) and 3-amino-1,2-

propanediol (0.09 g, 0.80 mmol). Aqueous ammonia (0.5 mol l⁻¹) was added until the pH of the mixture was 7. The mixture was stirred for 10 min to give a precipitate that was collected and washed with ethanol. After being air-dried for a day, the compound was recrystallized from dimethylformamide–cyclohexane (1:10 v/v). Red crystals of (I) suitable for X-ray analysis separated after 3 d in about 5% yield.

Crystal data

[Ni(C₇H₅O₂)₂]
M_r = 300.93
 Monoclinic, *P*2₁/*c*
a = 12.934 (3) Å
b = 5.827 (1) Å
c = 8.108 (2) Å
 β = 95.67 (3)°
V = 608.1 (2) Å³

Z = 2
D_x = 1.644 Mg m⁻³
 Mo *K*α radiation
 μ = 1.60 mm⁻¹
T = 293 (2) K
 Block, red
 0.24 × 0.21 × 0.16 mm

Data collection

Siemens *R3m* diffractometer
 ω scans
 Absorption correction: ψ scan
 (Kopfmann & Huber, 1968)
*T*_{min} = 0.688, *T*_{max} = 0.774
 2151 measured reflections
 1224 independent reflections

856 reflections with *I* > 2σ(*I*)
*R*_{int} = 0.033
 θ _{max} = 27.0°
 2 standard reflections
 every 200 reflections
 intensity decay: none

Refinement

Refinement on *F*²
R [*F*² > 2σ(*F*²)] = 0.046
wR (*F*²) = 0.100
S = 1.05
 1224 reflections
 89 parameters
 H-atom parameters constrained

$w = 1/[\sigma^2(F_o^2) + (0.0158P)^2 + 1.3629P]$
 where $P = (F_o^2 + 2F_c^2)/3$
 $(\Delta/\sigma)_{\max} = 0.032$
 $\Delta\rho_{\max} = 0.51 \text{ e } \text{Å}^{-3}$
 $\Delta\rho_{\min} = -0.39 \text{ e } \text{Å}^{-3}$
 Extinction correction: *SHELXL97*
 (Sheldrick, 1997)
 Extinction coefficient: 0.001 (2)

Table 1

Selected geometric parameters (Å, °).

Ni1—O1	1.832 (2)	Ni1—O2	1.853 (3)
O1 ⁱ —Ni1—O2	85.83 (12)	O1—Ni1—O2	94.17 (12)

Symmetry code: (i) $-x + 1, -y + 1, -z + 1$.

H atoms of the salicylaldehyde groups were placed in calculated positions and allowed to ride on their respective parent atoms, with

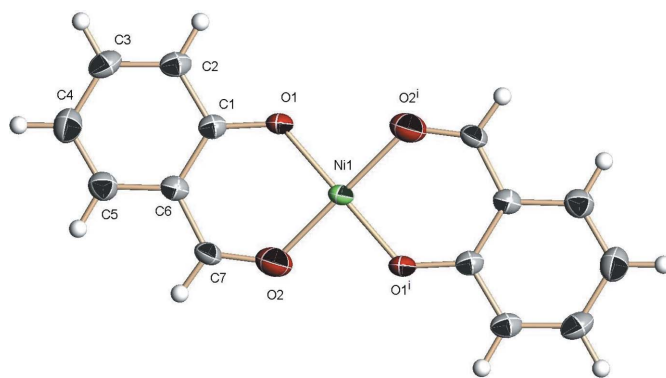


Figure 1

The molecular structure of (I), showing displacement ellipsoids at the 50% probability level. [Symmetry code: (i) $1 - x, 1 - y, 1 - z$].

C—H = 0.96 Å, and were assigned fixed isotropic displacement parameters of 0.080 Å².

Data collection: *XSCANS* (Siemens, 1990); cell refinement: *XSCANS*; data reduction: *SHELXTL-Plus* (Bruker, 1998); program(s) used to solve structure: *SHELXS97* (Sheldrick, 1997); program(s) used to refine structure: *SHELXL97* (Sheldrick, 1997); molecular graphics: *SHELXTL-Plus*; software used to prepare material for publication: *SHELXL97*.

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