CSD refcodes (*Refcode*) and bond valence parmaters (*R*) for La(III)-C bonds.

Refcode	***R***
Homoleptic coordiation sphere (only La-C bonds)	
ELUWEN	2.236252
HITSOS	2.25634
HIZLUX	2.263877
NAGSOD	2.261656
NERQUW	2.290942
PEDPOD	2.296236
TOFWAM01	2.205255
WAZNAM	2.307745
YODDAW	2.240513
IZOHUA	2.160162
IZOHUA01	2.162603
IZOHUA02	2.159134
Heteroleptic coordiation sphere (La-C and La-O bonds)	
AGIGUS	2.19961
AGIHAZ	2.20986
BADBAJ	2.183736
HODDIN	2.222267
HODFAH	2.191855
HODFUB	2.212111
LAWRAC	2.194415
NAPTED	2.233033
NAPTED	2.199555
NIRBOF	2.233502
NIRBUL	2.227022
OJOCEV	2.23162
OJOCEV	2.23162
PEWXUK	2.191693
SUQWEG	2.240519
SUQWEG	2.242627
SUQWEG01	2.256689
SUQWEG02	2.223046
SUQWEG02	2.238779
TILMAC	2.31695
TILMAC	2.31695
YERZAW	2.26095
ZUNBEP	2.215793
AYUJIN	2.19905

CSD refcodes (*Refcode*) and bond valence parmaters (*R*) for Ce(III)-C bonds.

Refcode	***R***
Homoleptic coordiation sphere (only Ce-C bonds)	
KECOCE10	2.120197
KOGMOI	2.231137
TEDGEO	2.254662
TOFVUF01	2.178315
WOFNAG	2.224457
Heteroleptic coordiation sphere (Ce-C and Ce-O bonds)	
JACMIJ	2.192132
JACMIJ	2.182092
JOLYAK	2.188013
KASYIM	2.253373
KASYIM	2.249394
LELBOT	2.182817
MEWGEA	2.139091
MEWGEA	2.142181
VESCOL	2.23416
ZAFJAR	2.2493
ZAFJAR	2.246268
ZEMVUI	2.244947
ZEMVUI	2.244947

CSD refcodes (*Refcode*) and bond valence parmaters (*R*) for Pr(III)-C bonds.

Refcode	***R***
Homoleptic coordiation sphere (only Pr-C bonds)	
JIZNOV	2.200173
Heteroleptic coordiation sphere (Pr-C and Pr-O bonds)	
AWORAF	2.168226
EMUSOU	2.163928
HIWDAS	2.188875
HIWDAS	2.183625
HODDOT	2.183545
HODDUZ	2.186573
HODFEL	2.193778
HODFIP	2.162359
SOCTAF	2.150311
SOCTAF10	2.150374
SOCTEJ	2.162017
SOCTEJ20	2.163043
TUMRAU	2.103666
VUCMOV10	2.18471
VUCWOF	2.166864
ZASFEE	2.186286
ZASFEE	2.189536
ZASFEE01	2.204698
ZASFEE01	2.203518
AYUJOT	2.151012
IXEZAM	2.131169

CSD refcodes (*Refcode*) and bond valence parmaters (*R*) for Nd(III)-C bonds.

Refcode	***R***
Homoleptic coordiation sphere (only Nd-C bonds)	
FONJIB	2.118307
GIQDOZ	2.228491
GIQDOZ	2.223544
GIQDUF	2.250514
HAQLEQ	2.119564
HARRIB	2.182859
HITSUY	2.198048
JIZDUR	2.181809
MCPDND	2.196556
MCPDND	2.192505
QEBJIQ	2.11454
QEBJIQ	2.109165
SOVYAD	2.204557
TILLUV	2.213529
WOFMOT	2.18323
YOTZAI	2.172534
YOTZAI10	2.172396
Heteroleptic coordiation sphere (Nd-C and Nd-O bonds)	
AGIHED	2.162208
BAJQEI	2.123101
COTFND10	2.163587
CUKNUR	2.15458
CUKNUR01	2.120259
DEDHOJ	2.191463
DEDHOJ	2.199408
FONHAR	2.286468
GUQFIH	2.114182
GUQFIH	2.114182
HACHEZ	2.136984
HODDEJ	2.183807
HODFOV	2.153056
IMACAA	2.269604
IMUVER	2.245453
KISSAG01	2.183361
KISSAG01	2.183206
LELBUZ	2.150498
LEPGIW	2.092931
LEPGIW	2.093005
MEDMIR	2.107458
NADQEO	2.178833
NADQEO	2.178833
PANWOQ	2.146212
PAPMIC	2.157214
PAPMIC	2.157214
POGVOW	2.078798
POGVOW	2.078798
PUGZOG	2.087325
QIYBEF	2.221668
QOSTUN	2.097211
TILMEG	2.26672

TILMEG	2.26672
TILMEG01	2.295534
TIMQOV	2.135105
VIVBOR	2.154186
WAGWUW	2.158391
WEFPUS	2.133475
WEYRAT	2.142722
YEZXUW	2.125215
YIYFOB	2.099828
YOPMEV	2.302125
YUWDID	2.121789
ZEMWAP	2.305127
ZUNBOZ	2.163291
PAGNAN	1.894682
PAGNAN	1.894682
PAGNER	2.137674
PAGNIV	2.139946
RAFCUX	2.205573

CSD refcodes (*Refcode*) and bond valence parmaters (*R*) for Nd(III)-C bonds.

Refcode	***R***
Homoleptic coordiation sphere (only Sm-C bonds)	
ABIDUK	2.072642
CETVEC	2.056576
CYPESM02	2.163315
DOLYOS	2.198276
DOLZEJ	2.231335
DOLZEJ	2.181215
FEYHAS	2.17664
FEYHAS	2.17664
FEYHAS01	2.182628
FEYHAS01	2.166688
FIWCAP	2.163036
FIWCET	2.178659
GIQDIT	2.192989
GUMHAX	2.122912
GUMHAX	2.146102
INDYSM10	2.146752
JEBWOC	2.208848
JEBWOC	2.178618
KADKEG	2.208589
KEKPIZ	2.161198
KEKPOF	2.162023
KEKPOF	2.163407
KEKRAT	2.164807
KEKRAT	2.165356
KEKREX	2.153452
KEXREK	2.164129
MAQHER	2.132886
NOYGAJ	2.079619
PAZSIS	2.067112
QEBJEM	2.070106
SIFZUC	2.140483
UDIXOU	2.187157
UDIXOU	2.175286
UDIXUA	2.192789
UDIXUA	2.18723
VOFWIW	2.223275
WEVNAM	2.179303
WEVNAM	2.179303
WEVNIU	2.184476
WEVNIU	2.180234
WEVNOA	2.17921
WEVNOA	2.17921
YICTAF	2.065057
YODDEA	2.154272
YORWAD	2.14846
YORWAD	2.146344
ZUHYIK	2.236706
FEWLOJ	2.194221
FEWLOJ	2.176908
Heteroleptic coordiation sphere (Sm-C and Sm-O bonds)	
CAHJEB	2.100698
CAHJIF	2.102063

CUPSEL	2.133597
CUPSEL	2.149232
CUPSIP	2.105892
CUPSIP	2.102904
CUWGEG	2.163992
CUWGEG	2.163992
DIGJEI	2.118113
DOLYUY	2.235402
DOMGER	2.117016
DOMGER	2.117016
GACSEI	2.126568
GACSEI	2.120582
GISLUP	2.034693
GISMAW	2.060348
HEQJES	2.10866
IHECED	2.151611
JACLUV	2.158968
JACLUV	2.158968
JAQDOU	2.155458
JAQDUA	2.150134
JEYNEG	2.109923
JEYNEG	2.109923
KEKPUL	2.18614
KEWNOP	2.197153
KEWPAD	2.109572
KILMUN	2.135682
KILMUN	2.135682
KONYUH	2.161956
KONYUH	2.161956
KONYUH01	2.149991
KONYUH01	2.149991
KONYUH02	2.15103
KONYUH02	2.15103
LAYRUY	2.148818
LIQKUR	2.1943
LIQKUR	2.160137
MAVBAM	2.199131
MAVBEQ	2.111904
NAPTIH	2.126145
NAPTIH	2.126145
OJOCOF	2.177216
OJOCOF	2.172588
PANXUX	2.104792
PELNOJ10	2.113048
PIGYOT	2.108118
PIGYOT01	2.111586
PIGYOT10	2.114865
POGVUC	2.062024
POGVUC	2.060142
POGVUC	2.062024
POGVUC	2.060142
POHCIY	2.14127
POHFIB	2.133663
PUQJUG	2.153646
PUQJUG	2.153646
RABTOZ	2.11503

RABTOZ	2.11503
SESGUS	2.131639
SESGUS	2.131639
SESKAC	2.118115
SESKAC	2.118115
SESKEG	2.118097
SESKEG	2.118097
TAMWUZ	2.128921
TAMWUZ01	2.131031
TATDIB	2.143976
TATDIB	2.142035
TINGOM	2.097269
VIQTIY	2.14669
VIQTOE	2.150523
VIQTOE	2.136801
VIZTON	2.109686
VIZTON	2.109686
VULFAJ	2.120371
ZIWROM	2.140134
DANQAL	2.120637
DANQAL	2.140888

CSD refcodes (*Refcode*) and bond valence parmaters (*R*) for Eu(III)-C bonds.

Refcode	***R***
Heteroleptic coordiation sphere (Eu-C and Eu-O bonds)	
BIDREL	2.065451
BIDREL	2.065451
YEBXAE	2.224993
YEBXAE	2.184005

CSD refcodes (*Refcode*) and bond valence parmaters (*R*) for Gd(III)-C bonds.

Refcode	***R***
Homoleptic coordiation sphere (only Gd-C bonds)	
FOGJEQ	2.116883
HITTAF	2.142231
KIFTUO	2.176869
Heteroleptic coordiation sphere (Gd-C and Gd-O bonds)	
CPTHGD10	2.104336
OJOCIZ	2.164373
OJOCIZ	2.155778
YUWDEZ	2.096233
YUWDEZ	2.047338
ZUNBUF	2.121984
EWURUJ	2.058227

CSD refcodes (*Refcode*) and bond valence parmaters (*R*) for Tb(III)-C bonds.

Refcode	***R***
Homoleptic coordiation sphere (only Tb-C bonds)	
LAFVIX	2.120324
PEGYAB	2.034812

CSD refcodes (*Refcode*) and bond valence parmaters (*R*) for Dy(III)-C bonds.

Refcode	***R***
Homoleptic coordiation sphere (only Dy-C bonds)	
ABIFAS	2.026342
HITTEJ	2.114499
MOXBIK	2.159623
Heteroleptic coordiation sphere (Dy-C and Dy-O bonds)	
KILZOU	2.118611
KILZOU02	2.06996
PAPMOI	2.076761
PAPMOI	2.076761
TEGKAR	2.08946
YEGNAZ	2.015784
YEGNAZ	2.015784
YEZYIL	2.068601
YEZYIL	2.068601
BIFNEK	2.04943

CSD refcodes (*Refcode*) and bond valence parmaters (*R*) for Ho(III)-C bonds.

Refcode	***R***
Heteroleptic coordiation sphere (Ho-C and Ho-O bonds)	
ULOVUM	2.072927
WEXWEB	2.049047

CSD refcodes (*Refcode*) and bond valence parmaters (*R*) for Er(III)-C bonds.

Refcode	***R***
Homoleptic coordiation sphere (only Er-C bonds)	
ABIFEW	2.000614
FABKUO	2.07117
FABKUO	2.093944
Heteroleptic coordiation sphere (Er-C and Er-O bonds)	
JAQFAI	2.070819
JUSDEG	2.055584
JUSDEG	2.055584
PANYAE	2.070489
YEDSIJ10	2.078534
YEZYAD	2.028193

CSD refcodes (*Refcode*) and bond valence parmaters (*R*) for Tm(III)-C bonds.

Refcode	***R***
Homoleptic coordiation sphere (only Tm-C bonds)	
QQQCASC	2.06605
QQQCASC	2.073899
RACYUQ	1.99191
WOFMUZ	2.076306
Heteroleptic coordiation sphere (Tm-C and Tm-O bonds)	
RIRQOY	2.03627
RIRQOY	2.03627

CSD refcodes (*Refcode*) and bond valence parmaters (*R*) for Yb(III)-C bonds.

Refcode	***R***
Homoleptic coordiation sphere (only Yb-C bonds)	
ABIFIA	1.95162
BOBNAH	2.103009
FUTSAO	2.041253
KIXXIY	1.985353
PIXMOY	2.03372
Heteroleptic coordiation sphere (Yb-C and Yb-O bonds)	
ABIROS	1.970419
ABIROS	1.992943
ABIROS	1.970419
ABIROS	1.992943
ADUNES	1.998636
AWEJER	2.04485
AWEJER	2.04485
BADBUD	2.035696
BAJQIM	2.044526
BESTUO	1.986204
BESTUO	1.994105
CEXHIW	2.001209
CEXHIW	2.013143
CIFBAU	1.999161
CIFBAU	1.999161
CIJPUG	2.014794
CIJPUG	2.03699
CIJPUG	2.014794
CIJPUG	2.03699
CUGPEZ	1.988483
CUGPEZ	1.980382
CUGPEZ	1.988483
CUGPEZ	1.980382
EWIJAV	2.036162
FOZPOZ	2.013358
FOZPOZ	2.003764
HIWDEW	2.072387
HIWDEW	2.058066
HIWDIA	2.05393
HIWDIA	2.056913
KONZAO	2.037987
KONZAO	2.044488
KONZAO	2.056892
KONZAO	2.046479
KUJTEO	1.978271
KUXFIS	1.986113
LAKKIR	1.985549
NAGPUG	2.073976
NIFZEH	2.021218
NOFVEJ	2.082598
POHFEX	2.061466
RABRIW	1.980715
RABRIW	1.988832
RABRUI	1.949057

RABRUI	1.963965
RABRUI01	1.952624
RABRUI01	1.97864
TAKSUU	2.093048
VIMBIC	2.031186
VIMBIC	2.031186
VUBPAJ	1.962064
VUBPAJ	1.962064
WACTEZ	1.98714
WACTEZ	1.98714
WACTEZ10	1.999193
WACTEZ10	1.999193
WACTEZ20	1.98714
WACTEZ20	1.98714
WIBHEU	1.977482
YAXLEO	2.045454
YAXLEO	2.029982
YEZYOR	2.032719
YEZYOR	2.032719
ZIVYEI	1.978806
ZIVYEI	1.978806
ZIVYIM	1.999287
ZIVYIM	1.999287
ZOFCAY	1.991864
ZOFCAY	1.968205
ZOFCAY	1.991864
ZOFCAY	1.968205
ZOTZEN	1.92473
ZUBDOP	1.996305

CSD refcodes (*Refcode*) and bond valence parmaters (*R*) for Lu(III)-C bonds.

Refcode	***R***
Homoleptic coordiation sphere (only Lu-C bonds)	
KIMHUJ	2.069694
LAWREG	1.930009
LAWREG	1.940149
VAKSIJ	1.964011
VAPZIV	1.926247
YEZNAS	1.911628
YEZNAS	1.919425
ZEFTEJ	2.086456
Heteroleptic coordiation sphere (Lu-C and Lu-O bonds)	
BIQWED	2.026045
BIQWED	2.000542
BIQWED	2.024892
BIQWED	2.017554
DEYYOV	2.047729
NAHSIY	2.036112
OHCPLU	1.971953
VEBKAO	2.014483
WEFRAA	2.019414
YANXUG	2.065072
YANXUG1	2.065072
YEZNEW	1.949246