```
1
    data CHA
    #************************
2
3
4
    \# CIF taken from the IZA-SC Database of Zeolite Structures
5
    # Ch. Baerlocher and L.B. McCusker
6
    # Database of Zeolite Structures: http://www.iza-structure.org/databases/
7
8
    # The atom coordinates and the cell parameters were optimized with DLS76
9
    # assuming a pure SiO2 composition.
10
    #********************
11
12
    _cell_length_a
13
                                    13.6750(0)
14
    _cell_length_b
                                    13.6750(0)
    _cell_length_c
15
                                    14.7670(0)
    _cell_angle_alpha
                                   90.0000(0)
16
    _cell_angle beta
                                   90.0000(0)
17
    _cell_angle gamma
                                  120.0000(0)
18
19
20
    _symmetry_space_group_name H-M
                                      'R -3 m'
    _symmetry_Int_Tables_number
21
                                      166
22
    symmetry cell setting
                                      trigonal
23
24
    loop
     symmetry_equiv_pos_as_xyz
25
    26
27
    '2/3+x,1/3+y,1/3+z'
28
    1/3+x,2/3+y,2/3+z
29
    '-y,+x-y,+z'
    '2/3-y,1/3+x-y,1/3+z'
30
    '1/3-y,2/3+x-y,2/3+z'
31
    '-x+y,-x,+z'
32
    '2/3-x+y,1/3-x,1/3+z'
33
    1/3-x+y,2/3-x,2/3+z
34
35
    '-y,-x,+z'
    '2/3-y,1/3-x,1/3+z'
36
37
    '1/3-y,2/3-x,2/3+z'
38
     '-x+y,+y,+z'
39
    '2/3-x+y, 1/3+y, 1/3+z'
40
    1/3-x+y, 2/3+y, 2/3+z
41
     '+x,+x-y,+z'
42
     '2/3+x,1/3+x-y,1/3+z'
    '1/3+x,2/3+x-y,2/3+z'
43
44
     '-x,-y,-z'
    '2/3-x,1/3-y,1/3-z'
45
46
     '1/3-x,2/3-y,2/3-z'
    '+y,-x+y,-z'
47
    '2/3+y,1/3-x+y,1/3-z'
48
    '1/3+y,2/3-x+y,2/3-z'
49
50
    '+x-y,+x,-z'
51
    '2/3+x-y,1/3+x,1/3-z'
    '1/3+x-y,2/3+x,2/3-z'
52
    '+y,+x,-z'
5.3
54
    '2/3+y,1/3+x,1/3-z'
55
    '1/3+y,2/3+x,2/3-z'
56
     '+x-y,-y,-z'
    '2/3+x-y,1/3-y,1/3-z'
57
    '1/3+x-y,2/3-y,2/3-z'
58
59
    '-x,-x+y,-z'
60
    '2/3-x,1/3-x+y,1/3-z'
61
    1/3-x,2/3-x+y,2/3-z
62
63
    loop
64
    _atom_site label
    _atom_site_type symbol
65
    _atom_site_fract_x
66
67
    _atom_site_fract_y
    _atom_site_fract z
68
                            0.0980
69
      \overline{0} \overline{0} \overline{0}.9020
                                      0.1227
        02
             0
                             0.3101
                                      0.1667
70
                    0.9767
        03
71
             0
                    0.1203
                             0.2405
                                       0.1315
72
        04
              0
                    0.0000
                              0.2577
                                       0.0000
73
        Т1
             Si
                    0.9997
                              0.2264
                                       0.1051
```