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1 C:\Users\ragr\AppData\Local\Programs\Python\Python39\
  python.exe "G:/Collaborators/Sauter Ulrich/Python/
  PlotLifeCycle.py"
2 start
3 ['G:\\Limit\\VMP3 data\\Rabeb\\Ampcera-LLZT0-Batch6\\
  B6-P7_M0-7d_750C-3h\\20210622_B6_P7_M0-7d_HT750C-
  3h_PT_again_C13.mpr', 'G:\\Limit\\VMP3 data\\Rabeb\\
  Ampcera-LLZT0-Batch6\\B6-P7_M0-7d_750C-3h\\
  20210622_B6_P7_M0-7d_HT750C-3h_PT_C01_C13.mpr', 'G:\\
  Limit\\VMP3 data\\Rabeb\\Ampcera-LLZT0-Batch6\\B6-
  P7_M0-7d_750C-3h\\20210803_B6_P7_M0-7d_HT750C-
  3h_PT_2_02_MB_C13.mpr', 'G:\\Limit\\VMP3 data\\Rabeb
  \\Ampcera-LLZT0-Batch6\\B6-P7_M0-7d_750C-3h\\
  2021080_B6_P7_M0-7d_HT750C-3h_PT_2_02_MB_C13.mpr', 'G
  :\\Limit\\VMP3 data\\Rabeb\\Ampcera-LLZT0-Batch6\\B6-
  P7_M0-7d_750C-3h\\20210907_B6_P7_M0-7d_HT750C-
  3h_PT_CORRECT_C13.mpr', 'G:\\Limit\\VMP3 data\\Rabeb
  \\Ampcera-LLZT0-Batch6\\B6-P7_M0-7d_750C-3h\\
  20210908_B6_P7_M0-7d_HT750C-3h_PT_3_02_MB_C13.mpr', '
  G:\\Limit\\VMP3 data\\Rabeb\\Ampcera-LLZT0-Batch6\\B6
  -P7_M0-7d_750C-3h\\20210910_B6_P7_M0-7d_HT750C-
  3h_PT_4_02_MB_C13.mpr', 'G:\\Limit\\VMP3 data\\Rabeb
  \\Ampcera-LLZT0-Batch6\\B6-P7_M0-7d_750C-3h\\
  20210913_B6_P7_M0-7d_HT750C-3h_PT_5_02_MB_C04.mpr', '
  G:\\Limit\\VMP3 data\\Rabeb\\Ampcera-LLZT0-Batch6\\B6
  -P7_M0-7d_750C-3h\\20210915_B6_P7_M0-7d_HT750C-
  3h_PT_6_inversed_02_MB_C04.mpr', 'G:\\Limit\\VMP3
  data\\Rabeb\\Ampcera-LLZT0-Batch6\\B6-P7_M0-7d_750C-
  3h\\20210917_B6_P7_M0-7d_HT750C-3h_PT_7_02_MB_C04.mpr
  ']
4 10
5 G:\\Limit\\VMP3 data\\Rabeb\\Ampcera-LLZT0-Batch6\\B6-
  P7_M0-7d_750C-3h\\20210622_B6_P7_M0-7d_HT750C-
  3h_PT_C01_C13.mpr HT750C-3h_PT_C01_C13
6 z cycle
7 Index(['flags', 'mode', 'ox/red', 'error', 'control
  changes', 'Ns changes',
8         'counter inc.', 'Ns', 'I Range', 'time/s', '
  control/mA', 'Ewe/V',
9         'I/mA', 'dq/mA.h', '(Q-Qo)/mA.h', 'Energy/W.h
  ', 'freq/Hz', '|Z|/Ohm',

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10      'Phase(Z)/deg', 'Q charge/discharge/mA.h', '
    half cycle', 'Ece/V',
11      '<Ece>/V', '|Ece|/V', 'Phase(Zce)/deg', '|Zce
|/Ohm', 'Re(Zce)/Ohm',
12      '-Im(Zce)/Ohm', 'Phase(Zwe-ce)/deg', '|Zwe-ce
|/Ohm', 'Re(Zwe-ce)/Ohm',
13      '-Im(Zwe-ce)/Ohm', 'z cycle', 'Energy charge/W
.h',
14      'Energy discharge/W.h', 'Capacitance charge/μF
',
15      'Capacitance discharge/μF'],
16      dtype='object')
17 Cycles:  0
18 G:\Limit\VMP3 data\Rabeb\Ampcera-LLZT0-Batch6\B6-
P7_M0-7d_750C-3h\20210622_B6_P7_M0-7d_HT750C-
3h_PT_again_C13.mpr HT750C-3h_PT_again_C13
19 z cycle
20 Index(['flags', 'mode', 'ox/red', 'error', 'control
changes', 'Ns changes',
21      'counter inc.', 'Ns', 'I Range', 'time/s', '
control/mA', 'Ewe/V',
22      'I/mA', 'dq/mA.h', '(Q-Q0)/mA.h', 'Energy/W.h
', 'freq/Hz', '|Z|/Ohm',
23      'Phase(Z)/deg', 'Q charge/discharge/mA.h', '
half cycle', 'Ece/V',
24      '<Ece>/V', '|Ece|/V', 'Phase(Zce)/deg', '|Zce
|/Ohm', 'Re(Zce)/Ohm',
25      '-Im(Zce)/Ohm', 'Phase(Zwe-ce)/deg', '|Zwe-ce
|/Ohm', 'Re(Zwe-ce)/Ohm',
26      '-Im(Zwe-ce)/Ohm', 'z cycle', 'Energy charge/W
.h',
27      'Energy discharge/W.h', 'Capacitance charge/μF
',
28      'Capacitance discharge/μF'],
29      dtype='object')
30 Cycles:  46
31 G:\Limit\VMP3 data\Rabeb\Ampcera-LLZT0-Batch6\B6-
P7_M0-7d_750C-3h\20210803_B6_P7_M0-7d_HT750C-
3h_PT_2_02_MB_C13.mpr 2_02_MB_C13
32 z cycle
33 Index(['flags', 'mode', 'ox/red', 'error', 'control

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33 changes', 'Ns changes',
34     'counter inc.', 'Ns', 'I Range', 'time/s', '
    control/V/mA', 'Ewe/V',
35     'I/mA', 'dq/mA.h', '(Q-Qo)/mA.h', 'Energy/W.h
    ', 'freq/Hz', '|Z|/Ohm',
36     'Phase(Z)/deg', 'Q charge/discharge/mA.h', '
    half cycle', 'Ece/V',
37     '<Ece>/V', '|Ece|/V', 'Phase(Zce)/deg', '|Zce
    |/Ohm', 'Re(Zce)/Ohm',
38     '-Im(Zce)/Ohm', 'Phase(Zwe-ce)/deg', '|Zwe-ce
    |/Ohm', 'Re(Zwe-ce)/Ohm',
39     '-Im(Zwe-ce)/Ohm', 'z cycle', 'Energy charge/W
    .h',
40     'Energy discharge/W.h', 'Capacitance charge/μF
    ',
41     'Capacitance discharge/μF'],
42     dtype='object')
43 Cycles: 40
44 G:\Limit\VMP3 data\Rabeb\Ampcera-LLZT0-Batch6\B6-
    P7_M0-7d_750C-3h\2021080_B6_P7_M0-7d_HT750C-
    3h_PT_2_02_MB_C13.mpr 2_02_MB_C13
45 z cycle
46 Index([], dtype='object')
47 G:\Collaborators\Sauter Ulrich\Python\Base.py:731:
    UserWarning: Not valid data file since column cycle
    number is missing
48     warnings.warn(
49 Cycles: 0
50 G:\Limit\VMP3 data\Rabeb\Ampcera-LLZT0-Batch6\B6-
    P7_M0-7d_750C-3h\20210907_B6_P7_M0-7d_HT750C-
    3h_PT_CORRECT_C13.mpr HT750C-3h_PT_CORRECT_C13
51 z cycle
52 Index(['flags', 'mode', 'ox/red', 'error', 'control
    changes', 'Ns changes',
53     'counter inc.', 'Ns', 'I Range', 'time/s', '
    control/V/mA', 'Ewe/V',
54     'I/mA', 'dq/mA.h', '(Q-Qo)/mA.h', 'Energy/W.h
    ', 'freq/Hz', '|Z|/Ohm',
55     'Phase(Z)/deg', 'Q charge/discharge/mA.h', '
    half cycle', 'Ece/V',
56     '<Ece>/V', '|Ece|/V', 'Phase(Zce)/deg', '|Zce

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56 |/0hm', 'Re(Zce)/0hm',
57     '-Im(Zce)/0hm', 'Phase(Zwe-ce)/deg', '|Zwe-ce
    |/0hm', 'Re(Zwe-ce)/0hm',
58     '-Im(Zwe-ce)/0hm', 'z cycle', 'Energy charge/W
    .h',
59     'Energy discharge/W.h', 'Capacitance charge/μF
    ',
60     'Capacitance discharge/μF'],
61     dtype='object')
62 Cycles: 0
63 G:\Limit\VMP3 data\Rabeb\Ampcera-LLZT0-Batch6\B6-
    P7_M0-7d_750C-3h\20210908_B6_P7_M0-7d_HT750C-
    3h_PT_3_02_MB_C13.mpr 3_02_MB_C13
64 z cycle
65 Index(['flags', 'mode', 'ox/red', 'error', 'control
    changes', 'Ns changes',
66     'counter inc.', 'Ns', 'I Range', 'time/s', '
    control/V/mA', 'Ewe/V',
67     'I/mA', 'dq/mA.h', '(Q-Qo)/mA.h', 'Energy/W.h
    ', 'freq/Hz', '|Z|/0hm',
68     'Phase(Z)/deg', 'Q charge/discharge/mA.h', '
    half cycle', 'Ece/V',
69     '<Ece>/V', '|Ece|/V', 'Phase(Zce)/deg', '|Zce
    |/0hm', 'Re(Zce)/0hm',
70     '-Im(Zce)/0hm', 'Phase(Zwe-ce)/deg', '|Zwe-ce
    |/0hm', 'Re(Zwe-ce)/0hm',
71     '-Im(Zwe-ce)/0hm', 'z cycle', 'Energy charge/W
    .h',
72     'Energy discharge/W.h', 'Capacitance charge/μF
    ',
73     'Capacitance discharge/μF'],
74     dtype='object')
75 Cycles: 0
76 G:\Limit\VMP3 data\Rabeb\Ampcera-LLZT0-Batch6\B6-
    P7_M0-7d_750C-3h\20210910_B6_P7_M0-7d_HT750C-
    3h_PT_4_02_MB_C13.mpr 4_02_MB_C13
77 z cycle
78 Index(['flags', 'mode', 'ox/red', 'error', 'control
    changes', 'Ns changes',
79     'counter inc.', 'Ns', 'I Range', 'time/s', '
    control/V/mA', 'Ewe/V',

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80      'I/mA', 'dq/mA.h', '(Q-Qo)/mA.h', 'Energy/W.h
    ', 'freq/Hz', '|Z|/Ohm',
81      'Phase(Z)/deg', 'Q charge/discharge/mA.h', '
half cycle', 'Ece/V',
82      '<Ece>/V', '|Ece|/V', 'Phase(Zce)/deg', '|Zce
|/Ohm', 'Re(Zce)/Ohm',
83      '-Im(Zce)/Ohm', 'Phase(Zwe-ce)/deg', '|Zwe-ce
|/Ohm', 'Re(Zwe-ce)/Ohm',
84      '-Im(Zwe-ce)/Ohm', 'z cycle', 'Energy charge/
W.h',
85      'Energy discharge/W.h', 'Capacitance charge/
μF',
86      'Capacitance discharge/μF'],
87      dtype='object')
88 Cycles:  0
89 G:\Limit\VMP3 data\Rabeb\Ampcera-LLZT0-Batch6\B6-
P7_M0-7d_750C-3h\20210913_B6_P7_M0-7d_HT750C-
3h_PT_5_02_MB_C04.mpr 5_02_MB_C04
90 z cycle
91 Index(['flags', 'mode', 'ox/red', 'error', 'control
changes', 'Ns changes',
92      'counter inc.', 'Ns', 'I Range', 'time/s', '
control/V/mA', 'Ewe/V',
93      'I/mA', 'dq/mA.h', '(Q-Qo)/mA.h', 'Energy/W.h
', 'freq/Hz', '|Z|/Ohm',
94      'Phase(Z)/deg', 'Q charge/discharge/mA.h', '
half cycle', 'Ece/V',
95      '<Ece>/V', '|Ece|/V', 'Phase(Zce)/deg', '|Zce
|/Ohm', 'Re(Zce)/Ohm',
96      '-Im(Zce)/Ohm', 'Phase(Zwe-ce)/deg', '|Zwe-ce
|/Ohm', 'Re(Zwe-ce)/Ohm',
97      '-Im(Zwe-ce)/Ohm', 'z cycle', 'Energy charge/
W.h',
98      'Energy discharge/W.h', 'Capacitance charge/
μF',
99      'Capacitance discharge/μF'],
100     dtype='object')
101 Cycles:  0
102 G:\Limit\VMP3 data\Rabeb\Ampcera-LLZT0-Batch6\B6-
P7_M0-7d_750C-3h\20210915_B6_P7_M0-7d_HT750C-
3h_PT_6_inversed_02_MB_C04.mpr inversed_02_MB_C04

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103 z cycle
104 Index(['flags', 'mode', 'ox/red', 'error', 'control
      changes', 'Ns changes',
105         'counter inc.', 'Ns', 'I Range', 'time/s', '
      control/V/mA', 'Ewe/V',
106         'I/mA', 'dq/mA.h', '(Q-Qo)/mA.h', 'Energy/W.h
      ', 'freq/Hz', '|Z|/Ohm',
107         'Phase(Z)/deg', 'Q charge/discharge/mA.h', '
      half cycle', 'Ece/V',
108         '<Ece>/V', '|Ece|/V', 'Phase(Zce)/deg', '|Zce
      |/'Ohm', 'Re(Zce)/Ohm',
109         '-Im(Zce)/Ohm', 'Phase(Zwe-ce)/deg', '|Zwe-ce
      |/'Ohm', 'Re(Zwe-ce)/Ohm',
110         '-Im(Zwe-ce)/Ohm', 'z cycle', 'Energy charge/
      W.h',
111         'Energy discharge/W.h', 'Capacitance charge/
      µF',
112         'Capacitance discharge/µF'],
113         dtype='object')
114 Cycles: 0
115 G:\Limit\VMP3 data\Rabeb\Ampcera-LLZT0-Batch6\B6-
      P7_M0-7d_750C-3h\20210917_B6_P7_M0-7d_HT750C-
      3h_PT_7_02_MB_C04.mpr 7_02_MB_C04
116 z cycle
117 Index(['flags', 'mode', 'ox/red', 'error', 'control
      changes', 'Ns changes',
118         'counter inc.', 'Ns', 'I Range', 'time/s', '
      control/V/mA', 'Ewe/V',
119         'I/mA', 'dq/mA.h', '(Q-Qo)/mA.h', 'Energy/W.h
      ', 'freq/Hz', '|Z|/Ohm',
120         'Phase(Z)/deg', 'Q charge/discharge/mA.h', '
      half cycle', 'Ece/V',
121         '<Ece>/V', '|Ece|/V', 'Phase(Zce)/deg', '|Zce
      |/'Ohm', 'Re(Zce)/Ohm',
122         '-Im(Zce)/Ohm', 'Phase(Zwe-ce)/deg', '|Zwe-ce
      |/'Ohm', 'Re(Zwe-ce)/Ohm',
123         '-Im(Zwe-ce)/Ohm', 'z cycle', 'Energy charge/
      W.h',
124         'Energy discharge/W.h', 'Capacitance charge/
      µF',
125         'Capacitance discharge/µF'],

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```
126         dtype='object')
127 Cycles:  14
128 end
129
130 Process finished with exit code 0
131
```