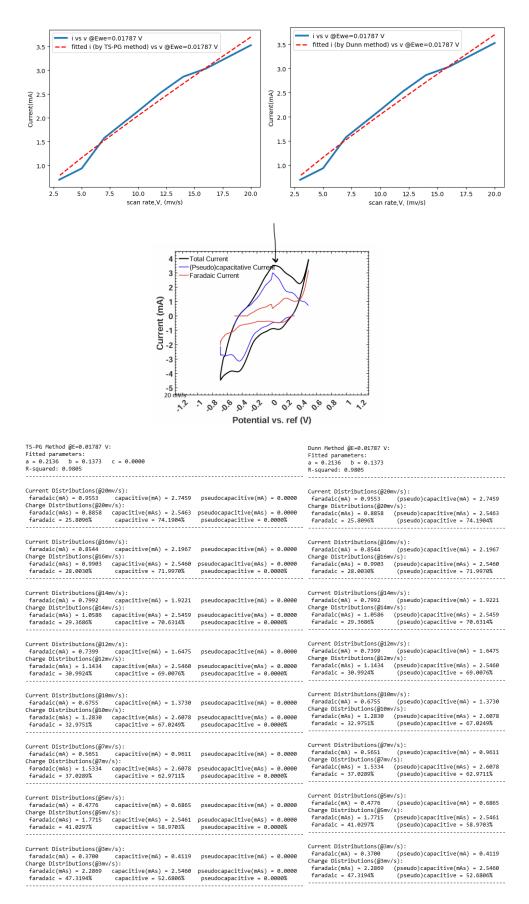


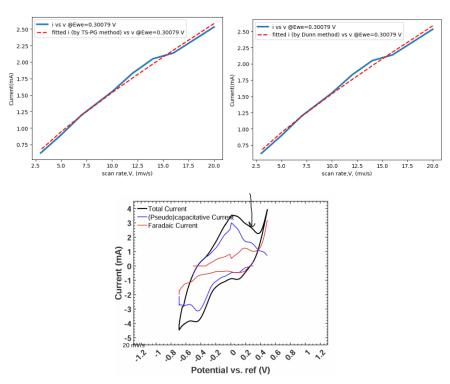
Working Electrode: Cu2O (1.17mg/cm2 loading)

Counter Electrode: Glassy Carbon

Reference Electrode: Ag|AgCI|KCI 3M

Electrolyte: 0.5M H₂SO₄





TS-PG Method @E=0.30079 V: Dunn Method @E=0.30079 V: Fitted parameters: Fitted parameters: a = 0.2657 b = 0.0698 = 0.2657 b = 0.0698 c = 0.0000 R-squared: 0.9932 R-squared: 0.9932 Current Distributions(@20mv/s): faradaic(mA) = 1.1884 capacitive(mA) = 1.3961 pseudocapacitive(mA) = 0.0000 Charge Distributions(@20mv/s): Current Distributions(@20mv/s): Charlet Distributions(g2cmw/s).

faradaic(mA) = 1.1884 (pseudo)capacitive(mA) = 1.3961

Charge Distributions(@20mw/s):

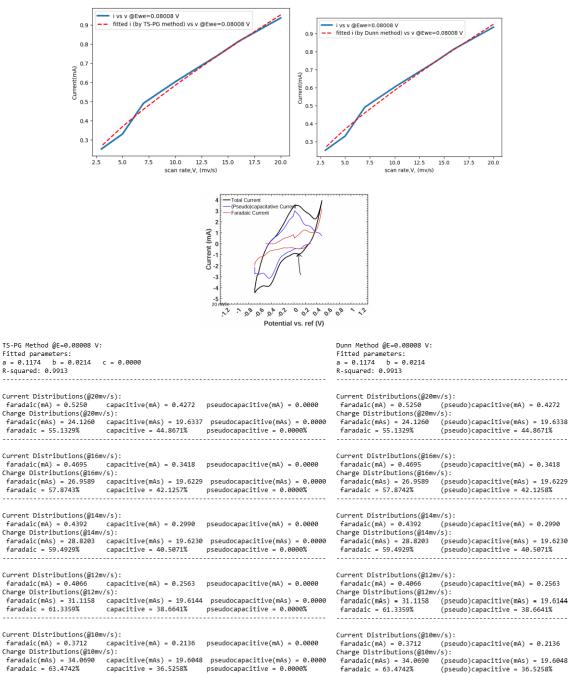
faradaic(mAs) = 17.9123 (pseudo)capacitive(mAs) = 21.0432

faradaic = 45.9814 (pseudo)capacitive = 54.0186% Current Distributions(@16mv/s): Current Distributions(@16mv/s): faradaic(mA) = 1.0629capacitive(mA) = 1.1169 pseudocapacitive(mA) = 0.0000 faradaic(mA) = 1.0629(pseudo)capacitive(mA) = 1.1169 | faradax(\max) = 1.0029 | faradax(\max) = 1.1105 | faradax(\max) = 0.0000 | faradax(\max) = 20.0265 | capacitive(\max) = 21.0432 | faradax(\max) = 20.0265 | capacitive(\max) = 21.0432 | faradax(\max) = 48.7623% | capacitive = 51.2377% | faradax(\max) = 0.0000% | faradax(\max) = 1.0029 | faradax Charge Distributions(@16mv/s):

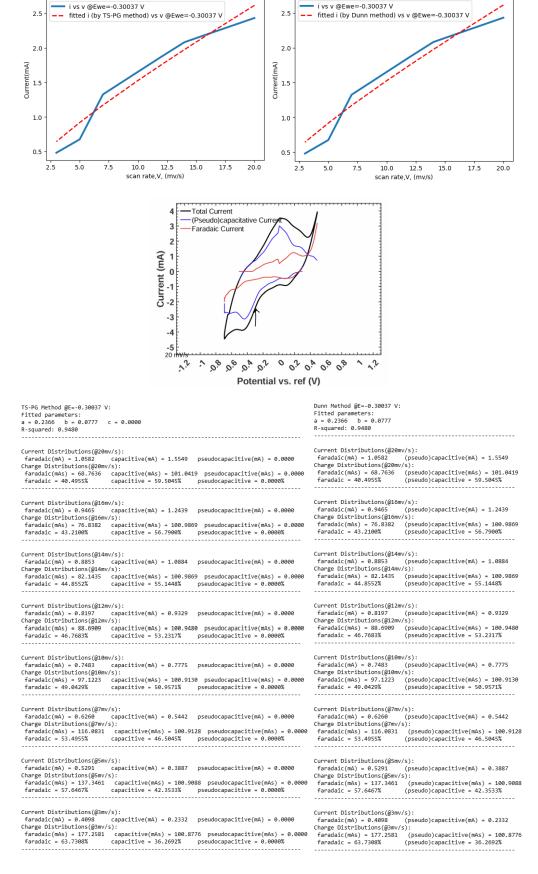
faradaic(mAs) = 20.0265 (pseudo)capacitive(mAs) = 21.0432
faradaic = 48.7623% (pseudo)capacitive = 51.2377% Current Distributions(@14mv/s): faradaic(mA) = 0.9943 (pset Charge Distributions(@14mv/s): Current Distributions(@14mv/s): (pseudo)capacitive(mA) = 0.9773 capacitive(mA) = 0.9773 pseudocapacitive(mA) = 0.0000 faradaic(mA) = 0.9943faradaic(mAs) = 21.4092 (pseudo)capacitive(mAs) = 21.0431 faradaic = 50.4312% (pseudo)capacitive = 49.5688% Current Distributions(@12mv/s): faradaic(mA) = 0.9205 capacitive(mA) = 0.8377 pseudocapacitive(mA) = 0.0000 Charge Distributions(@12mv/s): Current Distributions(@12mv/s): faradaic(mA) = 0.9205 (pseudo)capacitive(mA) = 0.8377 Charge Distributions(@12mv/s): .narge Distributions(<u>gizmv/s</u>): |faradaic(mAs) = 23.1246 (apacitive(mAs) = 21.0431 pseudocapacitive(mAs) = 0.0000 |faradaic = 52.3563% capacitive = 47.6437% pseudocapacitive = 0.0000% faradaic(mAs) = 23.1246 (pseudo)capacitive(mAs) = 21.0431 faradaic = 52.3563% (pseudo)capacitive = 47.6437% Current Distributions(@10mv/s): Current Distributions(@10mv/s): faradaic(mA) = 0.8403 capacitive(mA) = 0.6981 pseudocapacitive(mA) = 0.0000 Charge Distributions(@10mv/s): faradaic(mA) = 0.8403 (pseudo)capacitive(mA) = 0.6981 Charge Distributions(@10mv/s): faradaic(mAs) = 25.3696 capacitive(mAs) = 21.0746 pseudocapacitive(mAs) = 0.0000 faradaic(mAs) = 25.3696 (pseudo)capacitive(mAs) = 21.0746 capacitive = 45.3762% pseudocapacitive = 0.0000% faradaic = 54.6238% faradaic = 54.6238% (pseudo)capacitive = 45.3762% taradaic(mA) = 0.7031 (pseudo)capacitive(mA) = 0.4886 Charge Distributions(@7mv/s): faradaic(mAs) = 30.3224 (pseudo)capacitive(mAs) = 21.0746 faradaic = 58.9965% (pseudo)capacitive = 41 acref Current Distributions(@7mv/s): Current DISTIBUTIONS(@7mv/5):
faradaic(mA) = 0.7031 capacitive(mA) = 0.4886 pseudocapacitive(mA) = 0.0000
Charge Distributions(@7mv/5):
faradaic(mAs) = 30.3224 capacitive(mAs) = 21.0746 pseudocapacitive(mAs) = 0.0000
faradaic = 58.9965% capacitive = 41.0035% pseudocapacitive = 0.0000% Current Distributions(@Smv/s): faradaic(mA) = 0.5942 capacitive(mA) = 0.3490 pseudocapacitive(mA) = 0.0000 Charge Distributions(@Smv/s): Current Distributions(@5mv/s): faradaic(mA) = 0.5942 (pseudo)capacitive(mA) = 0.3490 Charge Distributions(@5mv/s): faradaic(mAs) = 35.8245 capacitive(mAs) = 21.0432 pseudocapacitive(mAs) = 0.0000 faradaic = 62.9963% capacitive = 37.0037% pseudocapacitive = 0.0000% faradaic = 62.9963% (pseudo)capacitive (mAs) = 21.0432 faradaic = 62.9963% (pseudo)capacitive = 37.0037% Current Distributions(@3mv/s): Current Distributions(@3mv/s): faradaic(mA) = 0.4603 capacitive(mA) = 0.2094 pseudocapacitive(mA) = 0.0000 Charge Distributions(@3mv/s): faradaic(mA) = 0.4603 (pseudo)capacitive(mA) = 0.2094 Charge Distributions(@3mv/s): Charge Distributions(@3mv/s):

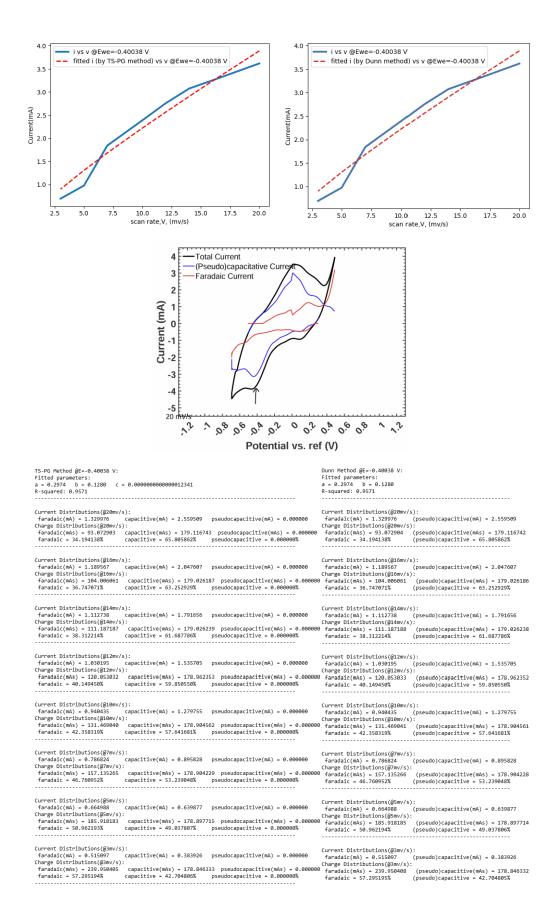
faradaic(mAs) = 46.2492 (pseudo)capacitive(mAs) = 21.0432

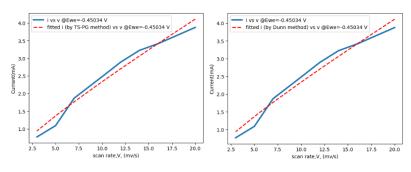
faradaic = 68.7288% (pseudo)capacitive = 31.2712%

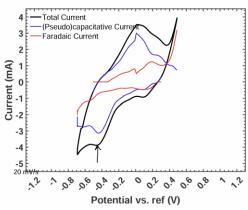


faradaic(mA) = 0.4695 capacitive(mA) = 0.3418 pseudocapacitive(mA) = 0.0000 Charge Distributions(@16mv/s):tharge Distributions(minumys):
faradaic(mAs) = 26.9589 capacitive(mAs) = 19.6229 pseudocapacitive(mAs) = 0.0000
faradaic = 57.8743% capacitive = 42.1257% pseudocapacitive = 0.0000% faradaic(mAs) = 26.9589 (pseudo)capacitive(mAs) = 19.6229
faradaic = 57.8742% (pseudo)capacitive = 42.1258% Current Distributions(@14mv/s): faradaic(mAs) = 28.8203 (pseudo)capacitive(mAs) = 19.6230
faradaic = 59.4929% (pseudo)capacitive = 40.5071% Current Distributions(@12mv/s): faradaic(mA) = 0.4066Charge Distributions(@12mv/s): faradaic(mAs) = 31.1158 capacitive(mAs) = 19.6144 pseudocapacitive(mAs) = 0.0000 faradaic = 61.3359% capacitive = 38.6641% pseudocapacitive = 0.0000% faradaic(mAs) = 31.1158 (pseudo)capacitive(mAs) = 19.6144
faradaic = 61.3359% (pseudo)capacitive = 38.6641% Current Distributions(@10mv/s): faradaic(mA) = 0.3712Charge Distributions(@10mv/s): faradaic(mAs) = 34.0690 capacitive(mAs) = 19.6048 pseudocapacitive(mAs) = 0.0000 faradaic = 63.4742% capacitive = 36.5258% pseudocapacitive = 0.0000% faradaic(mAs) = 34.0690 (pseudo)capacitive(mAs) = 19.6048 Current Distributions(@7mv/s): Current Distributions(@7mv/s): capacitive(mA) = 0.1495 pseudocapacitive(mA) = 0.0000 faradaic(mA) = 0.3106Charge Distributions(@7mv/s): faradaic(mAs) = 40.7246 capacitive(mAs) = 19.6068 pseudocapacitive(mAs) = 0.0000 faradaic = 67.5014% capacitive = 32.4986% pseudocapacitive = 0.0000% faradaic(mAs) = 40.7245 faradaic = 67.5014% (pseudo)capacitive(mAs) = 19.6068 (pseudo)capacitive = 32.4986% Current Distributions(@5mv/s): Current Distributions(@5mv/s): faradaic(mA) = 0.2625 tapactive(...,
Charge Distributions(@5mv/s):
faradaic(mAs) = 48.1938 capacitive(mAs) = 19.6100 pseudocapacitive(mAs) = 0.0000
faradaic = 71.0783% capacitive = 28.9217% pseudocapacitive = 0.0000% capacitive(mA) = 0.1068 pseudocapacitive(mA) = 0.0000 faradaic(mA) = 0.2625 (pseudo)capacitive(mA) = 0.1068 Charge Distributions(@5mv/s): faradaic(mAs) = 48.1938 (pseudo)capacitive(mAs) = 19.6100 faradaic = 71.0783% (pseudo)capacitive = 28.9217% Current Distributions(@3mv/s): Current Distributions(@3mv/s): faradaic(mA) = 0.2033 capacitive(mA) = 0.0641 pseudocapacitive(mA) = 0.0000 faradaic(mA) = 0.2033(pseudo)capacitive(mA) = 0.0641 Charge Distributions(@3mv/s): faradaic(mAs) = 62.1907 faradaic = 76.0350% (pseudo)capacitive(mAs) = 19.6015 (pseudo)capacitive = 23.9650%









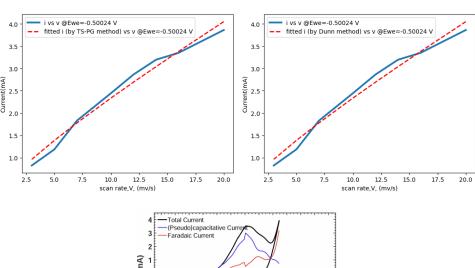
```
TS-PG Method @E=-0.45034 V:
                                                                                                                                                   Dunn Method @E=-0.45034 V:
Fitted parameters:
a = 0.3028 b = 0.1378 c = 0.00000000000000001061
                                                                                                                                                    Fitted parameters:
a = 0.3028 b = 0.1378
                                                                                                                                                    R-squared: 0.9711
R-squared: 0.9711
Current Distributions(@20mv/s):
                                                                                                                                                    Current Distributions(@20mv/s):
                                              capacitive(mA) = 2.755818 pseudocapacitive(mA) = 0.000000
                                                                                                                                                                                                  (pseudo)capacitive(mA) = 2.755818
\begin{aligned} &\text{faradaic}(\text{mA}) = 1.354956 & \text{capacitive}(\text{mA}) = 2.755818 & \text{pseudocapacitive}(\text{mA}) = 0.0000000 \\ &\text{charge Distributions}(@20mv/s): \\ &\text{faradaic}(\text{mAs}) = 98.142120 & \text{capacitive}(\text{mAs}) = 199.741955 & \text{pseudocapacitive}(\text{mAs}) = 0.0000000 \\ &\text{faradaic} = 32.946414\% & \text{capacitive} = 67.053586\% & \text{pseudocapacitive} = 0.0000000\% \end{aligned}
  faradaic(mA) = 1.354056
                                                                                                                                                      faradaic(mA) = 1.354056
                                                                                                                                                   faradalc(mM) = 1.354056 (pseudo)capacitive(mA) = 2.755616
Charge Distributions(@20mv/s):
faradaic(mAs) = 98.142120 (pseudo)capacitive(mAs) = 199.741955
faradaic = 32.946414% (pseudo)capacitive = 67.053586%
Current Distributions(@16mv/s): faradaic(mA) = 1.21105 capacitive(mA) = 2.204654 pseudocapacitive(mA) = 0.000000 Charge Distributions(@16mv/s):
                                                                                                                                                   Current Distributions(@16mv/s):
faradaic(mA) = 1.211105     (pseudo)capacitive(mA) = 2.284654
Charge Distributions(@16mv/s):
  faradaic(mAs) = 109.672664 (pseudo)capacitive(mAs) = 199.6
faradaic = 35.456384% (pseudo)capacitive = 64.543616%
                                                                                                                                                                                                  (pseudo)capacitive(mAs) = 199.644454
Current Distributions(@14mv/s): faradaic(mA) = 1.32885 capacitive(mA) = 1.929073 pseudocapacitive(mA) = 0.000000 Charge Distributions(@14mv/s):
                                                                                                                                                   Current Distributions(@14mv/s):
                                                                                                                                                   faradaic(mA) = 1.132885 (pseudo)capacitive(mA) = 1.929073 (harge Distributions(@14mv/5): faradaic(mAs) = 117.245058 (pseudo)capacitive(mAs) = 19.644537 faradaic = 36.998709% (pseudo)capacitive = 63.001291%
  Charge Distributions(glamm/s):

faradaic(mAs) = 117.245059 capacitive(mAs) = 199.644536 pseudocapacitive(mAs) = 0.000000

faradaic = 36.998709% capacitive = 63.001291% pseudocapacitive = 0.000000%
                                                                                                                                                   Current Distributions(@12mv/s):
Current Distributions(@12mv/s):
Current Distributions(@12mm/s):
faradaic(mA) = 1.048847 capacitive(mA) = 1.653491 pseudocapacitive(mA) = 0.000000
Charge Distributions(@12mm/s):
faradaic(mAs) = 126.595348 capacitive(mAs) = 199.575503 pseudocapacitive(mAs) = 0.000000
faradaic = 38.812588% capacitive = 61.187412% pseudocapacitive = 0.000000%
                                                                                                                                                      faradaic(mA) = 1.048847
                                                                                                                                                                                                  (pseudo)capacitive(mA) = 1.653491
                                                                                                                                                   (pseudo)capacitive(may) = 1.040647 (pseudo)capacitive(may) = 1.053491 (pseudo)capacitive(may) = 1.053491 (pseudo)capacitive(may) = 199.575504 faradaic = 38.812588% (pseudo)capacitive = 61.187412%
                                                                                                                                                    Current Distributions(@10mv/s):
faradaic(mA) = 0.957462 (p
Current Distributions(@10mv/s):
                                                                                                                                                                                                (pseudo)capacitive(mA) = 1.377909
  faradaic(mA) = 0.957462
                                              capacitive(mA) = 1.377909 pseudocapacitive(mA) = 0.000000
                                                                                                                                                   Charge Distributions(@10mv/s):
faradaic (mAs) = 138.635171 (pseudo)capacitive(mAs) = 199.513500 faradaic = 40.998289% (pseudo)capacitive = 59.001711%
                                                                                                                                                   Current Distributions(@7mv/s):
Current Distributions(@7mv/s):
                                                                                                                                                    Current Distributions(g/mv/s):
faradaic(mA) = 0.801070 (pseudo)capacitive(mA) = 0.964536
Charge Distributions(g/mv/s):
faradaic(mAs) = 165.700448 (pseudo)capacitive(mAs) = 199.513170
                                              faradaic(mA) = 0.801070
Taradual(ims) = 0.001070 capacitive(ims) = 0.5004300 pseudocapacitive(ims) = 0.0000000 floargo Distributions(@Tmv/s):

faradaic(mAs) = 165.700449 capacitive(mAs) = 199.513169 pseudocapacitive(mAs) = 0.0000000 faradaic = 45.370030% capacitive = 54.629170% pseudocapacitive = 0.000000%
                                                                                                                                                                                    % (pseudo)capacitive = 54.629170%
                                                                                                                                                      faradaic = 45.370830%
Current Distributions(@5mv/s):
                                                                                                                                                   Faradaic(mA) = 0.677028 (pseudo)capacitive(mA) = 0.688954 (harge Distributions(@5mv/s): faradaic(mAs) = 196.562495 (pseudo)capacitive(mAs) = 199.506 (pseudo)capacitive = 50.436551%
                                                                                                                                                                                                  (pseudo)capacitive(mAs) = 199.506129
                                                                                                                                                    Current Distributions(@3mv/s):
Current Distributions(@3mv/s):
                                                                                                                                                   Current Distributions(@3mv/s):
faradaic(mA) = 0.524424 (pseudo)capacitive(mA) = 0.413373
Charge Distributions(@3mv/s):
faradaic(mAs) = 253.032532 (pseudo)capacitive(mAs) = 199.450833
faradaic = 55.920847% (pseudo)capacitive = 44.079153%
Charge Distributions(@3mv/s):

Charge Distributions(@3mv/s):
```



Total Current

Total Current

Feradaic Current

Peradaic Current

Potential vs. ref (V)

```
TS-PG Method @E=-0.50024 V:
                                                                                                                                         Dunn Method @E=-0.50024 V:
                                                                                                                                         Fitted parameters:
a = 0.3343 b = 0.1278
R-squared: 0.9799
Fitted parameters:
   = 0.3343
                 Current Distributions(@20mv/s): faradaic(mA) = 1.494891 capacitive(mA) = 2.556365 pseudocapacitive(mA) = 0.000000 Charge Distributions(@20mv/s):
                                                                                                                                          Current Distributions(@20mv/s):
                                                                                                                                                                                    (pseudo)capacitive(mA) = 2.556365
                                                                                                                                           faradaic(mA) = 1.494891
                                                                                                                                         Charge Distributions(@20mv/s):
  faradaic(mAs) = 112.085894 (pseudo)capacitive(mAs) = 191.674487 faradaic = 36.899445% (pseudo)capacitive = 63.100555%
Current Distributions(@16mv/s): faradaic(mA) = 1.337071 (pseudo)capacitive(mA) = 2.045092 Charge Distributions(@16mv/s):
                                                                                                                                           Charge Distributions(@iom.r.).

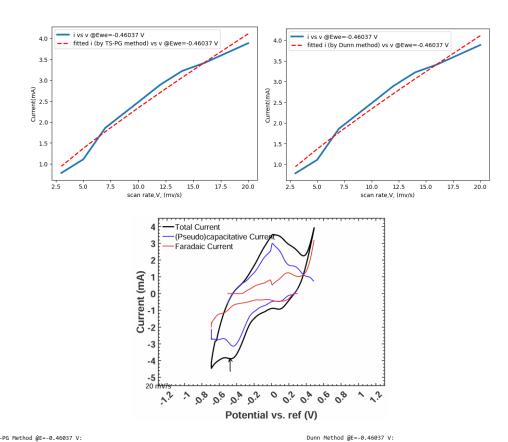
faradaic(mAs) = 125.256707 (pseudo)capacitive(mAs) = 125.256707 (pseudo)capacitive = 60.466983%
  .narge DISTrIDULIDNS(@IOMM75):
faradaic(mAs) = 125.256788 capacitive(mAs) = 191.584042 pseudocapacitive(mAs) = 0.000000
faradaic = 39.533017% capacitive = 60.466983% pseudocapacitive = 0.000000%
                                                                                                                                                                                     (pseudo)capacitive(mAs) = 191.584043
Current Distributions(@14mv/s):
                                                                                                                                         Current Distributions(@14mv/s):
Current Distributions(@14mv/s):
faradaic(mA) = 1.259716 capacitive(mA) = 1.789456 pseudocapacitive(mA) = 0.000000
Charge Distributions(@14mv/s):
faradaic(mAs) = 133.905000 capacitive(mAs) = 191.583965 pseudocapacitive(mAs) = 0.000000
faradaic = 41.139643% capacitive = 58.860357% pseudocapacitive = 0.000000%
                                                                                                                                         Current Distributions(@14mu/s):
faradaic(mA) = 1.2879116 (pseudo)capacitive(mA) = 1.789456
Charge Distributions(@14mu/s):
faradaic(mAs) = 133.904999 (pseudo)capacitive(mAs) = 191.583966
faradaic = 41.139643% (pseudo)capacitive = 58.860357%
Current Distributions(@12mv/s):
                                                                                                                                          Current Distributions(@12mv/s):
                                          capacitive(mA) = 1.533819 pseudocapacitive(mA) = 0.000000
                                                                                                                                                                                   (pseudo)capacitive(mA) = 1.533819
  faradaic(mA) = 1.157938
                                                                                                                                           faradaic(mA) = 1.157938
(pseudo)capacitive(mm) = 1.53539
(charge Distributions(@12mv/s):
faradaic(mAs) = 144.585778 (pseudo)capacitive(mAs) = 191.520184
faradaic = 43.017915% (pseudo)capacitive = 56.982085%
Current Distributions(@10mv/s):
                                                                                                                                          Current Distributions(@10mv/s):
                                         capacitive(mA) = 1.278183 pseudocapacitive(mA) = 0.000000
                                                                                                                                           faradaic(mA) = 1.057048
                                                                                                                                                                                  (pseudo)capacitive(mA) = 1.278183
  faradaic(mA) = 1.057048
Taradaic(mA) = 1.05/048 capacitive(mA) = 1.2/8183 pseudocapacitive(mA) = 0.0000000 Charge Distributions(@il0mv/s):

faradaic(mAs) = 158.338136 capacitive(mAs) = 191.462566 pseudocapacitive(mAs) = 0.0000000 faradaic = 45.265243% capacitive = 54.734757% pseudocapacitive = 0.0000000%
                                                                                                                                         Charge Distributions(@10mv/s):
                                                                                                                                           faradaic (mAs) = 158.338135 (pseudo)capacitive (mAs) = 191.462567 faradaic = 45.265242% (pseudo)capacitive = 54.734758%
Current Distributions(@7mv/s): faradaic(mA) = 0.884390 (pseudo)capacitive(mA) = 0.894728 Charge Distributions(@7mv/s):
                                                                                                                                                                                   (pseudo)capacitive(mAs) = 191.462196
                                                                                                                                           faradaic(mAs) = 189.249903
                                                                                                                                                                                  (pseudo)capacitive = 50.290547%
                                                                                                                                           faradaic = 49.709453%
Current Distributions(@5mv/s):
                                                                                                                                         Current Distributions(@5mv/s):
                                                                                                                                          Charge Distributions(@5mv/s):
faradaic(mA) = 0.747446 (pseudo)capacitive(mA) = 0.639091
Charge Distributions(@5mv/s):
faradaic(mAs) = 223.930964 (pseudo)capacitive(mAs) = 191.468
Indige DISTRIBUTIONS(BOMIN'S),
faradaic(mAs) = 223.939955 capacitive(mAs) = 191.468573 pseudocapacitive(mAs) = 0.000000
faradaic = 53.907370% capacitive = 46.092630% pseudocapacitive = 0.000000%
                                                                                                                                                                                     (pseudo)capacitive(mAs) = 191.468574
                                                                                                                                                                 907370% (pseudo)capacitive = 46.092630%
                                                                                                                                           faradaic = 53.907370%
                                                                                                                                          Current Distributions(@3mv/s):
Current Distributions(@3mv/s):
Current Distributions(@3mv/s): faradaic(mA) = 0.383455 pseudocapacitive(mA) = 0.000000 Charge Distributions(@3mv/s): faradaic(mAs) = 288.996772 capacitive(mAs) = 191.404421 pseudocapacitive(mAs) = 0.000000 faradaic = 60.157380% capacitive = 39.842620% pseudocapacitive = 0.000000%
                                                                                                                                           faradaic(mA) = 0.578969
                                                                                                                                                                                   (pseudo)capacitive(mA) = 0.383455

        faradaic(mA) = 0.578969
        (pseudo)capacitive(mA) = 0.383455

        charge Distributions(@3mv/s):
        (pseudo)capacitive(mAs) = 191.404422

        faradaic = 60.157380%
        (pseudo)capacitive = 39.842620%
```

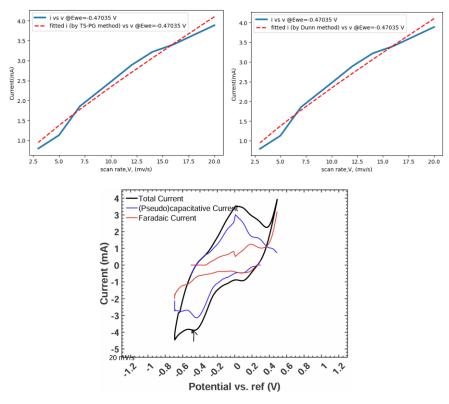


```
Dunn Method @E=-0.46037 V: Fitted parameters: a = 0.3063 b = 0.1371 R-squared: 0.9734
 Fitted parameters:
a = 0.3063 b = 0.1371 c = 0.0000000000000026804
R-squared: 0.9734
Current Distributions((0.20 \text{mv/s}): faradaic(mA) = 1.369632 (pseudo)capacitive(mA) = 2.741263 (harge Distributions((0.20 \text{mv/s}): faradaic(mAs) = 99.95571 (pseudo)capacitive(mAs) = 200.057097 faradaic(mAs) = 33.317117% (pseudo)capacitive = 66.682883%
Current Distributions(@16mv/s):
                                                                                                                                                            Current Distributions(@16mv/s):
                                                                                                                                                           Current Distributions(glomv/s):
faradaic(mA) = 1.225936 (pseudo)capacitive(mA) = 2.193010
Charge Distributions(glomv/s):
faradaic(mAs) = 111.699690 (pseudo)capacitive(mAs) = 199.960221
faradaic = 35.840233% (pseudo)capacitive = 64.159767%
capacitive(mA) = 2.193010 pseudocapacitive(mA) = 0.000000
                                        mm/rs):
610 capacitive(mAs) = 199.960221 pseudocapacitive(mAs) = 0.000000
capacitive = 64.159767% pseudocapacitive = 0.0000000
Current Distributions(@14mv/s): faradaic(mA) = 1.918884 pseudocapacitive(mA) = 0.000000 Charge Distributions(@14mv/s):
                                                                                                                                                            Current Distributions(@14mv/s):
                                                                                                                                                           faradaic(mA) = 1.145916 (μνευων,ωμε

change Distributions(gldnw/s):

faradaic(mAs) = 119.411889 (pseudo)capacitive(mAs) = 199.0

faradaic = 37.389583% (pseudo)capacitive = 62.618417%
                                                                                                                                                                                                            (pseudo)capacitive(mA) = 1.918884
  (pseudo)capacitive(mAs) = 199.960194
                                                                             10417% pseudocapacitive = 0.000000%
Current Distributions(@12mv/s):
                                                                                                                                                           faradaic(mA) = 1.060912 (pseudo)capacitive(mA) = 1.644758 Charge Distributions(@12mv/s):
                                                                                                                                                             charge Distributions(@12mv/s):
    faradaic(mAs) = 128.935501 (pseudo)capacitive(mAs) = 199.891854
    faradaic = 39.210698% (pseudo)capacitive = 60.789302%
                                                                                                                                                            \begin{array}{lll} Current \ Distributions(@10mv/s): \\ faradaic(mA) = 0.968476 & (pseudo)capacitive(mA) = 1.378632 \\ Charge \ Distributions(@10mv/s): \\ faradaic(mAs) = 141.197952 & (pseudo)capacitive(mAs) = 199.825 \\ faradaic = 41.403649% & (pseudo)capacitive = 58.596351% \\ \end{array} 
Current Distributions(@10mv/s):
Current Distributions(@10mv/s):
faradaic(mA) = 0.968476 capacitive(mA) = 1.370632 pseudocapacitive(mA) = 0.000000
Charge Distributions(@10mv/s):
faradaic(mAs) = 141.197953 capacitive(mAs) = 199.829849 pseudocapacitive(mAs) = 0.000000
capacitive = 58.596351% pseudocapacitive = 0.000000%
                                                                                                                                                          Current Distributions(@7mv/s):
Current Distributions(graw/s):
faradaic(mA) = 0.810285 capacitive(mA) = 0.959442 page 15tributions(graw/s):
faradaic(mAs) = 168.763555 capacitive(mAs) = 199.829520 pseudocapacitive(mAs) = 0.000000 faradaic = 45.785872% capacitive = 54.214128% pseudocapacitive = 0.0000000%
Current Distributions(@5mv/s):
                                                                                                                                                             faradaic(mA) = 0.684816
                                                                                                                                                                                                            (pseudo)capacitive(mA) = 0.685316
                                                                                                                                                           Charge Distributions(@5mv/s):
faradaic(mAs) = 199.690565
faradaic = 49.981754%
                                                                                                                                                                                                           (pseudo)capacitive(mAs) = 199.836360
(pseudo)capacitive = 50.018246%
Current Distributions(@:mv/s):
faradaic(mA) = 0.530456 capacitive(mA) = 0.411189 pseudocapacitive(mc) ...
Charge Distributions(@:mw/s):
faradaic(mAs) = 257.718701 capacitive(mAs) = 199.767595 pseudocapacitive(mAs) = 0.0000006
faradaic = 56.332880% capacitive = 43.667120% pseudocapacitive = 0.0000006%
Current Distributions(@3mv/s):
                                                                                                                                                            Current Distributions(@3mv/s):
faradaic(mA) = 0.530456 (
                                                                                                                                                                                                            (pseudo)capacitive(mA) = 0.411189
                                                                                                                                                           Taradaic(mA) = 0.350450 (pseudo)capacitive(mA) = 0.41189 (harge Distributions(@amv/s): faradaic(mAs) = 257.718701 (pseudo)capacitive(mAs) = 199.767595 faradaic = 56.332880% (pseudo)capacitive = 43.667120%
```



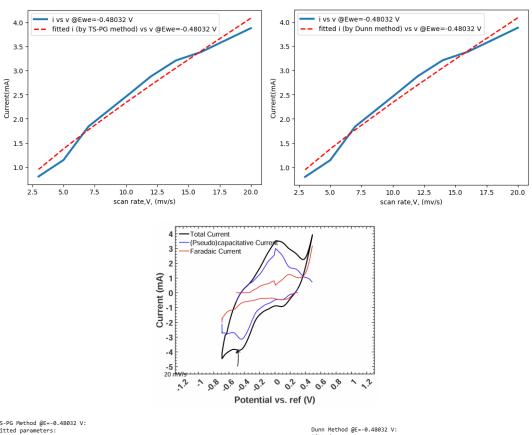
```
Dunn Method @E=-0.47035 V:
 TS-PG Method @E=-0.47035 V:
Fitted parameters:
a = 0.3120 b = 0.1353
                                                                                                                                               R-squared: 0.9755
                                                                                                                                               Current Distributions(@20mv/s): faradaic(mA) = 1.395244 (pseudo)capacitive(mA) = 2.705160 Charge Distributions(@20mv/s):
Current Distributions(@20mv/s):
faradaic(mAs) = 102.522132 (pseudo)capacitive(mAs) = 198.774334 faradaic = 34.026995% (pseudo)capacitive = 65.973005%
                                                                                                                                               Current Distributions(@16mv/s):
Current Distributions(@16mv/s):

faradaic(mA) = 1.247944 capacitive(mA) = 2.164128 pseudocapacitive(ma) - .....

Charge Distributions(@16mv/s):

faradaic(mAs) = 114.568162 capacitive(mAs) = 198.678843 pseudocapacitive(mAs) = 0.000000

faradaic = 36.574384% capacitive = 63.425616% pseudocapacitive = 0.000000%
Current Distributions(@16mv/s):
                                                                                                                                               \label{eq:faradalc(mA) = 1.247944} faradalc(mA) = 1.247944 \quad (pseudo) capacitive(mA) = 2.164128 \\ Charge Distributions(@16mv/s):
                                                                                                                                                faradaic(mAs) = 114.568163 (pseudo)capacitive(mAs) = 198.6 faradaic = 36.574384% (pseudo)capacitive = 63.4256163
                                                                                                                                                                                            (pseudo)capacitive(mAs) = 198.678842
 \begin{array}{lll} Current \ Distributions(@14mv/s): \\ faradalc(mA) = 1.167345 & capacitive(mA) = 1.893612 & pseudocapacitive(mA) = 0.000000 \\ Charge \ Distributions(@14mv/s): \\ faradalc(mAs) = 122.478550 & capacitive(mAs) = 198.678897 & pseudocapacitive(mAs) = 0.000000 \\ faradalc = 38.1366005 & capacitive = 61.8633945 & pseudocapacitive = 0.0000005 \\ \end{array} 
                                                                                                                                                Current Distributions(@14mv/s):
                                                                                                                                                                                          (pseudo)capacitive(mA) = 1.893612
                                                                                                                                                 faradaic(mA) = 1.167345
                                                                                                                                               taradalC(mA) = 1.107.495 (pseudo)Capactatve(mA) = 1.805.000 (pseudo)Capactatve(mA) = 198.678896 (pseudo)Capacitive(mAs) = 198.678896 (pseudo)Capacitive = 61.863394%
                                                                                                                                               Current Distributions(@12mv/s):
Current Distributions(@12mv/s):
Current Distributions(\#12mv/s): faradaic(mA) = 1.0623096 pseudocapacitive(mA) = 0.000000 Charge Distributions(\#12mv/s): faradaic(mAs) = 132.246923 capacitive(mAs) = 198.611268 pseudocapacitive(mAs) = 0.000000 faradaic = 39.970878% capacitive = 60.029122% pseudocapacitive = 0.000000%
                                                                                                                                               Current Distributions(@12mv/s):
faradaic(mA) = 1.808752 (pseudo)capacitive(mA) = 1.623096
Charge Distributions(@12mv/s):
faradaic(mAs) = 132.246924 (pseudo)capacitive(mAs) = 198.611267
faradaic = 39.970878% (pseudo)capacitive = 60.029122%
Current Distributions(@10mv/s):
                                                                                                                                               Current Distributions(@10mv/s):
Current Distributions(@10mv/s):
faradaic(mA) = 0.986587 (pseudo)capacitive(mA) = 1.352580
Charge Distributions(@10mv/s):
faradaic(mAs) = 144.824813 (pseudo)capacitive(mAs) = 198.559349
faradaic = 42.176846% (pseudo)capacitive = 57.823154%
Current Distributions(@7mv/s): faradaic(mA) = 0.825438 \qquad capacitive(mA) = 0.946806 \quad pseudocapacitive(mA) = 0.0000000 
                                                                                                                                               (pseudo)capacitive(mAs) = 198.549943
Current Distributions(@Smv/s):
faradaic(mA) = 0.697622 (pseudo)capacitive(mA) = 0.676290
Charge Distributions(@Smv/s):
                                                                                                                                                 faradaic(mAs) = 204.819633 (pseudo)capacitive(mAs) = 198.556571 faradaic = 50.776330% (pseudo)capacitive = 49.223670%
Current Distributions(@3mv/s): faradaic(mA) = 0.540376 (pseudo)capacitive(mA) = 0.405774 Charge Distributions(@3mv/s):
                                                                                                                                                 faradaic(mAs) = 264.330712 (pseudo)capacitive(mAs) = 198.488766
faradaic = 57.113135% (pseudo)capacitive = 42.886865%
```



```
Fitted parameters:
a = 0.3191 b = 0.1328
R-squared: 0.9771
Current Distributions(@20mv/s):
                                                                                                                                                        Current Distributions(@20mv/s):

faradaic(mA) = 1.426993 (pseudo)capacitive(mA) = 2.656762

Charge Distributions(@20mv/s):

faradaic(mAs) = 195.568190 (pseudo)capacitive(mAs) = 196.545935

faradaic = 34.943149% (pseudo)capacitive = 65.056851%
                                               capacitive(mA) = 2.656762 pseudocapacitive(mA) = 0.000000
faradaic(mA) = 1.426993
 \begin{array}{lll} Current \ Distributions(@16mv/s): \\ faradaic(mA) = 1.276341 & capacitive(mA) = 2.125410 & pseudocapacitive(mA) = 0.000000 \\ Charge \ Distributions(@16mw/s): \\ faradaic(mAs) = 117.972571 & capacitive(mAs) = 196.452256 & pseudocapacitive(mAs) = 0.000000 \\ faradaic = 37.520120% & capacitive = 62.479880% & pseudocapacitive = 0.0000000% \\ \end{array} 
                                                                                                                                                         Current Distributions(@16mv/s):
                                                                                                                                                         Current Distributions(@lowvs): defandatic(mA) = 2.125410 
fharadatic(mA) = 1.276341 (pseudo)capacitive(mA) = 2.125410 
fharadatic(mAs) = 117.972570 (pseudo)capacitive(mAs) = 196.452257 
faradatic(mAs) = 117.972570 (pseudo)capacitive(mAs) = 196.452257 
faradatic = 37.520119% (pseudo)capacitive = 62.479881%
Current Distributions(@14mv/s):
faradaic(mA) = 1.193908 (pseudo)capacitive(mA) = 1.859734
Charge Distributions(@14mv/s):
                                                                                                                                                           faradaic (mAs) = 126.118068 (pseudo)capacitive(mAs) = 196.452390 faradaic = 39.097836% (pseudo)capacitive = 60.902164%
Current Distributions(@12mv/s):
Current Distributions(\#12mv/s): faradaic(mA) = 1.19484 capacitive(mA) = 1.594857 pseudocapacitive(mA) = 0.000000 Charge Distributions(\#12mv/s): faradaic(mAs) = 136.176899 capacitive(mAs) = 196.385784 pseudocapacitive(mAs) = 0.000000 faradaic = 40.947739% capacitive = 59.052261% pseudocapacitive = 0.000000%
                                                                                                                                                         Current Distributions(@12mv/s):
                                                                                                                                                        Charge Distributions(@12mv/s):
faradaic(mA) = 1.105344 (pseudo)capacitive(mA) = 1.594057
Charge Distributions(@12mv/s):
faradaic(mAs) = 136.176897 (pseudo)capacitive(mAs) = 196.385785
faradaic = 40.947738% (pseudo)capacitive = 59.052262%
Current Distributions(@10mv/s):
                                                                                                                                                         Current Distributions(@10mv/s):
                                               capacitive(mA) = 1.328381 pseudocapacitive(mA) = 0.000000
  faradaic(mA) = 1.009036
                                                                                                                                                         faradaic(mA) = 1.009036 (pseudo)capacitive(mA) = 1.328381
Charge Distributions(@10mv/s):
faradaic(mAs) = 149.128872 (pseudo)capacitive(mAs) = 196.325957
faradaic = 43.168849% (pseudo)capacitive = 56.831151%
Current Distributions(@Smv/s):
faradaic(mA) = 0.713496 capacitive(mA) = 0.664191 pseudocapacitive(mA) = 0.000000
Current Distributions(@5mv/s):
                                                                                                                                                        faradaic(mA) = 0.713496

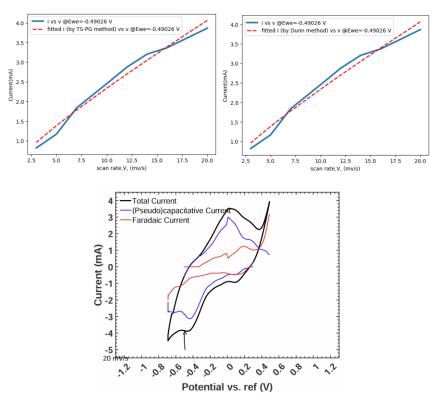
Charge Distributions(@5mv/s):

faradaic(mAs) = 210.906780
                                                                                                                                                                                                       (pseudo)capacitive(mA) = 0.664191
                                                                                                                                                                                     210.906780 (pseudo)capacitive(mAs) = 196.332201
9438% (pseudo)capacitive = 48.210562%
                                                                                                                                                           faradaic = 51.789438%
                                                                                                                                                        Current Distributions(@3mw/s):
faradalc(mA) = 0.552672 (pseudo)capacitive(mA) = 0.398514
Charge Distributions(@3mw/s):
faradalc(mAs) = 272.187113 (pseudo)capacitive(mAs) = 196.265596
faradalc = 58.103435% (pseudo)capacitive = 41.896565%
Current Distributions(@3mv/s):
  faradaic(mA) = 0.552672
                                               capacitive(mA) = 0.398514 pseudocapacitive(mA) = 0.000000

        fahadalc(mA) = 0.552672
        capacitive(mH) = 0.550572
        capacitive(mH) = 0.550572
        pseudocapacitive(mH)

        charge Distributions(@Ban/s):
        fanadaic(mAs) = 272.187115
        capacitive(mAs) = 196.265595
        pseudocapacitive = 0.0000006

        fanadaic = 58.103435%
        capacitive = 41.896565%
        pseudocapacitive = 0.0000006%
```



```
TS-PG Method @E=-0.49026 V:
                                                                                                                                                                                                                        Dunn Method @E=-0.49026 V:
                                                                                                                                                                                                                        Fitted parameters:
a = 0.3279 b = 0.1299
 Fitted parameters:
 a = 0.32/9
R-squared: 0.9783
    = 0.3279
                          b = 0.1299 c = 0.00000000000000000000
 Current Distributions(@20mv/s):
                                                                                                                                                                                                                        Current Distributions(@20mv/s):
                                                                  capacitive(mA) = 2.597741 pseudocapacitive(mA) = 0.000000
                                                                                                                                                                                                                      faradaic(mA) = 1.466520 (pseudo)capacitive(mA) = 2.597741
Charge Distributions(@20mv/5):
faradaic(mAs) = 109.225356 (pseudo)capacitive(mAs) = 193.477940
faradaic = 36.083306% (pseudo)capacitive = 63.916694%

      faradaic(mA) = 1.466520
      capacitive(mA) = 2.75774
      paradaic(mA) = 1.466520
      capacitive(mA) = 2.75774
      paradaic(mA) = 2.75774

   faradaic(mA) = 1.466520
                                                                                                                                                                                                                      Current Distributions(@16mv/s):

faradaic(mA) = 1.311695 [Opseudo)capacitive(mA) = 2.078193

Charge Distributions(@16mv/s):

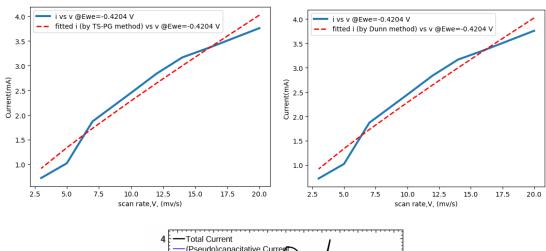
faradaic(mAs) = 122.059914 (pseudo)capacitive(mAs) = 193.386448

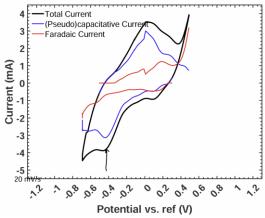
faradaic = 38.694348% (pseudo)capacitive = 61.305652%
Current Distributions(@16mv/s):
   faradaic(mA) = 1.311695
                                                                 capacitive(mA) = 2.078193 pseudocapacitive(mA) = 0.000000
 \begin{array}{lll} Current \ Distributions(@14mv/s): \\ faradaic(mA) = 1.226978 & (Dseudo) capacitive(mA) = 1.818419 \\ Charge \ Distributions(@14mv/s): \\ faradaic(mAs) = 130.487554 & (pseudo) capacitive(mAs) = 193.386473 \\ faradaic = 40.289601% & (pseudo) capacitive = 59.710399% \\ \end{array} 
Current Distributions(@14mv/s):
Current Distributions(@12mv/s):
Current Distributions(@12mv/s):
faradaic(mA) = 1.159691 capacitive(mA) = 1.558645 pseudocapacitive(mA) = 0.000000
Charge Distributions(@12mv/s):
faradaic(mAs) = 140.895430 capacitive(mAs) = 193.321660 pseudocapacitive(mAs) = 0.000000
faradaic = 42.156860% capacitive = 57.843140% pseudocapacitive = 0.000000%
                                                                                                                                                                                                                        tharge Distributions(Eastern, ),
faradaic(mAs) = 140.895430 (pseudo)capacitive(mAs) = 193.
faradaic = 42.156860% (pseudo)capacitive = 57.843140%
                                                                                                                                                                                                                                                                                           (pseudo)capacitive(mAs) = 193.321660
 Current Distributions(@10mv/s):
                                                                                                                                                                                                                        Current Distributions(@10mv/s):
 Current Distributions(gliomy/s):
faradaic(mA) = 1.036986 capacitive(mA) = 1.298871 pseudocapacitive(mA) = 0.000000
Charge Distributions(gliomy/s):
faradaic(mAs) = 154.296465 capacitive(mAs) = 193.263109 pseudocapacitive(mAs) = 0.0000006
faradaic = 44.394250% capacitive = 55.605750% pseudocapacitive = 0.000000%
                                                                                                                                                                                                                          faradaic(mA) = 1.036986
                                                                                                                                                                                                                                                                                        (pseudo)capacitive(mA) = 1.298871
                                                                                                                                                                                                                      Taradual(mx) = 1.200900 (pseudo)capactitive(mx) = 1.20071
(Charge Distributions(@l0mv/s):
faradaic(mAs) = 154.296465 (pseudo)capacitive(mAs) = 193.263109
faradaic = 44.394260% (pseudo)capacitive = 55.665750%
                               4.394250% capacitive = 55.605750% pseudocapacitive = 0.0000000%
Current Distributions(@7mv/s):
                                                                                                                                                                                                                      Charge Distributions(@MTM) = 0.867605 (pseudo)capacitive(mA) = 0.909209

Charge Distributions(@TMM/S):

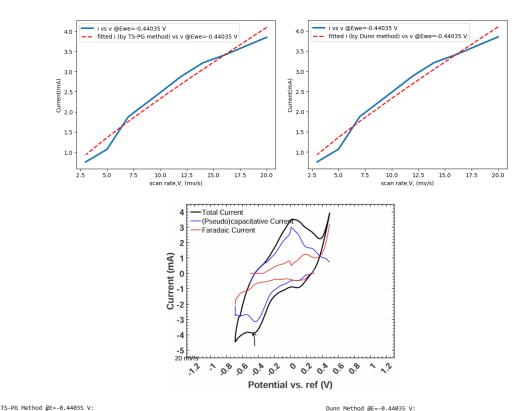
faradaic(mAS) = 184.419103 (pseudo)capacitive(mAs) = 193.262642

faradaic = 48.829234% (pseudo)capacitive = 51.170766%
 \begin{array}{lll} & \text{Current Distributions}(\underline{\#}\text{Smv/s}): \\ & \text{faradaic}(\text{mA}) = 0.733260 & (\text{pseudo})\text{capacitive}(\text{mA}) = 0.649435 \\ & \text{Charge Distributions}(\underline{\#}\text{Smv/s}): \\ & \text{faradaic}(\underline{\#}\text{AS}) = 218.214899 & (\text{pseudo})\text{capacitive}(\underline{\#}\text{AS}) = 193.269084 \\ & \text{faradaic} = 53.031201\% & (\text{pseudo})\text{capacitive} = 46.968799\% \\ \end{array} 
                                                                                                                                                                                                                      .harge Uistributions(g3mm/5):
faradaic(nAs) = 281.619276 capacitive(mAs) = 193.203946 pseudocapacitive(mAs) = 0.000000
faradaic = 59.310342% capacitive = 40.689658% pseudocapacitive = 0.000000%
```





TS-PG Method @E0.4204 V: Fitted parameters: a -0.2984 b -0.1345 c = 0.00000000000182284 R-squared: 0.9626	Dunn Method @E=-8.4284 V: Fitted parameters: a = 0.2984 b = 0.1345 R-squared: 0.9626
Current Distributions(@20mv/s): $ \begin{array}{lll} & \text{faradaic(nA)} & -1.334314 & \text{capacitive(mA)} & -2.690938 & \text{pseudocapacitive(mA)} & -0.000000 \\ & \text{Charge Distributions(@20mv/s)} & \text{capacitive(mAs)} & -191.004115 & \text{pseudocapacitive(mAs)} & -0.000000 \\ & \text{faradaic(nAs)} & -94.710237 & \text{capacitive(mAs)} & -191.004115 & \text{pseudocapacitive(mAs)} & -0.0000000 \\ & \text{faradaica} & -33.148575\% & \text{capacitive} & -66.851425\% & \text{pseudocapacitive} & -0.0000000\% \\ \end{array} $	Current Distributions(@20mv/s): faradaic(mA) = 1.334313 (pseudo)capacitive(mA) = 2.690938 Charge Distributions(@20mv/s): faradaic(mAs) = 94.710233 (pseudo)capacitive(mAs) = 191.004120 faradaic(mAs) = 47.710233 (pseudo)capacitive = 66.851426%
Current Distributions(@16mv/s): faradaic(mA) = 1.193446 capacitive(mA) = 2.152750 pseudocapacitive(mA) = 0.000000 Charge Distributions(@16mv/s): faradaic(mA) = 105.305693 capacitive(mAs) = 190.909125 pseudocapacitive(mAs) = 0.0000000 faradaic(mAs) = 35.665755% capacitive = 64.334245% pseudocapacitive = 0.0000000%	Current Distributions(@16mv/s): faradaic(mA) = 1.193446 (pseudo)capacitive(mA) = 2.152750 Charge Distributions(@16mv/s): faradaic(mAs) = 105.83599 (pseudo)capacitive(mAs) = 190.909130 faradaic = 35.665753% (pseudo)capacitive = 64.334247%
Current Distributions($@14mv/s$): fanadaic(mA) = 1.116367 capacitive(mA) = 1.883657 pseudocapacitive(mA) = 0.000000 Charge Distributions($@14mv/s$): faradaic(mA) = 113.14414 capacitive(mAs) = 190.909152 pseudocapacitive(mAs) = 0.0000000 faradaic(mAs) = 37.211936X capacitive = 62.788064X pseudocapacitive = 0.0000000X	Current Distributions(@14mv/s): faradaic(mA) = 1.116367 (pseudo)capacitive(mA) = 1.883657 Charge Distributions(@14mv/s): faradaic(mAs) = 113.144099 (pseudo)capacitive(mAs) = 190.909157 faradaic(mAs) = 113.144099 (pseudo)capacitive = 62.788065%
Current Distributions($@12mv/s$): faradaic(mA) = 1.033555 capacitive(mA) = 1.614563 pseudocapacitive(mA) = 0.000000 Charge Distributions($@12mv/s$): faradaic(mA) = 122.166444 capacitive(mAs) = 190.841798 pseudocapacitive(mAs) = 0.000000 faradaic(mAs) = 39.029793% capacitive = 60.970207% pseudocapacitive = 0.000000%	Current Distributions(@12mv/s): faradaic(mA) = 1.033555 (pseudo)capacitive(mA) = 1.614563 Charge Distributions(@12mv/s): faradaic(mAs) = 122.166478 (pseudo)capacitive(mAs) = 190.841803 faradaic = 39.829791% (pseudo)capacitive = 60.978289%
Current Distributions(@10mv/s): faradaic(mA) = 0.943592 capacitive(mA) = 1.345469 pseudocapacitive(mA) = 0.000000 Charge Distributions(@10mv/s): faradaic(mA) = 133.784260 capacitive(mAs) = 190.781300 pseudocapacitive(mAs) = 0.0000000 faradaic(mAs) = 131.784260 capacitive = 58.780514% pseudocapacitive = 0.0000000%	Current Distributions(@10mv/s): faradaic(mA) = 0.943502
Current Distributions(@7mv/s): faradaic(mA) = 0.789391	Current Distributions(@7mv/s): faradaic(mA) = 0.789390
Current Distributions(@Smw/s): faradaic(mA) = 0.667157	Current Distributions(@5mv/s): faradaic(mA) = 0.667157
Current Distributions $(\hat{\mathbf{g}})$ 3mv/s): faradaiz(nM) = 0.16777 capacitive(mA) = 0.403641 pseudocapacitive(mA) = 0.000000 Charge Distributions $(\hat{\mathbf{g}})$ 3mv/s): faradaic(nAs) = 244.177110 capacitive(mAs) = 190.720062 pseudocapacitive(mAs) = 0.000000 faradaic = 36.145941% capacitive = 43.854053% pseudocapacitive = 0.00000000 faradaic = 36.145941% capacitive = 43.854053% pseudocapacitive = 0.0000000000000000000000000000000000	Current Distributions(@3mm/s): faradaic(mA) = 0.516777 (pseudo)capacitive(mA) = 0.403641 Charge Distributions(@3mm/s): faradaic(mAs) = 244.177699 (pseudo)capacitive(mAs) = 190.720068 faradaica = 56.145939% (pseudo)capacitive = 43.854061%



```
Fitted parameters:
a = 0.3004 b = 0.1377
R-squared: 0.9683
 Fitted parameters:
       = 0.3004 b = 0.1377 c = 0.000000000000193895
 R-squared: 0.9683
 Current Distributions(@20mv/s):
                                                                                                                                                                                                                                                        Current Distributions(@20mv/s):
                                                                             capacitive(mA) = 2.753427 pseudocapacitive(mA) = 0.000000
    faradaic(mA) = 1.343354
                                                                                                                                                                                                                                                            faradaic(m\Delta) = 1.343354
                                                                                                                                                                                                                                                                                                                                     (pseudo)capacitive(mA) = 2.753427
Taradax(lmn) = 1.793534 | February | 2.75342/ pseudocapacitive(ms) = 0.000000 |

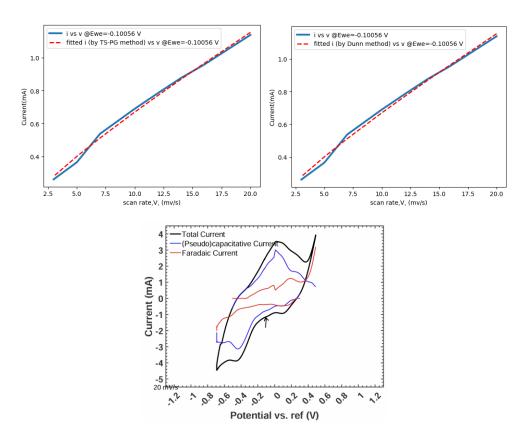
Charge Distributions(@20mv/s): faradaic(mAs) = 96.694757 | Capacitive(mAs) = 198.191920 | pseudocapacitive(mAs) = 0.000000 |

Faradaic = 32.790480% | capacitive = 67.209520% | pseudocapacitive = 0.000000%
                                                                                                                                                                                                                                                        Taradaic(mm) = 1.343534 (pseudo)capacitive(mm) = 2.75342/

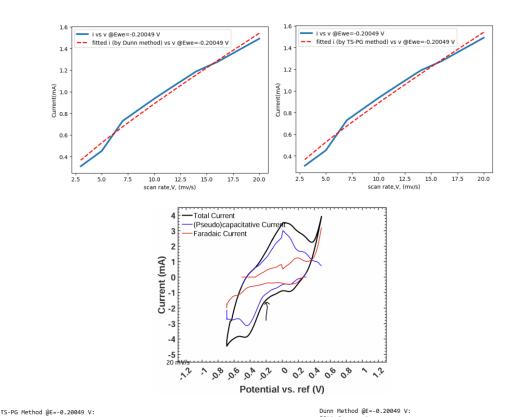
Charge Distributions(@20mv/s):

faradaic(mAs) = 96.694758 (pseudo)capacitive(mAs) = 198.191919

faradaic = 32.790480% (pseudo)capacitive = 67.209520%
Current Distributions(@16mv/s):
                                                                                                                                                                                                                                                        Current Distributions(@16mv/s):
                                                                                                                                                                                                                                                        Current Distributions(glabmys):
faradaic(mA) = 1.281532 (pseudo)capacitive(mA) = 2.202741
Charge Distributions(glabmys):
faradaic(mAs) = 180.805129 (pseudo)capacitive(mAs) = 198.894943
faradaic = 35.294824% (pseudo)capacitive = 64.705176%
charge Distributions(gl4mv/s):
    faradaic(mAs) = 115.515791 (pseudo)capacitive(mAs) = 198.094943
    faradaic = 36.834132% (pseudo)capacitive = 63.165868%
Current Distributions(@12mv/s):  \frac{1}{6} \frac{1
                                                                                                                                                                                                                                                        faradaic(mAs) = 124.727993
faradaic = 38.644891%
                                                                                                                                                                                                                                                                                                                                       (pseudo)capacitive(mAs) = 198.026163
                                                                                                                                                                                                                                                                                                                                 (pseudo)capacitive = 61.355109%
Current Distributions(@10mv/s):
                                                                                                                                                                                                                                                        faradaic(mA) = 0.949995 (pseudo)capacitive(mA) = 1.376713
Charge Distributions(@10mm/s):
faradaic(mAs) = 136.889927 (pseudo)capacitive(mAs) = 197.964
faradaic = 40.827451% (pseudo)capacitive = 59.172549%
    narge Uistributions(glumv/s):
faradaic(nAs) = 136.589926 capacitive(mAs) = 197.964214 pseudocapacitive(mAs) = 0.000000
faradaic(n=40.827451% capacitive = 59.172549% pseudocapacitive = 0.000000%
                                                                                                                                                                                                                                                                                                                                  (pseudo)capacitive(mAs) = 197.964213
(pseudo)capacitive = 59.172549%
 Current Distributions(@7mv/s):
                                                                                                                                                                                                                                                        Current Distributions(@7mv/s):
capacitive(mA) = 0.963699 pseudocapacitive(mA) = 0.000000
                                                                                                                                                                                                                                                            faradaic(mA) = 0.794739
                                                                                                                                                                                                                                                                                                                                     (pseudo)capacitive(mA) = 0.963699
                                                                                                                                                                                                                                                        TaPadall(mm) = 0.794/39 (pseudo)capacitive(mm) = 0.794/39 (pseudo)capacitive(mAs) = 197.963690 
faradaic(mAs) = 163.255758 (pseudo)capacitive = 54.804272% 
(pseudo)capacitive = 54.804272%
                                                                                                                                                                                                                                                                                         43.1337200 (pacado/capaca----
 Current Distributions(@5mv/s):
                                                                                                                                                                                                                                                        Current Distributions(@5mv/s):
                                                                                                                                                                                                                                                        Correin Distribucionis (genera);
faradaic(mA) = 0.671677 (pseudo)capacitive(mA) = 0.688357
Charge Distributions(gEnw/s);
faradaic(mAs) = 193.160874 (pseudo)capacitive(mAs) = 197.956
faradaic = 49.386794% (pseudo)capacitive = 50.613206%
faradaic(mA) = 0.671677
                                                                            capacitive(mA) = 0.688357 pseudocapacitive(mA) = 0.000000
                                                                                                                                                                                                                                                                                                                                   (pseudo)capacitive(mAs) = 197.956779
(pseudo)capacitive = 50.613206%
                                                                                                                                                                                                                                                        Current Distributions(@3mv/s):
faradaic(mA) = 0.528279 (pseudo)capacitive(mA) = 0.413014
Charge Distributions(@3mv/s):
faradaic(mAs) = 249.298918 (pseudo)capacitive(mAs) = 197.901
faradaic = 55.746578% (pseudo)capacitive = 44.253422%
 Current Distributions(@3mv/s):
Current Distributions(@dmv/s):
faradaic(mA) = 0.520279 capacitive(mA) = 0.413014 pseudocapacitive(mA) = 0.000000
Charge Distributions(@3mv/s):
faradaic(mAs) = 249.288916 capacitive(mAs) = 197.901477 pseudocapacitive(mAs) = 0.000000
faradaic = 55.746578% capacitive = 44.253422% pseudocapacitive = 0.000000%
                                                                                                                                                                                                                                                                                                                                       (pseudo)capacitive(mAs) = 197.901476
```



TS-PG Method @E=-0.10056 V: Fitted parameters: a = 0.0997 b = 0.0354 c = 0.0000000000079174761 R-squared: 0.9949	Dunn Method @E=-0.10056 V: Fitted parameters: a = 0.0997 b = 0.0354 R-squared: 0.9949
Current Distributions(@20mv/s): faradaic(mA) = 0.445662 capacitive(mA) = 0.708611 pseudocapacitive(mA) = 0.000000 Charge Distributions(@20mv/s): faradaic(mAs) = 24.569611 capacitive(mAs) = 38.963446 pseudocapacitive(mAs) = 0.000000 faradaic = 38.609747% capacitive = 61.390253% pseudocapacitive = 0.000000%	Current Distributions(@20mv/s): faradaic(mA) = 0.445662 (pseudo)capacitive(mA) = 0.708611 Charge Distributions(@20mv/s): faradaic(mAs) = 24.508911 (pseudo)capacitive(mAs) = 38.963446 faradaic = 38.609747% (pseudo)capacitive = 61.390253%
Current Distributions(@16mv/s): faradaic(mA) = 0.398612 capacitive(mA) = 0.566888 pseudocapacitive(mA) = 0.000000 Charge Distributions(@16mv/s): faradaic(mAs) = 27.369841 capacitive(mAs) = 38.924203 pseudocapacitive(mAs) = 0.000000 faradaic = 41.285520% capacitive = 58.714480% pseudocapacitive = 0.000000%	Current Distributions(@16mv/s): faradaic(mA) = 0.398612 (pseudo)capacitive(mA) = 0.566888 Charge Distributions(@16mv/s): faradaic(mAs) = 27.369841 (pseudo)capacitive(mAs) = 38.924203 faradaic = 41.285520% (pseudo)capacitive = 58.714480%
Current Distributions(@14mv/s): faradaic(mA) = 0.372867 capacitive(mA) = 0.496027 pseudocapacitive(mA) = 0.606000 change Distributions(@14mv/s): faradaic(mAs) = 0.959596 capacitive(mAs) = 0.9860000 pseudocapacitive(mAs) = 0.6000000 pseudocapacitive = $0.600000000000000000000000000000000000$	Current Distributions(@14mv/s): faradaic(mA) = 0.372867 (pseudo)capacitive(mA) = 0.496027 Charge Distributions(@14mv/s): faradaic(mAs) = 29.55996 (pseudo)capacitive(mAs) = 38.924210 faradaic = 42.912823% (pseudo)capacitive = 57.087177%
Current Distributions(@12mv/s): faradaic(mA) = 0.345208 capacitive(mA) = 0.425166 pseudocapacitive(mA) = 0.000000 Charge Distributions(@12mv/s): faradaic(mA) = 31.592463 capacitive(mAs) = 38.910031 pseudocapacitive(mAs) = 0.0000000 faradaic = 44.810419% capacitive = 55.189581% pseudocapacitive = 0.0000000%	Current Distributions(@12mv/s): faradaic(mA) = 0.345208 (pseudo)capacitive(mA) = 0.425166 Charge Distributions(@12mv/s): faradaic(mAs) = 31.592463 (pseudo)capacitive(mAs) = 38.910031 faradaic = 44.810419% (pseudo)capacitive = 55.189581%
Current Distributions(@10mv/s): faradaic(mA) = 0.315130	Current Distributions(@10mv/s): faradaic(mA) = 0.315130 (pseudo)capacitive(mA) = 0.354305 Charge Distributions(@10mv/s): faradaic(mAs) = 34.593617 (pseudo)capacitive(mAs) = 38.894074 faradaic = 47.074029% (pseudo)capacitive = 52.925971%
Current Distributions(@7mv/s): faradaic(mA) = 0.263657	Current Distributions(@7mv/s): faradaic(mA) = 0.263657 (pseudo)capacitive(mA) = 0.248014 Charge Distributions(@7mv/s): faradaic(mAs) = 41.350922 (pseudo)capacitive(mAs) = 38.897500 faradaic = 51.528642% (pseudo)capacitive = 48.471358%
Current Distributions(@5mv/s): faradaic(mA) = 0.222831 capacitive(mA) = 0.177153 pseudocapacitive(mA) = 0.000000 Charge Distributions(@5mv/s): faradaic(mA) = 48.933725 capacitive(mAs) = 38.902789 pseudocapacitive(mAs) = 0.000000 faradaic = 55.710003% capacitive = 44.289997% pseudocapacitive = 0.000000%	Current Distributions(@Smv/s): faradaic(mA) = 0.222831 (pseudo)capacitive(mA) = 0.177153 Charge Distributions(@Smv/s): faradaic(mAs) = 48.933725 (pseudo)capacitive(mAs) = 38.902790 faradaic = 55.710003% (pseudo)capacitive = 44.289997%
Current Distributions(@3mv/s): faradaic(mA) = 0.172604 capacitive(mA) = 0.106292 pseudocapacitive(mA) = 0.000000 Charge Distributions(@3mv/s): faradaic(mA) = 0.150097 capacitive(mAs) = 38.888571 pseudocapacitive(mAs) = 0.000000 faradaic = 61.888391% capacitive = 38.111609% pseudocapacitive = 0.0000000%	Current Distributions(@3mv/s): faradaic(mA) = 0.172604 (pseudo)capacitive(mA) = 0.106292 Charge Distributions(@3mv/s): faradaic(mAs) = 63.150079 (pseudo)capacitive(mAs) = 38.888571 faradaic = 61.888391% (pseudo)capacitive = 38.111609%



```
Fitted parameters:
a = 0.1279 b = 0.0484
                                                                                                                                                                                                a = 0.1279 b = 0.9837
                                                                                                                                                                                               Current Distributions(@20mv/s):
 Current Distributions(@20mv/s):
Current Distributions(gezomys):
faradaic(mA) = 0.572025 (pseudo)capacitive(mA) = 0.968043
Charge Distributions(@20mv/s):
faradaic(mAs) = 34.312382 (pseudo)capacitive(mAs) = 58.067196
faradaic = 37.142822% (pseudo)capacitive = 62.857178%
  .narge Distributions(g/zemv/s):
faradaic(mAs) = 34.312383 capacitive(mAs) = 58.067195 pseudocapacitive(mAs) = 0.000000
faradaic = 37.142823% capacitive = 62.857177% pseudocapacitive = 0.000000%
 Current Distributions(@16mv/s):
                                                                                                                                                                                               Current Distributions(@16mv/s):
                                                            capacitive(mA) = 0.774435 pseudocapacitive(mA) = 0.000000
                                                                                                                                                                                                                                                           (pseudo)capacitive(mA) = 0.774435
  faradaic(mA) = 0.511634
                                                                                                                                                                                                 faradaic(mA) = 0.511634
Charge Distributions(@16mv/s):
                                                                                                                                                                                                 faradaic(mAs) = 38.339782 (pseudo)capacitive(mAs) = 58.032946
faradaic = 39.782813% (pseudo)capacitive = 60.217187%
                                                                                                                                                                                               Current Distributions(@14mv/s):
 Current Distributions(@14mv/s):
                                                                                                                                                                                              faradaic(mA) = 0.478599 (pseudo)capacitive(mA) = 0.677630
Charge Distributions(@14mv/s):
faradaic(mAs) = 40.986938 (pseudo)capacitive(mAs) = 58.032927
faradaic = 41.392642% (pseudo)capacitive = 58.067358%
 faradaic(mA) = 0.478590 c.
Charge Distributions(@14mv/s):
                                                              capacitive(mA) = 0.677630 pseudocapacitive(mA) = 0.000000
  Integret DISTRIBUTIONS[g14M075].

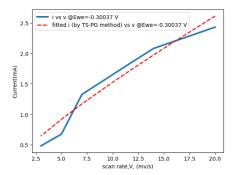
Faradaic(mAs) = 40.806938 capacitive(mAs) = 58.032926 pseudocapacitive(mAs) = 0.000000 faradaic = 41.392642% capacitive = 58.607358% pseudocapacitive = 0.000000%
                                                                                                                                                                                              Current Distributions(@12mv/s):
faradaic(mA) = 0.443088 (p
Charge Distributions(@12mv/s):
 Current Distributions(@12mv/s):
                                                            capacitive(mA) = 0.580826 pseudocapacitive(mA) = 0.000000
                                                                                                                                                                                                                                                            (pseudo)capacitive(mA) = 0.580826
   faradaic(mA) = 0.443088
 Charge Distributions(@12mv/s):
                               u.Luns.guzmm75): = 44.241444 capacitive(mAs) = 57.994243 pseudocapacitive(mAs) = 0.000000
.273973% capacitive = 56.726027% pseudocapacitive = 0.000000%
                                                                                                                                                                                                faradaic(mAs) = 44.241443 (pseudo)capacitive(mAs) = 57.994244
faradaic = 43.273972% (pseudo)capacitive = 56.726028%
    faradaic(mAs)
  faradaic = 43.273973%
                                                                                                         pseudocapacitive = 0.0000000%
 Current Distributions(@10mv/s):
                                                                                                                                                                                               Current Distributions(@10mv/s):
                                                                                                                                                                                              Faradaic(mA) = 0.404482 (pseudo)capacitive(mA) = 0.484022
Charge Distributions(@10mv/s):
faradaic(mAs) = 48.445839 (pseudo)capacitive(mAs) = 57.972425
faradaic = 45.523989% (pseudo)capacitive = 54.476011%
  faradaic(mA) = 0.404483
                                                            capacitive(mA) = 0.484022 pseudocapacitive(mA) = 0.000000
| Tanadax(mm) - 0.404403 | Tanadax(mm) - 0.404
Current Distributions(@7mv/s):
faradaic(mA) = 0.338414 (
Charge Distributions(@7mv/s):
                                                                                                                                                                                                                                                           (pseudo)capacitive(mA) = 0.338815
  faradaic = 49.970411% (pseudo)capacitive (mAs) = 57.977125
faradaic = 49.970411% (pseudo)capacitive = 50.029589%
 Current Distributions(@5mv/s):
                                                                                                                                                                                               Current Distributions(@5mv/s):

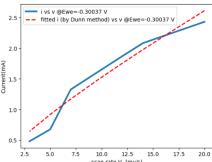
      Charge Distributions(@Smw/s):
      apacitive(mA) = 0.242011
      pseudocapacitive(mA) = 0.000000

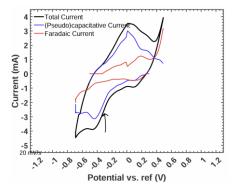
      Charge Distributions(@Smw/s):
      faradaic(mAs) = 68.526864
      capacitive(mAs) = 57.984355
      pseudocapacitive(mAs) = 0.000000

      faradaic = 54.166630%
      capacitive = 45.833370%
      pseudocapacitive = 0.000000%

                                                                                                                                                                                               faradaic(mA) = 0.286012 (pseudo)capacitive(mA) = 0.242011
Charge Distributions(@Emv/5):
faradaic(mAs) = 68.526633 (pseudo)capacitive(mAs) = 57.984356
faradaic = 54.166629% (pseudo)capacitive = 45.833371%
                                                                                                                                                                                                                                   66629% (pseudo)capacitive = 45.833371%
 Current Distributions(@3mv/s):
                                                                                                                                                                                               faradaic(mAs) = 88.438135 (pseudo)capacitive(mAs) = 57.964913 faradaic = 60.407304% (pseudo)capacitive = 39.592696%
```





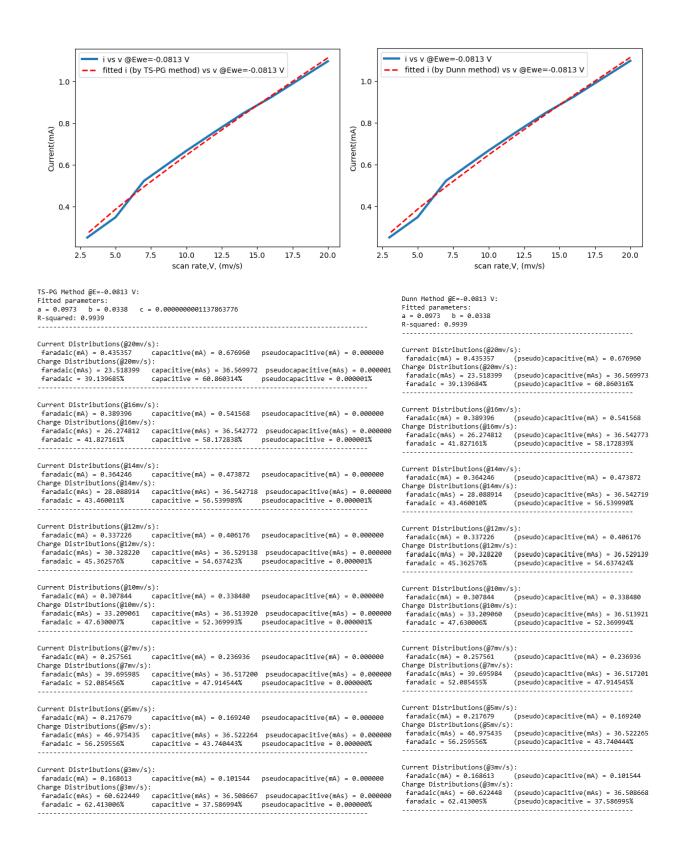


```
Dunn Method @E=-0.30037 V:
TS-PG Method @E=-0.30037 V:
Fitted parameters:
a = 0.2366 b = 0.0777 c = 0.000000000000016425
                                                                                                                                 Fitted parameters:
a = 0.2366 b = 0.0777
                                                                                                                                 R-squared: 0.9480
R-squared: 0.9480
Current Distributions(@20mv/s):
                                                                                                                                 Current Distributions(@20mv/s):
                                                                                                                                                                        (pseudo)capacitive(mA) = 1.554909
faradaic(mA) = 1.058186
 faradaic(m\Delta) = 1.058186
                                       capacitive(mA) = 1.554909 pseudocapacitive(mA) = 0.000000
                                                                                                                                 Charge Distributions(@20mv/s):
                                                                                                                                  faradaic = 40.495507% (pseudo)capacitive = 59.504493%
                                                                                                                                 Current Distributions(@16mv/s):
Current Distributions(@16mv/s):
                                                                                                                                 faradaic(mA) = 0.946471 (pseudo)capacitive(mA) = 1.243927
Charge Distributions(@16mv/s):
faradaic(mAs) = 76.838170 (pseudo)capacitive(mAs) = 100.986874
faradaic(mA) = 0.946471 \qquad capacitive(mA) = 1.243927 \qquad pseudocapacitive(mA) = 0.000000 \\ Charge \ Distributions(@16mv/s):
 tharge Distributions(@16mw/s):
faradaic(mAs) = 76.838170 capacitive(mAs) = 100.986874 pseudocapacitive(mAs) = 0.000000
faradaic = 43.209982% capacitive = 56.790018% pseudocapacitive = 0.000000%
                                                                                                                                 faradaic(mAs) = 76.838170 (pseudo)capacitive(mAs) = 100.91
faradaic = 43.209982% (pseudo)capacitive = 56.790018%
                                                                                                                                 Current Distributions(@14mv/s):
Current Distributions(@14mv/s):
faradaic(mA) = 0.885342 capacitive(mA) = 1.088436 pseudocapacitive(mA) = 0.000000 Charge Distributions(@14mv/s):
                                                                                                                                                                       (pseudo)capacitive(mA) = 1.088436
                                                                                                                                  faradaic(mA) = 0.885342
                                                                                                                                 tarada1c(mA) = 0.885342 (pseudo)capacitive(mA) = 1.088436

Charge Distributions(@14mv/s):

faradaic(mAs) = 82.143459 (pseudo)capacitive(mAs) = 100.986874

faradaic = 44.855190% (pseudo)capacitive = 55.144810%
 /-----
                                                                                                                                 Current Distributions(@12mv/s):
Current Distributions(@12mv/s):
faradaic(mA) = 0.819668 capacitive(mA) = 0.932946 pseudocapacitive(mA) = 0.000000 Charge Distributions(@12mv/s):
                                                                                                                                  faradaic(mA) = 0.819668
                                                                                                                                                                        (pseudo)capacitive(mA) = 0.932946
                                                                                                                                 rerousic(ma) = 0.819008 (pseudo)capacitive(mA) = 0.932946 (charge Distributions(@12mv/s): faradaic(mAs) = 88.698896 (pseudo)capacitive(mAs) = 100.947970 (pseudo)capacitive = 53.231688%
 Current Distributions(@10mv/s):
Current Distributions(@10mv/s):
faradaic(mA) = 0.748251 \quad capacitive(mA) = 0.777455 \quad pseudocapacitive(mA) = 0.000000 \quad charge Distributions (@10mv/s):
                                                                                                                                 faradaic(mA) = 0.78251 (pseudo)capacitive(mA) = 0.777455
Charge Distributions(@10mv/s):
faradaic(mAs) = 97.122339 (pseudo)capacitive(mAs) = 100.912986
faradaic = 49.042937% (pseudo)capacitive = 50.957063%
 | faradaic(mAs) = 97.12239 | capacitive(mAs) = 100.912986 | pseudocapacitive(mAs) = 0.000000 | faradaic = 49.042937% | capacitive = 50.957063% | pseudocapacitive = 0.000000% | |
                                                                                                                                 Current Distributions(@7mv/s):
Current Distributions(@7mv/s):
Current Distributions(@/mw/s):
faradaic(mA) = 0.626031 capacitive(mA) = 0.544218 pseudocapacitive(mA) = 0.000000
Charge Distributions(@7mv/s):
faradaic(mAs) = 116.083130 capacitive(mAs) = 100.912753 pseudocapacitive(mAs) = 0.000000
faradaic = 53.495545% capacitive = 46.504455% pseudocapacitive = 0.0000000
                                                                                                                                 Current Distributions(@5mv/s):
Current Distributions(@5mv/s):
                                                                                                                                 faradaic(mA) = 0.529093 (pseudo)capacitive(mA) = 0.388727
Charge Distributions(@5mv/s):
 faradaic(mA) = 0.529093
                                      capacitive(mA) = 0.388727 pseudocapacitive(mA) = 0.000000
faradaic(mA) = 0.52909 capacitive(mA) = 0.38877 pseudocapacitive(mA) = 0.00000 Charge Distributions((65my/s)):
faradaic(mAs) = 137.346068 capacitive(mAs) = 100.908827 pseudocapacitive(mAs) = 0.0000006 faradaic = 57.646693\% capacitive = 42.353307\% pseudocapacitive = 0.000000\%
                                                                                                                                  .narge Distributions(wpmv/s).
faradaic(mAs) = 137.346067 (pseudo)capacitive(mAs) = 100.908827
faradaic = 57.646693% (pseudo)capacitive = 42.353387%
                                                                                                                                 Current Distributions(@3mv/s):
Current Distributions(@3mv/s):
                                                                                                                                 faradaic(mA) = 0.49834 capacitive(mA) = 0.233236 pseudocapacitive(mA) = 0.000000 Charge Distributions(@3mv/s): faradaic(mAs) = 177.258148 capacitive(mAs) = 100.877604 pseudocapacitive(mAs) = 0.000000 faradaic = 03.730803% capacitive = 36.269197% pseudocapacitive = 0.000000%
                                                                                                                                  faradaic = 63.730803% (pseudo)capacitive = 36.269197%
```



This point showed the highest pseudocapacitive current.