

Change log

2024/08/10

Manuscript-Chapter 2: In Fig. 1b, all symbols for separation have been replaced by commas.

Manuscript-Chapter 3: In Fig. 2, all symbols for separation have been replaced by commas.

Manuscript-Appendix A: The lines for $\overline{C_{e,n}}$ and $\overline{C_{e,p}}$ have been deleted.

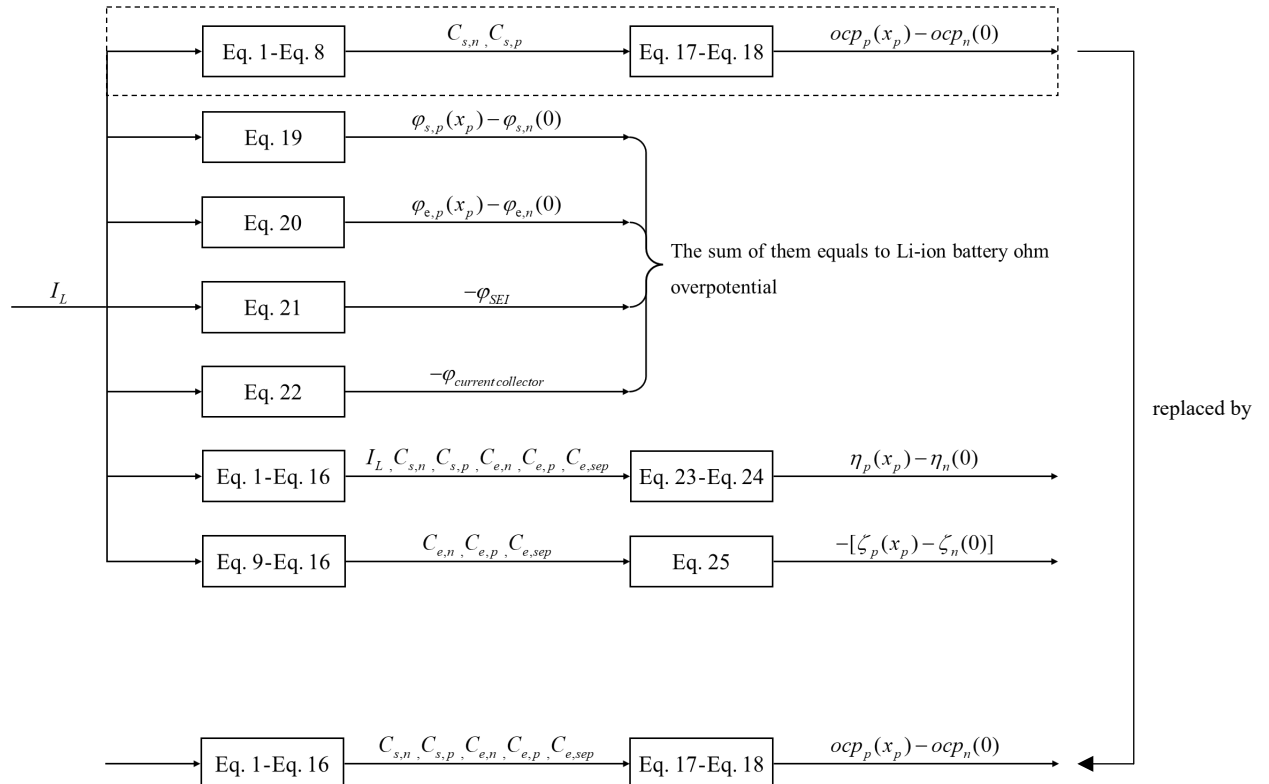
2024/09/30

Manuscript-Chapter 2: All ‘Bulter-Volmer Equation’s have been replaced by ‘Butler-Volmer Equation’s.

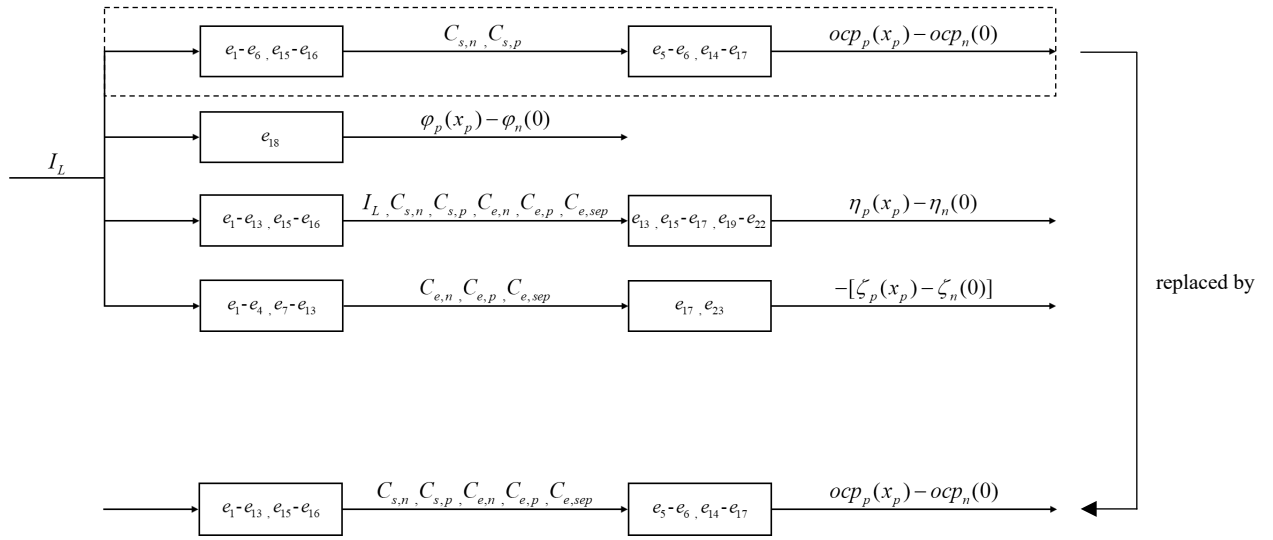
Manuscript-Chapter 5: All ‘Li-ion battery boundary temperature’s have been replaced by ‘Li-ion battery ambient temperature’s.

2024/11/07

Manuscript-Chapter 2: In Fig. 1b,



Manuscript-Chapter 3: In Fig. 2,



2025/03/12

Manuscript-Chapter 5: The expression of the sixth paragraph has been optimized.

Manuscript-Chapter 6: The expression of the fourth paragraph has been optimized.

Manuscript-Appendix B: In Eq. 82, R_n in the lower limit of the definite integral has been replaced by R_n .

2025/04/21

Data-Inter-electrode potential 1: In cell B1, 'Voltage(s)' has been replaced by 'Inter-electrode potential(V)'.

Data-Inter-electrode potential 2: In cell B1, 'Voltage(s)' has been replaced by 'Inter-electrode potential(V)'.

2025/11/16

Manuscript-Chapter 3: Fig. 4 has been deleted.

Manuscript-Chapter 6: In Fig. 6b, the graph of Inter-electrode potential 3 has been changed. In Table 8a, the time for computing Parameters 1-Parameters 4 has been changed.

Program of Example Algorithm: The program of Example Algorithm has been converted from a serial-computing program into a parallel-computing program to

improve the speed of solving Example Problem and its comments have been added. The new edition of the program of Example Algorithm is developed on MATLAB R2024b.

Program for computing the parameters of the modified P2D model: The program for computing the parameters of the modified P2D model has been converted from a serial-computing program into a parallel-computing program to improve the speed of computing the parameters of the modified P2D model and its comments have been added. The new edition of the program for computing the parameters of the modified P2D model is developed on MATLAB R2024b.

Program for computing the outputs of the modified P2D model: The program for computing the outputs of the modified P2D model has been optimized and its comments have been added. The new edition of the program for computing the outputs of the modified P2D model is developed on MATLAB R2024b.

Data: Add the 23-dimensional space for searching for the values of the parameters of the modified P2D model, Inter-electrode potential 3-Inter-electrode potential 8, Load current 3(average)-Load current 8(average) and Load current 3(instantaneous)-Load current 8(instantaneous).

After Manuscript is updated, Manuscript shall prevail if there is any divergence between Publication and Manuscript.