**Checklist for battery-related manuscripts submitted to**

**Journal of Power Sources /** **Journal of Power Sources Advances**

When submitting a manuscript to *Journal of Power Sources* or *Journal of Power Sources Advances* dealing with any type of battery, authors are requested to include the following checklist as supplemental information.

Please, confirm that each information in Table 1 is present in the manuscript by checking the corresponding box.

|  |  |
| --- | --- |
| **Table 1. Information Checklist** | |
| **Electrodes and Cells** | |
| Cell type and configuration |  |
| Electrodes’ geometry and size |  |
| Description of electrode preparation (including post-coating treatments such as compression/calendering) |  |
| Electrode’s active material areal mass loading (or areal capacity) |  |
| Composition of the electrodes including supplier and purity of pursued components |  |
| Apparent electrode density (calculated as the ratio of areal mass loading and thickness) |  |
| Current collector type and thickness (if not flat, also weight) |  |
| Separator type & thickness |  |
| Electrolyte composition and volume/weight used in the cell |  |
| Ratio of N/P capacities (for full cells only) |  |
| Areal capacity of the counter electrode (for half cells only) |  |
| Electrolyte/Sulfur (E/S) weight ratio (for Li-S batteries only) |  |
| Thickness and carbon mass loading of the air electrode (for metal air batteries only) |  |
| **Electrochemical testing** | |
| Testing temperature |  |
| Voltage (or potential) range |  |
| Theoretical capacity and specified C-rate |  |
| Charge / discharge program (CC, CV, combination) |  |
| C-rate for each electrochemical measurement |  |
| Initial electrochemical profile |  |
| Cycling performance |  |
| Coulombic efficiency associated with cycling data |  |
| **Additional checklist for redox flow batteries** | |
| Active material concentration in anolyte and catholyte |  |
| Electrode material (e.g., carbon felt, metal mesh) and thickness |  |
| Flow field type, if any |  |
| Anolyte / catholyte flow rate |  |
| Active material solubility limits (both redox forms) for anolyte and catholyte |  |

Please, indicate in Table 2 the electrochemical data reported in the manuscript by checking the corresponding box.

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Table 2. Performance Reporting** | | | | | | | | | | | | |
| **Cell type** | | Coin cell |  | | Pouch cell | | | |  | | Other |  |
| **Cell configuration** | | 2-electrode cell | | | |  | | 3-electrode cell | | | |  |
| **Mass loading of active material** |  | Coin cell | | Pouch cell | | | | | | Other | | |
| <2 mg cm-2 |  | |  | | | | | |  | | |
| 2-5 mg cm-2 |  | |  | | | | | |  | | |
| 5-8 mg cm-2 |  | |  | | | | | |  | | |
| >8 mg cm-2 |  | |  | | | | | |  | | |
| **Number of cycles at ≤1C** |  | Metal anode/battery  (incl. half cells) | | | | | Full cell | | | | | |
| <50 |  | | | | |  | | | | | |
| 50-200 |  | | | | |  | | | | | |
| >200 |  | | | | |  | | | | | |
| **Number of cycles at >1C** |  | Metal anode/battery  (incl. half cells) | | | | | Full cell | | | | | |
| <100 |  | | | | |  | | | | | |
| 100-300 |  | | | | |  | | | | | |
| 300-500 |  | | | | |  | | | | | |
| >500 |  | | | | |  | | | | | |

If you answered with NA to any request, please, explain the reason below:

**References:**

J. Li *et al*, *Good practice guide for papers on batteries for the Journal of Power Sources*, Journal of Power Sources 452 (2020) 227824. DOI: [10.1016/j.jpowsour.2020.227824](https://www.sciencedirect.com/science/article/pii/S0378775320301270)

A.K. Stephan, *Standardized Battery Reporting Guidelines*, Joule 5, (2021) 1-2. DOI: [10.1016/j.joule.2020.12.026](https://www.cell.com/joule/pdf/S2542-4351(20)30625-5.pdf)