

Technical editorial recommendations: Checklist

- 1) No acronyms (except chemical symbols) should be present in titles, unless they are very popular (e.g., XPS). Titles are read not only by specialists, but they are accessible to the whole scientific community. They should be understandable to everybody. Please write any acronym in full without repeating the acronym in brackets.
- 2) Please remove citation numbers in the abstract. Abstracts appear separate from the text in Chemical Abstracts and other databases. Citation numbers in Abstracts are useless. If strictly necessary, please provide full citations .
- 3) References should be cited in the text in square brackets [xx] NOT as superscripts.
- 4) Citation of several consecutive references should be [1-4], NOT [1,2,3,4]. Citation of two consecutive references should be [1,2], NOT [1-2].
- 5) The main section of manuscripts should be numbered 1., 2., 3., etc. Sub-sections should be numbered 2.1., 2.2., 2.2.1, 2.2.2., etc.
- 6) The main sections of manuscripts should typically be: 1. Introduction, 2. Experimental, 3. Results and Discussion, 4. Conclusions. Theory or Computations or similar may be included in case of theoretical sections.
- 7) References in the list should be reported according to the following format:
[1] R. Kotz, M. Carlen, Principles and applications of electrochemical capacitors, *Electrochim. Acta* 45 (2000) 2483.
For books and chapters see the on-line “Guide to Authors”.
- 8) References with “et al.” instead of some Authors’ names are not acceptable. Please write down the names of all Authors.
- 9) Multiple references under the same number in the reference list is not in the style of this Journal. Please, give a different number to each separate reference.
- 10) Footnotes should not be confused with references. Footnotes should not be placed in the reference list numbered sequentially with reference. Footnotes to the text should be placed to the bottom of the page where they are introduced. References should be renumbered accordingly.
- 11) Labels of graphs and headings of Tables
As a general rule, axes for graphs and headings for tables should be given in quantity calculus form, e.g., time as t/s, current as I/mA (i.e., quantity/units).
In case of two or more units, units should be separated by a space (NOT by a dot), e.g., current density, j/mA cm⁻², NOT j/mA.cm⁻², NOR j/mAcm⁻².
In particular, for logarithmic quantities, e.g., log (j/mA cm⁻²).
Please use ½, NOT 0.5 as an exponent.
Composition: e.g., mol% AB, at% Fe, wt% CD, vol% XY. Otherwise, use parenthesis, e.g., Fe content (wt%), AB in mixture (mol%). Use slash / for units only, therefore, e.g., Absorbance/a.u. (i.e., arbitrary units).
Similarly, dec is not a unit. Therefore, for Tafel slopes b/mV (or V) (NOT mV dec⁻¹).
- 12) Units
Authors should use SI units wherever possible and when these are not used should provide a conversion factor to SI units.
Please always convert Å to nm.
In labels of graphs and in column headings of Tables, M should not be used as the symbol of the units of concentration. The recommended units are mol dm⁻³ (preferable to mol l⁻¹). Therefore, concentration/mol dm⁻³, NOT concentration/M. But in the text or captions the form ...0.5M HCl solution... may be used. This is also the case for the indication of half cells, e.g.: Ag/AgCl/3M KCl, even in labels.

13) Most common symbols.

E, potential;
 η , overpotential;
I, current;
j, current density (per unit surface);
i, specific current (per unit mass);
 Z'' or $Z(\text{Im})$ or Z_{Im} , impedance imaginary part; Z' or $Z(\text{Re})$ or Z_{Re} , impedance real part;
c, concentration;
C, capacity;
f, frequency;
 ΔV , applied or output (cell) potential difference;
 ΔE , equilibrium (open circuit) (cell) potential difference;
Q, charge;
 σ , surface charge density;
q, charge density (per unit surface) or specific charge (per unit mass);
T, thermodynamic temperature (degree K)
t, Celsius temperature
t, time

14) Nomenclature.

The term “voltage” is not recommended in electrochemistry (it is scientific slang). In case it is referred to the whole cell, please use “applied or output potential difference” for electrolyzers or power sources, respectively. Alternatively, “cell potential (difference)” may be used in case of power sources. In case it is referred to the electrode potential, see next point.

15) Electrode potentials (Figures and Tables).

The reference electrode should always be indicated. E.g., E vs SCE/V or E vs (Ag/AgCl)/V or E vs (Li/Li⁺)/V, etc., NOT E/V vs. SCE

Please use SHE, NOT NHE, for the standard hydrogen electrode, and RHE for the reversible hydrogen electrode. The nature of the reference electrode should be specified in the “Experimental” section. If different from SHE, its value vs. SHE should possibly be indicated.

16) Although Tables of nomenclature and/or symbols have been a praxis thus far in theory-oriented papers, Authors are kindly recommended to POSSIBLY leave similar tables out. Symbols and quantities should be clearly defined in the text the first time they are introduced. If strictly necessary to have a Table, please keep its length at a minimum by avoiding to include obvious and popular items such as T temperature, E potential, F Faraday constant, etc. Behind such an editorial policy, there is not simply a banal reason of space, but a strategy aiming at avoiding that widespread exhibition of Tables with different “personal” symbols for the same quantity could spoil the efforts of IUPAC to uniformity based on pondered logical recommendations.

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