

Instructions for Authors

1 Preparation of Manuscripts

- 1.1 Manuscripts must be typewritten, double-spaced copy (one side only) on A 4 paper with Times Roman and Symbol fonts. If a printer is used, its output must be of high quality. Authors should make certain that copies of the manuscript are clearly reproduced.
- 1.2 The title of the paper, the names of the authors, and the place(s) where the work was done, including the complete address(es), should be written on the first page. The names of the authors should be written in the order of first name, middle initial(s), and surname, with an asterisk indicating the contact person. The abstract (100-200 words for *Articles*, *Technological Reports*, *Comprehensive Papers*, and *Reviews*; and 50-100 words for *Notes* and *Communications*), keywords (no more than four, with each keyword containing no more than three words), text, references, tables, figure captions, and figures should follow the first page in this order.
- 1.3 The text usually consists of the Introduction, Experiment, Results, Discussion (or Results and Discussion), and Conclusion (may vary).
- 1.4 Acknowledgments should be placed at the end of the text.
- 1.5 References to the literature and all notes should be numbered in one consecutive series by using parenthesized superscript numbers corresponding to the original references. When a comma, period (full stop), colon, or semicolon follows the word with the parenthesized reference number, it should be placed between the word and the number. Literature references and notes should be arranged and punctuated as shown in **Appendix 1**. The names of the journals in the literature should be abbreviated as in *Chemical Abstracts*.
- 1.6 Each table should be prepared on a separate paper. As the table may need to be reduced or reprepared to fit a one- or two-column format (86 mm or 176 mm width) on the journal page, its structure and layout should be arranged properly (see **Appendix 2**).
- 1.7 Figures and photographs must fit a one- or two-column format (86 mm or 176 mm width) on the journal page, and hence the figures and photographs should be submitted in the actual size and on a separate paper (see **Appendix 3**). Figure captions should be arranged on a separate paper. High-contrast positive prints in the actual size with two high-quality copies should be submitted as photographs. A scale bar should be included in an appropriate place in the case of microscopic photographs.
- 1.8 Color is available for figures and photographs. An additional charge to cover the cost of color printing will be required. The author may ask the editorial office to estimate the exact charge.
- 1.9 The file size of one e-mail, to which a PDF file of the complete set of the manuscript including tables, figures and/or pictures is attached, should be no more than 50 MB when the manuscript is submitted via e-mail. The corresponding author's name, operating system, and software with version number should be specified in the document of the e-mail.
- 1.10 The number of pages in the printed form should be roughly evaluated by layout formatting, and it should not exceed three for *Notes* and *Communications*. A template of MS-Word® documents is available for layout formatting via our Web site (<http://edit.electrochem.jp>).

2 Miscellaneous

- 2.1 A subtitle may follow the main title with a colon. A sequential number in Roman numerals should follow the main title when a common main title is used in a series of consecutive reports. The use of "Study on" is not recommended as a title.
- 2.2 The first letter of the first name and all the letters of the surname are capitalized.
- 2.3 When the work was done in more than one place, labeling using lower-case letters in alphabetical order from "a" should be marked as a superscript on the right side of the concerned author's name and on the left side of the place where the work was done. When the present affiliation of the author(s) is different from the place where the work was done, the address should be preceded by the words "Present address".
- 2.4 The following systematic headline numbers may be used. *e.g.*, 1, 1.1, 1.1.1, (1), (a) and so on.
- 2.5 Mathematical expressions and chemical structures will be treated as symbols in the printing. The usage of chemical structures is not recommended in the text and in the titles of figures and tables.
- 2.6 The nomenclature of the chemicals should follow the IUPAC rules: *Nomenclature of Inorganic Chemistry*, Butterworths, London (1971); and *Nomenclature of Organic Chemistry*, Sections A, B, C, D, E, F & H, 1979 Ed., Pergamon Press, Oxford (1979).
- 2.7 Terminology, symbols, units, and quantities should follow the IUPAC rules: I. Mills, T. Cvitas, K. Homann, N. Kallay, and K. Kuchitsu, *Quantities, Unit and Symbols in Physical Chemistry*, Blackwell Publications, Oxford (1988); *Manual of Symbols and Terminology for Physicochemical Quantities and Units*, *Pure Appl. Chem.*, 51, 1 (1979); and *Appendix III - Electrochemical Nomenclature*, *Pure Appl. Chem.*, 37, 499 (1974).
- 2.8
angstrom 1 Å 10⁻¹⁰ m

ton	1 t = Mg = 10 ³ kg
liter	1 l, L = dm ³ = 10 ⁻³ m ³
atmosphere	1 atm = 101325 Pa
torr	1 Torr = 133.322 Pa
calorie (thermochemical)	1 cal _{th} = 4.184 J
curie	1 Ci = 3.7 × 10 ¹⁰ Bq = 3.7 × 10 ¹⁰ s ⁻¹
kilowatt-hour	1 kWh = 3.6 × 10 ⁶ J
poise	1 P = 10 ⁻¹ Pa s = 10 ⁻¹ kg m ⁻¹ s ⁻¹
stokes	1 St = 10 ⁻⁴ m ² s ⁻¹
electron-volt	1 eV (= e × V) = 1.60218 × 10 ⁻¹⁹ J

Metric units (SI) should be used for all quantities except for the following units. For the other units, their conversion to the SI units should be described in the text.

Minute (min), hour (h), day (day), and angle (° ,',") may be used.

2.9 The electrochemical potential, if SCE is used as standard, should be described as $E = -0.24$ V vs. SCE.

2.10 Mathematical expressions and chemical equations should be numbered in one consecutive series with parenthesized numbers. Fractional expressions in the text should be described as a/b and (a+b)/(c+d). Doubled superscript and subscript should be avoided.

3 Submission of Final Version of Manuscripts

3.1 Upon acceptance of the manuscript for publication, authors will be requested to submit the final version of the manuscript on a 3.5-in. diskette with its hard copy.

3.2 The corresponding author's name, manuscript number, operating system, and software with version number should be labeled on the diskette. The diskette will not be returned.

3.3 The insertion of figures, tables, and special letters such as italic, bold, superscript, and subscript should be marked in red in the hard copy of the final version of the manuscript.

3.4 If the author does not provide the manuscript on a diskette, input of the manuscript for printing is requested to be charged to the author.

4 Proofs and Reprints

4.1 The author will receive the proofs which he or she is requested to correct and return. No revision, insertion, or deletion of words, except printed mistakes, will

be accepted. The corrected proofs must be returned within 48 hours by express mail.

4.2 The reprint order form should be completed and returned with the corrected proofs.

4.3 The number of pages printed with 10 point Times in the journal can be estimated by the following:

Text: two columns on a page, with each column having a 68 mm width and containing 60 lines. Figures, tables, and photographs: Each has a one- or two-column width.

Appendix 1 (examples for a list of references)

- 1) K. Ueno and M. Seo, *Denki Kagaku* (presently *Electrochemistry*), **66**, 713 (1998).
- 2) S. Abe, A. Fuchigami, and T. Nonaka, *Chem. Lett.*, **1983**, 1033.
- 3) L. R. Faulkner, *Chem. Eng. News*, 1984, February 27, p.28.
- 4) R. W. Murray, *Acc. Chem. Res.*, **13**, 135 (1980) and references cited therein.
- 5) A. J. Bard and L. R. Faulkner, *Electrochemical Methods, Fundamentals and Applications*, John Wiley and Sons, New York, NY, p.214 (1980).
- 6) S. Trasatti, *Comprehensive Treatise of Electrochemistry* (Eds. J. O' M. Bockris, B. E. Conway, and Y. Yeager), Vol. 1, Plenum Press, New York, NY, p. 44 (1980).
- 7) K. M. Mess, Ph. D. Thesis, University of Leiden, Leiden, The Netherlands (1969).
- 8) H. F. Lockwood, *U. S. Patent*, 3759835 (1965); *Chem. Abstr.*, **73**, 46241q (1970).
- 9) *Selected Values of Chemical Thermodynamic Properties, National Bureau of Standards Circular 500*, U. S. Government Printing Office, Washington, D. C. (1950).
- 10) L. Roe, AEC Report 66-170, Los Altos, CA, February (1964).
- 11) These compounds were analyzed by gas chromatography (column packing: Apiezon Grease L; temperature: 120°C).
- 12) J. Robinson, G. E. Thompson, and K. Shimizu, *Oxide Films on Metals and Alloys VII* (Eds. K. R. Hebert and G. E. Thompson), PV 94-25, p.1, *The Electrochemical Society Proceedings Series*, Pennington, NJ (1994).

Appendix 2 (example for table)

Table 2 Comparison of kinetic parameters for oxygen electrode reaction and the double layer capacitance obtained by different techniques in Au/(43 mol % Li+57 mol % K) carbonate (650 °C), $P(O_2)/P(CO_2)=0.9/0.1$.

Methods	Parameters ^{a)}				
	$i_0/\text{mA cm}^{-2}$	$\theta/\Omega \text{ cm}^2$	$C_d/\mu\text{F cm}^{-2}$	$\sigma/\Omega \text{ cm}^2 \text{ s}^{1/2}$	$\alpha_c/\text{b)}$
AC impedance	38.5	1.03	114	146	
Coulostatic relaxation	26.9	1.48	111		
Potential step	9.55				0.56

a) Calculated with $\eta=2$. b) Apparent cathodic transfer coefficient. $\alpha_c=(F/RT) \{d \ln(|I_c|)/dE\}$

Appendix 3 (example for figure)

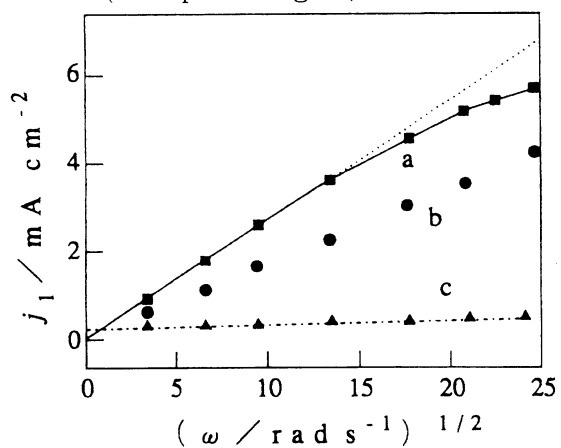


Fig. 1 Dependence of the limiting current density on the rotation rate of the RDEs for the oxidation of hexacyanoferrate(II). Solution : $0.5 \text{ mmol dm}^{-3} \text{ K}_3\text{Fe}(\text{CN})_6$ + $0.5 \text{ mol dm}^{-3} \text{ KCl}$ aqueous solution. $E = 0.4 \text{ V}$ vs. SCE, (a) bare glassy carbon electrode, (b) glassy carbon electrode coated with polymer A, (c) glassy carbon electrode coated with polymer B.