THE ETHICS OF SCIENTIFIC WRITING: HOW TO WRITE AND HOW NOT TO WRITE A PAPER

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University of Washington
Biological Futures in a Globalization World colloquium series
May 7, 2012
Publications

- Spreading of knowledge: oral & written communications
- Evaluation of a scientist
- Promotion of a scientist: scientific achievements

Publish or Perish?
The Ethics of Scientific Writing: The Good and the Bad

Ethics in publication is of paramount importance, and has become more of an issue for editors in recent years, particularly with the advent of the electronic age.
Plagiarism?

Use of others’ published and unpublished ideas or words (or other intellectual property) without attribution or permission, and presenting them as new and original rather than derived from an existing source.

Self-plagiarism refers to the practice of an author using portions of his or her previous writings on the same topic in another article, without specifically quoting or citing the self-plagiarized material.
Conflicts of Interest (Author)

• Conflicts may be financial, academic, commercial, political or personal. Financial interests may include employment, research funding (received or pending), stock or share ownership, patents, payment for lectures or travel, consultancies, non financial support, or any fiduciary interest in a company.

• Authors should declare all such interests (or their absence) in writing upon submission
How to structure a paper to tell your story

Some do’s and don’t’s
Take advantage of peer review

Self-plagiarism
Duplication
Plagiarism
Fabrication
Fraud
Reviewer responsibility
The editors are very pleased to announce that *Talanta* has been experiencing and increase in the number of papers submitted to the journal. This steady increase in submissions will require the journal to become more strict in its editorial policy and to reject papers that do not closely fit the journal’s aims and scope. To this effect, authors are encouraged to carefully read the aims and scope of the journal, and to consider the following criteria before submitting a paper to *Talanta*.

*Talanta* provides a forum for fundamental studies and original research dealing with all branches of pure and applied analytical chemistry.

**Classical analytical techniques** such as volumetric titrations, UV-visible spectrophotometry (including derivative spectrophotometry), voltammetric techniques, and so forth, are considered as routine analytical methods, and manuscripts dealing with these methods should be submitted for publication only if substantial improvement over existing official or standard procedures is clearly demonstrated. New reagents should demonstrate clear advantages, and their presentation should be comprehensive, rather than generating a series of similar papers.

Solvent extraction methods are well established, and new methods should demonstrate improvements in waste generation, non-hazardous material substitutes, and ease of use (automation).

Application of an original method to real matrices is encouraged, provided that it is properly validated following recommendations of official institutions. The developed method should especially comprise information on selectivity, sensitivity, detection limits, accuracy, reliability and speciation capabilities (e.g., in the case of trace metal analysis). Proper statistical treatment of the data should be provided.

**Application** of classical analytical approaches such as polarography, voltammetry (pulsed), UV-visible spectrophotometry (and derivative), and fluorimetry to relatively simple matrices having no major interference, such as drug formulations or reconstituted samples, are discouraged unless considerable improvements over other methods in the literature (time saving, accuracy, precision, cleaner chemistry, automation) are highlighted.

Papers dealing with analytical data such as stability constants, $pK_a$ values, etc. should be published in more specific journals, unless novel analytical methodology is demonstrated, or important analytical data are provided which could be useful in the development of analytical procedures.

*Gary D. Christian*
*Jean-Michel Kauffmann*
*Editors-in-Chief*
*April, 1998*
"If that's the way he feels about chemistry, there's no harm done."
Abstract

• Be brief and to the point

• Give principle of the method

• Include a summary of important data/results
  • Figures of merit
  • Range of measurement
  • Detection limit
  • Precision
  • Samples analyzed

This is NOT an introduction to justify the work
Just a summary of your study
Introduction

• The first sentence is the hardest to write
• Tell a story
• Why is this work important?
• What problem is being addressed?
• What has been done in the past?
• Give relevant references
• How does this advance the state-of-the art?
• Don’t say work of prior authors is no good.
• What have you done (what are you reporting?)
Experimental

Provide enough information for someone else to repeat your work:

Chemicals
Instrumentation
Procedures

Cite appropriate references for prior details
Results and Discussion

• This is the meat of your report

• Be succinct and clear

• Give the basis for your method
  - often nothing is said why a new reagent was selected or studied, although it works
  - why did you think it would work?

• Organize by topics

• Use tables and figures to summarize or illustrate results and conclusions
Figures

• A picture is as good as a thousand words

• Use straight lines sparingly

• Least squares lines, and $r^2$ values

• Don’t use too many figures

• Combine info in one figure when appropriate
  - may make comparisons easier
Tables

- Don’t put in too much data
- Only that needed to repeat the experiment and to verify/report results
- Significant figures!
- Statistics - standard deviation, t-test
Conclusions

Don’t just repeat abstract

Often not needed
Editors rely on reviewers to provide expert advice.

Most of you will review or have reviewed papers.

While you may say I would never engage in unethical behavior, others do. And it is easy to slip up yourself on self plagiarism. I will give an example of a distinguished scientist.

In this digital age, it is easy for unethical or lazy authors to copy other works, of theirs or of others.
Editors ask reviewers to check for prior similar work.

Some do and some don’t.

**Talanta instructions to reviewer:**

In order to assure the novelty of the work, I would appreciate, if readily done, that you check the author's prior related publications, besides the usual evaluation with respect to the work of others. Databases such as SciFinder Scholar, ScienceDirect, Scopus or Scirus (a free search engine), could aid you in this search.
A shallow review is usually not much help to the editor.

I will give examples where reviewers have been key in keeping out marginal or duplicative manuscripts.

And others where they have not.
Some examples
Give the rationale for your work

Don’t ignore that of others

Don’t ignore your own

Authors deliberately don’t a cite competitor’s work

Hope reviewers don’t find out is competition

May also neglect to mention own work. Only one reason: the work is similar to a previous publication.

This is self-plagiarism!
__X__ Reject

Comments:

…It is written in a straightforward way, but the shortcomings of the paper lead to a clear recommendation of rejection. It is not clear the justification of the rationale for the work. Why are more extraction methods needed for the analysis of these substances in tissues? What technical problems or issues does this research paper address?

The authors have disregarded the extensive research work spent on the extraction of the actual compounds from tissues that have been carried out during the recent decades…. 
Don’t repeat your own work
Preconcentration is subject of many researches in analytical chemistry and 8-hydroxyquinoline is frequently used in analytical chemistry either for liquid-liquid or solid-phase extraction. This manuscript described a new synthetic pathway and characterized 8-hydroxyquinoline immobilized silica gel with $^{13}$CPMAS NMR and DRIFT spectroscopy. In addition, the optimum operating conditions for preconcentration of trace metals in river water were examined in somewhat detail. The manuscript should be published in TALANTA. However, the manuscript should be shortened and a major revision is needed. In addition, the authors published a quite similar paper in xxxx, 374, 554-560. So the significance of this manuscript is weak.
The submitted paper focuses on the detection of catechol derivatives using a laccase modified electrode. The work is similar to several other papers from this group. The appears to be hastily put together both from the perspective of how it is written and from the depth of the science. Therefore, because of the lack of novelty and the difficulty the reader has in understanding the manuscript, this referee cannot recommend publication at this time. Some specific comments are:
TAL-D-07-00095
Extractive spectrophotometric determination of tungsten(VI) as its 6-chloro-3-hydroxy-2-(2'-thienyl)-4-oxo-4H-1-benzopyran complex

NOT REFERENCED:
A sensitive and selective extractive spectrophotometric determination of tungsten(VI) using 6-chloro-3-hydroxy-2-(4′-methoxyphenyl)-4-oxo-4H-1-benzopyran

3-Hydroxy-2-(4′-methoxyphenyl)-4-oxo-4H-1-benzopyran as an analytical reagent for the spectrophotometric determination of tungsten(VI)
The Bad
Publish and Perish
Don’t Duplicate


Formaldehyde paper

<aniline

Aniline paper
Fig. 4. Derivative cyclic voltammograms: $1.0 \times 10^{-1}$ mol/L aniline; 0.0010 mol/L HCl; 0.0030 mol/L NaNO$_2$; 0.0025 mol/L Na$_2$SO$_4$; 0.0060% HCHO; 0.0060% Triton X-100; scan rate of 100 mV/s; (a) First scan; (b) Second and repetitive scans.

Fig. 5. Derivative cyclic voltammograms: pH 5.7; $1.0 \times 10^{-3}$ M formaldehyde; $2.0 \times 10^{-5}$ M DNP; 0.010 M NaCl; 0.0016% Tween-80; scan rate of 100 mV s$^{-1}$; (a) First scan; (b) Second and repetitive scans.
A novel potentiometric diptheria immunosensor modified colloidal Ag and polyvinyl butyral as matrixes

Chong Qing Key Laboratory of Analytical Chemistry, College of Chemistry and Chemical Engineering, Southwest China Normal University, Chongqing 400715, China

Received 26 February 2004; Revised 11 April 2004; accepted 22 April 2004. Available online 19 June 2004.

Preparation and application on a kind of immobilization method of anti-diptheria for potentiometric immunosensor modified colloidal Au and polyvinyl butyral as matrixes

Chong Qing Key Laboratory of Analytical Chemistry, College of Chemistry and Chemical Engineering, Southwest China Normal University, Chongqing 400715, China

Fig. 7. The reproducibility (a) and life time (b) of the immunosensor to 40 ng mL\(^{-1}\) diphtheria antigen.

Fig. 9. The reproducibility (a) and life time (b) of the immunosensor to 48.6 ng mL\(^{-1}\) diphtheria antigen.
Fig. 4: Effect of experimental parameters on potentiometric response. (a) steady-state potentiometric response of immunosensor made of Au nanoparticles in the presence of 48 ng mL$^{-1}$ Diph, (b) effect of the amount of immobilized anti-Diph loading within the matrix of Au nanoparticles. (c) effect of pH on the potentiometric response of the immunosensor.
Fig. 2. The electrochemical impedance spectroscopy (EIS) of the different electrodes: (a) a bare platinum electrode, (b) Ag-modified platinum electrode, (c) Ag-PVB-modified platinum electrode, and (d) anti-Diph-Ag-PVB-modified platinum electrode. Supporting electrolyte, 10 mM PBS (pH 7.0) + 0.1 M KCl + 2.5 mM Fe(CN)₆⁴⁻/Fe(CN)₆³⁻ solution. Z vs. Z' at 220 mV vs. SCE.

Fig. 4. The electrochemical impedance spectroscopy of the different electrodes: (a) a bare platinum electrode, (b) Au-modified platinum electrode, (c) anti-Diph-Au-PVB-modified platinum electrode and (d) Au-PVB-modified platinum electrode. Supporting electrolyte, 10 mM PBS (pH 7.0) + 0.1 M KCl + 2.5 mM Fe(CN)₆⁴⁻/Fe(CN)₆³⁻ solution. Z vs. Z' at 220 mV vs. SCE.
TAL-D-06-01470
“Kinetic - Photometric Determination of Silver (I) based on its Catalytic Effect on Ligand Exchange Reaction between Potassium Ferrocyanide and 2-hydroxy-4-Methoxybenzophenone thiosemicarbazone”

XXX 48, 733 (2003)
“Kinetic Photometric Determination of Silver(I) Based on its Catalytic Effect on Reaction Between Potassium Ferrocyanide and 2-Hydroxy-4-Methoxybenzophenone Thiosemicarbazone”
Don’t Self Plagiarize
Breslow Paper In JACS Questioned

Critics cite similarities between Perspective and two previously published papers

The *Journal of the American Chemical Society* and ACS are investigating allegations of self-plagiarism leveled against Columbia University chemistry professor Ronald Breslow. ... At this time, the paper has been removed from the *JACS* website.

Breslow is a titan in the chemistry enterprise and a major figure at ACS. He served as the society’s president in 1996 and was the recipient of the society’s highest award, the Priestley Medal, in 1999. He is a member of the National Academy of Sciences and a recipient of the National Medal of Science (1991).
The paper in question is a *JACS* Perspective entitled “Evidence for the Likely Origin of Homochirality in Amino Acids, Sugars, and Nucleosides on Prebiotic Earth.”

Breslow had published on the same subject in *Tetrahedron Letters* in 2010.

… was identical in large part to a review Breslow had published in 2011 in the *Israel Journal of Chemistry.*
UPDATE: On April 28 via e-mail, Breslow responded to C&EN’s request for comment:

“The Perspective was requested by the editor of *JACS*, and I decided to accept the invitation since I thought the work definitely deserved *JACS* publication,” Breslow wrote. “However, I had written two reviews before in other journals, so I was concerned to avoid self-plagiarism. I knew that figures should not be duplicated, so I redid them and, of course, used a new title and introduction, and a new sequence of presentation, but then I am afraid I fell in love with my own words previously used—after all it was the same material being discussed—and did not make enough effort to change them.

....

repetition of so much was certainly an error, so I understand why the Perspective needs to be withdrawn.”
I think there is no originality in this work. My opinion is that the authors often change journals to increase the number of their papers. I compare this report to some papers found in Science Direct: ........

...........There are many similarities with this manuscript. The titles and keywords are mixed to have the same objective. Different paragraphs are not original.....
Don’t send the same work to two different journals!!
Dear Paul,

I feel I have to ask you for advice in regard to the paper you recently sent me to referee it.

Recently I received by chance two paper for refereeing which are from the same authors and on a similar topic:

A miniaturised fluorescence detector using a light emitting diode as excitation source and a windowless flow cell by xxx

and

MS. No. S02221, submitted to Talanta:
Light-emitting-diode-induced fluorescence detector for capillary electrophoresis using optical fibre with spherical end by xxx

...If I refereed each paper separately WITHOUT the knowledge of the other, my recommendations would be most likely for a minor and a major change respectively.
I have received one review on this paper which recommends rejection (review attached). Whilst awaiting the second review I noticed a paper by the same authors which had recently been published:

Determination of trace lead, cadmium and mercury by on-line column enrichment followed by RP-HPLC as metal-tetra-(4-bromophenyl)-porphyrin chelates. xxx Talanta xx (200x) xxx-xxx

I have compared the Talanta paper with the manuscript submitted to Analytica Chimica Acta and I was astounded to see that they are virtually identical. It therefore appears that the authors have submitted the same work to two journals and were prepared to see it published in both. If true, this is an outrageous and totally unacceptable action.
Prof. W. Fresenius
Fresenius’ Journal of Analytical Chemistry
Institut Fresenius
Postfach 12 61
65220 Taunusstein, Germany

Dear Prof. Fresenius:

Enclosed is my initial review of the paper by Huang et al. entitled

"The Determination of Trace Tetracycline by Spectrofluorimetry of Eu-
Tetracycline-Acetylacetone-Cetyltrimethyl Ammonium Bromide"

My assessment is that improvement in sensitivity over conventional methods is achieved as a result of adding the surfactant, but some details are lacking.

However, at the time I received the manuscript for review, I received a very similar manuscript from the same authors, submitted for publication in Talanta, entitled

"The Determination of Trace Tetracycline by Fluorescence Spectrophotometry of Eu-Tetracycline-Cetyltrimethyl Ammonium Bromide"

A copy is enclosed for your information. The only change in the one submitted to you is the addition of the reagent acetylacetone. The figures are virtually identical, with only an incremental increase in the sensitivity; most of the increase is due to the CTAB surfactant. The authors obviously conducted these studies in parallel with the idea of generating two papers. They should have presented only the completed study with the acetylacetone.

Because of the manner in which they have presented these two manuscripts, I am recommendin that neither be published. While we were about to submit the Talanta manuscript for review, I decided not to proceed after receiving the Fresenius’ Z. Anal. Chem. manuscript for review, and am returning it to the authors. I will be interested in learning of your disposition of the manuscript.

Please let me know if I can assist any further in this matter.

Sincerely,

Gary D. Christian
Professor
Dear Dr. Christian,
In the course of seeking reviewers, a reviewer reported to us that the following manuscript may be under consideration for Talanta:
"Development and validation of ultrafast UPLC and monolithic HPLC methods for the determination of principal flavor compounds in Vanilla planifolia: A comparative study." Authors: xxx

Yes, we have this under review. Reviewer discovered parts plagiarized from another author.
Don’t plagiarize
...the experimental designs seem to have been largely taken from a paper that is not cited (Garris et al., 2004, J Neurosci Methods, 140:103-114). **Even worse, it appears that entire text was simply lifted from the published work, e.g.,:**

"**Although too large for attaching to a rat, the size of the remote unit expedited circuit construction, modification and testing**" (Garris)
"**As the unit** was too large for attaching to a rat, the size of the remote unit expedited circuit construction, modification and testing"
(submitted manuscript)

"**A 14.7456MHz crystal enables an ADC rate of 100 KS/s and 460 Kbaud serial communication with the third component of the remote unit, telemetry.**" (Garris)
"**14.7456 MHz crystal enables an ADC rate of 100 KS/s and 460 Kbaud serial communications with the third component of the moving unit, telemetry**" (submitted manuscript)
Coated graphite-epoxy ion-selective electrode for the determination of chromium(III) in oxalic medium

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b National Organization For Drug Control & Research, Giza, P.O. Box 29, Cairo, Egypt, Saudi Arabia
c Faculty of Pharmacy, King Saud Univeristy, Riyadh, Saudi Arabia

Received 25 June 2003; received in revised form 7 October 2003; accepted 31 October 2003


COATED GRAPHITE-EPOXY ION-SELECTIVE ELECTRODE FOR THE DETERMINATION OF IRON(III) IN OXALIC MEDIUM

KEY WORDS: iron(III) ion-selective electrode, coated graphite-epoxy conductor electrode, potentiometry, PVC.

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Laboratório de Química Analítica, Departamento de Química, Centro de Ciências Exatas e de Tecnologia, Universidade Federal de São Carlos, Caixa Postal 676-13560-970-São Carlos-SP, Brazil.
Talanta

Abstract

A coated graphite-epoxy chromium(III) ion-selective electrode, based on the ion-pair between [Cr(oxalate)$_3$]$^{3-}$ anion and tricapryl methylammonium cation (Aliquat 336) in a poly(vinylchloride) (PVC) matrix is constructed. A thin membrane film of this ion-pair, dibutylphthalate (DBP) in PVC was deposited directly onto a Perspex$^R$ tube containing a graphite-epoxy conductor substrate attached to the end of a glass tube. The effect of membrane composition (ion-pair, DBP and PVC), oxalate concentration, pH and some cations and anions upon the electrode response is investigated. The electrode shows a linear anionic response to $E$ vs. log [Cr$^{3+}$] in the chromium(III) concentration range from $2.9 \times 10^{-6}$ to $10^{-2}$ mol l$^{-1}$, and a slope of $-18.7 \pm 0.5$ mV dec$^{-1}$, at pH working range of 2–8 and 0.3 mol l$^{-1}$ oxalate concentration. Variation in the potential of about $\pm 2$ mV was observed during a working day of 7–8 h. The response time was less than 5 s and the life time of this electrode was superior to 1 year (over 1500 determinations by each polymeric membrane), with a practical detection limit of $2.1 \times 10^{-6}$ mol l$^{-1}$. Application of this electrode for chromium(III) determination in some food materials and various types of plants is described.

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Keywords: Chromium(III) ion-selective electrode; Coated graphite-epoxy conductor electrode; Potentiometry; PVC

Analytical Letters

ABSTRACT

A coated graphite-epoxy iron(III) ion-selective electrode, based on the ion-pair between [Fe(oxalate)$_3$]$^{3-}$ anion and tricapryl methylammonium cation (Aliquat 336) in a poly(vinylchloride) (PVC) matrix is constructed. A thin membrane film of this ion-pair, dibutylphthalate (DBPh) in PVC was deposited directly onto a Perspex$^R$ tube containing a graphite-epoxy conductor substrate attached to the end of a glass tube. The effect of membrane composition (ion pair, DBPh and PVC), oxalate concentration, pH and some cations and anions upon the electrode response is investigated. The electrode shows a linear anionic response to $E$ vs. log[Fe$^{3+}$] in
1. Introduction

Since the development by Ross [1] of the first liquid membrane electrode sensitive to the calcium cation, much progress has been made. Moody et al. [2,3] replaced the thick layer of liquid exchanger material supported by a dialysis membrane (cellulose acetate) by a thin polymeric film of poly(vinylchloride) (PVC), thus significantly decreasing the high resistance and relatively long response of that electrode. Several electrodes were constructed for various cations, anions and organic compounds.

Analytical Letters

INTRODUCTION

Since the development by Ross\textsuperscript{1} of the first liquid membrane electrode sensitive to the calcium cation, much progress has been made. Moody and Thomas\textsuperscript{2,3} replaced the thick layer of liquid exchanger material supported by a dialysis membrane (cellulose acetate) by a thin polymeric film of poly(vinylchloride) (PVC), thus significantly decreasing the high resistance and relatively long response of that electrode. Several electrodes were constructed for various cations, anions and organic compounds.
Fig. 1. Effect of pH on the response of the chromium(III) ion-selective electrode for chromium(III) concentration of: • 1 x 10^{-3} and (□) 1 x 10^{-2} mol L^{-1} in 0.3 mol L^{-1} oxalate, at 25.0°C.

Figure 1: Effect of pH on the response of the iron (III) ion-selective electrode for iron (III) concentration of: • 1 x 10^{-3} and □ 1 x 10^{-2} mol L^{-1} in 0.3 mol L^{-1} oxalate, at 25.0°C.
Fig. 2: Effect of oxalate concentration on the calibration curves of the chromic(III) ion selective electrode: (Δ) 0.08, (○) 0.1 and (□) 0.3 mol L⁻¹, at pH 6.0 and 25 °C.

Figure 2: Effect of oxalate concentration on the calibration curves of the iron (III) ion selective electrode: △△△△: 0.08, ○○○○: 0.1 and □□□□: 0.3 mol L⁻¹, at pH 6.0 and 25 °C.
Fig. 3. Potentiometric selectivity coefficient values for chromium(III) ion-selective electrode ($\log K_{Cr,x}^{pot}$) in 0.3 mol/l oxalate solution, determined by separate methods\(^2\) at 1.0 x 10\(^{-4}\) mol/l concentration of interfering ions.

Figure 3: Potentiometric selectivity coefficient values for iron (III) ion-selective electrode ($\log K_{Fe,x}^{pot}$) in 0.3 mol/L oxalate solution, determined by separate methods\(^2\) at 1.0 x 10\(^{-4}\) mol/L concentration of interfering ions.
### Talanta

**Table 1**

Determination of chromium in some food materials using chromium(III) electrode compared with atomic absorption spectrophotometric method.

<table>
<thead>
<tr>
<th>Sample</th>
<th>Chromium (µg ml⁻¹)</th>
<th>Relative errors</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>AAS</td>
<td>Proposed sensor</td>
</tr>
<tr>
<td>Black pepper</td>
<td>53.8</td>
<td>54.8</td>
</tr>
<tr>
<td>Cocoa powder</td>
<td>53.1</td>
<td>52.3</td>
</tr>
<tr>
<td>Turmeric powder</td>
<td>53.6</td>
<td>52.4</td>
</tr>
<tr>
<td>(x)</td>
<td>53.6</td>
<td>53.2</td>
</tr>
<tr>
<td>(S^2)</td>
<td>0.1</td>
<td>1.9</td>
</tr>
</tbody>
</table>

\[ F = \frac{S^2_B}{S^2_A} = 1.9/0.1 = 19, \quad F_{0.01/3,3} = 29.5 \text{ (critical value)}. \]

### Analytical Letters

**Table 1.** Determination of iron in biotônico (Brazilian tonic formula) using iron(III) electrode compared with atomic absorption spectrophotometric method.

<table>
<thead>
<tr>
<th>Replicates</th>
<th>µg/ml of iron</th>
<th>Relative Errors</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>spectrophotometry</td>
<td>potentiometry</td>
</tr>
<tr>
<td>1</td>
<td>53.8</td>
<td>54.8</td>
</tr>
<tr>
<td>2</td>
<td>53.1</td>
<td>52.3</td>
</tr>
<tr>
<td>3</td>
<td>53.6</td>
<td>52.4</td>
</tr>
<tr>
<td>(x)</td>
<td>53.6</td>
<td>53.2</td>
</tr>
<tr>
<td>(S^2)</td>
<td>0.1</td>
<td>1.9</td>
</tr>
</tbody>
</table>

\[ F = \frac{S^2_B}{S^2_A} = 1.9/0.1 = 19 \]

\[ F_{0.01/3,3} = 29.5 \text{ (critical value)}. \]
Coated graphite-epoxy ion-selective electrode for the determination of chromium(III) in oxalic medium

S. Khalil\textsuperscript{a,\ast}, A.A. Wassel\textsuperscript{b}, F.F. Belal\textsuperscript{c}

Fig. 1. Effect of pH on the response of the chromium(III) ion-selective electrode for chromium(III) concentration of: (\textcircled\textbullet) $1 \times 10^{-3}$ and (\textsquare) $1 \times 10^{-2}$ mol/l\textsuperscript{-1} in 0.3 mol/l\textsuperscript{-1} oxalate, at 25.0°C.
RETRACTED: Matching pursuit-based approach for SNR improvement in ultrasonic NDT

Matching pursuit-based approach for SNR improvement in ultrasonic NDT

Available online 24 August 2005.

This article has been retracted at the request of the Editor-in-Chief and Publisher for violation of the publisher's policies.

Reason: This article is virtually identical to the previously published article: "Algorithm for SNR improvement in ultrasonic NDT", Independent Nondestructive Evaluation, Volume 38, Issue 3, 2006, Pages 163-168, authored by N. Mallat and Zhang.

Retracted articles are not removed from "the literature!
- They are replaced by a Retraction Note and a "Tombstone article"
- The reason of retraction will always be visible
RETRACTED: Oxidative damage of 14-3-3 zeta and gamma isoforms in Alzheimer’s disease and cerebral amyloid angiopathy *Neuroscience*, ....2007

This article has been retracted at the request of the editors and authors.

Reason: After publication of their paper, the authors increased the number of control cases .... in comparative spots ..... Differences were not significant between Alzheimer's disease (AD) (n=6) and age-matched controls (n=8)

......

Therefore, the present data do not indicate significant differences between control and AD cases regarding total 14-3-3 and oxidised 14-3-3 levels in total homogenates, and the conclusion made in this article is invalidated.
670 articles found as: retracted at the request of the Editor (all journals)

13 articles found as: retracted at the request of the Editor (Talanta)
Dear Dr. Huang:

Very serious allegations of plagiarism have been made against you for publishing without reference, studies by Kaneko et al (see attached). These allegations have been made to the Editors of Analytical Chemistry, Analitica Chimica Acta, Talanta and Chemistry Letters.

Such allegations, if not answered satisfactorily, will result in you being blacklisted by most of the world's major Analytical journals. I believe an answer to these charges is essential.

Sincerely yours,

Prof. G.G. Guilbault,
Executive Editor.
A Massive Case of Fraud:
Pattium Chiranjeevi
Ms. No.: ACA-07-746
Title: On-line Electrochemical Oxidation of As(III) for the determination of total As by Flow Injection-Solid Phase Spectrophotometry

The authors copied more than 95% of the work of Matsuoka et al which was published in December 2006 as a "hot" paper in Analytical Sciences. (Volume 22, pages 1519-1524).

Simply changed chromium to arsenic. The chromium reagent will not react with arsenic.
I received the very next day:

Sir, ….we found one related paper to our research,…
“Spectrophotometric determination of Fenitrothion…..
(Submitted September 5, 2006)

…The proposed reaction scheme is scientifically and experimentally not possible.

…author did not reply.
“…spectrophotometric determination of fenitrothion…”
*J. Hazardous Materials*, in press

Submitted October 8, 2006
Only minor change in purported reagent.

Abstract and all text *identical* to
“Spectrophotometric determination of fenitrothion…
Tables and figures identical,
only slight changes in numbers in tables.
Many other examples of similar duplication of papers by this author, sent to different journals. NONE cross referenced.
Papers submitted to Talanta, 2006:
9 submitted, 7 rejected (3 without review)
2 accepted

Papers submitted to Chemosphere:
6 submitted, 1 accepted 2005
5 rejected without review 2006

10 papers published, Env. Monit. Assess.

Papers accepted by J. Hazardous Mater.
5 published, 8 in press.
Editor received complaint of too many duplicated manuscripts, and wrote to author in Dec. 2006 he is pushing the limit of accepted scientific conduct.
Rejected Talanta paper:
“Cloud point extraction of palladium…”

Resubmitted to J. Hazardous Mater. 3 wks. later, but with 3 additional authors. Accepted.
70 papers published in three years.

25 different journals

27 coauthors in 15 papers
University allows only 6 students
56 coauthors on all papers

*Equipment not available!*
A Massive Case Of Fraud

Journal editors are left reeling as publishers move to rid their archives of scientist's falsified research

William G. Schulz
Chiranjeevi, who communicates through a wide variety of e-mail addresses, has not responded to multiple requests for comment by C&EN.

"Chiranjeevi claimed to be using advanced instrumentation not available at the university," the source says. "The chemistry in most of his papers is illogical—the chemistry itself is wrong."
Worse, "he was charging students a fee to award them degrees," the source says.

"He listed as many as 56 coauthors on his papers. There were complaints prior to the investigation, but nobody looked into it very seriously."

He says the university does not seem to have taken disciplinary action against any students who worked under Chiranjeevi's supervision, even though some of them were aware of and participated in the fraud he perpetrated.
"I hated seeing papers from this guy," says Gary D. Christian, who is editor-in-chief of the Elsevier analytical chemistry journal *Talanta*, one of the journals that published Chiranjeevi's research.

Christian, who is professor emeritus of chemistry at the University of Washington, Seattle, says Chiranjeevi's tactic was to flood journals with manuscript submissions in the hopes of wearing down editors who would eventually publish some of his work.
This time it’s chemistry’s turn. After a series of high-profile scientific misconduct cases in stem cell biology and physics, an Indian chemistry professor has been punished by his university for committing unethical practices involving what appear to be dozens of recent papers, including plagiarizing data in an article submitted last year to an analytical chemistry journal.

In the wake of the investigation, four Elsevier journals have retracted 13 papers written by Pattium Chiranjeevi, a professor of chemistry at Sri Venkateswara University (SVU) in Tirupati, India, and at least one other publication is reviewing pending submissions from Chiranjeevi or published articles he has written.
In an interview with Science, Chiranjeevi said that the charges against him are “baseless and not correct.”

He blames colleagues and journal editors for creating “this nuisance” and says that he plans to take action in an “international court of justice.”
The full scope of the falsified papers may never be known. Although the university has not said how many papers it examined, the summary concludes that “a large number of publications (66) in a short span of time, 2004–2007, without proper equipment, lead to the suspicion about the genuineness of the work.”

It cast further doubt on many of them, stating that the majority included co-authors whose involvement raised questions.
One of the biggest cases of scientific fraud in chemistry is continuing to send shockwaves across India, as concerns are raised over the senior academics who co-authored a plethora of discredited academic papers with researcher Pattium Chiranjeevi.
... attention has now turned to the researchers that put their names to nearly 45 of the suspect papers, who include the heads of the university's physics, mathematics, geology, and environmental sciences departments.
Shocking fraud
University sources allege that Chiranjeevi and his students combed old and obscure journals on the internet for papers to plagiarise. According to one, Chiranjeevi used to start his day by asking his students, 'Well, what have you downloaded today?'
Hosakere D Revanasiddappa, a chemistry professor at Mysore University, suspects that some of his own papers, which Chiranjeevi collected during a visit to his lab in 2003, might have kick-started the operation.

'I was shocked that Chiranjeevi's paper on selenium had large portions of text and tables copied from the paper he took from us,' he told Chemistry World.

Chiranjeevi also plagiarised another three of his papers by changing the names of metals, reagents and test specimens.
Meanwhile, Chiranjeevi says the case against him was fabricated and the enquiry committee one-sided. 'By April I will be ready to fight in the court,' he told *Chemistry World*. 'There is nothing to worry about.'
To:
Christian

From:
Pattium Chiranjeevi

I'd like to add you as a friend of mine on hi5. Click the button below to find out more.

Join hi5!»
Don’t try to fool the editors
SPECTROPHOTOMETRIC DETERMINATION OF TRACE BISMUTH(III) BY SUPPRESSIVE DECOLORATION

Zhu Zhencai

(Dept. of Chem., Zhengzhou Teachers College, Fujian, Peoples Republic of China)

Abstract: A new spectrophotometric method for the determination of Bi(III) on the oxidative fading between crystal violet and potassium iodate in the NH₄ medium at 85°C with H₂O₂. The optimum experimental conditions have been explored. The log A₀ is proportional to the concentration of Bi(III) over the range of 0.015 - 0.25 mg/ml, the sensitivity of method is a = 0.01 μg/ml (as log A₀ = 0.01, b = 0.01). The method has been applied to the determination of Bi(III) in samples with satisfactory results.
4. Reference


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10. 张国荣. 分析化学, 1990, 18 (12), 1145
Ms. Ref. No.: TAL-D-11-03399
Title: A magnetic nanoparticles-zinc oxide/zinc hexacyanoferrate hybrid film for amperometric determination of tyrosine
Talanta

Dear Dr.xxx,

This manuscript was recently rejected after review (ms. 11-2766). You then sent it to Editor Kauffmann, I guess hoping he would have it reviewed. As the reviewer pointed out before, the electrode (and numerous other similar ones from your laboratory) has limited novelty. We will not proceed with this manuscript.
Suggested Reviewers

1. Professor Munetaka Oyama, Division of Research Initiatives, Kyoto University, Japan. E. Mail: oyama@iic.kyoto-u.ac.jp
Thank you very much for your reviewer invitation. After opening the contents, I have found that I am a co-author of this paper. So, I cannot referee the paper.
Sincerely yours,
Munetaka Oyama
Some authors will submit a rejected paper some time later.

Hope the editor doesn’t notice and will have it reviewed again.
El-S….
1. 8/18/05: Electrochemical…domperidone in drug formulations.
   Rejected, no review (routine application) by J-MK
2. 7/24/06: Same paper. Rejected, no review by JLB
   (since cover letter said submitted to ACA)

And:
3. 7/8/06: Extraction of Au(III) with amiloride.HCl
   Rejected, no review
4. 6/9/07: Same paper. Rejected, no review

Also:
5. 8/2/06: Speciation of Au(I) and Au(III) with amiloride.HCl
   Rejected after review
6. 10/4/07: Same paper. Accepted after 3 revisions.
If you resubmit to another journal, at least pay attention to reviewers from the first journal. It will improve the paper. Very often the reviewers will be the same.
Dear Gary,

As I indicated in an earlier mail - I have seen this paper before. I therefore enclose my report (Analyst) together with the new one in an attachment to this mail.

Not so much has been changed in this paper. Maybe the language has improved a bit (revision probably still needed - English is not my mother tongue so I should be careful here). Still there is no explanation how the determinands migrate, what kind of charge they have, etc., why, why? It would be so simple to include. Did they not understand my previous report???

I cannot follow the logic behind this paper. The problem seems to be an artificial one - the real samples, on the other hand, offer a separation and quantification problem that would be possible to solve thereby making the paper more valuable.
Dear Dr. Murray,

I submit the following manuscript to Talanta....
Dear Professor Christian,

I submit the enclosed manuscript to Analytica Chimica Acta...
Dear Gary,

I received the attached review on manuscript PH901 for Anal Chim Acta. The reviewer comments about seeing something very similar for Talanta. Are you able to check into this to see if there is duplication of the Talanta manuscript?

Bets regards,

Paul

Dear Paul,

Yes, we have seen this paper, and rejected it, so the author is recycling it. Attached is the review we received.

Best regards,

Gary
Don’t plagiarize introductory material

Especially in your thesis – it may wind up in a paper

Remember, your professor may not catch this
Submit to the right journal

Read the aims and scope of the journal

Talanta often receives papers having nothing to do with analytical chemistry

Some are good quality, but they are returned
Publish with Major Revision

Comments:
The main problem with this paper is the English. It is not properly written and in some sentences it is difficult to understand what the authors want to explain and some description are not in chemistry language;

EX “The zero-order spectra of PV buffer solution and dilute blank liposome suspension were plane in the range 600-700 nm, while the spectrum of PV-Cu was steep in the same range (Fig.2A).” Must be changed to something like “The zero order spectra of PV buffer solution and dilute blank liposome suspension has a band, with a max of …, while the spectrum of PV-Cu has a band, with a with a max of …,”
Don’t be afraid to get some expert help on your English.

Even if it is excellent, it doesn’t hurt to have someone else critique your work.

It will help reviewers understand and accept the work.
You can rebut reviewer comments

Sometimes they miss something or just don’t understand

Two reviewers may have differing opinions

It is the editor who makes the decision
Plagiarism detection tools

**eTBLAST** is a text similarity search engine

[http://etest.vbi.vt.edu/etblast3/](http://etest.vbi.vt.edu/etblast3/)

Relevancy Threshold (Similarity ratio = 0.56). Entries above here have an unusual level of similarity

**Deja Vu**: a Database of Highly Similar Citations

[http://spore.vbi.vt.edu/dejavu/](http://spore.vbi.vt.edu/dejavu/)

**iThenticate** - Identifies by color code identical sections from other papers, including the author’s, gives word count
RETRACTED: Long-Term Quality of Life After Lung Resection
Thoracic Surgery Clinics, .... 2008

This article has been retracted at the request of the Editor-in-Chief.

Reason: significant portions of this article (605 words, 7 paragraphs) were copied verbatim from an article published in Chest without attribution.
Author’s similar papers:

Medline

Scopus – author

Google Scholar

SciFinder Scholar
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Be brave

Write that first paper

You will learn by doing

Expect criticism
  - your professor
  - reviewers

That is normal

99% of the papers I accept in *Talanta* require revision

Over half of all manuscripts are rejected
THANK YOU,
and Happy Writing!