

Guidelines for a UCPSS proceedings manuscript

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Introduction

This document explains how to properly prepare your proceedings manuscript for the UCPSS (Ultraclean Processing of Semiconductor Surfaces) conference.

It is required to strictly follow these guidelines and use the accompanying manuscript template. All manuscripts must be in English and text must be in black/white only. Color figures or photographs should also reproduce well in black and white only. Check your article by printing a hardcopy on a high-quality printer in black/white mode. Please keep this in mind when designing your figures, tables or other artwork etc... The Publisher calls authors for ethical behaviour (according to the Committee on Publication Ethics): [Publishing Ethics | Scientific.Net](#)

Language

Proof check the English language by dedicated software tools (e.g. Grammarly..) and by proofreading by a native speaker.

Authors

Author lists should be limited to a maximum of 7 authors. All authors should have a *significant* contribution to the manuscript. If the list contains more than 7 authors an accompanying letter should be sent to clearly identify the contribution of each author separately.

References

A proper description of the background or earlier work and prior art is mandatory. Each Manuscript should at least refer to 6 references. The overview of proceedings of previous editions of UCPSS, on the website, could be a useful starting point to check the prior-art:

<https://www.ucpss.org/home/previous-editions>.

General typesetting rules

Units. Use SI-units for all physical quantities (e.g. m, kg, s, N, C, A, V, K, J, eV, Pa, bar, ...). Use of other regional or outdated units is not acceptable (e.g. torr, psi, inch, ft, US-gallon, UK-gallon, cal, btu, pk, hp...) but may optionally be added between brackets, if (still used). E.g. overpressure, $p_g = 1 \text{ bar}$ (=approx. 14.5 psi).

Equations. Equations (refer with: Eq. 1, Eq. 2,...) should be indented 5 mm (= approx. 0.2 inch), with enough space above and below to separate the equation clearly from the running text. Equations have to be numbered sequentially, with the equation number put in parentheses and flushed to the right (see Eq. 1).

$$c_i^2 = a_{\text{peak}} + b_i^2 + d_{\text{SiO}_x} e^{j\alpha z} \quad (1)$$

A detailed overview of the typographic rules regarding symbols and equations is given in the American Institute of Physics (AIP) Style Manual [1]. This implies the following:

- The (non-italic) *roman typeface* is to be used for
 - *text-like items*: standard mathematical functions (sin, exp,...) and chemical symbols (Au, Ni,...)
 - (fixed) *values*, units (standard units such as Hz, C, A, m, kg and imaginary units such as i, j) and subscripts representing text abbreviations (e.g. C_g, with “g” from “gas”).
- *Single italic letters* are used to denote *variables*: such as symbols for mathematical quantities (*x,y,z*), symbols for physical quantities (e.g. *A*, *v*, *T*, C_g, with “C” from “Concentration”), mathematical functions (*f(x)*), and indices representing symbols of physical quantities (e.g. Ga_{1-x}Al_xAs).

The use of this proper standardized style improves communication accuracy: it allows for easy discrimination between e.g. a variable *A* (for area) and the unit A (for ampere) or the variable *T* (for temperature) and the unit T (for tesla).

Tables or figures

Tables or figures (floating items) can be placed at the most relevant place in the text (i.e. where they are first referred to) or grouped together at the end of the manuscript. In the former case, they should be positioned distinctly from the running text, e.g. by adding empty space above or below the item.

Adding captions. Tables and figures should be accompanied by a numbered, self explaining caption. In MS Word, this can be achieved using “insert - caption” from the menu bar and by selecting the appropriate floating item (table or figure). Cross references to tables and figures can be inserted by selecting “insert - cross reference” from the menu bar and by selecting the appropriate floating item from the list. In this way, numbering of the floating items and the corresponding cross references is done automatically. The font for captions is 10pt Times New Roman.

Tables. Tables (referred to as: Table I,...) contain one or more header lines, describing the table contents. Units should be given in standard brackets (meV).

The table caption (with the table number in roman capital numbers) should be placed *above* or *beside* the table. Horizontal lines are used to separate the caption from the table header and from the contents, or to delineate larger table portions. Individual lines of a table should not be separated (see e.g. Table I).

Figures. In the case of figures (referred to as: Figure 1,...) the caption, containing the figure number, should be placed *below* or *beside* the figure. Please include figures as graphic images in the electronic version.

In mathematical plots, no line-frame should be put around the figure and no gridlines should be used. It is highly recommended, however, to use x/y mirror axes with appropriate major and minor ticks. The font of the labels should be chosen - large enough - such that they are clearly readable. To distinguish different traces or curves from each other one should use an appropriate combination of marker types, line styles hashing patterns, instead of colors or grey scales (see e.g. Figure 1 and Figure 2). For line traces, an appropriate line thickness must be chosen. The background should be white, implying that all background color or grey should be removed.

Literature References

References are cited in the text by square brackets [1]. Two or more references at a time should be put in one set of brackets [2,3]. The references must be numbered in the order in which they are cited in the text and are to be listed at the end of the contribution under a heading *References*, see our example below. In the references section, the AIP convention [1] is to be used. The references are printed in a 10pt Times New Roman font.

Submission - MS Word file or PDF

The manuscript should be saved in a MS Word format or as PDF document. The publisher TransTechPub will send you your login data for your account, prior to May 8th. This account should be used to upload your manuscript on May 8th 2023 at latest. Manuscripts cannot be submitted by email. Peer review of all manuscripts will start on May 9th 2023.

References

[1] AIP Style Manual, 4th ed. (The American Institute of Physics, 1997), reproduced as: http://web.mit.edu/me-ugoffice/communication/aip_style_4thed.pdf.

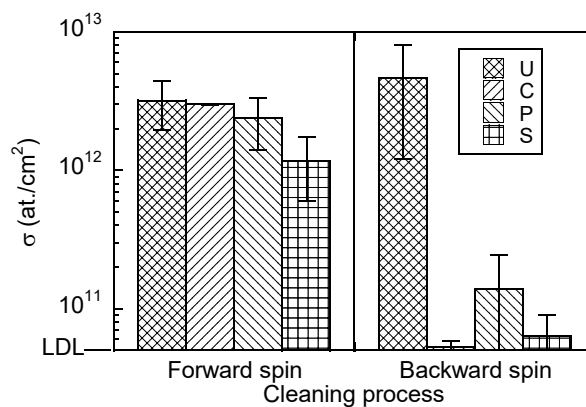


Figure 1: Area concentration of residual surface contamination after two spin cleaning processes.

Table I: Overview of Ω_0 (sr) for SiO₂ particles using oblique illumination in combination with the wide and narrow detectors of the particle measurement tool.

Detector	Si substrate	Si ₃ N ₄ substrate
Wide	0.8 ± 0.3	1.6 ± 0.3
Narrow	0.31 ± 0.03	1.8 ± 0.4

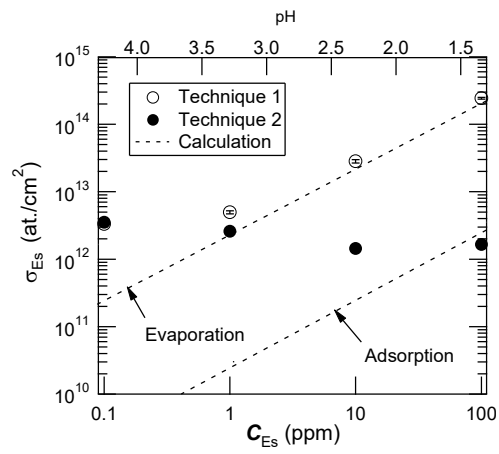


Figure 2: Area concentration of residual Es-contamination on the surface as a function of Es mass fraction and pH of the cleaning liquid, for two cleaning techniques.