FMRA-2014 Instructions - Format

Style

Authors are expected to follow the conventional writing, notation, and illustration style prescribed in 1) *The ACS Style Guide*, 3rd Edition, 2006 or 2) *Scientific Style and Format,* the *CSE Manual for Authors, Editors and Publishers*, 7th edition, 2006. Authors should also study the form and style of printed material in this journal. SI units should be used. Authors should use an identical format for their names in all publications to facilitate use of citations and author indexes.

Mathematics

- Special care should be given to make equations and formulas clear to the typesetter.
- *Variables* should appear in italic text.
- **Vectors** should appear in bold text.
- Capital and lower-case letters should be distinguished clearly where there could be confusion.
- Fractional exponents should be used to avoid root signs.
- Extra symbols should be introduced to avoid complicated exponents or where it is necessary to repeat a complicated expression a number of times.
- The slash (/) should be used wherever possible for fractions.
- Mathematical derivations that are easily found elsewhere in the literature should not be used.

References

All journal article references must include the title of the article and all authors. The phrases et al. and ibid. should not be used in any reference. Instead, all authors of the reference should be listed. All journal article references must include the initials and last name of all authors: the title of the article in italic, the volume number in bold, page number and (year).

Authors are responsible for providing English-language translations of reference citations originally published in other languages.

References should be double-spaced, numbered consecutively, placed on a separate page, and arranged thus:

1. A. Gouldstone, Y-L. Shen, S. Suresh, and C.V. Thompson: Evolution of stress in passivated and unpassivated metal interconnects. *J. Mater. Res.* 13, 1956 (1998).
2. H. Lamb: Hydrodynamics, 6th ed. (Cambridge Univ. Press, Cambridge, England, 1940), pp. 573, 645.
3. T.R. Jervis, J-P. Hirvonen, M. Nastasi, and M.R. Cohen: Laser mixing of titanium on silicon carbide, in Beam-Solid Interactions: Physical Phenomena, edited by J.A. Knapp, P. Borgesen, and R.A. Zuhr (Mater. Res. Soc. Symp. Proc. **157**, Pittsburgh, PA, 1990), p. 395.
4. H. Wang, A. Sharma, and A. Kvit: Mechanical properties of nanocrystalline and epitaxial TiN films on (100) silicon. *J. Mater. Res.***16**, 9 (2001).

Please take note of the reference format for the following MRS publications:

MRS Communications
T. Yokoto, T. Sekitani, Y. Kato, K. Kuribara, U. Zschieschang, H. Klauk, T. Yamamoto, K. Takimiya, H. Kuwabara, M. Ikeda, and T. Someya: Low-voltage organic transistor with subfemtoliter inkjet source-drain contacts. *MRS Communications*, doi:10.1557/mrc.2011.4, Published online 17 June 2011.

Journal of Materials Research
G. Bakan, N. Khan, A. Cywar, K. Cil, M. Akbulut, A. Gokirmak, and H. Silva: Self-heating of silicon microwires: Crystallization and thermoelectric effects. *J. Mater. Res.***26**(9), 1061 (2011).

MRS Bulletin
B.M. Moskal and L. Kosbar: Addressing broader impacts through K–12 outreach in materials education. *MRS Bull.***36**(4), 255 (2011).

MRS Symposium Proceedings
Print volume:
T.R. Jervis, J-P. Hirvonen, M. Nastasi, and M.R. Cohen: Laser mixing of titanium on silicon carbide, in Beam-Solid Interactions: Physical Phenomena, edited by J.A. Knapp, P. Borgesen, and R.A. Zuhr (Mater. Res. Soc. Symp. Proc. **157**, Pittsburgh, PA, 1990), p. 395.

Electronic volume:
T. Saif, J. Rajagopalan, and A. Tofangchi: The role of mechanical tension in neurons, in *Biological Materials and Structures in Physiologically Extreme Conditions and Disease*, edited by M.J. Buehler, D. Kaplan, C.T. Lim, and J. Spatz (Mater. Res. Soc. Symp. Proc. **1274**, Warrendale, PA, 2010) 1274-QQ01-06.

Tables

All but the simplest tabular material should be organized into separate tables. Tables should be numbered with Roman numerals on separate pages at the end of the manuscript. Captions should be sufficiently descriptive to make the data in the table intelligible without referring to the text. Complicated column headings in the body of the table should be avoided. If

necessary, symbols that are explained in the caption should be used.

TABLE I. Structural parameters of LNMO-A at 300 K (from powder neutron diffraction data).

Rhombohedral (R-3) phase

Atom	Wyc.	*x*	*y*	*z*	B Å^2	Occ
La	*6c*	0	0	0.7534(10)	0.51	1
Ni/Mn	*3a*	0	0	0	0.62	0.74(1)/0.26(1)
Mn/Ni	*3b*	0	0	0.5	0.62	0.74(1)/0.26(1)
O	*18f*	0.5572(9)	0	0.25	1.21	1

Monoclinic ($P2_1/n$) phase

Atom	Wyc.	*x*	*y*	*z*	Occ
La	*4e*	1.005(7)	0.012(5)	0.258(4)	1
Ni/Mn	*2c*	0.5	0	0.5	0.65(1)/0.35(1)
Mn/Ni	*2d*	0.5	0	0	0.65(1)/0.35(1)
O1	*4e*	0.762(7)	0.232(7)	0.034(3)	1
O2	*4e*	0.270(7)	0.240(7)	0.961(2)	1
O3	*4e*	0.045(5)	0.531(7)	0.265(2)	1

B_{ov} = 1.1(1) Å^2.

TABLE II. Enthalpy of drop solution ΔH_{dsol} (kJ/mol) for Li_2CO_3, La_4LiAuO_8, and $LiLaO_2$ in lead borate at 800 °C.

Li_2CO_3 (kJ/mol)	La_4LiAuO_8 (kJ/mol)	$LaLiO_2$ (kJ/mol)
243.855	166.101	47.979
228.848	157.847	47.965
227.631	151.599	45.869
244.843	156.995	42.655
237.533	157.468	48.403
242.895	160.341	44.898
237.293	157.557	42.510
236.233	160.980	43.961
		42.054
		46.319
237.39 ± 4.61[a]	158.61 ± 1.84[a]	45.38 ± 1.40[a]

[a]Error is two standard deviations of the mean.