

A. Authors, Institutions, Overview

- 1. Title - Enter a title, beginning with a descriptive reference to the specimen material or other characteristics specific to this data record, e.g. "Polyvinyl Acetate Degradation During XPS Measurements." Please refrain from using titles beginning with the name of the spectroscopy, e.g. avoid titles like "AES Study of..."

LaAlO₃ (100) by XPS

- 2. Authors, Institutions, and Locations (city, state, province, or country) — list authors and affiliations, in order of appearance in SSS.

Richard P. Vasquez	California Institute of Technology	Pasadena, CA. 91109-8099
Author	Institution	Location
Author	Institution	Location
Author	Institution	Location
Author	Institution	Location
Author	Institution	Location

- 3. Abstract — Summarize and include key information about the specimens and spectra, such as specimen material, measurement procedures, and significance of the research. The abstract will be reprinted verbatim.

XPS core level and valence band measurements are presented for a twinned LaAlO₃ (100) crystal.

4. Corresponding Author - Provide detailed information for the author chosen as principal contact for technical questions or questions from SSS editors.

Vasquez Richard P
Last Name First Name Middle Initial

Jet Propulsion Laboratory, California Institute of Technology
Institution Department

4800 Oak Grove Drive 302-231
Address, PO Box Mail Stop

Pasadena LA 91109-8099 USA
City State Zip Code Country

818/354-0359 818/393-4540
Phone Fax E-Mail

5. Technique and # of Spectra Submitted - Check the technique used and enter the number of spectra being submitted, including o// calibration spectra. Complete o copy of Section F for each spectrum.

XPS AES 7

6. # of calibration Spectra in Data Record

0

7. # of Spectra for SSS publication - Enter the number of spectra for which hard-copy publication is being requested. For accepted data records comprising large numbers of spectra, o// of the spectra will be entered into the AVS electronic database, but it may on/y be feasible to publish o representative number of spectra in Surface Science Spectra. An opportunity to identify specific spectra for publication is given in Field 2, Section F.

6

8. Publish Auger Derivative Spectra - Auger spectra submitted may be displayed in Surface Science Spectra as N(E) data alone or as superimposed N(E) and derivative forms. The default display mode will include both forms. Check your preference.

Display both forms Display N(E) only

① | 9. Key Words – list selected phrases and words to help readers search for information in the database, e.g. Auger electron spectroscopy, oxidation, corrosion, surface segregation. Be selective, but thorough.

Lanthanum compounds, al. . al.umi. num compounds?. perovskites, x-ray photoemission spectroscopy

① | 10. Spectra Category – Check the suggested category of the data record: Technical, Comparison, or Reference [see the overview of instructions for definitions], the editors may suggest an alternate category, based on the recommendations of referees.

Technical Comparison Reference

③ | 11. References – list citations to articles related to the data record using the style of J. Vac. Sci. Technol.

1. J. B. Goodenough and J.M. Longe, in K.-H. Hellwege (Ed.), Landolt-Bornstein New Series, Group 111, Vol. 4a, p. 126, (Springer-Verlag, Berlin, 1970)

⑥ | 12. Acknowledgements

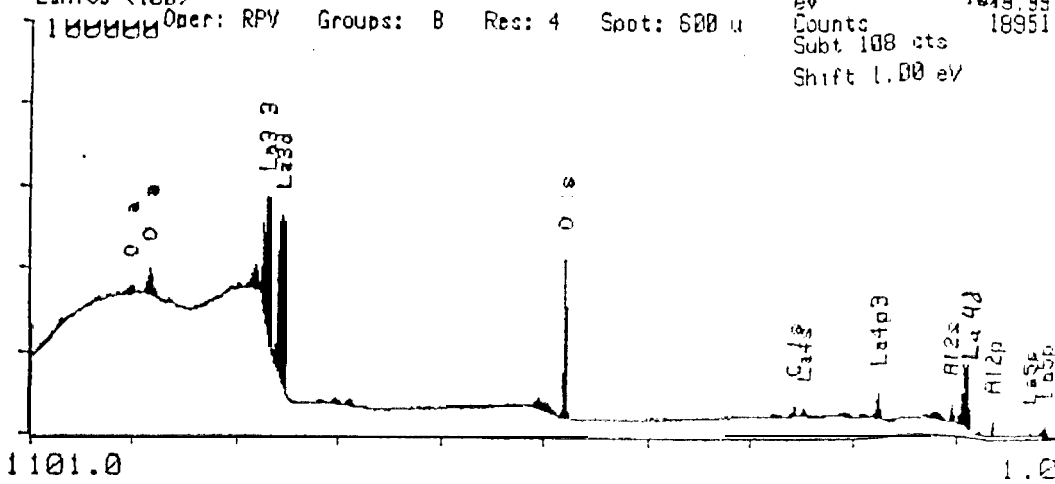
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Monday 2/15/1993
 13:38:16
 LaAlO3 (100)

(1) RV042792_3
 Region 1

of Scans 2
 Flood Gun 0.0
 eV 1000.00
 Counts 18951
 Subt 108 cts
 Shift 1.00 eV

Spectrum #1
 Survey



SURFACE COMPOSITION TABLE
 RV042792_3 Region 1
 LaAlO3 (100)

Elem	Corr'd BE	Flood Gun	Delta BE	Sens Factor	# of Scans	eV/group	Area	Relative Area	Atom %
Al2p	72.14	0.0	.86	.602	2	137.5	7207	643498	16.03
La4d	104.12	0.0	-5.12	7.209	2	137.5	89395	666003	16.59
C 1s	284.80	0.0	-.20	1.000	2	137.5	7474	401436	10.00
O 1s	529.07	0.0	2.93	2.494	2	137.5	106920	2303086	57.38