JVST A
Journal of Vacuum Science & Technology A

PERSPECTIVE

avs.scitation.org/journal/jva

Perspective on improving the quality of surface and material data analysis in the scientific literature with a focus on x-ray photoelectron spectroscopy (XPS)

Cite as: J. Vac. Sci. Technol. A **41**, 038501 (2023); doi: 10.1116/6.0002437
Submitted: 17 December 2022 · Accepted: 7 March 2023 ·
Published Online: 3 May 2023

View Online Export Citation CrossMark

George H. Major,[1] Joshua W. Pinder,[1] Daniel E. Austin,[1] Donald R. Baer,[2] Steven L. Castle,[1] Jan Čechal,[3] B. Maxwell Clark,[1] Hagai Cohen,[4] Jonathan Counsell,[5] Alberto Herrera-Gomez,[6] Pavitra Govindan,[7] Seong H. Kim,[8] David J. Morgan,[9,10] Robert L. Opila,[11] Cedric J. Powell,[12] Stanislav Průša,[3,13] Adam Roberts,[5] Mario Rocca,[14,15] Naoto Shirahata,[16,17,18] Tomáš Šikola,[3,13] Emily F. Smith,[19] Regina C. So,[1] John E. Stovall,[20] Jennifer Strunk,[21] Andrew Teplyakov,[22] Jeff Terry,[23] Stephen G. Weber,[24] and Matthew R. Linford[1,a)]

AFFILIATIONS

[1]Department of Chemistry and Biochemistry, Brigham Young University, C100 BNSN, Provo, Utah 84602
[2]Pacific Northwest National Laboratory, Richland, Washington 99352
[3]CEITEC BUT, Brno University of Technology, Purkyňova 123, Brno 612 00, Czech Republic
[4]Department of Chemical Research Support Weizmann Institute of Science, Rehovot 76100, Israel
[5]Kratos Analytical Ltd., Wharfside, Trafford Wharf Road, Manchester M17 1GP, United Kingdom
[6]CINVESTAV–Unidad Querétaro, Querétaro 76230, Mexico
[7]Department of Economics, University of Utah, 260 Central Campus Dr #4100, Salt Lake City, Utah 84112
[8]Department of Chemical Engineering and Materials Research Institute, Pennsylvania State University, University Park, Pennsylvania 16802
[9]Max Planck-Cardiff Centre on the Fundamentals of Heterogeneous Catalysis FUNCAT, Cardiff Catalysis Institute, School of Chemistry, Cardiff University, Main Building, Park Place, Cardiff CF10 3AT, United Kingdom
[10]HarwellXPS—EPSRC National Facility for Photoelectron spectroscopy, RCaH, Didcot, Oxon OX11 0FA, United Kingdom
[11]Materials Science and Engineering, College of Engineering, University of Delaware, Newark, Delaware 19716
[12]Associate, Materials Measurement Science Division, National Institute of Standards and Technology, Gaithersburg, Maryland 20899-8370
[13]Institute of Physical Engineering, Brno University of Technology, Technická 2, Brno 616 69, Czech Republic
[14]IMEM-CNR, U.O.S. Genova, Via Dodecaneso 33, 16146 Genova, Italy
[15]Dipartimento di Fisica, Universit'a di Genova, Via Dodecaneso 33, 16146 Genova, Italy
[16]International Center for Materials Nanoarchitectonics (MANA), National Institute for Materials Science (NIMS), 1-1 Namiki, Tsukuba 305-0044, Japan
[17]Graduate School of Chemical Sciences and Engineering, Hokkaido University, Sapporo 060-0814, Japan
[18]Department of Physics, Chuo University, 1-13-27 Kasuga, Bunkyo, Tokyo 112-8551, Japan
[19]School of Chemistry, University of Nottingham, Nottingham NG7 2RD, United Kingdom
[20]Department of Economics, Brigham Young University, Provo, Utah 84602
[21]Leibniz-Institute for Catalysis at the University of Rostock, Rostock18059, Germany
[22]Department of Chemistry and Biochemistry, University of Delaware, Newark, Delaware 19716
[23]Department of Physics, Illinois Institute of Technology, Chicago, Illinois 60616
[24]Department of Chemistry, University of Pittsburgh, Pittsburgh, Pennsylvania 15260

06 September 2024 18:46:54

Published under an exclusive license by the AVS