

# **Plutonium Futures: The Science 2024**

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- 181 Investigating Actinide Containing Single Particle Systems Using Synchrotron-Based X-Ray Fluorescence and X-Ray Absorption near Edge Fine Structure—*Dominic Piedmont (Brookhaven), Mehmet Topsakal (Brookhaven), Andrew Kiss (Brookhaven), Lorriane Shultz-Johnson (SRNL), Rachel Bergin (SRNL), Shawna Tazik (SRNL), Christopher Barrett (SRNL), Simerjeet K. Gill (Brookhaven)*
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- 191 Solubility, Speciation and Thermodynamics of  $\text{PuCO}_3\text{OH}(\text{cr})$  in Carbonate Containing Solutions—*P. Müller (Karlsruhe Institute for Technology), D. Fellhauer (Karlsruhe Institute for Technology), D. Schild (Karlsruhe Institute for Technology), M. Altmaier (Karlsruhe Institute for Technology), X. Gaona (Karlsruhe Institute for Technology), H. Geckeis (Karlsruhe Institute for Technology)*
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- 203 Fundamental Science of Pu: How a new Radiological Lab is Helping Shed new Light on Actinide Research Around LANL—*Paul H. Tobash (LANL), Greta L. Chappell (LANL), W. Adam Phelan (LANL), David C. Arellano (LANL), Derek V. Prada (LANL), Jeremy N. Mitchell (LANL), Neil Harrison (LANL), Matt Janish (LANL), Miles Beaux (LANL), Eric Bauer (LANL)*

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- 212 Advancing Sample Preparation Techniques for Scanning Electron Microscopy-Based Particle Size Analysis of Plutonium-Dioxide—*Kyle Makovsky (PNNL), Jason Lonergan (Missouri Univ. Science and Technology), Aaron Nicholas (PNNL), Cody Nizinski (PNNL), Richard Clark (PNNL), David Meier (PNNL)*
- 213 XPS Characterization of Pu at LANL Surface Science Lab—*William Ponder (LANL), Sarah Hickam (LANL), Alessandro Mazza (LANL), Connor Dozhier (LANL), Dan T. Olive (LANL)*

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- 217 Mapping Surface of Pu Materials with Atomic-Scale Resolution via Field Ion Microscopy and operando-Atom Probe Tomography—*Daniel E. Perea (PNNL), Sten V. Lambeets (PNNL), Dallin J. Barton (PNNL), Jacqueline I. Royer (PNNL), Matthew T. Athon (PNNL), Dallas D. Reilly (PNNL)*

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- 221 Auger Parameter Data of Plutonium Materials—*Paul Roussel (AWE)*