

## Madeline H. Elkins

ASSOCIATE

Patents and  
Innovations  
*Palo Alto*

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### FOCUS AREAS

Artificial Intelligence and  
Machine Learning  
Climate and Clean  
Technologies  
Data Storage and Cloud  
Diagnostics, Life Science  
Tools, and Deep Tech  
Digital Health  
Intellectual Property  
Life Sciences  
Medical Devices  
NewSpace  
Patents and Innovations  
Quantum Computing  
Semiconductors  
Software

### EXPERIENCE

Dr. Madeline Elkins is an associate in the Palo Alto office of Wilson Sonsini Goodrich & Rosati, where she is a member of the patents and innovations practice. She focuses on patent prosecution and due diligence matters in the fields of medical devices and medical imaging, quantum computing (trapped atom, annealing, software, and quantum computing as a service), optical coherence tomography, holography, Fourier microscopy, electron microscopy, image analysis software, diagnostic software, digital health, and semiconductor fabrication.

During her doctoral studies at the University of California, Berkeley, in the group of Daniel Neumark, Madeline's research focused on the relaxation dynamics of solvated electrons in liquid microjets. As part of her doctorate work, she designed and built optical assemblies and spectroscopic instrumentation.

Prior to joining the firm, Madeline was a research fellow at Princeton University, where her research focused on quantum coherence and charge localization in artificial light harvesting materials, including organic and polymeric semiconductors and perovskites, under the joint supervision of Greg Scholes from Princeton University and Edward Sargent from the University of Toronto.

### CREDENTIALS

#### Education

- J.D., UC Berkeley School of Law  
*Order of the Coif, Business Law Certificate, Law and Technology Certificate, Dean's Fellowship*
- Postdoctoral Fellow, Princeton University
- Ph.D., Chemistry, University of California, Berkeley  
*Howard H. Crandall Fellowship*
- B.A., Chemistry and Physics, Wellesley College

#### Admissions

- State Bar of California
- U.S. Patent and Trademark Office

### INSIGHTS

#### Select Publications

- "The Politics of Agency Adjudication After *United States v. Arthrex*," *37 Berkeley Technology Law Journal* 1331, 2022
- Co-author with L.N. Tran, D.P. McMeekin, H.J. Snaith, and G.D. Scholes, "Observation of Charge Generation via Photoinduced Stark Effect in Mixed-Cation Lead Bromide Perovskite Thin Films," *11 The Journal of Physical Chemistry Letters* 10081, 2020

- Co-author with A.H. Proppe, O. Voznyy, R.D. Pensack, F. Zapata, L. Vezquez Besteiro, L.N. Quan, R. Quintero-Bermudez, P. Todorovic, S.O. Kelley, A.O. Govorov, I.I. Gray, E.H. Sargent, and G.D. Scholes, "Spectrally Resolved Ultrafast Exciton Transfer in Mixed Perovskite Quantum Wells," 10 *The Journal of Physical Chemistry Letters* 419, 2019
- Co-author with R.D. Pensack, A.H. Proppe, O. Voznyy, L.N. Quan, S.O. Kelley, E.H. Sargent, and G.D. Scholes, "Biexciton Resonances Reveal Exciton Localization in Stacked Perovskite Quantum Wells," 8(16) *Journal of Physical Chemistry Letters* 3895-901, 2017
- Co-author with L.H. Williams and D.M. Neumark, "Isotope Effect on Hydrated Electron Relaxation Dynamics Studied with Time-Resolved Liquid Jet Photoelectron Spectroscopy," 144(18) *Journal of Chemical Physics*, 2016
- Co-author with H.L. Williams and D.M. Neumark, "Dynamics of Electron Solvation in Methanol: Excited State Relaxation and Generation by Charge Transfer to Solvent," 142(23) *Journal of Chemical Physics*, 2015
- Co-author with H.L. Williams, A.T. Shreve, and D.M. Neumark, "Relaxation Mechanism of the Hydrated Electron," 342(6165) *Science* 1496-9, 2013
- Co-author with A.T. Shreve and D.M. Neumark, "Photoelectron Spectroscopy of Solvated Electrons in Alcohol and Acetonitrile Microjets," 4 *Chemical Science* 1633-9, 2013

## TECHNICAL FLUENCY

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### Diagnostics and Medical Devices

- Biosensors
- Diagnostics
- Medical devices
- Medical imaging
- Neuroimaging
- Point-of-care testing (POCT)
- Telemedicine technology
- Wearable analyte sensors

### Chemistry and Material Science

- Materials chemistry
- Nanochemistry
- Photovoltaic materials

### Engineering and Technology

- AI
- Computer science
- Machine learning
- Materials science
- Mechanical engineering
- Microfluidics

### Miscellaneous

- Design patent
- Fluorescence microscopy
- Ophthalmology
- Physics