ANDREW K. SAYDJARI

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PUBLICATIONS

I am an author on **19+ papers** that have **441+** citations (h-index=11). This includes:
8+ papers as **(co-)lead author** with 194+ citations
5+ papers with **significant contributions** with 197+ citations

Most of my papers can be found online on ADS, though citations outside astronomy are missing. My ORCID is 0000-0002-6561-9002.

Publications as (Co-)Lead Author:

1. **Saydjari, A. K.**; Uzsoy, A.S.; Zucker, C.; Peek, J. E. G.; Finkbeiner, D. P.
   2023, ApJ, 954, 141. Grad
   Measuring the 8621 Å Diffuse Interstellar Band in Gaia DR3 RVS Spectra: Obtaining a Clean Catalog by Marginalizing over Stellar Types
2. **Saydjari, A. K.**; Schlafly, E. F.; Lang, D.; Meisner, A. M.; Green, G. M.; Zucker, C.; Zelko, I.; Speagle, J. S.; Daylan, T.; Lee, A.; Valdes, F.; Schlegel, D.; Finkbeiner, D. P.
   2023, ApJS, 264, 2. Grad
   The Dark Energy Camera Plane Survey 2 (DECaPS2): More Sky, Less Bias, and Better Uncertainties
3. **Saydjari, A. K.**; Finkbeiner, D. P.
   2022, ApJ, 933, 155. Grad
   Photometry on Structured Backgrounds: Local Pixel-wise Infilling by Regression
4. **Saydjari, A. K.**; Finkbeiner, D. P.
   2022, TPAMI, 45, 2. Grad
   Equivariant Wavelets: Fast Rotation and Translation Invariant Wavelet Scattering Transforms
5. **Saydjari, A. K.**; Portillo, S. K. N.; Slepian, Z.; Kahraman, S.; Burkhart, B.; Finkbeiner, D. P.
   2021, ApJ, 910, 122. Grad
   Classification of Magnetohydrodynamic Simulations using Wavelet Scattering Transforms
6. **Saydjari, A. K. & Weis, P.**; Wu, S.
   2016, Adv. Energy Mat., 7, 1601622. Undergrad
   Spanning the Solar Spectrum: Azopolymer Solar Thermal Fuels for Simultaneous UV and Visible Light Storage
   Cover Article: AEM
7. **Saydjari, A. K.**; Pietron, J. J.; Simpkins, B. S.
   2015, Electroanalysis., 27, 1960-1967. HS
   Electrochemical Deposition and Spectroelectro-chemical Response of Bromophenol Blue Films on Gold
8. **Saydjari, A. K.**; Long, J.; Dressick, W.; Simpkins, B. S.
   2014, Chem. Phys. Lett., 608, 328-333. HS
   Optical Interference Effect Corrections for Absorbance Spectra of Layer-by-Layer Thin Films Bearing Covalently Bound Dye

Publications with Significant Contributions:

9. Lesser, O.; **Saydjari, A. K.;** Wesson M.; Yacoby, A.; Oreg, Y.
   2021, PNAS, 118, 27. Grad
   Phase-induced topological superconductivity in a planar heterostructure
   Designed and ran experiments in Kwant to show applicability for realistic device densities.
10. Alegria, L.D.; Bøttcher, C.G.; **Saydjari, A. K.;** Pierce, A.T.; Lee, S.H.; Harvey, S.P.; Vool, U.; Yacoby, A.;
    2021, Nature Nanotechnology, 16, 404-408. Grad
    High-energy quasiparticle injection into mesoscopic superconductors
    Helped fabricate devices, collected data on dil. fridge I operated, and analyzed data/models.
11. Charboneau, D.J.; Brudvig, G.W.; Hazari, N.; Lant, H.M.C; **Saydjari, A. K.**
    2019, ACS Catal., 9, 3228-3241. Undergrad
    Development of an Improved System for the Carboxylation of Aryl Halides through Mechanistic Studies
    M.Sc. thesis work. Designed experiments, worked up reactions and NMR, analyzed data.
12. McKee, A.; Solano, M.; **Saydjari, A. K.;** Bennett, C.J.; Hud, N.V.; Orlando, T.M.
    2018, ChemBioChem, 19, 1-6. Undergrad
    A Possible Path to Prebiotic Peptides Involving Silica and Hydroxy Acid-Mediated Amide Bond Formation
    Cover Article: ChemBioChem
    Designed/ran cycling experiments, analyzed MS/MS spectra, wrote first manuscript.
13. Wang, D.; Wagner, M.; **Saydjari, A. K.**; Wu, S.; Butt, H.
    2017, Chem. Eur. J., 23, 2628-2634. Undergrad
    A Photoresponsive Orthogonal Supramolecular Complex Based on Host–Guest Interactions
    Lead quantum chemical simulations determining molecular geometry key to HG interaction.

Publications as a Contributing Author:

14. Edenhofer, G. [7 additional co-authors including **Saydjari, A. K.]**
    2023, arXiv:2308.01295 (submitted A&A) Grad
    A Parsec-Scale Galactic 3D Dust Map out to 1.25 kpc from the Sun
    Aided in map validation, data-release, securing compute, and consulted on methods development.
15. Zasowski, G. [152 additional co-authors including **Saydjari, A. K.]**
    2023, ApJS, 267, 44. Grad
    The Eighteenth Data Release of the Sloan Digital Sky Surveys: Targeting and First Spectra from SDSS-V
    Key APOGEE pipeline team member and led dust group DIB catalog and reddening efforts.
16. Cantat-Gaudin, T. et al. [13 additional co-authors including **Saydjari, A. K.]**
    2023, A&A, 669, A55. Grad
    An empirical model of the Gaia DR3 selection function
    Created DECaPS2 (and high-resolution coverage maps) that were the underlying comparison used in deriving the empirical selection function.
17. Speagle, J. S. & Zucker, C. [17 additional co-authors including **Saydjari, A. K.]**
    2021, (accepted ApJ) Grad
    Mapping the Milky Way in 5-D with 170 Million Stars at High Galactic Latitudes
    Provided feedback during method development, and on publication/code-base.

18. Speagle, J. S. & Zucker, C. [17 additional co-authors including **Saydjari, A. K.]**
    2021, (submitted ApJ) Grad
    Deriving Stellar Properties, Distances, and Reddenings from Photometry and Astrometry with brutus.
    Provided feedback during method development, and on publication/code-base.

Non-Refereed

Publications as a Contributing Author:

19. Sayres, C. et al. [12 additional co-authors including **Saydjari, A. K.]**
    2022, Proceedings of the SPIE, 12184 Grad
    SDSS-V robotic focal plane system: overview of coordinate systems and transforms
    Developed regularized fits to improve focal plane coordinate transform.

White Papers with Significant Contributions:

20. Han, J.J. et al. [208 additional co-authors including **Saydjari, A. K.]**
    2023, arXiv:2306.11784. Grad
    NANCY: Next-generation All-sky Near-infrared Community surveY
    Lead (wrote) the dust/reddening applications section.
21. Paladini, R. et al. [69 additional co-authors including **Saydjari, A. K.]**
    2023, arXiv:2307.07642. Grad
    Roman Early-Definition Astrophysics Survey Opportunity: Galactic Roman Infrared Plane Survey (GRIPS)
    (Co)-Developed crowded field photometry codes necessary for successful photometry in the plane.