

# ANDREW K. SAYDJARI

Graduate Student | Harvard Physics

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## PUBLICATIONS

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I am an author on **19+** papers that have **364+** citations (h-index=10). This includes:

**8+ papers** as (co-)lead author with 160+ citations

**5+ papers** with **significant contributions** with 165+ citations

Most of my papers can be found online on [ADS](#), though citations outside astronomy are missing.

My ORCID is [0000-0002-6561-9002](https://orcid.org/0000-0002-6561-9002).

### Publications as (Co-)Lead Author:

1. Saydjari, A. K.; Zucker, C.; Peek, J. E. G.; Finkbeiner, D. P.  
2022, arXiv:2212.03879 (accepted ApJ) 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.  
2023, 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](#)
10. Alegria, L.D.; Böttcher, 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](#)
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](#)
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](#)
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](#)

## Publications as a Contributing Author:

14. 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](#)
15. 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](#)
16. 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
17. 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.
18. 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](#)
19. 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](#)

## White Paper 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 surveyY](#)

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 \(GRIPS\)](#)