

# Stanford

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### Bio

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#### STANFORD ADVISORS

- Mark Cappelli, Postdoctoral Faculty Sponsor

#### LINKS

- My Google Scholar Page: [https://scholar.google.com/citations?user=L\\_qLnj8AAAAJ&hl=en](https://scholar.google.com/citations?user=L_qLnj8AAAAJ&hl=en)
- My LinkedIn Page: <https://www.linkedin.com/in/hossein-mehrpour-bernety/>

### Publications

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#### PUBLICATIONS

- **Experimental detection of topological surface waves at a magnetized plasma interface in the Voigt configuration** *APPLIED PHYSICS LETTERS*  
Bernety, H., Zink, D., Piriae, D., Cappelli, M. A.  
2024; 124 (4)
- **Tunable non-reciprocal waveguide using spoof plasmon polariton coupling to a gaseous magnetoplasmon** *OPTICS LETTERS*  
Cappelli, M. A., Bernety, H., Sun, D., Houriez, L., Wang, B.  
2023; 48 (14): 3725-3728
- **An electromagnetic scattering approach to identifying topological and non-topological unidirectional edge states at gyrotropic plasma interfaces** *JOURNAL OF APPLIED PHYSICS*  
Bernety, H., Cappelli, M. A.  
2023; 133 (10)
- **A tunable microwave circulator based on a magnetized plasma as an active gyrotropic element** *PHYSICS OF PLASMAS*  
Bernety, H., Houriez, L. S., Rodriguez, J. A., Wang, B., Cappelli, M. A.  
2022; 29 (11)
- **A characterization of plasma properties of a heterogeneous magnetized low pressure discharge column** *AIP ADVANCES*  
Bernety, H., Houriez, L. S., Rodriguez, J. A., Wang, B., Cappelli, M. A.  
2022; 12 (11)
- **Experimental study of electromagnetic wave scattering from a gyrotropic gaseous plasma column** *APPLIED PHYSICS LETTERS*  
Houriez, L. S., Bernety, H., Rodriguez, J. A., Wang, B., Cappelli, M. A.  
2022; 120 (22)
- **Graphene-Metal Metasurface for Cloaking of Cylindrical Objects at Low-Terahertz Frequencies** *IEEE ACCESS*  
Pawar, S., Bernety, H., Yakovlev, A. B.  
2022; 10: 130200-130211