

## **Hari Srikanth, Ph.D.**

**Distinguished University Professor**  
**2022 Humboldt Research Awardee**  
**2019 Fulbright US Scholar**  
**2019 IEEE Magnetics Society**  
**Distinguished Lecturer**  
**Group Leader** – Functional Materials Laboratory  
**Director** -Florida Initiative for Emergent Low Dimensional Quantum Materials (FIELD-QM)  
**Fellow** –American Physical Society  
**Fellow** -Institute of Physics  
**Associate Editor** -Physical Review B

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<https://scholar.google.com/citations?user=40EKS94AAAAJ&hl=en>

## **Employment/Professional Experience:**

2020-present	Distinguished University Professor, University of South Florida
2009-2020	Professor, Physics Department, University of South Florida
2004-2009	Associate Professor, Physics Dept., USF, Tampa, FL
2000-04	Assistant Professor, Physics Dept., USF, Tampa, FL
1998-00	Assistant Professor for Research, Advanced Materials Research Institute, University of New Orleans, LA
1998	National Research Council Associate, Rome Labs, Hanscom AFB, MA
1995-98	Postdoctoral Researcher, Physics Dept., Northeastern Univ., Boston, MA
1994-95	Postdoctoral Researcher, University of Nebraska, NE

Short term Visiting Professorships held at Basque Center for Materials (Bilbao, Spain), Slovak Academy of Sciences (Kosice, Slovakia), Federal University of Rio de Janeiro, Brazil (funded by American Physical Society), Fulbright visiting professorship at Nanyang Technological University, Singapore (2019-2022), Visiting Professor at Indian Institute of Technology Bombay (2021-present), Humboldt Visiting Professor at University of Duisburg-Essen (2022-present), Visiting Professor at Indian Institute of Science Bangalore (2025-2026)

## **Education:**

1994 Ph. D (Physics), Indian Institute of Science, Bangalore, India  
1987 M. Sc (Physics), Madura College, Madurai, India  
1985 B. Sc (Physics), Madura College, Madurai, India

## **Membership in Professional Societies:**

American Physical Society (APS) (**Fellow**)  
Institute of Physics (IOP) (**Fellow**)  
Institute for Electrical and Electronic Engineers (IEEE) –Magnetics Society (**Senior Member**)  
Institute of Nanotechnology (IoN) -**Fellow**

## Highlights of professional achievements

- **Distinguished University Professor at University of South Florida (2020-present)**
- Lead PI grants ~ **\$7.0 Million** received during past 20 years from **National Science Foundation, Department of Energy, Army Research Office, DARPA, Marie Curie Foundation through Bizkaia Talent** etc.
- Total grant funding in multi-PI grants ~ **\$11 Million**
- **Over 320 journal publications** [~280 papers published from USF since joining the university in Fall 2000]
- **2 US Patents (7, 268, 563 and 9,384,877)**
- **Recipient of Alexander von Humboldt Research Award 2022**
- **Awarded 2019 Fulbright US Scholar to conduct research as a Visiting Professor at Nanyang Technological University, Singapore**
- **2019 IEEE Magnetics Society Distinguished Lecturer (delivered 81 lectures in 15 countries around the world from January-December 2019)**
- **Outstanding Faculty Awards (2020, 2021) University of South Florida**
- **Member, Nanomagnetism Technical Committee, IEEE Nanotechnology Council**
- **Fellow, Institute of Physics (FIInstP) (inducted 2021)**
- **Marie Curie Fellow (2015)**
- **Fellow, American Physical Society (FAPS) (inducted 2014) Citation:** “For important contributions to the experimental studies of magnetization dynamics and novel physics in complex nano-composites”
- **Fellow, Institute of Nanotechnology (FIoN) (inducted 2014)**
- **Associate Editor, Physical Review B (June 2021 – present)**
- **Editor, Journal of Alloys and Compounds (March 2020-2023)**
- **Associate Editor, Journal of Applied Physics (March 2014 – 2020)**
- **Member, Editorial Advisory Board, Journal of Magnetism and Magnetic Materials**
- **Member, Nanomagnetism Technical Committee, IEEE Nanotechnology Council**
- **Special Events Chair, 2025 MMM conference**
- **Special Events Chair, 2022 Joint MMM/INTERMAG conference**
- **Publication Chair, International Conference on Magnetism (ICM 2018)**
- **Publication Chair and Steering Committee Member, MMM and joint MMM/Intermag conferences in 2011, 2012 and 2013.**
- Peer reviewer for NSF, DoE, DoD agencies and over 15 journals.
- USF College of Arts and Sciences, Faculty Council Member and Tenure & Promotion committee (2010 – 16)
- **Over 300 invited talks/colloquia/seminars**
- **Over 260 contributed presentations at international conference**

## Teaching/Education related activities

- Taught a number of undergraduate and graduate courses in physics and materials science over the past 24 years at USF. Consistently received high student evaluations.
- **Graduated 22 PhD students and 5 MS students** in the past 22 years
- **Mentored 15 postdoctoral researchers and over 25 undergraduate students**

- Developed a 3 lecture short course on “Nanomagnetism –Principles, Fabrication, Properties and Applications” and taught at several international institutions. Funded by APS and recently taught this course at the Federal University of Rio de Janeiro (UFRJ) in Brazil in May 2018.

## Journal Publications: (320+)

(12721 citations as of May 2025. h-index: 65; Source: Google Scholar)

Selected recent publications over the past 3 years

1. “Superparamagnetic superparticles for magnetic hyperthermia: overcoming the particle size limit” -S. B. Attanayake, Minh Dang Nguyen, **A. Chanda**, **J. Alonso**, Inaki Orue, T. Randall Lee, **H. Srikanth** and M. H. Phan, **ACS Applied Materials and Interfaces** **17**, 19436 (2025)
2. “Robust Nernst magneto-thermoelectricity in topological spin semi-metal FeCrRhX (X = Si,Ge)” -**A. Chanda**, J. Nag, *N. Schulz*, D. De Tellem, A. Alam, K. G. Suresh, M. H. Phan and **H. Srikanth**, **Physical Review B** **111**, 094416 (2025)
3. “Discovery of giant positive magnetoresistance in proximity to helimagnetic order in manganese phosphide nanostructured films” -*N. Mudiyansele*, *D. De Tellem*, **A. Chanda**, A.T. Duong, T-N. Hsieh, J. Frisch, M. Bar, R.P. Madhogaria, S. Mozaffari, H.S. Arachchige, D. G. Mandrus, **H. Srikanth**, S. Witanachchi and M.H. Phan, **ACS Applied Materials and Interfaces** (April 2025) <https://doi.org/10.1021/acsami.4c21202>
4. “Unraveling the structural dependency of Weyl nodes in Co<sub>2</sub>MnGa” -N. Schulz, G. Pantano, D. DeTellem, A. Chanda, E.M. Clements, M. McGuire, A. Markou, C. Felser, D.A. Arena, J. Gayles, M.H. Phan and H. Srikanth, **Physical Review B** **110**, 054419 (2024)
5. “Large anomalous Nernst effect and its bipolarity in quaternary equiatomic Heusler alloys CrRuXGe (X = Co and Mn)” -**A. Chanda**, J. Nag, *N. Schulz*, A. Alam, K.G. Suresh, M.H. Phan and **H. Srikanth**, **Physical Review B** **109**, 224415 (2024)
6. “Tailoring the magnetic and hyperthermic properties of biphasic iron oxide nanocubes through post-annealing” -S. Attanayake, A. Chanda, R. Das, M.H. Phan and H. Srikanth, **Crystals** **14**, 519 (2024) <https://doi.org/10.3390/cryst14060519>
7. “Thermally generated magnonic spin currents in a polycrystalline gadolinium iron garnet thin film with perpendicular magnetic anisotropy” -**A. Chanda**, C. Holzmann, *N. Schulz*, D. Stein, M. Albrecht, M.H. Phan and H. Srikanth, **Journal of Applied Physics** **135**, 123901 (2024)
8. “Temperature evolution of magnon propagation length in Tm<sub>3</sub>Fe<sub>5</sub>O<sub>12</sub> thin films: Roles of magnetic anisotropy and Gilbert damping” -**A. Chanda**, C. Holzmann, *N. Schulz*, A. Ullrich, *D. DeTellem*, M. Albrecht, M. Gross, C.A. Ross, D. A. Arena, M.H. Phan and **H. Srikanth**, **ACS Nano** **18**, 7223 (2024) <https://doi.org/10.1021/acsnano.3c12495>
9. “Large thermo-spin effects Heusler alloy-based spin gapless semiconductor thin films” -**A. Chanda**, Deepika Rani, D. DeTellem, N. Alzahrani, D. A. Arena, S. Witanachchi, Ratnamala Chatterjee, M.H. Phan and **H. Srikanth**, **ACS Applied Materials & Interfaces** **15**, 53697 (2023)
10. “Intrinsic Berry curvature driven anomalous Nernst thermopower in the semimetallic Heusler alloy CoFeVSb” -**A. Chanda**, J. Nag, A. Alam, K.G. Suresh, M.H. Phan and **H. Srikanth**, **Physical Review B (LETTER)** **107**, L220403 (2023)
11. “Surface termination-enhanced magnetism at nickel ferrite/2D nanomaterial interfaces: implications for spintronics” -*N. Schulz*, **A. Chanda**, G. Datt, C.S. Ong, F. Sorgenfrei, S. Ambardar, D.V. Voronine, O. Eriksson, T. Sarkar, V. Kamalakar, M.H. Phan and **H. Srikanth**, **ACS Applied Nanomaterials** (June 2023) <https://doi.org/10.1021/acsanm.3c01352>

12. “Competing magnetic interactions and field-induced metamagnetic transition in highly crystalline phase-tunable iron oxide nanorods” -S. *Attanayake*, **A. Chanda**, T. Hulse, R. Das, M.H. Phan and **H. Srikanth**, *Nanomaterials* **13**, 1340 (2023)
13. “From multi-segmented to core-shell nanorods: morphology evolution in Fe-Au nanorods by tuning fabrication conditions” -Hafsa Khurshid, Rahaana Yoosuf, Humaira Zafar, *Supun Attanayake*, Muhammad Azeem, Bashar Issa, Dalaver Anjum and **Hari Srikanth**, *Nanotechnology* **34**, 18502 (2023)
14. “Enhanced magnetism and anomalous Hall transport through 2D WS<sub>2</sub> interfaces” -*Chang-Ming Hung*, D.T.Dang, **A. Chanda**, *D. Detellem*, N. Alzahrani, N. Kapuruge, *Y.T.H Pham*, M. Liu, D. Zhou, H. Gutierrez, D.A. Arena, M. Terrones, S. Witanachchi, L.M. Woods, H. Srikanth and M.H. Phan, *Nanomaterials* **13**, 771 (2023)
15. “Effects of annealing temperature on the magnetic properties of highly crystalline biphasic iron oxide nanorods” -*S.B. Attanayake*, **A. Chanda**, R. Das, M.H. Phan and **H. Srikanth**, *AIP Advances* **13**, 025333 (2023)
16. “Magnetism and spin dependent transport phenomena across Verwey and Morin transitions in iron oxide/Pt bilayers” -**A. Chanda**, *Chang-Ming Hung*, Anh Tuan Dong, S. Cho, **H. Srikanth** and M.H. Phan, *Journal of Magnetism and Magnetic Materials* **568**, 170370 (2023)
17. “Emergence of asymmetric skew scattering dominated anomalous Nernst effect in spin gapless semiconductors Co<sub>1+x</sub>Fe<sub>1-x</sub>CrGa” -**A. Chanda**, Deepika Rani, J. Nag, A. Alam, K.G. Suresh, M.H. Phan and **H. Srikanth**, *Physical Review B* **106**, 134416 (2022)
18. “Emergent magnetism and exchange bias effect in iron oxide nanocubes with tunable phase and size” -*Supun Attanayake*, **Amit Chanda**, Raja Das, Nalaka Kapuruge, Humberto Gutierrez, Manh-Huong Phan and **Hari Srikanth**, *Journal of Physics: Condensed Matter* **34**, 495301 (2022) <https://doi.org/10.1088/1361-648X/ac99cc>
19. “Proximity enhanced magnetism at NiFe<sub>2</sub>O<sub>4</sub>/Graphene interface” -*N.Schulz*, **A. Chanda**, G. Datt, M.Venkata Kamalakar, T. Sarkar, M.H. Phan and **H. Srikanth**, *AIP Advances* **12**, 035132 (2022) <https://doi.org/10.1063/9.0000271>
20. “Macrospin model of an assembly of magnetically coupled core-shell nanoparticles” -N. Ntallis, C. Kons, H. Srikanth, M.H. Phan, D.A. Arena and M. Pereiro, *Physical Review B* **106**, 104402 (2022) <https://doi.org/10.1103/PhysRevB.106.104402>
21. “Spin Seebeck Effect in Iron Oxide Thin Films: Effects of phase transition, phase coexistence and surface magnetism” -**A. Chanda**, D. DeTellem, Y. Pham, J. Shoup, A.T. Duong, *R. Das*, S. Cho, D.V. Voronine, M. Tuan Trinh, D. Arena, S. Witanachchi, **H. Srikanth** and M. H. Phan, *ACS Applied Materials and Interfaces* <https://doi.org/10.1021/acsami.1c23284> (March 2022)
22. “Surface magnetic anisotropy-mediated spin Hall magnetoresistance and spin Seebeck effects in a YIG/Pt heterostructure” -*V. Kalappattil*, **R. Das**, M.H. Phan and **H. Srikanth**, *Journal of Magnetism and Magnetic Materials* **551**, 169173 (2022); <https://doi.org/10.1016/j.jmmm.2022.169173>
23. “Scaling of the thermally induced sign inversion of longitudinal spin Seebeck effect in a compensated ferrimagnet: role of magnetic anisotropy” -**A. Chanda**, C. Hozmann, N. Schulz, J. Seyd, M. Albrecht, M.H. Phan and **H. Srikanth**, *Advanced Functional Materials* **32**, 2109170 (2022) <https://doi.org/10.1002/adfm.202109170>
24. “Radiofrequency transverse susceptibility as a probe to study magnetic systems” -S. Chandra and **H. Srikanth**, Book Chapter (pp. 119-137) in “*Magnetic Measurement Techniques for Materials Characterization*” -Ed. V. Franco, B. Dodrill (Springer 2021) <https://doi.org/10.1007/978-3-030-70443-8>

## Professional/Conference Service (past 3 years)

- **Special Events Chair**, Magnetism and Magnetic Materials (MMM) 2025, Palm Beach, FL (October 2025)
- **IEEE Magnetics Society Administrative Committee (AdCom) Member** (Elected for term Jan 2024 – Dec 2026)
- **ERATO Evaluation and Advisory Subcommittee Member**, Japan Science and Technology Agency (2023-2026)
- **International Advisory Board Member**, 2026 NANO conference, Genova, Italy
- **Theme Topic Co-organizer**, 2024 ICM Conference, Bologna, Italy
- **Chair**, Workshop in AI in physics publishing, APS Editors' meeting, Long Island NY (Oct 2023)
- **Symposium co-organizer**, 2023 ICMAT, Singapore
- **Member, Nanomagnetism Technical Committee**, IEEE Nanotechnology Council (June 2021 – present)
- **Special Events Chair**, 2022 Joint MMM-INTERMAG conference, New Orleans LA (January 2022)
- **Co-Organizer**, “Magnetism in Medicine”, **Focus Session at the 2021 American Physical Society March Meeting**
- **Editor, *Physical Review B*** (June 2021 – present)
- **Editor, *Journal of Alloys and Compounds*** (March 2020 – December 2023)
- **Symposium Chair**, 2019 Joint MMM/Intermag conference, Washington DC, January 2018
- **Session Chair**, 2018 ICM conference, San Francisco, July 2018
- **Associate Editor, *Journal of Applied Physics*** (March 2014 – Feb 2020). This is considered one of the world's premier journal in the field of applied physics.
- **Program Committee and subcommittee coordinator**, 2019 Joint MMM/Intermag conference, Washington DC (January 2019)
- **Publications Co-Chair**, 2018 International Conference on Magnetism (ICM), San Francisco

## University Governance and Service activities [@ Univ. of South Florida]

- USF Distinguished University Professors Recommending Committee (2024- present)
- USF Faculty Senate (2020 – 2023)
- USF College of Arts and Sciences Faculty Council (2020-2022; 2024-2025), Deputy Chair 2021-2022\_Physics Department Faculty Advisory Committee (FAC) (2002 – 2005, 2007 – 2009, 2010 - 2013); FAC Chair (2012-2013), (2014-2015)