

Daoguan Ning

Postdoctoral Scholar, Mechanical Engineering

Bio

STANFORD ADVISORS

- Xiaolin Zheng, Postdoctoral Faculty Sponsor

Publications

PUBLICATIONS

- **Steam-diluted iron combustion enabling simultaneous burn-rate enhancement and nanoparticle mitigation** *INTERNATIONAL JOURNAL OF HEAT AND MASS TRANSFER*
Ning, D.
2026; 264
- **Ignition temperature and combustion dynamics of B-HTPB composite microparticles** *COMBUSTION AND FLAME*
Ning, D., Ka, D., Huynh, A., Li, Y., Zheng, X.
2026; 286
- **A novel approach for modeling iron microparticle oxidation during the reactive cooling process** *COMBUSTION AND FLAME*
Ning, D., Scholtissek, A., Dreizler, A.
2025; 279
- **Nanoparticle formation in the boundary layer of burning iron microparticles: Modeling and simulation** *CHEMICAL ENGINEERING JOURNAL*
Nguyen, B., Scholtissek, A., Li, T., Ning, D., Stein, O., Dreizler, A., Hasse, C.
2025; 507
- **Size-resolved ignition temperatures of isolated iron microparticles** *COMBUSTION AND FLAME*
Ning, D., Li, Y., Li, T., Boehm, B., Dreizler, A.
2024; 270
- **Oxidation progress and inner structure during single micron-sized iron particles combustion in a hot oxidizing atmosphere** *FUEL*
Sperling, A., Deutschmann, M. P., Ning, D., Spielmann, J., Li, T., Kramm, U. I., Nirschl, H., Boehm, B., Dreizler, A.
2025; 381
- **Temperature of burning iron microparticles with in-situ resolved initial sizes** *COMBUSTION AND FLAME*
Ning, D., Li, T., Boehm, B., Dreizler, A.
2024; 270
- **A quantitative theory for heterogeneous combustion of nonvolatile metal particles in the diffusion-limited regime** *COMBUSTION AND FLAME*
Ning, D., Dreizler, A.
2024; 269
- **Modeling the oxidation of iron microparticles during the reactive cooling phase** *PROCEEDINGS OF THE COMBUSTION INSTITUTE*
Mich, J., da Silva, A., Ning, D., Li, T., Raabe, D., Boehm, B., Dreizler, A., Hasse, C., Scholtissek, A.
2024; 40 (1-4)
- **Multi-stage oxidation of iron particles in a flame-generated hot laminar flow** *COMBUSTION AND FLAME*
Ning, D., Li, T., Mich, J., Scholtissek, A., Boehm, B., Dreizler, A.

