

# Ronghai Wu

## List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/9261087/publications.pdf>

Version: 2024-02-01

17  
papers

382  
citations

840728

11  
h-index

888047

17  
g-index

17  
all docs

17  
docs citations

17  
times ranked

225  
citing authors

| #  | ARTICLE  | IF   | CITATIONS |
|----|--|------|-----------|
| 1  | Study on hot deformation behavior and intrinsic workability of 6063 aluminum alloys using 3D processing map. <i>Journal of Alloys and Compounds</i> , 2017, 713, 212-221.  | 5.5  | 75        |
| 2  | A continuum approach to combined $\hat{\gamma}/\hat{\beta}$ evolution and dislocation plasticity in Nickel-based superalloys. <i>International Journal of Plasticity</i> , 2017, 95, 142-162.                          | 8.8  | 49        |
| 3  | Effect of initial microstructure on creep of single crystal nickel-based superalloys: A phase-field simulation incorporating dislocation dynamics. <i>Journal of Alloys and Compounds</i> , 2019, 779, 326-334.        | 5.5  | 40        |
| 4  | Insights from a minimal model of dislocation-assisted rafting in single crystal Nickel-based superalloys. <i>Scripta Materialia</i> , 2016, 123, 42-45.  | 5.2  | 32        |
| 5  | Instability of dislocation fluxes in a single slip: Deterministic and stochastic models of dislocation patterning. <i>Physical Review B</i> , 2018, 98, .  | 3.2  | 28        |
| 6  | Effect of Re on mechanical properties of single crystal Ni-based superalloys: Insights from first-principle and molecular dynamics. <i>Journal of Alloys and Compounds</i> , 2021, 862, 158643.                        | 5.5  | 28        |
| 7  | A dislocation dynamics-assisted phase field model for Nickel-based superalloys: The role of initial dislocation density and external stress during creep. <i>Journal of Alloys and Compounds</i> , 2017, 703, 389-395. | 5.5  | 24        |
| 8  | Atomistic simulation studies of Ni-based superalloys. <i>Journal of Alloys and Compounds</i> , 2021, 855, 157355.  | 5.5  | 23        |
| 9  | Cell structure formation in a two-dimensional density-based dislocation dynamics model. <i>Materials Theory</i> , 2021, 5, .   | 4.3  | 16        |
| 10 | High temperature creep mechanisms of a single crystal superalloy: A phase-field simulation and microstructure characterization. <i>Progress in Natural Science: Materials International</i> , 2020, 30, 366-370.       | 4.4  | 13        |
| 11 | Elastoplastic behavior of the $\hat{\gamma}$ -phase in Ni-based single crystal superalloys: A molecular dynamics study considering Re and temperature effect. <i>Mechanics of Materials</i> , 2021, 160, 103989.       | 3.2  | 12        |
| 12 | Cyclic-loading microstructure-property relations from a mesoscale perspective: An example of single crystal Nickel-based superalloys. <i>Journal of Alloys and Compounds</i> , 2019, 770, 964-971.                     | 5.5  | 11        |
| 13 | Thermodynamic considerations on a class of dislocation-based constitutive models. <i>Journal of the Mechanics and Physics of Solids</i> , 2022, 159, 104735.   | 4.8  | 11        |
| 14 | Characterization and Analysis of Strain Heterogeneity at Grain-Scale of Titanium Alloy with Tri-Modal Microstructure during Tensile Deformation. <i>Materials</i> , 2018, 11, 2194.                                    | 2.9  | 6         |
| 15 | Effect of Dislocation Mechanism on Elastoplastic Behavior of Crystals with Heterogeneous Dislocation Distribution. <i>Acta Mechanica Solida Sinica</i> , 2020, 33, 487-495.  | 1.9  | 5         |
| 16 | Insights into the nucleation, grain growth and phase transformation behaviours of sputtered metastable $\hat{\gamma}$ -W films. <i>Journal of Materials Science and Technology</i> , 2021, 90, 66-75.                  | 10.7 | 5         |
| 17 | Investigation of the relation between bainitic-ferritic microstructures and coincidence-site lattice boundaries by electron backscatter diffraction. <i>Materials Letters</i> , 2020, 267, 127553.                     | 2.6  | 4         |