

# Melissa K Santala

## List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/4880074/publications.pdf>

Version: 2024-02-01

19  
papers

1,754  
citations

1039406

9  
h-index

887659

17  
g-index

19  
all docs

19  
docs citations

19  
times ranked

1902  
citing authors

| #  | ARTICLE  | IF   | CITATIONS |
|----|--|------|-----------|
| 1  | Additively manufactured hierarchical stainless steels with high strength and ductility. <i>Nature Materials</i> , 2018, 17, 63-71.   | 13.3 | 1,517     |
| 2  | Approaches for ultrafast imaging of transient materials processes in the transmission electron microscope. <i>Micron</i> , 2012, 43, 1108-1120.  | 1.1  | 67        |
| 3  | Time resolved electron microscopy for <i>in situ</i> experiments. <i>Applied Physics Reviews</i> , 2014, 1, 041101.  | 5.5  | 38        |
| 4  | A detailed study of the Al <sub>3</sub> Ni formation reaction using nanocalorimetry. <i>Thermochimica Acta</i> , 2017, 658, 72-83.   | 1.2  | 24        |
| 5  | Rayleigh instabilities in crystalline solids: Evolution of finite-aspect-ratio pore channels in sapphire. <i>Acta Materialia</i> , 2008, 56, 1967-1980.  | 3.8  | 21        |
| 6  | Surface-energy-anisotropy-induced orientation effects on Rayleigh instabilities in sapphire. <i>Surface Science</i> , 2006, 600, 782-792.  | 0.8  | 17        |
| 7  | The orientation and morphology of platinum precipitates in sapphire. <i>Acta Materialia</i> , 2011, 59, 4761-4774.   | 3.8  | 14        |
| 8  | Nanosecond-scale time-resolved electron imaging during laser crystallization of GeTe. <i>Physica Status Solidi (B): Basic Research</i> , 2012, 249, 1907-1913.   | 0.7  | 14        |
| 9  | Orientation and morphology of Pt nanoparticles in $\gamma$ -alumina processed via ion implantation and thermal annealing. <i>Scripta Materialia</i> , 2020, 188, 44-49.                                | 2.6  | 14        |
| 10 | Precipitate orientation relationships in Pt-implanted sapphire. <i>Scripta Materialia</i> , 2010, 62, 187-190.   | 2.6  | 9         |
| 11 | Structure and phase transitions at the interface between $\gamma$ -Al <sub>2</sub> O <sub>3</sub> and Pt. <i>Journal of Physics Condensed Matter</i> , 2013, 25, 232202.                               | 0.7  | 8         |
| 12 | Effect of thermal aging on corrosion behavior of duplex stainless steels. <i>SN Applied Sciences</i> , 2022, 4, 1.   | 1.5  | 3         |
| 13 | High speed direct imaging of thin metal film ablation by movie-mode dynamic transmission electron microscopy. <i>Scientific Reports</i> , 2016, 6, 23046.  | 1.6  | 2         |
| 14 | Mapping Crystallization Kinetics of Phase-Change Materials Over Large Temperature Ranges Using Complementary In Situ Microscopy Techniques. <i>Microscopy and Microanalysis</i> , 2018, 24, 1868-1869. | 0.2  | 2         |
| 15 | High-Speed Electron Microscopy. <i>Springer Handbooks</i> , 2019, , 455-486.   | 0.3  | 2         |
| 16 | High-speed nanoscale characterization of dewetting via dynamic transmission electron microscopy. <i>Journal of Applied Physics</i> , 2016, 120, 085301.  | 1.1  | 1         |
| 17 | In-Situ TEM Observation of Crystallization in Phase-Change Material. <i>Microscopy and Microanalysis</i> , 2018, 24, 1930-1931.  | 0.2  | 1         |
| 18 | Dynamic Transmission Electron Microscope Study on the Crystallization of Ion-Bombarded Amorphous Germanium Thin Films. <i>Microscopy and Microanalysis</i> , 2015, 21, 1855-1856.                      | 0.2  | 0         |

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|----|---|-----|-----------|
| 19 | Imaging Irreversible Transformations with Movie-Mode Dynamic Transmission Electron Microscopy. <i>Microscopy and Microanalysis</i> , 2015, 21, 1853-1854. | 0.2 | 0         |