

# Frank Stein

## List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/9448526/publications.pdf>

Version: 2024-02-01

30  
papers

1,136  
citations

759233  
12  
h-index

552781  
26  
g-index

33  
all docs

33  
docs citations

33  
times ranked

1155  
citing authors

| #  | ARTICLE  | IF  | CITATIONS |
|----|--|-----|-----------|
| 1  | The Al-Rich Part of the Fe-Al Phase Diagram. <i>Journal of Phase Equilibria and Diffusion</i> , 2016, 37, 162-173.   | 1.4 | 194       |
| 2  | Laves phases: a review of their functional and structural applications and an improved fundamental understanding of stability and properties. <i>Journal of Materials Science</i> , 2021, 56, 5321-5427.                               | 3.7 | 186       |
| 3  | Re-determination of transition temperatures in the Fe–Al system by differential thermal analysis. <i>International Journal of Materials Research</i> , 2007, 98, 580-588.  | 0.3 | 136       |
| 4  | Thermal proteome profiling in bacteria: probing protein state <i>&lt; i&gt;in vivo&lt;/i&gt;</i> . <i>Molecular Systems Biology</i> , 2018, 14, e8242.   | 7.2 | 130       |
| 5  | Iron Aluminides. <i>Annual Review of Materials Research</i> , 2019, 49, 297-326.   | 9.3 | 71        |
| 6  | A Scheil–Gulliver model dedicated to the solidification of steel. <i>Calphad: Computer Coupling of Phase Diagrams and Thermochemistry</i> , 2015, 48, 184-188.   | 1.6 | 60        |
| 7  | On the reaction scheme and liquidus surface in the ternary system Fe–Si–Ti. <i>Intermetallics</i> , 2008, 16, 273-282.   | 3.9 | 57        |
| 8  | Thermodynamic description of the systems Co–Nb, Al–Nb and Co–Al–Nb. <i>Journal of Alloys and Compounds</i> , 2015, 637, 361-375.   | 5.5 | 55        |
| 9  | Elemental partitioning and site-occupancy in $\beta/\beta'$ forming Co-Ti-Mo and Co-Ti-Cr alloys. <i>Scripta Materialia</i> , 2018, 154, 159-162.  | 5.2 | 44        |
| 10 | Investigation of the $\hat{\mu}$ phase in the Fe–Al system by high-temperature neutron diffraction. <i>Applied Physics A: Materials Science and Processing</i> , 2010, 99, 607-611.  | 2.3 | 25        |
| 11 | Preparation, phase stability and structure of the C36 Laves phase $Nb_1-xCo_{2+x}$ . <i>Zeitschrift Fur Kristallographie - Crystalline Materials</i> , 2006, 221, .  | 0.8 | 23        |
| 12 | Composition dependence of hardness and elastic modulus of the cubic and hexagonal $NbCo_2$ Laves phase polytypes studied by nanoindentation. <i>Journal of Materials Research</i> , 2020, 35, 185-195.                                 | 2.6 | 15        |
| 13 | Thermodynamic Assessment of the Fe-Al-Nb System with Updated Fe-Nb Description. <i>Journal of Phase Equilibria and Diffusion</i> , 2017, 38, 771-787.  | 1.4 | 13        |
| 14 | The Ternary System Nickel/Silicon/Titanium Revisited. <i>Zeitschrift Fur Anorganische Und Allgemeine Chemie</i> , 2010, 636, 982-990.  | 1.2 | 12        |
| 15 | Microstructures of Ternary Eutectic Refractory Me-Si-B (Me = Mo, V) Alloy Systems. <i>Materials Science Forum</i> , 0, 941, 827-832.   | 0.3 | 12        |
| 16 | The effect of the ternary elements B, Ti, Cr, Cu, and Mo on fully lamellar $FeAl_3+FeAl_2$ alloys. <i>Journal of Alloys and Compounds</i> , 2017, 722, 219-228.  | 5.5 | 11        |
| 17 | Thermodynamic assessment of the Cr–Al–Nb system. <i>International Journal of Materials Research</i> , 2010, 101, 1369-1375.  | 0.3 | 10        |
| 18 | The Co–Ti system revisited: About the cubic-to-hexagonal Laves phase transformation and other controversial features of the phase diagram. <i>Calphad: Computer Coupling of Phase Diagrams and Thermochemistry</i> , 2019, 67, 101681. | 1.6 | 10        |

| #  | ARTICLE  | IF  | CITATIONS |
|----|--|-----|-----------|
| 19 | Compositional Dependence of the Compressive Yield Strength of Fe-Nb(-Al) and Co-Nb Laves Phases. Materials Research Society Symposia Proceedings, 2011, 1295, 311.   | 0.1 | 7         |
| 20 | Development of new Fe-Al-Nb(B) alloys for structural applications at high temperatures. MRS Advances, 2021, 6, 176-182.  | 0.9 | 7         |
| 21 | Solid-Solid Phase Transformations and Their Kinetics in Ti-Al-Nb Alloys. Metals, 2021, 11, 1991.   | 2.3 | 7         |
| 22 | Constitution of the ternary system Co-Si-Ti. Intermetallics, 2013, 38, 92-101.   | 3.9 | 4         |
| 23 | Nb-Based Nb-Al-Fe Alloys: Solidification Behavior and High-Temperature Phase Equilibria. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2018, 49, 752-762.                             | 2.2 | 4         |
| 24 | Thermodynamic Re-Assessment of the Co-Nb System. Materials Research Society Symposia Proceedings, 2008, 1128, 53001.   | 0.1 | 3         |
| 25 | Microstructure and Phase Transformation Temperatures of Two-Phase FeAl (B2) + FeAl2 Alloys. Materials Research Society Symposia Proceedings, 2014, 1760, 55.   | 0.1 | 3         |
| 26 | Structure and Disorder of the Laves Phases in the Co-Nb System. Materials Research Society Symposia Proceedings, 2008, 1128, 80801.  | 0.1 | 2         |
| 27 | Phase Equilibria in the Ternary Nb-Cr-Al System and Site Occupation in the Hexagonal C14 Laves Phase Nb(Al <sub>x</sub> Cr <sub>1-x</sub> ) <sub>2</sub> . Materials Research Society Symposia Proceedings, 2008, 1128, 81101. | 0.1 | 1         |
| 28 | An In-situ Electron Microscopy Study of Microstructural Evolution in a Co-NbCo <sub>2</sub> Binary Alloy. Materials Research Society Symposia Proceedings, 2008, 1128, 80901.  | 0.1 | 1         |
| 29 | Iron-Based Intermetallics. , 2021, , 423-458.  |     | 1         |
| 30 | The Effect of Li on Intermetallic Fe-Al Alloys. Materials Research Society Symposia Proceedings, 2012, 1516, 263-268.  | 0.1 | 0         |