

# Niels van Dijk

## List of Publications by Year in descending order

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31  
papers

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citations

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434195

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times ranked

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#	ARTICLE	IF	CITATIONS
1	Enhanced reversibility of the magnetoelastic transition in (Mn,Fe) <sub>2</sub> (P,Si) alloys via minimizing the transition-induced elastic strain energy. Journal of Materials Science and Technology, 2022, 103, 165-176.	10.7	11
2	Crystal structures and magnetic properties of Fe <sub>1.93</sub> -Co P <sub>1</sub> -Si compounds. Journal of Alloys and Compounds, 2022, 903, 163770.	5.5	1
3	Nonlinear influence of excess Mn on the magnetoelastic transition in (Mn,Cr) <sub>2</sub> Sb. Journal of Alloys and Compounds, 2022, 903, 164011.	5.5	1
4	Reduced Hysteresis and Enhanced Giant Magnetocaloric Effect in B-Doped all- <i>d</i> -Metal <math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline" overflow="scroll"><math>Ni</math> - <math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline" overflow="scroll"><math>Co</math> - <math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline" overflow="scroll"><math>Mn</math>	3.8	14
5	Impact of F and S doping on (Mn,Fe) <sub>2</sub> (P,Si) giant magnetocaloric materials. Acta Materialia, 2022, 234, 118057.	7.9	9
6	A novel 3D mixed-mode multigrain model with efficient implementation of solute drag applied to austenite-ferrite phase transformations in Fe-C-Mn alloys. Acta Materialia, 2021, 212, 116897.	7.9	15
7	The antiferromagnetic to ferrimagnetic phase transition in Mn <sub>2</sub> Sb <sub>1</sub> -Bi compounds. Journal of Alloys and Compounds, 2021, 866, 158963.	5.5	12
8	Landau model evaluation of the magnetic entropy change in magnetocaloric materials. Journal of Magnetism and Magnetic Materials, 2021, 529, 167871.	2.3	20
9	(Fe,Co) <sub>2</sub> (P,Si) rare-earth free permanent magnets: From macroscopic single crystals to submicron-sized particles. Acta Materialia, 2021, 221, 117388.	7.9	5
10	Self healing of radiation-induced damage in Fe- <sup>60</sup> Au and Fe- <sup>60</sup> Cu alloys: Combining positron annihilation spectroscopy with TEM and ab initio calculations. Journal of Alloys and Compounds, 2020, 817, 152765.	5.5	20
11	Design of Reversible Low-Field Magnetocaloric Effect at Room Temperature in Hexagonal MnMX Ferromagnets. Physical Review Applied, 2020, 13, .	3.8	13
12	A Review of Self-healing Metals: Fundamentals, Design Principles and Performance. Acta Metallurgica Sinica (English Letters), 2020, 33, 1167-1179.	2.9	19
13	Switching the magnetostructural coupling in MnCoGe-based magnetocaloric materials. Physical Review Materials, 2020, 4, .	2.4	8
14	Combined effect of annealing temperature and vanadium substitution for magnetocaloric Mn <sub>1.2</sub> -V Fe <sub>0.75</sub> P <sub>0.5</sub> Si <sub>0.5</sub> alloys. Journal of Alloys and Compounds, 2019, 803, 671-677.	5.5	27
15	Self healing of creep damage in iron-based alloys by supersaturated tungsten. Acta Materialia, 2019, 166, 531-542.	7.9	22
16	Reversible low-field magnetocaloric effect in Ni-Mn-In-based Heusler alloys. Physical Review Materials, 2019, 3, .	2.4	30
17	Self-Healing Phenomena in Metals. Advanced Materials Interfaces, 2018, 5, 1800226.	3.7	64
18	Tuning the magnetoelastic transition in (Mn,Fe) <sub>2</sub> (P,Si) by B, C, and N doping. Scripta Materialia, 2016, 124, 129-132.	5.2	32

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19	Autonomous filling of creep cavities in Fe-Au alloys studied by synchrotron X-ray nano-tomography. Acta Materialia, 2016, 121, 352-364.	7.9	33
20	Structural and magnetocaloric properties of (Mn,Fe) <sub>2</sub> (P,Si) materials with added nitrogen. Journal of Alloys and Compounds, 2016, 670, 123-127.	5.5	39
21	Effects of Milling Conditions on Nano-scale MnFe(P,Si) Particles by Surfactant-assisted High-energy Ball Milling. Physics Procedia, 2015, 75, 1104-1111.	1.2	5
22	Self Healing of Creep Damage by Gold Precipitation in Iron Alloys. Advanced Engineering Materials, 2015, 17, 598-603.	3.5	35
23	Taming the First-Order Transition in Giant Magnetocaloric Materials. Advanced Materials, 2014, 26, 2671-2675.	21.0	238
24	Preferential Au precipitation at deformation-induced defects in Fe-Au and Fe-Au-B-N alloys. Journal of Alloys and Compounds, 2014, 584, 425-429.	5.5	16
25	The mechanical stability of retained austenite in low-alloyed TRIP steel under shear loading. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2014, 594, 125-134.	5.6	30
26	Defect-induced Au precipitation in Fe-Au and Fe-Au-B-N alloys studied by in situ small-angle neutron scattering. Acta Materialia, 2013, 61, 7009-7019.	7.9	37
27	Positron annihilation study of ageing precipitation in deformed Fe-Cu-B-N-C. Philosophical Magazine, 2013, 93, 4182-4197.	1.6	4
28	Multi length scale characterization of austenite in TRIP steels using high-energy X-ray diffraction. Powder Diffraction, 2013, 28, 77-80.	0.2	3
29	Real-time martensitic transformation kinetics in maraging steel under high magnetic fields. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2010, 527, 5241-5245.	5.6	46
30	Self-healing behaviour in man-made engineering materials: bioinspired but taking into account their intrinsic character. Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences, 2009, 367, 1689-1704.	3.4	99
31	Self-healing of deformation damage in underaged Al-Cu-Mg alloys. Scripta Materialia, 2008, 58, 719-722.	5.2	49