Vassili A Vorontsov

List of Publications by Year
in descending order

28 papers	1,439 citations	394390 19 h-index	526264 27 g-index
29 all docs	29 docs citations	29 times ranked	1199 citing authors

#	Article	IF	Citations
1	The effect of grain size on the twin initiation stress in a TWIP steel. Acta Materialia, 2015, 89, 247-257.	7.9	221
2	Alloying effects in polycrystalline Î³â€² strengthened Coâ€"Alâ€"W base alloys. Intermetallics, 2014, 48, 44-53.	3.9	168
3	Effect of alloying on the oxidation behaviour of Coâ€"Alâ€"W superalloys. Corrosion Science, 2014, 83, 382-395.	6.6	117
4	High-resolution electron microscopy of dislocation ribbons in a CMSX-4 superalloy single crystal. Acta Materialia, 2012, 60, 4866-4878.	7.9	105
5	Segregation at stacking faults within the Î³â€² phase of two Ni-base superalloys following intermediate temperature creep. Scripta Materialia, 2015, 94, 5-8.	5.2	97
6	Coarsening behaviour and interfacial structure of Î³â€² precipitates in Co-Al-W based superalloys. Acta Materialia, 2016, 120, 14-23.	7.9	80
7	Shearing of Î³â€² precipitates by aâŒ©112âŒª dislocation ribbons in Ni-base superalloys: A phase field approach. Acta Materialia, 2010, 58, 4110-4119.	7.9	56
8	Precipitation processes in the Beta-Titanium alloy Tiâ€"5Alâ€"5Moâ€"5Vâ€"3Cr. Journal of Alloys and Compounds, 2015, 646, 946-953.	5.5	54
9	Nanoprecipitation in a beta-titanium alloy. Journal of Alloys and Compounds, 2015, 623, 146-156.	5.5	50
10	Alloying effects on oxidation mechanisms in polycrystalline Coâ€"Ni base superalloys. Corrosion Science, 2017, 116, 44-52.	6.6	45
11	In situ micropillar deformation of hydrides in Zircaloy-4. Acta Materialia, 2015, 92, 81-96.	7.9	44
12	The formation of ordered clusters in Tiâ€"7Al and Tiâ€"6Alâ€"4V. Acta Materialia, 2016, 112, 141-149.	7.9	44
13	Effect of precipitation on mechanical properties in the Î²-Ti alloy Tiâ€"24Nbâ€"4Zrâ€"8Sn. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2016, 655, 399-407.	5.6	43
14	Elastic moduli and load partitioning in a single-crystal nickel superalloy. Scripta Materialia, 2009, 61, 109-112.	5.2	40
15	Alloying and the micromechanics of Coâ€"Alâ€"Wâ€"X quaternary alloys. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2014, 613, 201-208.	5.6	40
16	The dynamic behaviour of a twinning induced plasticity steel. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2014, 589, 252-261.	5.6	38
17	Superelastic load cycling of Gum Metal. Acta Materialia, 2015, 88, 323-333.	7.9	34
18	Shearing of Î³â€² precipitates in Ni-base superalloys: a phase field study incorporating the effective Î³-surface. Philosophical Magazine, 2012, 92, 608-634.	1.6	30

#	Article	IF	Citations
19	Femtosecond quantification of void evolution during rapid material failure. Science Advances, 2020, 6, .	10.3	22
20	Generalised stacking fault energy of Ni-Al and Co-Al-W superalloys: Density-functional theory calculations. Materialia, 2020, 9, 100555.	2.7	20
21	A High Strength Tiâ€"SiC Metal Matrix Composite. Advanced Engineering Materials, 2017, 19, 1700027.	3.5	19
22	The Dislocation Mechanism of Stress Corrosion Embrittlement in Ti-6Al-2Sn-4Zr-6Mo. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2016, 47, 282-292.	2.2	15
23	High-temperature<i>Î³</i>(FCC)/<i>Î³</i>â€²(L1_{2}) Co-Al-W based superalloys. MATEC Web of Conferences, 2014, 14, 18003.	0.2	13
24	Understanding the â€œblue spotâ€: Engineering Failure Analysis, 2016, 61, 2-20.	4.0	11
25	Prediction of Mechanical Behaviour in Ni-Base Superalloys Using the Phase Field Model of Dislocations. Advanced Materials Research, 0, 278, 150-155.	0.3	5
26	Interface characteristics in an <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mrow><mml:mi>Î±</mml:mi><mml:mo>+</mml:mo><mml:mi>Î²</mml:mi titanium alloy. Physical Review Materials, 2020, 4, .	2.4	5
27	Precipitate dissolution during deformation induced twin thickening in a CoNi-base superalloy subject to creep. Acta Materialia, 2022, 232, 117936.	7.9	5
28	Dislocations in a Ni-based superalloy during low temperature creep. MATEC Web of Conferences, 2014, 14, 01006.	0.2	3