Hael Mughrabi

List of Publications by Year
in descending order

25 papers	2,866 citations	430754 18 h-index	610775 24 g-index
27 all docs	27 docs citations	27 times ranked	1695 citing authors

#	Article	IF	Citations
1	Heterostructured materials: superior properties from hetero-zone interaction. Materials Research Letters, 2021, 9, 1-31.	4.1	505
2	Low energy dislocation structures produced by cyclic deformation. Materials Science and Engineering, 1986, 81, 433-450.	0.1	348
3	Cyclic deformation and fatigue properties of very fine-grained metals and alloys. International Journal of Fatigue, 2010, 32, 1413-1427.	2.8	269
4	Specific features and mechanisms of fatigue in the ultrahigh-cycle regime. International Journal of Fatigue, 2006, 28, 1501-1508.	2.8	243
5	Cyclic Slip Irreversibilities and the Evolution of Fatigue Damage. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2009, 40, 1257-1279.	1.1	187
6	The importance of sign and magnitude of Î³/Î³â€² lattice misfit in superalloysâ€”with special reference to the new Î³â€²-hardened cobalt-base superalloys. Acta Materialia, 2014, 81, 21-29.	3.8	165
7	Cyclic Slip Irreversibilities and the Evolution of Fatigue Damage. Metallurgical and Materials Transactions B: Process Metallurgy and Materials Processing Science, 2009, 40, 431-453.	1.0	157
8	Secondary cyclic hardening in fatigued copper monocrystals and polycrystals. Materials Science and Engineering, 1984, 63, 147-163.	0.1	137
9	Fatigue, Cyclic Deformation and Microstructure. Cyclic Deformation and Fatigue of Selected Ferritic and Austenitic Steels: Specific Aspects.. ISIJ International, 1997, 37, 1154-1169.	0.6	104
10	Microstructural mechanisms of cyclic deformation, fatigue crack initiation and early crack growth. Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences, 2015, 373, 20140132.	1.6	98
11	Fatigue, an everlasting materials problem - still en vogue. Procedia Engineering, 2010, 2, 3-26.	1.2	95
12	Cyclic slip irreversibility and fatigue life: A microstructure-based analysis. Acta Materialia, 2013, 61, 1197-1203.	3.8	90
13	High-temperature measurements of lattice parameters and internal stresses of a creep-deformed monocrystalline nickel-base superalloy. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 1996, 27, 1003-1014.	1.1	86
14	The Î±-factor in the Taylor flow-stress law in monotonic, cyclic and quasi-stationary deformations: Dependence on slip mode, dislocation arrangement and density. Current Opinion in Solid State and Materials Science, 2016, 20, 411-420.	5.6	85
15	Fatigue damage in copper polycrystals subjected to ultrahigh-cycle fatigue below the PSB threshold. International Journal of Fatigue, 2010, 32, 872-878.	2.8	74
16	Microstructural fatigue mechanisms: Cyclic slip irreversibility, crack initiation, non-linear elastic damage analysis. International Journal of Fatigue, 2013, 57, 2-8.	2.8	74
17	Cyclic Deformation and Fatigue Properties of Ultrafine Grain Size Materials: Current Status and Some Criteria for Improvement of the Fatigue Resistance. Materials Research Society Symposia Proceedings, 2000, 634, 211.	0.1	57
18	Damage Mechanisms and Fatigue Lives: From the Low to the Very High Cycle Regime. Procedia Engineering, 2013, 55, 636-644.	1.2	22

#	Article	IF	Citations
19	Revisiting â€œSteady-Stateâ€•Monotonic and Cyclic Deformation: Emphasizing the Quasi-Stationary State of Deformation. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2020, 51, 1441-1456.	1.1	13
20	Misorientations and geometrically necessary dislocations in deformed copper crystals: A microstructural analysis of X-ray rocking curves. International Journal of Materials Research, 2005, 96, 688-697.	0.8	9
21	A tribute to Claude Bathias â€“ Highlights of his pioneering work in Gigacycle Fatigue. International Journal of Fatigue, 2016, 93, 217-223.	2.8	8
22	Implications of non-negligible microstructural variations during steady-state deformation. International Journal of Materials Research, 2005, 96, 546-551.	0.8	6
23	Cyclic strain rate effects in fatigued face-centred and body-centred cubic metals. Philosophical Magazine, 2013, 93, 3821-3834.	0.7	5
24	Cyclic Strain Localization in Fatigued Metals. , 2001, , 271-281.		2
25	On the dislocation mechanisms of dynamic strain ageing in fatigued plain carbon steels. International Journal of Materials Research, 2022, 94, 471-477.	0.1	0