

# Oncu Akyildiz

## List of Publications by Year in Descending Order

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**Version:** 2024-04-02

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The third column is the impact factor (IF) of the journal, and the fourth column is the number of citations of the article.

18 papers	189 citations	7 h-index	13 g-index
20 ext. papers	213 ext. citations	3.1 avg, IF	2.97 L-index

#	Paper	IF	Citations
18	A process-microstructure finite element simulation framework for predicting phase transformations and microhardness for directed energy deposition of Ti6Al4V. <i>Additive Manufacturing</i> , <b>2020</b> , 35, 101252	6.1	7
17	Influence of displacement constraints to the surface reconstruction of stressed bicrystal thin films. <i>Materials Research Express</i> , <b>2020</b> , 7, 026411	1.7	
16	Predicting Microstructure Evolution During Directed Energy Deposition Additive Manufacturing of Ti-6Al-4V. <i>Journal of Manufacturing Science and Engineering, Transactions of the ASME</i> , <b>2018</b> , 140,	3.3	39
15	Synthesis, characterization and electrochemical performance of Nb doped LiFePO <sub>4</sub> /C cathodes. <i>Hittite Journal of Science &amp; Engineering</i> , <b>2018</b> , 5, 49-55	1	2
14	YRSEK KROMLU BEYAZ DİME DEMİRLERDE FAZ DENGESİNİN BENZETİMİ <i>Uludağ University Journal of the Faculty of Engineering</i> , <b>2018</b> , 23, 179-190	0.1	1
13	Thermal Grooving by Surface Diffusion: a Review of Classical Thermo-Kinetics Approach. <i>Hittite Journal of Science &amp; Engineering</i> , <b>2017</b> , 4, 7-16	1	4
12	The thermodynamic stability of intermediate solid solutions in LiFePO <sub>4</sub> nanoparticles. <i>Journal of Materials Chemistry A</i> , <b>2016</b> , 4, 5436-5447	13	26
11	Particle-size and morphology dependence of the preferred interface orientation in LiFePO <sub>4</sub> nano-particles. <i>Journal of Materials Chemistry A</i> , <b>2014</b> , 2, 15437-15447	13	37
10	Grain boundary grooving in bi-crystal thin films induced by surface drift-diffusion driven by capillary forces and applied uniaxial tensile stresses. <i>Philosophical Magazine</i> , <b>2012</b> , 92, 804-829	1.6	7
9	Mesoscopic nonequilibrium thermodynamics treatment of the grain boundary thermal grooving induced by the anisotropic surface drift diffusion. <i>Journal of Materials Science</i> , <b>2011</b> , 46, 6054-6064	4.3	5
8	Grain boundary grooving induced by the anisotropic surface drift diffusion driven by the capillary and electromigration forces: Simulations. <i>Journal of Applied Physics</i> , <b>2011</b> , 110, 043521	2.5	7
7	Morphological Evolution of Intragranular Void under the Thermal-Stress Gradient Generated by the Steady State Heat Flow in Encapsulated Metallic Films: Special Reference to Flip Chip Solder Joints. <i>Solid State Phenomena</i> , <b>2008</b> , 139, 151-156	0.4	
6	Morphological evolution of voids by surface drift diffusion driven by the capillary, electromigration, and thermal-stress gradient induced by the steady state heat flow in passivated metallic thin films and flip-chip solder joints. II. Applications. <i>Journal of Applied Physics</i> , <b>2008</b> , 104, 023522	2.5	4
5	Morphological evolution of voids by surface drift diffusion driven by capillary, electromigration, and thermal-stress gradients induced by steady-state heat flow in passivated metallic thin films and flip chip solder joints. I. Theory. <i>Journal of Applied Physics</i> , <b>2008</b> , 104, 023521	2.5	12
4	Morphological evolution of tilted grain-boundary thermal grooving by surface diffusion in bicrystal thin solid films having strong anisotropic surface Gibbs free energies. <i>Journal of Applied Physics</i> , <b>2008</b> , 104, 013518	2.5	4
3	Cathode edge displacement by voiding coupled with grain boundary grooving in bamboo like metallic interconnects by surface drift-diffusion under the capillary and electromigration forces. <i>International Journal of Solids and Structures</i> , <b>2008</b> , 45, 921-942	3.1	9
2	Computer Simulations on the Grain Boundary Grooving and Cathode Edge Displacement in Bamboo-like Metallic Interconnects. <i>Materials Research Society Symposia Proceedings</i> , <b>2006</b> , 914, 1		1

- 1 Grain boundary grooving and cathode voiding in bamboo-like metallic interconnects by surface drift diffusion under the capillary and electromigration forces. *Journal of Applied Physics*, **2005**, 97, 093520<sup>25</sup> 23