

Yoosuf N Picard

List of Publications by Year in Descending Order

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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.

83
papers

1,146
citations

21
h-index

31
g-index

87
ext. papers

1,240
ext. citations

2.5
avg, IF

4.14
L-index

#	Paper	IF	Citations
83	Micromachining imposed subsurface plastic deformation in single-crystal aluminum. <i>Materials Characterization</i> , 2021 , 171, 110747	3.9	5
82	On-Demand Nanoscale Manipulations of Correlated Oxide Phases. <i>Advanced Functional Materials</i> , 2019 , 29, 1905585	15.6	6
81	Microscopy & Microanalysis 2018. <i>Microscopy Today</i> , 2019 , 27, 30-31	0.4	1
80	Effects of Cr Concentration on Cementite Coarsening in Ultrahigh Carbon Steel. <i>Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science</i> , 2019 , 50, 4779-4790	2.3	2
79	Grain growth stagnation and texture development in an irradiated thermally stabilized nanocrystalline alloy. <i>Journal of Applied Physics</i> , 2019 , 126, 175901	2.5	4
78	Effects of Nb Modification and Cooling Rate on the Microstructure in an Ultrahigh Carbon Steel. <i>Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science</i> , 2018 , 49, 2161-2172	2.3	5
77	Microscopy & Microanalysis 2018 in Baltimore, Maryland. <i>Microscopy Today</i> , 2018 , 26, 38-41	0.4	
76	Microscopy & Microanalysis 2018. <i>Microscopy Today</i> , 2018 , 26, 46-47	0.4	
75	A Review of Electron Channeling Contrast Imaging for Non-Destructive Defect Analysis of Crystalline Solids. <i>Microscopy and Microanalysis</i> , 2018 , 24, 630-631	0.5	
74	Characterizing the Effect of ECAP on Particle Dispersion and Thermal Stability of Internally Oxidized Fe-Y Alloys. <i>Microscopy and Microanalysis</i> , 2018 , 24, 2220-2221	0.5	
73	Automated Quadrat Analysis Technique for Particle Dispersion Quantification in Oxide Dispersion Strengthened Alloys. <i>Microscopy and Microanalysis</i> , 2018 , 24, 592-593	0.5	
72	Interface Characterization of Al/Cu Microlaminates Fabricated By Electrically Assisted Roll Bonding. <i>Journal of Micro and Nano-Manufacturing</i> , 2017 , 5,	1.3	2
71	UHCSDB: UltraHigh Carbon Steel Micrograph DataBase. <i>Integrating Materials and Manufacturing Innovation</i> , 2017 , 6, 197-205	2.9	23
70	Coarsening of Inter- and Intra-granular Proeutectoid Cementite in an Initially Pearlitic 2C-4Cr Ultrahigh Carbon Steel. <i>Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science</i> , 2017 , 48, 2320-2335	2.3	11
69	Automated Acquisition and Analysis of Selected Area Electron Channeling Patterns in an FEG-SEM. <i>Microscopy and Microanalysis</i> , 2017 , 23, 550-551	0.5	
68	Investigating Defect Contrast in GeXSh _{1-x} /Si Epitaxial Structures Using Electron Channeling Contrast Imaging. <i>Microscopy and Microanalysis</i> , 2017 , 23, 574-575	0.5	
67	Synthesis of Group IV Nanowires on Graphene: The Case of Ge Nanocrawlers. <i>Nano Letters</i> , 2016 , 16, 5267-72	11.5	14

66	Combined Electron Channeling Contrast Imaging (ECCI) and Transmission Electron Microscopy (TEM) Studies of Coherent Domain Boundaries in Strained La 0.7 Sr 0.3 MnO 3 (LSM) Epitaxial Thin Films. <i>Microscopy and Microanalysis</i> , 2016 , 22, 1346-1347	0.5	
65	Transient Thermometry and High-Resolution Transmission Electron Microscopy Analysis of Filamentary Resistive Switches. <i>ACS Applied Materials & Interfaces</i> , 2016 , 8, 20176-84	9.5	27
64	Digital image analysis to quantify carbide networks in ultrahigh carbon steels. <i>Materials Characterization</i> , 2016 , 117, 134-143	3.9	18
63	Transient thermometry and HRTEM analysis of RRAM thermal dynamics during switching and failure 2016 ,		1
62	Glide of threading edge dislocations after basal plane dislocation conversion during 4HβiC epitaxial growth. <i>Journal of Crystal Growth</i> , 2015 , 418, 7-14	1.6	6
61	In situ TEM imaging of defect dynamics under electrical bias in resistive switching rutile-TiO ₂ <i>Microscopy and Microanalysis</i> , 2015 , 21, 140-53	0.5	33
60	Applications of Electron Channeling Contrast Imaging for the Rapid Characterization of Extended Defects in III/V/Si Heterostructures. <i>IEEE Journal of Photovoltaics</i> , 2015 , 5, 676-682	3.7	31
59	Oxygen Vacancy Creation, Drift, and Aggregation in TiO ₂ -Based Resistive Switches at Low Temperature and Voltage. <i>Advanced Functional Materials</i> , 2015 , 25, 2876-2883	15.6	72
58	Electron channeling contrast imaging of anti-phase boundaries in coherently strained La _{0.7} Sr _{0.3} MnO ₃ thin films on (110)-oriented SrTiO ₃ . <i>Applied Physics Letters</i> , 2015 , 107, 041601	3.4	6
57	. <i>Journal of Microelectromechanical Systems</i> , 2015 , 24, 2008-2018	2.5	7
56	Site-specific comparisons of V-defects and threading dislocations in InGaN/GaN multi-quantum-wells grown on SiC and GaN substrates. <i>Journal of Crystal Growth</i> , 2014 , 387, 16-22	1.6	10
55	In situ biasing TEM investigation of resistive switching events in TiO ₂ -based RRAM 2014 ,		4
54	Measuring the Strain Sensitivity in Si (001) Electron Channeling Patterns Using Higher-order Laue Zone Line Shifts. <i>Microscopy and Microanalysis</i> , 2014 , 20, 42-43	0.5	3
53	Site Specific TEM Specimen Preparation for Characterization of Extended Defects in 4H-SiC Epilayers. <i>Microscopy and Microanalysis</i> , 2014 , 20, 344-345	0.5	
52	Using Electron Channeling Contrast Imaging for Misfit Dislocation Characterization in Heteroepitaxial III-V/Si Thin Films. <i>Microscopy and Microanalysis</i> , 2014 , 20, 552-553	0.5	
51	A Method for Quantitative Analysis of Carbide Network Path Lengths in Ultrahigh Carbon Steel. <i>Microscopy and Microanalysis</i> , 2014 , 20, 874-875	0.5	
50	Investigating the Effects of a Heat Treatment on Microstructure of an Ultrahigh Carbon Steel through SEM and In Situ CLSM studies. <i>Microscopy and Microanalysis</i> , 2014 , 20, 964-965	0.5	
49	Strain Associated with Surface-Penetrating Dislocations Visible by Electron Channeling Contrast Imaging. <i>Microscopy and Microanalysis</i> , 2014 , 20, 1076-1077	0.5	

48	Experimental Investigation of Sub-Surface Deformation using EBSD in Single Crystal Aluminum during Orthogonal Micromachining. <i>Microscopy and Microanalysis</i> , 2014 , 20, 1472-1473	0.5	2
47	Ultrashort Pulsed Laser Induced Heat Affected Zones Characterized by Ion Channeling Contrast Imaging. <i>Microscopy and Microanalysis</i> , 2014 , 20, 1480-1481	0.5	2
46	In Situ Biasing TEM Characterization of Resistive Switching Phenomena in TiO ₂ -based RRAM. <i>Microscopy and Microanalysis</i> , 2014 , 20, 1548-1549	0.5	2
45	Defect Analysis in La _{0.7} Sr _{0.3} MnO ₃ Epitaxial Thin Films by Electron Channeling Contrast Imaging (ECCI). <i>Microscopy and Microanalysis</i> , 2014 , 20, 1036-1037	0.5	
44	Rapid characterization of extended defects in III-V/Si by electron channeling contrast imaging 2014		2
43	Rapid misfit dislocation characterization in heteroepitaxial III-V/Si thin films by electron channeling contrast imaging. <i>Applied Physics Letters</i> , 2014 , 104, 232111	3.4	48
42	Theory of dynamical electron channeling contrast images of near-surface crystal defects. <i>Ultramicroscopy</i> , 2014 , 146, 71-8	3.1	35
41	Pattern transfer with stabilized nanoparticle etch masks. <i>Nanotechnology</i> , 2013 , 24, 085303	3.4	2
40	Impact of Joule heating on the microstructure of nanoscale TiO ₂ resistive switching devices. <i>Journal of Applied Physics</i> , 2013 , 113, 163703	2.5	24
39	Nucleation of in-grown stacking faults and dislocation half-loops in 4H-SiC epitaxy. <i>Journal of Applied Physics</i> , 2013 , 114, 123502	2.5	6
38	Dislocation impact on resistive switching in single-crystal SrTiO ₃ . <i>Journal of Applied Physics</i> , 2013 , 113, 234510	2.5	21
37	Microstructure of epitaxial GaN films grown on chemomechanically polished GaN(0001) substrates. <i>Journal of Crystal Growth</i> , 2012 , 347, 88-94	1.6	15
36	Future Prospects for Defect and Strain Analysis in the SEM via Electron Channeling. <i>Microscopy Today</i> , 2012 , 20, 12-16	0.4	21
35	High-Throughput Characterization of Surface Segregation in Cu _x Pd _{1-x} Alloys. <i>Journal of Physical Chemistry C</i> , 2011 , 115, 10155-10163	3.8	39
34	Effects of Nitrogen Doping on Basal Plane Dislocation Reduction in 8° Off-Cut 4H-SiC Epilayers. <i>Materials Science Forum</i> , 2011 , 679-680, 63-66	0.4	5
33	Growth of 4H- and 3C-SiC Epitaxial Layers on 4H-SiC Step-Free Mesas. <i>Materials Science Forum</i> , 2011 , 679-680, 119-122	0.4	1
32	Direct observation of basal-plane to threading-edge dislocation conversion in 4H-SiC epitaxy. <i>Journal of Applied Physics</i> , 2011 , 109, 094906	2.5	32
31	Identifying threading dislocations in GaN films and substrates by electron channelling. <i>Journal of Microscopy</i> , 2011 , 244, 311-9	1.9	14

30	Imaging Dislocations in Single-Crystal SrTiO ₃ Substrates by Electron Channeling. <i>Journal of Electronic Materials</i> , 2011 , 40, 2222-2227	1.9	15
29	Secondary electron dopant contrast imaging of compound semiconductor junctions. <i>Journal of Applied Physics</i> , 2011 , 110, 014902	2.5	5
28	Relating Precursor Pyrolysis Conditions and Aqueous Electrolyte Capacitive Energy Storage Properties for Activated Carbons Derived from Anhydrous Glucose-d. <i>Journal of the Electrochemical Society</i> , 2011 , 158, A83	3.9	19
27	CL/EBIC-SEM Techniques for Evaluation of Impact of Crystallographic Defects on Carrier Lifetime in 4H-SiC Epitaxial Layers. <i>Materials Science Forum</i> , 2010 , 645-648, 211-214	0.4	8
26	Exchange bias in a single phase ferrimagnet. <i>Journal of Applied Physics</i> , 2010 , 107, 113915	2.5	18
25	Diffraction Contrast of Threading Dislocations in GaN and 4H-SiC Epitaxial Layers Using Electron Channeling Contrast Imaging. <i>Journal of Electronic Materials</i> , 2010 , 39, 743-746	1.9	5
24	Electrical and Optical Characterization of AlGaIn/GaN HEMTs with In Situ and Ex Situ Deposited SiN _x Layers. <i>Journal of Electronic Materials</i> , 2010 , 39, 2452-2458	1.9	22
23	Basal Plane Dislocation Mitigation in 8° Off-Cut 4H-SiC through In Situ Growth Interrupts during Chemical Vapor Deposition. <i>Materials Science Forum</i> , 2009 , 615-617, 61-66	0.4	3
22	Crystalline Quality and Surface Morphology of 3C-SiC Films on Si Evaluated by Electron Channeling Contrast Imaging. <i>Materials Science Forum</i> , 2009 , 615-617, 435-438	0.4	
21	Growth and photoluminescence properties of vertically aligned SnO ₂ nanowires. <i>Journal of Crystal Growth</i> , 2009 , 311, 3158-3162	1.6	28
20	Controlled Growth of Parallel Oriented ZnO Nanostructural Arrays on Ga ₂ O ₃ Nanowires. <i>Crystal Growth and Design</i> , 2009 , 9, 1164-1169	3.5	36
19	Cathodoluminescence studies of the inhomogeneities in Sn-doped Ga ₂ O ₃ nanowires. <i>Nano Letters</i> , 2009 , 9, 3245-51	11.5	70
18	Growth of Sn-Doped Ga ₂ O ₃ Nanowires and Ga ₂ O ₃ /SnO ₂ Heterostructures for Gas Sensing Applications. <i>Crystal Growth and Design</i> , 2009 , 9, 4471-4479	3.5	41
17	Structure and Orientation Determination of Metal-Oxide Nanostructures by Electron Backscatter Diffraction. <i>Microscopy and Microanalysis</i> , 2009 , 15, 402-403	0.5	1
16	Pulsed laser ignition thresholds of energetic multilayer foils 2009 ,		1
15	Nanosecond laser induced ignition thresholds and reaction velocities of energetic bimetallic nanolaminates. <i>Applied Physics Letters</i> , 2008 , 93, 104104	3.4	18
14	Nondestructive defect measurement and surface analysis of 3C-SiC on Si (001) by electron channeling contrast imaging. <i>Materials Research Society Symposia Proceedings</i> , 2008 , 1068, 1		
13	Lateral/vertical Homoepitaxial Growth on 4H-SiC Surfaces Controlled by Dislocations. <i>Materials Research Society Symposia Proceedings</i> , 2008 , 1069, 1		

12	Femtosecond laser heat affected zones profiled in CoBi multilayer thin films. <i>Applied Physics Letters</i> , 2008 , 92, 014102	3.4	8
11	Diffraction contrast and Bragg reflection determination in forescattered electron channeling contrast images of threading screw dislocations in 4H-SiC. <i>Journal of Applied Physics</i> , 2008 , 104, 124906	2.5	26
10	Nondestructive dislocation delineation using topographically enhanced imaging of surface morphologies in 4H-SiC epitaxial layers. <i>Journal of Applied Physics</i> , 2008 , 103, 074904	2.5	6
9	Epitaxial SiC Growth Morphology and Extended Defects Investigated by Electron Backscatter Diffraction and Electron Channeling Contrast Imaging. <i>Journal of Electronic Materials</i> , 2008 , 37, 691-698	1.9	10
8	Imaging Surface Pits and Dislocations in 4H-SiC by Forescattered Electron Detection and Photoluminescence. <i>Journal of Electronic Materials</i> , 2008 , 37, 655-661	1.9	5
7	Electron channeling contrast imaging of atomic steps and threading dislocations in 4H-SiC. <i>Applied Physics Letters</i> , 2007 , 90, 234101	3.4	41
6	Pulsed laser ignition of reactive multilayer films. <i>Applied Physics Letters</i> , 2006 , 88, 144102	3.4	39
5	Femtosecond laser machining of single-crystal superalloys through thermal barrier coatings. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2006 , 430, 203-207	5.3	51
4	Role of a native oxide on femtosecond laser interaction with silicon (100) near the damage threshold. <i>Applied Physics Letters</i> , 2005 , 86, 264103	3.4	13
3	Femtosecond laser interactions with Co/Al multilayer films. <i>Materials Research Society Symposia Proceedings</i> , 2004 , 850, 54		4
2	Focused ion beam-shaped microtools for ultra-precision machining of cylindrical components. <i>Precision Engineering</i> , 2003 , 27, 59-69	2.9	89
1	Cutting Reactive Foils Without Igniting Them (A Femtosecond Laser Machining Approach). <i>Materials Research Society Symposia Proceedings</i> , 2003 , 800, 33		1