

L E Rehn

List of Publications by Year in Descending Order

Source: <https://exaly.com/author-pdf/11872443/l-e-rehn-publications-by-year.pdf>

Version: 2024-04-17

This document has been generated based on the publications and citations recorded by exaly.com. For the latest version of this publication list, visit the link given above.

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

81
papers

1,780
citations

25
h-index

41
g-index

81
ext. papers

1,818
ext. citations

3.4
avg, IF

3.54
L-index

#	Paper	IF	Citations
81	Early-stage suppression of Cu (001) oxidation. <i>Applied Physics Letters</i> , 2005 , 87, 051914	3.4	35
80	Generating Nanoscale Arrays Using Self-Organized Porous-Alumina Ion Implantation Masks. <i>Materials Research Society Symposia Proceedings</i> , 2003 , 777, 221		
79	Microstructure and mechanical properties of TiSiN coatings. <i>Journal of Materials Research</i> , 2002 , 17, 2628-2632	2.5	53
78	Sound velocity of glassy Pd ₄₀ Si ₂₀ after heavy-ion irradiation at low temperatures. <i>Philosophical Magazine A: Physics of Condensed Matter, Structure, Defects and Mechanical Properties</i> , 2002 , 82, 2333-2339		
77	Intrinsic stress development in TiN:H ceramic nanocomposite coatings. <i>Applied Physics Letters</i> , 2002 , 81, 352-354	3.4	27
76	Mass density of glassy Pd ₈₀ Si ₂₀ during low-temperature light ion irradiation. <i>Journal of Materials Research</i> , 2001 , 16, 2788-2792	2.5	2
75	Origin of atomic clusters during ion sputtering. <i>Physical Review Letters</i> , 2001 , 87, 207601	7.4	55
74	Shock-Wave Synthesis of Nanoparticles During Ion Sputtering. <i>Materials Research Society Symposia Proceedings</i> , 2001 , 704, 761		
73	In-situ transmission electron microscopy study of ion-irradiated copper: Temperature dependence of defect yield and cascade collapse. <i>Philosophical Magazine A: Physics of Condensed Matter, Structure, Defects and Mechanical Properties</i> , 2000 , 80, 809-842		12
72	Compositional variation of microstructure in ion-implanted Al _x Ga _{1-x} As. <i>Journal of Materials Research</i> , 2000 , 15, 2043-2053	2.5	2
71	Inductively coupled plasma assisted deposition and mechanical properties of metal-free and Ti-containing hydrocarbon coatings. <i>Journal of Applied Physics</i> , 2000 , 87, 2840-2848	2.5	36
70	Proximity effect thermometer for local electron temperature measurements on mesoscopic samples. <i>Applied Physics Letters</i> , 1999 , 75, 3554-3556	3.4	14
69	Heavy-Ion Irradiation Induced Diamond Formation in Carbonaceous Materials. <i>Materials Research Society Symposia Proceedings</i> , 1998 , 540, 189		5
68	Modeling the Post-Yield Flow Behavior after Neutron and Electron Irradiation of Steels and Iron-Base Alloys. <i>Materials Research Society Symposia Proceedings</i> , 1998 , 540, 463		
67	Effects of Heavy-Ion Cascade Volume on the Suppression of Radiation-Induced Segregation in Alloys. <i>Materials Research Society Symposia Proceedings</i> , 1997 , 504, 129		
66	Transmission Electron Microscopy Study of Cascade Collapse in Copper During in-Situ Ion-Irradiation at Elevated Temperatures. <i>Materials Research Society Symposia Proceedings</i> , 1997 , 504, 189		
65	Changes in Mass Density and Sound Velocity of Amorphous Pd ₈₀ Si ₂₀ by Low Temperature Ion Irradiation. <i>Materials Research Society Symposia Proceedings</i> , 1997 , 481, 445		

- 64 Amorphization Mechanisms in Al_xGa_{1-x}As. *Materials Research Society Symposia Proceedings*, **1996**, 438, 199
- 63 Amorphization Mechanisms in Al_xGa_{1-x}As. *Materials Research Society Symposia Proceedings*, **1996**, 439, 197
- 62 Transmission Electron Microscopy Study In-Situ of Radiation-Induced Defects in Copper at Elevated Temperatures. *Materials Research Society Symposia Proceedings*, **1996**, 439, 313 1
- 61 Nanometer-Scale Metal Dispersions in Polymeric Matrices. *Materials Research Society Symposia Proceedings*, **1996**, 461, 147
- 60 Ion implantation damage in Al_{0.6}Ga_{0.4}As/GaAs heterostructures. *Journal of Applied Physics*, **1995**, 78, 97-103 2.5 13
- 59 Substrate effects on the structure of epitaxial PbTiO₃ thin films prepared on MgO, LaAlO₃, and SrTiO₃ by metalorganic chemical-vapor deposition. *Journal of Applied Physics*, **1995**, 78, 2607-2622 2.5 166
- 58 Intercascade annihilation of freely migrating defects. *Applied Physics Letters*, **1995**, 67, 229-231 3.4 13
- 57 Effect of Cascade Remnants on Freely Migrating Defects in Cu -1 % Au Alloys. *Materials Research Society Symposia Proceedings*, **1995**, 396, 179
- 56 Electron Irradiation-Induced Mechanical Property Changes in Reactor Pressure Vessel Alloys. *Materials Research Society Symposia Proceedings*, **1995**, 398, 177
- 55 Growth of high quality single-domain single-crystal films of PbTiO₃. *Applied Physics Letters*, **1994**, 65, 1106-1108 3.4 42
- 54 Growth of aluminum nitride thin films on Si(111) and Si(001): Structural characteristics and development of intrinsic stresses. *Journal of Applied Physics*, **1994**, 75, 3446-3455 2.5 87
- 53 Epitaxial Pb(Zr_{0.40}Ti_{0.60})O₃/SrRuO₃ and PbTiO₃/SrRuO₃ Multilayer Thin Films Prepared by MOCVD and RF Sputtering. *Materials Research Society Symposia Proceedings*, **1994**, 361, 307 7
- 52 Gamma Ray-Induced Embrittlement of Pressure Vessel Alloys. *Materials Research Society Symposia Proceedings*, **1994**, 373, 155
- 51 Density Changes in Amorphous Pd₈₀Si₂₀ During Low Temperature ion Irradiation. *Materials Research Society Symposia Proceedings*, **1994**, 373, 261 1
- 50 Enhancement of diffusion-induced grain boundary migration by ion irradiation. *Applied Physics Letters*, **1993**, 62, 1597-1599 3.4 10
- 49 Reduction of Defect Fluxes Using Dual-Ion-Beam Processing. *Materials Research Society Symposia Proceedings*, **1993**, 316, 57 1
- 48 Modulation Wavelength Dependence of Ion Mixing in Metallic Superlattices. *Materials Research Society Symposia Proceedings*, **1993**, 316, 271
- 47 Cross-Sectional TEM Studies of DIGM in Irradiated Au-Cu Bilayers. *Materials Research Society Symposia Proceedings*, **1992**, 279, 369

46	The Effect of Digm and Irradiation-Induced Grain Growth on Interdiffusion in Bilayer Ion-Beam Mixing Experiments. <i>Materials Research Society Symposia Proceedings</i> , 1992 , 279, 497		
45	Interdiffusion and Grain-Boundary Migration in Au/Cu Bilayers During Ion-Irradiation. <i>Materials Research Society Symposia Proceedings</i> , 1991 , 235, 559		
44	Ion channeling along the. <i>Physical Review B</i> , 1991 , 44, 2334-2340	3.3	6
43	Comparison of p and He channeling across Tc in YBa ₂ Cu ₃ O _{7-x} . <i>Physical Review B</i> , 1991 , 43, 13711-13713	3.3	12
42	Chi-phase precipitation in ion-irradiated molybdenum-rhenium alloys. <i>Philosophical Magazine A: Physics of Condensed Matter, Structure, Defects and Mechanical Properties</i> , 1990 , 62, 29-51		11
41	Amorphization in Zr ₃ Al irradiated with 1-mev e ⁻ and Kr ⁺ . <i>Metallurgical and Materials Transactions A - Physical Metallurgy and Materials Science</i> , 1990 , 21, 1799-1808		34
40	Ion channeling in (Bi _{1.7} Pb _{0.3})Sr ₂ CaCu ₂ O _x single crystals. <i>Physical Review B</i> , 1990 , 42, 4175-4182	3.3	26
39	Neutron diffraction and transmission electron microscopy study of hydrogen-induced phase transformations in Zr ₃ Al. <i>Journal of Applied Physics</i> , 1990 , 67, 1312-1319	2.5	25
38	The dose, temperature, and projectile-mass dependence for irradiation-induced amorphization of CuTi. <i>Journal of Materials Research</i> , 1989 , 4, 1143-1150	2.5	55
37	Strong traps for deuterium in krypton-implanted nickel. <i>Journal of Applied Physics</i> , 1989 , 65, 1023-1029	2.5	3
36	Shift of phonon anomaly with Tc observed in (Y,Er)Ba ₂ Cu ₃ O _{7-δ} by ion channeling. <i>Physical Review B</i> , 1989 , 40, 11396-11399	3.3	26
35	Direct evidence of anomalous Cu-O vibrational modes near Tc in ErBa ₂ Cu ₃ O _{7-δ} . <i>Physical Review Letters</i> , 1989 , 62, 2869-2872	7.4	126
34	Crystalline to amorphous transformation in GaAs during Kr ion bombardment: A study of elastic behavior. <i>Journal of Applied Physics</i> , 1989 , 66, 152-155	2.5	22
33	Irradiation-enhanced and -induced mass transport. <i>Metallurgical and Materials Transactions A - Physical Metallurgy and Materials Science</i> , 1989 , 20, 2619-2626		4
32	Solid-state amorphization, interdiffusion, and ion-beam mixing in Au/Zr and Ni/Zr. <i>Journal of Materials Research</i> , 1989 , 4, 1444-1449	2.5	20
31	Effects of Ion Dose on the Morphology and Crystallization of Amorphous Germanium. <i>Materials Research Society Symposia Proceedings</i> , 1989 , 157, 659		
30	Irradiation-Induced Amorphization and Elastic Shear Instability in Intermetallic Compounds. <i>Materials Research Society Symposia Proceedings</i> , 1989 , 157, 777		8
29	Phonon Anomaly at Tc In (Y/Er)Ba ₂ Cu ₃ O ₇ <i>Materials Research Society Symposia Proceedings</i> , 1989 , 169, 1033		

28	Ion-channeling investigation of thermal vibrational amplitudes across the superconducting transition in YBa ₂ Cu ₃ O _{7-δ} . <i>Physical Review B</i> , 1988 , 38, 9287-9290	3-3	46
27	Hydrogen-induced crystal to glass transformation in Zr ₃ Al. <i>Applied Physics Letters</i> , 1988 , 53, 1820-1822	3-4	55
26	Freely-migrating-defect production during irradiation at elevated temperatures. <i>Physical Review B</i> , 1988 , 38, 12868-12878	3-3	31
25	Elastic Instability During Amorphization of Intermetallic Compounds by Charged-Particle Beams. <i>Materials Research Society Symposia Proceedings</i> , 1988 , 100, 51		
24	Ion-Beam Mixing and Amorphization in Au/Zr Bilayers. <i>Materials Research Society Symposia Proceedings</i> , 1988 , 100, 69		5
23	The Effect of Simultaneous Electron and Kr ⁺ Irradiation on Amorphization of CuTi. <i>Materials Research Society Symposia Proceedings</i> , 1988 , 128, 339		1
22	Amorphization of Zr ₃ Al by Hydrogenation and Subsequent Electron Irradiation. <i>Materials Research Society Symposia Proceedings</i> , 1988 , 128, 345		
21	Cascade-driven migration of structural interfaces: A new type of irradiation-induced phase transformation. <i>Applied Physics Letters</i> , 1987 , 50, 1876-1878	3-4	10
20	Brillouin scattering study of lattice-stiffness changes due to ion irradiation: Dramatic softening in Nb ₃ Ir. <i>Physical Review B</i> , 1987 , 35, 883-885	3-3	48
19	Solid-state amorphization of Zr ₃ Al: Evidence of an elastic instability and first-order phase transformation. <i>Physical Review Letters</i> , 1987 , 59, 2987-2990	7-4	157
18	Detection of Near-Surface ⁵² Cr Segregation in Irradiated ⁵¹ V(Cr) By Rbs. <i>Materials Research Society Symposia Proceedings</i> , 1986 , 82, 499		
17	Trapping of deuterium in krypton-implanted nickel. <i>Journal of Applied Physics</i> , 1986 , 59, 2747-2751	2-5	11
16	The trapping of deuterium in argon-implanted nickel. <i>Journal of Applied Physics</i> , 1985 , 57, 845-848	2-5	7
15	Gauging film thickness: A comparison of an x-ray diffraction technique with Rutherford backscattering spectrometry. <i>Journal of Applied Physics</i> , 1985 , 57, 643-645	2-5	14
14	Relative efficiencies of different ions for producing freely migrating defects. <i>Physical Review B</i> , 1984 , 30, 3073-3080	3-3	89
13	Kinetics of radiation-induced segregation in Ni-12.7 at.% Si. <i>Physical Review B</i> , 1983 , 28, 3100-3109	3-3	43
12	The Dependence of Ion Beam Mixing on Projectile Mass. <i>Materials Research Society Symposia Proceedings</i> , 1983 , 27, 25		2
11	Modification of μm Thick Surface Layers Using keV Ion Energies. <i>Materials Research Society Symposia Proceedings</i> , 1983 , 27, 37		3

10	Study of Ion Bombardment-Induced SubSurface Compositional Modifications in Ni-Cu Alloys at Elevated Temperatures by Ion Scattering Spectroscopy. <i>Materials Research Society Symposia Proceedings</i> , 1983 , 27, 79		2
9	Near-surface segregation in irradiated Ni ₃ Si. <i>Philosophical Magazine A: Physics of Condensed Matter, Structure, Defects and Mechanical Properties</i> , 1982 , 45, 957-972		6
8	Surface Modification and Radiation-Induced Segregation. <i>Materials Research Society Symposia Proceedings</i> , 1981 , 7, 17		6
7	An experimental study of dia- and paraelastic effects in e--irradiated copper. <i>Journal of Physics F: Metal Physics</i> , 1977 , 7, 1107-1113		14
6	Anelastic relaxation due to single self-interstitial atoms in electron-irradiated Al. <i>Physical Review B</i> , 1977 , 15, 672-679	3-3	43
5	Anelastic relaxation due to clustered self-interstitial atoms in Al. <i>Physical Review B</i> , 1977 , 15, 680-688	3-3	25
4	Measurement of the diaelastic effect in poly-crystalline copper during electron irradiation at 5 k. <i>Radiation Effects</i> , 1976 , 27, 189-190		3
3	Effects of thermal-neutron irradiation on the elastic constants of copper. <i>Physical Review B</i> , 1974 , 10, 349-362	3-3	67
2	Experimental Evidence for Split Interstitials in Copper. <i>Physical Review Letters</i> , 1974 , 32, 1054-1057	7-4	57
1	Effects of self-interstitials and close pairs on the elastic constants of copper. <i>Physical Review B</i> , 1974 , 10, 363-375	3-3	75