

# Noriaki Itoh

## List of Publications by Year in descending order

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114465

63  
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127  
all docs

127  
docs citations

127  
times ranked

1553  
citing authors

#	ARTICLE	IF	CITATIONS
1	Energy dependence of the ion-induced sputtering yields of monatomic solids. Atomic Data and Nuclear Data Tables, 1984, 31, 1-80.	2.4	712
2	Visible photoluminescence in Si <sup>+</sup> -implanted silica glass. Journal of Applied Physics, 1994, 75, 7779-7783.	2.5	376
3	Creation of lattice defects by electronic excitation in alkali halides. Advances in Physics, 1982, 31, 491-551.	14.4	362
4	Creation of Quasistable Lattice Defects by Electronic Excitation in SiO <sub>2</sub> . Physical Review Letters, 1983, 51, 423-426.	7.8	193
5	Formation of interstitial-vacancy pairs by electronic excitation in pure ionic crystals. Journal of Physics and Chemistry of Solids, 1990, 51, 717-735.	4.0	160
6	Luminescence and defect formation in undensified and densified amorphous SiO <sub>2</sub> . Physical Review B, 1990, 41, 3794-3799.	3.2	138
7	Mechanism of neutral particle emission from electron-hole plasma near solid surface. Physics Letters, Section A: General, Atomic and Solid State Physics, 1982, 92, 471-475.	2.1	128
8	Threshold energy for photogeneration of self-trapped excitons in SiO <sub>2</sub> . Physical Review B, 1989, 39, 11183-11186.	3.2	113
9	Radiation effects in ionic solids. Radiation Effects, 1986, 98, 269-287.	0.4	81
10	Laser-induced electronic processes on GaP (110) surfaces: Particle emission and ablation initiated by defects. Physical Review B, 1992, 45, 8424-8436.	3.2	81
11	Laser sputtering in the electronic excitation regime: Comparison with electron and ion sputtering. Nuclear Instruments & Methods in Physics Research B, 1987, 27, 155-166.	1.4	75
12	Sputtering and dynamic interstitial motion in alkali halides. Nuclear Instruments & Methods, 1976, 132, 201-211.	1.2	74
13	Excitons in crystalline and amorphous SiO <sub>2</sub> : formation, relaxation and conversion to Frenkel pairs. Journal of Non-Crystalline Solids, 1994, 179, 194-201.	3.1	64
14	Excitonic model of track registration of energetic heavy ions in insulators. Nuclear Instruments & Methods in Physics Research B, 1998, 146, 362-366.	1.4	60
15	Theoretical study of Na-atom emission from NaCl (100) surfaces. Physical Review B, 1994, 49, 11364-11373.	3.2	54
16	Dynamical interaction of surface electron-hole pairs with surface defects: Surface spectroscopy monitored by particle emissions. Physical Review Letters, 1993, 70, 2495-2498.	7.8	50
17	Effect of segregation on preferred sputtering of alloys. Radiation Effects, 1984, 80, 163-182.	0.4	48
18	Selective non-radiative transitions at excited states of the self-trapped exciton in alkali halides. Journal of Physics and Chemistry of Solids, 1984, 45, 323-340.	4.0	46

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19	A theoretical study of desorption induced by electronic transitions in alkali halides. <i>Surface Science</i> , 1989, 217, 573-589.	1.9	46
20	Dechanneling of MeV Protons from Axial and Planar Channels of Germanium Crystal. <i>Journal of the Physical Society of Japan</i> , 1971, 30, 1430-1438.	1.6	41
21	Defect formation in insulators under dense electronic excitation. <i>Radiation Effects and Defects in Solids</i> , 1989, 110, 19-26.	1.2	39
22	Electronic excitation mechanism of sputtering and track formation by energetic ions in the electronic stopping regime. <i>Nuclear Instruments &amp; Methods in Physics Research B</i> , 1986, 13, 550-555.	1.4	36
23	Subthreshold radiation-induced processes in the bulk and on surfaces and interfaces of solids. <i>Nuclear Instruments &amp; Methods in Physics Research B</i> , 1998, 135, 175-183.	1.4	36
24	Electronic-excitation mechanism in sputtering induced by high density electronic excitation. <i>Physics Letters, Section A: General, Atomic and Solid State Physics</i> , 1985, 108, 480-484.	2.1	35
25	Temperature Dependence of the Radiation-Induced Dynamic Motion of Interstitial Halogen in Alkali Halides. <i>Journal of the Physical Society of Japan</i> , 1975, 39, 155-161.	1.6	34
26	Interactions of Interstitial Centers with Monovalent Impurities in KBr Crystals. <i>Journal of the Physical Society of Japan</i> , 1970, 29, 156-162.	1.6	34
27	Anticorrelation between yields of recombination luminescence and recombination-induced defect formation in alkali-metal halides. <i>Physical Review B</i> , 1986, 34, 4230-4234.	3.2	33
28	Two Slowly Decaying Luminescence Bands in Alkali Iodides. <i>Journal of the Physical Society of Japan</i> , 1985, 54, 4418-4430.	1.6	32
29	Non-linear photo-induced sputtering of GaP for photons of sub-band-gap energies. <i>Surface Science</i> , 1990, 227, L115-L119.	1.9	32
30	Laser-induced sputtering of oxides and compound semiconductors. <i>Nuclear Instruments &amp; Methods in Physics Research B</i> , 1984, 1, 301-306.	1.4	30
31	Formation of ion damage tracks. <i>Physics Letters, Section A: General, Atomic and Solid State Physics</i> , 1984, 100, 42-44.	2.1	29
32	Lattice relaxation of highly excited self-trapped excitons in CaF <sub>2</sub> . <i>Physical Review B</i> , 1989, 40, 1282-1287.	3.2	29
33	Self-trapped exciton model of heavy-ion track registration. <i>Nuclear Instruments &amp; Methods in Physics Research B</i> , 1996, 116, 33-36.	1.4	29
34	Bond scission induced by electronic excitation in solids: A tool for nanomanipulation. <i>Nuclear Instruments &amp; Methods in Physics Research B</i> , 1997, 122, 405-409.	1.4	29
35	Laser-induced reemission of silicon atoms implanted into quartz. <i>Journal of Applied Physics</i> , 1988, 64, 3663-3666.	2.5	26
36	A Study of a Manganese Paramagnetic Center in Irradiated NaCl : Mn <sup>++</sup> Crystals. <i>Journal of the Physical Society of Japan</i> , 1969, 26, 291-298.	1.6	25

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37	Optical and Electron Paramagnetic Resonance Studies of Atomic Manganese Centers in NaCl. Journal of the Physical Society of Japan, 1970, 29, 1295-1302.	1.6	25
38	Structural Change Induced by Electronic Excitation on GaP Surfaces. Physical Review Letters, 1987, 59, 2883-2886.	7.8	25
39	Electron Paramagnetic Resonance and Optical Absorption Studies of Radiation-Induced Radicals in Naphthalene Single Crystals. Journal of the Physical Society of Japan, 1973, 35, 518-524.	1.6	24
40	F-Center Formation at Highly Excited Triplet States of Self-Trapped Excitons in KCl. Journal of the Physical Society of Japan, 1980, 48, 1618-1624.	1.6	24
41	Mollwo-Ivey relation for the electron transition energy of the self-trapped excitons in alkali halides. Physical Review B, 1992, 45, 1432-1435.	3.2	24
42	Radiation-Induced Radicals in Anthracene Single Crystals. Molecular Crystals and Liquid Crystals, 1976, 36, 99-113.	0.8	23
43	Non-Radiative De-Excitation of Highly Excited Self-Trapped Excitons in Alkali Halides: Mechanism of the FandH Centre Production. Journal of the Physical Society of Japan, 1980, 49, 1364-1371.	1.6	23
44	Frenkel Defect Formation and Intersystem Crossing at Highly-Excited States of the Triplet Self-Trapped Exciton in NaCl. Journal of the Physical Society of Japan, 1981, 50, 3988-3995.	1.6	23
45	Radiolysis in Naphthalene Single Crystals. Molecular Crystals, 1969, 6, 227-246.	1.2	22
46	Modification of the surface structure of GaP induced by electronic excitation. Surface Science, 1987, 184, L445-L451.	1.9	22
47	Nonthermal laser sputtering from solid surfaces. Nuclear Instruments & Methods in Physics Research B, 1991, 58, 452-462.	1.4	22
48	Relaxation and bond breaking at defect sites on GaP (110) surfaces by phonon-assisted multihole localization. Physical Review B, 1993, 47, 2031-2037.	3.2	21
49	Emission of Na atoms from undamaged and slightly damaged NaCl (100) surfaces by electronic excitation. Physical Review B, 1994, 49, 4931-4937.	3.2	21
50	Lattice instability at excited states of the self-trapped excitons in MgF <sub>2</sub> . Journal of Applied Physics, 1991, 69, 7831-7835.	2.5	20
51	Orientation of the Optical Dipole Moments of the Lowest-to-Higher-States Transitions of Self-Trapped Excitons in Alkali Chlorides. Journal of the Physical Society of Japan, 1981, 50, 2385-2394.	1.6	20
52	Studies of Higher Triplet Exciton Bands through T-T Absorption in Naphthalene Single Crystal. Journal of the Physical Society of Japan, 1976, 40, 250-257.	1.6	17
53	Energy and temperature dependences of dechanneling induced by displaced atoms. Radiation Effects, 1977, 33, 209-214.	0.4	17
54	Generation of Lattice Defects by Exciton Interaction in RbI: Lattice Instability under Dense Electronic Excitation. Physical Review Letters, 1988, 60, 2753-2756.	7.8	17

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55	Relaxation of excitons perturbed by self-trapped excitons in RbI: Evidence for exciton fusion in inorganic solids with strong electron-phonon coupling. <i>Physical Review Letters</i> , 1990, 64, 1429-1432.	7.8	17
56	CNDO calculation of energies of Ga atom ejection from defect sites on the GaP(110) surface. <i>Surface Science</i> , 1991, 259, L787-L790.	1.9	17
57	Time-Resolved Spectroscopic Study of Excitonic Luminescence Centers in RbI Crystals. <i>Journal of the Physical Society of Japan</i> , 1992, 61, 1366-1379.	1.6	17
58	Radiation Damage in Naphthalene Single Crystals. <i>Journal of the Physical Society of Japan</i> , 1968, 24, 1179-1179.	1.6	17
59	Excitation-Induced Atomic Motion of Self-Trapped Excitons in RbCl: Reorientation and Defect Formation. <i>Journal of the Physical Society of Japan</i> , 1986, 55, 3258-3271.	1.6	16
60	Laser-induced sputtering of Ga and Ga <sup>+</sup> from the GaP(110) surface: Its relation to surface imperfection. <i>Applied Physics Letters</i> , 1990, 56, 1980-1982.	3.3	16
61	Validity of the continuum approximation in calculating the scattering yields for atom location. <i>Radiation Effects</i> , 1976, 31, 47-52.	0.4	15
62	Creation of luminescent single self-trapped excitons from highly excited states of triplet self-trapped excitons in NaCl. <i>Physics Letters, Section A: General, Atomic and Solid State Physics</i> , 1979, 73, 45-49.	2.1	15
63	Mechanism of electron-excitation-induced defect creation in alkali halides. <i>Radiation Effects</i> , 1982, 64, 161-169.	0.4	15
64	Production of lattice defects by electronic excitation in oxides. <i>Nuclear Instruments &amp; Methods in Physics Research B</i> , 1984, 1, 187-191.	1.4	15
65	Restoration of Fluorescence from the Lowest Singlet State in the Self-Trapped Exciton by Perturbation with Monovalent Cation Impurities in Alkali Halides. <i>Journal of the Physical Society of Japan</i> , 1982, 51, 888-897.	1.6	14
66	Self-trapped excitons and interstitial-vacancy pairs in oxides. <i>The Philosophical Magazine: Physics of Condensed Matter B, Statistical Mechanics, Electronic, Optical and Magnetic Properties</i> , 1991, 63, 955-964.	0.6	14
67	Optical Studies of Self-Trapped Excitons in CsCl and CsBr. <i>Journal of the Physical Society of Japan</i> , 1993, 62, 2904-2914.	1.6	14
68	Forbidden Transitions in Neutral Silver in Alkali Halides. <i>Journal of the Physical Society of Japan</i> , 1968, 25, 1197-1197.	1.6	13
69	De-excitation of electron- and hole-excited states of self-trapped excitons in RbI. <i>Physics Letters, Section A: General, Atomic and Solid State Physics</i> , 1980, 80, 53-56.	2.1	12
70	A new type of laser-induced surface damage of GaAs. <i>Solid State Communications</i> , 1984, 49, 347-349.	1.9	12
71	Dependence of laser-induced damage of surface layers of GaP on pulse width and wavelength. <i>Applied Physics Letters</i> , 1983, 43, 1054-1056.	3.3	11
72	Defect initiated particle emission from semiconductor surfaces by laser irradiation. <i>Surface Science</i> , 1993, 283, 169-176.	1.9	11

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73	Defect-excitation processes involved in laser-induced atomic emission and laser ablation of nonmetallic solids. <i>Physical Review B</i> , 1994, 50, 11730-11737.	3.2	11
74	Self-trapped excitons perturbed by Na <sup>+</sup> in KCl crystal. <i>Physics Letters, Section A: General, Atomic and Solid State Physics</i> , 1977, 60, 465-467.	2.1	10
75	Volume Change due to Self-Trapped Exciton and Frenkel Pair in KBr. <i>Journal of the Physical Society of Japan</i> , 1986, 55, 735-738.	1.6	10
76	Anomalous Defect Processes in Silicon-Implanted SiO <sub>2</sub> . <i>Japanese Journal of Applied Physics</i> , 1989, 28, L1254-L1257.	1.5	10
77	Magneto-optical study of the free-exciton luminescence in Rbl. <i>Physical Review B</i> , 1992, 45, 9417-9419.	3.2	10
78	New model of ion-induced crystallization and amorphization of silicon. <i>Applied Physics Letters</i> , 1994, 64, 1000-1002.	3.3	10
79	Excited States of Neutral Silver Center in Alkali Halides Embedded in Continuum. <i>Journal of the Physical Society of Japan</i> , 1973, 35, 1122-1127.	1.6	10
80	Laser induced sputtering of Ga atoms from clean and laser-damaged GaP	1.2	9
81	Radiation damage in nonmetallic solids under dense electronic excitation. <i>Nuclear Instruments &amp; Methods in Physics Research B</i> , 1992, 65, 21-25.	1.4	9
82	Optical Absorption Bands of Off-Center Ag <sup>+</sup> in CsBr. <i>Journal of the Physical Society of Japan</i> , 1975, 39, 1486-1491.	1.6	8
83	High density effect induced in the tracks of heavy charged particles in CdS and CuCl. <i>Radiation Effects</i> , 1980, 51, 185-195.	0.4	8
84	Comments on the role of impurities on the primary process for f-coloring in alkali halides. <i>Radiation Effects</i> , 1981, 57, 155-159.	0.4	8
85	Energies for atomic emissions from defect sites on the Si surfaces: The effects of halogen adsorbates. <i>Journal of Applied Physics</i> , 1994, 75, 255-258.	2.5	8
86	Generation of Free Excitons by Optical Excitation of Self-Trapped Excitons in KI. <i>Journal of the Physical Society of Japan</i> , 1984, 53, 2145-2150.	1.6	8
87	Recombination-induced metastable to stable transformation of the EL2 center in GaAs. <i>Applied Physics Letters</i> , 1989, 55, 639-641.	3.3	7
88	Formation of metastable defects under irradiation of ceramics. <i>Journal of Nuclear Materials</i> , 1991, 183, 25-32.	2.7	7
89	The DIET from semiconductor surfaces by excitation of valence electrons. <i>Nuclear Instruments &amp; Methods in Physics Research B</i> , 1995, 101, 93-102.	1.4	7
90	Proton dechanneling in alkali halide mixed crystals. <i>Radiation Effects</i> , 1972, 13, 271-276.	0.4	6

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91	Kinetics of defect formation in alkali halides. Radiation Effects, 1978, 37, 45-50.	0.4	6
92	Electron Paramagnetic Resonance Studies of Defects in Silicon-Implanted SiO <sub>2</sub> . Japanese Journal of Applied Physics, 1987, 26, L1967-L1969.	1.5	6
93	Material modification by electronic excitation. Radiation Effects and Defects in Solids, 1998, 146, 1-10.	1.2	6
94	Laser-induced desorption from STM-selected semiconductor sites. Progress in Surface Science, 1999, 61, 1-19.	8.3	6
95	Properties of CaSO <sub>4</sub> (Mn) Powder for Thermoluminescence Dosimeter. Journal of Nuclear Science and Technology, 1969, 6, 132-137.	1.3	5
96	Hopping of interstitial atoms by electronic excitation of Frenkel pairs in SrF <sub>2</sub> . Nuclear Instruments & Methods in Physics Research B, 1984, 1, 452-455.	1.4	5
97	Laser-induced optical reflection and absorption of GaP. Nuclear Instruments & Methods in Physics Research B, 1985, 9, 60-65.	1.4	5
98	Analysis of molecular-beam epitaxially grown ZnSe on GaAs and GaP by means of ion channeling. Journal of Applied Physics, 1987, 62, 4460-4464.	2.5	5
99	Optically detected magnetic resonance studies of donor-acceptor recombination processes in GaP crystals. Journal of Applied Physics, 1989, 65, 2035-2041.	2.5	5
100	Non-Thermal Laser-Induced Desorption of Compound Semiconductors. Springer Series in Surface Sciences, 1985, , 237-244.	0.3	5
101	Manganese centers with various valency in alkali halides. Radiation Effects, 1970, 4, 161-165.	0.4	4
102	Charge Transfer Transitions from Cyclohexadienyl-Type Radicals to Host Molecules in Anthracene Single Crystals. Molecular Crystals and Liquid Crystals, 1978, 44, 211-226.	0.8	4
103	De-Excitation Pathways of Highly-Excited Self-Trapped Exciton and Electron Plus Self-Trapped Hole. Journal of the Physical Society of Japan, 1983, 52, 1901-1903.	1.6	4
104	Analysis of initial stage of Pd-Si(111) and Au-Si(111) interface reactions by means of high-resolution proton energy-loss spectroscopy. Applied Physics Letters, 1987, 51, 1072-1074.	3.3	4
105	Mechanisms of Laser-Induced Desorption from Insulators and Compound Semiconductors. , 1987, , 215-233.		4
106	Isotope Effects on Optical Absorption Spectra of Hydronaphthyl Radicals in Naphthalene Single Crystals. Journal of the Physical Society of Japan, 1978, 44, 1619-1626.	1.6	3
107	Laser-induced particle emission from surfaces of non-metallic solids: A search for primary processes of laser ablation. Lecture Notes in Physics, 1991, , 213-223.	0.7	3
108	Direct measurement of transient macroscopic volume change induced by generation of electron-hole pairs in GaP and GaAs. Applied Physics Letters, 1991, 58, 146-148.	3.3	3

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109	Vacancy-initiated laser sputtering from semiconductor surfaces. Nuclear Instruments & Methods in Physics Research B, 1993, 82, 310-316.	1.4	3
110	Photon energy dependence of the laser-induced emission yield of Si atoms from the Si(100) surface. Journal of Physics Condensed Matter, 1996, 8, 1475-1484.	1.8	3
111	Comparison of Electronic-Excitation-Induced Structural Modification of Carbon-Based Nanomaterials with that of Semiconductor Surfaces. Nano, 2016, 11, 1630001.	1.0	2
112	Backscattering of keV Protons from Diamond Lattices. Journal of the Physical Society of Japan, 1971, 31, 313-313.	1.6	2
113	Empirical determination of the random fraction in disordered channel. Radiation Effects, 1975, 26, 173-176.	0.4	1
114	Photocurrent Induced by Detrapping of Charge Carriers Trapped by Radicals in Naphthalene and Anthracene Single Crystals. Molecular Crystals and Liquid Crystals, 1979, 51, 189-202.	0.8	1
115	Modification of the surface structure of GaP induced by electronic excitation. Surface Science Letters, 1987, 184, L445-L451.	0.1	1
116	Radiation damage in ceramic plasma-facing materials. Journal of Nuclear Materials, 1988, 155-157, 58-66.	2.7	1
117	Reply to "Comment on "Laser-induced reemission of silicon atoms implanted into quartz" (J. Appl. Phys. 64, 3663 (1988)). Journal of Applied Physics, 1989, 66, 5661-5661.	2.5	1
118	CNDO calculation of energies of Ga atom ejection from defect sites on the GaP(110) surface. Surface Science Letters, 1991, 259, L787-L790.	0.1	1
119	Atomic Processes Induced by Electronic Excitation at Surfaces. Series on Directions in Condensed Matter Physics, 1989, , 253-271.	0.1	1
120	Overview of Defect Processes Induced by Electronic Excitation in Insulators. Series on Directions in Condensed Matter Physics, 1989, , 1-10.	0.1	1
121	Theoretical Studies of Hydronaphthyl Radicals Embedded in Naphthalene Single Crystal. Molecular Crystals and Liquid Crystals, 1980, 58, 193-204.	0.8	0
122	Synergistic effects in radiation-induced particle ejection from solid surfaces. Vacuum, 1990, 41, 1558-1560.	3.5	0
123	Bond scission induced by electronic excitation in non-metallic solids. Radiation Effects and Defects in Solids, 1999, 148, 31-32.	1.2	0
124	Atomic Processes Induced by Electronic Excitation in Non-Metallic Solids. , 1990, , .		0