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Dislocation-related photoluminescence in silicon

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#	Paper	IF	Citations
363	Electrical properties of dislocations and point defects in plastically deformed silicon. 1985 , 32, 6571-6581		259
362	Infrared Cathodoluminescence Studies from Dislocations in Silicon in tem, a Fourier Transform Spectrometer for Cl in Tem and Els/cl Coincidence Measurements of Lifetimes in Semiconductors. <i>Materials Research Society Symposia Proceedings</i> , 1986 , 82, 235		6
361	Photoluminescence Investigation of Dislocation-Related Defects in High Purity Silicon. <i>Materials Research Society Symposia Proceedings</i> , 1986 , 82, 283		3
360	Deep Defect Levels in Plastically Deformed GaAs. <i>Japanese Journal of Applied Physics</i> , 1986 , 25, 533-537 ^{1.4}		21
359	Dissociation-width-dependent radiative recombination of electrons and holes at widely split partial dislocations in silicon. 1986 , 57, 1472-1475		59
358	Antisite-related defects in plastically deformed GaAs. 1986 , 33, 5880-5883		41
357	Properties of SiGe Alloys Grown on Si Substrates by Liquid Phase Epitaxy. <i>Materials Research Society Symposia Proceedings</i> , 1987 , 102, 419		2
356	Photoluminescence Characterization of Thin Silicon-On-Insulator Films Produced by Oxygen Implantation. <i>Materials Research Society Symposia Proceedings</i> , 1987 , 107, 117		4
355	New photoluminescence defect at 1.0192 eV in silicon molecular beam epitaxy layers ascribed to Cu. 1987 , 51, 1185-1187		5
354	Photoluminescence studies of silicon-on-insulator substrates formed by oxygen implantation. 1988 , 52, 465-467		13
353	Analysis of dislocation and point defect interaction in silicon over radiative recombination spectra. 1988 , 107, 1-8		2
352	Spectroscopic Investigation of Arsenic-Induced Surface Defects in High-Dose As+ Implanted Rapid Thermal Annealed Silicon. <i>Materials Research Society Symposia Proceedings</i> , 1988 , 138, 215		1
351	Electrical and optical properties of gold-doped n-type silicon. <i>Journal of Applied Physics</i> , 1989 , 65, 137-145 ⁵		15
350	Electronic behaviour of decorated stacking faults in silicon. 1989 , 4, 123-128		23
349	The optical properties of luminescence centres in silicon. 1989 , 176, 83-188		45 ¹
348	Photoluminescence characterization of molecular beam epitaxial silicon. 1989 , 183, 235-254		20
347	Photoluminescence at 0.944 eV from heat-treated n-type silicon. 1989 , 113, K261-K264		3

346	Photoluminescence from MBE Si grown at low temperatures; donor bound excitons and decorated dislocations. 1989 , 4, 593-598		31
345	Defect Induced Luminescence from MBE Prepared Si/Si _{1-x} Ge _x Superlattices. <i>Materials Research Society Symposia Proceedings</i> , 1989 , 163, 343		3
344	Dislocation Related D-Band Luminescence; the Effects of Transition Metal Contamination. <i>Materials Research Society Symposia Proceedings</i> , 1989 , 163, 57		22
343	Characterization of Polycrystalline Silicon Thin Films by Photoluminescence. <i>Materials Research Society Symposia Proceedings</i> , 1990 , 182, 213		
342	Luminescence of MBE SimGen Strained Monolayer Superlattices. <i>Materials Research Society Symposia Proceedings</i> , 1990 , 198, 479		2
341	Elimination of dislocations in heteroepitaxial MBE and RTCVD Ge x Si _{1-x} grown on patterned Si substrates. 1990 , 19, 949-955		31
340	The mechanism of modulated optical reflectance imaging of dislocations in silicon. 1990 , 103, 217-225		5
339	Implantation and diffusion of noble gas atoms during ion-beam etching of silicon. <i>Journal of Applied Physics</i> , 1990 , 68, 6179-6186	2.5	20
338	Photoluminescence of the D lines in silicon containing a high concentration of carbon after a two-step isochronal anneal. 1990 , 56, 764-766		3
337	Near-band-gap photoluminescence of Si _{1-x} Ge _x alloys grown on Si(100) by molecular beam epitaxy. 1990 , 57, 1925-1927		115
336	Photoluminescence assessment of MBE silicon. 1990 , 5, 1161-1167		4
335	Si-Based Photonic Devices by MBE. <i>Materials Research Society Symposia Proceedings</i> , 1991 , 220, 299		13
334	Si/Ge Superlattices for Optical Applications: Possibilities, Problems, and Prospects. <i>Materials Research Society Symposia Proceedings</i> , 1991 , 220, 311		2
333	Deep Luminescence from Relaxed Si _{1-x} Ge _x Epitaxial Layers. <i>Materials Research Society Symposia Proceedings</i> , 1991 , 220, 321		3
332	The Generation and Optical Activity of Misfit Dislocations by Very Low Level Transition Metal Contamination of SiGe/Si. <i>Materials Research Society Symposia Proceedings</i> , 1991 , 239, 401		1
331	Photoluminescence and electroreflectance of Ge ₂ Si strained layer superlattices. 1991 , 9, 245-248		3
330	Structure dependence of photoluminescence in Ge _n /Si _m strained-layer superlattices. 1991 , 111, 902-906		4
329	MBE SimGen strained monolayer superlattices. 1991 , 111, 897-901		2

328	Well-resolved band-edge photoluminescence of excitons confined in strained Si _{1-x} Ge _x quantum wells. 1991 , 66, 1362-1365	282
327	A quantitative model for an interaction between extended dislocation loops and impurities in Czochralski silicon based upon the photoluminescence analysis. <i>Journal of Applied Physics</i> , 1991 , 70, 3018-3024 ¹²	25
326	Photoluminescence of hydrogenated SimGen superlattices. 1991 , 59, 1705-1707	30
325	Radiative electronic transitions associated with oxygen-induced stacking faults in silicon. 1992 , 7, A41-A44	10
324	Recombination-generation behaviour of decorated defects in silicon. 1992 , 7, A263-A268	15
323	Optical and structural investigation of SiGe/Si quantum wells. 1992 , 60, 2183-2185	61
322	Difference of the electrical properties of screw and 60° dislocations in silicon as detected with temperature-dependent electron beam induced current technique. 1992 , 61, 792-794	16
321	Effects of nitrogen on oxygen precipitation in silicon. <i>Journal of Applied Physics</i> , 1992 , 71, 3760-3765	2.5 74
320	Cathodoluminescence imaging and spectroscopy of dislocations in Si and Si _{1-x} Ge _x alloys. 1992 , 61, 1087-1089	40
319	Direct observation of band-edge luminescence and alloy luminescence from ultrametastable silicon-germanium alloy layers. 1992 , 60, 1729-1731	67
318	Relaxation Defect Characterization of RTCVD Si _{1-x} Ge _x /Si Heterostructures by Electrical and Optical Techniques. <i>Materials Research Society Symposia Proceedings</i> , 1992 , 262, 247	
317	Characterisation of Extended Defects in Si and Si _{1-x} Ge _x Alloys: The Influence of Transition Metal Contamination. <i>Materials Research Society Symposia Proceedings</i> , 1992 , 263, 305	2
316	Characterization of epitaxial and oxidation-induced stacking faults in silicon: The influence of transition-metal contamination. 1992 , 60, 1369-1371	54
315	A Classification of the Dislocation-Related Photoluminescence in Silicon. 1992 , 172, 53-63	23
314	Photoluminescence and electrical characterization of SiGe/Si heterostructures grown by rapid thermal chemical vapour deposition. 1992 , 222, 60-68	33
313	Band edge and deep level photoluminescence of fully strained Si _{1-x} Ge _x /Si alloys. 1992 , 222, 89-93	8
312	Photoluminescence investigations of graded, totally relaxed GeSi _{1-x} structures. 1992 , 21, 1099-1104	17
311	Investigation of dislocations in Si _{1-x} Ge _x /Si heterostructures grown by LPCVD. 1992 , 125, 301-310	11

310	Non-destructive identification of end-of-range damage in ion-implanted and annealed silicon. 1993 , 63, 227-231		7
309	Recombination Activity of Misfit Dislocations in Silicon. 1993 , 137, 327-335		35
308	Hydrogen Passivation of the Dislocation-Related D-Band Luminescence in Silicon. 1993 , 137, 543-548		9
307	Luminescence associated with the presence of dislocations in silicon. 1993 , 138, 665-672		26
306	Optical properties of dislocations in silicon crystals. 1993 , 138, 681-686		16
305	Fabrication of high mobility two-dimensional electron and hole gases in GeSi/Si. <i>Journal of Applied Physics</i> , 1993 , 73, 8364-8370	2.5	78
304	Characterization of compositionally graded Si _{1-x} Ge _x alloy layers by photoluminescence spectroscopy and by cathodoluminescence spectroscopy and imaging. <i>Journal of Applied Physics</i> , 1993 , 73, 1952-1956	2.5	36
303	Band-Edge Photoluminescence of SiGe/Strained-Si/SiGe Type-II Quantum Wells on Si(100). <i>Japanese Journal of Applied Physics</i> , 1993 , 32, L1391-L1393	1.4	5
302	Investigation of the recombination activity of misfit dislocations in Si/SiGe epilayers by cathodoluminescence imaging and the electron beam induced current technique. 1993 , 63, 2085-2087		24
301	Band-gap narrowing determination by photoluminescence on strained B-doped Si _{0.82} Ge _{0.18} layers grown on Si. 1993 , 62, 2986-2988		15
300	Band-edge photoluminescence of SiGe/strained-Si/SiGe type-II quantum wells on Si(100). 1993 , 63, 3509-3511		29
299	Luminescence study on interdiffusion in strained Si _{1-x} Ge _x /Si single quantum wells grown by molecular beam epitaxy. 1993 , 63, 1651-1653		42
298	Mercury-related luminescent center in silicon. 1993 , 47, 13309-13313		3
297	Line-shape model for broad photoluminescence band from Si _{1-x} Ge _x /Si heterostructures. 1993 , 48, 18276-18279		2
296	Luminescence Studies of MBE Grown Si/SiGe Quantum Wells. <i>Materials Research Society Symposia Proceedings</i> , 1993 , 298, 21		9
295	Magnetotransport and photoluminescence of two-dimensional hole gases in Si/Si _{1-x} Ge _x /Si heterostructures. 1994 , 50, 18113-18123		12
294	Hydrogen effect on the optical activity of dislocations in silicon introduced at room temperature. <i>Journal of Applied Physics</i> , 1994 , 76, 7882-7888	2.5	31
293	Defect states in Si containing dislocation nets. 1994 , 146, 745-755		13

292	Cathodoluminescence imaging of misfit dislocations in Si/SiGe epitaxial layers: the influence of transition metal contamination. 1994 , 24, 48-51		5
291	Luminescence from rod-like defects and hydrogen related centres in silicon. 1994 , 24, 144-151		14
290	Band-edge photoluminescence of SiGe/strained-Si/SiGe type-II quantum wells on Si(100). 1994 , 37, 933-936		6
289	Optical and electrical properties of buried semiconducting ϵ -FeSL. 1994 , 84, 163-167		86
288	Room-temperature sharp line electroluminescence at ≈ 1.54 eV from an erbium-doped, silicon light-emitting diode. 1994 , 64, 2842-2844		306
287	Growth and characterization of compositionally graded, relaxed Si _{1-x} Ge _x . 1994 , T54, 208-211		31
286	Structural and optical characterization of ϵ -FeSi ₂ layers on Si formed by ion beam synthesis. 1995 , 270, 406-410		26
285	Structure of the photoluminescence spectra in the vicinity of the lines D1 and D2 in plastically deformed Si. 1995 , 148, K1-K4		5
284	Growth of 3CSiC on on-axis Si(100) substrates by chemical vapor deposition. 1995 , 154, 303-314		48
283	Deep states associated with oxidation induced stacking faults in RTA p-type silicon before and after copper diffusion. 1995 , 38, 1025-1034		9
282	Photoluminescence from Si(001) films doped with 100–1000 eV B ⁺ ions during deposition by molecular beam epitaxy. <i>Journal of Applied Physics</i> , 1995 , 77, 4623-4631	2.5	6
281	Effect of rapid thermal annealing on the photoluminescence properties of SiGe/Si heterostructures. <i>Journal of Applied Physics</i> , 1995 , 78, 4039-4045	2.5	14
280	Effect of growth conditions on the structural properties of ion beam sputter deposited SiGe epilayers. <i>Journal of Applied Physics</i> , 1995 , 78, 4975-4981	2.5	10
279	Photoluminescence studies of relaxation processes in strained Si _{1-x} Ge _x /Si epilayers. <i>Journal of Applied Physics</i> , 1995 , 78, 446-450	2.5	8
278	Electronic states associated with dislocations in p-type silicon studied by means of electric-dipole spin resonance and deep-level transient spectroscopy. 1995 , 51, 16721-16727		21
277	Effects of a grain boundary on the photoluminescence spectrum of silicon: expansion of electron-hole droplet cloud. <i>Journal of Physics Condensed Matter</i> , 1995 , 7, 6161-6177	1.8	1
276	Photoluminescence of $\text{Si}_{0.83}\text{Ge}_{0.17}$ Quantum Wells Grown on (100)Si by Low-Pressure Chemical Vapor Deposition. <i>Japanese Journal of Applied Physics</i> , 1995 , 34, L213-L216	1.4	5
275	Optical study of diffusion limitation in MBE growth of SiGe quantum wells. 1995 , 10, 319-325		10

274	Positron Annihilations Associated with Defects in Plastically Deformed Si. <i>Japanese Journal of Applied Physics</i> , 1995 , 34, 4579-4586	1.4	11
273	Dislocation-related electroluminescence at room temperature in plastically deformed silicon. 1995 , 51, 10520-10526		111
272	Optical absorption and photoluminescence studies of FeSi_2 prepared by heavy implantation of Fe^+ ions into Si. <i>Journal of Applied Physics</i> , 1996 , 80, 5955-5962	2.5	89
271	Light Emission from Silicon. 1996 , 333-381		30
270	Growth Conditions of Erbium-Oxygen-Doped Silicon Grown by MBE. <i>Materials Research Society Symposia Proceedings</i> , 1996 , 422, 15		6
269	Excitation and De-Excitation of Yb^{3+} in InP and Er^{3+} in Si:Photoluminescence and Impact Ionization Studies. <i>Materials Research Society Symposia Proceedings</i> , 1996 , 422, 207		10
268	Room Temperature Electroluminescence from D1 Dislocation Centers in Silicon. <i>Materials Research Society Symposia Proceedings</i> , 1996 , 442, 331		
267	Synthesis of FeSi_2 for optical applications by Fe triple-energy ion implantation into Si(100) and Si(111) substrates. 1996 , 281-282, 252-255		14
266	A luminescence study of defects and internal strains in ion-implanted silicon on sapphire films. 1996 , 45, 185-188		4
265	Cathodoluminescence and EBIC study on misfit dislocations in SiGe/Si heterostructure. 1996 , 42, 141-145		6
264	Strain relaxation and dislocations in SiGe/Si structures. 1996 , 17, 105-146		105
263	Cathodoluminescence study on dislocations in silicon. <i>Journal of Applied Physics</i> , 1996 , 79, 3253-3260	2.5	57
262	Photoluminescence and Raman study of porous SiGe. <i>Journal of Applied Physics</i> , 1996 , 79, 9301-9304	2.5	11
261	Photoluminescence spectra of deformed Si-Ge alloy. <i>Journal of Applied Physics</i> , 1996 , 80, 6991-6996	2.5	17
260	Electrical and optical characterization of extended defects in SIMOX structures. 1996 , 11, 27-33		3
259	Prerequisite for Photoluminescence D Line Spectra of Heat-Treated Carbon-Lean Czochralski Silicon Crystals. <i>Japanese Journal of Applied Physics</i> , 1997 , 36, 1-5	1.4	22
258	Origin of dislocation-related photoluminescence bands in very thin silicon-germanium layers grown on silicon substrates. 1997 , 71, 3823-3825		7
257	Structural characterization of $\text{Si}_{0.7}\text{Ge}_{0.3}$ layers grown on Si(001) substrates by molecular beam epitaxy. <i>Journal of Applied Physics</i> , 1997 , 81, 199-204	2.5	21

256	Electronic Properties of Microcrystalline Silicon. <i>Materials Research Society Symposia Proceedings</i> , 1997 , 467, 283		39
255	Stress study of 1.5 μm emission in Si : Er and GaAs : Er. 1997 , 72-74, 110-111		2
254	Room-temperature electroluminescence from dislocations in silicon. 1997 , 294, 201-203		4
253	A silicon/iron-disilicide light-emitting diode operating at a wavelength of 1.5 μm . 1997 , 387, 686-688		646
252	Single-molecule optical switching of terrylene in p-terphenyl. 1997 , 387, 688-691		98
251	Time-resolved dislocation-related luminescence in strain-relaxed SiGe/Si. 1997 , 294, 33-36		6
250	Relaxed epitaxial Si _{1-x} Ge _x grown by MBE. 1997 , 294, 43-46		15
249	Load-dependent electronic states at the crack tip in a semiconductor. 1998 , 243, 345-350		1
248	Critical thickness of Si/sub 0.7/Ge/sub 0.3/ layers in the fabrication of hf SiGe HBTs.		
247	Influence of misfit dislocation interactions on photoluminescence spectra of SiGe on patterned Si. <i>Journal of Applied Physics</i> , 1998 , 83, 3773-3776	2.5	13
246	Dislocation-related luminescence properties of silicon. 1998 , 13, 124-129		31
245	Photoluminescence from Reactive Deposition Epitaxy (RDE) Grown FeSi_2 Balls Embedded in Si Crystals. <i>Japanese Journal of Applied Physics</i> , 1998 , 37, L1513-L1516	1.4	15
244	On the environment of optically active Er in Si-electroluminescence devices. 1998 , 72, 809-811		30
243	Dislocation structure and photoluminescence of partially relaxed SiGe layers on Si(001) substrates. 1999 , 14, 582-588		28
242	Optical characterization of strain-induced structural modification in SiGe-based heterostructures. <i>Journal of Applied Physics</i> , 1999 , 85, 2363-2366	2.5	13
241	1.5 μm infrared photoluminescence phenomena in Er-doped porous silicon. 1999 , 74, 537-539		19
240	Defect diagnostics using scanning photoluminescence in multicrystalline silicon. 1999 , 273-274, 549-552		14
239	Luminescence of silicon films on sapphire irradiated with high-energy particles. 1999 , 66, 410-414		

238	Scanning room-temperature photoluminescence in polycrystalline silicon. 1999 , 74, 1555-1557		39
237	Optical properties of InAs quantum dots in a Si matrix. 1999 , 74, 1701-1703		61
236	Luminescence from dislocations in silicon-germanium layer grown on silicon substrate. <i>Journal of Applied Physics</i> , 1999 , 85, 1771-1774	2.5	8
235	Characterization of defects in annealed Czochralski-grown silicon wafers by photoluminescence method. 2000 , 210, 69-73		1
234	Defect related photoluminescence of SiGe/Si heterostructures grown by APCVD. 2000 , 364, 254-258		5
233	Formation and annealing of defects during high-temperature processing of ion-implanted epitaxial silicon: the role of dopant implants. 2000 , 71, 186-191		12
232	Optical properties of InAs quantum dots in a Si matrix. 2000 , 7, 317-321		21
231	Is there a future for semiconducting silicides? (invited). 2000 , 50, 223-235		28
230	Photoluminescence characterization of defects in Si and SiGe structures. <i>Journal of Physics Condensed Matter</i> , 2000 , 12, 10105-10121	1.8	20
229	Defect monitoring using scanning photoluminescence spectroscopy in multicrystalline silicon wafers. 2000 , 15, 840-848		67
228	Photoluminescence and structural studies on extended defect evolution during high-temperature processing of ion-implanted epitaxial silicon. <i>Journal of Applied Physics</i> , 2001 , 89, 4310-4317	2.5	9
227	Modification of ϵ -FeSi ₂ precipitate layers in silicon by hydrogen implantation. 2001 , 55, 219-225		4
226	Epitaxial growth of high quality ϵ -FeSi ₂ layers on Si(111) under the presence of an Sb flux. 2001 , 169-170, 310-314		9
225	Study of structure and optical properties of ϵ -FeSi ₂ precipitates formed by ion-implantation of Fe ⁺ in Si(100) and effects of co-implantation of Fe ⁺ and Si ⁺ in amorphous SiO ₂ . 2001 , 381, 194-201		13
224	Formation of ϵ -FeSi ₂ precipitates at the SiO ₂ /Si interface by Fe ⁺ ion implantation and their structural and optical properties. 2001 , 381, 202-208		11
223	Low-temperature photoluminescence characterization of hydrogen- and helium-implanted silicon. 2001 , 4, 297-299		13
222	Low-temperature photoluminescence characterization of defects formation in hydrogen and helium implanted silicon at post-implantation annealing. 2001 , 308-310, 181-184		14
221	Evolution of copper and hydrogen-related defects in silicon. 2001 , 308-310, 404-407		31

220	Defect diagnostics in multicrystalline silicon using scanning techniques. 2001 , 308-310, 1133-1136		5
219	Separation of dislocation- and erbium-related photoluminescence by time resolved studies. 2001 , 81, 56-58		
218	Optical properties of FeSi ₂ precipitate layers in silicon. <i>Optical Materials</i> , 2001 , 17, 121-124	3.3	7
217	Alteration of band structure in Si nanocrystals. 2001 , 15, 273-275		2
216	Effect of dislocations on the photoluminescence decay of 1.54 eV emission from erbium-doped silicon. <i>Journal of Applied Physics</i> , 2001 , 89, 2715-2719	2.5	6
215	Experimental investigation of band structure modification in silicon nanocrystals. 2001 , 64,		29
214	Self-assembly of epitaxially grown Ge/Si quantum dots enhanced by As ion implantation. 2001 , 79, 4025-4027		9
213	Dislocation Related Photoluminescence in Silicon. 2001 , 87,		51
212	Enhancement of photoluminescence by microdisk formation from Si/Ge/Si single quantum wells. 2002 , 80, 2520-2522		6
211	Near-infrared waveguide photodetector with Ge/Si self-assembled quantum dots. 2002 , 80, 509-511		66
210	Structural and cathodoluminescence study of mechanically milled silicon. 2002 , 17, 77-82		33
209	Temperature behaviour of photoluminescence and electron-beam-induced current recombination behaviour of extended defects in solar grade silicon. <i>Journal of Physics Condensed Matter</i> , 2002 , 14, 13169 ¹⁸ -13177		
208	TEM and PL Study of FeSi ₂ Precipitates Formed in Si by Iron Implantation Using a Metal Vapor Vacuum Arc Ion Source. <i>Materials Research Society Symposia Proceedings</i> , 2002 , 737, 683		
207	Photoluminescence of ultrasmall Ge quantum dots grown by molecular-beam epitaxy at low temperatures. 2002 , 80, 1279-1281		116
206	Method for shallow impurity characterization in ultrapure silicon using photoluminescence. <i>Journal of Applied Physics</i> , 2002 , 92, 5913-5916	2.5	11
205	Silicon, further remarks to photoluminescence defect spectra. 1-5		
204	Low temperature epitaxial growth of germanium islands in active regions of silicon interband tunneling diodes. 2002 , 89, 106-110		6
203	Cathodoluminescence study on the tilt and twist boundaries in bonded silicon wafers. 2002 , 91-92, 244-247		11

202	Influence of the Si/Ge interface on phononless radiative recombination in Ge hut clusters grown on Si (001). 2002 , 13, 1030-1033		
201	Luminescence lifetime of the 1.5- μm emission of FeSi ₂ precipitate layers in silicon. 2002 , 60, 205-210		14
200	Germanium islands embedded in strained silicon quantum wells grown on patterned substrates. 2002 , 33, 525-529		3
199	Luminescent Si-Ge solid solution layers ER-doped in molecular-beam epitaxy. <i>Semiconductors</i> , 2002 , 36, 625-628	0.7	2
198	Impurities and defects in multicrystalline silicon for solar cells: low-temperature photoluminescence investigations. <i>Solar Energy Materials and Solar Cells</i> , 2002 , 72, 503-508	6.4	9
197	Characterization and light emission properties of FeSi ₂ precipitates in Si synthesized by metal vapor vacuum arc ion implantation. 2003 , 206, 317-320		10
196	Dislocation-induced photoluminescence in silicon crystals of various impurity composition. 2003 , 45, 259-265		6
195	Optical and structural properties of FeSi ₂ precipitate layers in silicon. <i>Journal of Applied Physics</i> , 2003 , 94, 207-211	2.5	27
194	Influence of boron-doped Si cap layer on the photoluminescence of FeSi ₂ particles embedded in Si matrix. <i>Journal of Applied Physics</i> , 2003 , 94, 1518-1520	2.5	11
193	Effect of implantation temperature on dislocation loop formation and origin of 1.55- μm photoluminescence from ion-beam-synthesized FeSi ₂ precipitates in silicon. 2003 , 83, 42-44		27
192	Semiconductors, Elemental Material Properties. 2003 ,		
191	Cathodoluminescence. 2003 ,		
190	Time-Resolved Photoluminescence Study of Si/FeSi ₂ /Si Structures Grown by Molecular Beam Epitaxy. <i>Japanese Journal of Applied Physics</i> , 2004 , 43, L930-L933	1.4	14
189	Growth of Si/FeSi ₂ /Bi double-heterostructures on Si(111) substrates by molecular-beam epitaxy and photoluminescence using time-resolved measurements. <i>Journal of Applied Physics</i> , 2004 , 96, 2561-2565	2.5	35
188	Influence of FeSi ₂ particle size and Si growth rate on 1.5 μm photoluminescence from Si/FeSi ₂ -particles/Si structures grown by molecular-beam epitaxy. <i>Journal of Applied Physics</i> , 2004 , 95, 5483-5486	2.5	15
187	Structural and photoluminescence properties of heteroepitaxial silicon-on-sapphire layers. 2004 , 46, 10-12		1
186	Effect of current on the electroluminescence of defects produced by high-temperature post-implantation annealing of Si: (Er,O) structures in a chlorine-containing environment. 2004 , 46, 1810-1814		
185	Intrinsic Point Defects, Impurities, and Their Diffusion in Silicon. <i>Computational Microelectronics</i> , 2004 ,		169

184	Optical characterization of FeSi_2 layers formed by ion beam synthesis. 2004 , 7, 463-466		9
183	Photoluminescence studies of defects created in nitrogen-doped silicon during annealing under enhanced pressure. 2004 , 7, 405-409		4
182	Photoluminescence of a tensilely strained silicon quantum well on a relaxed SiGe buffer layer. 2004 , 85, 46-48		13
181	Dislocation luminescence in plastically deformed silicon crystals: effect of dislocation intersection and oxygen decoration. 2004 , 27, 123-127		20
180	Growth and Characterization of Si-Based Light-Emitting Diode with FeSi_2 -Particles/Si Multilayered Active Region by Molecular Beam Epitaxy. <i>Japanese Journal of Applied Physics</i> , 2005 , 44, 3951-3953	1.4	22
179	Photoluminescence characterization of strained Si-SiGe-on-insulator wafers with different Ge fractions. 2005 , 87, 251928		16
178	Fine Structure of Dislocation Related PL Bands D1 and D2 in Silicon. 2005 , 108-109, 767-772		4
177	An application of cathodoluminescence to optimize the shallow trench isolation process. <i>IEEE Transactions on Semiconductor Manufacturing</i> , 2005 , 18, 546-553	2.6	6
176	Photoluminescence signature of silicon interstitial cluster evolution from compact to extended structures in ion-implanted silicon. 2005 , 20, 638-644		53
175	On the role of dislocation loops in silicon light emitting diodes. 2005 , 87, 201105		23
174	Investigation of stress-induced defects in shallow trench isolation by cathodoluminescence and Raman spectroscopies. <i>Journal of Applied Physics</i> , 2006 , 100, 064504	2.5	8
173	Influence of the Implantation Dose and of the Annealing Duration on the Raman Spectra of Ion-Beam Synthesized FeSi_2 Layers. 2006 , 3, 229-232		
172	Photoluminescence and TEM evaluations of defects generated during SiGe-on-insulator virtual substrate fabrication: Temperature ramping process. 2006 , 253, 31-36		1
171	Improvement of luminescence from FeSi_2 particles embedded in silicon, with high temperature silicon buffer layer. 2006 , 290, 176-179		1
170	Photoluminescence enhancement of FeSi_2 by optimizing Al-doping concentration. 2006 , 376-377, 799-802		7
169	Photoluminescence properties of Si/ FeSi_2 /Si double heterostructure. 2006 , 508, 380-384		6
168	Epitaxial growth and characterization of Si-based light-emitting Si/ FeSi_2 film/Si double heterostructures on Si(001) substrates by molecular beam epitaxy. 2006 , 508, 371-375		26
167	Epitaxial Growth and Luminescence Characterization of Si-based Double Heterostructures Light-emitting Diodes with Iron Disilicide Active Region. <i>Materials Research Society Symposia Proceedings</i> , 2006 , 958, 1		

166	Ion Beam Analysis of Ge/Si Dots Grown on Ultrathin SiO ₂ Interlayers. 2006 , 514-516, 1121-1124		
165	Photoluminescence evaluation of defects generated during SiGe-on-insulator virtual substrate fabrication: Temperature ramping process. 2006 , 89, 041916		7
164	Photoluminescence Evaluation of Defects Generated during Temperature Ramp-up Process of SiGe-On-Insulator Virtual Substrate Fabrication. 2006 ,		
163	Electrical activity of intragrain defects in polycrystalline silicon layers obtained by aluminum-induced crystallization and epitaxy. 2007 , 90, 092103		41
162	The Electrical and Optical Properties of Point and Extended Defects in Silicon Arising from Oxygen Precipitation. 2007 , 131-133, 225-232		2
161	Optical characterization of Si _{1-x} Ge _x nanodots grown on Si substrates via ultrathin SiO ₂ buffer layers. <i>Journal of Applied Physics</i> , 2007 , 101, 114312	2.5	6
160	Photoluminescence analysis of intragrain defects in multicrystalline silicon wafers for solar cells. <i>Journal of Applied Physics</i> , 2007 , 102, 054506	2.5	50
159	Photoluminescence decay time and electroluminescence of p-Si/FeSi ₂ particles/n-Si and p-Si/FeSi ₂ film/n-Si double-heterostructures light-emitting diodes grown by molecular-beam epitaxy. <i>Journal of Applied Physics</i> , 2007 , 101, 124506	2.5	25
158	Application of cathodoluminescence to SiGe epitaxial process control. 2007 ,		
157	Photoluminescence characterization of FeSi ₂ prepared by ion beam sputter deposition (IBSD) method. 2007 , 515, 8149-8153		2
156	Nondestructive investigation of FeSi ₂ /Si interface by photoluminescence measurements. 2007 , 515, 8129-8132		4
155	Effects of defect, carrier concentration and annealing process on the photoluminescence of silicon pn diodes. 2007 , 10, 173-178		4
154	Optical and electrical properties of FeSi ₂ single crystals. 2007 , 304, 53-56		6
153	Influence of Cu contamination on dislocation related luminescence. 2007 , 4, 3095-3099		2
152	Signatures of distinct structures related to rod-like defects in silicon detected by various measurement methods. <i>Physica Status Solidi (A) Applications and Materials Science</i> , 2007 , 204, 2229-2237 ^{1.6}		7
151	Radiative properties of dislocations generated around oxygen precipitates in Si. <i>Physica Status Solidi (A) Applications and Materials Science</i> , 2007 , 204, 2238-2247	1.6	10
150	Dislocation-related luminescence in single-crystal silicon subjected to silicon ion implantation and subsequent annealing. <i>Semiconductors</i> , 2007 , 41, 537-539	0.7	14
149	Structures and light emission properties of nanocrystalline FeSi ₂ /Si formed by ion beam synthesis with a metal vapor vacuum arc ion source. 2007 , 515, 8122-8128		5

148	Microscopic and spectroscopic mapping of dislocation-related photoluminescence in multicrystalline silicon wafers. 2008 , 19, 132-134		25
147	Formation and photoluminescence characteristics of Er-related nanostructures on Si(001) substrate covered with an ultrathin SiO ₂ film. 2008 , 602, 2547-2551		1
146	Electron-beam-induced current evidence for room-temperature photoluminescence of silicon pn diode. 2008 , 82, 1337-1340		3
145	Electronic properties of Ge islands embedded in multilayer and superlattice structures. 2008 , 517, 303-305		2
144	Tuning the luminescence emission of {105}-faceted Ge QDs superlattice using proton implantation and thermal annealing. 2008 , 517, 391-394		1
143	Time-resolved measurements of dislocation-related photoluminescence bands in silicon. 2008 , 23, 025010		4
142	Room-Temperature 1.6 μm Electroluminescence from p ⁺ -Si/ErFeSi ₂ /n ⁺ -Si Diodes on Si(001) without High-Temperature Annealing. 2008 , 1, 051405		7
141	p-Si/ErFeSi ₂ /n-Si double-heterostructure light-emitting diodes achieving 1.6 μm electroluminescence of 0.4 mW at room temperature. 2009 , 94, 213509		24
140	Photoluminescence and Raman scattering in axial Si/Ge nanowire heterojunctions. 2009 , 95, 133120		11
139	Defect-related light emission in the 1.4-1.7 μm range from Si layers at room temperature. <i>Journal of Applied Physics</i> , 2009 , 105, 063513	2.5	18
138	Determination of the Origin of Dislocation Related Luminescence from Silicon Using Regular Dislocation Networks. 2009 , 156-158, 567-572		10
137	D-Line Emission from Small Angle Grain Boundaries in Multicrystalline Si. 2009 , 156-158, 561-565		
136	Electroluminescence from metal-oxide-silicon tunneling diode with ion-beam-synthesized ErFeSi ₂ precipitates embedded in the active region. 2009 , 267, 1081-1084		1
135	Dislocation photoluminescence in plastically deformed germanium. 2009 , 404, 4540-4542		2
134	Analysis of photoluminescence spectra for detection of stress-induced defects in silicon substrates after the polycrystalline diamond film deposition. 2009 , 404, 4616-4618		
133	Optical and electrical evaluations of SiGe layers on insulator fabricated using Ge condensation by dry oxidation. 2009 , 53, 841-849		4
132	Crystallographic properties of grain size-controlled polycrystalline silicon thin films deposited on alumina substrate. 2009 , 311, 789-793		2
131	Spherical crystallization of Si during free fall in drop-tubes. 2009 , 311, 722-726		9

130	Photoluminescence of silicon after deposition of polycrystalline diamond films. <i>Semiconductors</i> , 2009 , 43, 1159-1163	0.7	1
129	Photoluminescence evolution in self-ion-implanted and annealed silicon. 2009 , 18, 4906-4911		14
128	Intragrain defects in polycrystalline silicon layers grown by aluminum-induced crystallization and epitaxy for thin-film solar cells. <i>Journal of Applied Physics</i> , 2009 , 105, 114507	2.5	43
127	Cathodoluminescence study of dislocation-related luminescence from small-angle grain boundaries in multicrystalline silicon. 2009 , 94, 112103		15
126	Photoluminescence and Raman study of a tensilely strained Si type-II quantum well on a relaxed SiGe graded buffer. 2009 , 6, 012023		1
125	Defect engineering in implantation technology of silicon light-emitting structures with dislocation-related luminescence. <i>Semiconductors</i> , 2010 , 44, 1-23	0.7	43
124	Y and Z luminescence of polycrystalline cadmium telluride. 2010 , 52, 2345-2351		1
123	Photoluminescence Analysis of Iron Contamination Effect in Multicrystalline Silicon Wafers for Solar Cells. 2010 , 39, 747-750		24
122	Simultaneous stress and defect luminescence study on silicon. <i>Physica Status Solidi (A) Applications and Materials Science</i> , 2010 , 207, 436-441	1.6	28
121	Sub-bandgap luminescence centers in silicon created by self-ion implantation and thermal annealing. <i>Journal of Applied Physics</i> , 2010 , 107, 123109	2.5	27
120	Indirect optical absorption and origin of the emission from β -FeSi ₂ nanoparticles: Bound exciton (0.809 eV) and band to acceptor impurity (0.795 eV) transitions. <i>Journal of Applied Physics</i> , 2010 , 107, 103508	2.5	9
119	Dislocation Structure, Electrical and Luminescent Properties of Hydrophilically Bonded Silicon Wafer Interface. 2011 , 178-179, 233-242		3
118	Physical analysis of carrier lifetime controlled IGBT [II]. 2011 ,		0
117	Polarization analysis of luminescence for the characterization of silicon wafer solar cells. 2011 , 98, 171914		19
116	Radiation properties of dislocations created by plastic deformation of Si under high pressure and low temperature. <i>Journal of Physics: Conference Series</i> , 2011 , 281, 012020	0.3	2
115	OBSERVATION ON PHOTOLUMINESCENCE EVOLUTION IN 300 keV SELF-ION IMPLANTED AND ANNEALED SILICON. 2011 ,		
114	Photoluminescence in silicon implanted with silicon ions at amorphizing doses. <i>Semiconductors</i> , 2011 , 45, 1140-1144	0.7	5
113	Effect of copper on dislocation luminescence centers in silicon. 2011 , 53, 369-376		1

112	Different architectures of relaxed Si _{1-x} Gex/Si pseudo-substrates grown by low-pressure chemical vapor deposition: Structural and morphological characteristics. 2011 , 328, 18-24		7
111	Effects of low-temperature annealing on polycrystalline silicon for solar cells. <i>Solar Energy Materials and Solar Cells</i> , 2011 , 95, 559-563	6.4	8
110	Structural and electronic aspects related to the near-infrared light emission of Fe-doped silicon films. 2011 , 151, 587-590		
109	Defect Evaluation by Photoluminescence for Uniaxially Strained Si-On-Insulator. 2011 , 158, H1221		
108	The origin of 0.78 eV line of the dislocation related luminescence in silicon. <i>Journal of Applied Physics</i> , 2012 , 112, 063528	2.5	2
107	Influence of deep defects on device performance of thin-film polycrystalline silicon solar cells. 2012 , 101, 123904		23
106	Gettering Processes and the Role of Extended Defects. 2012 , 127-188		16
105	Observation on photoluminescence evolution in 300 keV self-ion implanted and annealed silicon. 2012 , 27, 130-132		2
104	Co-Implantation of Carbon and Protons: An Integrated Silicon Device Technology Compatible Method to Generate the Lasing G-Center. 2012 , 22, 2709-2712		25
103	Investigation of defect luminescence from multicrystalline Si wafer solar cells using X-ray fluorescence and luminescence imaging. 2012 , 6, 460-462		2
102	Dislocation-related photoluminescence imaging of mc-Si wafers at room temperature. 2012 , 47, 1148-1152		9
101	Dislocation-related electroluminescence of silicon after electron irradiation. 2012 , 152, 1956-1959		7
100	Capability of photoluminescence for characterization of multi-crystalline silicon. <i>Journal of Applied Physics</i> , 2012 , 111, 073504	2.5	16
99	Structure and optical properties of silicon layers with GaSb nanocrystals created by ion-beam synthesis. <i>Physica Status Solidi (A) Applications and Materials Science</i> , 2012 , 209, 148-152	1.6	13
98	Deep-level photoluminescence due to dislocations and oxygen precipitates in multicrystalline Si. <i>Journal of Applied Physics</i> , 2012 , 111, 113523	2.5	67
97	Growth process of microcrystalline silicon studied by combined photoluminescence and Raman investigations. <i>Journal of Applied Physics</i> , 2013 , 114, 223511	2.5	4
96	Properties of Strong Luminescence at 0.93 eV in Solar Grade Silicon. 2013 , 205-206, 83-88		
95	Enhancement of room temperature dislocation-related photoluminescence of electron irradiated silicon. <i>Journal of Applied Physics</i> , 2013 , 113, 033518	2.5	13

94	On the origin of deep oxygen defects in hydrogenated nanocrystalline silicon thin films used in photovoltaic applications. <i>Solar Energy Materials and Solar Cells</i> , 2013 , 113, 61-70	6.4	4
93	Semiconducting beta-phase FeSi ₂ for light emitting diode applications: Recent developments, challenges, and solutions. 2013 , 537, 1-22		23
92	Luminescence from Germanium and Germanium on Silicon. 2013 , 205-206, 383-393		3
91	Characterization of thin-film a-Si:H/ μ c-Si:H tandem solar cells on glass substrates. 2013 , 48, 279-286		1
90	Identification of intra-grain and grain boundary defects in polycrystalline Si thin films by electron paramagnetic resonance. 2013 , 7, 959-962		15
89	On the origin of intense luminescence at 0.93 eV from multi-crystalline silicon. <i>Journal of Applied Physics</i> , 2013 , 114, 034902	2.5	3
88	Dislocations. 2013 ,		
87	(Invited) Structural and Optical Properties of Si/Ge Nanowire Heterojunctions. 2013 , 53, 215-224		
86	Spectroscopy and Topography of Deep-Level Luminescence in Photovoltaic Silicon. <i>IEEE Journal of Photovoltaics</i> , 2014 , 4, 1452-1458	3.7	28
85	Polarized photoluminescence imaging analysis around small-angle grain boundaries in multicrystalline silicon wafers for solar cells. <i>Japanese Journal of Applied Physics</i> , 2014 , 53, 080303	1.4	7
84	Photoluminescence of rare earth ions (Er ³⁺ , Yb ³⁺) in a porous silicon matrix. 2014 , 562, 462-466		8
83	Nanoscale characterisation of semiconductors by cathodoluminescence. 2014 , 55, 012018		7
82	Investigations on residual strains and the cathodoluminescence and electron beam induced current signal of grain boundaries in silicon. <i>Journal of Applied Physics</i> , 2014 , 115, 163511	2.5	9
81	Photoluminescence and infrared spectroscopy for the study of defects in silicon for photovoltaic applications. <i>Solar Energy Materials and Solar Cells</i> , 2014 , 130, 696-703	6.4	27
80	Effects of Solar Cell Processing Steps on Dislocation Luminescence in Multicrystalline Silicon. 2015 , 77, 619-625		7
79	Defect Characterization in Silicon by Electron-Beam-Induced Current and Cathodoluminescence Techniques. 2015 , 343-373		3
78	Effect of plastic deformation on the magnetic properties and dislocation luminescence of isotopically enriched silicon ²⁹ Si:B. <i>Semiconductors</i> , 2015 , 49, 1140-1144	0.7	
77	Dislocations in laser-doped silicon detected by micro-photoluminescence spectroscopy. 2015 , 107, 022101		23

76	Light emission from rare-earths in dislocation engineered silicon substrates. <i>Japanese Journal of Applied Physics</i> , 2015 , 54, 07JB01	1.4	3
75	Micrometer-Scale Deep-Level Spectral Photoluminescence From Dislocations in Multicrystalline Silicon. <i>IEEE Journal of Photovoltaics</i> , 2015 , 5, 799-804	3.7	22
74	Time-resolved photoluminescence properties of ion-beam-synthesized β -FeSi ₂ and Si-implanted Si. <i>Japanese Journal of Applied Physics</i> , 2015 , 54, 07JB05	1.4	3
73	Electronic and Optical Properties of Dislocations in Silicon. 2016 , 6, 74		13
72	Super-enhancement of 1.54 μ m emission from erbium codoped with oxygen in silicon-on-insulator. 2016 , 5, 37501		11
71	Classification of crystal defects in multicrystalline silicon solar cells and wafer using spectrally and spatially resolved photoluminescence. <i>Journal of Applied Physics</i> , 2016 , 119, 054501	2.5	16
70	Strong electroluminescence from direct band and defects in Ge n+/p shallow junctions at room temperature. 2016 , 108, 191107		10
69	Evolution of thermal, structural, and optical properties of SiGe superlattices upon thermal treatment. <i>Physica Status Solidi (A) Applications and Materials Science</i> , 2016 , 213, 533-540	1.6	5
68	Electroluminescence properties of LEDs based on electron-irradiated p-Si. <i>Semiconductors</i> , 2016 , 50, 252-256	0.7	1
67	INVESTIGATION OF NEAR-SURFACE DEFECTS INDUCED BY SPIKE RAPID THERMAL ANNEALING IN c-SILICON SOLAR CELLS. 2016 , 23, 1550107		
66	Defect Characterization in Silicon Devices by Cathodoluminescence. 2016 , 37, 122-127		
65	Silicon-Modified Rare-Earth Transitions A New Route to Near- and Mid-IR Photonics. 2016 , 26, 1986-1994		8
64	Low-temperature micro-photoluminescence spectroscopy on laser-doped silicon with different surface conditions. 2016 , 122, 1		7
63	Detecting Dopant Diffusion Enhancement at Grain Boundaries in Multicrystalline Silicon Wafers With Microphotoluminescence Spectroscopy. <i>IEEE Journal of Photovoltaics</i> , 2017 , 7, 598-603	3.7	2
62	Dislocation-related photoluminescence in silicon implanted with fluorine ions. <i>Technical Physics Letters</i> , 2017 , 43, 50-52	0.7	5
61	Microscopic Distributions of Defect Luminescence From Subgrain Boundaries in Multicrystalline Silicon Wafers. <i>IEEE Journal of Photovoltaics</i> , 2017 , 7, 772-780	3.7	12
60	Defect related radiative recombination in mono-like crystalline silicon wafers. <i>Physica Status Solidi (A) Applications and Materials Science</i> , 2017 , 214, 1700124	1.6	2
59	Light emitting from the self-interstitial clusters buried in the Si ⁺ self-ion implanted Si films. <i>Micro and Nano Letters</i> , 2017 , 12, 205-208	0.9	3

58	Photoluminescence associated with {113} defects in oxygen-implanted silicon. <i>Physica Status Solidi (A) Applications and Materials Science</i> , 2017 , 214, 1700317	1.6	7
57	Photoluminescence for in-line buried defects detection in silicon devices. 2017 ,		
56	Determination of the Boron and Phosphorus Ionization Energies in Compensated Silicon by Temperature-Dependent Luminescence. <i>Silicon</i> , 2017 , 9, 147-151	2.4	6
55	Microscopic Distribution of Luminescence from Dislocation Clusters in Multicrystalline Silicon Wafers. 2017 ,		
54	Photoluminescence for in-line buried defects detection in silicon devices. 2017 ,		4
53	Pressure-induced photoluminescence of MgO. <i>Journal of Physics Condensed Matter</i> , 2018 , 30, 194002	1.8	2
52	Raman and photoluminescence spectroscopy of SiGe layer evolution on Si(100) induced by dewetting. <i>Journal of Applied Physics</i> , 2018 , 123, 015304	2.5	19
51	Structural and photoluminescence properties of Si-based nanosheet bundles rooted on Si substrates. <i>Japanese Journal of Applied Physics</i> , 2018 , 57, 04FJ01	1.4	2
50	Defects Investigation in Nanosecond laser Annealed Crystalline Silicon: Identification and Localization. 2018 ,		1
49	Line defects in crystals and flux pinning in superconductors Scientific work of Reiner Labusch (1935-2016). <i>Materials Today: Proceedings</i> , 2018 , 5, 14662-14692	1.4	
48	Luminescent and Structural Properties of Electron-Irradiated Silicon Light-Emitting Diodes with Dislocation-Related Luminescence. <i>Materials Today: Proceedings</i> , 2018 , 5, 14772-14777	1.4	4
47	Materials Chemistry and Physics for Low-Cost Silicon Photovoltaics. 2018 , 23-60		
46	Direct-Gap Photoluminescence from a Si-Ge Multilayer Super Unit Cell Grown on Si _{0.4} Ge _{0.6} . <i>ECS Journal of Solid State Science and Technology</i> , 2018 , 7, R115-R119	2	
45	On the structure and photoluminescence of dislocations in silicon. <i>Journal of Applied Physics</i> , 2018 , 124, 053106	2.5	6
44	The Effects of Aluminum Gettering and Thermal Treatments on the Light-Emitting Properties of Dislocation Structures in Self-Implanted Silicon Subjected to Boron Ion Doping. <i>Physica Status Solidi (A) Applications and Materials Science</i> , 2019 , 216, 1900323	1.6	1
43	Investigation of defect levels in BaSi ₂ epitaxial films by photoluminescence and the effect of atomic hydrogen passivation. <i>Journal of Physics Communications</i> , 2019 , 3, 075005	1.2	6
42	High performance planar germanium-on-silicon single-photon avalanche diode detectors. <i>Nature Communications</i> , 2019 , 10, 1086	17.4	61
41	Luminescence in Photovoltaics. <i>Springer Series on Fluorescence</i> , 2019 , 173-211	0.5	1

40	Towards an efficient light-emitting source based on self-implanted silicon with dislocation-related luminescence. <i>Journal of Physics: Conference Series</i> , 2019 , 1410, 012152	0.3	1
39	Correlation of Defect Luminescence and Recombination in Multicrystalline Silicon. <i>IEEE Journal of Photovoltaics</i> , 2019 , 9, 55-63	3.7	3
38	Photoluminescence Imaging for Buried Defects Detection in Silicon: Assessment and Use-Cases. <i>IEEE Transactions on Semiconductor Manufacturing</i> , 2019 , 32, 23-30	2.6	3
37	Introductory lecture: origins and applications of efficient visible photoluminescence from silicon-based nanostructures. <i>Faraday Discussions</i> , 2020 , 222, 10-81	3.6	3 ¹
36	Optical properties of D and S defects induced by Si/Ni ions co-implanting into Si films on insulator. <i>Nanotechnology</i> , 2020 , 31, 245704	3.4	1
35	Crystal defects in monocrystalline silicon induced by spot laser melting. <i>Journal of Applied Physics</i> , 2020 , 127, 093102	2.5	4
34	Nitride-stressor and quantum-size engineering in Ge quantum-dot photoluminescence wavelength and exciton lifetime. <i>Nano Futures</i> , 2020 , 4, 015001	3.6	2
33	Optical and recombination properties of dislocations in cast-mono silicon from short wave infrared luminescence imaging. <i>Journal of Applied Physics</i> , 2020 , 127, 063102	2.5	1
32	Detailed analysis of radiative transitions from defects in n-type monocrystalline silicon using temperature- and light intensity-dependent spectral Photoluminescence. <i>Solar Energy Materials and Solar Cells</i> , 2020 , 208, 110376	6.4	3
31	Optical properties of multiple energy silicon implantation in silicon films using silicon-on-insulator targets. <i>Optical Materials</i> , 2021 , 116, 111065	3.3	0
30	Structural Transformations of the Dislocation Cores in Si and Their Relationship with Photoluminescence. <i>Crystallography Reports</i> , 2021 , 66, 636-643	0.6	
29	Extended Defects in O+-Implanted Si Layers and Their Luminescence. <i>Crystallography Reports</i> , 2021 , 66, 625-635	0.6	1
28	Impact of Gettering and Hydrogenation on Sub-Band-Gap Luminescence from Ring Defects in Czochralski-Grown Silicon. <i>ACS Applied Energy Materials</i> ,	6.1	1
27	Dislocation-Related Excitons in Semiconductors. <i>Springer Proceedings in Physics</i> , 1991 , 28-39	0.2	8
26	Origin of the D-Band Photoluminescence in Silicon. <i>Springer Proceedings in Physics</i> , 1991 , 50-55	0.2	1
25	Intrinsic Point Defects. <i>Computational Microelectronics</i> , 2004 , 77-227		8
24	Si-Ge Strained Layer Heterostructures: Device Possibilities and Process Limitations. 1993 , 401-444		1
23	Optical and structural properties of EFeSi ₂ layers on Si fabricated by triple 56Fe ion implantations. 1996 , 943-946		3

22	DETECTION OF DISLOCATION-RELATED PHOTOLUMINESCENCE BANDS IN SI-GE ALLOYS GROWN BY LIQUID PHASE EPITAXY. 1990 , 1453-1457		12
21	Nanocrystal- and Dislocation-Related Luminescence in Si Matrix with InAs Nanocrystals. <i>Acta Physica Polonica A</i> , 2011 , 120, 204-207	0.6	2
20	Synthesis of flowerlike Si nanostructures on Si substrates. <i>Japanese Journal of Applied Physics</i> , 2017 , 56, 05DE05	1.4	1
19	Si-based light emitters synthesized with Ge+ ion bombardment. <i>Journal of Applied Physics</i> , 2021 , 130, 153101	2.5	0
18	Effects of Hydrogen on the Deep Levels in Si, ZnO and Diamond Studied by Cathodoluminescence. <i>Materials Research Society Symposia Proceedings</i> , 2002 , 719, 921		
17	Selected High-Impact Journal Articles on Defects in Microelectronic Materials and Devices. 2008 ,		2
16	Manipulations of properties of the W-line emitting from the Si+ Self-ion-implanted Si thin films on insulated oxide layer. <i>Wuli Xuebao/Acta Physica Sinica</i> , 2011 , 60, 106104	0.6	
15	PHOTOLUMINESCENCE CHARACTERIZATION OF MOLECULAR BEAM EPITAXIAL SILICON. 1989 , 235-254		
14	Characterization of the Interface of Silicon pn-Junctions, Fabricated by the Silicon Direct Bonding (SDB) Method. <i>Springer Proceedings in Physics</i> , 1989 , 219-224	0.2	1
13	Defect Related Issues in the Application of Si/Si _{1-x} Ge _x Structures. <i>Springer Proceedings in Physics</i> , 1991 , 510-520	0.2	
12	Hydrogen and the Mechanical Properties of Semiconductors. <i>Springer Series in Materials Science</i> , 1992 , 319-330	0.9	
11	Non-destructive identification of end-of-range damage in ion-implanted and annealed silicon. 1993 , 227-231		
10	Properties of Silicon for Photoluminescence. <i>Applied Science and Convergence Technology</i> , 2014 , 23, 113-127		
9	Measurement methods, part F. 1-13		
8	Effect of Compressive and Stretching Strains on the Dislocation Luminescence Spectrum in Silicon. <i>Semiconductors</i> , 2021 , 55, 633	0.7	1
7	$\text{Si}_{1-x}\text{Ge}_x$ Ukrainian Journal of Physics, 2022 , 56, 254	0.4	
6	Effect of Additional Implantation with Oxygen Ions on the Dislocation-related Luminescence in Silicon-containing Oxygen Precipitates. <i>Semiconductors</i> , 2021 , 55, 891-894	0.7	0
5	Investigation of veryintenseD3-band emission in multi-crystalline silicon wafers using electron microscopy and hyperspectral photoluminescence imaging. <i>Journal of Applied Physics</i> , 2022 , 131, 145703 ²⁻⁵		

- 4 Photoluminescence imaging for slip line detection and characterization in silicon substrates. **2022**,
- 3 Formation of light-emitting defects in silicon by swift heavy ion irradiation and subsequent annealing. **2023**, 535, 132-136
- 2 IR Photoluminescence of Silicon Irradiated with High-Energy Xe Ions after Annealing. **2022**, 58, 633-642
- 1 Applications of Raman, IR, and CL Spectroscopy. **2023**, 47-141