Pressure dependence of the optical phonons and transv

Physical Review B 25, 3878-3888

DOI: 10.1103/physrevb.25.3878

Citation Report

#	Article	IF	CITATIONS
1	Dependence on volume of the phonon frequencies and the ir effective charges of several III-V semiconductors. Physical Review B, 1983, 28, 4579-4584.	3.2	330
2	Diamond anvil cell and high-pressure physical investigations. Reviews of Modern Physics, 1983, 55, 65-108.	45.6	1,171
3	Nonlinear-optical properties and signs of the Raman tensor for LiGaO2. Physical Review B, 1984, 29, 2221-2226.	3.2	30
4	Effective Charges and Their Pressure Dependence in αâ€LilO ₃ . Physica Status Solidi (B): Basic Research, 1984, 122, 53-64.	1.5	5
5	Pressure-Raman effects in covalent and molecular solids. Topics in Applied Physics, 1984, , 463-527.	0.8	60
6	Dependence of Raman frequencies and scattering intensities on pressure in GaSb, InAs, and InSb semiconductors. Physical Review B, 1984, 30, 681-687.	3.2	130
7	Photoluminescence and Raman Spectroscopy of Cubic SiC Grown by Chemical Vapor Deposition on Si Substrates. Materials Research Society Symposia Proceedings, 1985, 46, 581.	0.1	15
8	Effects of Strains on the Dynamic Effective Charge of Ill–V Semiconductors. Physica Status Solidi (B): Basic Research, 1985, 129, 101-116.	1.5	26
9	Ground state properties of the group IV ionic compound silicon carbide. Solid State Communications, 1985, 56, 177-180.	1.9	37
10	Growth and properties of HgTe-CdTe and other Hg-based superlattices. IEEE Journal of Quantum Electronics, 1986, 22, 1656-1665.	1.9	67
11	Infrared reflectance evaluation of chemically vapor deposited βâ€SiC films grown on Si substrates. Journal of Applied Physics, 1986, 60, 1479-1485.	2.5	93
12	Pressure dependence of the optical phonon frequencies and the transverse effective charge in AlSb. Solid State Communications, 1986, 57, 483-486.	1.9	41
13	Calculated ground-state properties of silicon carbide. Journal of Physics C: Solid State Physics, 1986, 19, 4413-4426.	1.5	74
14	Abinitiopseudopotential study of structural and high-pressure properties of SiC. Physical Review B, 1987, 35, 8196-8201.	3.2	199
15	Raman scattering of SiC: Estimation of the internal stress in 3Câ€SiC on Si. Journal of Applied Physics, 1987, 62, 254-257.	2.5	72
16	Optical, Vibrational and Surface Properties of SiC. Materials Research Society Symposia Proceedings, 1987, 97, 207.	0.1	7
17	High pressure X-ray investigations on 3C-SiC. Solid State Communications, 1987, 63, 113-114.	1.9	58
18	Photoluminescence spectroscopy of ionâ€implanted 3Câ€SiC grown by chemical vapor deposition. Journal of Applied Physics, 1987, 61, 2011-2016.	2.5	64

#	ARTICLE	IF	Citations
19	Ground State and Electronic Properties of Silicon Carbide and Boron Nitride. Physica Status Solidi (B): Basic Research, 1988, 146, 573-587.	1.5	43
20	Raman scattering studies of chemicalâ€vaporâ€deposited cubic SiC films of (100) Si. Journal of Applied Physics, 1988, 64, 3176-3186.	2.5	175
21	Raman determination of layer stresses and strains for heterostructures and its application to the cubic SiC/Si system. Journal of Applied Physics, 1988, 64, 6827-6835.	2.5	102
22	The effects of thermal annealing on the microstructural, optical and electrical properties of beta silicon carbide films implanted with boron or nitrogen. Journal of Electronic Materials, 1989, 18, 157-165.	2.2	12
23	The self-consistent tight-binding method: application to silicon and silicon carbide. Journal of Physics Condensed Matter, 1990, 2, 7791-7808.	1.8	30
24	Similarities, differences, and trends in the properties of interstitial H in cubic C, Si, BN, BP, AlP, and SiC. Physical Review B, 1990, 42, 9486-9495.	3.2	51
25	High pressure study of cubic BN and SIC (Raman scattering and EDS). High Pressure Research, 1990, 5, 938-940.	1.2	10
26	Pressure-dependent phonon properties of III-V compound semiconductors. Physical Review B, 1990, 41, 12129-12139.	3.2	35
27	Pressure dependence of the Raman phonon spectrum in 6h-silicon carbide. Journal of Molecular Structure, 1991, 247, 373-384.	3.6	17
28	Pressure dependences of band gaps and optical-phonon frequency in cubic SiC. Physical Review B, 1991, 44, 1053-1056.	3.2	48
29	Textured diamond growth on (100) βâ€SiC via microwave plasma chemical vapor deposition. Applied Physics Letters, 1992, 60, 698-700.	3.3	385
30	A technique for measuring residual stress in SiC whiskers within an alumina matrix through Raman spectroscopy. Journal of Applied Physics, 1992, 71, 3524-3531.	2.5	44
31	Large pressure effect on photoluminescence lines in 6H SiC:Ti crystal. Solid State Communications, 1993, 88, 537-540.	1.9	7
32	Isotope effects on boron phosphide single-crystal wafers. Journal of Crystal Growth, 1993, 132, 611-613.	1.5	23
33	Pressure-induced phase transition in SiC. Physical Review B, 1993, 48, 10587-10590.	3.2	205
34	Raman Scattering Characterization of Ultrathin Films of β-SiC. Materials Research Society Symposia Proceedings, 1993, 324, 267.	0.1	0
35	Lattice-constant dependence of the dynamical effective charge in AlAs and GaAs. Physical Review B, 1994, 50, 14125-14130.	3.2	20
36	Large increase of the low-frequency dielectric constant of gallium sulfide under hydrostatic pressure. Physical Review B, 1994, 49, 4601-4604.	3.2	15

#	Article	IF	Citations
37	Pseudopotential calculations on 3Cî—,SiC. Materials Chemistry and Physics, 1994, 39, 34-39.	4.0	3
38	Ab initiocalculation of structural and lattice-dynamical properties of silicon carbide. Physical Review B, 1994, 50, 17054-17063.	3.2	213
39	Raman Modes of 6HPolytype of Silicon Carbide to Ultrahigh Pressures: A Comparison with Silicon and Diamond. Physical Review Letters, 1994, 72, 4105-4108.	7.8	125
40	Beginnings and connections. The Philosophical Magazine: Physics of Condensed Matter B, Statistical Mechanics, Electronic, Optical and Magnetic Properties, 1994, 70, 315-320.	0.6	0
41	Ab initio calculation of structural, lattice dynamical, and thermal properties of cubic silicon carbide. International Journal of Quantum Chemistry, 1995, 56, 801-817.	2.0	70
42	Ab initio linear response calculations of lattice dynamics using anLAPW basis. International Journal of Quantum Chemistry, 1995, 56, 131-136.	2.0	0
43	Anomalies in the pressure dependence of the effective charge in cubic semiconductors. Physical Review B, 1995, 52, R8613-R8616.	3.2	35
44	Pressure dependence of the refractive index of diamond, cubic silicon carbide and cubic boron nitride. Solid State Communications, 1996, 99, 943-948.	1.9	98
45	Diamond Layers on Silicon: Feasibility of Interface Assessment by Infrared and Raman Spectroscopies. Physica Status Solidi A, 1996, 154, 269-282.	1.7	9
46	Pressure dependence of Born effective charges, dielectric constant, and lattice dynamics in SiC. Physical Review B, 1996, 53, 5430-5437.	3.2	59
47	Pressure dependence of static and dynamic ionicity of SiC polytypes. Physical Review B, 1996, 53, 6071-6075.	3.2	22
48	Pressure-dependent dynamical and dielectric properties of cubic SiC. Journal of Physics Condensed Matter, 1996, 8, 2945-2955.	1.8	31
49	Characterization of 3C-SiC Epitaxial Layers on TiC(111) by Raman Scattering. Japanese Journal of Applied Physics, 1997, 36, 5525-5531.	1.5	15
50	Free electron laser annealing of N-ion-implanted 3C-SiC films. Applied Physics Letters, 1997, 71, 823-825.	3.3	8
51	Hot hole energy relaxation in Si/Si0.8Ge0.2 two dimensional hole gases. Journal of Applied Physics, 1997, 81, 6853-6856.	2.5	14
52	Interfacial structures of oriented diamond on Si(100) characterized by confocal Raman spectroscopy. Diamond and Related Materials, 1997, 6, 1036-1040.	3.9	16
53	Free electron laser annealing of silocon carbibe. Journal of Electronic Materials, 1997, 26, 183-186.	2.2	3
54	Raman Investigation of SiC Polytypes. Physica Status Solidi A, 1997, 162, 39-64.	1.7	759

#	Article	IF	CITATIONS
55	Pressure dependence of electronic properties in zinc-blende-like SiGe compound. Journal of Physics and Chemistry of Solids, 1998, 59, 759-768.	4.0	5
56	Ultra thin 3C-SiC pseudomorphic films on Si (100) prepared by organometallic CVD with methyltrichlorosilane. Thin Solid Films, 1998, 318, 18-21.	1.8	15
57	Stresses in 3C-SiC films grown on Si substrates. , 0, , .		0
58	Phonons, Strains, and Pressure in Semiconductors. Semiconductors and Semimetals, 1998, 55, 117-233.	0.7	41
59	Infrared Absorption Properties of Nanocrystalline Cubic SiC Films. Japanese Journal of Applied Physics, 1998, 37, 5485-5489.	1.5	32
60	Dynamical-charge neutrality at a crystal surface. Physical Review B, 1998, 57, 5742-5745.	3.2	16
61	Influence of SiC Cover Layer of Si Substrate on Properties of Cubic SiC Films Prepared by Hydrogen Plasma Sputtering. Japanese Journal of Applied Physics, 1999, 38, L714-L716.	1.5	3
62	Pseudomorphic growth of ultrathin cubic 3C–SiC films on Si(100) by temperature programmed organometallic chemical vapor deposition. Journal of Applied Physics, 1999, 85, 2652-2657.	2.5	20
63	Transverse effective charge and its pressure dependence in GaN single crystals. Physical Review B, 1999, 60, 1480-1483.	3.2	29
64	Raman linewidths of optical phonons in 3Câ SiCunder pressure: First-principles calculations and experimental results. Physical Review B, 1999, 59, 6774-6783.	3.2	65
65	Near-thermal equilibrium growth of SiC by physical vapor transport. Materials Science and Engineering B: Solid-State Materials for Advanced Technology, 1999, 61-62, 44-47.	3.5	20
66	Resonance enhancement of electronic Raman scattering from nitrogen defect levels in silicon carbide. Journal of Applied Physics, 1999, 86, 2073-2077.	2.5	20
67	Oscillator strength and effective charge in amorphous silicon carbon alloy. Solid State Communications, 2000, 115, 375-378.	1.9	3
68	Raman study on residual strains in thin 3C-SiC epitaxial layers grown on Si(001). Thin Solid Films, 2000, 368, 307-311.	1.8	27
69	Vacancies in SiC nanopowders. Materials Science and Engineering B: Solid-State Materials for Advanced Technology, 2000, 77, 147-158.	3.5	19
70	Fabrication of Nanoscale Cubic SiC Particle Film. Japanese Journal of Applied Physics, 2000, 39, 6202-6207.	1.5	3
71	Investigation and modeling of the infrared optical properties of direct current sputtered SiC films on silicon. Journal of Applied Physics, 2000, 88, 3053-3058.	2.5	7
72	Synthesis and Characterization of SiC Nanowires through a Reductionâ°'Carburization Route. Journal of Physical Chemistry B, 2000, 104, 5251-5254.	2.6	145

#	ARTICLE	IF	Citations
73	High-pressure phases of group IV and III-V semiconductors. Reports on Progress in Physics, 2001, 64, 483-516.	20.1	230
74	Silicon carbide (SiC) Raman phonon wavenumbers. , 0, , 1-12.		0
75	Silicon carbide (SiC) phonon wavenumbers and frequencies., 0,, 1-23.		0
76	Non-Rutherford backscattering studies of SiC/SIMOX structures. Applied Surface Science, 2001, 184, 178-182.	6.1	2
77	Mechanistic Study and Characterization of 3C-SiC(100) Grown on Si(100). Journal of the Electrochemical Society, 2001, 148, C383.	2.9	18
78	Effect of pressure on the Raman anomaly of zinc-blende CuBr and Raman spectra of high-pressure phases. Physical Review B, 2001, 64, .	3.2	19
79	Quantitative evaluation of biaxial strain in epitaxial 3C-SiC layers on Si(100) substrates by Raman spectroscopy. Journal of Applied Physics, 2002, 91, 1113-1117.	2.5	77
80	Pressure and temperature dependence of the Raman phonons in isotopic \hat{I}^3 -Cul. Physical Review B, 2002, 66, .	3.2	48
81	Silicon carbide (SiC), phonon dispersion, phonon frequencies and wavenumbers., 0,, 1-9.		0
82	Vibrational properties of ZnTe at high pressures. Journal of Physics Condensed Matter, 2002, 14, 739-757.	1.8	39
83	Effect of surface preparation on Ni Ohmic contact to 3C-SiC. Solid-State Electronics, 2002, 46, 2273-2279.	1.4	26
84	Study of surface defects on 3C–SiC films grown on Si(111) by CVD. Journal of Crystal Growth, 2003, 253, 95-101.	1.5	25
85	Nanosized \hat{I}^2 -SiC films prepared by a Cat-CVD with negative bias at low substrate temperature. Applied Surface Science, 2003, 217, 314-318.	6.1	1
86	Bulk crystal growth of cubic silicon carbide by sublimation epitaxy. Journal of Crystal Growth, 2003, 249, 216-221.	1.5	18
87	Phonon density of states inSr2FeCoO6â^δandBaSrFeCoO6â^δ:â€∫Effects induced by magnetic order and transport coherence. Physical Review B, 2003, 68, .	3.2	8
88	Stress Control in 3C-SiC Films Grown on Si(111). Materials Science Forum, 2004, 457-460, 301-304.	0.3	6
89	Raman and Rayleigh Smart Imaging of Nanophases and Nanosized Materials. Alternatives Techniques to SEM, TEM and AFM?. Materials Research Society Symposia Proceedings, 2004, 838, 103.	0.1	0
90	Influence of the Ge Coverage Prior to Carbonization on the Structure of SiC Grown on Si(111). Materials Science Forum, 2004, 457-460, 297-300.	0.3	3

#	ARTICLE	IF	CITATIONS
91	Anomalous Dynamical Charge Change Behavior of Nanocrystalline 3C-SiC upon Compression. Journal of the American Ceramic Society, 2004, 87, 2291-2293.	3.8	6
92	Infrared ellipsometry of SiC/Si heterostructures with Ge modified interfaces. Thin Solid Films, 2004, 455-456, 183-186.	1.8	6
93	â€~Smart' Raman/Rayleigh imaging of nanosized SiC materials using the spatial correlation model. Journal of Materials Science, 2004, 39, 6183-6190.	3.7	44
94	The role of Ge predeposition temperature in the MBE epitaxy of SiC on Ssilicon. Physica Status Solidi C: Current Topics in Solid State Physics, 2004, 1, 341-346.	0.8	10
95	Surface carbonization of $Si(111)$ by C2H2 and the subsequent $SiC(111)$ epitaxial growth from $SiH4$ and C2H2. Journal of Crystal Growth, 2004, 265, 382-389.	1.5	15
96	Zinc-blende AlN and GaN under pressure: structural, electronic, elastic and piezoelectric properties. Semiconductor Science and Technology, 2004, 19, 1220-1231.	2.0	68
97	Moissanite (SiC) as windows and anvils for high-pressure infrared spectroscopy. Review of Scientific Instruments, 2004, 75, 5026-5029.	1.3	13
98	First-principles calculations of optical properties of GeC, SnC and GeSn under hydrostatic pressure. Physica B: Condensed Matter, 2005, 355, 392-400.	2.7	35
99	Cross-polarization imaging and micro-raman detection of defects in the epitaxy of 4H-SiC. Journal of Electronic Materials, 2005, 34, 382-388.	2.2	8
100	In-situ formed nanoparticles on 3C-SiC film under femtosecond pulsed laser irradiation. Physica Status Solidi (A) Applications and Materials Science, 2005, 202, 1066-1072.	1.8	8
101	Control of 3C-SiC/Si wafer bending by the "checker-board―carbonization method. Physica Status Solidi (A) Applications and Materials Science, 2005, 202, 524-530.	1.8	18
102	Raman spectra of silicon carbide small particles and nanowires. Journal of Physics Condensed Matter, 2005, 17, 2387-2395.	1.8	57
103	Prediction of bulk modulus at high temperatures from longitudinal phonon frequencies: Application to diamond,câ~BN, and3Câ~SiC. Physical Review B, 2006, 73, .	3.2	36
104	Characterization of the crystalline quality of \hat{l}^2 -SiC formed by ion beam synthesis. Nuclear Instruments & Methods in Physics Research B, 2006, 249, 851-855.	1.4	6
105	Observation of Free Carrier Redistribution Resulting from Stacking Fault Formation in Annealed 4H-SiC. Materials Science Forum, 2006, 527-529, 347-350.	0.3	9
106	Residual strains in cubic silicon carbide measured by Raman spectroscopy correlated with x-ray diffraction and transmission electron microscopy. Journal of Applied Physics, 2006, 100, 083514.	2.5	25
107	Optical Characteristics of Polycrystalline 3C-SiC for Harsh Environments. Siberian Russian Workshop and Tutorial on Electron Devices and Materials, 2007, , .	0.0	0
108	Effect of excitation wavelength on the Raman scattering from optical phonons in silicon carbide monofilaments. Journal of Applied Physics, 2007, 102, 023512.	2.5	18

#	Article	IF	CITATIONS
109	Raman Spectroscopy of nanomaterials: How spectra relate to disorder, particle size and mechanical properties. Progress in Crystal Growth and Characterization of Materials, 2007, 53, 1-56.	4.0	865
110	Spectroscopic investigations of the role of Ge in modifying the Si to SiC conversion process. Surface and Interface Analysis, 2008, 40, 794-797.	1.8	2
111	Stress and stress monitoring in SiC–Si heterostructures. Physica Status Solidi (A) Applications and Materials Science, 2008, 205, 867-871.	1.8	9
112	Heteroepitaxial growth and characterization of 3C-SiC films on on-axis Si (110) substrates by LPCVD. Ceramics International, 2008, 34, 657-660.	4.8	3
113	Effect of Al Doping on Properties of SiC Films. Chinese Physics Letters, 2008, 25, 3346-3349.	3.3	6
114	Path-integral molecular dynamics simulation of mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"> <mml:mi><mml:mi></mml:mi><mml:mi><mml:mi><mml:mi><mml:mi><mml:mi><mml:mi><mml:mi><mml:mi><mml:mi><mml:mi><mml:mi><mml:mi><mml:mi><mml:mi><mml:mi><mml:mi><mml:mi><mml:mi><mml:mi><mml:mi><mml:mi><mml:mi><mml:mi><mml:mi><mml:mi><mml:mi><mml:mi><mml:mi><mml:mi><mml:mi><mml:mi><mml:mi><mml:mi><mml:mi><mml:mi><mml:mi><mml:mi><mml:mi><mml:mi><mml:mi><mml:mi><mml:mi><mml:mi><mml:mi><mml:mi><mml:mi><mml:mi><mml:mi><mml:mi><mml:mi><mml:mi><mml:mi><mml:mi><mml:mi><mml:mi><mml:mi><mml:mi><mml:mi><mml:mi><mml:mi><mml:mi><mml:mi><mml:mi><mml:mi><mml:mi><mml:mi><mml:mi><mml:mi><mml:mi><mml:mi><mml:mi><mml:mi><mml:mi><mml:mi><mml:mi><mml:mi><mml:mi><mml:mi><mml:mi><mml:mi><mml:mi><mml:mi><mml:mi><mml:mi><mml:mi><mml:mi><mml:mi><mml:mi><mml:mi><mml:mi><mml:mi><mml:mi><mml:mi><mml:mi><mml:mi><mml:mi><mml:mi><mml:mi><mml:mi><mml:mi><mml:mi><mml:mi><mml:mi><mml:mi><mml:mi><mml:mi><mml:mi><mml:mi><mml:mi><mml:mi><mml:mi><mml:mi><mml:mi><mml:mi><mml:mi><mml:mi><mml:mi><mml:mi><mml:mi><mml:mi><mml:mi><mml:mi><mml:mi><mml:mi><mml:mi><mml:mi><mml:mi><mml:mi><mml:mi><mml:mi><mml:mi><mml:mi><mml:mi><mml:mi><mml:mi><mml:mi><mml:mi><mml:mi><mml:mi><mml:mi><mml:mi><mml:mi><mml:mi><mml:mi><mml:mi><mml:mi><mml:mi><mml:mi><mml:mi><mml:mi><mml:mi><mml:mi><mml:mi><mml:mi><mml:mi><mml:mi><mml:mi><mml:mi><mml:mi><mml:mi><mml:mi><mml:mi><mml:mi><mml:mi><mml:mi><mml:mi><mml:mi><mml:mi><mml:mi><mml:mi><mml:mi><mml:mi><mml:mi><mml:mi><mml:mi><mml:mi><mml:mi><mml:mi><mml:mi><mml:mi><mml:mi><mml:mi><mml:mi><mml:mi><mml:mi><mml:mi><mml:mi><mml:mi><mml:mi><mml:mi><mml:mi><mml:mi><mml:mi><mml:mi><mml:mi><mml:mi><mml:mi><mml:mi><mml:mi><mml:mi><mml:mi><mml:mi><mml:mi><mml:mi><mml:mi><mml:mi><mml:mi><mml:mi><mml:mi><mml:mi><mml:mi><mml:mi><mml:mi><mml:mi><mml:mi><mml:mi><mml:mi><mml:mi><mml:mi><mml:mi><mml:mi><mml:mi><mml:mi><mml:mi><mml:mi><mml:mi><mml:mi><mml:mi><mml:mi><mml:mi><mml:mi><mml:mi><mml:mi><mml:mi><mml:mi><mml:mi><mml:mi><mml:< td=""><td>າ່ອ.2</td><td>28</td></mml:<></mml:mi></mml:mi></mml:mi></mml:mi></mml:mi></mml:mi></mml:mi></mml:mi></mml:mi></mml:mi></mml:mi></mml:mi></mml:mi></mml:mi></mml:mi></mml:mi></mml:mi></mml:mi></mml:mi></mml:mi></mml:mi></mml:mi></mml:mi></mml:mi></mml:mi></mml:mi></mml:mi></mml:mi></mml:mi></mml:mi></mml:mi></mml:mi></mml:mi></mml:mi></mml:mi></mml:mi></mml:mi></mml:mi></mml:mi></mml:mi></mml:mi></mml:mi></mml:mi></mml:mi></mml:mi></mml:mi></mml:mi></mml:mi></mml:mi></mml:mi></mml:mi></mml:mi></mml:mi></mml:mi></mml:mi></mml:mi></mml:mi></mml:mi></mml:mi></mml:mi></mml:mi></mml:mi></mml:mi></mml:mi></mml:mi></mml:mi></mml:mi></mml:mi></mml:mi></mml:mi></mml:mi></mml:mi></mml:mi></mml:mi></mml:mi></mml:mi></mml:mi></mml:mi></mml:mi></mml:mi></mml:mi></mml:mi></mml:mi></mml:mi></mml:mi></mml:mi></mml:mi></mml:mi></mml:mi></mml:mi></mml:mi></mml:mi></mml:mi></mml:mi></mml:mi></mml:mi></mml:mi></mml:mi></mml:mi></mml:mi></mml:mi></mml:mi></mml:mi></mml:mi></mml:mi></mml:mi></mml:mi></mml:mi></mml:mi></mml:mi></mml:mi></mml:mi></mml:mi></mml:mi></mml:mi></mml:mi></mml:mi></mml:mi></mml:mi></mml:mi></mml:mi></mml:mi></mml:mi></mml:mi></mml:mi></mml:mi></mml:mi></mml:mi></mml:mi></mml:mi></mml:mi></mml:mi></mml:mi></mml:mi></mml:mi></mml:mi></mml:mi></mml:mi></mml:mi></mml:mi></mml:mi></mml:mi></mml:mi></mml:mi></mml:mi></mml:mi></mml:mi></mml:mi></mml:mi></mml:mi></mml:mi></mml:mi></mml:mi></mml:mi></mml:mi></mml:mi></mml:mi></mml:mi></mml:mi></mml:mi></mml:mi></mml:mi></mml:mi></mml:mi></mml:mi></mml:mi></mml:mi></mml:mi></mml:mi></mml:mi></mml:mi></mml:mi></mml:mi></mml:mi></mml:mi></mml:mi></mml:mi></mml:mi></mml:mi></mml:mi></mml:mi></mml:mi></mml:mi></mml:mi></mml:mi></mml:mi></mml:mi></mml:mi></mml:mi></mml:mi></mml:mi></mml:mi></mml:mi></mml:mi></mml:mi></mml:mi></mml:mi></mml:mi></mml:mi></mml:mi></mml:mi></mml:mi></mml:mi></mml:mi></mml:mi></mml:mi></mml:mi></mml:mi></mml:mi></mml:mi></mml:mi></mml:mi></mml:mi></mml:mi></mml:mi></mml:mi></mml:mi></mml:mi></mml:mi></mml:mi></mml:mi></mml:mi></mml:mi></mml:mi></mml:mi></mml:mi></mml:mi></mml:mi></mml:mi></mml:mi></mml:mi></mml:mi></mml:mi></mml:mi></mml:mi></mml:mi></mml:mi></mml:mi>	າ່ອ.2	28
115	Synthesis and compression of nanocrystalline silicon carbide. Journal of Applied Physics, 2008, 104, .	2.5	9
116	Isotope effects on the lattice parameter of cubic SiC. Physical Review B, 2009, 79, .	3.2	10
117	Characterization of 3C-SiC micro-pillars on Si(100) substrate grown by vapor-liquid–solid process. Thin Solid Films, 2009, 517, 2882-2885.	1.8	5
118	Growth and Characterization of 3C-SiC Films for Micro Electro Mechanical Systems (MEMS) Applications. Crystal Growth and Design, 2009, 9, 4852-4859.	3.0	36
119	Nanoscale residual stress-field mapping†around nanoindents in SiC†by IR s-SNOM and confocal Raman microscopy. Optics Express, 2009, 17, 22351.	3.4	36
120	Pressure effects on the phonon modes in beryllium chalcogenides. Materials Chemistry and Physics, 2010, 123, 343-346.	4.0	37
121	Stress measurements in ZrB2–SiC composites using Raman spectroscopy and neutron diffraction. Journal of the European Ceramic Society, 2010, 30, 2165-2171.	5.7	63
122	Raman Spectroscopic Stress Evaluation of Femtosecond-Laser-Modified Region Inside 4H-SiC. Applied Physics Express, 2010, 3, 016603.	2.4	7
123	Growth of Epitaxial 3C-SiC Films on Si(100) via Low Temperature SiC Buffer Layer. Crystal Growth and Design, 2010, 10, 36-39.	3.0	32
124	Reduction of the transverse effective charge of optical phonons in ZnO under pressure. Applied Physics Letters, 2010, 96, .	3.3	43
125	Raman spectrometry study of phase stability and phonon anharmonicity of Al3BC3 at elevated temperatures and high pressures. Journal of Applied Physics, 2011, 110, .	2.5	11
126	Lattice Dynamics and Crystalline Properties of Wurtzite Zn _{1â€"<i>x</i>} Mg _{<i>x</i>} O Powders under High Pressure. Journal of Physical Chemistry C, 2011, 115, 19962-19970.	3.1	12

#	Article	IF	Citations
127	Identification of the reconstruction and bonding structure of SiC nanocrystal surface by infrared spectroscopy. Applied Surface Science, 2011, 258, 627-630.	6.1	14
128	Wafer curvature analysis in 3C-SiC layers grown on (001) and (111) Si substrates. Journal of Crystal Growth, 2011, 318, 401-405.	1.5	9
129	Measurement of thermal residual stresses in ZrB2–SiC composites. Journal of the European Ceramic Society, 2011, 31, 1811-1820.	5.7	85
130	Raman Stress Characterization of Hetero-Epitaxial 3C-SiC Free Standing Structures. Materials Science Forum, 2011, 679-680, 141-144.	0.3	7
131	Evaluation of Curvature and Stress in 3C-SiC Grown on Differently Oriented Si Substrates. Materials Science Forum, 0, 679-680, 137-140.	0.3	5
132	Micro-Raman Analysis of a Micromachined 3C-SiC Cantilever. Materials Science Forum, 2012, 717-720, 525-528.	0.3	1
133	Transmission Fourier Transform Infra-red Spectroscopy Investigation of Structure Property Relationships in Low-k SiO _x C _y :H Dielectric Thin Films. Materials Research Society Symposia Proceedings, 2012, 1520, 1.	0.1	1
134	Strain Field Analysis of 3C-SiC Free-Standing Microstructures by Micro-Raman and Theoretical Modelling. Materials Science Forum, 2012, 711, 55-60.	0.3	3
135	Stress fields analysis in 3C–SiC free-standing microstructures by micro-Raman spectroscopy. Thin Solid Films, 2012, 522, 20-22.	1.8	14
136	The impact of H/D substitution on the structure, composition and thermal stability of grain boundaries in sub-micron diamond films deposited on silicon. Diamond and Related Materials, 2012, 22, 59-65.	3.9	3
137	Infrared spectroscopy characterization of 3C–SiC epitaxial layers on silicon. Journal Physics D: Applied Physics, 2012, 45, 495101.	2.8	19
138	Effect of hydrostatic pressure on the structural, elastic and electronic properties of (B3) boron phosphide. Pramana - Journal of Physics, 2012, 79, 95-106.	1.8	15
139	Structural Characterization of 3C-SiC Grown Using Methyltrichlorosilane. Materials Science Forum, 0, 740-742, 291-294.	0.3	1
140	Optimization of a buffer layer for cubic silicon carbide growth on silicon substrates. Journal of Crystal Growth, 2013, 383, 84-94.	1.5	32
141	Microâ€Raman analysis and finiteâ€element modeling of 3 Câ€SiC microstructures. Journal of Raman Spectroscopy, 2013, 44, 299-306.	2.5	12
142	Stress Relaxation Study in 3C-SiC Microstructures by Micro-Raman Analysis and Finite Element Modeling. Materials Science Forum, 0, 740-742, 673-676.	0.3	0
143	Evaluation of Stacking Faults in Single-Crystalline 3C-SiC Films by Polarized Raman Spectroscopy. Japanese Journal of Applied Physics, 2013, 52, 075501.	1.5	6
144	Terahertz conductivity and ultrafast dynamics of photoinduced charge carriers in intrinsic 3C and 6H silicon carbide. Applied Physics Letters, 2014, 105, 032104.	3.3	7

#	Article	IF	CITATIONS
145	General Properties of Bulk SiC. Engineering Materials and Processes, 2014, , 7-114.	0.4	11
146	Fracture property and quantitative strain evaluation of hetero-epitaxial single crystal 3C-SiC membrane. Materials Research Express, 2014, 1, 015912.	1.6	4
147	Evaluation of Mechanical and Optical Properties of Hetero-Epitaxial Single Crystal 3C-SiC Squared-Membrane. Materials Science Forum, 0, 778-780, 457-460.	0.3	3
148	Deposition of diamond/ \hat{l}^2 -SiC composite gradient films by HFCVD: A competitive growth process. Diamond and Related Materials, 2014, 42, 41-48.	3.9	14
149	A top-down approach to densify ZrB2–SiC–BN composites with deeper homogeneity and improved reliability. Chemical Engineering Journal, 2014, 249, 93-101.	12.7	32
150	Strain Evaluation and Fracture Properties of Hetero-Epitaxial Single Crystal 3C-SiC Squared Membrane. Materials Science Forum, 2014, 806, 11-14.	0.3	0
151	Growth of a 3C-SiC layer by carburization of silicon nanopillars. Materials Letters, 2015, 141, 263-266.	2.6	3
152	3C-SiC Heteroepitaxial Growth on Silicon: The Quest for Holy Grail. Critical Reviews in Solid State and Materials Sciences, 2015, 40, 56-76.	12.3	69
153	Separating macrostresses from microstresses in Al2O3–15vol%SiC particulate reinforced composites. Scripta Materialia, 2015, 109, 84-88.	5.2	9
154	Correlation between the residual stress in 3C-SiC/Si epifilm and the quality of epitaxial graphene formed thereon. IOP Conference Series: Materials Science and Engineering, 2015, 79, 012004.	0.6	4
155	FTIR Studies of Silicon Carbide 1D-Nanostructures. Materials Science Forum, 2015, 821-823, 261-264.	0.3	12
156	Room and high temperature flexural failure of spark plasma sintered boron carbide. Ceramics International, 2016, 42, 7001-7013.	4.8	28
157	Defect structure and strain reduction of 3C-SiC/Si layers obtained with the use of a buffer layer and methyltrichlorosilane addition. CrystEngComm, 2016, 18, 2770-2779.	2.6	7
158	DFT Study of Hydrostatic Pressure Effect on Cd 1 \hat{a} , $x \times x \times (Z = Cr, Mn; X = S, Se)$ DMSs. Journal of Superconductivity and Novel Magnetism, 2017, 30, 2175-2185.	1.8	7
159	Hydrostatic Pressure Effect on Ga0.75Cr0.25As DMS: DFT Study. Journal of Superconductivity and Novel Magnetism, 2017, 30, 3079-3084.	1.8	2
160	Growing bulk-like 3C-SiC from seeding material produced by CVD. Physica Status Solidi (A) Applications and Materials Science, 2017, 214, 1600429.	1.8	2
161	Thermal conductivity of bulk and nanowire of cubic-SiC from ab initio calculations. Computational Materials Science, 2017, 128, 249-256.	3.0	24
162	FTIR study of silicon carbide amorphization by heavy ion irradiations. Journal Physics D: Applied Physics, 2017, 50, 095301.	2.8	13

#	Article	IF	Citations
163	On the pressure-dependent phonon characteristics and anomalous thermal expansion coefficient of 3C-SiC. Materials Science and Engineering B: Solid-State Materials for Advanced Technology, 2017, 226, 1-9.	3.5	16
164	Zinc-blende to rocksalt transition in SiC in a laser-heated diamond-anvil cell. Physical Review B, 2017, 95, .	3.2	30
165	Determination of stress components in 4H-SiC power devices via Raman spectroscopy. Journal of Applied Physics, 2017, 122, .	2.5	34
166	Microstress in the matrix of a meltâ€infiltrated SiC/SiC ceramic matrix composite. Journal of the American Ceramic Society, 2017, 100, 5286-5294.	3.8	23
167	From thin film to bulk 3C-SiC growth: Understanding the mechanism of defects reduction. Materials Science in Semiconductor Processing, 2018, 78, 57-68.	4.0	99
168	Relaxation of residual microstress in reaction bonded silicon carbide. Ceramics International, 2018, 44, 11745-11750.	4.8	10
169	Study by molecular dynamics of the influence of temperature and pressure on the optical properties of undoped 3C-SiC structures. Journal of Quantitative Spectroscopy and Radiative Transfer, 2018, 205, 220-229.	2.3	4
170	Spectroscopic phonon and extended x-ray absorption fine structure measurements on 3C-SiC/Si (001) epifilms. Applied Surface Science, 2018, 427, 302-310.	6.1	5
171	Comparative study of the pressure dependence of optical-phonon transverse-effective charges and linewidths in wurtzite InN. Physical Review B, 2018, 98, .	3.2	12
172	Development of a method to evaluate the stress distribution in 4H-SiC power devices. Japanese Journal of Applied Physics, 2018, 57, 106602.	1.5	12
173	First principles calculation of the nonhydrostatic effects on structure and Raman frequency of 3C-SiC. Scientific Reports, 2018, 8, 11279.	3.3	4
174	High-Pressure, High-Temperature Behavior of Silicon Carbide: A Review. Crystals, 2018, 8, 217.	2.2	63
175	SiO ₂ â€SiC Mixtures at High Pressures and Temperatures: Implications for Planetary Bodies Containing SiC. Journal of Geophysical Research E: Planets, 2019, 124, 2294-2305.	3.6	4
176	Stress Characterization of the Interface Between Thermal Oxide and the 4H-SiC Epitaxial Layer Using Near-Field Optical Raman Microscopy. Applied Spectroscopy, 2019, 73, 1193-1200.	2.2	4
177	Effects of temperature and pressure on the optical and vibrational properties of thermoelectric SnSe. Physical Chemistry Chemical Physics, 2019, 21, 8663-8678.	2.8	20
178	Accelerated oxidation and microstructure evolution of SiC in the presence of NaF. Journal of Nuclear Materials, 2021, 543, 152560.	2.7	4
179	Hot Carrier Transport in SiGe/Si Two-Dimensional Hole Gases. , 1996, , 449-452.		1
181	Optical and Electronic Properties of SiC. , 1990, , 563-587.		29

#	Article	IF	CITATIONS
182	Effect of intense laser irradiation on the structural stability of 3C-SiC. Wuli Xuebao/Acta Physica Sinica, 2015, 64, 046301.	0.5	3
183	Chemoheteroepitaxy of $3C\widehat{a}\in SiC(111)$ on $Si(111)$: Influence of Predeposited Ge on Structure and Composition. Physica Status Solidi (A) Applications and Materials Science, 2021, 218, 2100399.	1.8	1
184	Raman Scattering Characteristics on 3C-SiC Thin Films Deposited by APCVD Method. Journal of the Korean Institute of Electrical and Electronic Material Engineers, 2007, 20, 606-610.	0.0	0
185	Theory of the Piezoresistive Effect in p-Type 3C-SiC. Springer Theses, 2017, , 31-47.	0.1	0
186	Silicon carbide (SiC) mode Grýneisen parameters. , 0, , 1-6.		0
187	Silicon carbide (SiC) effective charges. , 0, , 1-8.		0
188	Silicon carbide (SiC), mode Grýneisen parameters, sound velocity, elastic moduli, etc , 0, , 1-4.		0
189	Relaxation of Mechanical Stress in Epitaxial Films of Cubic Silicon Carbide on Silicon Substrates with a Buffer Porous Layer. Technical Physics, 2021, 66, 869.	0.7	0
190	Dielectric AlN/epoxy and SiC/epoxy composites with enhanced thermal and dynamic mechanical properties at low temperatures. Progress in Natural Science: Materials International, 2022, 32, 304-313.	4.4	3
191	Exciton properties, optical phonon modes, polaron characteristics and plasma frequency of GaSb upon compression. Materials Science in Semiconductor Processing, 2022, 147, 106694.	4.0	2
192	Deep Dive into Lattice Dynamics and Phonon Anharmonicity for Intrinsically Low Thermal Expansion Coefficient in Cus. SSRN Electronic Journal, 0, , .	0.4	0
193	Residual Stress Measurement by Raman on Surface-Micromachined Monocrystalline 3C-SiC on Silicon on insulator. Materials Science Forum, 0, 1062, 320-324.	0.3	0
194	Pressure and temperature stability boundaries of cubic SiC polymorphs: a first-principles investigation. Physical Chemistry Chemical Physics, 2022, 24, 16228-16236.	2.8	3
195	Deep Dive into Lattice Dynamics and Phonon Anharmonicity for Intrinsically Low Thermal Expansion Coefficient in CuS. ChemNanoMat, 2022, 8, .	2.8	3
196	Effect of hexagonality on the pressure-dependent lattice dynamics of 4H-SiC. New Journal of Physics, 2022, 24, 113015.	2.9	4
197	Change in Elastic Deformations in SiC Films during Their Growth by the Coordinated Atomic Substitution Method on Si Substrates. Physics of the Solid State, 2022, 64, 511-515.	0.6	1
198	Phase formation of cubic silicon carbide from reactive silicon–carbon multilayers. MRS Advances, 2023, 8, 494-498.	0.9	0
199	Impact of Doping on Cross-Sectional Stress Assessment of 3C-SiC/Si Heteroepitaxy. Materials, 2023, 16, 3824.	2.9	1

#	ARTICLE	IF	CITATIONS
200	Deep learning inter-atomic potential for irradiation damage in 3C-SiC. Computational Materials Science, 2024, 233, 112693.	3.0	0
201	Determining the thermal conductivity and phonon behavior of SiC materials with quantum accuracy via deep learning interatomic potential model. Journal of Nuclear Materials, 2024, 591, 154897.	2.7	0