

# Pressure Dependence of the Resistivity of Germanium

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Citation Report

| #  | ARTICLE   | IF   | CITATIONS |
|----|---|------|-----------|
| 1  | Some recent developments in the calculation of crystal energy bands — new results for the germanium crystal. <i>Physica</i> , 1954, 20, 801-812.      | 0.9  | 75        |
| 2  | Speculations on the Energy Band Structure of Ge-Si Alloys. <i>Physical Review</i> , 1954, 95, 847-848.  | 2.7  | 168       |
| 3  | The Electronic Energy Band Structure of Silicon and Germanium. <i>Proceedings of the IEEE</i> , 1955, 43, 1703-1732.                                  | 0.6  | 56        |
| 4  | The Influence of Pressure on Metal-Germanium Contacts. <i>Proceedings of the Physical Society Section B</i> , 1955, 68, 922-928.                      | 0.9  | 0         |
| 5  | Conductivity, Hall Effect, and Magnetoresistance inn-Type Germanium, and Their Dependence on Pressure. <i>Physical Review</i> , 1955, 100, 1129-1139. | 2.7  | 31        |
| 6  | Pressure Dependence of the Resistivity of Silicon. <i>Physical Review</i> , 1955, 98, 1755-1757.  | 2.7  | 75        |
| 7  | Energy Levels of a Crystal Modified by Alloying or by Pressure. <i>Physical Review</i> , 1955, 99, 1759-1766.   | 2.7  | 17        |
| 8  | Valence Semiconductors, Germanium and Silicon. <i>Solid State Physics</i> , 1955, , 283-365.  | 0.5  | 19        |
| 9  | Theory of the Electrical Properties of Germanium and Silicon. <i>Advances in Electronics and Electron Physics</i> , 1955, 7, 85-182.                  | 0.6  | 389       |
| 10 | Theory of Transport Effects in Semiconductors: Thermoelectricity. <i>Physical Review</i> , 1956, 104, 1223-1239.                                      | 2.7  | 148       |
| 11 | Infra-red Absorption in Semiconductors. <i>Reports on Progress in Physics</i> , 1956, 19, 107-155.  | 20.1 | 215       |
| 12 | Electronic band structure of diamonds. <i>Physica</i> , 1956, 22, 156-158.  | 0.9  | 8         |
| 13 | Effects of Pressure on the Electrical Properties of Semiconductors. <i>Physical Review</i> , 1956, 101, 1256-1263.                                    | 2.7  | 44        |
| 14 | Deformation Potential Theory forn-Type Ge. <i>Physical Review</i> , 1956, 101, 531-536.   | 2.7  | 37        |
| 15 | Temperature Dependence of the Piezoresistance of High-Purity Silicon and Germanium. <i>Physical Review</i> , 1957, 105, 525-539.                      | 2.7  | 178       |
| 16 | Theory of Mobility of Electrons in Solids. <i>Solid State Physics</i> , 1957, 4, 199-366.   | 0.5  | 120       |
| 17 | A survey of atomic constants. <i>Nuovo Cimento</i> , 1957, 5, 267-360.  | 1.0  | 17        |
| 18 | Optical properties of semiconductors under hydrostatic pressure—I. Germanium. <i>Journal of Physics and Chemistry of Solids</i> , 1958, 5, 89-101.    | 4.0  | 47        |

| #  | ARTICLE  | IF   | CITATIONS |
|----|--|------|-----------|
| 19 | Optical properties of semiconductors under hydrostatic pressureâ”ll. Silicon. Journal of Physics and Chemistry of Solids, 1958, 5, 102-106.  | 4.0  | 32        |
| 20 | Optical properties of semiconductors under hydrostatic pressureâ”lll. Journal of Physics and Chemistry of Solids, 1958, 6, 6-15.   | 4.0  | 25        |
| 21 | The effect of pressure on the optical absorption edge of germanium and silicon. Journal of Physics and Chemistry of Solids, 1958, 7, 210-213.                                      | 4.0  | 48        |
| 22 | Experimental Investigations of the Electronic Band Structure of Solids. Reviews of Modern Physics, 1958, 30, 122-154.  | 45.6 | 189       |
| 23 | Effect of Pressure on the Infrared Absorption of Semiconductors. Physical Review, 1959, 113, 1495-1503.  | 2.7  | 41        |
| 24 | Pressure-dependence of the resistivity of germanium. Journal of Physics and Chemistry of Solids, 1959, 10, 12-18.  | 4.0  | 5         |
| 25 | The effect of pressure on the properties of germanium and silicon. Journal of Physics and Chemistry of Solids, 1959, 8, 196-204.   | 4.0  | 98        |
| 26 | Photo-piezoelectric effect in semiconductors. European Physical Journal D, 1959, 9, 572-577.   | 0.4  | 7         |
| 27 | Physics at High Pressure. Solid State Physics, 1960, 11, 41-147.   | 0.5  | 23        |
| 28 | Influence de la pression sur quelques propriÃ©tÃ©s des semiconducteurs. Le Journal De Physique Et Le Radium Publication De La SociÃ©tÃ© FranÃ§aise De Physique, 1960, 21, 130-140. | 0.8  | 2         |
| 29 | EinfluÃŸ von Bandstruktur und Elektron-Gitter-Wechselwirkung auf die Lichtabsorption in Halbleitern. Advances in Solid State Physics, 1960, , 124-159.                             | 0.8  | 0         |
| 30 | Pressure Dependence of the Current-Voltage Characteristics of Esaki Diodes. Physical Review Letters, 1960, 4, 60-62.   | 7.8  | 35        |
| 31 | Internal Friction in Germanium and Silicon I: Electron and Impurity Relaxation. Proceedings of the Physical Society, 1960, 76, 385-397.  | 1.6  | 33        |
| 32 | The Effects of Elastic Deformation on the Electrical Conductivity of Semiconductors. Solid State Physics, 1960, 11, 149-221.   | 0.5  | 120       |
| 33 | Band Structure of the Intermetallic Semiconductors from Pressure Experiments. Journal of Applied Physics, 1961, 32, 2082-2094.   | 2.5  | 253       |
| 34 | Interband Scattering inn-Type Germanium. Physical Review, 1961, 124, 391-407.  | 2.7  | 39        |
| 35 | Effect of High Pressure on Electrical Properties of NiO, CoO, CuO, and Cu <sub>2</sub> O. Physical Review, 1961, 121, 77-82.   | 2.7  | 13        |
| 36 | Effect of Pressure on the Energy Levels of Impurities in Semiconductors. II. Gold in Silicon. Physical Review, 1962, 128, 38-42.   | 2.7  | 35        |

| #  | ARTICLE   | IF  | CITATIONS |
|----|---|-----|-----------|
| 37 | Effect of Pressure on the Energy Levels of Impurities in Semiconductors. I. Arsenic, Indium, and Aluminum in Silicon. <i>Physical Review</i> , 1962, 128, 30-38.                      | 2.7 | 46        |
| 38 | Effect of Pressure on the Energy Levels of Impurities in Semiconductors. III. Gold in Germanium. <i>Physical Review</i> , 1962, 128, 43-55.   | 2.7 | 26        |
| 39 | Energy levels of light nuclei. III Z = 11 to Z = 20. <i>Nuclear Physics (journal)</i> , 1962, 34, 1-324.  | 1.9 | 450       |
| 40 | Pressure dependence of the resistivity of germanium. <i>Physica</i> , 1963, 29, 757-763.  | 0.9 | 2         |
| 41 | Photomagnetoelectric effect in Graded-gap Semiconductors. <i>Physica Status Solidi (B): Basic Research</i> , 1963, 3, 1039-1051.  | 1.5 | 9         |
| 42 | Resistance of Elastically Deformed Shallow p-n Junctions. II. <i>Journal of Applied Physics</i> , 1963, 34, 1958-1970.  | 2.5 | 82        |
| 43 | Effect of Alloying and Pressure on the Band Structure of Germanium and Silicon. <i>Physical Review</i> , 1963, 131, 1524-1529.  | 2.7 | 98        |
| 44 | Influence de la pression sur la conductivitÃ© Ã©lectrique des solides. <i>Journal De Physique</i> , 1964, 25, 402-424.  | 1.8 | 2         |
| 45 | Physical behavior of germanium under shock wave compression. <i>Journal of Physics and Chemistry of Solids</i> , 1966, 27, 1519-1529.   | 4.0 | 38        |
| 47 | Piezotransmission Measurements of Phonon-Assisted Transitions in Semiconductors. I. Germanium. <i>Physical Review</i> , 1967, 155, 693-702.   | 2.7 | 24        |
| 48 | Form Factors and Ultraviolet Spectra of Semiconductors at High Pressure. <i>Physical Review</i> , 1967, 154, 647-653.   | 2.7 | 26        |
| 49 | The pressure coefficient of the indirect optical energy gap of germanium. <i>Physica</i> , 1967, 37, 279-283.   | 0.9 | 2         |
| 50 | Influence of Uniaxial Stress on the Optical Properties of CdSe. <i>Physica Status Solidi (B): Basic Research</i> , 1968, 27, 255-261.   | 1.5 | 17        |
| 51 | Conduction-Band Minimum of Ge from High-Pressure Studies on p-n Junctions. <i>Physical Review</i> , 1968, 171, 836-838.   | 2.7 | 17        |
| 52 | Uniaxial Stress Effect on (000) and (100) Conduction-Band Minima of Germanium. <i>Japanese Journal of Applied Physics</i> , 1969, 8, 700-703.   | 1.5 | 5         |
| 53 | Pressure dependence of the reverse current in surface barrier diodes. <i>Lettore Al Nuovo Cimento Rivista Internazionale Della SocietÃ Italiana Di Fisica</i> , 1970, 4, 1223-1230.   | 0.4 | 0         |
| 54 | On the effect of pressure on the band extrema of covalent semiconductors. <i>Lettore Al Nuovo Cimento Rivista Internazionale Della SocietÃ Italiana Di Fisica</i> , 1970, 4, 848-857. | 0.4 | 13        |
| 55 | Temperature dependence of the energy gap in GaAs. <i>Physica Status Solidi A</i> , 1971, 8, K111-K113.  | 1.7 | 2         |

| #  | ARTICLE  | IF  | CITATIONS |
|----|--|-----|-----------|
| 56 | Optical Evidence for a Network of Cracklike Voids in Amorphous Germanium. Physical Review Letters, 1971, 27, 1716-1719.  | 7.8 | 128       |
| 57 | Axial yield strengths and phase $\alpha$ transition stresses for $\alpha$ -100, $\alpha$ -110, and $\alpha$ -111 germanium. Journal of Applied Physics, 1972, 43, 4437-4442.       | 2.5 | 31        |
| 58 | Effects of Impurity Compensation on Electrical Properties of p-type Germanium under Hydrostatic Pressure. Journal of Applied Physics, 1972, 43, 490-496.                           | 2.5 | 1         |
| 59 | High-resolution measurement of the germanium absorption edge under pressure. Physica, 1972, 60, 235-243.   | 0.9 | 4         |
| 60 | Dye centres in magnesium doped corundum monocrystal. Crystal Research and Technology: Journal of Experimental and Industrial Crystallography, 1976, 11, 103-108.                   | 0.3 | 2         |
| 61 | Density and binding energy of electron-hole droplets in uniformly stressed germanium. Solid State Communications, 1978, 26, 209-211.   | 1.9 | 18        |
| 62 | A device for high uniaxial compression of single crystal specimens at low temperatures. Cryogenics, 1978, 18, 163-165.   | 1.7 | 0         |
| 63 | Magnetophonon Resonance in n-Type Germanium. Journal of the Physical Society of Japan, 1982, 51, 2226-2232.  | 1.6 | 14        |
| 64 | Electron transport and pressure coefficients associated with the L1 <sub>1</sub> and L1 <sub>2</sub> minima of germanium. Physical Review B, 1986, 34, 2319-2328.                  | 3.2 | 20        |
| 65 | Temperature dependence of In-doped silicon strain gages. , 0, , .  |     | 0         |
| 66 | Chapter 1 High Pressure in Semiconductor Physics: A Historical Overview. Semiconductors and Semimetals, 1998, 54, 1-48.  | 0.7 | 7         |
| 67 | William Paul: a scientist, a teacher, and a friend. Physica Status Solidi (B): Basic Research, 2003, 235, 211-220.   | 1.5 | 1         |
| 68 | 12th International Conference on High Pressure Semiconductor Physics (HPSP-12): Concluding remarks. Physica Status Solidi (B): Basic Research, 2007, 244, 481-487.                 | 1.5 | 2         |
| 69 | Shock Compression of a Pyrolytic, Ceylon Natural, and Hot-Pressed Synthetic Graphite to 120 GPa. , 1979, , 944-952.  |     | 5         |
| 70 | Variation de la résistivité de couches minces de Ge et Te par la pression. Le Journal De Physique Et Le Radium Publication De La Société Française De Physique, 1959, 20, 506-507. | 0.8 | 4         |
| 71 | Non-Metal to Metal Transition in Amorphous Ge and Ge-Sn Alloys under High Pressure. Journal of the Physical Society of Japan, 1974, 36, 558-564.                                   | 1.6 | 12        |
| 72 | The Effects of Elastic Strain on the Conductivity of Homopolar Semiconductors. , 1958, , 236-246.  |     | 0         |
| 73 | Bibliographical references. , 1961, , 42-64.   |     | 0         |

# ARTICLE

IF CITATIONS

74 Piezoresistivity in Semiconducting Ferroelectrics. , 1988, , 201-226.

0