

Vinod K Tewary

List of Publications by Year in descending order

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97
papers

1,687
citations

279798

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315739

38
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99
all docs

99
docs citations

99
times ranked

1053
citing authors

| # | ARTICLE | IF | CITATIONS |
|----|---|-----|-----------|
| 1 | Multiscale Green's function for silicene and its application to calculation of the strain field due to a vacancy. MRS Advances, 2021, 6, 734. | 0.9 | 1 |
| 2 | Semi-discrete Green's function for solution of anisotropic thermal/electrostatic Boussinesq and Mindlin problems: Application to two-dimensional material systems. Engineering Analysis With Boundary Elements, 2020, 110, 56-68. | 3.7 | 4 |
| 3 | Generalized Green's function molecular dynamics for canonical ensemble simulations. Physical Review E, 2018, 97, 053310. | 2.1 | 6 |
| 4 | Green's function modeling of response of two-dimensional materials to point probes for scanning probe microscopy. Physics Letters, Section A: General, Atomic and Solid State Physics, 2016, 380, 1750-1756. | 2.1 | 5 |
| 5 | Ullmann-like reactions for the synthesis of complex two-dimensional materials. Nanotechnology, 2016, 27, 442501. | 2.6 | 2 |
| 6 | Stratified graphene/noble metal systems for low-loss plasmonics applications. Physical Review B, 2013, 87, . | 3.2 | 28 |
| 7 | Manipulation of graphene's dynamic ripples by local harmonic out-of-plane excitation. Nanotechnology, 2013, 24, 055701. | 2.6 | 23 |
| 8 | Effect of elastic deformation on frictional properties of few-layer graphene. Physical Review B, 2012, 85, . | 3.2 | 110 |
| 9 | Atomistic simulation of a graphene-nanoribbon-metal interconnect. Journal of Physics Condensed Matter, 2011, 23, 355006. | 1.8 | 14 |
| 10 | Phenomenological interatomic potentials for silicon, germanium and their binary alloy. Physics Letters, Section A: General, Atomic and Solid State Physics, 2011, 375, 3811-3816. | 2.1 | 6 |
| 11 | Simulation of lattice strain due to a CNT-metal interface. Nanotechnology, 2011, 22, 085703. | 2.6 | 14 |
| 12 | Extending the time scale in molecular dynamics simulations: Propagation of ripples in graphene. Physical Review B, 2009, 80, . | 3.2 | 10 |
| 13 | Singular behavior of the Debye-Waller factor of graphene. Physical Review B, 2009, 79, . | 3.2 | 77 |
| 14 | Parametric interatomic potential for graphene. Physical Review B, 2009, 79, . | 3.2 | 49 |
| 15 | Materials informatics: Facilitating the integration of data-driven materials research with education. Jom, 2008, 60, 51-52. | 1.9 | 8 |
| 16 | Multiscale Green's function for the deflection of graphene lattice. Physical Review B, 2008, 77, . | 3.2 | 12 |
| 17 | Theory of nuclear resonant inelastic x-ray scattering from Fe-57 in a single-walled carbon nanotube. Physical Review B, 2007, 75, . | 3.2 | 2 |
| 18 | Multiscale modeling of point defects in Si-Ge(001) quantum wells. Physical Review B, 2007, 75, . | 3.2 | 10 |

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| 19 | Multiscale model of near-spherical germanium quantum dots in silicon. Nanotechnology, 2007, 18, 105402. | 2.6 | 11 |
| 20 | Multiscale Modeling of a Germanium Quantum Dot in Silicon. , 2006, , 89-98. | | 0 |
| 21 | Green's function-based multiscale modeling of defects in a semi-infinite silicon substrate. International Journal of Solids and Structures, 2005, 42, 4722-4737. | 2.7 | 14 |
| 22 | NSF NSDL Materials Digital Library & MSE Education. Materials Research Society Symposia Proceedings, 2005, 909, 1. | 0.1 | 1 |
| 23 | Static responses of a multilayered anisotropic piezoelectric structure to point force and point charge. Smart Materials and Structures, 2004, 13, 175-183. | 3.5 | 5 |
| 24 | Multiscale Green's-function method for modeling point defects and extended defects in anisotropic solids: Application to a vacancy and free surface in copper. Physical Review B, 2004, 69, . | 3.2 | 27 |
| 25 | Green's-function method for modeling surface acoustic wave dispersion in anisotropic material systems and determination of material parameters. Wave Motion, 2004, 40, 399-412. | 2.0 | 17 |
| 26 | Elastostatic Green's function for advanced materials subject to surface loading. Journal of Engineering Mathematics, 2004, 49, 289-304. | 1.2 | 13 |
| 27 | Continuum Dyson's equation and defect Green's function in a heterogeneous anisotropic solid. Mechanics Research Communications, 2004, 31, 405-414. | 1.8 | 4 |
| 28 | Three-dimensional Green's functions of steady-state motion in anisotropic half-spaces and bimetals. Engineering Analysis With Boundary Elements, 2004, 28, 1069-1082. | 3.7 | 27 |
| 29 | Formation of a surface quantum dot near laterally and vertically neighboring dots. Physical Review B, 2003, 68, . | 3.2 | 9 |
| 30 | Multiscale Modeling of Mechanical Response of Quantum Nanostructures. Materials Research Society Symposia Proceedings, 2003, 778, 921. | 0.1 | 0 |
| 31 | Effects of Laterally and Vertically Neighboring Quantum Dots on Formation of a New Quantum Dot. Materials Research Society Symposia Proceedings, 2003, 775, 9501. | 0.1 | 0 |
| 32 | Change in low-temperature thermodynamic functions of a semiconductor due to a quantum dot. Physical Review B, 2002, 66, . | 3.2 | 4 |
| 33 | Theory of elastic wave propagation in anisotropic film on anisotropic substrate: TiN film on single-crystal Si. Journal of the Acoustical Society of America, 2002, 112, 925-935. | 1.1 | 14 |
| 34 | Multiscale Modeling of Point Defects and Free Surfaces in Semi-infinite Solids. Materials Research Society Symposia Proceedings, 2002, 731, 991. | 0.1 | 0 |
| 35 | Green's Function Method for Calculation of Strain Field Due to a Quantum Dot in a Semi-Infinite Anisotropic Solid. Materials Research Society Symposia Proceedings, 2002, 727, 1. | 0.1 | 1 |
| 36 | Surface acoustic wave methods to determine the anisotropic elastic properties of thin films*. Measurement Science and Technology, 2001, 12, 1486-1494. | 2.6 | 58 |

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| 37 | Greens functions for boundary element analysis of anisotropic bimetals. Engineering Analysis With Boundary Elements, 2001, 25, 279-288. | 3.7 | 34 |
| 38 | Green's function for steady-state heat conduction in a bimaterial composite solid. Computational Mechanics, 2000, 25, 627-634. | 4.0 | 13 |
| 39 | Lattice-statics model for edge dislocations in crystals. Philosophical Magazine A: Physics of Condensed Matter, Structure, Defects and Mechanical Properties, 2000, 80, 1445-1452. | 0.6 | 5 |
| 40 | Inversion of elastic waveform data in anisotropic solids using the delta-function representation of the Green's function. Journal of the Acoustical Society of America, 1998, 104, 1716-1719. | 1.1 | 4 |
| 41 | Lattice Statics Green's Function for Modeling of Dislocations in Crystals. Materials Research Society Symposia Proceedings, 1998, 529, 15. | 0.1 | 0 |
| 42 | Boundary integral equation formulation for Interface cracks in anisotropic materials. Computational Mechanics, 1997, 20, 261-266. | 4.0 | 22 |
| 43 | Theory of elastic waves in three-dimensional anisotropic plates. Journal of the Acoustical Society of America, 1996, 100, 2964-2968. | 1.1 | 2 |
| 44 | Elastic green's function for a bimaterial composite solid containing a crack inclined to the interface. Computational Mechanics, 1996, 19, 41-48. | 4.0 | 1 |
| 45 | Elastic Green's function for a damaged interface in anisotropic materials. Journal of Materials Research, 1996, 11, 537-544. | 2.6 | 4 |
| 46 | Green's function for anisotropic half-space solids in frequency space and calculation of mechanical admittance. Journal of the Acoustical Society of America, 1996, 100, 2960-2963. | 1.1 | 7 |
| 47 | Lattice correction to mechanical admittance of solids. Journal of the Acoustical Society of America, 1996, 100, 89-91. | 1.1 | 1 |
| 48 | Surface waves in three-dimensional half-space tetragonal solids. Journal of the Acoustical Society of America, 1996, 100, 86-88. | 1.1 | 9 |
| 49 | Fidelity of Michelson Interferometric and Conical Piezoelectric Ultrasonic Transducers. , 1996, , 971-978. | | 0 |
| 50 | Computationally efficient representation for elastostatic and elastodynamic Green's functions for anisotropic solids. Physical Review B, 1995, 51, 15695-15702. | 3.2 | 36 |
| 51 | Boundary-integral Analysis of Anisotropic Bimetals with an Interface Crack. , 1995, , 2868-2873. | | 0 |
| 52 | Elastic Green's function for a composite solid containing a crack at an angle to the interface. , 1995, , 2902-2907. | | 0 |
| 53 | Lattice imperfections studied by use of lattice Green's functions. Physical Review B, 1992, 46, 10613-10622. | 3.2 | 82 |
| 54 | Lattice statics of interfaces and interfacial cracks in bimaterial solids. Journal of Materials Research, 1992, 7, 1018-1028. | 2.6 | 16 |

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| 55 | A computationally efficient representation for propagation of elastic waves in anisotropic solids. <i>Journal of the Acoustical Society of America</i> , 1992, 91, 1888-1896. | 1.1 | 31 |
| 56 | Theoretical study of the fracture of brittle materials: atomistic calculations. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 1991, 146, 273-289. | 5.6 | 4 |
| 57 | Theory of capacitive probe method for noncontact characterization of dielectric properties of materials. <i>Journal of Materials Research</i> , 1991, 6, 629-638. | 2.6 | 3 |
| 58 | Atomic theory of fracture of brittle materials: Application to covalent semiconductors. <i>Journal of Materials Research</i> , 1991, 6, 1553-1566. | 2.6 | 21 |
| 59 | Green's function for generalized Hilbert problem for cracks and free surfaces in composite materials. <i>Journal of Materials Research</i> , 1991, 6, 2585-2591. | 2.6 | 3 |
| 60 | Elastic Green's function for a bimaterial composite solid containing a free surface normal to the interface. <i>Journal of Materials Research</i> , 1991, 6, 2592-2608. | 2.6 | 16 |
| 61 | Generalized plane strain analysis of a bimaterial composite containing a free surface normal to the interface. <i>Journal of Materials Research</i> , 1991, 6, 2609-2622. | 2.6 | 4 |
| 62 | A relation between the surface energy and the Debye temperature for cubic solids. <i>Journal of Materials Research</i> , 1990, 5, 1118-1122. | 2.6 | 10 |
| 63 | Lattice statics Green's function method for calculation of atomistic structure of grain boundary interfaces in solids: Part II. Anharmonic theory. <i>Journal of Materials Research</i> , 1989, 4, 320-326. | 2.6 | 3 |
| 64 | Lattice statics Green's function method for calculation of atomistic structure of grain boundary interfaces in solids: Part I. Harmonic theory. <i>Journal of Materials Research</i> , 1989, 4, 309-319. | 2.6 | 13 |
| 65 | Elastic Green's function for a composite solid with a planar crack in the interface. <i>Journal of Materials Research</i> , 1989, 4, 124-136. | 2.6 | 30 |
| 66 | Elastic Green's function for a composite solid with a planar interface. <i>Journal of Materials Research</i> , 1989, 4, 113-123. | 2.6 | 55 |
| 67 | Theory of chemically induced kink formation on cracks in silica. I. 3-D crack Green's functions. <i>Journal of Materials Research</i> , 1987, 2, 619-630. | 2.6 | 29 |
| 68 | Theory of chemically induced kink formation on cracks in silica. II. Force law calculations. <i>Journal of Materials Research</i> , 1987, 2, 631-637. | 2.6 | 11 |
| 69 | Open circuit voltage decay in p-n junction diodes at high levels of injection. <i>Solid-State Electronics</i> , 1986, 29, 561-570. | 1.4 | 10 |
| 70 | Measurements of the open-circuit photovoltage decay in a silicon solar cell. <i>Solar Cells</i> , 1983, 9, 289-293. | 0.6 | 6 |
| 71 | Effect of pn coupling on open-circuit photovoltage decay in a silicon pn junction solar cell. <i>Journal Physics D: Applied Physics</i> , 1983, 16, 1741-1747. | 2.8 | 2 |
| 72 | Theory of open-circuit photovoltage decay in a finite base solar cell with drift field. <i>Journal Physics D: Applied Physics</i> , 1982, 15, 1077-1087. | 2.8 | 9 |

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| 73 | Theory of open circuit voltage decay in a p-n junction diode at high injection. Solid-State Electronics, 1982, 25, 903-907. | 1.4 | 8 |
| 74 | Design and testing of a uniformly illuminating nontracking concentrator. Solar Energy, 1981, 27, 387-391. | 6.1 | 10 |
| 75 | A new method for the measurement of series resistance of solar cells. Journal Physics D: Applied Physics, 1981, 14, 1643-1646. | 2.8 | 49 |
| 76 | Effect of pn coupling on steady-state and transient characteristics of a pn junction solar cell. Journal Physics D: Applied Physics, 1981, 14, 1115-1124. | 2.8 | 5 |
| 77 | Temperature effects in silicon solar cells. Solid-State Electronics, 1980, 23, 1021-1028. | 1.4 | 42 |
| 78 | Effect of plasma reflection on open-circuit voltage of a solar cell at ultrahigh light intensities. Applied Physics Letters, 1980, 37, 58-59. | 3.3 | 2 |
| 79 | Surface boundary condition for solar cell diffusion equation. Journal Physics D: Applied Physics, 1980, 13, 835-837. | 2.8 | 3 |
| 80 | Response of a silicon p-n solar cell to high intensity light. Journal Physics D: Applied Physics, 1980, 13, 1885-1898. | 2.8 | 12 |
| 81 | Change of phonon dispersion curves due to interstitials in Al. Zeitschrift für Physik B Condensed Matter and Quanta, 1975, 21, 255-261. | 1.9 | 24 |
| 82 | Lattice dynamics of a solid with a screw dislocation. Journal of Physics C: Solid State Physics, 1974, 7, 261-278. | 1.5 | 11 |
| 83 | Green-function method for lattice statics. Advances in Physics, 1973, 22, 757-810. | 14.4 | 226 |
| 84 | Lattice distortion due to gas interstitials in bcc metals. Journal of Physics F: Metal Physics, 1973, 3, 1515-1523. | 1.6 | 52 |
| 85 | Tunnelling levels of librator in Ohfield. Journal of Physics C: Solid State Physics, 1973, 6, 1999-2009. | 1.5 | 7 |
| 86 | On a relation between the monovacancy formation energy and the Debye temperature for metals. Journal of Physics F: Metal Physics, 1973, 3, 704-708. | 1.6 | 34 |
| 87 | Theory of defect superlattices in crystals with application to void/vacancy and nitrogen interstitial lattices in tantalum and vanadium. Journal of Physics F: Metal Physics, 1973, 3, 1275-1284. | 1.6 | 24 |
| 88 | Activation energy of gas interstitials in BCC metals. Journal of Physics F: Metal Physics, 1973, 3, 1910-1914. | 1.6 | 4 |
| 89 | Mossbauer, effect for ^{57}Fe in copper. Journal of Physics F: Metal Physics, 1973, 3, 1256-1260. | 1.6 | 4 |
| 90 | The Direct Construction of the Lattice Green Function. , 1972, , 155-176. | | 6 |

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| 91 | Theory of the void lattice in molybdenum. Journal of Physics F: Metal Physics, 1972, 2, L69-L72. | 1.6 | 32 |
| 92 | On a semi-continuum Green function method for lattice dynamics with application to copper. Journal of Physics F: Metal Physics, 1971, 1, 554-569. | 1.6 | 16 |
| 93 | Carbon fibre composite as collimator and filter for stress waves. Journal Physics D: Applied Physics, 1971, 4, L5-L6. | 2.8 | 0 |
| 94 | Evaluation of the Fourier coefficients in the expansion of the lattice Green function and the frequency spectrum. Proceedings of the Physical Society, 1967, 92, 987-989. | 1.6 | 5 |
| 95 | The Fourier expansion method for computation of the frequency distribution function of crystals. Proceedings of the Physical Society, 1965, 86, 1225-1233. | 1.6 | 6 |
| 96 | Nuclear Size Correction to the Relativistic Thomas Fermi Equation of State and Its Effect on Chandrasekhar's Mass Limit. Progress of Theoretical Physics, 1963, 29, 691-698. | 2.0 | 1 |
| 97 | Calculations on the Low Temperature Specific Heat of Selenium and Tellurium. Journal of Chemical Physics, 1963, 38, 417-419. | 3.0 | 19 |