# Elisa Molinari

## List of Publications by Citations



| | | | |
|---|---|---|---|
| 247 papers | 9,737 citations | 50 h-index | 89 g-index |
| 268 ext. papers | 10,385 ext. citations | 4.6 avg, IF | 5.8 L-index |

| # | Paper | IF | Citations |
|---|---|---|---|
| 247 | Exciton binding energies in carbon nanotubes from two-photon photoluminescence. *Physical Review B*, **2005**, 72, | 3.3 | 404 |
| 246 | Coherent ultrafast charge transfer in an organic photovoltaic blend. *Science*, **2014**, 344, 1001-5 | 33.3 | 381 |
| 245 | Electronic structure of atomically precise graphene nanoribbons. *ACS Nano*, **2012**, 6, 6930-5 | 16.7 | 339 |
| 244 | Anharmonic Phonon Lifetimes in Semiconductors from Density-Functional Perturbation Theory. *Physical Review Letters*, **1995**, 75, 1819-1822 | 7.4 | 270 |
| 243 | Excitons in carbon nanotubes: an ab initio symmetry-based approach. *Physical Review Letters*, **2004**, 92, 196401 | 7.4 | 254 |
| 242 | Microscopic calculation of the electron-phonon interaction in quantum wells. *Physical Review B*, **1992**, 45, 6747-6756 | 3.3 | 224 |
| 241 | Few-particle effects in semiconductor quantum dots: observation of multicharged excitons. *Physical Review Letters*, **2000**, 84, 5648-51 | 7.4 | 214 |
| 240 | GolP: an atomistic force-field to describe the interaction of proteins with Au(111) surfaces in water. *Journal of Computational Chemistry*, **2009**, 30, 1465-76 | 3.5 | 207 |
| 239 | Optical properties of graphene nanoribbons: The role of many-body effects. *Physical Review B*, **2008**, 77, | 3.3 | 204 |
| 238 | Quantum coherence controls the charge separation in a prototypical artificial light-harvesting system. *Nature Communications*, **2013**, 4, 1602 | 17.4 | 199 |
| 237 | DFT Study of Cysteine Adsorption on Au(111). *Journal of Physical Chemistry B*, **2003**, 107, 1151-1156 | 3.4 | 194 |
| 236 | Electron-phonon interaction in quasi-two-dimensional systems. *Physical Review B*, **1991**, 44, 3463-3466 | 3.3 | 169 |
| 235 | Exploiting exciton-exciton interactions in semiconductor quantum dots for quantum-information processing. *Physical Review B*, **2000**, 62, R2263-R2266 | 3.3 | 152 |
| 234 | Anisotropy of surface optical properties from first-principles calculations. *Physical Review B*, **1990**, 41, 9935-9946 | 3.3 | 151 |
| 233 | Solid state effects on exciton states and optical properties of PPV. *Physical Review Letters*, **2002**, 88, 206403 | 7.4 | 145 |
| 232 | Coulomb-induced suppression of band-edge singularities in the optical spectra of realistic quantum-wire structures. *Physical Review Letters*, **1996**, 76, 3642-3645 | 7.4 | 127 |
| 231 | Mixing of electronic states in pentacene adsorption on copper. *Physical Review Letters*, **2007**, 99, 046802 | 7.4 | 126 |

| | | | |
|---|---|---|---|
| 230 | Exciton binding energy in GaAs V-shaped quantum wires. *Physical Review Letters*, **1994**, 73, 2899-2902 | 7.4 | 125 |
| 229 | Exciton-dominated optical response of ultra-narrow graphene nanoribbons. *Nature Communications*, **2014**, 5, 4253 | 17.4 | 121 |
| 228 | Phonon spectra of ultrathin GaAs/AlAs superlattices: An ab initio calculation. *Physical Review B*, **1990**, 41, 3870-3873 | 3.3 | 110 |
| 227 | Tracking the coherent generation of polaron pairs in conjugated polymers. *Nature Communications*, **2016**, 7, 13742 | 17.4 | 108 |
| 226 | Potential energy surface for graphene on graphene: Ab initio derivation, analytical description, and microscopic interpretation. *Physical Review B*, **2012**, 86, | 3.3 | 97 |
| 225 | Sliding Properties of MoS2 Layers: Load and Interlayer Orientation Effects. *Journal of Physical Chemistry C*, **2014**, 118, 13809-13816 | 3.8 | 88 |
| 224 | Effects of disorder on the Raman spectra of GaAs/AlAs superlattices. *Physical Review B*, **1992**, 45, 4280-4288 | 3.3 | 87 |
| 223 | Calculated superlattice and interface phonons of InAs/GaSb superlattices. *Physical Review B*, **1986**, 33, 8889-8891 | 3.3 | 87 |
| 222 | Theoretical study of the electronic structure of GaP(110). *Physical Review B*, **1981**, 24, 6029-6042 | 3.3 | 86 |
| 221 | High-finesse optical quantum gates for electron spins in artificial molecules. *Physical Review Letters* , **2003**, 90, 206802 | 7.4 | 85 |
| 220 | Electron states of an Sb-ordered overlayer on GaAs(110). *Physical Review B*, **1983**, 27, 1251-1258 | 3.3 | 85 |
| 219 | Towards Protein Field-Effect Transistors: Report and Model of a Prototype. *Advanced Materials*, **2005**, 17, 816-822 | 24 | 80 |
| 218 | Coulomb correlation effects in semiconductor quantum dots: The role of dimensionality. *Physical Review B*, **1999**, 59, 10165-10175 | 3.3 | 79 |
| 217 | G-quartet biomolecular nanowires. *Applied Physics Letters*, **2002**, 80, 3331-3333 | 3.4 | 78 |
| 216 | Confined longitudinal and transverse phonons in GaAs/AlAs superlattices. *Superlattices and Microstructures*, **1986**, 2, 397-400 | 2.8 | 77 |
| 215 | Ab initio study of model guanine assemblies: The role of □coupling and band transport. *Physical Review B*, **2001**, 65, | 3.3 | 75 |
| 214 | Probing the mechanism for graphene nanoribbon formation on gold surfaces through X-ray spectroscopy. *Chemical Science*, **2014**, 5, 4419-4423 | 9.4 | 74 |
| 213 | First-principles theory of correlated transport through nanojunctions. *Physical Review Letters*, **2005**, 94, 116802 | 7.4 | 71 |

| | | | |
|---|---|---|---|
| 212 | Resonant quasiconfined optical phonons in semiconductor superlattices. *Physical Review B*, **1989**, 39, 3923-3926 | 3.3 | 71 |
| 211 | In-plane Raman scattering of (001)-Si/Ge superlattices: Theory and experiment. *Physical Review B*, **1994**, 49, 5406-5414 | 3.3 | 70 |
| 210 | Exciton-exciton annihilation and biexciton stimulated emission in graphene nanoribbons. *Nature Communications*, **2016**, 7, 11010 | 17.4 | 69 |
| 209 | Shape-Independent Scaling of Excitonic Confinement in Realistic Quantum Wires. *Physical Review Letters*, **1997**, 78, 3527-3530 | 7.4 | 68 |
| 208 | Optical emission from small Si particles. *Solid State Communications*, **1997**, 102, 545-549 | 1.6 | 68 |
| 207 | Electronic rectification in protein devices. *Applied Physics Letters*, **2003**, 82, 472-474 | 3.4 | 68 |
| 206 | Raman Fingerprints of Atomically Precise Graphene Nanoribbons. *Nano Letters*, **2016**, 16, 3442-7 | 11.5 | 67 |
| 205 | Linear and nonlinear optical properties of realistic quantum-wire structures: The dominant role of Coulomb correlation. *Physical Review B*, **1996**, 53, 16462-16473 | 3.3 | 67 |
| 204 | Calculated phonon spectra of Si/Ge (001) superlattices: Features for interface characterization. *Applied Physics Letters*, **1989**, 54, 1220-1222 | 3.4 | 63 |
| 203 | Coherent population transfer in coupled semiconductor quantum dots. *Applied Physics Letters*, **2000**, 77, 1864 | 3.4 | 62 |
| 202 | Molecular phases in coupled quantum dots. *Physical Review B*, **2004**, 69, | 3.3 | 57 |
| 201 | A molecular state of correlated electrons in a quantum dot. *Nature Physics*, **2008**, 4, 467-471 | 16.2 | 55 |
| 200 | How To Identify Plasmons from the Optical Response of Nanostructures. *ACS Nano*, **2017**, 11, 7321-7335 | 16.7 | 54 |
| 199 | Magnetic states in prismatic core multishell nanowires. *Nano Letters*, **2009**, 9, 1631-5 | 11.5 | 54 |
| 198 | Quantum dot states and optical excitations of edge-modulated graphene nanoribbons. *Physical Review B*, **2011**, 84, | 3.3 | 53 |
| 197 | Local Optical Spectroscopy in Quantum Confined Systems: A Theoretical Description. *Physical Review Letters*, **1999**, 82, 847-850 | 7.4 | 49 |
| 196 | Electronic properties of polymer crystals: the effect of interchain interactions. *Physical Review Letters*, **2003**, 90, 086401 | 7.4 | 48 |
| 195 | Coupled free-carrier and exciton relaxation in optically excited semiconductors. *Physical Review B*, **1996**, 54, 4660-4673 | 3.3 | 48 |

| | | | |
|---|---|---|---|
| 194 | Interface mode in Si/Ge superlattices: Theory and experiments. *Physical Review B*, **1993**, 48, 8959-8962 | 3.3 | 48 |
| 193 | Surface-Assisted Reactions toward Formation of Graphene Nanoribbons on Au(110) Surface. *Journal of Physical Chemistry C*, **2015**, 119, 2427-2437 | 3.8 | 47 |
| 192 | Cylindrical two-dimensional electron gas in a transverse magnetic field. *Physical Review B*, **2008**, 78, | 3.3 | 47 |
| 191 | Quantum phases in artificial molecules. *Solid State Communications*, **2001**, 119, 309-321 | 1.6 | 47 |
| 190 | Superlattice effects on confined phonons. *Physical Review Letters*, **1986**, 56, 1751 | 7.4 | 47 |
| 189 | Bandgap Engineering of Graphene Nanoribbons by Control over Structural Distortion. *Journal of the American Chemical Society*, **2018**, 140, 7803-7809 | 16.4 | 47 |
| 188 | Calculated longitudinal superlattice and interface phonons of superlattices. *Superlattices and Microstructures*, **1987**, 3, 117-120 | 2.8 | 46 |
| 187 | Electronics and Optics of Graphene Nanoflakes: Edge Functionalization and Structural Distortions. *Journal of Physical Chemistry C*, **2012**, 116, 17328-17335 | 3.8 | 45 |
| 186 | Interchain interaction and Davydov splitting in polythiophene crystals: An ab initio approach. *Applied Physics Letters*, **2002**, 80, 4118-4120 | 3.4 | 45 |
| 185 | Evidence of correlation in spin excitations of few-electron quantum dots. *Physical Review Letters*, **2005**, 95, 266806 | 7.4 | 43 |
| 184 | Ultrafast carrier relaxation and vertical-transport phenomena in semiconductor superlattices: A Monte Carlo analysis. *Physical Review B*, **1995**, 51, 16943-16953 | 3.3 | 43 |
| 183 | Light-Induced Field Enhancement in Nanoscale Systems from First-Principles: The Case of Polyacenes. *ACS Photonics*, **2014**, 1, 1049-1058 | 6.3 | 42 |
| 182 | Biexciton stability in carbon nanotubes. *Physical Review Letters*, **2007**, 99, 126806 | 7.4 | 42 |
| 181 | Quantifying the Plasmonic Character of Optical Excitations in Nanostructures. *ACS Photonics*, **2016**, 3, 520-525 | 6.3 | 41 |
| 180 | Friction by Shear Deformations in Multilayer Graphene. *Journal of Physical Chemistry C*, **2012**, 116, 21104-21108 | 3.3 | 41 |
| 179 | Spin-transport selectivity upon Co adsorption on antiferromagnetic graphene nanoribbons. *Journal of Chemical Physics*, **2010**, 133, 124703 | 3.9 | 41 |
| 178 | First-principles density-functional theory calculations of electron-transfer rates in azurin dimers. *Journal of Chemical Physics*, **2006**, 124, 64501 | 3.9 | 41 |
| 177 | Self-induced transparency in semiconductor quantum dots. *Physical Review B*, **2002**, 65, | 3.3 | 41 |

| | | | |
|---|---|---|---|
| 176 | Multiple quantum phases in artificial double-dot molecules. *Solid State Communications*, **1999**, 112, 151-155 | 1.8 | 41 |
| 175 | Optical Properties and Charge-Transfer Excitations in Edge-Functionalized All-Graphene Nanojunctions. *Journal of Physical Chemistry Letters*, **2011**, 2, 1315-9 | 6.4 | 40 |
| 174 | Phonon-induced electron relaxation in weakly confined single and coupled quantum dots. *Physical Review B*, **2006**, 74, | 3.3 | 40 |
| 173 | Microscopic calculation of the electron-optical-phonon interaction in ultrathin GaAs/AlxGa1-xAs alloy quantum-well systems. *Physical Review B*, **1995**, 51, 7046-7057 | 3.3 | 40 |
| 172 | Direct experimental observation of fracton mode patterns in one-dimensional Cantor composites. *Physical Review Letters*, **1992**, 68, 1555-1558 | 7.4 | 38 |
| 171 | Carbon nanotubes as excitonic insulators. *Nature Communications*, **2017**, 8, 1461 | 17.4 | 37 |
| 170 | Electron-hole localization in coupled quantum dots. *Physical Review B*, **2002**, 65, | 3.3 | 37 |
| 169 | Infrared reflectivity by transverse-optical phonons in (GaAs)m/(AlAs)n ultrathin-layer superlattices. *Physical Review B*, **1991**, 43, 14754-14757 | 3.3 | 37 |
| 168 | Imaging quasiparticle wave functions in quantum dots via tunneling spectroscopy. *Physical Review B*, **2005**, 71, | 3.3 | 36 |
| 167 | Calculations of phonon spectra in III□V and Si?Ge superlattices: A tool for structural characterization. *Surface Science*, **1990**, 228, 112-119 | 1.8 | 36 |
| 166 | First-principles comparative study on the interlayer adhesion and shear strength of transition-metal dichalcogenides and graphene. *Physical Review B*, **2015**, 92, | 3.3 | 35 |
| 165 | Addition energies in semiconductor quantum dots: Role of electron□electron interaction. *Applied Physics Letters*, **1998**, 72, 957-959 | 3.4 | 35 |
| 164 | Micro-Raman scattering in ultrathin-layer superlattices: Evidence of zone-center anisotropy of optical phonons. *Physical Review B*, **1993**, 47, 1483-1488 | 3.3 | 35 |
| 163 | Designing All-Graphene Nanojunctions by Covalent Functionalization. *Journal of Physical Chemistry C*, **2011**, 115, 2969-2973 | 3.8 | 34 |
| 162 | Protein-surface interactions: challenging experiments and computations. *Journal of Molecular Recognition*, **2010**, 23, 259-62 | 2.6 | 33 |
| 161 | Band structure and optical anisotropy in V-shaped and T-shaped semiconductor quantum wires. *Physical Review B*, **1997**, 55, 7110-7123 | 3.3 | 32 |
| 160 | Phonon-assisted exciton formation and relaxation in GaAs/AlxGa1□As quantum wells. *Physical Review B*, **1997**, 55, R16049-R16052 | 3.3 | 32 |
| 159 | Magnetic field dependence of triplet-singlet relaxation in quantum dots with spin-orbit coupling. *Physical Review B*, **2007**, 75, | 3.3 | 31 |

| | | | |
|---|---|---|---|
| 158 | Strong Exciton Binding in Quantum Structures through Remote Dielectric Confinement. *Physical Review Letters*, **1998**, 80, 4995-4998 | 7.4 | 31 |
| 157 | Few-particle effects in the optical spectra of semiconductor quantum dots. *Solid State Communications*, **1999**, 111, 187-192 | 1.6 | 31 |
| 156 | Interplanar forces and phonon spectra of strained Si and Ge: Ab initio calculations and applications to Si/Ge superlattices. *Physical Review B*, **1990**, 42, 7090-7096 | 3.3 | 31 |
| 155 | Self-consistent pseudopotential calculation of the electronic properties of the InP (110) surface. *Journal of Physics C: Solid State Physics*, **1982**, 15, 1099-1109 | | 31 |
| 154 | Optical Excitations and Field Enhancement in Short Graphene Nanoribbons. *Journal of Physical Chemistry Letters*, **2012**, 3, 924-9 | 6.4 | 30 |
| 153 | Competing mechanisms for singlet-triplet transition in artificial molecules. *Physical Review B*, **2004**, 69, | 3.3 | 30 |
| 152 | Reduced electron relaxation rate in multielectron quantum dots. *Physical Review Letters*, **2005**, 95, 066806 | 7.4 | 30 |
| 151 | First-principles approach for the calculation of optical properties of one-dimensional systems with helical symmetry: The case of carbon nanotubes. *Physical Review B*, **2005**, 72, | 3.3 | 30 |
| 150 | Local absorption spectra of artificial atoms and molecules. *Physical Review B*, **2000**, 62, 13657-13666 | 3.3 | 30 |
| 149 | Exciton formation and relaxation in GaAs epilayers. *Physical Review B*, **1998**, 58, R13403-R13406 | 3.3 | 30 |
| 148 | Valence band spectroscopy in V-grooved quantum wires. *Applied Physics Letters*, **1996**, 69, 2965-2967 | 3.4 | 30 |
| 147 | Phonons in thin GaAs quantum wires. *Physical Review B*, **1993**, 47, 1695-1698 | 3.3 | 30 |
| 146 | Electron-phonon interactions in two-dimensional systems: a microscopic approach. *Semiconductor Science and Technology*, **1992**, 7, B67-B72 | 1.8 | 29 |
| 145 | Surface nanopatterning through styrene adsorption on Si(100). *Physical Review B*, **2006**, 73, | 3.3 | 28 |
| 144 | Effects of few-particle interaction on the atomiclike levels of a single strain-induced quantum dot. *Physical Review B*, **2000**, 62, 1592-1595 | 3.3 | 28 |
| 143 | Origin of surface anisotropies in the optical spectra of III-V compounds. *Physical Review B*, **1989**, 39, 13005-13008 | 3.3 | 28 |
| 142 | Correlation effects in wave function mapping of molecular beam epitaxy grown quantum dots. *Nano Letters*, **2007**, 7, 2701-6 | 11.5 | 27 |
| 141 | Symmetry lowering of pentacene molecular states interacting with a Cu surface. *Physical Review B*, **2007**, 76, | 3.3 | 26 |

| | | | |
|---|---|---|---|
| 140 | Electron Channels in Biomolecular Nanowires. *Journal of Physical Chemistry B*, **2004**, 108, 2509-2515 | 3.4 | 26 |
| 139 | Water-mediated electron transfer between protein redox centers. *Journal of Physical Chemistry B*, **2007**, 111, 3774-81 | 3.4 | 25 |
| 138 | Effect of electron-electron interaction on the phonon-mediated spin relaxation in quantum dots. *Physical Review B*, **2007**, 76, | 3.3 | 25 |
| 137 | Ab initio study of transport parameters in polymer crystals. *Physical Review B*, **2004**, 69, | 3.3 | 25 |
| 136 | Long range order in Al0.5Ga0.5As: Local density calculation of the electronic structure. *Solid State Communications*, **1985**, 56, 125-126 | 1.6 | 25 |
| 135 | Self-assembled guanine ribbons as wide-bandgap semiconductors. *Physica E: Low-Dimensional Systems and Nanostructures*, **2002**, 13, 1236-1239 | 3 | 24 |
| 134 | Raman signatures of classical and quantum phases in coupled dots: A theoretical prediction. *Europhysics Letters*, **2002**, 58, 555-561 | 1.6 | 24 |
| 133 | Reduced carrier cooling and thermalization in semiconductor quantum wires. *Physical Review B*, **1993**, 47, 1632-1635 | 3.3 | 24 |
| 132 | Atomic intermixing in short period GaAs/AlAs superlattices. *Surface Science*, **1992**, 267, 171-175 | 1.8 | 24 |
| 131 | Optical near-field mapping of excitons and biexcitons in naturally occurring semiconductor quantum dots. *Applied Physics Letters*, **2004**, 84, 3963-3965 | 3.4 | 23 |
| 130 | Role of the electronic properties of azurin active site in the electron-transfer process. *International Journal of Quantum Chemistry*, **2005**, 102, 328-342 | 2.1 | 23 |
| 129 | Ultrafast relaxation of photoexcited carriers in semiconductor quantum wires: A Monte Carlo approach. *Physical Review B*, **1995**, 52, 5183-5201 | 3.3 | 23 |
| 128 | Bonding and surface electronic structure of an Sb overlayer on GaP(110). *Surface Science*, **1987**, 184, 449-462 | 1.8 | 23 |
| 127 | Ab initio simulation of optical limiting: the case of metal-free phthalocyanine. *Physical Review Letters*, **2014**, 112, 198303 | 7.4 | 21 |
| 126 | Ab Initio Study of Chemisorption Reactions for Carboxylic Acids on Hydrogenated Silicon Surfaces. *Journal of Physical Chemistry B*, **2004**, 108, 17278-17280 | 3.4 | 21 |
| 125 | Quantum interferences in the Raman cross section for the radial breathing mode in metallic carbon nanotubes. *Physical Review B*, **2005**, 71, | 3.3 | 20 |
| 124 | Single-electron charging in quantum dots with large dielectric mismatch. *Physical Review B*, **2001**, 63, | 3.3 | 20 |
| 123 | Dominance of charged excitons in single-quantum-dot photoluminescence spectra. *Physical Review B*, **2002**, 66, | 3.3 | 20 |

| | | | |
|---|---|---|---|
| 122 | Vibrational properties of a continuous self-similar structure. *Physical Review B*, **1994**, 49, 15067-15075 | 3.3 | 20 |
| 121 | Planar force-constant method for lattice dynamics of superstructures. *Physical Review B*, **1990**, 41, 8302-8312 | 3.3 | 20 |
| 120 | A monolayer transition-metal dichalcogenide as a topological excitonic insulator. *Nature Nanotechnology*, **2020**, 15, 367-372 | 28.7 | 19 |
| 119 | Dark-state luminescence of macroatoms at the near field. *Physical Review Letters*, **2005**, 95, 216802 | 7.4 | 19 |
| 118 | Cation interdiffusion in GaAs-AlAs superlattices measured with Raman spectroscopy. *Applied Physics Letters*, **1991**, 59, 2859-2861 | 3.4 | 19 |
| 117 | Stopband edges in the dispersion curves of Lamb waves propagating in piezoelectric periodical structures. *Applied Physics Letters*, **1988**, 53, 1806-1808 | 3.4 | 19 |
| 116 | Imaging correlated wave functions of few-electron quantum dots: Theory and scanning tunneling spectroscopy experimentsa). *Journal of Applied Physics*, **2007**, 101, 081714 | 2.5 | 18 |
| 115 | Field-controlled suppression of phonon-induced transitions in coupled quantum dots. *Applied Physics Letters*, **2004**, 85, 4729-4731 | 3.4 | 18 |
| 114 | Unraveling effects of disorder on the electronic structure of SiO2 from first principles. *Physical Review B*, **2010**, 81, | 3.3 | 17 |
| 113 | Interaction of electrons with interface phonons in GaAs/AlAs and GaAs/AlGaAs heterostructures. *Semiconductor Science and Technology*, **1992**, 7, B116-B119 | 1.8 | 17 |
| 112 | A coupled-mode theory for periodic piezoelectric composites. *IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control*, **1989**, 36, 50-6 | 3.2 | 17 |
| 111 | Electronic and optical properties of doped TiO2 by many-body perturbation theory. *Physical Review Materials*, **2019**, 3, | 3.2 | 17 |
| 110 | Optical Properties of Bilayer Graphene Nanoflakes. *Journal of Physical Chemistry C*, **2014**, 118, 23219-23225 | 4.8 | 16 |
| 109 | Anisotropy and size effects on the optical spectra of polycyclic aromatic hydrocarbons. *Journal of Physical Chemistry A*, **2014**, 118, 6507-13 | 2.8 | 16 |
| 108 | Optical spectra of nitride quantum dots: Quantum confinement and electron–hole coupling. *Applied Physics Letters*, **1999**, 75, 3449-3451 | 3.4 | 16 |
| 107 | Electron-phonon interaction in two-dimensional systems: A microscopic approach. *Superlattices and Microstructures*, **1991**, 10, 471-478 | 2.8 | 16 |
| 106 | Microscopic calculation of differential reflectivity of GaP(110). *Surface Science*, **1987**, 189-190, 1028-1032 | 2.8 | 16 |
| 105 | Electronic properties of guanine-based nanowires. *Solid State Communications*, **2004**, 131, 557-564 | 1.6 | 15 |

| | | | |
|---|---|---|---|
| 104 | Enhancement of Coulomb interactions in semiconductor nanostructures by dielectric confinement. *Physica E: Low-Dimensional Systems and Nanostructures*, **2000**, 6, 482-485 | 3 | 15 |
| 103 | Low threshold subharmonic generation in composite structures with Cantor-like code. *Physical Review Letters*, **1992**, 69, 3318-3321 | 7.4 | 15 |
| 102 | Water effects on electron transfer in azurin dimers. *Journal of Physical Chemistry B*, **2006**, 110, 23796-800 | 3.4 | 14 |
| 101 | The effect of dielectric polarization-induced surface states on many-body configurations in a quantum dot. *Semiconductor Science and Technology*, **2002**, 17, 1302-1311 | 1.8 | 14 |
| 100 | Ab-initio study of excitonic effects in conventional and organic semiconductors. *Physica Status Solidi (B): Basic Research*, **2005**, 242, 1754-1758 | 1.3 | 14 |
| 99 | Finite-size effects in the frequency response of piezoelectric composite plates. *Journal of Applied Physics*, **1989**, 66, 2828-2832 | 2.5 | 14 |
| 98 | GaAs/AlAs monolayer superlattices: A new candidate for a highly spin-polarized electron source. *Solid State Communications*, **1987**, 62, 1-3 | 1.6 | 14 |
| 97 | SiO2 in density functional theory and beyond. *Physica Status Solidi (B): Basic Research*, **2011**, 248, 1061-1066 | 1.6 | 13 |
| 96 | Effect of the Coulomb interaction on the electron relaxation of weakly-confined quantum dot systems using the full configuration interaction approach. *Physical Review B*, **2006**, 74, | 3.3 | 13 |
| 95 | Tailoring of light emission properties of functionalized oligothiophenes. *Applied Physics Letters*, **2001**, 79, 2505-2507 | 3.4 | 13 |
| 94 | Excitons in carbon nanotubes. *Physica Status Solidi (B): Basic Research*, **2006**, 243, 3204-3208 | 1.3 | 12 |
| 93 | Biomolecular electronic devices based on self-organized deoxyguanosine nanocrystals. *Annals of the New York Academy of Sciences*, **2002**, 960, 184-92 | 6.5 | 12 |
| 92 | Neutral and charged electron-hole complexes in artificial molecules: Quantum transitions induced by the in-plane magnetic field. *Physical Review B*, **2004**, 70, | 3.3 | 12 |
| 91 | InAs/GaSb(001) valence-band offset: Independence of interface composition and strain. *Applied Physics Letters*, **1996**, 69, 3218-3220 | 3.4 | 12 |
| 90 | First-principles calculation of anisotropic reflectance at the GaAs(110) surface. *Surface Science*, **1989**, 211-212, 518-523 | 1.8 | 12 |
| 89 | Quantum interference in nanometric devices: Ballistic transport across arrays of T-shaped quantum wires. *Applied Physics Letters*, **1997**, 71, 1519-1521 | 3.4 | 11 |
| 88 | Suppression of acoustic-phonon-induced electron transitions in coupled quantum dots. *Physica E: Low-Dimensional Systems and Nanostructures*, **2005**, 26, 427-431 | 3 | 11 |
| 87 | Phonons in Si/GaAs superlattices. *Physical Review B*, **1992**, 46, 7296-7299 | 3.3 | 11 |

| | | | |
|---|---|---|---|
| 86 | Local optical spectroscopy of semiconductor nanostructures in the linear regime. *Physical Review B*, **2000**, 62, 8204-8211 | 3.3 | 10 |
| 85 | Si-GaAs(001) superlattice structure. *Journal of Crystal Growth*, **1993**, 127, 121-125 | 1.6 | 10 |
| 84 | Piezoelectric plate resonances due to first Lamb symmetrical mode. *Journal of Applied Physics*, **1988**, 64, 2238-2240 | 2.5 | 10 |
| 83 | Optically detected single-electron charging in a quantum dot. *Physica E: Low-Dimensional Systems and Nanostructures*, **2002**, 13, 95-100 | 3 | 9 |
| 82 | Theory of excitonic confinement in semiconductor quantum wires. *Journal of Physics Condensed Matter*, **1999**, 11, 5969-5988 | 1.8 | 9 |
| 81 | Si-GaAs(001) superlattices. *Applied Physics Letters*, **1992**, 61, 1570-1572 | 3.4 | 9 |
| 80 | Tailoring optical properties and stimulated emission in nanostructured polythiophene. *Scientific Reports*, **2019**, 9, 7370 | 4.9 | 8 |
| 79 | Correlation Effects in Quantum Dot Wave Function Imaging. *Japanese Journal of Applied Physics*, **2006**, 45, 1966-1969 | 1.4 | 8 |
| 78 | Nanoscale compositional fluctuations in multiple InGaAs/GaAs quantum wires. *Journal of Applied Physics*, **2000**, 87, 2261-2264 | 2.5 | 8 |
| 77 | V-grooved quantum wires as prototypes of 1D-systems: Single particle properties and correlation effects. *Solid-State Electronics*, **1996**, 40, 249-255 | 1.7 | 8 |
| 76 | Optical phonon probes of the lateral scale of interface roughness: A theoretical investigation. *Solid-State Electronics*, **1994**, 37, 621-624 | 1.7 | 8 |
| 75 | Hydrogen adsorption on compound semiconductor surfaces. *Vacuum*, **1990**, 41, 663-666 | 3.7 | 8 |
| 74 | Phonons in semiconductor superlattices. *Superlattices and Microstructures*, **1988**, 4, 449-457 | 2.8 | 8 |
| 73 | Evidence of ideal excitonic insulator in bulk MoS under pressure. *Proceedings of the National Academy of Sciences of the United States of America*, **2021**, 118, | 11.5 | 8 |
| 72 | Directionality of acoustic-phonon emission in weakly confined semiconductor quantum dots. *Physical Review B*, **2007**, 75, | 3.3 | 7 |
| 71 | Vibrational properties of Si/Ge superlattices: Theory and in-plane Raman scattering experiments. *Solid-State Electronics*, **1994**, 37, 757-760 | 1.7 | 7 |
| 70 | Phonons and electron-phonon interaction in GaAs quantum wires. *Solid-State Electronics*, **1994**, 37, 761-764 | 1.7 | 7 |
| 69 | Intermolecular conical intersections in molecular aggregates. *Nature Nanotechnology*, **2021**, 16, 63-68 | 28.7 | 7 |

| | | | |
|---|---|---|---|
| 68 | Oxygen-mediated electron transport through hybrid silicon-organic interfaces. *Nanotechnology*, **2008**, 19, 285201 | 3.4 | 6 |
| 67 | Optical properties of one-dimensional graphene polymers: the case of polyphenanthrene. *Physica Status Solidi (B): Basic Research*, **2007**, 244, 4124-4128 | 1.3 | 6 |
| 66 | Optics and Transport in Conjugated Polymer Crystals: Interchain Interaction Effects. *Advances in Solid State Physics*, **2003**, 313-326 | | 6 |
| 65 | Ab-initio study of Coulomb-correlated optical properties in conjugated polymers. *Synthetic Metals*, **2001**, 119, 257-258 | 3.6 | 6 |
| 64 | Multiwavelength Raman spectroscopy of ultranarrow nanoribbons made by solution-mediated bottom-up approach. *Physical Review B*, **2019**, 100, | 3.3 | 5 |
| 63 | Engineering the strain field for the control of quantum confinement: An analytical model for arbitrary shape nanostructures. *Journal of Applied Physics*, **1998**, 84, 3437-3441 | 2.5 | 5 |
| 62 | Optical excitations of quasi-one-dimensional systems: carbon nanotubes versus polymers and semiconductor wires. *Physica Status Solidi (A) Applications and Materials Science*, **2006**, 203, 3602-3610 | 1.6 | 5 |
| 61 | Two-photon photoluminescence and exciton binding energies in single-walled carbon nanotubes. *Physica Status Solidi (B): Basic Research*, **2006**, 243, 2428-2435 | 1.3 | 5 |
| 60 | First-principles investigation of functionalization-defects on silicon surfaces. *Surface Science*, **2006**, 600, 3892-3897 | 1.8 | 5 |
| 59 | Spin–spin interaction in artificial molecules with in-plane magnetic field. *Physica E: Low-Dimensional Systems and Nanostructures*, **2004**, 22, 482-485 | 3 | 5 |
| 58 | Charge transport and radiative recombination in polythiophene crystals: a first-principles study. *Synthetic Metals*, **2003**, 139, 755-757 | 3.6 | 5 |
| 57 | Excitonic and biexcitonic effects in the coherent optical response of semiconductor quantum dots. *Physica B: Condensed Matter*, **1999**, 272, 1-4 | 2.8 | 5 |
| 56 | An investigation of carrier dynamics in semiconductor quantum wires following femtosecond laser excitation. *Semiconductor Science and Technology*, **1994**, 9, 871-874 | 1.8 | 5 |
| 55 | Anisotropy in the optical spectrum of the GaAs(110) surface. *Physical Review Letters*, **1990**, 65, 937 | 7.4 | 5 |
| 54 | Adsorption and Motion of Single Molecular Motors on TiO2(110). *Journal of Physical Chemistry C*, **2020**, 124, 24776-24785 | 3.8 | 4 |
| 53 | Competitive Chemisorption of Bifunctional Carboxylic Acids on H:Si(100): A First-Principles Study. *Journal of Physical Chemistry C*, **2008**, 112, 10167-10175 | 3.8 | 4 |
| 52 | Exact biexciton binding energy in carbon nanotubes using a quantum Monte Carlo approach. *Physica E: Low-Dimensional Systems and Nanostructures*, **2008**, 40, 1997-1999 | 3 | 4 |
| 51 | Quantum phases of correlated electrons in artificial molecules under magnetic fields. *Physical Review B*, **2006**, 74, | 3.3 | 4 |

| | | | |
|---|---|---|---|
| 50 | Phonons in quantum wires **1992**, 1677, 55 | | 4 |
| 49 | Monte Carlo simulation of a "true" quantum wire **1992**, 1676, 161 | | 4 |
| 48 | Evidence for equilibrium exciton condensation in monolayer WTe2. *Nature Physics*, **2022**, 18, 94-99 | 16.2 | 4 |
| 47 | Concavity Effects on the Optical Properties of Aromatic Hydrocarbons. *Journal of Physical Chemistry C*, **2013**, 117, 12909-12915 | 3.8 | 3 |
| 46 | Electronic and magnetic states in core multishell nanowires: Edge localization, Landau levels and Aharonov-Bohm oscillations. *Journal of Physics: Conference Series*, **2009**, 193, 012027 | 0.3 | 3 |
| 45 | Publisher's Note: Optical properties of graphene nanoribbons: The role of many-body effects [Phys. Rev. B 77, 041404(R) (2008)]. *Physical Review B*, **2008**, 77, | 3.3 | 3 |
| 44 | Spin excitations in few-electrons AlGaAs/GaAs quantum dots probed by inelastic light scattering. *Physica E: Low-Dimensional Systems and Nanostructures*, **2006**, 34, 304-307 | 3 | 3 |
| 43 | On the electronic structure analysis for one redox-active molecule. *Chemical Physics Letters*, **2004**, 393, 118-123 | 2.5 | 3 |
| 42 | Relationship between structural and optoelectronic properties in semiconducting polymers. *Semiconductor Science and Technology*, **2004**, 19, S362-S364 | 1.8 | 3 |
| 41 | Strong exciton binding in hybrid GaAs-based nanostructures. *Physica B: Condensed Matter*, **1999**, 272, 518-521 | 2.8 | 3 |
| 40 | Hot Phonons in Quantum Wires: A Monte Carlo Investigation. *Europhysics Letters*, **1994**, 28, 277-282 | 1.6 | 3 |
| 39 | Threshold lowering for subharmonic generation in Cantor-like composite structures. *Physica A: Statistical Mechanics and Its Applications*, **1992**, 191, 540-544 | 3.3 | 3 |
| 38 | Surface confined phonons in semiconductor superlattices. *Surface Science*, **1989**, 211-212, 354-360 | 1.8 | 3 |
| 37 | Aspects of self-consistent procedures in surface pseudopotential calculations. *Journal of Physics C: Solid State Physics*, **1982**, 15, 3627-3637 | | 3 |
| 36 | Interaction-Driven Giant Orbital Magnetic Moments in Carbon Nanotubes. *Physical Review Letters*, **2018**, 121, 127704 | 7.4 | 3 |
| 35 | Optical Spectroscopy on Single Quantum Dots: Charged Excitons **2001**, 63-74 | | 3 |
| 34 | Intrinsic edge excitons in two-dimensional MoS2. *Physical Review B*, **2020**, 101, | 3.3 | 2 |
| 33 | Probing collective modes of correlated states of few electrons in semiconductor quantum dots. *Solid State Communications*, **2009**, 149, 1436-1442 | 1.6 | 2 |

| | | | |
|---|---|---|---|
| 32 | Correlated states and spin transitions in nanofabricated AlGaAs/GaAs few-electron quantum dots probed by inelastic light scattering. *Physica E: Low-Dimensional Systems and Nanostructures*, **2008**, 40, 1867-1869 | 3 | 2 |
| 31 | Spin relaxation due to spin□orbit coupling in multi-electron quantum dots. *Physica E: Low-Dimensional Systems and Nanostructures*, **2008**, 40, 1804-1806 | 3 | 2 |
| 30 | Interacting electrons in artificial molecules with magnetic field of arbitrary direction. *Physica E: Low-Dimensional Systems and Nanostructures*, **2005**, 26, 327-330 | 3 | 2 |
| 29 | Local absorption spectra of single and coupled semiconductor quantum dots. *Materials Science and Engineering B: Solid-State Materials for Advanced Technology*, **2001**, 80, 266-269 | 3.1 | 2 |
| 28 | Theoretical analysis of the optical spectra of InxGa1□xN quantum dots in InyGa1□yN layers. *Physica E: Low-Dimensional Systems and Nanostructures*, **2000**, 7, 934-938 | 3 | 2 |
| 27 | Phonons and Electron-Phonon Interaction in Low-Dimensional Structures. *NATO ASI Series Series B: Physics*, **1995**, 161-203 | | 2 |
| 26 | Infrared reflectivity and Raman spectra of (GaAs)m(AlAs)n ultrathin layer superlattices. *Surface Science*, **1992**, 267, 430-433 | 1.8 | 2 |
| 25 | Vibrational properties of Si/GaAs superlattices. *Superlattices and Microstructures*, **1992**, 12, 429-432 | 2.8 | 2 |
| 24 | Few-electron liquid and solid phases in artificial molecules at high magnetic field **2003**, 361-371 | | 2 |
| 23 | Frequency dependence in GW made simple using a multipole approximation. *Physical Review B*, **2021**, 104, | 3.3 | 2 |
| 22 | Carrier states on cylindrical 2DEGs in a magnetic field. *Physica E: Low-Dimensional Systems and Nanostructures*, **2008**, 40, 2040-2042 | 3 | 1 |
| 21 | Response to □Comment on □Field-controlled suppression of phonon-induced transitions in coupled quantum dots□[Appl. Phys. Lett. 88, 4729 (2006)]□*Applied Physics Letters*, **2006**, 88, 196102 | 3.4 | 1 |
| 20 | Phonon-induced electron relaxation in correlated quantum dots. *Physica Status Solidi C: Current Topics in Solid State Physics*, **2006**, 3, 3660-3663 | | 1 |
| 19 | Magnetic-field-dependent optical properties and interdot correlations in coupled quantum dots. *Journal of Luminescence*, **2005**, 112, 109-112 | 3.8 | 1 |
| 18 | Strong coupling and dressed states of an interface island in a pillar semiconductor microcavity. *Physical Review B*, **2001**, 64, | 3.3 | 1 |
| 17 | Metastable transition of EL2 in GaAs: The electron-phonon-coupling channel. *Solid State Communications*, **1994**, 89, 493-496 | 1.6 | 1 |
| 16 | Green function approach to realistic calculations of the electronic structure of semiconductor interfaces. *Surface Science*, **1985**, 152-153, 1178-1184 | 1.8 | 1 |
| 15 | Vibrational signature of the graphene nanoribbon edge structure from high-resolution electron energy-loss spectroscopy. *Nanoscale*, **2020**, 12, 19681-19688 | 7.7 | 1 |

| | | | |
|---|---|---|---|
| 14 | Collective Properties of Electrons and Holes in Coupled Quantum Dots **2005**, 269-283 | | 1 |
| 13 | Anomalous non-equilibrium response in black phosphorus to sub-gap mid-infrared excitation.. *Nature Communications*, **2022**, 13, 2667 | 17.4 | 1 |
| 12 | Roadmap on bio-nano-photonics. *Journal of Optics (United Kingdom)*, **2021**, 23, 073001 | 1.7 | 0 |
| 11 | Band structure modulation by methoxy-functionalization of graphene nanoribbons. *Journal of Materials Chemistry C*, **2022**, 10, 4173-4181 | 7.1 | 0 |
| 10 | Quantum coherence controls the charge separation in a prototypical artificial light harvesting system. *EPJ Web of Conferences*, **2013**, 41, 08017 | 0.3 | |
| 9 | Controlling spin phases of few electrons in artificial molecules by magnetic fields. *Physica Status Solidi (B): Basic Research*, **2006**, 243, 3874-3878 | 1.3 | |
| 8 | High-finesse optical quantum gates for electron spins in artificial molecules. *Physica E: Low-Dimensional Systems and Nanostructures*, **2004**, 21, 1061-1064 | 3 | |
| 7 | Weak and Strong Coupling for Quantum Boxes in Pillar Microcavities. *Physica Status Solidi A*, **2002**, 190, 375-378 | | |
| 6 | Biexcitons in artificial molecules with in-plane magnetic field. *Physica E: Low-Dimensional Systems and Nanostructures*, **2005**, 26, 308-311 | 3 | |
| 5 | Few-Particle Effects in Nonlinear Optical Spectra of Semiconductor Quantum Dots. *Materials Research Society Symposia Proceedings*, **1999**, 571, 241 | | |
| 4 | Magnetic-field effects in the luminescence of V-shaped quantum wires. *Nuovo Cimento Della Societa Italiana Di Fisica D - Condensed Matter, Atomic, Molecular and Chemical Physics, Biophysics*, **1995**, 17, 1681-1685 | | |
| 3 | Fast exciton and free-carrier kinetics in semiconductors: a Monte Carlo simulation. *Nuovo Cimento Della Societa Italiana Di Fisica D - Condensed Matter, Atomic, Molecular and Chemical Physics, Biophysics*, **1995**, 17, 1717-1722 | | |
| 2 | Vibrational properties of isolated AlAs monolayers embedded in GaAs: a theoretical study of the effects of disorder. *Applied Surface Science*, **1992**, 56-58, 617-621 | 6.7 | |
| 1 | Coherent Ultrafast Charge Transfer in an Organic Photovoltaic Blend. *Springer Proceedings in Physics*, **2015**, 557-560 | 0.2 | |