# Mahmood Rezaee Roknabadi

List of Publications by Year
in descending order

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| 75 | 923 | 567281 15 | 552781 26 |
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| papers | citations | h-index | g-index |

| 75 | 75 | 75 | 1197 |
|---|---|---|---|
| all docs | docs citations | times ranked | citing authors |

| # | Article | IF | Citations |
|---|---|---|---|
| 1 | Effect of external strain on electronic structure of stanene. Computational Materials Science, 2015, 101, 164-167. | 3.0 | 86 |
| 2 | Study of structural and magnetic properties of superparamagnetic Fe3O4/SiO2 coreâ€“shell nanocomposites synthesized with hydrophilic citrate-modified Fe3O4 seeds via a solâ€“gel approach. Physica E: Low-Dimensional Systems and Nanostructures, 2013, 53, 207-216. | 2.7 | 59 |
| 3 | Energy transfer in strained graphene assisted by discrete breathers excited by external ac driving. Physical Review B, 2017, 95, . | 3.2 | 50 |
| 4 | Electrically Engineered Band Gap in Two-Dimensional Ge, Sn, and Pb: A First-Principles and Tight-Binding Approach. Journal of Physical Chemistry C, 2015, 119, 11896-11902. | 3.1 | 41 |
| 5 | Electronic and thermal properties of germanene and stanene by first-principles calculations. Superlattices and Microstructures, 2016, 91, 383-390. | 3.1 | 41 |
| 6 | A novel technique for increasing electron mobility of indium-tin-oxide transparent conducting films. Thin Solid Films, 2002, 413, 167-170. | 1.8 | 36 |
| 7 | Transport properties of an armchair boron-nitride nanoribbon embedded between two graphene electrodes. Physica E: Low-Dimensional Systems and Nanostructures, 2011, 43, 1751-1754. | 2.7 | 36 |
| 8 | Computational study of edge configuration and the diameter effects on the electrical transport of graphdiyne nanotubes. Physica E: Low-Dimensional Systems and Nanostructures, 2016, 84, 146-151. | 2.7 | 27 |
| 9 | Semi-transparent Schottky junction solar cell based on evaporated CdSe thin films: Influence of post-deposition air-annealing. Optik, 2020, 204, 164204. | 2.9 | 26 |
| 10 | Effect of Ag-doping on the structural, optical, electrical and photovoltaic properties of thermally evaporated Cadmium Selenide thin films. Materials Research Express, 2019, 6, 126453. | 1.6 | 22 |
| 11 | The role of electronâ€“phonon interaction on the transport properties of graphene based nano-devices. Physica B: Condensed Matter, 2014, 446, 85-91. | 2.7 | 19 |
| 12 | First principles study of small cobalt clusters encapsulated in C60 and C82 spherical nanocages. Applied Surface Science, 2011, 257, 7586-7591. | 6.1 | 17 |
| 13 | Silicene nanoribbon as a new DNA sequencing device. Physics Letters, Section A: General, Atomic and Solid State Physics, 2018, 382, 595-600. | 2.1 | 17 |
| 14 | Hydrogen adsorption on the Î±-graphyne using ab initio calculations. Superlattices and Microstructures, 2014, 75, 340-346. | 3.1 | 16 |
| 15 | Possible polaron formation of zigzag graphene nano-ribbon in the presence of Rashba spinâ€“orbit coupling. Physica E: Low-Dimensional Systems and Nanostructures, 2015, 66, 303-308. | 2.7 | 16 |
| 16 | Co-electrospinning fabrication and study of structural and electromagnetic interference-shielding effectiveness of TiO2/SiO2 coreâ€“shell nanofibers. Applied Physics A: Materials Science and Processing, 2016, 122, 1. | 2.3 | 16 |
| 17 | Spin polarization tuning in the graphene quantum dot by using in-plane external electric field. Journal of Magnetism and Magnetic Materials, 2014, 350, 6-11. | 2.3 | 15 |
| 18 | Effect of Temperature on Young's Modulus of Graphene. Journal of Thermal Stresses, 2012, 35, 913-920. | 2.0 | 14 |

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|---|---|---|---|
| 19 | Electronic and optical properties of pure and doped boron-nitride nanotube. Physica B: Condensed Matter, 2013, 410, 212-216. | 2.7 | 14 |
| 20 | First-principles study of the superconductivity in MgB2 bulk and in its bilayer thin film based on electronâ€“phonon coupling. Physica C: Superconductivity and Its Applications, 2015, 509, 1-4. | 1.2 | 14 |
| 21 | Electrical Investigation of Armchair Graphene-Graphdiyne-Graphene Nanoribbons Heterojunctions. Communications in Theoretical Physics, 2016, 65, 99-104. | 2.5 | 14 |
| 22 | Amorphous calcium phosphate nanoparticles-based mouthwash: preparation, characterization, and anti-bacterial effects. Green Chemistry Letters and Reviews, 2019, 12, 278-285. | 4.7 | 14 |
| 23 | First principles calculations of C70 fullerene nano-cage doped with transition metal atoms (Fe, Co). Physica E: Low-Dimensional Systems and Nanostructures, 2011, 43, 1351-1359. | 2.7 | 13 |
| 24 | Electronic properties of Î±-graphyne nanoribbons under the electric field effect. Physica E: Low-Dimensional Systems and Nanostructures, 2015, 67, 54-58. | 2.7 | 13 |
| 25 | Spin-dependent transport properties of an armchair boron-phosphide nanoribbon embedded between two graphene nanoribbon electrodes. Physica E: Low-Dimensional Systems and Nanostructures, 2015, 65, 61-67. | 2.7 | 13 |
| 26 | DFT-NEGF simulation of graphene-graphdiyne-graphene resonant tunneling transistor. Computational Materials Science, 2018, 144, 280-284. | 3.0 | 13 |
| 27 | Evaluation of electronic and transport properties of a nano-scale device in the presence of electric field. Physica E: Low-Dimensional Systems and Nanostructures, 2010, 43, 402-404. | 2.7 | 12 |
| 28 | Spin dependent transport through triangular graphene quantum dot in the presence of Rashba type spinâ€“orbit coupling. Journal of Magnetism and Magnetic Materials, 2014, 367, 81-85. | 2.3 | 12 |
| 29 | Electronic and phononic modulation of MoS2 under biaxial strain. Physica B: Condensed Matter, 2017, 526, 96-101. | 2.7 | 12 |
| 30 | Ab-initio investigation of spin-dependent transport properties in Fe-doped armchair graphyne nanoribbons. Journal of Magnetism and Magnetic Materials, 2016, 420, 56-61. | 2.3 | 11 |
| 31 | Interaction of longitudinal phonons with discrete breather in strained graphene. European Physical Journal B, 2018, 91, 1. | 1.5 | 11 |
| 32 | The effects of MoO3/TPD multiple quantum well structures on the performance of organic light emitting diodes (OLEDs). Journal of Materials Science: Materials in Electronics, 2019, 30, 3952-3958. | 2.2 | 11 |
| 33 | Influence of Co substitution on magnetic properties and thermal expansion of Nd6Fe13Si intermetallic compound. Intermetallics, 2011, 19, 682-687. | 3.9 | 9 |
| 34 | Exploring the sensitivity of ZnO nanotubes to tyrosine nitration: A DFT approach. Physics Letters, Section A: General, Atomic and Solid State Physics, 2016, 380, 2090-2097. | 2.1 | 9 |
| 35 | First principle study of inducing superconductivity in Î±-graphyne by hole-doping and biaxial tensile strain. Computational Materials Science, 2016, 124, 183-189. | 3.0 | 9 |
| 36 | Extraordinary optical transmission of periodic array of subwavelength holes within titanium nitride thin film. Journal of Nanophotonics, 2017, 11, 036006. | 1.0 | 9 |

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| 37 | Low temperature facile synthesis of pseudowollastonite nanoparticles by the surfactant-assisted sol-gel method. Materials Chemistry and Physics, 2020, 243, 122629. | 4.0 | 9 |
| 38 | Effect of electronâ€“electron interaction on the transport through a nano-wire. Physica E: Low-Dimensional Systems and Nanostructures, 2012, 44, 1214-1217. | 2.7 | 8 |
| 39 | Rectifying behavior of graphene/h-boron-nitride heterostructure. Physica B: Condensed Matter, 2013, 415, 62-66. | 2.7 | 8 |
| 40 | Topological phase in oxidized zigzag stanene nanoribbons. AIP Advances, 2016, 6, 095019. | 1.3 | 8 |
| 41 | Magnetotransport properties of corrugated stanene in the presence of electric modulation and tilted magnetic field. Physica Status Solidi (B): Basic Research, 2016, 253, 300-307. | 1.5 | 8 |
| 42 | Adsorption characteristics of amino acids on graphene and germanene using dispersion-corrected density functional theory. Physica E: Low-Dimensional Systems and Nanostructures, 2021, 127, 114498. | 2.7 | 8 |
| 43 | A study of inelastic electronâ€“phonon interactions on tunneling magnetoresistance of a nano-scale device. Physica B: Condensed Matter, 2011, 406, 478-481. | 2.7 | 7 |
| 44 | Magnetoelastic properties of ErMn6Sn6 intermetallic compound. Journal of Magnetism and Magnetic Materials, 2012, 324, 723-728. | 2.3 | 7 |
| 45 | Estimation of the Youngâ€™s modulus of single-walled carbon nanotubes under electric field using tight-binding method. Superlattices and Microstructures, 2013, 59, 178-186. | 3.1 | 7 |
| 46 | Site specific interaction of aromatic amino acids with ZnO nanotubes: A density functional approach. Computational and Theoretical Chemistry, 2016, 1086, 36-44. | 2.5 | 7 |
| 47 | Density functional investigations on the adsorption characteristics of nucleobases on germanene nanoribbons. Physica E: Low-Dimensional Systems and Nanostructures, 2020, 117, 113772. | 2.7 | 7 |
| 48 | Synthesis and controlled drug release behavior of micro-mesoporous wollastonite nanoparticles. Effect of calcination temperature on the structural and biodegradability properties. Materials Chemistry and Physics, 2022, 280, 125825. | 4.0 | 7 |
| 49 | Magnetoelastic properties of GdMn6Sn6 intermetallic compound. Journal of Magnetism and Magnetic Materials, 2011, 323, 2070-2075. | 2.3 | 6 |
| 50 | Interaction of nucleobases with silicene nanoribbon: A density functional approach. Computational and Theoretical Chemistry, 2017, 1103, 32-37. | 2.5 | 6 |
| 51 | Spin-dependent structural, electronic and transport properties of armchair graphyne nanoribbons doped with single transition-metal atom, using DFT calculations. Journal of Magnetism and Magnetic Materials, 2017, 443, 96-103. | 2.3 | 6 |
| 52 | Semimetal behavior of bilayer stanene. Physica E: Low-Dimensional Systems and Nanostructures, 2017, 89, 155-159. | 2.7 | 4 |
| 53 | Optical Properties of Au-Doped Titanium Nitride Nanostructures: a Connection Between Density Functional Theory and Finite-Difference Time-Domain Method. Plasmonics, 2019, 14, 1871-1879. | 3.4 | 4 |
| 54 | Investigation of Charge Trapping Induced by DCMâ€“TPA Dopant in Organic Light Emitting Devices Composed of (NPB:Alq3):DCMâ€“TPA Mixed Host-Doped Emitting Layer. Transactions on Electrical and Electronic Materials, 2019, 20, 240-251. | 1.9 | 4 |

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|---|---|---|---|
| 55 | Effects of phonon scattering on the electron transport and photocurrent of graphene quantum dot structures. European Physical Journal B, 2019, 92, 1. | 1.5 | 4 |
| 56 | Spin transport properties of Fe, Co and Ni doped hydrogenated zigzag silicene nanoribbons: Negative differential resistance and spin filtering effect. Superlattices and Microstructures, 2019, 125, 95-102. | 3.1 | 4 |
| 57 | Magnetovolume effects in substituted Er1â^'xGdxMn6Sn6 intermetallics. Intermetallics, 2012, 22, 116-121. | 3.9 | 3 |
| 58 | The effect of impurity on a spin-filter device based on graphene. Physica E: Low-Dimensional Systems and Nanostructures, 2013, 54, 93-97. | 2.7 | 3 |
| 59 | Magnetoelastic properties of substituted Er1â^'xGdxMn6Sn6 intermetallic system. Journal of Magnetism and Magnetic Materials, 2014, 361, 126-131. | 2.3 | 3 |
| 60 | High piezoelectricity in the buckled V-structure monolayers of group III-V: An Ab initio calculation. Physica E: Low-Dimensional Systems and Nanostructures, 2018, 102, 88-94. | 2.7 | 3 |
| 61 | Electron transport simulation in bulk wurtzite ZnO and its n+â€“nâ€“n+ diode, compared with GaN. Physica E: Low-Dimensional Systems and Nanostructures, 2013, 47, 252-256. | 2.7 | 2 |
| 62 | Study of the electronâ€“photon interaction on the spin-dependent transport in nano-structures. Physica E: Low-Dimensional Systems and Nanostructures, 2014, 57, 76-82. | 2.7 | 2 |
| 63 | Synthesis, UV-shielding and electromagnetic wave absorbing properties of polyvinylpyrrolidone- $$hbox {TiO}_{2}$$ TiO 2 /polyacrylonitrile- $$hbox {SiO}_{2}$$. Bulletin of Materials Science, 2019, 42, 1. | 1.7 | 2 |
| 64 | Modelling of energy transfer induced by longitudinal shaking of one atom row in carbon nanoribbons. Letters on Materials, 2016, 6, 152-155. | 0.7 | 2 |
| 65 | Investigating magneto-resistance in transition metals doped silicene nanoribbons. Superlattices and Microstructures, 2022, 164, 107144. | 3.1 | 2 |
| 66 | Magnetoelastic properties of Nd6Fe13Cu intermetallic compound. Physica B: Condensed Matter, 2011, 406, 3359-3362. | 2.7 | 1 |
| 67 | Study of Transport Properties in Armchair Graphyne Nanoribbons: A Density Functional Approach. Communications in Theoretical Physics, 2016, 66, 143-148. | 2.5 | 1 |
| 68 | Study of electronic and optical properties of two-layered hydrogenated aluminum nitrate nanosheet. Physica E: Low-Dimensional Systems and Nanostructures, 2017, 93, 234-237. | 2.7 | 1 |
| 69 | Spectrally Tunable Optical Transmission of Titanium Nitride Split Ring Resonators. Plasmonics, 2018, 13, 1569-1576. | 3.4 | 1 |
| 70 | Comment on: â€œKramersâ€“Kronig calculations for linear and nonlinear optics of nanostructured methyl violet (CI-42535): New trend in laser power attenuation using dyesâ€•[Physica B 552 (2019) 62â€“70]. Physica B: Condensed Matter, 2020, 589, 412186. | 2.7 | 1 |
| 71 | Nanoscale Trilayer Ni/Cu/Fe Investigation for MI Sensor Application. Transactions of the Indian Institute of Metals, 2019, 72, 1175-1179. | 1.5 | 0 |
| 72 | Theoretical study of the effects of electron-phonon and electron-photon interaction in optoelectronic properties of armchair graphene nano-flakes â€“a renormalization method. Physica E: Low-Dimensional Systems and Nanostructures, 2020, 118, 113867. | 2.7 | 0 |

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|---|---|---|---|
| 73 | Comment on: â€œGrowth, optical, photoluminescence, dielectric, second and third order nonlinear optical studies of benzoyl valine acentric crystalâ€•[(2017) Mol. Cryst. Liq. Cryst., 658, 186â€“197]. Molecular Crystals and Liquid Crystals, 2020, 703, 67-68. | 0.9 | 0 |
| 74 | Comment on:â€œOptical analysis of nanostructured rose bengal thin films using Kramersâ€“Kronig approach: New trend in laser power attenuationâ€•[Opt. Laser. Technol. 112 (2019) 207â€“214]. Optics and Laser Technology, 2020, 131, 106448. | 4.6 | 0 |
| 75 | Fabrication and study of UV-shielding and photocatalytic performance of uniform TiO2/SiO2 core-shell nanofibers via single-nozzle co-electrospinning and interface solâ€“gel reaction. Scientia Iranica, 2016, 23, 3135-3144. | 0.4 | 0 |