# Nestor Perea-Lopez

List of Publications by Year
in descending order

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|---|---|---|---|
| 77<br>papers | 7,732<br>citations | 126907<br>33<br>h-index | 79698<br>73<br>g-index |
| 78<br>all docs | 78<br>docs citations | 78<br>times ranked | 12320<br>citing authors |

| # | Article | IF | Citations |
|---|---|---|---|
| 1 | Evolution of spectroscopy features in layered MoS<sub>x</sub>Se<sub>(2-x)</sub> solid solutions. Materials Research Express, 2022, 9, 046301. | 1.6 | 1 |
| 2 | Interaction of gases with monolayer WS<sub>2</sub>: an in situ spectroscopy study. Nanoscale, 2021, 13, 11470-11477. | 5.6 | 10 |
| 3 | Confined Crack Propagation in MoS<sub>2</sub> Monolayers by Creating Atomic Vacancies. ACS Nano, 2021, 15, 1210-1216. | 14.6 | 19 |
| 4 | Quantification and Healing of Defects in Atomically Thin Molybdenum Disulfide: Beyond the Controlled Creation of Atomic Defects. ACS Nano, 2021, 15, 9658-9669. | 14.6 | 37 |
| 5 | Defect creation in WSe<sub>2</sub> with a microsecond photoluminescence lifetime by focused ion beam irradiation. Nanoscale, 2020, 12, 2047-2056. | 5.6 | 30 |
| 6 | Temperature- and power-dependent phonon properties of suspended few layers of tungsten diselenide. Vibrational Spectroscopy, 2020, 111, 103169. | 2.2 | 10 |
| 7 | Second harmonic generation in two-dimensional transition metal dichalcogenides with growth and post-synthesis defects. 2D Materials, 2020, 7, 045020. | 4.4 | 10 |
| 8 | Hollow â€œgrapheneâ€•microtubes using polyacrylonitrile nanofiber template and potential applications of field emission. Carbon, 2020, 167, 439-445. | 10.3 | 3 |
| 9 | Clean Transfer of 2D Transition Metal Dichalcogenides Using Cellulose Acetate for Atomic Resolution Characterizations. ACS Applied Nano Materials, 2019, 2, 5320-5328. | 5.0 | 33 |
| 10 | Dynamics of cleaning, passivating and doping monolayer MoS <sub>2</sub> by controlled laser irradiation. 2D Materials, 2019, 6, 045031. | 4.4 | 40 |
| 11 | Angstrom-Size Defect Creation and Ionic Transport through Pores in Single-Layer MoS<sub>2</sub>. Nano Letters, 2018, 18, 1651-1659. | 9.1 | 129 |
| 12 | Carbon-rich shungite as a natural resource for efficient Li-ion battery electrodes. Carbon, 2018, 130, 105-111. | 10.3 | 31 |
| 13 | Probing the interaction of noble gases with pristine and nitrogen-doped graphene through Raman spectroscopy. Physical Review B, 2018, 97, . | 3.2 | 7 |
| 14 | Optical identification of sulfur vacancies: Bound excitons at the edges of monolayer tungsten disulfide. Science Advances, 2017, 3, e1602813. | 10.3 | 213 |
| 15 | Aligned carbon nanotube/zinc oxide nanowire hybrids as high performance electrodes for supercapacitor applications. Journal of Applied Physics, 2017, 121, . | 2.5 | 35 |
| 16 | Atomically Thin Layers of Graphene and Hexagonal Boron Nitride Made by Solvent Exfoliation of Their Phosphoric Acid Intercalation Compounds. ACS Nano, 2017, 11, 6746-6754. | 14.6 | 35 |
| 17 | Photoluminescence Enhancement of Titanate Nanotubes by Insertion of Rare Earth Ions in Their Interlayer Spaces. Journal of Nanomaterials, 2017, 2017, 1-9. | 2.7 | 19 |
| 18 | Distinct photoluminescence and Raman spectroscopy signatures for identifying highly crystalline WS<sub>2</sub> monolayers produced by different growth methods. Journal of Materials Research, 2016, 31, 931-944. | 2.6 | 95 |

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|---|---|---|---|
| 19 | Fabrication and characterization of ultraviolet photosensors from ZnO nanowires prepared using chemical bath deposition method. Journal of Applied Physics, 2016, 119, 084306. | 2.5 | 33 |
| 20 | Electric-Field-Assisted Directed Assembly of Transition Metal Dichalcogenide Monolayer Sheets. ACS Nano, 2016, 10, 5006-5014. | 14.6 | 9 |
| 21 | Temperature- and power-dependent phonon properties of suspended continuous WS2 monolayer films. Vibrational Spectroscopy, 2016, 86, 270-276. | 2.2 | 15 |
| 22 | Tunable and label-free virus enrichment for ultrasensitive virus detection using carbon nanotube arrays. Science Advances, 2016, 2, e1601026. | 10.3 | 73 |
| 23 | Ultrasensitive molecular sensor using N-doped graphene through enhanced Raman scattering. Science Advances, 2016, 2, e1600322. | 10.3 | 174 |
| 24 | Third order nonlinear optical response exhibited by mono- and few-layers of WS 2. 2D Materials, 2016, 3, 021005. | 4.4 | 46 |
| 25 | Hall and field-effect mobilities in few layered p-WSe2 field-effect transistors. Scientific Reports, 2015, 5, 8979. | 3.3 | 107 |
| 26 | 3D Nanocomposites of Covalently Interconnected Multiwalled Carbon Nanotubes with SiC with Enhanced Thermal and Electrical Properties. Advanced Functional Materials, 2015, 25, 4985-4993. | 14.9 | 18 |
| 27 | Covalent Networks: 3D Nanocomposites of Covalently Interconnected Multiwalled Carbon Nanotubes with SiC with Enhanced Thermal and Electrical Properties (Adv. Funct. Mater. 31/2015). Advanced Functional Materials, 2015, 25, 4922-4922. | 14.9 | 2 |
| 28 | Electronic, magnetic, optical, and edge-reactivity properties of semiconducting and metallic WS 2 nanoribbons. 2D Materials, 2015, 2, 015002. | 4.4 | 24 |
| 29 | Three-dimensionally bonded spongy graphene material with super compressive elasticity and near-zero Poissonâ€™s ratio. Nature Communications, 2015, 6, 6141. | 12.8 | 458 |
| 30 | Ultrasensitive gas detection of large-area boron-doped graphene. Proceedings of the National Academy of Sciences of the United States of America, 2015, 112, 14527-14532. | 7.1 | 177 |
| 31 | Tellurium-Assisted Low-Temperature Synthesis of MoS<sub>2</sub> and WS<sub>2</sub> Monolayers. ACS Nano, 2015, 9, 11658-11666. | 14.6 | 123 |
| 32 | (Ga,In)P nanowires grown without intentional catalyst. Journal of Crystal Growth, 2015, 431, 72-78. | 1.5 | 5 |
| 33 | Two-dimensional transition metal dichalcogenides: Clusters, ribbons, sheets and more. Nano Today, 2015, 10, 559-592. | 11.9 | 107 |
| 34 | Graphene: Large-Area Si-Doped Graphene: Controllable Synthesis and Enhanced Molecular Sensing (Adv. Mater. 45/2014). Advanced Materials, 2014, 26, 7676-7676. | 21.0 | 0 |
| 35 | Ultrashort optical pulse characterization using WS_2 monolayers. Optics Letters, 2014, 39, 383. | 3.3 | 33 |
| 36 | Facile synthesis of MoS2 and MoxW1-xS2 triangular monolayers. APL Materials, 2014, 2, . | 5.1 | 93 |

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| 37 | Pine-tree-like morphologies of nitrogen-doped carbon nanotubes: Electron field emission enhancement. Journal of Materials Research, 2014, 29, 2441-2450. | 2.6 | 4 |
| 38 | Harmonic generation in 2D layered materials. , 2014, , . | | 0 |
| 39 | Three-dimensional Nanotube Networks and a New Horizon of Applications. , 2014, , 457-493. | | 2 |
| 40 | Direct Synthesis of van der Waals Solids. ACS Nano, 2014, 8, 3715-3723. | 14.6 | 253 |
| 41 | Largeâ€Area Siâ€Doped Graphene: Controllable Synthesis and Enhanced Molecular Sensing. Advanced Materials, 2014, 26, 7593-7599. | 21.0 | 116 |
| 42 | Discovery of Wall-Selective Carbon Nanotube Growth Conditions via Automated Experimentation. ACS Nano, 2014, 8, 10214-10222. | 14.6 | 70 |
| 43 | Dislocation motion and grain boundary migration in two-dimensional tungsten disulphide. Nature Communications, 2014, 5, 4867. | 12.8 | 192 |
| 44 | Super-stretchable Graphene Oxide Macroscopic Fibers with Outstanding Knotability Fabricated by Dry Film Scrolling. ACS Nano, 2014, 8, 5959-5967. | 14.6 | 170 |
| 45 | Synthesis, Characterization and Magnetic Properties of Defective Nitrogen-Doped Multiwall Carbon Nanotubes Encapsulating Ferromagnetic Nanoparticles. Journal of Nano Research, 2014, 28, 39-49. | 0.8 | 2 |
| 46 | CVD-grown monolayered MoS <sub>2</sub> as an effective photosensor operating at low-voltage. 2D Materials, 2014, 1, 011004. | 4.4 | 195 |
| 47 | Synthesis, characterization and magnetic properties of Co@Au core-shell nanoparticles encapsulated by nitrogen-doped multiwall carbon nanotubes. Carbon, 2014, 77, 722-737. | 10.3 | 23 |
| 48 | Atomic-scale Observation of Grains and Grain Boundaries in Monolayers of WS<sub>2</sub>. Microscopy and Microanalysis, 2014, 20, 1084-1085. | 0.4 | 3 |
| 49 | Extraordinary Second Harmonic Generation in Tungsten Disulfide Monolayers. Scientific Reports, 2014, 4, 5530. | 3.3 | 262 |
| 50 | Large Area Films of Alternating Grapheneâ€“Carbon Nanotube Layers Processed in Water. ACS Nano, 2013, 7, 10788-10798. | 14.6 | 85 |
| 51 | Microfluidic device with carbon nanotube channel walls for blood plasma extraction. , 2013, , . | | 2 |
| 52 | Optoelectronic modulation by multi-wall carbon nanotubes. Nanotechnology, 2013, 24, 045201. | 2.6 | 14 |
| 53 | Extraordinary Room-Temperature Photoluminescence in Triangular WS<sub>2</sub> Monolayers. Nano Letters, 2013, 13, 3447-3454. | 9.1 | 1,375 |
| 54 | Formation of Nitrogen-Doped Graphene Nanoribbons via Chemical Unzipping. ACS Nano, 2013, 7, 2192-2204. | 14.6 | 80 |

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|---|---|---|---|
| 55 | Photosensor Device Based on Fewâ€Layered WS<sub>2</sub> Films. Advanced Functional Materials, 2013, 23, 5511-5517. | 14.9 | 546 |
| 56 | Identification of individual and few layers of WS2 using Raman Spectroscopy. Scientific Reports, 2013, 3, . | 3.3 | 1,185 |
| 57 | Controlled Synthesis and Transfer of Large-Area WS<sub>2</sub> Sheets: From Single Layer to Few Layers. ACS Nano, 2013, 7, 5235-5242. | 14.6 | 534 |
| 58 | Sensors: Photosensor Device Based on Fewâ€Layered WS<sub>2</sub> Films (Adv. Funct. Mater. 44/2013). Advanced Functional Materials, 2013, 23, 5510-5510. | 14.9 | 7 |
| 59 | Photoluminescence Properties of Eu-Doped LaSr<sub>2</sub>AlO<sub>5</sub>. Science of Advanced Materials, 2012, 4, 563-567. | 0.7 | 9 |
| 60 | Millimeter-Long Carbon Nanotubes: Outstanding Electron-Emitting Sources. ACS Nano, 2011, 5, 5072-5077. | 14.6 | 50 |
| 61 | Near UV-Blue Excitable Green-Emitting Nanocrystalline Oxide. Advances in Materials Science and Engineering, 2011, 2011, 1-7. | 1.8 | 3 |
| 62 | Ablation and optical third-order nonlinearities in Ag nanoparticles. International Journal of Nanomedicine, 2010, 5, 925. | 6.7 | 24 |
| 63 | Contribution of the Two-Photon Absorption to the Third Order Nonlinearity of Au Nanoparticles Embedded in TiO<sub>2</sub> Films and in Ethanol Suspension. Journal of Physical Chemistry C, 2010, 114, 10108-10113. | 3.1 | 43 |
| 64 | Study of Luminescence from GaN:Tb[sup 3+] Powders and Thin Films Deposited by MOVPE and PLD Methods. Journal of the Electrochemical Society, 2009, 156, J158. | 2.9 | 9 |
| 65 | Eu3+ activated GaN thin films grown on sapphire by pulsed laser deposition. Physica Status Solidi C: Current Topics in Solid State Physics, 2008, 5, 1756-1758. | 0.8 | 3 |
| 66 | Synthesis of rare-earth activated AlN and GaN powders via a three-step conversion process. Physica Status Solidi C: Current Topics in Solid State Physics, 2008, 5, 1889-1891. | 0.8 | 6 |
| 67 | Red-emitting SrIn<sub>2</sub>O<sub>4</sub>â€‰:â€‰Eu<sup>3+</sup>phosphor powders for applications in solid state white lamps. Journal Physics D: Applied Physics, 2008, 41, 092005. | 2.8 | 18 |
| 68 | A Study of Oxygen Content in GaN, AlN, and GaAlN Powders. Journal of the Electrochemical Society, 2008, 155, J137. | 2.9 | 1 |
| 69 | A novel hybrid pulsed laser deposition/metalorganic vapour deposition method to form rare-earth activated GaN. Journal Physics D: Applied Physics, 2008, 41, 122001. | 2.8 | 2 |
| 70 | Electroluminescence from Eu3+ doped Sr2CeO4 nanocrystalline thin films. Optical Materials, 2006, 29, 43-46. | 3.6 | 28 |
| 71 | White light emission from Y2SiO5:Ce, Tb films excited by electroluminescence. Optical Materials, 2006, 29, 47-50. | 3.6 | 16 |
| 72 | Nanocrystalline Sr2CeO4 thin films grown on silicon by laser ablation. Thin Solid Films, 2006, 497, 177-181. | 1.8 | 8 |

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| 73 | Luminescent and crystalline properties of blueâ€“white-emitting nanocrystalline Sr2CeO4 thin films produced by laser ablation. Optical Materials, 2005, 27, 1212-1216. | 3.6 | 16 |
| 74 | White light emission from rare earth activated yttrium silicate nanocrystalline powders and thin films. Optical Materials, 2005, 27, 1221-1227. | 3.6 | 43 |
| 75 | Luminescence study in Eu-doped aluminum oxide phosphors. Optical Materials, 2005, 27, 1311-1315. | 3.6 | 62 |
| 76 | Current-heating formation of small holes in thin gold or silver films. Review of Scientific Instruments, 2002, 73, 4399-4401. | 1.3 | 13 |
| 77 | Identification of individual and few layers of WS2 using Raman Spectroscopy. , 0, . | | 1 |