# Antonio Esau Del Rio Castillo

## List of Publications by Citations



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|---|---|---|---|
| 56 papers | 2,809 citations | 31 h-index | 52 g-index |
| 59 ext. papers | 3,337 ext. citations | 10.9 avg, IF | 5.18 L-index |

| # | Paper | IF | Citations |
|---|---|---|---|
| 56 | Dispersibility-Dependent Biodegradation of Graphene Oxide by Myeloperoxidase. *Small*, **2015**, 11, 3985-94 | 11 | 176 |
| 55 | Graphene Interface Engineering for Perovskite Solar Modules: 12.6% Power Conversion Efficiency over 50 cm2 Active Area. *ACS Energy Letters*, **2017**, 2, 279-287 | 20.1 | 162 |
| 54 | Ink-jet printing of graphene for flexible electronics: An environmentally-friendly approach. *Solid State Communications*, **2015**, 224, 53-63 | 1.6 | 162 |
| 53 | MoS Quantum Dot/Graphene Hybrids for Advanced Interface Engineering of a CHNHPbI Perovskite Solar Cell with an Efficiency of over 20. *ACS Nano*, **2018**, 12, 10736-10754 | 16.7 | 138 |
| 52 | Graphene-Perovskite Solar Cells Exceed 18 % Efficiency: A Stability Study. *ChemSusChem*, **2016**, 9, 2609-2619 | 8.5 | 133 |
| 51 | Scalable Production of Graphene Inks via Wet-Jet Milling Exfoliation for Screen-Printed Micro-Supercapacitors. *Advanced Functional Materials*, **2019**, 29, 1807659 | 15.6 | 123 |
| 50 | Selective organic functionalization of graphene bulk or graphene edges. *Chemical Communications*, **2011**, 47, 9330-2 | 5.8 | 108 |
| 49 | Engineered MoSe2-Based Heterostructures for Efficient Electrochemical Hydrogen Evolution Reaction. *Advanced Energy Materials*, **2018**, 8, 1703212 | 21.8 | 107 |
| 48 | High-yield production of 2D crystals by wet-jet milling. *Materials Horizons*, **2018**, 5, 890-904 | 14.4 | 92 |
| 47 | Extending the Continuous Operating Lifetime of Perovskite Solar Cells with a Molybdenum Disulfide Hole Extraction Interlayer. *Advanced Energy Materials*, **2018**, 8, 1702287 | 21.8 | 90 |
| 46 | Mechanically Stacked, Two-Terminal Graphene-Based Perovskite/Silicon Tandem Solar Cell with Efficiency over 26%. *Joule*, **2020**, 4, 865-881 | 27.8 | 76 |
| 45 | Black phosphorus polycarbonate polymer composite for pulsed fibre lasers. *Applied Materials Today* , **2016**, 4, 17-23 | 6.6 | 74 |
| 44 | Exfoliation of Few-Layer Black Phosphorus in Low-Boiling-Point Solvents and Its Application in Li-Ion Batteries. *Chemistry of Materials*, **2018**, 30, 506-516 | 9.6 | 74 |
| 43 | Size-Tuning of WSe Flakes for High Efficiency Inverted Organic Solar Cells. *ACS Nano*, **2017**, 11, 3517-3531 | 16.7 | 72 |
| 42 | WS-Graphite Dual-Ion Batteries. *Nano Letters*, **2018**, 18, 7155-7164 | 11.5 | 68 |
| 41 | Liquid-Phase Exfoliated Indium-Selenide Flakes and Their Application in Hydrogen Evolution Reaction. *Small*, **2018**, 14, e1800749 | 11 | 68 |
| 40 | Binder-free graphene as an advanced anode for lithium batteries. *Journal of Materials Chemistry A*, **2016**, 4, 6886-6895 | 13 | 67 |

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| 39 | Solution-Processed Hybrid Graphene Flake/2H-MoS2 Quantum Dot Heterostructures for Efficient Electrochemical Hydrogen Evolution. *Chemistry of Materials*, **2017**, 29, 5782-5786 | 9.6 | 66 |
| 38 | Selective suspension of single layer graphene mechanochemically exfoliated from carbon nanofibres. *Nano Research*, **2014**, 7, 963-972 | 10 | 62 |
| 37 | Graphene-Based Electron Transport Layers in Perovskite Solar Cells: A Step-Up for an Efficient Carrier Collection. *Advanced Energy Materials*, **2017**, 7, 1701349 | 21.8 | 60 |
| 36 | Detection of Endotoxin Contamination of Graphene Based Materials Using the TNF-□Expression Test and Guidelines for Endotoxin-Free Graphene Oxide Production. *PLoS ONE*, **2016**, 11, e0166816 | 3.7 | 58 |
| 35 | Graphene-Induced Improvements of Perovskite Solar Cell Stability: Effects on Hot-Carriers. *Nano Letters*, **2019**, 19, 684-691 | 11.5 | 53 |
| 34 | Thermal Stability and Anisotropic Sublimation of Two-Dimensional Colloidal Bi2Te3 and Bi2Se3 Nanocrystals. *Nano Letters*, **2016**, 16, 4217-23 | 11.5 | 51 |
| 33 | Doped-MoSe2 Nanoflakes/3d Metal Oxide□Hydr(Oxy)Oxides Hybrid Catalysts for pH-Universal Electrochemical Hydrogen Evolution Reaction. *Advanced Energy Materials*, **2018**, 8, 1801764 | 21.8 | 50 |
| 32 | Few-layer graphene improves silicon performance in Li-ion battery anodes. *Journal of Materials Chemistry A*, **2017**, 5, 19306-19315 | 13 | 48 |
| 31 | Few-layer MoS2 flakes as a hole-selective layer for solution-processed hybrid organic hydrogen-evolving photocathodes. *Journal of Materials Chemistry A*, **2017**, 5, 4384-4396 | 13 | 43 |
| 30 | An anisotropic layer-by-layer carbon nanotube/boron nitride/rubber composite and its application in electromagnetic shielding. *Nanoscale*, **2020**, 12, 7782-7791 | 7.7 | 39 |
| 29 | Effect of graphene nano-platelet morphology on the elastic modulus of soft and hard biopolymers. *Carbon*, **2016**, 109, 331-339 | 10.4 | 38 |
| 28 | Applications of supercritical fluids to enhance the dissolution behaviors of Furosemide by generation of microparticles and solid dispersions. *European Journal of Pharmaceutics and Biopharmaceutics*, **2012**, 81, 131-41 | 5.7 | 35 |
| 27 | Cellulosic Graphene Biocomposites for Versatile High-Performance Flexible Electronic Applications. *Advanced Electronic Materials*, **2016**, 2, 1600245 | 6.4 | 35 |
| 26 | Graphene Quantum Dot-Aerogel: From Nanoscopic to Macroscopic Fluorescent Materials. Sensing Polyaromatic Compounds in Water. *ACS Applied Materials & Interfaces*, **2018**, 10, 18192-18201 | 9.5 | 32 |
| 25 | High-Power Graphene□Carbon Nanotube Hybrid Supercapacitors. *ChemNanoMat*, **2017**, 3, 436-446 | 3.5 | 30 |
| 24 | Biotransformation and Biological Interaction of Graphene and Graphene Oxide during Simulated Oral Ingestion. *Small*, **2018**, 14, e1800227 | 11 | 27 |
| 23 | How much does size really matter? Exploring the limits of graphene as Li ion battery anode material. *Solid State Communications*, **2017**, 251, 88-93 | 1.6 | 25 |
| 22 | Single-step exfoliation and functionalization of few-layers black phosphorus and its application for polymer composites. *FlatChem*, **2019**, 18, 100131 | 5.1 | 24 |

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| 21 | Scalable spray-coated graphene-based electrodes for high-power electrochemical double-layer capacitors operating over a wide range of temperature. *Energy Storage Materials*, **2021**, 34, 1-11 | 19.4 | 24 |
| 20 | Graphene-engineered automated sprayed mesoscopic structure for perovskite device scaling-up. *2D Materials*, **2018**, 5, 045034 | 5.9 | 22 |
| 19 | Graphene-Based Hole-Selective Layers for High-Efficiency, Solution-Processed, Large-Area, Flexible, Hydrogen-Evolving Organic Photocathodes. *Journal of Physical Chemistry C*, **2017**, 121, 21887-21903 | 3.8 | 22 |
| 18 | Flexible Graphene/Carbon Nanotube Electrochemical Double-Layer Capacitors with Ultrahigh Areal Performance. *ChemPlusChem*, **2019**, 84, 882-892 | 2.8 | 20 |
| 17 | CVD-graphene/graphene flakes dual-films as advanced DSSC counter electrodes. *2D Materials*, **2019**, 6, 035007 | 5.9 | 20 |
| 16 | Carbon nanotubes-bridged molybdenum trioxide nanosheets as high performance anode for lithium ion batteries. *2D Materials*, **2018**, 5, 015024 | 5.9 | 17 |
| 15 | Ultralow friction of ink-jet printed graphene flakes. *Nanoscale*, **2017**, 9, 7612-7624 | 7.7 | 15 |
| 14 | On sliding on graphene: a novel concept to boost supercapacitor performance. *Nanoscale Horizons*, **2019**, 4, 1077-1091 | 10.8 | 15 |
| 13 | Graphene morphology effect on the gas barrier, mechanical and thermal properties of thermoplastic polyurethane. *Composites Science and Technology*, **2020**, 200, 108461 | 8.6 | 13 |
| 12 | A few-layer graphene for advanced composite PVDF membranes dedicated to water desalination: a comparative study. *Nanoscale Advances*, **2020**, 2, 4728-4739 | 5.1 | 12 |
| 11 | Nitrogen-doped graphene based triboelectric nanogenerators. *Nano Energy*, **2021**, 87, 106173 | 17.1 | 11 |
| 10 | A two-fold engineering approach based on Bi2Te3 flakes towards efficient and stable inverted perovskite solar cells. *Materials Advances*, **2020**, 1, 450-462 | 3.3 | 10 |
| 9 | High-Sulfur-Content Graphene-Based Composite through Ethanol Evaporation for High-Energy Lithium-Sulfur Battery. *ChemSusChem*, **2020**, 13, 1593-1602 | 8.3 | 9 |
| 8 | Graphene and related 2D materials for high efficient and stable perovskite solar cells **2017**, | | 6 |
| 7 | An integrated and multi-technique approach to characterize airborne graphene flakes in the workplace during production phases. *Nanoscale*, **2021**, 13, 3841-3852 | 7.7 | 6 |
| 6 | Exfoliated BiTe-enabled membranes for new concept water desalination: Freshwater production meets new routes. *Water Research*, **2021**, 203, 117503 | 12.5 | 5 |
| 5 | Spray deposition of exfoliated MoS2 flakes as hole transport layer in perovskite-based photovoltaics **2015**, | | 3 |
| 4 | 3D printed silicon-few layer graphene anode for advanced Li-ion batteries.. *RSC Advances*, **2021**, 11, 35051-35060 | 3.7 | 0 |

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| 3 | Poly(methyl methacrylate)-Assisted Exfoliation of Graphite and Its Use in Acrylonitrile-Butadiene-Styrene Composites. *Chemistry - A European Journal*, **2020**, 26, 6715-6725 | 4.8 | 1 |
| 2 | Few-Layers Graphene-Based Cement Mortars: Production Process and Mechanical Properties. *Sustainability*, **2022**, 14, 784 | 3.6 | 1 |
| 1 | Multi-walled carbon nanotubes enhance the genetic transformation of Bifidobacterium longum. *Carbon*, **2021**, 184, 902-909 | 10.4 | 0 |