

# Samuel Lara Avila

## List of Publications by Year in Descending Order

**Source:** <https://exaly.com/author-pdf/6382375/samuel-lara-avila-publications-by-year.pdf>

**Version:** 2024-04-24

This document has been generated based on the publications and citations recorded by exaly.com. For the latest version of this publication list, visit the link given above.

The third column is the impact factor (IF) of the journal, and the fourth column is the number of citations of the article.

58  
papers

2,227  
citations

24  
h-index

47  
g-index

69  
ext. papers

2,546  
ext. citations

8  
avg, IF

4.42  
L-index

#	Paper	IF	Citations
58	Highly efficient UV detection in a metal-semiconductor-metal detector with epigraphene. <i>Applied Physics Letters</i> , <b>2022</b> , 120, 191101	3.4	0
57	Multiscale Charge Transport in van der Waals Thin Films: Reduced Graphene Oxide as a Case Study. <i>ACS Nano</i> , <b>2021</b> , 15, 2654-2667	16.7	5
56	Electron-phonon coupling of epigraphene at millikelvin temperatures measured by quantum transport thermometry. <i>Applied Physics Letters</i> , <b>2021</b> , 118, 103102	3.4	0
55	Clustering and Morphology Evolution of Gold on Nanostructured Surfaces of Silicon Carbide: Implications for Catalysis and Sensing. <i>ACS Applied Nano Materials</i> , <b>2021</b> , 4, 1282-1293	5.6	4
54	The performance limits of epigraphene Hall sensors doped across the Dirac point. <i>Applied Physics Letters</i> , <b>2020</b> , 116, 223504	3.4	3
53	Ambipolar charge transport in quasi-free-standing monolayer graphene on SiC obtained by gold intercalation. <i>Physical Review B</i> , <b>2020</b> , 102,	3.3	6
52	Chemical Sensing with Atomically Thin Platinum Templated by a 2D Insulator. <i>Advanced Materials Interfaces</i> , <b>2020</b> , 7, 1902104	4.6	5
51	Polymer-encapsulated molecular doped epigraphene for quantum resistance metrology. <i>Metrologia</i> , <b>2019</b> , 56, 045004	2.1	8
50	Effect of graphene substrate type on formation of BiSe nanoplates. <i>Scientific Reports</i> , <b>2019</b> , 9, 4791	4.9	9
49	Towards quantum-limited coherent detection of terahertz waves in charge-neutral graphene. <i>Nature Astronomy</i> , <b>2019</b> , 3, 983-988	12.1	18
48	Molecular Lipid Films on Microengineering Materials. <i>Langmuir</i> , <b>2019</b> , 35, 10286-10298	4	6
47	Probing variable range hopping lengths by magneto conductance in carbonized polymer nanofibers. <i>Scientific Reports</i> , <b>2018</b> , 8, 4948	4.9	5
46	Uniform doping of graphene close to the Dirac point by polymer-assisted assembly of molecular dopants. <i>Nature Communications</i> , <b>2018</b> , 9, 3956	17.4	34
45	Parallel Fabrication of Self-Assembled Nanogaps for Molecular Electronic Devices. <i>Small</i> , <b>2018</b> , 14, e1803471	11.71	9
44	Enhancing optoelectronic properties of SiC-grown graphene by a surface layer of colloidal quantum dots. <i>2D Materials</i> , <b>2017</b> , 4, 031001	5.9	4
43	Guided selective deposition of nanoparticles by tuning of the surface potential. <i>Europhysics Letters</i> , <b>2017</b> , 119, 18004	1.6	3
42	Thermal Stability of Epitaxial Graphene Electrodes for Conductive Polymer Nanofiber Devices. <i>Crystals</i> , <b>2017</b> , 7, 378	2.3	2

41	Site-selective immobilization of functionalized DNA origami on nanopatterned Teflon AF. <i>Journal of Materials Chemistry C</i> , <b>2017</b> , 5, 7637-7643	7.1	7
40	Controlling deposition of nanoparticles by tuning surface charge of SiO by surface modifications. <i>RSC Advances</i> , <b>2016</b> , 6, 104246-104253	3.7	24
39	Giant quantum Hall plateaus generated by charge transfer in epitaxial graphene. <i>Scientific Reports</i> , <b>2016</b> , 6, 30296	4.9	24
38	Apparent Power Law Scaling of Variable Range Hopping Conduction in Carbonized Polymer Nanofibers. <i>Scientific Reports</i> , <b>2016</b> , 6, 37783	4.9	8
37	Nanopatterning of mobile lipid monolayers on electron-beam-sculpted Teflon AF surfaces. <i>ACS Nano</i> , <b>2015</b> , 9, 1271-9	16.7	5
36	Hot carrier relaxation of Dirac fermions in bilayer epitaxial graphene. <i>Journal of Physics Condensed Matter</i> , <b>2015</b> , 27, 164202	1.8	17
35	Wafer-scale homogeneity of transport properties in epitaxial graphene on SiC. <i>Carbon</i> , <b>2015</b> , 87, 409-414	10.4	26
34	High mobility epitaxial graphene devices via aqueous-ozone processing. <i>Applied Physics Letters</i> , <b>2015</b> , 106, 063503	3.4	11
33	Operation of graphene quantum Hall resistance standard in a cryogen-free table-top system. <i>2D Materials</i> , <b>2015</b> , 2, 035015	5.9	44
32	Physics of a disordered Dirac point in epitaxial graphene from temperature-dependent magnetotransport measurements. <i>Physical Review B</i> , <b>2015</b> , 92,	3.3	8
31	Low contact resistance in epitaxial graphene devices for quantum metrology. <i>AIP Advances</i> , <b>2015</b> , 5, 087134	1.34	13
30	A prototype of RK/200 quantum Hall array resistance standard on epitaxial graphene. <i>Journal of Applied Physics</i> , <b>2015</b> , 118, 044506	2.5	17
29	Influence of Impurity Spin Dynamics on Quantum Transport in Epitaxial Graphene. <i>Physical Review Letters</i> , <b>2015</b> , 115, 106602	7.4	14
28	The conquest of middle-earth: combining top-down and bottom-up nanofabrication for constructing nanoparticle based devices. <i>Nanoscale</i> , <b>2014</b> , 6, 14605-16	7.7	29
27	Single-molecule electronics: from chemical design to functional devices. <i>Chemical Society Reviews</i> , <b>2014</b> , 43, 7378-411	58.5	343
26	Quantum Hall effect and quantum point contact in bilayer-patched epitaxial graphene. <i>Nano Letters</i> , <b>2014</b> , 14, 3369-73	11.5	27
25	Tuning carrier density across Dirac point in epitaxial graphene on SiC by corona discharge. <i>Applied Physics Letters</i> , <b>2014</b> , 105, 063106	3.4	22
24	Phase coherence and energy relaxation in epitaxial graphene under microwave radiation. <i>Applied Physics Letters</i> , <b>2013</b> , 103, 093103	3.4	7

23	Express optical analysis of epitaxial graphene on SiC: impact of morphology on quantum transport. <i>Nano Letters</i> , <b>2013</b> , 13, 4217-23	11.5	44
22	Phase space for the breakdown of the quantum Hall effect in epitaxial graphene. <i>Physical Review Letters</i> , <b>2013</b> , 111, 096601	7.4	32
21	Quantum resistance metrology using graphene. <i>Reports on Progress in Physics</i> , <b>2013</b> , 76, 104501	14.4	57
20	Practical and Fundamental Impact of Epitaxial Graphene on Quantum Metrology. <i>Mapan - Journal of Metrology Society of India</i> , <b>2013</b> , 28, 239-250	1	
19	Reststrahl band-assisted photocurrents in epitaxial graphene layers. <i>Physical Review B</i> , <b>2013</b> , 88,	3.3	14
18	Magnetic quantum ratchet effect in graphene. <i>Nature Nanotechnology</i> , <b>2013</b> , 8, 104-7	28.7	87
17	Energy loss rates of hot Dirac fermions in epitaxial, exfoliated, and CVD graphene. <i>Physical Review B</i> , <b>2013</b> , 87,	3.3	38
16	Weak localization scattering lengths in epitaxial, and CVD graphene. <i>Physical Review B</i> , <b>2012</b> , 86,	3.3	47
15	Aligned growth of gold nanorods in PMMA channels: parallel preparation of nanogaps. <i>ACS Nano</i> , <b>2012</b> , 6, 3861-7	16.7	15
14	Dihydroazulene Photoswitch Operating in Sequential Tunneling Regime: Synthesis and Single-Molecule Junction Studies. <i>Advanced Functional Materials</i> , <b>2012</b> , 22, 4249-4258	15.6	48
13	Precision comparison of the quantum Hall effect in graphene and gallium arsenide. <i>Metrologia</i> , <b>2012</b> , 49, 294-306	2.1	53
12	Helicity-dependent photocurrents in graphene layers excited by midinfrared radiation of a CO <sub>2</sub> laser. <i>Physical Review B</i> , <b>2011</b> , 84,	3.3	65
11	Non-volatile photochemical gating of an epitaxial graphene/polymer heterostructure. <i>Advanced Materials</i> , <b>2011</b> , 23, 878-82	24	106
10	Terahertz radiation driven chiral edge currents in graphene. <i>Physical Review Letters</i> , <b>2011</b> , 107, 276601	7.4	94
9	Light-Triggered Conductance Switching in Single-Molecule Dihydroazulene/Vinylheptafulvene Junctions. <i>Journal of Physical Chemistry C</i> , <b>2011</b> , 115, 18372-18377	3.8	51
8	Graphene, universality of the quantum Hall effect and redefinition of the SI system. <i>New Journal of Physics</i> , <b>2011</b> , 13, 093026	2.9	51
7	Engineering and metrology of epitaxial graphene. <i>Solid State Communications</i> , <b>2011</b> , 151, 1094-1099	1.6	21
6	Disordered Fermi liquid in epitaxial graphene from quantum transport measurements. <i>Physical Review Letters</i> , <b>2011</b> , 107, 166602	7.4	69

5	Anomalously strong pinning of the filling factor $\nu=2$ in epitaxial graphene. <i>Physical Review B</i> , <b>2011</b> , 83,	3.3	86
4	Towards a quantum resistance standard based on epitaxial graphene. <i>Nature Nanotechnology</i> , <b>2010</b> , 5, 186-9	28.7	338
3	Bianthrone in a Single-Molecule Junction: Conductance Switching with a Bistable Molecule Facilitated by Image Charge Effects $\square$ <i>Journal of Physical Chemistry C</i> , <b>2010</b> , 114, 20686-20695	3.8	19
2	Photon helicity driven currents in graphene <b>2010</b> ,		1
1	Dynamic Hall effect driven by circularly polarized light in a graphene layer. <i>Physical Review Letters</i> , <b>2010</b> , 105, 227402	7.4	124