Jose Avila

List of Publications by Year
in descending order

70 papers	6,375 citations	117625 34 h-index	91884 69 g-index
70 all docs	70 docs citations	70 times ranked	8484 citing authors

#	Article	IF	Citations
1	Gap Opening in Double-Sided Highly Hydrogenated Free-Standing Graphene. Nano Letters, 2022, 22, 2971-2977.	9.1	9
2	Interplay of crystal thickness and in-plane anisotropy and evolution of quasi-one-dimensional electronic character in ReSe2. Physical Review B, 2021, 104, .	3.2	5
3	Visualizing electron localization of WS ₂ /WSe ₂ moirÃ© superlattices in momentum space. Science Advances, 2021, 7, eabf4387.	10.3	24
4	Indirect to direct band gap crossover in two-dimensional WS2(1â^'x)Se2x alloys. Npj 2D Materials and Applications, 2021, 5, .	7.9	31
5	Spatially-resolved electronic structure of stripe domains in IrTe2 through electronic structure microscopy. Communications Physics, 2021, 4, .	5.3	4
6	Strain and Spin-Orbit Coupling Engineering in Twisted WS2/Graphene Heterobilayer. Nanomaterials, 2021, 11, 2921.	4.1	10
7	Insights into the Arsenic Shell Decapping Mechanisms in As/GaAs Nanowires by X-ray and Electron Microscopy. Journal of Physical Chemistry C, 2021, 125, 28136-28142.	3.1	2
8	Layer-controlled single-crystalline graphene film with stacking order via Cuâ€"Si alloy formation. Nature Nanotechnology, 2020, 15, 861-867.	31.5	79
9	Effect of Band Symmetry on Photocurrent Production in Quasi-One-Dimensional Transition-Metal Trichalcogenides. ACS Applied Materials & Interfaces, 2020, 12, 40525-40531.	8.0	21
10	Structural and electronic transitions in few layers of isotopically pure hexagonal boron nitride. Physical Review B, 2020, 102, .	3.2	6
11	Dimensionality-Mediated Semimetal-Semiconductor Transition in Ultrathin <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mrow><mml:msub><mml:mrow><mml:mi>PtTe</mml:mi></mml:mrow><mml:mrow><mml:mn>2</mml:mn> Films. Physical Review Letters, 2020, 124, 036402.	7.8	54
12	Large-area epitaxial growth of curvature-stabilized ABC trilayer graphene. Nature Communications, 2020, 11, 546.	12.8	47
13	The electronic band structure of quasi-one-dimensional van der Waals semiconductors: the effective hole mass of ZrS₃ compared to TiS₃. Journal of Physics Condensed Matter, 2020, 32, 29LT01.	1.8	12
14	Graphene synthesis on SiO2 using pulsed laser deposition with bilayer predominance. Materials Chemistry and Physics, 2019, 238, 121905.	4.0	13
15	Strong interlayer hybridization in the aligned SnS2/WSe2 hetero-bilayer structure. Npj 2D Materials and Applications, 2019, 3, .	7.9	39
16	The Role of Oxygen Atoms on Excitons at the Edges of Monolayer WS₂. Nano Letters, 2019, 19, 4641-4650.	9.1	39
17	Nanospot angle-resolved photoemission study of Bernal-stacked bilayer graphene on hexagonal boron nitride: Band structure and local variation of lattice alignment. Physical Review B, 2019, 99, .	3.2	13
18	Nanomosaic of Topological Dirac States on the Surface of Pb₅Bi₂₄Se₄₁ Observed by Nano-ARPES. Nano Letters, 2019, 19, 3737-3742.	9.1	10

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19	Visualizing the Effect of an Electrostatic Gate with Angle-Resolved Photoemission Spectroscopy. Nano Letters, 2019, 19, 2682-2687.	9.1	32
20	Electroanalytical Performance of Nitrogen-Doped Graphene Films Processed in One Step by Pulsed Laser Deposition Directly Coupled with Thermal Annealing. Materials, 2019, 12, 666.	2.9	13
21	Gate-Controlled Metalâ€“Insulator Transition in TiS₃ Nanowire Field-Effect Transistors. ACS Nano, 2019, 13, 803-811.	14.6	54
22	Nano-Architecture of nitrogen-doped graphene films synthesized from a solid CN source. Scientific Reports, 2018, 8, 3247.	3.3	72
23	Unraveling the Structural and Electronic Properties at the WSe₂â€“Graphene Interface for a Rational Design of van der Waals Heterostructures. ACS Applied Nano Materials, 2018, 1, 1131-1140.	5.0	19
24	Large local lattice expansion in graphene adlayers grown on copper. Nature Materials, 2018, 17, 450-455.	27.5	13
25	The band structure of the quasi-one-dimensional layered semiconductor TiS3(001). Applied Physics Letters, 2018, 112, .	3.3	38
26	Topology and doping effects in three-dimensional nanoporous graphene. Carbon, 2018, 131, 258-265.	10.3	41
27	Emergence of Interfacial Polarons from Electronâ€“Phonon Coupling in Graphene/h-BN van der Waals Heterostructures. Nano Letters, 2018, 18, 1082-1087.	9.1	55
28	Valence band inversion and spin-orbit effects in the electronic structure of monolayer GaSe. Physical Review B, 2018, 98, .	3.2	47
29	Flat electronic bands in long sequences of rhombohedral-stacked graphene. Physical Review B, 2018, 97, .	3.2	46
30	Resolving Deep Quantum-Well States in Atomically Thin 2H-MoTe₂ Flakes by Nanospot Angle-Resolved Photoemission Spectroscopy. Nano Letters, 2018, 18, 4664-4668.	9.1	13
31	Boron-Doped Graphene Nanoribbons: Electronic Structure and Raman Fingerprint. ACS Nano, 2018, 12, 7571-7582.	14.6	38
32	Black Arsenic: A Layered Semiconductor with Extreme Inâ€Plane Anisotropy. Advanced Materials, 2018, 30, e1800754.	21.0	161
33	Quasicrystalline 30Â° twisted bilayer graphene as an incommensurate superlattice with strong interlayer coupling. Proceedings of the National Academy of Sciences of the United States of America, 2018, 115, 6928-6933.	7.1	169
34	Stacking-Dependent Electronic Structure of Trilayer Graphene Resolved by Nanospot Angle-Resolved Photoemission Spectroscopy. Nano Letters, 2017, 17, 1564-1568.	9.1	63
35	Direct observation of the band structure in bulk hexagonal boron nitride. Physical Review B, 2017, 95, .	3.2	65
36	Chemical and electronic structure imaging of graphene on Cu: a NanoARPES study. Journal of Physics Condensed Matter, 2017, 29, 183001.	1.8	6

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37	Electronic structure determination using an assembly of conventional and synchrotron techniques: The case of a xanthate complex. Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy, 2017, 180, 183-192.	3.9	6
38	Substrate dependent electronic structure variations of van der Waals heterostructures of MoSe ₂ or MoSe _{2(1âˆ’ <i>x</i>)} Te _{2 <i>x</i>} grown by van der Waals epitaxy. 2D Materials, 2017, 4, 025094.	4.4	19
39	Electronic structure of graphene/hexagonal boron nitride heterostructure revealed by Nano-ARPES. Journal of Physics: Conference Series, 2017, 864, 012005.	0.4	8
40	Electronic structure of polycrystalline CVD-graphene revealed by Nano-ARPES. Journal of Physics: Conference Series, 2017, 849, 012019.	0.4	4
41	High-resolution Electronic and Chemical imaging of wonder nanomaterials beyond graphene. Journal of Physics: Conference Series, 2017, 864, 012036.	0.4	0
42	Two-Dimensional Hallmark of Highly Interconnected Three-Dimensional Nanoporous Graphene. ACS Omega, 2017, 2, 3691-3697.	3.5	32
43	Optimal focusing system of the Fresnel zone plates at the Synchrotron SOLEIL NanoARPES beamline. Journal of Physics: Conference Series, 2017, 849, 012039.	0.4	11
44	Degradation of Albumin on Plasma-Treated Polystyrene by Soft X-ray Exposure. Polymers, 2016, 8, 244.	4.5	3
45	Electrolytic phototransistor based on graphene-MoS2 van der Waals p-n heterojunction with tunable photoresponse. Applied Physics Letters, 2016, 109, .	3.3	41
46	Quantum Transport and Nano Angle-resolved Photoemission Spectroscopy on the Topological Surface States of Single Sb2Te3 Nanowires. Scientific Reports, 2016, 6, 29493.	3.3	43
47	Experimental observation of two massless Dirac-fermion gases in graphene-topological insulator heterostructure. 2D Materials, 2016, 3, 021009.	4.4	21
48	Electronic structure of transferred graphene/h-BN van der Waals heterostructures with nonzero stacking angles by nano-ARPES. Journal of Physics Condensed Matter, 2016, 28, 444002.	1.8	14
49	Band Alignment and Minigaps in Monolayer MoS₂-Graphene van der Waals Heterostructures. Nano Letters, 2016, 16, 4054-4061.	9.1	288
50	Exploring the Electronic Structure and Chemical Homogeneity of Individual Bi₂Te₃ Nanowires by Nano-Angle-Resolved Photoemission Spectroscopy. Nano Letters, 2016, 16, 4001-4007.	9.1	13
51	Band renormalization and spin polarization of MoS₂ in graphene/MoS₂ heterostructures. Physica Status Solidi - Rapid Research Letters, 2015, 9, 701-706.	2.4	17
52	van der Waals epitaxy of monolayer hexagonal boron nitride on copper foil: growth, crystallography and electronic band structure. 2D Materials, 2015, 2, 025003.	4.4	51
53	Direct Observation of Interlayer Hybridization and Dirac Relativistic Carriers in Graphene/MoS₂ van der Waals Heterostructures. Nano Letters, 2015, 15, 1135-1140.	9.1	163
54	Effect of oxygen and nitrogen functionalization on the physical and electronic structure of graphene. Nano Research, 2015, 8, 2620-2635.	10.4	47

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55	Observation of a two-dimensional liquid of FrÃ¶hlich polarons at the bare SrTiO3 surface. Nature Communications, 2015, 6, 8585.	12.8	127
56	Atomic structure of the<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mrow><mml:msqrt><mml:mn>3</mml:mn></mml:msqrt><mml:mspace width="0.16em" /><mml:mo>Ã—</mml:mo><mml:mspace width="0.16em" /><mml:msqrt><mml:mn>3</mml:mn></mml:msqrt></mml:mrow></mml:math>phase of silicene on Ag(111). Physical Review B, 2014, 90, .	3.2	107
57	First NanoARPES User Facility Available at SOLEIL: An Innovative and Powerful Tool for Studying Advanced Materials. Synchrotron Radiation News, 2014, 27, 24-30.	0.8	72
58	Polycrystalline Graphene with Single Crystalline Electronic Structure. Nano Letters, 2014, 14, 5706-5711.	9.1	134
59	Is graphene on copper doped?. Physica Status Solidi - Rapid Research Letters, 2013, 7, 643-646.	2.4	30
60	Evidence of Dirac fermions in multilayer silicene. Applied Physics Letters, 2013, 102, .	3.3	180
61	The quasiparticle band dispersion in epitaxial multilayer silicene. Journal of Physics Condensed Matter, 2013, 25, 382202.	1.8	55
62	Exploring electronic structure of one-atom thick polycrystalline graphene films: A nano angle resolved photoemission study. Scientific Reports, 2013, 3, 2439.	3.3	81
63	Interferometer-controlled soft X-ray scanning photoemission microscope at SOLEIL. Journal of Physics: Conference Series, 2013, 425, 132013.	0.4	10
64	ANTARES, a scanning photoemission microscopy beamline at SOLEIL. Journal of Physics: Conference Series, 2013, 425, 192023.	0.4	43
65	Chemical imaging and angle-resolved photoemission study of well-ordered thermally reduced SrTiO<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:msub><mml:mrow /><mml:mn>3</mml:mn></mml:msub></mml:math>(100). Physical Review B, 2012, 85, .	3.2	14
66	Band-gap expansion in the surface-localized electronic structure of MoS<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:msub><mml:mrow /><mml:mn>2</mml:mn></mml:msub></mml:math>(0002). Physical Review B, 2012, 86, .	3.2	47
67	Zooming in on Electronic Structure: NanoARPES at SOLEIL and ALS. Synchrotron Radiation News, 2012, 25, 19-25.	0.8	36
68	Silicene: Compelling Experimental Evidence for Graphenelike Two-Dimensional Silicon. Physical Review Letters, 2012, 108, 155501.	7.8	3,275
69	Perturbation of Ge(111) and Si(111)â^š3Î±-Sn surfaces by adsorption of dopants. Surface Science, 2006, 600, 3154-3159.	1.9	4
70	COMPLEX BEHAVIORS AT SIMPLE SEMICONDUCTOR AND METAL/SEMICONDUCTOR SURFACES. Surface Review and Letters, 2003, 10, 981-1008.	1.1	16