Ana Laura Elias

List of Publications by Year in Descending Order

78 papers	8,230 citations	35 h-index	83 g-index
83 ext. papers	9,317 ext. citations	11.1 avg, IF	5.51 L-index

#	Paper	IF	Citations
78	Evolution of spectroscopy features in layered MoSxSe(2-x) solid solutions. *Materials Research Express*, **2022**, 9, 046301	1.7	
77	Low temperature activation of inert hexagonal boron nitride for metal deposition and single atom catalysis. *Materials Today*, **2021**,	21.8	5
76	Quantification and Healing of Defects in Atomically Thin Molybdenum Disulfide: Beyond the Controlled Creation of Atomic Defects. *ACS Nano*, **2021**, 15, 9658-9669	16.7	11
75	Reversible fusion-fission fibers. *Science*, **2021**, 372, 573	33.3	
74	Multiple excitations and temperature study of the disorder-induced Raman bands in MoS2. *2D Materials*, **2021**, 8, 035042	5.9	2
73	Hybrid materials based on pyrrhotite, troilite, and few-layered graphitic nanostructures: Synthesis, characterization, and cyclic voltammetry studies. *Applied Surface Science*, **2021**, 563, 150327	6.7	0
72	Universal Substitutional Doping of Transition Metal Dichalcogenides by Liquid-Phase Precursor-Assisted Synthesis. *ACS Nano*, **2020**, 14, 4326-4335	16.7	44
71	Second harmonic generation in two-dimensional transition metal dichalcogenides with growth and post-synthesis defects. *2D Materials*, **2020**, 7, 045020	5.9	6
70	Monolayer Vanadium-Doped Tungsten Disulfide: A Room-Temperature Dilute Magnetic Semiconductor. *Advanced Science*, **2020**, 7, 2001174	13.6	33
69	Spontaneous chemical functionalization via coordination of Au single atoms on monolayer MoS. *Science Advances*, **2020**, 6,	14.3	22
68	Superconductivity enhancement in phase-engineered molybdenum carbide/disulfide vertical heterostructures. *Proceedings of the National Academy of Sciences of the United States of America*, **2020**, 117, 19685-19693	11.5	4
67	Carbon doping of WS monolayers: Bandgap reduction and p-type doping transport. *Science Advances*, **2019**, 5, eaav5003	14.3	70
66	All Natural, High Efficient Groundwater Extraction via Solar Steam/Vapor Generation. *Advanced Sustainable Systems*, **2019**, 3, 1800055	5.9	56
65	Clean Transfer of 2D Transition Metal Dichalcogenides Using Cellulose Acetate for Atomic Resolution Characterizations. *ACS Applied Nano Materials*, **2019**, 2, 5320-5328	5.6	17
64	Functional Pd/reduced graphene oxide nanocomposites: effect of reduction degree and doping in hydrodechlorination catalytic activity. *Journal of Nanoparticle Research*, **2019**, 21, 1	2.3	0
63	Facile 1D graphene fiber synthesis from an agricultural by-product: A silicon-mediated graphenization route. *Carbon*, **2019**, 142, 78-88	10.4	7
62	Scalable and Highly Efficient Mesoporous Wood-Based Solar Steam Generation Device: Localized Heat, Rapid Water Transport. *Advanced Functional Materials*, **2018**, 28, 1707134	15.6	254

61	Light-Emitting Transition Metal Dichalcogenide Monolayers under Cellular Digestion. *Advanced Materials*, **2018**, 30, 1703321	24	12
60	High-Performance Solar Steam Device with Layered Channels: Artificial Tree with a Reversed Design. *Advanced Energy Materials*, **2018**, 8, 1701616	21.8	174
59	Raman spectroscopy revealing noble gas adsorption on single-walled carbon nanotube bundles. *Carbon*, **2018**, 127, 312-319	10.4	15
58	Probing the interaction of noble gases with pristine and nitrogen-doped graphene through Raman spectroscopy. *Physical Review B*, **2018**, 97,	3.3	7
57	Low-temperature Synthesis of Heterostructures of Transition Metal Dichalcogenide Alloys (WMoS) and Graphene with Superior Catalytic Performance for Hydrogen Evolution. *ACS Nano*, **2017**, 11, 5103-5112	16.7	116
56	Photoluminescence Segmentation within Individual Hexagonal Monolayer Tungsten Disulfide Domains Grown by Chemical Vapor Deposition. *ACS Applied Materials & Interfaces*, **2017**, 9, 15005-15014	8.5	48
55	Optical identification of sulfur vacancies: Bound excitons at the edges of monolayer tungsten disulfide. *Science Advances*, **2017**, 3, e1602813	14.3	154
54	Polysulphone composite membranes modified with two types of carbon additives as a potential material for bone tissue regeneration. *Bulletin of Materials Science*, **2017**, 40, 201-212	1.7	3
53	Defect Coupling and Sub-Angstrom Structural Distortions in WMoS Monolayers. *Nano Letters*, **2017**, 17, 2802-2808	11.5	32
52	Temperature- and power-dependent phonon properties of suspended continuous WS2 monolayer films. *Vibrational Spectroscopy*, **2016**, 86, 270-276	2.1	11
51	Excitonic Effects in Tungsten Disulfide Monolayers on Two-Layer Graphene. *ACS Nano*, **2016**, 10, 7840-6	16.7	34
50	Ultrasensitive molecular sensor using N-doped graphene through enhanced Raman scattering. *Science Advances*, **2016**, 2, e1600322	14.3	125
49	Third order nonlinear optical response exhibited by mono- and few-layers of WS 2. *2D Materials*, **2016**, 3, 021005	5.9	35
48	MoS2 Monolayers on Nanocavities: Enhanced Light-Matter Interaction within Atomic Monolayers **2016**,		1
47	Distinct photoluminescence and Raman spectroscopy signatures for identifying highly crystalline WS2 monolayers produced by different growth methods. *Journal of Materials Research*, **2016**, 31, 931-944	2.5	68
46	Electric-Field-Assisted Directed Assembly of Transition Metal Dichalcogenide Monolayer Sheets. *ACS Nano*, **2016**, 10, 5006-14	16.7	7
45	MoS 2 monolayers on nanocavities: enhancement in light□matter interaction. *2D Materials*, **2016**, 3, 025017	5.9	62
44	Spontaneous Formation of Atomically Thin Stripes in Transition Metal Dichalcogenide Monolayers. *Nano Letters*, **2016**, 16, 6982-6987	11.5	40

43	The influence of carbon nanotubes characteristics in their performance as positive electrodes in vanadium redox flow batteries. *Sustainable Energy Technologies and Assessments*, **2015**, 9, 105-110	4.7	21
42	Graphene nanoribbons inducing cube-shaped Ag nanoparticle assemblies. *Carbon*, **2015**, 93, 800-811	10.4	15
41	Stable and solid pellets of functionalized multi-walled carbon nanotubes produced under high pressure and temperature. *Journal of Nanoparticle Research*, **2015**, 17, 1	2.3	3
40	Ultrasensitive gas detection of large-area boron-doped graphene. *Proceedings of the National Academy of Sciences of the United States of America*, **2015**, 112, 14527-32	11.5	146
39	Tellurium-Assisted Low-Temperature Synthesis of MoS2 and WS2 Monolayers. *ACS Nano*, **2015**, 9, 11658-66	13.7	107
38	Ultrafast Intrinsic Photoresponse and Direct Evidence of Sub-gap States in Liquid Phase Exfoliated MoS2Thin Films. *Scientific Reports*, **2015**, 5, 11272	4.9	43
37	Two-dimensional transition metal dichalcogenides: Clusters, ribbons, sheets and more. *Nano Today*, **2015**, 10, 559-592	17.9	84
36	Individual Mo Dopant Atoms in WS2 Monolayers: Atomic Structure and Induced Strain. *Microscopy and Microanalysis*, **2015**, 21, 435-436	0.5	3
35	3D Nanocomposites of Covalently Interconnected Multiwalled Carbon Nanotubes with SiC with Enhanced Thermal and Electrical Properties. *Advanced Functional Materials*, **2015**, 25, 4985-4993	15.6	14
34	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	15.6	2
33	Electronic, magnetic, optical, and edge-reactivity properties of semiconducting and metallic WS 2 nanoribbons. *2D Materials*, **2015**, 2, 015002	5.9	17
32	Extraordinary Second Harmonic Generation in tungsten disulfide monolayers. *Scientific Reports*, **2014**, 4, 5530	4.9	214
31	Band gap engineering and layer-by-layer mapping of selenium-doped molybdenum disulfide. *Nano Letters*, **2014**, 14, 442-9	11.5	378
30	Electrochemical characterization of liquid phase exfoliated two-dimensional layers of molybdenum disulfide. *ACS Applied Materials & Interfaces*, **2014**, 6, 2125-30	9.5	97
29	Large-area Si-doped graphene: controllable synthesis and enhanced molecular sensing. *Advanced Materials*, **2014**, 26, 7593-9	24	91
28	Dislocation motion and grain boundary migration in two-dimensional tungsten disulphide. *Nature Communications*, **2014**, 5, 4867	17.4	167
27	Super-stretchable graphene oxide macroscopic fibers with outstanding knotability fabricated by dry film scrolling. *ACS Nano*, **2014**, 8, 5959-67	16.7	150
26	Ultra-light carbon nanotube sponge as an efficient electromagnetic shielding material in the GHz range. *Physica Status Solidi - Rapid Research Letters*, **2014**, 8, 698-704	2.5	59

25	CVD-grown monolayered MoS 2 as an effective photosensor operating at low-voltage. *2D Materials* , **2014**, 1, 011004	5.9	170
24	Atomic-scale Observation of Grains and Grain Boundaries in Monolayers of WS2. *Microscopy and Microanalysis*, **2014**, 20, 1084-1085	0.5	2
23	Graphene: Large-Area Si-Doped Graphene: Controllable Synthesis and Enhanced Molecular Sensing (Adv. Mater. 45/2014). *Advanced Materials*, **2014**, 26, 7676-7676	24	
22	Ultrashort optical pulse characterization using WS monolayers. *Optics Letters*, **2014**, 39, 383-5	3	30
21	Facile synthesis of MoS2 and MoxW1-xS2 triangular monolayers. *APL Materials*, **2014**, 2, 092514	5.7	75
20	Pine-tree-like morphologies of nitrogen-doped carbon nanotubes: Electron field emission enhancement. *Journal of Materials Research*, **2014**, 29, 2441-2450	2.5	4
19	Three-dimensional Nanotube Networks and a New Horizon of Applications **2014**, 457-493		2
18	Nanoribbons: Nitrogen-Doped Graphitic Nanoribbons: Synthesis, Characterization, and Transport (Adv. Funct. Mater. 30/2013). *Advanced Functional Materials*, **2013**, 23, 3714-3714	15.6	
17	Nitrogen-Doped Graphitic Nanoribbons: Synthesis, Characterization, and Transport. *Advanced Functional Materials*, **2013**, 23, 3755-3762	15.6	28
16	Three-dimensional nitrogen-doped multiwall carbon nanotube sponges with tunable properties. *Nano Letters*, **2013**, 13, 5514-20	11.5	97
15	Extraordinary room-temperature photoluminescence in triangular WS2 monolayers. *Nano Letters*, **2013**, 13, 3447-54	11.5	1145
14	Nitrogen Silicon Heterodoping of Carbon Nanotubes. *Journal of Physical Chemistry C*, **2013**, 117, 8481-8488	4.8	19
13	Photosensor Device Based on Few-Layered WS2 Films. *Advanced Functional Materials*, **2013**, 23, 5511-5517	15.6	480
12	Identification of individual and few layers of WS2 using Raman Spectroscopy. *Scientific Reports*, **2013**, 3,	4.9	911
11	Controlled synthesis and transfer of large-area WS2 sheets: from single layer to few layers. *ACS Nano*, **2013**, 7, 5235-42	16.7	453
10	Sensors: Photosensor Device Based on Few-Layered WS2 Films (Adv. Funct. Mater. 44/2013). *Advanced Functional Materials*, **2013**, 23, 5510-5510	15.6	5
9	Catalytic Twist-Spun Yarns of Nitrogen-Doped Carbon Nanotubes. *Advanced Functional Materials*, **2012**, 22, 1069-1075	15.6	33
8	Carbon Nanotubes: Catalytic Twist-Spun Yarns of Nitrogen-Doped Carbon Nanotubes (Adv. Funct. Mater. 5/2012). *Advanced Functional Materials*, **2012**, 22, 1098-1098	15.6	1

7	Nitrogen-doped graphene: beyond single substitution and enhanced molecular sensing. *Scientific Reports*, **2012**, 2, 586	4.9	517
6	Longitudinal cutting of pure and doped carbon nanotubes to form graphitic nanoribbons using metal clusters as nanoscalpels. *Nano Letters*, **2010**, 10, 366-72	11.5	284
5	Graphene and graphite nanoribbons: Morphology, properties, synthesis, defects and applications. *Nano Today*, **2010**, 5, 351-372	17.9	695
4	Graphene Shape Control by Multistage Cutting and Transfer. *Advanced Materials*, **2009**, 21, 4487-4491	24	133
3	Viability studies of pure carbon- and nitrogen-doped nanotubes with Entamoeba histolytica: from amoebicidal to biocompatible structures. *Small*, **2007**, 3, 1723-9	11	53
2	Integration of Nitrogen-Doped Graphene Oxide Dots with Au Nanoparticles for Enhanced Electrocatalytic Hydrogen Evolution. *ACS Applied Nano Materials*,	5.6	2
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