Emiliano Cortes

List of Publications by Year
in descending order

102	5,575	81839	82499
papers	citations	39 h-index	72 g-index

118	118	118	6652
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	The Chemistry of the Sulfurâ€“Gold Interface: In Search of a Unified Model. Accounts of Chemical Research, 2012, 45, 1183-1192.	7.6	459
2	Non-plasmonic nanoantennas for surface enhanced spectroscopies with ultra-low heat conversion. Nature Communications, 2015, 6, 7915.	5.8	433
3	Plasmonic hot electron transport drives nano-localized chemistry. Nature Communications, 2017, 8, 14880.	5.8	328
4	Towards Reliable and Quantitative Surfaceâ€Enhanced Raman Scattering (SERS): From Key Parameters to Good Analytical Practice. Angewandte Chemie - International Edition, 2020, 59, 5454-5462.	7.2	324
5	Bridging the Gap between Dielectric Nanophotonics and the Visible Regime with Effectively Lossless Gallium Phosphide Antennas. Nano Letters, 2017, 17, 1219-1225.	4.5	208
6	Challenges in Plasmonic Catalysis. ACS Nano, 2020, 14, 16202-16219.	7.3	203
7	Photo-induced enhanced Raman spectroscopy for universal ultra-trace detection of explosives, pollutants and biomolecules. Nature Communications, 2016, 7, 12189.	5.8	201
8	Self-assembled monolayers of thiolates on metals: a review article on sulfur-metal chemistry and surface structures. RSC Advances, 2014, 4, 27730-27754.	1.7	187
9	Accelerating CO₂ Electroreduction to Multicarbon Products via Synergistic Electricâ€“Thermal Field on Copper Nanoneedles. Journal of the American Chemical Society, 2022, 144, 3039-3049.	6.6	147
10	From Optical to Chemical Hot Spots in Plasmonics. Accounts of Chemical Research, 2019, 52, 2525-2535.	7.6	131
11	Monitoring the Electrochemistry of Single Molecules by Surface-Enhanced Raman Spectroscopy. Journal of the American Chemical Society, 2010, 132, 18034-18037.	6.6	121
12	Hybrid Plasmonic Nanomaterials for Hydrogen Generation and Carbon Dioxide Reduction. ACS Energy Letters, 2022, 7, 778-815.	8.8	110
13	Spectral Screening of the Energy of Hot Holes over a Particle Plasmon Resonance. Nano Letters, 2019, 19, 1867-1874.	4.5	106
14	Optimizing Hydrogen Binding on Ru Sites with RuCo Alloy Nanosheets for Efficient Alkaline Hydrogen Evolution. Angewandte Chemie - International Edition, 2022, 61, e202113664.	7.2	102
15	Vertical Cu Nanoneedle Arrays Enhance the Local Electric Field Promoting C₂ Hydrocarbons in the CO₂ Electroreduction. Nano Letters, 2022, 22, 1963-1970.	4.5	95
16	High-Efficiency Second Harmonic Generation from a Single Hybrid ZnO Nanowire/Au Plasmonic Nano-Oligomer. Nano Letters, 2014, 14, 6660-6665.	4.5	93
17	Paired Ruâ€’Oâ€’Mo ensemble for efficient and stable alkaline hydrogen evolution reaction. Nano Energy, 2021, 82, 105767.	8.2	86
18	Understanding and Reducing Photothermal Forces for the Fabrication of Au Nanoparticle Dimers by Optical Printing. Nano Letters, 2017, 17, 5747-5755.	4.5	81

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19	Ligand Engineering in Nickel Phthalocyanine to Boost the Electrocatalytic Reduction of CO₂. Advanced Functional Materials, 2022, 32, .	7.8	80
20	Activating plasmonic chemistry. Science, 2018, 362, 28-29.	6.0	72
21	Enhanced Stability of Thiolate Self-Assembled Monolayers (SAMs) on Nanostructured Gold Substrates. Langmuir, 2009, 25, 5661-5666.	1.6	70
22	Strong Correlation between Molecular Configurations and Charge-Transfer Processes Probed at the Single-Molecule Level by Surface-Enhanced Raman Scattering. Journal of the American Chemical Society, 2013, 135, 2809-2815.	6.6	68
23	Dynamics of Photoâ€Induced Surface Oxygen Vacancies in Metalâ€Oxide Semiconductors Studied Under Ambient Conditions. Advanced Science, 2019, 6, 1901841.	5.6	62
24	Connecting Metallic Nanoparticles by Optical Printing. Nano Letters, 2016, 16, 1224-1229.	4.5	61
25	Efficient ultrafast all-optical modulation in a nonlinear crystalline gallium phosphide nanodisk at the anapole excitation. Science Advances, 2020, 6, .	4.7	61
26	Efficiency and Bond Selectivity in Plasmonâ€Induced Photochemistry. Advanced Optical Materials, 2017, 5, 1700191.	3.6	61
27	Nanoscale Control of Molecular Self-Assembly Induced by Plasmonic Hot-Electron Dynamics. ACS Nano, 2018, 12, 2184-2192.	7.3	60
28	Accuracy and Mechanistic Details of Optical Printing of Single Au and Ag Nanoparticles. ACS Nano, 2017, 11, 9678-9688.	7.3	58
29	Anapole Excitations in Oxygen-Vacancy-Rich TiO_{2â€“x} Nanoresonators: Tuning the Absorption for Photocatalysis in the Visible Spectrum. ACS Nano, 2020, 14, 2456-2464.	7.3	58
30	Tuning the intermediate reaction barriers by a CuPd catalyst to improve the selectivity of CO2 electroreduction to C2 products. Chinese Journal of Catalysis, 2021, 42, 1500-1508.	6.9	56
31	Experimental characterization techniques for plasmon-assisted chemistry. Nature Reviews Chemistry, 2022, 6, 259-274.	13.8	56
32	Nickel polyphthalocyanine with electronic localization at the nickel site for enhanced CO2 reduction reaction. Applied Catalysis B: Environmental, 2022, 306, 121093.	10.8	53
33	Optical Metasurfaces for Energy Conversion. Chemical Reviews, 2022, 122, 15082-15176.	23.0	52
34	Surface-Enhanced Spectroscopies of a Molecular Monolayer in an All-Dielectric Nanoantenna. ACS Photonics, 2018, 5, 1546-1557.	3.2	48
35	Decoupling absorption and emission processes in super-resolution localization of emitters in a plasmonic hotspot. Nature Communications, 2017, 8, 14513.	5.8	47
36	Complex Surface Chemistry of 4-Mercaptopyridine Self-Assembled Monolayers on Au(111). Langmuir, 2012, 28, 6839-6847.	1.6	45

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37	Light-Induced Polarization-Directed Growth of Optically Printed Gold Nanoparticles. Nano Letters, 2016, 16, 6529-6533.	4.5	44
38	In Situ Photothermal Response of Single Gold Nanoparticles through Hyperspectral Imaging Anti-Stokes Thermometry. ACS Nano, 2021, 15, 2458-2467.	7.3	42
39	Imaging Plasmon Hybridization of Fano Resonances via Hot-Electron-Mediated Absorption Mapping. Nano Letters, 2018, 18, 3400-3406.	4.5	41
40	Tailored Hypersound Generation in Single Plasmonic Nanoantennas. Nano Letters, 2016, 16, 1428-1434.	4.5	40
41	Size-Selective Optical Printing of Silicon Nanoparticles through Their Dipolar Magnetic Resonance. ACS Photonics, 2019, 6, 815-822.	3.2	40
42	From Single to Multiple Ag-Layer Modification of Au Nanocavity Substrates: A Tunable Probe of the Chemical Surface-Enhanced Raman Scattering Mechanism. ACS Nano, 2011, 5, 5433-5443.	7.3	37
43	Coreâ€“Shell Bimetallic Nanoparticle Trimers for Efficient Light-to-Chemical Energy Conversion. ACS Energy Letters, 2020, 5, 3881-3890.	8.8	37
44	Self-Constructed Multiple Plasmonic Hotspots on an Individual Fractal to Amplify Broadband Hot Electron Generation. ACS Nano, 2021, 15, 10553-10564.	7.3	37
45	Local Growth Mediated by Plasmonic Hot Carriers: Chirality from Achiral Nanocrystals Using Circularly Polarized Light. Nano Letters, 2021, 21, 10315-10324.	4.5	37
46	Electrical control of single-photon emission in highly charged individual colloidal quantum dots. Science Advances, 2020, 6, .	4.7	33
47	Tailoring Plasmonic Bimetallic Nanocatalysts Toward Sunlightâ€Driven H₂ Production. Advanced Functional Materials, 2022, 32, .	7.8	33
48	Electrochemical Modulation for Signal Discrimination in Surface Enhanced Raman Scattering (SERS). Analytical Chemistry, 2010, 82, 6919-6925.	3.2	29
49	Plasmonic Nanoprobes for Stimulated Emission Depletion Nanoscopy. ACS Nano, 2016, 10, 10454-10461.	7.3	29
50	Anapole-Assisted Absorption Engineering in Arrays of Coupled Amorphous Gallium Phosphide Nanodisks. ACS Photonics, 2021, 8, 1469-1476.	3.2	29
51	The Effect of Photoinduced Surface Oxygen Vacancies on the Charge Carrier Dynamics in TiO₂ Films. Nano Letters, 2021, 21, 8348-8354.	4.5	29
52	Monitoring plasmonic hot-carrier chemical reactions at the single particle level. Faraday Discussions, 2019, 214, 73-87.	1.6	28
53	Particleâ€inâ€Frame Nanostructures with Interior Nanogaps. Angewandte Chemie - International Edition, 2019, 58, 15890-15894.	7.2	25
54	Template Dissolution Interfacial Patterning of Single Colloids for Nanoelectrochemistry and Nanosensing. ACS Nano, 2020, 14, 17693-17703.	7.3	25

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55	Fermi Level Equilibration at the Metalâ€“Molecule Interface in Plasmonic Systems. Nano Letters, 2021, 21, 6592-6599.	4.5	25
56	Nanostructured amorphous gallium phosphide on silica for nonlinear and ultrafast nanophotonics. Nanoscale Horizons, 2020, 5, 1500-1508.	4.1	24
57	Optimizing Hydrogen Binding on Ru Sites with RuCo Alloy Nanosheets for Efficient Alkaline Hydrogen Evolution. Angewandte Chemie, 2022, 134, .	1.6	24
58	Ag-modified Au nanocavity SERS substrates. Physical Chemistry Chemical Physics, 2009, 11, 7469.	1.3	23
59	Acoustic Far-Field Hypersonic Surface Wave Detection with Single Plasmonic Nanoantennas. Physical Review Letters, 2018, 121, 253902.	2.9	23
60	Probing the Role of Atomic Defects in Photocatalytic Systems through Photoinduced Enhanced Raman Scattering. ACS Energy Letters, 2021, 6, 4273-4281.	8.8	22
61	Dynamics of hot electron generation in metallic nanostructures: general discussion. Faraday Discussions, 2019, 214, 123-146.	1.6	21
62	Metasurface Photoelectrodes for Enhanced Solar Fuel Generation. Advanced Energy Materials, 2021, 11, 2102877.	10.2	21
63	Determination of Nanoscale Mechanical Properties of Polymers via Plasmonic Nanoantennas. ACS Photonics, 2020, 7, 1403-1409.	3.2	19
64	Plasmonic Photothermal Fluorescence Modulation for Homogeneous Biosensing. ACS Sensors, 2016, 1, 1351-1357.	4.0	18
65	Aromatic and Aliphatic Thiol Self-Assembled Monolayers on Au: Anchoring and Delivering Copper Species. Journal of Physical Chemistry C, 2011, 115, 24707-24717.	1.5	17
66	Dissociative Photoionization of Methyl Thiocyanate, CH3SCN, in the Proximity of the Sulfur 2p Edge. Journal of Physical Chemistry A, 2009, 113, 564-572.	1.1	16
67	Perchloromethyl Mercaptan, CCl₃SCl, Excited with Synchrotron Radiation in the Proximity of the Sulfur and Chlorine 2p Edges: Dissociative Photoionization of Highly Halogenated Species. Journal of Physical Chemistry A, 2009, 113, 9624-9632.	1.1	16
68	Solving the Long-Standing Controversy of Long-Chain Alkanethiols Surface Structure on Au(111). Journal of Physical Chemistry C, 2018, 122, 3893-3902.	1.5	14
69	Acoustic Coupling between Plasmonic Nanoantennas: Detection and Directionality of Surface Acoustic Waves. ACS Photonics, 2021, 8, 2846-2852.	3.2	13
70	Engineering gallium phosphide nanostructures for efficient nonlinear photonics and enhanced spectroscopies. Nanophotonics, 2021, 10, 4261-4271.	2.9	13
71	Challenges on optical printing of colloidal nanoparticles. Journal of Chemical Physics, 2022, 156, 034201.	1.2	12
72	3D Confocal Raman Tomography to Probe Field Enhancements inside Supercluster Metamaterials. ACS Photonics, 2017, 4, 2070-2077.	3.2	11

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73	Direct Detection of Optical Forces of Magnetic Nature in Dielectric Nanoantennas. Nano Letters, 2020, 20, 7627-7634.	4.5	11
74	Near-Field Spectroscopy of Cylindrical Phonon-Polariton Antennas. ACS Nano, 2020, 14, 8508-8517.	7.3	11
75	Controlling Plasmonic Chemistry Pathways through Specific Ion Effects. Advanced Optical Materials, 2022, 10, .	3.6	10
76	New materials for hot electron generation: general discussion. Faraday Discussions, 2019, 214, 365-386.	1.6	9
77	Self-assembly of thiolated cyanine aggregates on Au(111) and Au nanoparticle surfaces. Nanoscale, 2012, 4, 531-540.	2.8	8
78	Synergetic Light-Harvesting and Near-Field Enhancement in Multiscale Patterned Gold Substrates. ACS Photonics, 2015, 2, 1355-1365.	3.2	8
79	Special topic on emerging directions in plasmonics. Journal of Chemical Physics, 2020, 153, 010401.	1.2	8
80	Hot electron physics and applications. Journal of Applied Physics, 2021, 129, .	1.1	8
81	In situ surface-enhanced Raman spectroelectrochemistry reveals the molecular conformation of electrolyte additives in Li-ion batteries. Journal of Materials Chemistry A, 2021, 9, 20024-20031.	5.2	7
82	Halideâ€“Metal Complexes at Plasmonic Interfaces Create New Decay Pathways for Plasmons and Excited Molecules. ACS Photonics, 2022, 9, 895-904.	3.2	7
83	Applications in catalysis, photochemistry, and photodetection: general discussion. Faraday Discussions, 2019, 214, 479-499.	1.6	5
84	Resonant Far- to Near-Field Channeling in Synergetic Multiscale Antennas. ACS Photonics, 2019, 6, 1466-1473.	3.2	4
85	Auf dem Weg zur verlÃsslichen und quantitativen SERSâ€Spektroskopie: von SchlÃ¼sselparametern zur guten analytischen Praxis. Angewandte Chemie, 2020, 132, 5496-5505.	1.6	4
86	Surface plasmon enhanced spectroscopies and time and space resolved methods: general discussion. Faraday Discussions, 2015, 178, 253-279.	1.6	3
87	Surface Oxygen Vacancies: Dynamics of Photoâ€Induced Surface Oxygen Vacancies in Metalâ€Oxide Semiconductors Studied Under Ambient Conditions (Adv. Sci. 22/2019). Advanced Science, 2019, 6, 1970132.	5.6	3
88	Particleâ€inâ€aâ€Frame Nanostructures with Interior Nanogaps. Angewandte Chemie, 2019, 131, 16037-16041.	1.6	2
89	Photo-induced enhanced Raman spectroscopy (PIERS): sensing atomic-defects, explosives and biomolecules. , 2019, , .		2
90	Enhancing hybrid metal-semiconductor systems beyond SERS with PIERS (photo-induced enhanced) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 5		2

#	Article	IF	Citations
91	Hot carrier optoelectronics with titanium nitride. , 2020, , .		1
92	Generation and Detection of Surface Acoustic Waves using Single Plasmonic Nanoresonators. , 2018, , .		1
93	Correction to Connecting Metallic Nanoparticles by Optical Printing. Nano Letters, 2018, 18, 1555-1555.	4.5	0
94	Gallium Phopshide Nanostructures on Transparent Substrates for Nonlinear and Ultrafast Nanophotonics. , 2021, , .		0
95	Generating, probing and utilising photo-induced surface oxygen vacancies for trace molecular detection. , 2021, , .		0
96	Metal-molecule charge transfer through Fermi level equilibration in plasmonic systems. , 2021, , .		0
97	Super-Resolution Mapping of Light-Driven Reactions on Metal Nanostructures. , 2021, , .		0
98	3D confocal Raman mapping of field enhancement inside supercluster metamaterials (Conference) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50		0
99	Size-Selective Optical Printing of Silicon Nanoparticles through Their Dipolar Magnetic Resonance. , 2019, , .		0
100	Collective modes of self-assembled supercluster metamaterials: towards label-free sensing. , 2019, , .		0
101	Size-selective optical printing of silicon nanoparticles through their dipolar magnetic resonance. , 2020, , .		0
102	Size-selective optical printing of silicon nanoparticles through their dipolar magnetic resonance (Conference Presentation). , 2020, , .		0