David J Masiello

List of Publications by Year
in descending order

68	2,323	304743 22	206112 48
papers	citations	h-index	g-index

69	69	69	3500
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Probing the Structure of Single-Molecule Surface-Enhanced Raman Scattering Hot Spots. Journal of the American Chemical Society, 2008, 130, 12616-12617.	13.7	825
2	Optical microresonators as single-particle absorption spectrometers. Nature Photonics, 2016, 10, 788-795.	31.4	143
3	Charge-Tunable Quantum Plasmons in Colloidal Semiconductor Nanocrystals. ACS Nano, 2014, 8, 1065-1072.	14.6	134
4	Characterization of the Electron- and Photon-Driven Plasmonic Excitations of Metal Nanorods. ACS Nano, 2012, 6, 7497-7504.	14.6	114
5	Many-body theory of surface-enhanced Raman scattering. Physical Review A, 2008, 78, .	2.5	82
6	Spatially Mapping Energy Transfer from Single Plasmonic Particles to Semiconductor Substrates via STEM/EELS. Nano Letters, 2015, 15, 3465-3471.	9.1	77
7	Single-Molecule Surface-Enhanced Raman Scattering: Can STEM/EELS Image Electromagnetic Hot Spots?. Journal of Physical Chemistry Letters, 2012, 3, 2303-2309.	4.6	62
8	Signatures of Fano Interferences in the Electron Energy Loss Spectroscopy and Cathodoluminescence of Symmetry-Broken Nanorod Dimers. ACS Nano, 2013, 7, 4511-4519.	14.6	60
9	Characterizing Localized Surface Plasmons Using Electron Energy-Loss Spectroscopy. Annual Review of Physical Chemistry, 2016, 67, 331-357.	10.8	55
10	Sculpting Fano Resonances To Control Photonicâ€“Plasmonic Hybridization. Nano Letters, 2017, 17, 6927-6934.	9.1	45
11	Thermal Signatures of Plasmonic Fano Interferences: Toward the Achievement of Nanolocalized Temperature Manipulation. Journal of Physical Chemistry Letters, 2014, 5, 1347-1354.	4.6	35
12	Spatial, Spectral, and Coherence Mapping of Single-Molecule SERS Active Hot Spots via the Discrete-Dipole Approximation. Journal of Physical Chemistry Letters, 2011, 2, 1695-1700.	4.6	34
13	Electron Energy Loss Spectroscopy Study of the Full Plasmonic Spectrum of Self-Assembled Auâ€“Ag Alloy Nanoparticles: Unraveling Size, Composition, and Substrate Effects. ACS Photonics, 2016, 3, 130-138.	6.6	32
14	Imaging Energy Transfer in Pt-Decorated Au Nanoprisms via Electron Energy-Loss Spectroscopy. Journal of Physical Chemistry Letters, 2016, 7, 3825-3832.	4.6	30
15	Examining Substrate-Induced Plasmon Mode Splitting and Localization in Truncated Silver Nanospheres with Electron Energy Loss Spectroscopy. Journal of Physical Chemistry Letters, 2015, 6, 2569-2576.	4.6	29
16	Cooperative Nearâ€Field Surface Plasmon Enhanced Quantum Dot Nanoarrays. Advanced Functional Materials, 2010, 20, 2675-2682.	14.9	28
17	Far-field midinfrared superresolution imaging and spectroscopy of single high aspect ratio gold nanowires. Proceedings of the National Academy of Sciences of the United States of America, 2020, 117, 2288-2293.	7.1	28
18	Imaging Plasmon Hybridization in Metal Nanoparticle Aggregates with Electron Energy-Loss Spectroscopy. Journal of Physical Chemistry C, 2016, 120, 20852-20859.	3.1	25

#	Article	IF	Citations
19	Dynamic Optical Switching of Polymer/Plasmonic Nanoparticle Hybrids with Sparse Loading. Journal of Physical Chemistry B, 2017, 121, 1092-1099.	2.6	25
20	Direct Observation of Infrared Plasmonic Fano Antiresonances by a Nanoscale Electron Probe. Physical Review Letters, 2019, 123, 177401.	7.8	25
21	Continuous Wave Resonant Photon Stimulated Electron Energy-Gain and Electron Energy-Loss Spectroscopy of Individual Plasmonic Nanoparticles. ACS Photonics, 2019, 6, 2499-2508.	6.6	25
22	STEM/EELS Imaging of Magnetic Hybridization in Symmetric and Symmetry-Broken Plasmon Oligomer Dimers and All-Magnetic Fano Interference. Nano Letters, 2016, 16, 6668-6676.	9.1	24
23	Active Far-Field Control of the Thermal Near-Field <i>via</i> Plasmon Hybridization. ACS Nano, 2019, 13, 9655-9663.	14.6	23
24	Combined Tight-Binding and Numerical Electrodynamics Understanding of the STEM/EELS Magneto-optical Responses of Aromatic Plasmon-Supporting Metal Oligomers. ACS Photonics, 2014, 1, 1013-1024.	6.6	20
25	Elucidating Energy Pathways through Simultaneous Measurement of Absorption and Transmission in a Coupled Plasmonicâ€"Photonic Cavity. Nano Letters, 2020, 20, 50-58.	9.1	20
26	Quantum Beats from Entangled Localized Surface Plasmons. ACS Photonics, 2015, 2, 157-164.	6.6	19
27	Multipolar Nanocube Plasmon Mode-Mixing in Finite Substrates. Journal of Physical Chemistry Letters, 2018, 9, 504-512.	4.6	19
28	Mislocalization in Plasmon-Enhanced Single-Molecule Fluorescence Microscopy as a Dynamical Youngâ€™s Interferometer. ACS Photonics, 2018, 5, 3141-3151.	6.6	18
29	Plasmon Heating Promotes Ligand Reorganization on Single Gold Nanorods. Journal of Physical Chemistry Letters, 2019, 10, 1394-1401.	4.6	18
30	Infrared plasmonics: STEM-EELS characterization of Fabry-PÃ©rot resonance damping in gold nanowires. Physical Review B, 2020, 101, .	3.2	18
31	Rotation of Single-Molecule Emission Polarization by Plasmonic Nanorods. Journal of Physical Chemistry Letters, 2019, 10, 5047-5054.	4.6	17
32	Resonance-Rayleigh Scattering and Electron Energy-Loss Spectroscopy of Silver Nanocubes. Journal of Physical Chemistry C, 2014, 118, 10254-10262.	3.1	15
33	Introduction: Plasmonics in Chemistry. Chemical Reviews, 2018, 118, 2863-2864.	47.7	14
34	Focused Electron Beam Induced Deposition Synthesis of 3D Photonic and Magnetic Nanoresonators. ACS Applied Nano Materials, 2019, 2, 8075-8082.	5.0	14
35	Time-dependent quantum many-body theory of identical bosons in a double well: Early-time ballistic interferences of fragmented and number entangled states. Physical Review A, 2007, 76, .	2.5	13
36	Tunable Spectral Ordering of Magnetic Plasmon Resonances in Noble Metal Nanoclusters. ACS Photonics, 2018, 5, 3272-3281.	6.6	13

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37	Nanoscale probing of resonant photonic modes in dielectric nanoparticles with focused electron beams. Physical Review B, 2019, 99, .	3.2	12
38	Plasmonic Landau damping in active environments. Physical Review B, 2018, 97, .	3.2	11
39	Active Tuning of Hybridized Modes in a Heterogeneous Photonic Molecule. Physical Review Applied, 2020, 13, .	3.8	9
40	Wavelength-Dependent Photothermal Imaging Probes Nanoscale Temperature Differences among Subdiffraction Coupled Plasmonic Nanorods. Nano Letters, 2021, 21, 5386-5393.	9.1	9
41	Molecularâ€"Electronic Structure in a Plasmonic Environment: Elucidating the Quantum Image Interaction. Journal of Physical Chemistry C, 2013, 117, 12249-12257.	3.1	8
42	Electron Beam Infrared Nano-Ellipsometry of Individual Indium Tin Oxide Nanocrystals. Nano Letters, 2020, 20, 7987-7994.	9.1	7
43	Near field excited state imaging via stimulated electron energy gain spectroscopy of localized surface plasmon resonances in plasmonic nanorod antennas. Scientific Reports, 2020, 10, 12537.	3.3	7
44	Intermolecular Hydrogen Bonding Tunes Vibronic Coupling in Heptazine Complexes. Journal of Physical Chemistry B, 2020, 124, 11680-11689.	2.6	7
45	Exact k -body representation of the Jaynes-Cummings interaction in the dressed basis: Insight into many-body phenomena with light. Physical Review A, 2021, 104, .	2.5	7
46	Lattice Kerker Effect with Plasmonic Oligomers. Journal of Physical Chemistry C, 2021, 125, 18817-18826.	3.1	7
47	Toward Quantitative Nanothermometry Using Single-Molecule Counting. Journal of Physical Chemistry B, 2021, 125, 12197-12205.	2.6	7
48	Multiscale theory and simulation of plasmon-enhanced molecular optical processes. International Journal of Quantum Chemistry, 2014, 114, 1413-1420.	2.0	6
49	Noninvasive Cathodoluminescence-Activated Nanoimaging of Dynamic Processes in Liquids. ACS Nano, 2017, 11, 10583-10590.	14.6	6
50	Imaging Infrared Plasmon Hybridization in Doped Semiconductor Nanocrystal Dimers. Journal of Physical Chemistry Letters, 2021, 12, 10270-10276.	4.6	5
51	Comment on â€œHgS and HgS/CdS Colloidal Quantum Dots with Infrared Intraband Transitions and Emergence of a Surface Plasmonâ€. Journal of Physical Chemistry C, 2016, 120, 28900-28902.	3.1	4
52	High spatial and energy resolution electron energy loss spectroscopy of the magnetic and electric excitations in plasmonic nanorod oligomers. Optics Express, 2021, 29, 4661.	3.4	4
53	Infrared surface phonon nanospectroscopy of an interacting dielectric-particleâ€"dielectric-substrate dimer using fast electrons. Physical Review B, 2021, 103, .	3.2	4
54	Nanoscale Mapping and Defectâ€Assisted Manipulation of Surface Plasmon Resonances in 2D Bi₂Te₃/Sb₂Te₃ Inâ€Plane Heterostructures. Advanced Optical Materials, 2022, 10, .	7.3	4

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55	Nanometer-Scale Spatial and Spectral Mapping of Exciton Polaritons in Structured Plasmonic Cavities. Physical Review Letters, 2022, 128, .	7.8	4
56	Symmetry-Broken Many-Body Excited States of the Gaseous Atomic Double-Well Boseâ€“Einstein Condensate. Journal of Physical Chemistry A, 2019, 123, 1962-1967.	2.5	3
57	Plasmon Hybridization in Nanorhombus Assemblies. Journal of Physical Chemistry C, 2020, 124, 27009-27016.	3.1	3
58	Probing nanoparticle substrate interactions with synchrotron infrared nanospectroscopy: Coupling gold nanorod Fabry-PÃ©rot resonances with <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:msub><mml:mi>SiO</mml:mi><mml:mn>2</mml:mn></mml:msub></mm and <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mi>h</mml:mi><mml:mtext>âˆ'</mml:mtext><mml:mi>BN</mml:mi></mr phonons. Physical Review B, 2021, 104, .	3.2	3
59	Model-Based Insight into Single-Molecule Plasmonic Mislocalization. Journal of Physical Chemistry C, 0, , .	3.1	3
60	Coupled-Dipole Modeling and Experimental Characterization of Geometry-Dependent Trochoidal Dichroism in Nanorod Trimers. ACS Photonics, 2021, 8, 1159-1168.	6.6	2
61	Visualizing Electric and Magnetic Field Coupling in Au-Nanorod Trimer Structures via Stimulated Electron Energy Gain and Cathodoluminescence Spectroscopy: Implications for Meta-Atom Imaging. ACS Applied Nano Materials, 0, , .	5.0	2
62	Spectroscopy and microscopy of plasmonic systems. Journal of Chemical Physics, 2021, 155, 090401.	3.0	1
63	Nanoarrays: Cooperative Near-Field Surface Plasmon Enhanced Quantum Dot Nanoarrays (Adv. Funct.) Tj ETQq1 1 0.784314 rgBT /Over	14.9	0
64	Nanoscopic imaging of energy transfer from single plasmonic particles to semiconductor substrates via STEM/EELS. Microscopy and Microanalysis, 2015, 21, 1909-1910.	0.4	0
65	Understanding guided light modes in oxide nanoparticles with monochromated EELS. Microscopy and Microanalysis, 2017, 23, 1550-1551.	0.4	0
66	Tribute to William P. Reinhardt. Journal of Physical Chemistry A, 2019, 123, 3615-3616.	2.5	0
67	Polarization out of the vortex. Nature Physics, 2021, 17, 549-551.	16.7	0
68	Substrate Effects on the Phonon Response of Individual Dielectric Nanostructures. Microscopy and Microanalysis, 2021, 27, 312-314.	0.4	0