Martin Moskovits

List of Publications by Year in Descending Order

111 papers	17,010 citations	48 h-index	121 g-index
121 ext. papers	18,869 ext. citations	11.1 avg, IF	7.2 L-index

#	Paper	IF	Citations
111	Progress and challenges of ceramics for supercapacitors. *Journal of Materiomics*, **2021**,	6.7	4
110	Plasmonic nanoreactors regulating selective oxidation by energetic electrons and nanoconfined thermal fields. *Science Advances*, **2021**, 7,	14.3	14
109	A brief history of surface-enhanced Raman spectroscopy and the localized surface plasmon Dedicated to the memory of Richard Van Duyne (1945–2019). *Journal of Raman Spectroscopy*, **2021**, 52, 279-284	2.3	6
108	Rational Component and Structure Design of Noble-Metal Composites for Optical and Catalytic Applications. *Small Structures*, **2021**, 2, 2000138	8.7	12
107	Silica-based ceramics toward electromagnetic microwave absorption. *Journal of the European Ceramic Society*, **2021**, 41, 7381-7381	6	13
106	Recent Progress and Prospects in Plasmon-Mediated Chemical Reaction. *Matter*, **2020**, 3, 42-56	12.7	26
105	Accurately Predicting the Radiation Enhancement Factor in Plasmonic Optical Antenna Emitters. *Journal of Physical Chemistry Letters*, **2020**, 11, 1947-1953	6.4	4
104	Present and Future of Surface-Enhanced Raman Scattering. *ACS Nano*, **2020**, 14, 28-117	16.7	1000
103	Quantitative surface-enhanced Raman spectroscopy chemical analysis using citrate as an in situ calibrant. *Analyst, The*, **2019**, 144, 1818-1824	5	6
102	Disentangling charge carrier from photothermal effects in plasmonic metal nanostructures. *Nature Communications*, **2019**, 10, 2671	17.4	56
101	Interfacial Construction of Plasmonic Nanostructures for the Utilization of the Plasmon-Excited Electrons and Holes. *Journal of the American Chemical Society*, **2019**, 141, 8053-8057	16.4	41
100	Microfluidic analysis of fentanyl-laced heroin samples by surface-enhanced Raman spectroscopy in a hydrophobic medium. *Analyst, The*, **2019**, 144, 3080-3087	5	17
99	Canada's early contributions to plasmonics. *Canadian Journal of Chemistry*, **2019**, 97, 483-487	0.9	
98	Changes in the structure of electrodeposited manganese oxide water oxidation catalysts revealed by in-operando Raman spectroscopy. *Journal of Catalysis*, **2019**, 371, 287-290	7.3	6
97	Protecting the Nanoscale Properties of Ag Nanowires with a Solution-Grown SnO Monolayer as Corrosion Inhibitor. *Journal of the American Chemical Society*, **2019**, 141, 13977-13986	16.4	24
96	Smart SERS Hot Spots: Single Molecules Can Be Positioned in a Plasmonic Nanojunction Using Host-Guest Chemistry. *Journal of the American Chemical Society*, **2018**, 140, 4705-4711	16.4	70
95	Merely Measuring the UV-Visible Spectrum of Gold Nanoparticles Can Change Their Charge State. *Nano Letters*, **2018**, 18, 669-674	11.5	12

94	Screening for canine transitional cell carcinoma (TCC) by SERS-based quantitative urine cytology. *Nanomedicine: Nanotechnology, Biology, and Medicine*, **2018**, 14, 1279-1287	6	6
93	Dielectrophoretic Nanoparticle Aggregation for On-Demand Surface Enhanced Raman Spectroscopy Analysis. *Analytical Chemistry*, **2018**, 90, 7930-7936	7.8	30
92	Stackable bipolar pouch cells with corrosion-resistant current collectors enable high-power aqueous electrochemical energy storage. *Energy and Environmental Science*, **2018**, 11, 2865-2875	35.4	36
91	Microwave-Assisted Synthesis of Ultrastable Cu@TiO2 Core-Shell Nanowires with Tunable Diameters via a Redox-Hydrolysis Synergetic Process. *ChemNanoMat*, **2018**, 4, 914-918	3.5	8
90	Detection of Papaverine for the Possible Identification of Illicit Opium Cultivation. *Analytical Chemistry*, **2017**, 89, 1684-1688	7.8	15
89	Properly Structured, Any Metal Can Produce Intense Surface Enhanced Raman Spectra. *Journal of Physical Chemistry C*, **2017**, 121, 14269-14273	3.8	14
88	Hot Charge Carrier Transmission from Plasmonic Nanostructures. *Annual Review of Physical Chemistry*, **2017**, 68, 379-398	15.7	159
87	Dual-reporter SERS-based biomolecular assay with reduced false-positive signals. *Proceedings of the National Academy of Sciences of the United States of America*, **2017**, 114, 9056-9061	11.5	47
86	Electromagnetic theories of surface-enhanced Raman spectroscopy. *Chemical Society Reviews*, **2017** , 46, 4042-4076	58.5	662
85	Criterion for determining resolving power in the optical near field. *Journal of Nanophotonics*, **2017**, 11, 1	1.1	3
84	A plasmonic liquid junction photovoltaic cell with greatly improved power conversion efficiency. *Chemical Communications*, **2016**, 52, 13460-13462	5.8	5
83	Plasmon-Mediated Photocatalytic Decomposition of Formic Acid on Palladium Nanostructures. *Advanced Optical Materials*, **2016**, 4, 1041-1046	8.1	22
82	Anisotropic Growth of TiO2 onto Gold Nanorods for Plasmon-Enhanced Hydrogen Production from Water Reduction. *Journal of the American Chemical Society*, **2016**, 138, 1114-7	16.4	329
81	Plasmon-Mediated Reduction of Aqueous Platinum Ions: The Competing Roles of Field Enhancement and Hot Charge Carriers. *Journal of Physical Chemistry C*, **2016**, 120, 6750-6755	3.8	39
80	Angle-dependent light scattering by highly uniform colloidal rod-shaped microparticles: Experiment and simulation. *Journal of Polymer Science, Part B: Polymer Physics*, **2016**, 54, 1889-1895	2.6	3
79	Optimization of Surface-Enhanced Raman Spectroscopy Conditions for Implementation into a Microfluidic Device for Drug Detection. *Analytical Chemistry*, **2016**, 88, 10513-10522	7.8	49
78	Large Format Surface-Enhanced Raman Spectroscopy Substrate Optimized for Enhancement and Uniformity. *ACS Nano*, **2016**, 10, 7566-71	16.7	111
77	Detection of low concentrations of ampicillin in milk. *Analyst, The*, **2015**, 140, 5003-5	5	48

76	Rapid identification by surface-enhanced Raman spectroscopy of cancer cells at low concentrations flowing in a microfluidic channel. *ACS Nano*, **2015**, 9, 4328-36	16.7	161
75	Biotags Based on Surface-Enhanced Raman Can Be as Bright as Fluorescence Tags. *Nano Letters*, **2015**, 15, 6745-50	11.5	43
74	Critical role of adsorption equilibria on the determination of surface-enhanced Raman enhancement. *ACS Nano*, **2015**, 9, 584-93	16.7	38
73	A surface plasmon enabled liquid-junction photovoltaic cell. *Faraday Discussions*, **2015**, 178, 413-20	3.6	6
72	The case for plasmon-derived hot carrier devices. *Nature Nanotechnology*, **2015**, 10, 6-8	28.7	126
71	Panchromatic photoproduction of H2 with surface plasmons. *Nano Letters*, **2015**, 15, 2132-6	11.5	74
70	Hot carrier filtering in solution processed heterostructures: a paradigm for improving thermoelectric efficiency. *Advanced Materials*, **2014**, 26, 2755-61, 2618	24	51
69	On the plasmonic photovoltaic. *ACS Nano*, **2014**, 8, 6066-73	16.7	128
68	Progressive transition from resonant to diffuse reflection in anisotropic colloidal films. *Journal of Polymer Science, Part B: Polymer Physics*, **2014**, 52, 611-617	2.6	2
67	Rapid detection of drugs of abuse in saliva using surface enhanced Raman spectroscopy and microfluidics. *ACS Nano*, **2013**, 7, 7157-64	16.7	134
66	Phosphorus stimulated unidirectional growth of TiO2 nanostructures. *Journal of Materials Chemistry A*, **2013**, 1, 6091	13	1
65	An autonomous photosynthetic device in which all charge carriers derive from surface plasmons. *Nature Nanotechnology*, **2013**, 8, 247-51	28.7	891
64	Persistent misconceptions regarding SERS. *Physical Chemistry Chemical Physics*, **2013**, 15, 5301-11	3.6	232
63	Stabilizing inorganic photoelectrodes for efficient solar-to-chemical energy conversion. *Energy and Environmental Science*, **2013**, 6, 1633	35.4	27
62	Surface-enhanced Raman spectroscopy: Substrates and materials for research and applications. *MRS Bulletin*, **2013**, 38, 607-611	3.2	34
61	High-efficiency panchromatic hybrid Schottky solar cells. *Advanced Materials*, **2013**, 25, 256-60	24	28
60	Reply to "comment on high-efficiency panchromatic hybrid Schottky solar cells". *Advanced Materials*, **2013**, 25, 4826-7	24	0
59	Plasmonic photoanodes for solar water splitting with visible light. *Nano Letters*, **2012**, 12, 5014-9	11.5	430

58	Robust SERS enhancement factor statistics using rotational correlation spectroscopy. *Nano Letters*, **2012**, 12, 2912-7	11.5	41
57	Plasmonic properties of gold nanoparticles separated from a gold mirror by an ultrathin oxide. *Nano Letters*, **2012**, 12, 2088-94	11.5	221
56	Free-surface microfluidics/surface-enhanced Raman spectroscopy for real-time trace vapor detection of explosives. *Analytical Chemistry*, **2012**, 84, 9700-5	7.8	78
55	How the localized surface plasmon became linked with surface-enhanced Raman spectroscopy. *Notes and Records of the Royal Society*, **2012**, 66, 195-203	0.4	22
54	SERS Biotags (SBTs) for the Quantitative Ratiometric Discrimination between Noncancerous and Cancerous Prostate Cells. *Materials Research Society Symposia Proceedings*, **2012**, 1468, 19		1
53	Visualizing chromatographic separation of metal ions on a surface-enhanced Raman active medium. *Nano Letters*, **2011**, 11, 145-50	11.5	100
52	Polarized Raman Scattering from a Single, Segmented SnO2 Wire. *Journal of Physical Chemistry C*, **2011**, 115, 17270-17277	3.8	9
51	Plasmonic photosensitization of a wide band gap semiconductor: converting plasmons to charge carriers. *Nano Letters*, **2011**, 11, 5548-52	11.5	345
50	Gate-tunable surface processes on a single-nanowire field-effect transistor. *Advanced Materials*, **2011**, 23, 2306-12	24	34
49	Reversible tuning of SERS hot spots with aptamers. *Advanced Materials*, **2011**, 23, 4152-6	24	70
48	Applied physics. Hot electrons cross boundaries. *Science*, **2011**, 332, 676-7	33.3	67
47	Quantitative ratiometric discrimination between noncancerous and cancerous prostate cells based on neuropilin-1 overexpression. *Proceedings of the National Academy of Sciences of the United States of America*, **2011**, 108, 16559-64	11.5	57
46	Growth direction determination of a single RuO2 nanowire by polarized Raman spectroscopy. *Applied Physics Letters*, **2010**, 96, 213108	3.4	24
45	Transforming SERS into a dependable platform for ultra-sensitive molecular sensing **2010**,		1
44	Tin-oxide-nanowire-based electronic nose using heterogeneous catalysis as a functionalization strategy. *ACS Nano*, **2010**, 4, 3117-22	16.7	89
43	CdSe nanorods dominate photocurrent of hybrid CdSe-P3HT photovoltaic cell. *ACS Nano*, **2010**, 4, 6132-6	16.7	48
42	Aptamer-mediated surface-enhanced Raman spectroscopy intensity amplification. *Nano Letters*, **2010**, 10, 4181-5	11.5	101
41	Aptatag-based multiplexed assay for protein detection by surface-enhanced Raman spectroscopy. *Small*, **2010**, 6, 1550-7	11	47

40	Mapping local pH in live cells using encapsulated fluorescent SERS nanotags. *Small*, **2010**, 6, 618-22	11	144
39	Catalysis and Alternatives to Liquid Fuels. *Topics in Catalysis*, **2009**, 52, 988-992	2.3	
38	Generalized Approach to SERS-Active Nanomaterials via Controlled Nanoparticle Linking, Polymer Encapsulation, and Small-Molecule Infusion. *Journal of Physical Chemistry C*, **2009**, 113, 13622-13629	3.8	149
37	Rapid, solution-based characterization of optimized SERS nanoparticle substrates. *Journal of the American Chemical Society*, **2009**, 131, 162-9	16.4	91
36	Fe Nanowires in Nanoporous Alumina: Geometric Effect versus Influence of Pore Walls. *Journal of Physical Chemistry C*, **2008**, 112, 2252-2255	3.8	46
35	Nanostructure-Dependent Metal□Insulator Transitions in Vanadium-Oxide Nanowires. *Journal of Physical Chemistry C*, **2008**, 112, 13328-13331	3.8	53
34	High-yield TiO2 nanowire synthesis and single nanowire field-effect transistor fabrication. *Applied Physics Letters*, **2008**, 92, 242111	3.4	44
33	Insight into the Raman shifts and optical absorption changes upon annealing polymer/fullerene solar cells. *Applied Physics Letters*, **2008**, 92, 251912	3.4	41
32	Surface-enhanced Raman spectroscopy for DNA detection by nanoparticle assembly onto smooth metal films. *Journal of the American Chemical Society*, **2007**, 129, 6378-9	16.4	288
31	Surface-Enhanced Raman Spectroscopy and Nanogeometry: The Plasmonic Origin of SERS. *Journal of Physical Chemistry C*, **2007**, 111, 17985-17988	3.8	225
30	Polarized Raman scattering from single GaN nanowires. *Physical Review B*, **2006**, 74,	3.3	97
29	Engineering Nanostructures for Single-Molecule Surface-Enhanced Raman Spectroscopy. *Israel Journal of Chemistry*, **2006**, 46, 283-291	3.4	1
28	Synthesis of Au nanoclusters supported upon a TiO2 nanotube array. *Journal of Materials Research*, **2005**, 20, 1093-1096	2.5	12
27	Surface-enhanced Raman spectroscopy: a brief retrospective. *Journal of Raman Spectroscopy*, **2005**, 36, 485-496	2.3	1369
26	Low Cost Integrated Sensors Utilizing Patterned Nano-Structured Titania Arrays Fabricated Using a Simple Process. *Materials Research Society Symposia Proceedings*, **2004**, 828, 313		
25	Templated Synthesis of Highly Ordered Mesostructured Nanowires and Nanowire Arrays. *Nano Letters*, **2004**, 4, 2337-2342	11.5	190
24	Polarized Surface Enhanced Raman Scattering from Aligned Silver Nanowire Rafts. *Journal of Physical Chemistry B*, **2004**, 108, 12724-12728	3.4	159
23	CHEMICAL SENSING AND CATALYSIS BY ONE-DIMENSIONAL METAL-OXIDE NANOSTRUCTURES. *Annual Review of Materials Research*, **2004**, 34, 151-180	12.8	942

22	Topotactic Thermal Oxidation of Sn Nanowires: Intermediate Suboxides and Core-Shell Metastable Structures. *Nano Letters*, **2003**, 3, 1125-1129	11.5	81
21	Surface enhanced Raman spectroscopy of carbon nanotubules deposited on a silver self-affine fractal surface. *Journal of Applied Physics*, **2002**, 92, 3517-3523	2.5	4
20	SERS and the Single Molecule **2002**, 215-227		157
19	Template-grown high-density nanocapacitor arrays. *Applied Physics Letters*, **2000**, 77, 1722-1724	3.4	47
18	Dynamics of a piezoelectric tuning fork/optical fiber assembly in a near-field scanning optical microscope. *Review of Scientific Instruments*, **2000**, 71, 437-443	1.7	17
17	Photochemical Reactions of Phenazine and Acridine Adsorbed on Silver Colloid Surfaces. *Journal of Physical Chemistry B*, **2000**, 104, 7462-7467	3.4	12
16	Photodecomposition of Diazanaphthalenes Adsorbed on Silver Colloid Surfaces. *Journal of Physical Chemistry B*, **2000**, 104, 3594-3600	3.4	20
15	Nanoscale Electroless Metal Deposition in Aligned Carbon Nanotubes. *Chemistry of Materials*, **1998**, 10, 1963-1967	9.6	147
14	Photochemical Desorption of 4-Vinylbenzoic Acid Adsorbed on Silver Colloid Surfaces. *Journal of Physical Chemistry B*, **1997**, 101, 1649-1654	3.4	17
13	Effect of Surface Geometry on the Photochemical Reaction of 1,10-Phenanthroline Adsorbed on Silver Colloid Surfaces. *Journal of Physical Chemistry B*, **1997**, 101, 8279-8285	3.4	43
12	Adsorbate Photochemistry on a Colloid Surface: Phthalazine on Silver. *The Journal of Physical Chemistry*, **1996**, 100, 805-813		62
11	Electrochemical Fabrication of CdS Nanowire Arrays in Porous Anodic Aluminum Oxide Templates. *The Journal of Physical Chemistry*, **1996**, 100, 14037-14047		579
10	Electrochemical Fabrication of the Nano-Wire Arrays: Template, Materials And Applications. *Materials Research Society Symposia Proceedings*, **1996**, 451, 367		2
9	Light-induced kinetic effects in solids. *Physical Review B*, **1996**, 53, 11388-11402	3.3	51
8	Photon scanning tunneling microscopy images of optical excitations of fractal metal colloid clusters. *Physical Review Letters*, **1994**, 72, 4149-4152	7.4	208
7	Nanowires formed in anodic oxide nanotemplates. *Journal of Materials Research*, **1994**, 9, 1014-1018	2.5	210
6	Direct and roughness-induced indirect transitions in photoemission from silver films. *Surface Science*, **1993**, 297, L84-L90	1.8	10
5	Photochemical decomposition at colloid surfaces. *The Journal of Physical Chemistry*, **1993**, 97, 1678-1683		34

4	Enhanced Raman scattering by fractal clusters: Scale-invariant theory. *Physical Review B*, **1992**, 46, 2821-2830	3.9	239
3	Interference effects in surface enhanced Raman scattering by thin adsorbed layers. *Journal of Chemical Physics*, **1990**, 92, 4600-4608	3.9	15
2	A surface enhanced Raman study of carbon dioxide coadsorption with oxygen and alkali metals on silver surfaces. *Journal of Chemical Physics*, **1989**, 90, 6668-6679	3.9	34
1	Surface-enhanced spectroscopy. *Reviews of Modern Physics*, **1985**, 57, 783-826	40.5	4439