

Martin Moskovits

List of Publications by Year in descending order

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117
papers

20,800
citations

36691

53
h-index

25230

113
g-index

121
all docs

121
docs citations

121
times ranked

22097
citing authors

#	ARTICLE	IF	CITATIONS
1	Doping and interface engineering in a sandwich $\text{Ti}_3\text{C}_2\text{T}_x/\text{MoS}_2/\text{P}$ heterostructure for efficient hydrogen evolution. <i>Journal of Materials Chemistry C</i> , 2022, 10, 4140-4147.	2.7	26
2	Coupling of ultrasmall and small Co P nanoparticles confined in porous SiO_2 matrix for a robust oxygen evolution reaction. <i>Nano Materials Science</i> , 2022, 4, 393-399.	3.9	18
3	A brief history of surface-enhanced Raman spectroscopy and the localized surface plasmon Dedicated to the memory of Richard Van Duyne (1945–2019). <i>Journal of Raman Spectroscopy</i> , 2021, 52, 279-284.	1.2	15
4	Rational Component and Structure Design of Noble-Metal Composites for Optical and Catalytic Applications. <i>Small Structures</i> , 2021, 2, 2000138.	6.9	31
5	Preface to the special issue dedicated to Professor Richard P. Van Duyne (1945–2019). <i>Journal of Raman Spectroscopy</i> , 2021, 52, 263-267.	1.2	2
6	Progress and challenges of ceramics for supercapacitors. <i>Journal of Materiomics</i> , 2021, 7, 1198-1224.	2.8	15
7	Mark Stockman: Evangelist for Plasmonics. <i>ACS Photonics</i> , 2021, 8, 683-698.	3.2	2
8	Plasmonic nanoreactors regulating selective oxidation by energetic electrons and nanoconfined thermal fields. <i>Science Advances</i> , 2021, 7, .	4.7	43
9	Silica-based ceramics toward electromagnetic microwave absorption. <i>Journal of the European Ceramic Society</i> , 2021, 41, 7381-7403.	2.8	70
10	Present and Future of Surface-Enhanced Raman Scattering. <i>ACS Nano</i> , 2020, 14, 28-117.	7.3	2,153
11	Recent Progress and Prospects in Plasmon-Mediated Chemical Reaction. <i>Matter</i> , 2020, 3, 42-56.	5.0	65
12	Accurately Predicting the Radiation Enhancement Factor in Plasmonic Optical Antenna Emitters. <i>Journal of Physical Chemistry Letters</i> , 2020, 11, 1947-1953.	2.1	4
13	Protecting the Nanoscale Properties of Ag Nanowires with a Solution-Grown SnO_2 Monolayer as Corrosion Inhibitor. <i>Journal of the American Chemical Society</i> , 2019, 141, 13977-13986.	6.6	45
14	Quantitative surface-enhanced Raman spectroscopy chemical analysis using citrate as an <i>in situ</i> calibrant. <i>Analyst, The</i> , 2019, 144, 1818-1824.	1.7	13
15	Disentangling charge carrier from photothermal effects in plasmonic metal nanostructures. <i>Nature Communications</i> , 2019, 10, 2671.	5.8	119
16	Interfacial Construction of Plasmonic Nanostructures for the Utilization of the Plasmon-Excited Electrons and Holes. <i>Journal of the American Chemical Society</i> , 2019, 141, 8053-8057.	6.6	68
17	Microfluidic analysis of fentanyl-laced heroin samples by surface-enhanced Raman spectroscopy in a hydrophobic medium. <i>Analyst, The</i> , 2019, 144, 3080-3087.	1.7	29
18	Canada's early contributions to plasmonics. <i>Canadian Journal of Chemistry</i> , 2019, 97, 483-487.	0.6	0

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19	Changes in the structure of electrodeposited manganese oxide water oxidation catalysts revealed by in-operando Raman spectroscopy. <i>Journal of Catalysis</i> , 2019, 371, 287-290.	3.1	8
20	Smart SERS Hot Spots: Single Molecules Can Be Positioned in a Plasmonic Nanojunction Using Host-Guest Chemistry. <i>Journal of the American Chemical Society</i> , 2018, 140, 4705-4711.	6.6	102
21	Merely Measuring the UV-Visible Spectrum of Gold Nanoparticles Can Change Their Charge State. <i>Nano Letters</i> , 2018, 18, 669-674.	4.5	19
22	Screening for canine transitional cell carcinoma (TCC) by SERS-based quantitative urine cytology. <i>Nanomedicine: Nanotechnology, Biology, and Medicine</i> , 2018, 14, 1279-1287.	1.7	8
23	Microwave-Assisted Synthesis of Ultrastable Cu@TiO ₂ Core-Shell Nanowires with Tunable Diameters via a Redox-Hydrolysis Synergetic Process. <i>ChemNanoMat</i> , 2018, 4, 914-918.	1.5	8
24	Dielectrophoretic Nanoparticle Aggregation for On-Demand Surface Enhanced Raman Spectroscopy Analysis. <i>Analytical Chemistry</i> , 2018, 90, 7930-7936.	3.2	40
25	Stackable bipolar pouch cells with corrosion-resistant current collectors enable high-power aqueous electrochemical energy storage. <i>Energy and Environmental Science</i> , 2018, 11, 2865-2875.	15.6	58
26	Detection of Papaverine for the Possible Identification of Illicit Opium Cultivation. <i>Analytical Chemistry</i> , 2017, 89, 1684-1688.	3.2	16
27	SERS – facts, figures and the future. <i>Chemical Society Reviews</i> , 2017, 46, 3864-3865.	18.7	59
28	Properly Structured, Any Metal Can Produce Intense Surface Enhanced Raman Spectra. <i>Journal of Physical Chemistry C</i> , 2017, 121, 14269-14273.	1.5	23
29	Hot Charge Carrier Transmission from Plasmonic Nanostructures. <i>Annual Review of Physical Chemistry</i> , 2017, 68, 379-398.	4.8	218
30	Dual-reporter SERS-based biomolecular assay with reduced false-positive signals. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2017, 114, 9056-9061.	3.3	67
31	Electromagnetic theories of surface-enhanced Raman spectroscopy. <i>Chemical Society Reviews</i> , 2017, 46, 4042-4076.	18.7	1,020
32	Criterion for determining resolving power in the optical near field. <i>Journal of Nanophotonics</i> , 2017, 11, 1.	0.4	3
33	Angle-dependent light scattering by highly uniform colloidal rod-shaped microparticles: Experiment and simulation. <i>Journal of Polymer Science, Part B: Polymer Physics</i> , 2016, 54, 1889-1895.	2.4	3
34	Optimization of Surface-Enhanced Raman Spectroscopy Conditions for Implementation into a Microfluidic Device for Drug Detection. <i>Analytical Chemistry</i> , 2016, 88, 10513-10522.	3.2	65
35	Large Format Surface-Enhanced Raman Spectroscopy Substrate Optimized for Enhancement and Uniformity. <i>ACS Nano</i> , 2016, 10, 7566-7571.	7.3	131
36	A plasmonic liquid junction photovoltaic cell with greatly improved power conversion efficiency. <i>Chemical Communications</i> , 2016, 52, 13460-13462.	2.2	5

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37	Plasmon-Mediated Photocatalytic Decomposition of Formic Acid on Palladium Nanostructures. <i>Advanced Optical Materials</i> , 2016, 4, 1041-1046.	3.6	32
38	Anisotropic Growth of TiO ₂ onto Gold Nanorods for Plasmon-Enhanced Hydrogen Production from Water Reduction. <i>Journal of the American Chemical Society</i> , 2016, 138, 1114-1117.	6.6	422
39	Plasmon-Mediated Reduction of Aqueous Platinum Ions: The Competing Roles of Field Enhancement and Hot Charge Carriers. <i>Journal of Physical Chemistry C</i> , 2016, 120, 6750-6755.	1.5	49
40	The case for plasmon-derived hot carrier devices. <i>Nature Nanotechnology</i> , 2015, 10, 6-8.	15.6	142
41	Panchromatic Photoproduction of H ₂ with Surface Plasmons. <i>Nano Letters</i> , 2015, 15, 2132-2136.	4.5	80
42	Detection of low concentrations of ampicillin in milk. <i>Analyst</i> , 2015, 140, 5003-5005.	1.7	59
43	Rapid Identification by Surface-Enhanced Raman Spectroscopy of Cancer Cells at Low Concentrations Flowing in a Microfluidic Channel. <i>ACS Nano</i> , 2015, 9, 4328-4336.	7.3	177
44	Biotags Based on Surface-Enhanced Raman Can Be as Bright as Fluorescence Tags. <i>Nano Letters</i> , 2015, 15, 6745-6750.	4.5	49
45	Critical Role of Adsorption Equilibria on the Determination of Surface-Enhanced Raman Enhancement. <i>ACS Nano</i> , 2015, 9, 584-593.	7.3	43
46	A surface plasmon enabled liquid-junction photovoltaic cell. <i>Faraday Discussions</i> , 2015, 178, 413-420.	1.6	7
47	Progressive transition from resonant to diffuse reflection in anisotropic colloidal films. <i>Journal of Polymer Science, Part B: Polymer Physics</i> , 2014, 52, 611-617.	2.4	2
48	Hot Carrier Filtering in Solution Processed Heterostructures: A Paradigm for Improving Thermoelectric Efficiency. <i>Advanced Materials</i> , 2014, 26, 2755-2761.	11.1	58
49	On the Plasmonic Photovoltaic. <i>ACS Nano</i> , 2014, 8, 6066-6073.	7.3	152
50	Rapid Detection of Drugs of Abuse in Saliva Using Surface Enhanced Raman Spectroscopy and Microfluidics. <i>ACS Nano</i> , 2013, 7, 7157-7164.	7.3	174
51	Phosphorus stimulated unidirectional growth of TiO ₂ nanostructures. <i>Journal of Materials Chemistry A</i> , 2013, 1, 6091.	5.2	2
52	An autonomous photosynthetic device in which all charge carriers derive from surface plasmons. <i>Nature Nanotechnology</i> , 2013, 8, 247-251.	15.6	1,050
53	Persistent misconceptions regarding SERS. <i>Physical Chemistry Chemical Physics</i> , 2013, 15, 5301.	1.3	261
54	Stabilizing inorganic photoelectrodes for efficient solar-to-chemical energy conversion. <i>Energy and Environmental Science</i> , 2013, 6, 1633.	15.6	32

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55	Surface-enhanced Raman spectroscopy: Substrates and materials for research and applications. MRS Bulletin, 2013, 38, 607-611.	1.7	41
56	High-Efficiency Panchromatic Hybrid Schottky Solar Cells. Advanced Materials, 2013, 25, 256-260.	11.1	29
57	Reply to "Comment on High-Efficiency Panchromatic Hybrid Schottky Solar Cells". Advanced Materials, 2013, 25, 4826-4827.	11.1	1
58	How the localized surface plasmon became linked with surface-enhanced Raman spectroscopy. Notes and Records of the Royal Society, 2012, 66, 195-203.	0.1	25
59	SERS Biotags (SBTs) for the Quantitative Ratiometric Discrimination between Noncancerous and Cancerous Prostate Cells. Materials Research Society Symposia Proceedings, 2012, 1468, 19.	0.1	2
60	Plasmonic Photoanodes for Solar Water Splitting with Visible Light. Nano Letters, 2012, 12, 5014-5019.	4.5	491
61	Robust SERS Enhancement Factor Statistics Using Rotational Correlation Spectroscopy. Nano Letters, 2012, 12, 2912-2917.	4.5	44
62	Plasmonic Properties of Gold Nanoparticles Separated from a Gold Mirror by an Ultrathin Oxide. Nano Letters, 2012, 12, 2088-2094.	4.5	256
63	Free-Surface Microfluidics/Surface-Enhanced Raman Spectroscopy for Real-Time Trace Vapor Detection of Explosives. Analytical Chemistry, 2012, 84, 9700-9705.	3.2	96
64	Hot Electrons Cross Boundaries. Science, 2011, 332, 676-677.	6.0	76
65	Visualizing Chromatographic Separation of Metal Ions on a Surface-Enhanced Raman Active Medium. Nano Letters, 2011, 11, 145-150.	4.5	105
66	Polarized Raman Scattering from a Single, Segmented SnO ₂ Wire. Journal of Physical Chemistry C, 2011, 115, 17270-17277.	1.5	9
67	Plasmonic Photosensitization of a Wide Band Gap Semiconductor: Converting Plasmons to Charge Carriers. Nano Letters, 2011, 11, 5548-5552.	4.5	385
68	Spot the hotspot. Nature, 2011, 469, 307-308.	13.7	33
69	Gate-Tunable Surface Processes on a Single-Nanowire Field-Effect Transistor. Advanced Materials, 2011, 23, 2306-2312.	11.1	37
70	Reversible Tuning of SERS Hot Spots with Aptamers. Advanced Materials, 2011, 23, 4152-4156.	11.1	75
71	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, 16559-16564.	3.3	60
72	Aptag-Based Multiplexed Assay for Protein Detection by Surface-Enhanced Raman Spectroscopy. Small, 2010, 6, 1550-1557.	5.2	48

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73	Mapping Local pH in Live Cells Using Encapsulated Fluorescent SERS Nanotags. <i>Small</i> , 2010, 6, 618-622.	5.2	151
74	Growth direction determination of a single RuO ₂ nanowire by polarized Raman spectroscopy. <i>Applied Physics Letters</i> , 2010, 96, 213108.	1.5	25
75	Transforming SERS into a dependable platform for ultra-sensitive molecular sensing. , 2010, , .		1
76	Tin-Oxide-Nanowire-Based Electronic Nose Using Heterogeneous Catalysis as a Functionalization Strategy. <i>ACS Nano</i> , 2010, 4, 3117-3122.	7.3	99
77	CdSe Nanorods Dominate Photocurrent of Hybrid CdSe/P3HT Photovoltaic Cell. <i>ACS Nano</i> , 2010, 4, 6132-6136.	7.3	50
78	Aptamer-Mediated Surface-Enhanced Raman Spectroscopy Intensity Amplification. <i>Nano Letters</i> , 2010, 10, 4181-4185.	4.5	110
79	Catalysis and Alternatives to Liquid Fuels. <i>Topics in Catalysis</i> , 2009, 52, 988-992.	1.3	0
80	Generalized Approach to SERS-Active Nanomaterials via Controlled Nanoparticle Linking, Polymer Encapsulation, and Small-Molecule Infusion. <i>Journal of Physical Chemistry C</i> , 2009, 113, 13622-13629.	1.5	160
81	Rapid, Solution-Based Characterization of Optimized SERS Nanoparticle Substrates. <i>Journal of the American Chemical Society</i> , 2009, 131, 162-169.	6.6	100
82	Fe Nanowires in Nanoporous Alumina: Geometric Effect versus Influence of Pore Walls. <i>Journal of Physical Chemistry C</i> , 2008, 112, 2252-2255.	1.5	46
83	Nanostructure-Dependent Metal/Insulator Transitions in Vanadium-Oxide Nanowires. <i>Journal of Physical Chemistry C</i> , 2008, 112, 13328-13331.	1.5	58
84	High-yield TiO ₂ nanowire synthesis and single nanowire field-effect transistor fabrication. <i>Applied Physics Letters</i> , 2008, 92, .	1.5	47
85	Insight into the Raman shifts and optical absorption changes upon annealing polymer/fullerene solar cells. <i>Applied Physics Letters</i> , 2008, 92, 251912.	1.5	43
86	Surface-Enhanced Raman Spectroscopy and Nanogeometry: The Plasmonic Origin of SERS. <i>Journal of Physical Chemistry C</i> , 2007, 111, 17985-17988.	1.5	248
87	Surface-Enhanced Raman Spectroscopy for DNA Detection by Nanoparticle Assembly onto Smooth Metal Films. <i>Journal of the American Chemical Society</i> , 2007, 129, 6378-6379.	6.6	302
88	Polarized Raman scattering from single GaN nanowires. <i>Physical Review B</i> , 2006, 74, .	1.1	107
89	Engineering Nanostructures for Single-Molecule Surface-Enhanced Raman Spectroscopy. <i>Israel Journal of Chemistry</i> , 2006, 46, 283-291.	1.0	1
90	Synthesis of Au nanoclusters supported upon a TiO ₂ nanotube array. <i>Journal of Materials Research</i> , 2005, 20, 1093-1096.	1.2	15

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91	Surface-enhanced Raman spectroscopy: a brief retrospective. <i>Journal of Raman Spectroscopy</i> , 2005, 36, 485-496.	1.2	1,538
92	Low Cost Integrated Sensors Utilizing Patterned Nano-Structured Titania Arrays Fabricated Using a Simple Process. <i>Materials Research Society Symposia Proceedings</i> , 2004, 828, 313.	0.1	0
93	Templated Synthesis of Highly Ordered Mesostructured Nanowires and Nanowire Arrays. <i>Nano Letters</i> , 2004, 4, 2337-2342.	4.5	205
94	Polarized Surface Enhanced Raman Scattering from Aligned Silver Nanowire Rafts. <i>Journal of Physical Chemistry B</i> , 2004, 108, 12724-12728.	1.2	166
95	CHEMICAL SENSING AND CATALYSIS BY ONE-DIMENSIONAL METAL-OXIDE NANOSTRUCTURES. <i>Annual Review of Materials Research</i> , 2004, 34, 151-180.	4.3	999
96	Topotactic Thermal Oxidation of Sn Nanowires: Intermediate Suboxides and Core-Shell Metastable Structures. <i>Nano Letters</i> , 2003, 3, 1125-1129.	4.5	87
97	Surface enhanced Raman spectroscopy of carbon nanotubes deposited on a silver self-affine fractal surface. <i>Journal of Applied Physics</i> , 2002, 92, 3517-3523.	1.1	4
98	SERS and the Single Molecule. , 2002, , 215-227.		177
99	Template-grown high-density nanocapacitor arrays. <i>Applied Physics Letters</i> , 2000, 77, 1722-1724.	1.5	54
100	Dynamics of a piezoelectric tuning fork/optical fiber assembly in a near-field scanning optical microscope. <i>Review of Scientific Instruments</i> , 2000, 71, 437-443.	0.6	24
101	Photochemical Reactions of Phenazine and Acridine Adsorbed on Silver Colloid Surfaces. <i>Journal of Physical Chemistry B</i> , 2000, 104, 7462-7467.	1.2	16
102	Photodecomposition of Dizanaphthalenes Adsorbed on Silver Colloid Surfaces. <i>Journal of Physical Chemistry B</i> , 2000, 104, 3594-3600.	1.2	25
103	Nanoscale Electroless Metal Deposition in Aligned Carbon Nanotubes. <i>Chemistry of Materials</i> , 1998, 10, 1963-1967.	3.2	157
104	Photochemical Desorption of 4-Vinylbenzoic Acid Adsorbed on Silver Colloid Surfaces. <i>Journal of Physical Chemistry B</i> , 1997, 101, 1649-1654.	1.2	20
105	Effect of Surface Geometry on the Photochemical Reaction of 1,10-Phenanthroline Adsorbed on Silver Colloid Surfaces. <i>Journal of Physical Chemistry B</i> , 1997, 101, 8279-8285.	1.2	45
106	Electrochemical Fabrication of CdS Nanowire Arrays in Porous Anodic Aluminum Oxide Templates. <i>The Journal of Physical Chemistry</i> , 1996, 100, 14037-14047.	2.9	641
107	Electrochemical Fabrication of the Nano-Wire Arrays: Template, Materials And Applications. <i>Materials Research Society Symposia Proceedings</i> , 1996, 451, 367.	0.1	2
108	Light-induced kinetic effects in solids. <i>Physical Review B</i> , 1996, 53, 11388-11402.	1.1	53

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109	Adsorbate Photochemistry on a Colloid Surface: Phthalazine on Silver. The Journal of Physical Chemistry, 1996, 100, 805-813.	2.9	70
110	Photon scanning tunneling microscopy images of optical excitations of fractal metal colloid clusters. Physical Review Letters, 1994, 72, 4149-4152.	2.9	235
111	Nanowires formed in anodic oxide nanotemplates. Journal of Materials Research, 1994, 9, 1014-1018.	1.2	233
112	Direct and roughness-induced indirect transitions in photoemission from silver films. Surface Science, 1993, 297, L84-L90.	0.8	10
113	Photochemical decomposition at colloid surfaces. The Journal of Physical Chemistry, 1993, 97, 1678-1683.	2.9	36
114	Enhanced Raman scattering by fractal clusters: Scale-invariant theory. Physical Review B, 1992, 46, 2821-2830.	1.1	260
115	Interference effects in surface enhanced Raman scattering by thin adsorbed layers. Journal of Chemical Physics, 1990, 92, 4600-4608.	1.2	15
116	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.	1.2	38
117	Surface-enhanced spectroscopy. Reviews of Modern Physics, 1985, 57, 783-826.	16.4	4,950