Sumeet Mahajan

List of Publications by Citations

104 papers	4,317 citations	37 h-index	63 g-index
124 ext. papers	4,879 ext. citations	6.7 avg, IF	5.46 L-index

#	Paper	IF	Citations
104	Mimicking the colourful wing scale structure of the Papilio blumei butterfly. *Nature Nanotechnology*, **2010**, 5, 511-5	28.7	301
103	Precise subnanometer plasmonic junctions for SERS within gold nanoparticle assemblies using cucurbit[n]uril "glue". *ACS Nano*, **2011**, 5, 3878-87	16.7	272
102	Localized and delocalized plasmons in metallic nanovoids. *Physical Review B*, **2006**, 74,	3.3	221
101	SERS at structured palladium and platinum surfaces. *Journal of the American Chemical Society*, **2007**, 129, 7399-406	16.4	168
100	Understanding Plasmons in Nanoscale Voids. *Nano Letters*, **2007**, 7, 2094-2100	11.5	163
99	SERS-melting: a new method for discriminating mutations in DNA sequences. *Journal of the American Chemical Society*, **2008**, 130, 15589-601	16.4	151
98	Intracellular SERS nanoprobes for distinction of different neuronal cell types. *Nano Letters*, **2013**, 13, 2463-70	11.5	124
97	Quantitative SERS using the sequestration of small molecules inside precise plasmonic nanoconstructs. *Nano Letters*, **2012**, 12, 5924-8	11.5	123
96	Surface enhanced coherent anti-stokes Raman scattering on nanostructured gold surfaces. *Nano Letters*, **2011**, 11, 5339-43	11.5	110
95	Tuning plasmons on nano-structured substrates for NIR-SERS. *Physical Chemistry Chemical Physics*, **2007**, 9, 104-9	3.6	99
94	Single molecule SERS and detection of biomolecules with a single gold nanoparticle on a mirror junction. *Analyst, The*, **2013**, 138, 4574-8	5	98
93	Understanding the Surface-Enhanced Raman Spectroscopy Background. *Journal of Physical Chemistry C*, **2010**, 114, 7242-7250	3.8	96
92	Metal oxide nanoparticle mediated enhanced Raman scattering and its use in direct monitoring of interfacial chemical reactions. *Nano Letters*, **2012**, 12, 4242-6	11.5	95
91	Nanostructured Calcite Single Crystals with Gyroid Morphologies. *Advanced Materials*, **2009**, 21, 3928-3932	24	94
90	Reproducible Deep-UV SERRS on Aluminum Nanovoids. *Journal of Physical Chemistry Letters*, **2013**, 4, 1449-52	6.4	83
89	Reproducible SERRS from structured gold surfaces. *Physical Chemistry Chemical Physics*, **2007**, 9, 6016-20	3.6	82
88	Raman Spectroscopy: An Emerging Tool in Neurodegenerative Disease Research and Diagnosis. *ACS Chemical Neuroscience*, **2018**, 9, 404-420	5.7	77

87	Nanoparticles and intracellular applications of surface-enhanced Raman spectroscopy. *Analyst, The*, **2016**, 141, 5037-55	5	76
86	Relating SERS Intensity to Specific Plasmon Modes on Sphere Segment Void Surfaces. *Journal of Physical Chemistry C*, **2009**, 113, 9284-9289	3.8	72
85	In situ SERS monitoring of photochemistry within a nanojunction reactor. *Nano Letters*, **2013**, 13, 5985-90	11.5	70
84	Enhancing solar cells with localized plasmons in nanovoids. *Optics Express*, **2011**, 19, 11256-63	3.3	70
83	Characterization and Visualization of Vesicles in the Endo-Lysosomal Pathway with Surface-Enhanced Raman Spectroscopy and Chemometrics. *ACS Nano*, **2016**, 10, 307-16	16.7	67
82	Easily coupled whispering gallery plasmons in dielectric nanospheres embedded in gold films. *Physical Review Letters*, **2006**, 97, 137401	7.4	61
81	Immobilization of antibodies on polyaniline films and its application in a piezoelectric immunosensor. *Analytical Chemistry*, **2006**, 78, 8368-73	7.8	60
80	Observing Single Molecules Complexing with Cucurbit[7]uril through Nanogap Surface-Enhanced Raman Spectroscopy. *Journal of Physical Chemistry Letters*, **2016**, 7, 704-10	6.4	57
79	Gold nanoparticles explore cells: cellular uptake and their use as intracellular probes. *Methods*, **2014**, 68, 354-63	4.6	53
78	Raman and SERS spectroscopy of cucurbit[n]urils. *Physical Chemistry Chemical Physics*, **2010**, 12, 10429-33	3.6	53
77	Single nanoparticle SERS probes of ion intercalation in metal-oxide electrodes. *Nano Letters*, **2014**, 14, 495-8	11.5	48
76	Nanoscale dysregulation of collagen structure-function disrupts mechano-homeostasis and mediates pulmonary fibrosis. *ELife*, **2018**, 7,	8.9	48
75	Surface-enhanced Raman spectroscopy of CdSe quantum dots on nanostructured plasmonic surfaces. *Applied Physics Letters*, **2009**, 95, 141111	3.4	45
74	Electrodeposition of highly ordered macroporous iridium oxide through self-assembled colloidal templates. *Journal of Materials Chemistry*, **2009**, 19, 3855		45
73	Hierarchical electrohydrodynamic structures for surface-enhanced Raman scattering. *Advanced Materials*, **2012**, 24, OP175-80, OP174	24	43
72	Interaction of metallic nanoparticles with dielectric substrates: effect of optical constants. *Nanotechnology*, **2013**, 24, 035201	3.4	41
71	Improved electrochromic performance in inverse opal vanadium oxide films. *Journal of Materials Chemistry*, **2010**, 20, 7131		39
70	Stretchable metal-elastomer nanovoids for tunable plasmons. *Applied Physics Letters*, **2009**, 95, 154103	3.4	39

69	Near-Field Plasmonics of an Individual Dielectric Nanoparticle above a Metallic Substrate. *Journal of Physical Chemistry C*, **2013**, 117, 7784-7790	3.8	38
68	EC-AFM investigation of reversible volume changes with electrode potential in polyaniline. *Journal of Electroanalytical Chemistry*, **2009**, 625, 16-26	4.1	38
67	The histone deacetylase inhibitor, romidepsin, as a potential treatment for pulmonary fibrosis. *Oncotarget*, **2017**, 8, 48737-48754	3.3	36
66	Increasing the open-circuit voltage of photoprotein-based photoelectrochemical cells by manipulation of the vacuum potential of the electrolytes. *ACS Nano*, **2012**, 6, 9103-9	16.7	35
65	meso-Aryl sapphyrins with heteroatoms; synthesis, characterization, spectral and electrochemical properties. *Journal of the Chemical Society Perkin Transactions II*, **1999**, 961-968		35
64	UV SERS at well ordered Pd sphere segment void (SSV) nanostructures. *Physical Chemistry Chemical Physics*, **2009**, 11, 1023-6	3.6	34
63	Optimizing SERS from Gold Nanoparticle Clusters: Addressing the Near Field by an Embedded Chain Plasmon Model. *Journal of Physical Chemistry C*, **2016**, 120, 10512-10522	3.8	33
62	Simple Composite Dipole Model for the Optical Modes of Strongly-Coupled Plasmonic Nanoparticle Aggregates. *Journal of Physical Chemistry C*, **2012**, 116, 25044-25051	3.8	30
61	Optimising superoscillatory spots for far-field super-resolution imaging. *Optics Express*, **2018**, 26, 8095-8112	3.3	29
60	Rescue from tau-induced neuronal dysfunction produces insoluble tau oligomers. *Scientific Reports*, **2015**, 5, 17191	4.9	25
59	Engineering SERS via absorption control in novel hybrid Ni/Au nanovoids. *Optics Express*, **2009**, 17, 13298-308	3.3	25
58	Raman spectroscopy and coherent anti-Stokes Raman scattering imaging: prospective tools for monitoring skeletal cells and skeletal regeneration. *Journal of the Royal Society Interface*, **2016**, 13,	4.1	25
57	Synthesis of meso-substituted core modified expanded porphyrins; effect of acid catalysts on the cyclization. *Tetrahedron Letters*, **1998**, 39, 1961-1964	2	24
56	Surfactant protein A (SP-A) inhibits agglomeration and macrophage uptake of toxic amine modified nanoparticles. *Nanotoxicology*, **2015**, 9, 952-62	5.3	22
55	CARS based label-free assay for assessment of drugs by monitoring lipid droplets in tumour cells. *Journal of Biophotonics*, **2014**, 7, 906-13	3.1	22
54	One pot synthesis of core modified expanded porphyrins. *Tetrahedron Letters*, **1998**, 39, 9249-9252	2	22
53	Theory of SERS enhancement: general discussion. *Faraday Discussions*, **2017**, 205, 173-211	3.6	21
52	Disentangling the Peak and Background Signals in Surface-Enhanced Raman Scattering. *Journal of Physical Chemistry C*, **2012**, 116, 6184-6190	3.8	21

51	Optimized Vertical Carbon Nanotube Forests for Multiplex Surface-Enhanced Raman Scattering Detection. *Journal of Physical Chemistry Letters*, **2012**, 3, 3486-92	6.4	21
50	Coherent anti-Stokes Raman scattering for label-free biomedical imaging. *Journal of Optics (United Kingdom)*, **2013**, 15, 094006	1.7	19
49	Detection of early osteogenic commitment in primary cells using Raman spectroscopy. *Analyst, The*, **2017**, 142, 1962-1973	5	18
48	The Use of an Electroactive Marker as a SERS Label in an E-melting Mutation Discrimination Assay. *Electroanalysis*, **2009**, 21, 2190-2197	3	18
47	Tracking adipogenic differentiation of skeletal stem cells by label-free chemically selective imaging. *Chemical Science*, **2015**, 6, 7089-7096	9.4	17
46	Tunable Microstructured Surface-Enhanced Raman Scattering Substrates via Electrohydrodynamic Lithography. *Journal of Physical Chemistry Letters*, **2013**, 4, 4153-4159	6.4	17
45	Single Nanoparticle-Based Heteronanojunction as a Plasmon Ruler for Measuring Dielectric Thin Films. *Journal of Physical Chemistry Letters*, **2015**, 6, 2282-6	6.4	16
44	Direct visualization of symmetry breaking during janus nanoparticle formation. *Small*, **2012**, 8, 2698-703	11	16
43	SERS from two-tier sphere segment void substrates. *Physical Chemistry Chemical Physics*, **2011**, 13, 16661-5	3.5	16
42	Identification of microplastics in a large water volume by integrated holography and Raman spectroscopy. *Applied Optics*, **2020**, 59, 5073-5078	1.7	16
41	SERS in biology/biomedical SERS: general discussion. *Faraday Discussions*, **2017**, 205, 429-456	3.6	15
40	Multimodal spectral focusing CARS and SFG microscopy with a tailored coherent continuum from a microstructured fiber. *Applied Physics B: Lasers and Optics*, **2020**, 126, 1	1.9	14
39	Optical fibre-tip probes for SERS: numerical study for design considerations. *Optics Express*, **2018**, 26, 15539-15550	3.3	14
38	Optical nonlinearities in chemically synthesized and femtosecond laser fabricated gold nanoparticle colloidal solutions. *Optics and Laser Technology*, **2021**, 139, 107008	4.2	14
37	Tuneable Metamaterial-like Platforms for Surface-Enhanced Raman Scattering via Three-Dimensional Block Co-polymer-Based Nanoarchitectures. *ACS Applied Materials & Interfaces*, **2019**, 11, 14437-14444	9.5	13
36	Solvent-resistant ultraflat gold using liquid glass. *Langmuir*, **2012**, 28, 1347-50	4	13
35	Visualizing electromagnetic fields at the nanoscale by single molecule localization. *Nano Letters*, **2015**, 15, 3217-23	11.5	12
34	Tuning plasmons layer-by-layer for quantitative colloidal sensing with surface-enhanced Raman spectroscopy. *Nanoscale*, **2018**, 10, 7138-7146	7.7	12

33	Ground and Excited State Dynamics of Core-modified Normal and Expanded Porphyrins. *Journal of Porphyrins and Phthalocyanines*, **1998**, 02, 305-314	1.8	12
32	Live-imaging of Bioengineered Cartilage Tissue using Multimodal Non-linear Molecular Imaging. *Scientific Reports*, **2019**, 9, 5561	4.9	11
31	Mapping gigahertz vibrations in a plasmonic phononic crystal. *New Journal of Physics*, **2013**, 15, 023013	2.9	11
30	Serum Raman spectroscopy as a diagnostic tool in patients with Huntington's disease. *Chemical Science*, **2020**, 11, 525-533	9.4	10
29	Ultrasensitive and towards single molecule SERS: general discussion. *Faraday Discussions*, **2017**, 205, 291-330	3.6	9
28	Analytical SERS: general discussion. *Faraday Discussions*, **2017**, 205, 561-600	3.6	9
27	Near-field optical enhancement by lead-sulfide quantum dots and metallic nanoparticles for SERS. *Journal of Raman Spectroscopy*, **2013**, 44, 1292-1298	2.3	9
26	Hepatic Steatosis Accompanies Pulmonary Alveolar Proteinosis. *American Journal of Respiratory Cell and Molecular Biology*, **2017**, 57, 448-458	5.7	8
25	Simple time weighted average level air-monitoring method for sulfur mustard in work places. *Journal of Chromatography A*, **2001**, 907, 229-34	4.5	8
24	Conformational Evolution of Molecular Signatures during Amyloidogenic Protein Aggregation. *ACS Chemical Neuroscience*, **2019**, 10, 4593-4611	5.7	7
23	Regulation of the Bone Vascular Network is Sexually Dimorphic. *Journal of Bone and Mineral Research*, **2019**, 34, 2117-2132	6.3	7
22	Coherent anti-Stokes Raman scattering (CARS) spectroscopy in Caenorhabditis elegans and Globodera pallida: evidence for an ivermectin-activated decrease in lipid stores. *Pest Management Science*, **2017**, 73, 2550-2558	4.6	7
21	What do we actually see in intracellular SERS? Investigating nanosensor-induced variation. *Faraday Discussions*, **2017**, 205, 409-428	3.6	7
20	Wavelength modulated surface enhanced (resonance) Raman scattering for background-free detection. *Analyst, The*, **2013**, 138, 2816-20	5	7
19	Ge on Si waveguide mid-infrared absorption spectroscopy of proteins and their aggregates. *Biomedical Optics Express*, **2020**, 11, 4714-4722	3.5	7
18	Quantitative temporal interrogation in 3D of bioengineered human cartilage using multimodal label-free imaging. *Integrative Biology (United Kingdom)*, **2018**, 10, 635-645	3.7	7
17	Surfactant-free coating of thiols on gold nanoparticles using sonochemistry: a study of competing processes. *Ultrasonics Sonochemistry*, **2014**, 21, 1886-92	8.9	6
16	Raman spectroscopy links differentiating osteoblast matrix signatures to pro-angiogenic potential. *Matrix Biology Plus*, **2020**, 5, 100018	5.1	6

15	Raman Scattering Techniques for Defense and Security Applications. *Analytical Chemistry*, **2021**, 93, 417-439	7.4	5
14	Standing-wave-excited multiplanar fluorescence in a laser scanning microscope reveals 3D information on red blood cells. *Scientific Reports*, **2014**, 4, 7359	4.9	4
13	Conformational fingerprinting of tau variants and strains by Raman spectroscopy. *RSC Advances*, **2021**, 11, 8899-8915	3.7	4
12	High-power, high-efficiency, all-fiberized-laser-pumped, 260-nm, deep-UV laser for bacterial deactivation. *Optics Express*, **2021**, 29, 42485	3.3	3
11	Antibiotic-Loaded Polymersomes for Clearance of Intracellular. *ACS Nano*, **2021**,	16.7	2
10	Label-free and Multimodal Second Harmonic Generation Light Sheet Microscopy		2
9	Superresolved polarization-enhanced second-harmonic generation for direct imaging of nanoscale changes in collagen architecture. *Optica*, **2021**, 8, 674-685	8.6	2
8	Selective Imaging of Microplastic and Organic Particles in Flow by Multimodal Coherent Anti-Stokes Raman Scattering and Two-Photon Excited Autofluorescence Analysis. *Analytical Chemistry*, **2021**, 93, 5234-5240	7.8	2
7	Investigating biomechanical noise in neuroblastoma cells using the quartz crystal microbalance. *Journal of the Royal Society Interface*, **2015**, 12,	4.1	1
6	Morphological changes with electrode potential in microtubules and nanowires of Polyaniline: An in-situ EC-AFM study **2007**,		1
5	Widely-tunable synchronisation-free picosecond laser source for multimodal CARS, SHG, and two-photon microscopy. *Biomedical Optics Express*, **2021**, 12, 1010-1019	3.5	1
4	Multiscale molecular profiling of pathological bone resolves sexually dimorphic control of extracellular matrix composition. *DMM Disease Models and Mechanisms*, **2021**,	4.1	1
3	Raman Spectroscopy of Biomolecules at Electrode Surfaces. *Advances in Electrochemical Science and Engineering*, **2012**, 269-334		0
2	Development of Unconventional Nano-Metamaterials from Viral Nano-Building Blocks. *Advanced Optical Materials*,2102784	8.1	0
1	Hierarchical Electrohydrodynamic Structures for Surface-Enhanced Raman Scattering (Adv. Mater. 23/2012). *Advanced Materials*, **2012**, 24, OP174-OP174	24	