Prabhat Verma

List of Publications by Year
in descending order

70	3,421	159358 30	138251 58
papers	citations	h-index	g-index

72	72	72	3987
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Ultrastable tip-enhanced hyperspectral optical nanoimaging for defect analysis of large-sized WS ₂ layers. Science Advances, 2022, 8, .	4.7	16
2	Label-free Raman mapping of saturated and unsaturated fatty acid uptake, storage, and return toward baseline levels in macrophages. Analyst, The, 2021, 146, 1268-1280.	1.7	5
3	Broadband Plasmon Nanofocusing: Comprehensive Study of Broadband Nanoscale Light Source. Journal of Physical Chemistry C, 2021, 125, 6378-6386.	1.5	7
4	Polarization Raman Imaging of Organic Monolayer Islands for Crystal Orientation Analysis. ACS Omega, 2021, 6, 9520-9527.	1.6	1
5	Raman Spectroscopic Nanoimaging of Optical Fields of Metal Nanostructures with a Chemically Modified Metallic Tip. Journal of Physical Chemistry C, 2021, 125, 20397-20404.	1.5	6
6	Plasmon nanofocusing for the suppression of photodegradation in fluorescence imaging using near-field scanning optical microscopy. Optics Communications, 2021, 497, 127206.	1.0	2
7	Probing stacking configurations in a few layered MoS2 by low frequency Raman spectroscopy. Scientific Reports, 2020, 10, 21227.	1.6	18
8	Tip-Enhanced Raman Spectroscopy of Multiwalled Carbon Nanotubes through D-Band Imaging: Implications for Nanoscale Analysis of Interwall Interactions. ACS Applied Nano Materials, 2020, 3, 6001-6008.	2.4	22
9	One-side metal-coated pyramidal cantilever tips for highly reproducible tip-enhanced Raman spectroscopy. Nanotechnology, 2020, 31, 335207.	1.3	13
10	White nanolight source for optical nanoimaging. Science Advances, 2020, 6, eaba4179.	4.7	32
11	Anharmonic Effects in Single-Walled Carbon Nanotubes Analyzed through Low-Temperature Raman Imaging. Journal of Physical Chemistry C, 2020, 124, 6922-6928.	1.5	6
12	Probing inter-molecular interactions of dinaphthothienothiophene (DNTT) molecules in a transistor device using low-frequency Raman spectroscopy. Applied Physics Express, 2020, 13, 022010.	1.1	4
13	Orientation analysis of pentacene molecules in organic field-effect transistor devices using polarization-dependent Raman spectroscopy. Scientific Reports, 2019, 9, 15149.	1.6	13
14	Tapered arrangement of metallic nanorod chains for magnified plasmonic nanoimaging. Scientific Reports, 2019, 9, 2656.	1.6	4
15	Raman Spectroscopic Studies of Dinaphthothienothiophene (DNTT). Materials, 2019, 12, 615.	1.3	8
16	Probing nanoscale defects and wrinkles in MoS2 by tip-enhanced Raman spectroscopic imaging. Applied Physics Letters, 2019, 114, .	1.5	55
17	Plasmonic transfer of near-field light from subwavelength objects through a gold-nanorod chain. Applied Physics Express, 2018, 11, 102001.	1.1	3
18	Tip-Enhanced Raman Spectroscopy: Technique and Recent Advances. Chemical Reviews, 2017, 117, 6447-6466.	23.0	308

#	Article	IF	Citations
19	Highly efficient plasmonic tip design for plasmon nanofocusing in near-field optical microscopy. Nanoscale, 2016, 8, 5634-5640.	2.8	55
20	Superhydrophobic SERS Substrates Based on Silver-Coated Reduced Graphene Oxide Gratings Prepared by Two-Beam Laser Interference. ACS Applied Materials & Interfaces, 2015, 7, 27059-27065.	4.0	38
21	Optical antennas with multiple plasmonic nanoparticles for tip-enhanced Raman microscopy. Nanoscale, 2015, 7, 17424-17433.	2.8	79
22	Silver hierarchical structures grown on microstructured silicon in chip for microfluidic integrated catalyst and SERS detector. Chinese Optics Letters, 2015, 13, 102401-102405.	1.3	3
23	Quantitative Analysis of Polarization-Controlled Tip-Enhanced Raman Imaging through the Evaluation of the Tip Dipole. ACS Nano, 2014, 8, 10187-10195.	7.3	53
24	Evaluation of the interlayer interactions of few layers of graphene. Chemical Physics Letters, 2013, 557, 114-117.	1.2	17
25	Tip-Enhanced Raman Investigation of Extremely Localized Semiconductor-to-Metal Transition of a Carbon Nanotube. Physical Review Letters, 2013, 111, 216101.	2.9	57
26	Far-field free tapping-mode tip-enhanced Raman microscopy. Applied Physics Letters, 2013, 102, .	1.5	35
27	Subnanometric stabilization of plasmon-enhanced optical microscopy. Nanotechnology, 2012, 23, 205503.	1.3	8
28	Polarization-Controlled Raman Microscopy and Nanoscopy. Journal of Physical Chemistry Letters, 2012, 3, 1295-1300.	2.1	35
29	Tunable plasmon resonances in a metallic nanotipâ€“film system. Nanoscale, 2012, 4, 5931.	2.8	23
30	Molecular orientation analysis of organic thin films by zâ€polarization Raman microscope. Journal of Raman Spectroscopy, 2012, 43, 2029-2034.	1.2	30
31	Optimization ofs-Polarization Sensitivity in Apertureless Near-Field Optical Microscopy. International Journal of Optics, 2012, 2012, 1-6.	0.6	8
32	Nanoâ€imaging through tipâ€enhanced Raman spectroscopy: Stepping beyond the classical limits. Laser and Photonics Reviews, 2010, 4, 548-561.	4.4	70
33	Single-mode operation regime for 12-fold index-guiding quasicrystal optical fibers. Applied Physics B: Lasers and Optics, 2010, 100, 499-503.	1.1	14
34	Temporally dynamic photopolymerization of<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mrow><mml:msub><mml:mtext>C</mml:mtext><mml:mrow><mml:mn>60</mml:mn></mml:mrow></mml:msub></mml:mrow></mml:math> encapsulated in single-walled carbon nanotubes. Physical Review B, 2010, 81, .	1.1	3
35	Validity of the V parameter for photonic quasi-crystal fibers. Optics Letters, 2010, 35, 1064.	1.7	28
36	Experimental Identification of Chemical Effects in Surface Enhanced Raman Scattering of 4-Aminothiophenol. Journal of Physical Chemistry C, 2010, 114, 7515-7520.	1.5	100

#	Article	IF	Citations
37	Subnanometric Near-Field Raman Investigation in the Vicinity of a Metallic Nanostructure. Physical Review Letters, 2009, 102, 186101.	2.9	103
38	Halideâ€ionâ€assisted increase of surfaceâ€enhanced hyperâ€Raman scattering: a clear observation of the chemical effect. Journal of Raman Spectroscopy, 2009, 40, 119-120.	1.2	8
39	Nanoâ€scale analysis of graphene layers by tipâ€enhanced nearâ€field Raman spectroscopy. Journal of Raman Spectroscopy, 2009, 40, 1434-1440.	1.2	95
40	Plasmonics for near-field nano-imaging and superlensing. Nature Photonics, 2009, 3, 388-394.	15.6	705
41	Pressure-assisted tip-enhanced Raman imaging at a resolution of a few nanometres. Nature Photonics, 2009, 3, 473-477.	15.6	192
42	Imaging and spectroscopy through plasmonic nano-probe. EPJ Applied Physics, 2009, 46, 20101.	0.3	11
43	Oxygen-assisted shape control in polyol synthesis of silver nanocrystals. Chemical Physics Letters, 2008, 462, 92-95.	1.2	37
44	Subwavelength colour imaging with a metallic nanolens. Nature Photonics, 2008, 2, 438-442.	15.6	206
45	Manipulating full photonic band gaps in two dimensional birefringent photonic crystals. Optics Express, 2008, 16, 14812.	1.7	30
46	Active Control of the Oxidization of a Silicon Cantilever for the Characterization of Silicon-based Semiconductors. Chemistry Letters, 2008, 37, 122-123.	0.7	8
47	Confinement of enhanced field investigated by tip-sample gap regulation in tapping-mode tip-enhanced Raman microscopy. Applied Physics Letters, 2007, 91, .	1.5	51
48	Nanoanalysis of crystalline properties of GaN thin film using tip-enhanced Raman spectroscopy. Applied Physics Letters, 2007, 90, 061906.	1.5	46
49	Temporal Fluctuation of Tip-Enhanced Raman Spectra of Adenine Molecules. Journal of Physical Chemistry C, 2007, 111, 9460-9464.	1.5	84
50	Visualization of localized strain of a crystalline thin layer at the nanoscale by tip-enhanced Raman spectroscopy and microscopy. Journal of Raman Spectroscopy, 2007, 38, 684-696.	1.2	78
51	Optical Nano-Imaging of Materials: Peeping Through Tip-Enhanced Raman Scattering. Chimia, 2006, 60, 770-776.	0.3	9
52	Diameter-selective near-field Raman analysis and imaging of isolated carbon nanotube bundles. Applied Physics Letters, 2006, 88, 093125.	1.5	58
53	Near-field Raman scattering investigation of tip effects onC60molecules. Physical Review B, 2006, 73, .	1.1	75
54	Modeling of Strain Induced by Compositional Variation in Wafer-Shaped Bulk Mixed Crystals. Japanese Journal of Applied Physics, 2004, 43, 5469-5476.	0.8	4

#	Article	IF	Citations
55	Study on polycrystallization in bulk InxGa1â^'xAs using micro-Raman and photoluminescence. Journal of Crystal Growth, 2004, 263, 125-131.	0.7	1
56	Micro-Raman Characterization of Starting Material for Traveling Liquidus Zone Growth Method. Japanese Journal of Applied Physics, 2002, 41, 991-995.	0.8	25
57	Raman Scattering from Wurtzite GaN Bulk Crystal. Materials Science Forum, 2002, 389-393, 1501-1504.	0.3	1
58	The influence of residual strain on Raman scattering in InxGa1â^'xAs single crystals. Materials Science and Engineering B: Solid-State Materials for Advanced Technology, 2002, 91-92, 66-69.	1.7	21
59	Raman studies on GaAs[sub 1â^'x]Bi[sub x] and InAs[sub 1â^'x]Bi[sub x]. Journal of Applied Physics, 2001, 89, 1657.	1.1	56
60	Strain-Induced MI Transition in n-Si and n-Ge: Physical Mechanisms and Transport Phenomena. Physica Status Solidi (B): Basic Research, 2001, 223, 519-523.	0.7	3
61	Confinement effects on the electronic and vibronic properties of CdS[sub 0.65]Se[sub 0.35] nanoparticles grown by thermal annealing. Journal of Applied Physics, 2000, 88, 4109.	1.1	39
62	Size analysis of nanocrystals in semiconductor doped silicate glasses with anomalous small-angle x ray and Raman scattering. Journal of Applied Physics, 2000, 88, 1873-1879.	1.1	22
63	Laser power dependence of the photoluminescence from CdSxSe1-xnanoparticles in glass. Journal of Physics Condensed Matter, 2000, 12, 1097-1110.	0.7	19
64	Phonon sidebands of electronic transitions in Li-doped CdS. Physical Review B, 1999, 59, 15748-15752.	1.1	3
65	Acoustic vibrations of semiconductor nanocrystals in doped glasses. Physical Review B, 1999, 60, 5778-5785.	1.1	95
66	Excitonic effect in resonant Raman scattering by 2LO-phonon in CdS and ZnSe. Physica B: Condensed Matter, 1999, 271, 1-6.	1.3	4
67	Temperature dependence of optical phonon lifetimes in ZnSe. Physica B: Condensed Matter, 1996, 226, 331-337.	1.3	57
68	Raman scattering probe of ion-implanted and pulse laser annealed GaAs. Journal of Applied Physics, 1996, 79, 3921.	1.1	2
69	Raman-scattering probe of anharmonic effects in GaAs. Physical Review B, 1995, 51, 16660-16667.	1.1	88
70	Direct Evidence of Chemical Contribution to Surface-enhanced Hyper-Raman Scattering. Applied Physics Express, 0, 1, 092401.	1.1	6