

# Mikael KÃ¸ll

## List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/2951715/publications.pdf>

Version: 2024-02-01

248  
papers

23,520  
citations

10351

72  
h-index

7931

149  
g-index

249  
all docs

249  
docs citations

249  
times ranked

19321  
citing authors

#	ARTICLE	IF	CITATIONS
1	Direction- and Polarization-Resolved Radiation of Coupled Plasmon Modes on Silver Nanowires. <i>Advanced Photonics Research</i> , 2022, 3, 2100300.	1.7	0
2	Label-free nanofluidic scattering microscopy of size and mass of single diffusing molecules and nanoparticles. <i>Nature Methods</i> , 2022, 19, 751-758.	9.0	30
3	Deep learning in light-matter interactions. <i>Nanophotonics</i> , 2022, 11, 3189-3214.	2.9	10
4	Non-equilibrium properties of an active nanoparticle in a harmonic potential. <i>Nature Communications</i> , 2021, 12, 1902.	5.8	15
5	Microscopic metavehicles powered and steered by embedded optical metasurfaces. <i>Nature Nanotechnology</i> , 2021, 16, 970-974.	15.6	44
6	Aberration-corrected large-scale hybrid metalenses. <i>Optica</i> , 2021, 8, 1405.	4.8	28
7	Metasurface Optical Characterization Using Quadriwave Lateral Shearing Interferometry. <i>ACS Photonics</i> , 2021, 8, 603-613.	3.2	21
8	Nanoplasmonic Nanofluidic Single-Molecule Biosensors for Ultrasmall Sample Volumes. <i>ACS Sensors</i> , 2021, 6, 73-82.	4.0	8
9	Present and Future of Surface-Enhanced Raman Scattering. <i>ACS Nano</i> , 2020, 14, 28-117.	7.3	2,153
10	Nanoscale Inorganic Motors Driven by Light: Principles, Realizations, and Opportunities. <i>Chemical Reviews</i> , 2020, 120, 269-287.	23.0	89
11	Optical Tweezing and Photothermal Properties of Resonant Dielectric and Metallic Nanospheres. <i>ACS Photonics</i> , 2020, 7, 2405-2412.	3.2	7
12	Protein kinase A controls yeast growth in visible light. <i>BMC Biology</i> , 2020, 18, 168.	1.7	17
13	Optical Rotation and Thermometry of Laser Tweezed Silicon Nanorods. <i>Nano Letters</i> , 2020, 20, 6494-6501.	4.5	11
14	Strong Transient Flows Generated by Thermoplasmonic Bubble Nucleation. <i>ACS Nano</i> , 2020, 14, 17468-17475.	7.3	8
15	Large-Scale Metasurfaces Made by an Exposed Resist. <i>ACS Photonics</i> , 2020, 7, 885-892.	3.2	17
16	Selective surface-enhanced Raman scattering detection of Tabun, VX and Cyclosarin nerve agents using 4-pyridine amide oxime functionalized gold nanopillars. <i>Talanta</i> , 2020, 211, 120721.	2.9	18
17	Full optical characterization of single nanoparticles using quantitative phase imaging. <i>Optica</i> , 2020, 7, 243.	4.8	33
18	Optical material anisotropy in high-index transition metal dichalcogenide Mie nanoresonators. <i>Optica</i> , 2020, 7, 680.	4.8	37

#	ARTICLE	IF	CITATIONS
19	Circular dichroism mode splitting and bounds to its enhancement with cavity-plasmon-polaritons. <i>Nanophotonics</i> , 2020, 9, 283-293.	2.9	31
20	Fabrication of Monodisperse Colloids of Resonant Spherical Silicon Nanoparticles: Applications in Optical Trapping and Printing. <i>ACS Photonics</i> , 2019, 6, 2141-2148.	3.2	13
21	Ultrafast Modulation of Thermoplasmonic Nanobubbles in Water. <i>Nano Letters</i> , 2019, 19, 8294-8302.	4.5	13
22	Surface Interactions of Gold Nanoparticles Optically Trapped against an Interface. <i>Journal of Physical Chemistry C</i> , 2019, 123, 16406-16414.	1.5	16
23	Electromagnetic Energy Distribution in Resonant Quasi Porous Silicon Nanostructures. <i>ACS Photonics</i> , 2019, 6, 1706-1714.	3.2	5
24	Transition metal dichalcogenide nanodisks as high-index dielectric Mie nanoresonators. <i>Nature Nanotechnology</i> , 2019, 14, 679-683.	15.6	235
25	Plasmonic versus All-Dielectric Nanoantennas for Refractometric Sensing: A Direct Comparison. <i>ACS Photonics</i> , 2019, 6, 1556-1564.	3.2	51
26	Computational Modelling of Metasurfaces for Strongly Divergent Beams. , 2019, , .		0
27	Solar harvesting based on perfect absorbing all-dielectric nanoresonators on a mirror. <i>Optics Express</i> , 2019, 27, A967.	1.7	15
28	A Gaussian reflective metasurface for advanced wavefront manipulation. <i>Optics Express</i> , 2019, 27, 21069.	1.7	11
29	Optical Forces and the First Kerker Condition. , 2019, , .		0
30	Photothermal DNA Release from Laser-Tweezed Individual Gold Nanomotors Driven by Photon Angular Momentum. <i>ACS Photonics</i> , 2018, 5, 2168-2175.	3.2	15
31	Large-scale Fabrication of Shaped High Index Dielectric Nanoparticles on a Substrate and in Solution. <i>Advanced Optical Materials</i> , 2018, 6, 1701253.	3.6	22
32	Light-Driven Rotation of Plasmonic Nanomotors. <i>Advanced Functional Materials</i> , 2018, 28, 1706272.	7.8	77
33	Antenna-Enhanced Fluorescence Correlation Spectroscopy Resolves Calcium-Mediated Lipid-Lipid Interactions. <i>ACS Nano</i> , 2018, 12, 3272-3279.	7.3	3
34	High index dielectric metasurfaces and colloidal solutions: from fabrication to application. <i>Journal of Physics: Conference Series</i> , 2018, 1092, 012158.	0.3	0
35	Antibody-Antigen Interaction Dynamics Revealed by Analysis of Single-Molecule Equilibrium Fluctuations on Individual Plasmonic Nanoparticle Biosensors. <i>ACS Nano</i> , 2018, 12, 9958-9965.	7.3	34
36	Photothermal Heating of Plasmonic Nanoantennas: Influence on Trapped Particle Dynamics and Colloid Distribution. <i>ACS Photonics</i> , 2018, 5, 2878-2887.	3.2	69

#	ARTICLE	IF	CITATIONS
37	Quantum description and emergence of nonlinearities in strongly coupled single-emitter nanoantenna systems. <i>Physical Review B</i> , 2018, 98, .	1.1	32
38	Construction and Operation of a Light-driven Gold Nanorod Rotary Motor System. <i>Journal of Visualized Experiments</i> , 2018, , .	0.2	3
39	Optically controlled stochastic jumps of individual gold nanorod rotary motors. <i>Physical Review B</i> , 2018, 98, .	1.1	13
40	Counter-propagating Optical Trapping of Resonant Nanoparticles Using a Uniaxial Crystal. <i>Laser and Photonics Reviews</i> , 2018, 12, 1800139.	4.4	6
41	Nanostructured Dielectric Fractals on Resonant Plasmonic Metasurfaces for Selective and Sensitive Optical Sensing of Volatile Compounds. <i>Advanced Materials</i> , 2018, 30, e1800931.	11.1	47
42	Anapole-Enhanced Intrinsic Raman Scattering from Silicon Nanodisks. <i>ACS Photonics</i> , 2018, 5, 2730-2736.	3.2	73
43	Directional scattering and multipolar contributions to optical forces on silicon nanoparticles in focused laser beams. <i>Optics Express</i> , 2018, 26, 29074.	1.7	22
44	Light-sensing via hydrogen peroxide and a peroxiredoxin. <i>Nature Communications</i> , 2017, 8, 14791.	5.8	56
45	Large-Scale Silicon Nanophotonic Metasurfaces with Polarization Independent Near-Perfect Absorption. <i>Nano Letters</i> , 2017, 17, 3054-3060.	4.5	72
46	Multidimensional Hybridization of Dark Surface Plasmons. <i>ACS Nano</i> , 2017, 11, 4265-4274.	7.3	21
47	FRET enhancement close to gold nanoparticles positioned in DNA origami constructs. <i>Nanoscale</i> , 2017, 9, 673-683.	2.8	59
48	Superior LSPR substrates based on electromagnetic decoupling for on-a-chip high-throughput label-free biosensing. <i>Light: Science and Applications</i> , 2017, 6, e17042-e17042.	7.7	57
49	Wavevector-Selective Nonlinear Plasmonic Metasurfaces. <i>Nano Letters</i> , 2017, 17, 5258-5263.	4.5	20
50	Probing Photothermal Effects on Optically Trapped Gold Nanorods by Simultaneous Plasmon Spectroscopy and Brownian Dynamics Analysis. <i>ACS Nano</i> , 2017, 11, 10053-10061.	7.3	34
51	Brownian fluctuations of an optically rotated nanorod. <i>Optica</i> , 2017, 4, 746.	4.8	33
52	Metasurfaces and Colloidal Suspensions Composed of 3D Chiral Si Nanoresonators. <i>Advanced Materials</i> , 2017, 29, 1701352.	11.1	39
53	Thin-Film Amorphous Silicon Nanopillar Solar Cells: An Investigation of the Optical Potential. , 2017, , .		1
54	Fabrication of continuous gradient plasmonic nanostructures. , 2016, , .		0

#	ARTICLE	IF	CITATIONS
55	Metasurfaces: Continuous-Gradient Plasmonic Nanostructures Fabricated by Evaporation on a Partially Exposed Rotating Substrate (Adv. Mater. 23/2016). Advanced Materials, 2016, 28, 4756-4756.	11.1	1
56	A Multiscale Approach to Modeling Plasmonic Nanorod Biosensors. Journal of Physical Chemistry C, 2016, 120, 20692-20701.	1.5	13
57	Sensing (un)binding events via surface plasmons: effects of resonator geometry. , 2016, , .		0
58	Polarization conversion-based molecular sensing using anisotropic plasmonic metasurfaces. Nanoscale, 2016, 8, 10576-10581.	2.8	39
59	Hot Electron Generation and Cathodoluminescence Nanoscopy of Chiral Split Ring Resonators. Nano Letters, 2016, 16, 5183-5190.	4.5	92
60	Continuous-Gradient Plasmonic Nanostructures Fabricated by Evaporation on a Partially Exposed Rotating Substrate. Advanced Materials, 2016, 28, 4658-4664.	11.1	32
61	Detection of nerve gases using surface-enhanced Raman scattering substrates with high droplet adhesion. Nanoscale, 2016, 8, 1305-1308.	2.8	91
62	Directional Light Extinction and Emission in a Metasurface of Tilted Plasmonic Nanopillars. Nano Letters, 2016, 16, 98-104.	4.5	28
63	Evaluating Conditions for Strong Coupling between Nanoparticle Plasmons and Organic Dyes Using Scattering and Absorption Spectroscopy. Journal of Physical Chemistry C, 2016, 120, 20588-20596.	1.5	58
64	Gold Nanorod Rotary Motors Driven by Resonant Light Scattering. ACS Nano, 2015, 9, 12542-12551.	7.3	109
65	Near-Complete Photon Spin Selectivity in a Metasurface of Anisotropic Plasmonic Antennas. Physical Review X, 2015, 5, .	2.8	9
66	Optical Magnetism and Plasmonic Fano Resonances in Metal-Insulator-Metal Oligomers. Nano Letters, 2015, 15, 1952-1958.	4.5	88
67	Schottky barrier formation and band bending revealed by first- principles calculations. Scientific Reports, 2015, 5, 11374.	1.6	75
68	Realizing Strong Light-Matter Interactions between Single-Nanoparticle Plasmons and Molecular Excitons at Ambient Conditions. Physical Review Letters, 2015, 114, 157401.	2.9	419
69	Explosive and chemical threat detection by surface-enhanced Raman scattering: A review. Analytica Chimica Acta, 2015, 893, 1-13.	2.6	252
70	Dimer-on-mirror SERS substrates with attogram sensitivity fabricated by colloidal lithography. Nanoscale, 2015, 7, 9405-9410.	2.8	98
71	Plasmon Enhanced Internal Photoemission in Antenna-Spacer-Mirror Based Au/TiO <sub>2</sub> Nanostructures. Nano Letters, 2015, 15, 4059-4065.	4.5	121
72	Laser Trapping of Colloidal Metal Nanoparticles. ACS Nano, 2015, 9, 3453-3469.	7.3	193

#	ARTICLE	IF	CITATIONS
73	Ultimate Limit of Light Extinction by Nanophotonic Structures. Nano Letters, 2015, 15, 7633-7638.	4.5	25
74	Interactions of Bacterial Lipopolysaccharides with Gold Nanorod Surfaces Investigated by Refractometric Sensing. ACS Applied Materials & Interfaces, 2015, 7, 24915-24925.	4.0	31
75	Refractometric biosensing based on optical phase flips in sparse and short-range-ordered nanoplasmonic layers. Light: Science and Applications, 2014, 3, e220-e220.	7.7	85
76	Plasmonic particles set into fast orbital motion by an optical vortex beam. Optics Express, 2014, 22, 4349.	1.7	55
77	Nanogaps for SERS applications. MRS Bulletin, 2014, 39, 163-168.	1.7	99
78	Directional Nanoplasmonic Antennas for Self-Referenced Refractometric Molecular Analysis. Journal of Physical Chemistry C, 2014, 118, 21075-21080.	1.5	21
79	Quasi-isotropic Surface Plasmon Polariton Generation through Near-Field Coupling to a Penrose Pattern of Silver Nanoparticles. ACS Nano, 2014, 8, 9286-9294.	7.3	8
80	Macroscopic Layers of Chiral Plasmonic Nanoparticle Oligomers from Colloidal Lithography. ACS Photonics, 2014, 1, 1074-1081.	3.2	77
81	A Thermal Plasmonic Sensor Platform: Resistive Heating of Nanohole Arrays. Nano Letters, 2014, 14, 3544-3549.	4.5	41
82	Toward Plasmonic Biosensors Functionalized by a Photoinduced Surface Reaction. Journal of Physical Chemistry C, 2013, 117, 14751-14758.	1.5	8
83	Mutually synchronized bottom-up multi-nanocontact spin-torque oscillators. Nature Communications, 2013, 4, 2731.	5.8	98
84	Plasmon-Enhanced Enzyme-Linked Immunosorbent Assay on Large Arrays of Individual Particles Made by Electron Beam Lithography. ACS Nano, 2013, 7, 8824-8832.	7.3	33
85	Ultrafast Spinning of Gold Nanoparticles in Water Using Circularly Polarized Light. Nano Letters, 2013, 13, 3129-3134.	4.5	129
86	Complete Light Annihilation in an Ultrathin Layer of Gold Nanoparticles. Nano Letters, 2013, 13, 3053-3058.	4.5	24
87	Plasmonic nanoantennas for SERS, directional light, sensing and strong coupling. , 2013, , .		0
88	Approaching the strong coupling limit in single plasmonic nanorods interacting with J-aggregates. Scientific Reports, 2013, 3, 3074.	1.6	210
89	The Yeast Transcription Factor Crz1 Is Activated by Light in a Ca <sup>2+</sup> /Calcineurin-Dependent and PKA-Independent Manner. PLoS ONE, 2013, 8, e53404.	1.1	41
90	A simple model for the resonance shift of localized plasmons due to dielectric particle adhesion. Optics Express, 2012, 20, 524.	1.7	28

#	ARTICLE	IF	CITATIONS
91	Simulating light scattering from supported plasmonic nanowires. Optics Express, 2012, 20, 10816.	1.7	25
92	Fano interference in supported gold nanosandwiches with weakly coupled nanodisks. Optics Express, 2012, 20, 29646.	1.7	4
93	A combination of concave/convex surfaces for field-enhancement optimization: the indented nanocone. Optics Express, 2012, 20, 25201.	1.7	11
94	Directional Scattering and Hydrogen Sensing by Bimetallic Pd@Au Nanoantennas. Nano Letters, 2012, 12, 2464-2469.	4.5	150
95	Diffraction from Arrays of Plasmonic Nanoparticles with Short-Range Lateral Order. ACS Nano, 2012, 6, 9455-9465.	7.3	14
96	An Introduction to Plasmonic Refractive Index Sensing. , 2012, , 1-26.		2
97	Inverse sensitivity. Nature Materials, 2012, 11, 570-571.	13.3	16
98	Editorial: Plasmonic sensors. Annalen Der Physik, 2012, 524, A155-A155.	0.9	0
99	One molecule at a time. Nature Nanotechnology, 2012, 7, 347-349.	15.6	9
100	Optical Tweezers for Raman Spectroscopy. , 2012, , 507-530.		3
101	Fano Interference between Localized Plasmons and Interface Reflections. ACS Nano, 2012, 6, 7533-7539.	7.3	50
102	Laser Manipulation of Plasmonic Nanoparticles for SERS and Sensing. , 2012, , 153-167.		0
103	Angular Distribution of Surface-Enhanced Raman Scattering from Individual Au Nanoparticle Aggregates. ACS Nano, 2011, 5, 2036-2041.	7.3	81
104	Plasmon Hybridization Reveals the Interaction between Individual Colloidal Gold Nanoparticles Confined in an Optical Potential Well. Nano Letters, 2011, 11, 4505-4508.	4.5	46
105	Cascaded logic gates in nanophotonic plasmon networks. Nature Communications, 2011, 2, 387.	5.8	412
106	A bimetallic nanoantenna for directional colour routing. Nature Communications, 2011, 2, 481.	5.8	302
107	Optical response of supported gold nanodisks. Optics Express, 2011, 19, 12093.	1.7	30
108	Mode-specific directional emission from hybridized particle-on-a-film plasmons. Optics Express, 2011, 19, 12856.	1.7	14

#	ARTICLE	IF	CITATIONS
109	Plasmon-Enhanced Colorimetric ELISA with Single Molecule Sensitivity. <i>Nano Letters</i> , 2011, 11, 1826-1830.	4.5	172
110	Continuous light exposure causes cumulative stress that affects the localization oscillation dynamics of the transcription factor Msn2p. <i>Biochimica Et Biophysica Acta - Molecular Cell Research</i> , 2011, 1813, 358-366.	1.9	25
111	Unidirectional Broadband Light Emission from Supported Plasmonic Nanowires. <i>Nano Letters</i> , 2011, 11, 706-711.	4.5	205
112	Symmetry-dependent screening of surface plasmons in ultrathin supported films: The case of Al/Si(111). <i>Physical Review B</i> , 2011, 83, .	1.1	14
113	Metal nanoparticles amplify photodynamic effect on skin cells in vitro. , 2011, , .		2
114	Hole mask colloidal lithography on magnetic multilayers for spin torque applications. <i>Journal of Physics: Conference Series</i> , 2010, 200, 072078.	0.3	1
115	Coloring fluorescence emission with silver nanowires. <i>Applied Physics Letters</i> , 2010, 96, .	1.5	50
116	Sulfate Assimilation Mediates Tellurite Reduction and Toxicity in <i>Saccharomyces cerevisiae</i> . <i>Eukaryotic Cell</i> , 2010, 9, 1635-1647.	3.4	22
117	Optical Forces in Plasmonic Nanoparticle Dimers. <i>Journal of Physical Chemistry C</i> , 2010, 114, 7472-7479.	1.5	74
118	Alignment, Rotation, and Spinning of Single Plasmonic Nanoparticles and Nanowires Using Polarization Dependent Optical Forces. <i>Nano Letters</i> , 2010, 10, 268-273.	4.5	244
119	Optical manipulation of plasmonic nanoparticles using laser tweezers. , 2010, , .		2
120	Investigations on light-induced stress in fluorescence microscopy using nuclear localization of the transcription factor Msn2p as a reporter. <i>FEMS Yeast Research</i> , 2009, 9, 875-884.	1.1	35
121	Unidirectional Ultracompact Optical Nanoantennas. <i>Nano Letters</i> , 2009, 9, 2343-2349.	4.5	162
122	Sensitivity enhancement of nanoplasmonic sensors in low refractive index substrates. <i>Optics Express</i> , 2009, 17, 2015.	1.7	72
123	Resonant optical absorption in graphite nanostructures. <i>Journal of Optics</i> , 2009, 11, 114022.	1.5	12
124	High-Resolution Microspectroscopy of Plasmonic Nanostructures for Miniaturized Biosensing. <i>Analytical Chemistry</i> , 2009, 81, 6572-6580.	3.2	80
125	Ultrahigh sensitivity made simple: nanoplasmonic label-free biosensing with an extremely low limit-of-detection for bacterial and cancer diagnostics. <i>Nanotechnology</i> , 2009, 20, 434015.	1.3	136
126	Intrinsic Fano Interference of Localized Plasmons in Pd Nanoparticles. <i>Nano Letters</i> , 2009, 9, 882-886.	4.5	93

#	ARTICLE	IF	CITATIONS
127	Electron-lattice interactions in the perovskite $\text{LaFeO}_3$ by optical spectroscopy and $\text{LaFeO}_3$ . Physical Review B, 2009, 80, .	1.1	15
128	Optical aggregation of metal nanoparticles in a microfluidic channel for surface-enhanced Raman scattering analysis. Lab on A Chip, 2009, 9, 193-195.	3.1	118
129	Refractometric Sensing Using Propagating versus Localized Surface Plasmons: A Direct Comparison. Nano Letters, 2009, 9, 4428-4433.	4.5	320
130	Plasmonic Au/Co/Au Nanosandwiches with Enhanced Magneto-optical Activity. Small, 2008, 4, 202-205.	5.2	221
131	The sodium pump Ena1p provides mechanistic insight into the salt sensitivity of vacuolar protein sorting mutants. Biochimica Et Biophysica Acta - Molecular Cell Research, 2008, 1783, 974-984.	1.9	18
132	Plasmonic Properties of Silver Trimers with Trigonal Symmetry Fabricated by Electron-Beam Lithography. Journal of Physical Chemistry C, 2008, 112, 14313-14317.	1.5	70
133	Electron-phonon interactions in perovskites containing Fe and Cr studied by Raman scattering using oxygen-isotope and cation substitution. Physical Review B, 2008, 78, .	1.1	68
134	Green's tensor calculations of plasmon resonances of single holes and hole pairs in thin gold films. New Journal of Physics, 2008, 10, 105004.	1.2	27
135	Structural asymmetry and induced optical magnetism in plasmonic nanosandwiches. Journal of the Optical Society of America B: Optical Physics, 2008, 25, 659.	0.9	60
136	Shape effects in the localized surface plasmon resonance of single nanoholes in thin metal films. Optics Express, 2008, 16, 5609.	1.7	65
137	Optically controlled interparticle distance tuning and welding of single gold nanoparticle pairs by photochemical metal deposition. Optics Express, 2008, 16, 12362.	1.7	45
138	Image analysis algorithms for cell contour recognition in budding yeast. Optics Express, 2008, 16, 12943.	1.7	44
139	Enhanced Nanoplasmonic Optical Sensors with Reduced Substrate Effect. Nano Letters, 2008, 8, 3893-3898.	4.5	212
140	Optical forces on interacting plasmonic nanoparticles in a focused Gaussian beam. Physical Review B, 2008, 77, .	1.1	44
141	Photochemical Tuning of Plasmon Resonances in Single Gold Nanoparticles. Journal of Physical Chemistry C, 2008, 112, 4920-4924.	1.5	32
142	Top-down extended meshing algorithm and its applications to Green's tensor nano-optics calculations. Physical Review E, 2007, 75, 046702.	0.8	5
143	Development of automatic image analysis algorithms for protein localization studies in budding yeast. , 2007, , .		0
144	Nanometric control of the distance between plasmonic nanoparticles using optical forces. Optics Express, 2007, 15, 14914.	1.7	28

#	ARTICLE	IF	CITATIONS
145	Sensing Characteristics of NIR Localized Surface Plasmon Resonances in Gold Nanorings for Application as Ultrasensitive Biosensors. <i>Nano Letters</i> , 2007, 7, 1256-1263.	4.5	685
146	Franck-Condon higher order lattice excitations in the $\text{LaFe}_{1-x}\text{Cr}_x\text{O}_3$ ( $x=0, 0.1, 0.5, 0.9, 1.0$ ) perovskites due to Fe-Cr charge transfer effects. <i>Physical Review B</i> , 2007, 75, .	1.1	60
147	Nanohole Plasmons in Optically Thin Gold Films. <i>Journal of Physical Chemistry C</i> , 2007, 111, 1207-1212.	1.5	151
148	Gold-Silica-Gold Nanosandwiches: Tunable Bimodal Plasmonic Resonators. <i>Small</i> , 2007, 3, 294-299.	5.2	131
149	Optical antennas based on coupled nanoholes in thin metal films. <i>Nature Physics</i> , 2007, 3, 884-889.	6.5	98
150	Long-Range Refractive Index Sensing Using Plasmonic Nanostructures. <i>Journal of Physical Chemistry C</i> , 2007, 111, 11806-11810.	1.5	77
151	Resonant coupling between localized plasmons and anisotropic molecular coatings in ellipsoidal metal nanoparticles. <i>Physical Review B</i> , 2006, 73, .	1.1	89
152	Photo-induced transformations in 2,2'-bipyridine-5,5'-diyl-terthiophene thin films on silver. <i>Physical Chemistry Chemical Physics</i> , 2006, 8, 1445.	1.3	10
153	Raman Spectroscopic Studies of Terthiophenes for Molecular Electronics. <i>Journal of Physical Chemistry B</i> , 2006, 110, 25671-25677.	1.2	17
154	Magnetic-field enhancement in gold nanosandwiches. <i>Optics Express</i> , 2006, 14, 8240.	1.7	105
155	Creating Hot Nanoparticle Pairs for Surface-Enhanced Raman Spectroscopy through Optical Manipulation. <i>Nano Letters</i> , 2006, 6, 2639-2641.	4.5	253
156	On the importance of optical forces in surface-enhanced Raman scattering (SERS). <i>Faraday Discussions</i> , 2006, 132, 35-44.	1.6	42
157	Photoinduced nanodots and pinning effects in $\text{Bi}_2\text{Sr}_2\text{CaCu}_2\text{O}_{8+d}$ . <i>Physica C: Superconductivity and Its Applications</i> , 2006, 445-448, 443-446.	0.6	0
158	Plasmonic and Diffractive Coupling in 2D Arrays of Nanoparticles produced by Electron Beam Lithography. <i>Materials Research Society Symposia Proceedings</i> , 2006, 951, 20.	0.1	3
159	Resonant two-phonon Raman scattering as a probe of hole crystal formation in $\text{Sr}_{1-x}\text{Ca}_x\text{Cu}_2\text{O}_4$ . <i>Physical Review B</i> , 2006, 74, .	1.1	6
160	Estimating SERS Properties of Silver-Particle Aggregates through Generalized Mie Theory. , 2006, , 87-103.		21
161	Estimating SERS Properties of Silver-Particle Aggregates through Generalized Mie Theory. , 2006, , 87-104.		0
162	Field enhancement and molecular response in surface-enhanced Raman scattering and fluorescence spectroscopy. <i>Journal of Raman Spectroscopy</i> , 2005, 36, 510-514.	1.2	79

#	ARTICLE	IF	CITATIONS
163	Order-disorder-order phase transitions in the pyrochlore superconductor $\text{Cd}_2\text{Re}_2\text{O}_7$ . <i>Physical Review B</i> , 2005, 71, .	1.1	20
164	In situ resonant Raman scattering and reversible photoinduced structural change in $\text{YBa}_2\text{Cu}_3\text{O}_{6+x}$ . <i>Physical Review B</i> , 2005, 71, .	1.1	5
165	Investigating Narrow Plasmons in Nanoparticle Arrays Fabricated Using Electron Beam Lithography.. <i>Materials Research Society Symposia Proceedings</i> , 2005, 872, 1.	0.1	3
166	Surface-enhanced Raman scattering and fluorescence near metal nanoparticles. <i>Physical Review B</i> , 2005, 72, .	1.1	274
167	A microfluidic system enabling Raman measurements of the oxygenation cycle in single optically trapped red blood cells. <i>Lab on A Chip</i> , 2005, 5, 431-436.	3.1	113
168	Controlling Plasmon Line Shapes through Diffractive Coupling in Linear Arrays of Cylindrical Nanoparticles Fabricated by Electron Beam Lithography. <i>Nano Letters</i> , 2005, 5, 1065-1070.	4.5	416
169	Confined Plasmons in Nanofabricated Single Silver Particle Pairs: Experimental Observations of Strong Interparticle Interactions. <i>Journal of Physical Chemistry B</i> , 2005, 109, 1079-1087.	1.2	488
170	Localized Surface Plasmon Resonance Sensing of Lipid-Membrane-Mediated Biorecognition Events. <i>Journal of the American Chemical Society</i> , 2005, 127, 5043-5048.	6.6	272
171	Plasmons in the Metallic Nanoparticle Film System as a Tunable Impurity Problem. <i>Nano Letters</i> , 2005, 5, 2009-2013.	4.5	149
172	Plasmonic Sensing Characteristics of Single Nanometric Holes. <i>Nano Letters</i> , 2005, 5, 2335-2339.	4.5	248
173	Resonance Raman spectroscopy of optically trapped functional erythrocytes. <i>Journal of Biomedical Optics</i> , 2004, 9, 593.	1.4	88
174	Light scattering in gold nanorings. <i>Journal of Quantitative Spectroscopy and Radiative Transfer</i> , 2004, 89, 11-16.	1.1	32
175	Direct Observation of Heterogeneous Photochemistry on Aggregated Ag Nanocrystals Using Raman Spectroscopy: The Case of Photoinduced Degradation of Aromatic Amino Acids. <i>Journal of Physical Chemistry A</i> , 2004, 108, 4187-4193.	1.1	64
176	Optical Spectroscopy of Nanometric Holes in Thin Gold Films. <i>Nano Letters</i> , 2004, 4, 1003-1007.	4.5	280
177	Unified Treatment of Fluorescence and Raman Scattering Processes near Metal Surfaces. <i>Physical Review Letters</i> , 2004, 93, 243002.	2.9	191
178	Optical Spectroscopy of Single Trapped Metal Nanoparticles in Solution. <i>Nano Letters</i> , 2004, 4, 115-118.	4.5	181
179	Resonance Raman study of the oxygenation cycle of optically trapped single red blood cells in a microfluidic system. , 2004, , .		2
180	Nanoparticle Optics: The Importance of Radiative Dipole Coupling in Two-Dimensional Nanoparticle Arrays. <i>Journal of Physical Chemistry B</i> , 2003, 107, 7337-7342.	1.2	665

#	ARTICLE	IF	CITATIONS
181	Optical Properties of Short Range Ordered Arrays of Nanometer Gold Disks Prepared by Colloidal Lithography. <i>Journal of Physical Chemistry B</i> , 2003, 107, 5768-5772.	1.2	325
182	Polarization-Dependent Surface-Enhanced Raman Spectroscopy of Isolated Silver Nanoaggregates. <i>ChemPhysChem</i> , 2003, 4, 1001-1005.	1.0	170
183	Large-area topography analysis and near-field Raman spectroscopy using bent fibre probes. <i>Journal of Microscopy</i> , 2003, 210, 269-273.	0.8	16
184	Surface-Based Gold-Nanoparticle Sensor for Specific and Quantitative DNA Hybridization Detection. <i>Langmuir</i> , 2003, 19, 10414-10419.	1.6	103
185	Oxygen-ordering superstructures in underdoped $\text{YBa}_2\text{Cu}_3\text{O}_{6+x}$ studied by hard x-ray diffraction. <i>Physical Review B</i> , 2003, 68, .	1.1	72
186	Laser-Induced Growth and Deposition of Noble-Metal Nanoparticles for Surface-Enhanced Raman Scattering. <i>Nano Letters</i> , 2003, 3, 593-596.	4.5	104
187	Optical Properties of Gold Nanorings. <i>Physical Review Letters</i> , 2003, 90, 057401.	2.9	969
188	Importance of substrate and photo-induced effects in Raman spectroscopy of single functional erythrocytes. <i>Journal of Biomedical Optics</i> , 2003, 8, 173.	1.4	43
189	Development of a novel Raman tweezers setup for single-cell studies. , 2003, , .		0
190	<title>Raman imaging and spectroscopy of single functional erythrocytes: a feasibility study</title>. , 2002, 4614, 20.		8
191	Phase-sensitive near-field imaging of metal nanoparticles. <i>Journal of Applied Physics</i> , 2002, 92, 6211-6214.	1.1	37
192	Single-Molecule Surface-Enhanced Raman and Fluorescence Correlation Spectroscopy of Horseradish Peroxidase. <i>Journal of Physical Chemistry B</i> , 2002, 106, 1213-1218.	1.2	135
193	Charge redistribution in $\text{YBa}_2\text{Cu}_3\text{O}_{7-\delta}$ probed by Raman spectroscopy: $\text{CuO}_2$ -plane phonon as a probe of carrier dynamics in the $\text{CuO}_2$ plane. <i>Applied Physics Letters</i> , 2002, 81, 4988-4990.	1.5	1
194	Surface-Plasmon-Enhanced Optical Forces in Silver Nanoaggregates. <i>Physical Review Letters</i> , 2002, 89, 246802.	2.9	456
195	Laser-Induced Growth of Ag Nanoparticles from Aqueous Solutions. <i>ChemPhysChem</i> , 2002, 3, 116-119.	1.0	61
196	Modeling the optical response of nanoparticle-based surface plasmon resonance sensors. <i>Sensors and Actuators B: Chemical</i> , 2002, 87, 244-249.	4.0	161
197	Interparticle coupling effects in nanofabricated substrates for surface-enhanced Raman scattering. <i>Applied Physics Letters</i> , 2001, 78, 802-804.	1.5	418
198	<title>Interparticle coupling effects in surface-enhanced Raman scattering</title>. , 2001, , .		32

#	ARTICLE	IF	CITATIONS
199	Pressure-induced effects in high-Tc superconductors: Raman scattering as a probe of charge-lattice dynamics under high pressure. <i>Physica C: Superconductivity and Its Applications</i> , 2001, 357-360, 142-145.	0.6	7
200	Photoinduced effects and oxygen dynamics in YBa <sub>2</sub> Cu <sub>3</sub> O <sub>x</sub> . <i>Physica C: Superconductivity and Its Applications</i> , 2001, 364-365, 545-548.	0.6	2
201	Multivariate evaluation of doxorubicin surface-enhanced Raman spectra. <i>Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy</i> , 2001, 57, 1907-1915.	2.0	46
202	Feasibility of quantitative determination of doxorubicin with surface-enhanced Raman spectroscopy. <i>Journal of Raman Spectroscopy</i> , 2001, 32, 971-974.	1.2	37
203	Single Molecule Vibrational Fine-structure of Tyrosine Adsorbed on Ag Nano-Crystals. <i>Single Molecules</i> , 2000, 1, 239-248.	1.7	79
204	Resonant Raman scattering and photoinduced metastability in oxygen-deficient YBa <sub>2</sub> Cu <sub>3</sub> O <sub>x</sub> . <i>Physica C: Superconductivity and Its Applications</i> , 2000, 338, 157-160.	0.6	6
205	Raman-active phonons and their doping dependence in spin-ladder Sr <sub>14</sub> Cu <sub>24</sub> O <sub>41</sub> . <i>Physica C: Superconductivity and Its Applications</i> , 2000, 338, 161-165.	0.6	6
206	High-pressure Raman study of Bi <sub>2</sub> Sr <sub>2</sub> CaCu <sub>2</sub> O <sub>8+d</sub> : indications of strong bond-strength hierarchy and pressure-induced charge transfer. <i>Physica C: Superconductivity and Its Applications</i> , 2000, 341-348, 2241-2242.	0.6	4
207	Raman scattering in YBa <sub>2</sub> Cu <sub>4</sub> O <sub>8</sub> and PrBa <sub>2</sub> Cu <sub>4</sub> O <sub>8</sub> – indications of pseudogap effects in non-superconducting PrBa <sub>2</sub> Cu <sub>4</sub> O <sub>8</sub> . <i>Physica C: Superconductivity and Its Applications</i> , 2000, 341-348, 2251-2252.	0.6	0
208	Electromagnetic contributions to single-molecule sensitivity in surface-enhanced Raman scattering. <i>Physical Review E</i> , 2000, 62, 4318-4324.	0.8	1,484
209	Anisotropic dynamical scaling in a weakly 3D system: The case of oxygen ordering in YBa <sub>2</sub> Cu <sub>3</sub> O <sub>6.5</sub> . <i>Europhysics Letters</i> , 2000, 51, 447-453.	0.7	3
210	Lattice and charge excitations in La <sub>1-x</sub> Sr <sub>x</sub> MnO <sub>3</sub> . <i>Physical Review B</i> , 2000, 61, 1193-1197.	1.1	45
211	Raman scattering in YBa <sub>2</sub> Cu <sub>4</sub> O <sub>8</sub> and PrBa <sub>2</sub> Cu <sub>4</sub> O <sub>8</sub> : Indications of pseudogap effects in nonsuperconducting PrBa <sub>2</sub> Cu <sub>4</sub> O <sub>8</sub> . <i>Physical Review B</i> , 2000, 61, 7049-7054.	1.1	16
212	Single Molecule Vibrational Fine-structure of Tyrosine Adsorbed on Ag Nano-Crystals. , 2000, 1, 239.		3
213	Raman-active phonons and their doping dependence in Pb-based cuprate superconductors. <i>Physical Review B</i> , 1999, 60, 6316-6319.	1.1	6
214	Phonon Raman scattering of Bi <sub>2</sub> Sr <sub>2</sub> CaCu <sub>2</sub> O <sub>8+d</sub> under hydrostatic pressure. <i>Physical Review B</i> , 1999, 59, 8447-8450.	1.1	6
215	Superstructure formation and the structural phase diagram of YBa <sub>2</sub> Cu <sub>3</sub> O <sub>6+x</sub> . <i>Physica C: Superconductivity and Its Applications</i> , 1999, 317-318, 259-269.	0.6	73
216	Spectroscopy of Single Hemoglobin Molecules by Surface Enhanced Raman Scattering. <i>Physical Review Letters</i> , 1999, 83, 4357-4360.	2.9	2,270

#	ARTICLE	IF	CITATIONS
217	Optimizing nanofabricated substrates for Surface Enhanced Raman Scattering. Scripta Materialia, 1999, 12, 783-788.	0.5	36
218	Raman-active phonons in $\text{Bi}_2\text{Sr}_2\text{Ca}_{n-1}\text{Cu}_n\text{O}_{2n+4d}$ ( $n=1,2,3$ ) – phonon assignment and charge redistribution effects. Journal of Physics and Chemistry of Solids, 1998, 59, 2003-2005.	1.9	7
219	Resonance Raman scattering as a probe of oxygen dynamics in $\text{YBa}_2\text{Cu}_3\text{O}_x$ . Journal of Physics and Chemistry of Solids, 1998, 59, 1988-1990.	1.9	2
220	Neutron-scattering studies of a polymer electrolyte, $\text{PPO} \cdot \text{LiClO}_4$ . Solid State Ionics, 1998, 113-115, 139-147.	1.3	20
221	$\text{CuO}$ -chain Raman scattering and photoinduced metastability in $\text{YBa}_2\text{Cu}_3\text{O}_x$ . Physical Review B, 1998, 57, R14072-R14075.	1.1	32
222	Raman-active phonons in $\text{Bi}_2\text{Sr}_2\text{Ca}_x\text{La}_x\text{CuO}_{6+d}$ : Phonon assignment and charge-redistribution effects. Physical Review B, 1997, 56, 2847-2851.	1.1	26
223	Screened Raman response in two-dimensional $d_{x^2-y^2}$ -wave superconductors: Relative intensities in different symmetry channels. Physical Review B, 1997, 55, 97-100.	1.1	22
224	Pr substitution in $\text{Y}_2\text{Ba}_4\text{Cu}_6\text{O}_{14+n}$ ( $n = 0, 1, 2$ ) influence on structure and $T_c$ . Physica C: Superconductivity and Its Applications, 1996, 259, 97-108.	0.6	3
225	Change in phonon Raman spectra of $\text{Bi}_2\text{Sr}_2\text{Ca}_x\text{Y}_x\text{Cu}_2\text{O}_8 + d$ induced by hole filling and implications for phonon assignments. Materials Science and Engineering B: Solid-State Materials for Advanced Technology, 1996, 41, 107-110.	1.7	1
226	Effects of Zn substitution for Cu on Raman phonon anomalies in double-chain $\text{YBa}_2\text{Cu}_4\text{O}_8$ superconductors. Physical Review B, 1996, 53, 3566-3572.	1.1	10
227	Raman-active phonons in $\text{Bi}_2\text{Sr}_2\text{Ca}_{1-x}\text{Y}_x\text{Cu}_2\text{O}_{8+d}$ ( $x=0 \rightarrow 1$ ): Effects of hole filling and internal pressure induced by Y doping for Ca, and implications for phonon assignments. Physical Review B, 1996, 53, 11796-11806.	1.1	95
228	Phonon Raman scattering in $\text{Y}_1-x\text{Pr}_x\text{Ba}_2\text{Cu}_4\text{O}_8$ ( $x=0 \rightarrow 1$ ) and $(\text{Y}_1-x\text{Pr}_x)_2\text{Ba}_4\text{Cu}_7\text{O}_{15}$ ( $x=0 \rightarrow 0.6$ ). Physical Review B, 1996, 53, 3590-3597.	1.1	11
229	Influence of Zn-doping on the electronic raman scattering of $\text{YBa}_2\text{Cu}_3\text{O}_7$ . Journal of Physics and Chemistry of Solids, 1995, 56, 1835.	1.9	3
230	Substitution of Pr for Y in $\text{YBa}_2\text{Cu}_4\text{O}_8$ and $\text{YBa}_2\text{Cu}_3\text{O}_{7.5}$ superconductors: Phonon modes and charge transfer effects. Journal of Physics and Chemistry of Solids, 1995, 56, 1833.	1.9	0
231	Superconducting gap in $\text{Pr}_x\text{Y}_{1-x}\text{Ba}_2\text{Cu}_4\text{O}_8$ and $\text{YBa}_2\text{Sr}_y\text{Cu}_4\text{O}_8$ probed by infrared phonon self-energies. Journal of Superconductivity and Novel Magnetism, 1994, 7, 113-116.	0.5	1
232	Anomalous behaviour of the $147 \text{ cm}^{-1}$ $\text{Cu}(2)$ Raman mode in $\text{YBa}_2\text{Cu}_4\text{O}_8$ under high pressure. Signature of change in the electronic state of the $\text{CuO}_2$ plane. Physica C: Superconductivity and Its Applications, 1994, 230, 199-206.	0.6	10
233	Temperature dependence of phonon Raman scattering in $\text{Y}_2\text{Ba}_4\text{Cu}_7\text{O}_{15}$ . Physica C: Superconductivity and Its Applications, 1994, 225, 317-324.	0.6	30
234	Oxygen phonons in orthorhombic and tetragonal $\text{Tl}_2\text{Ba}_2\text{CuO}_6$ investigated by Raman scattering. Physica C: Superconductivity and Its Applications, 1994, 220, 131-137.	0.6	9

#	ARTICLE	IF	CITATIONS
235	Y-123; the influence of various dopant ions on structure and properties. Physica C: Superconductivity and Its Applications, 1994, 235-240, 389-390.	0.6	4
236	Symmetry-dependent phonon interactions in YBa <sub>2</sub> Cu <sub>4</sub> O <sub>8</sub> superconductors: a Raman and infrared spectroscopic study. Physica C: Superconductivity and Its Applications, 1994, 235-240, 1091-1092.	0.6	0
237	Is there a correlation between T <sub>c</sub> and the features of the B <sub>1g</sub> Raman continuum in YBa <sub>2</sub> Cu <sub>3</sub> O <sub>7-δ</sub> ? Physica C: Superconductivity and Its Applications, 1994, 235-240, 1095-1096.	0.6	3
238	Evidence for a scaling of the superconducting gap with T <sub>c</sub> in Pr <sub>x</sub> Y <sub>1-x</sub> Ba <sub>2</sub> Cu <sub>4</sub> O <sub>8</sub> . Solid State Communications, 1993, 87, 907-911.	0.9	10
239	Charge-transfer and compression effects of isomorphous substitutions in YBa <sub>2</sub> Cu <sub>3</sub> O <sub>7</sub> . Physical Review B, 1993, 47, 5359-5366.	1.1	81
240	The effects of Co substitutions for Cu in YBa <sub>2</sub> Cu <sub>3</sub> O <sub>6+x</sub> on the phonon Raman spectrum. Journal of Alloys and Compounds, 1993, 195, 363-366.	2.8	10
241	Structural and physical properties of rare-earth- (R-) substituted RBa <sub>2</sub> Cu <sub>4</sub> O <sub>8-δ</sub> superconductors. Journal of Alloys and Compounds, 1993, 193, 132-134.	2.8	5
242	Polymerized complex synthesis of a pure 93 K Y <sub>2</sub> Ba <sub>4</sub> Cu <sub>7</sub> O <sub>15-δ</sub> superconductor without the need of high oxygen pressure and additive catalysts. Journal of Applied Physics, 1993, 73, 2424-2428.	1.1	31
243	Structure of Y (Pr) Ba <sub>2</sub> Cu <sub>4</sub> O <sub>8</sub> . Physica C: Superconductivity and Its Applications, 1992, 204, 147-154.	0.6	29
244	High-quality ceramics of YBa <sub>2</sub> Cu <sub>4</sub> O <sub>8</sub> from citrate sol-gel precursors sintered at one atmosphere oxygen pressure. Physica C: Superconductivity and Its Applications, 1991, 173, 377-380.	0.6	45
245	Changes in the apical oxygen vibrational frequency and T <sub>c</sub> due to Sr substitution for Ba in YBa <sub>2</sub> Cu <sub>3</sub> O <sub>7-δ</sub> , Tl <sub>2</sub> Ba <sub>2</sub> CaCu <sub>2</sub> O <sub>8-δ</sub> and Tl <sub>2</sub> Ba <sub>2</sub> CuO <sub>6-δ</sub> superconductors. Physica C: Superconductivity and Its Applications, 1991, 185-189, 821-822.	0.6	6
246	Neutron diffraction and Raman spectroscopic studies of Y-123. Physica C: Superconductivity and Its Applications, 1991, 185-189, 893-894.	0.6	3
247	Neutron diffraction studies of TL-2201, TL-2212 and Y-123 doped with strontium. Physica C: Superconductivity and Its Applications, 1991, 185-189, 623-624.	0.6	11
248	Neutron diffraction studies of TL-2201 and TL-2212 doped with lanthanum. Physica C: Superconductivity and Its Applications, 1991, 185-189, 625-626.	0.6	4