Liesbet Lagae

List of Publications by Year
in descending order

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95 papers	4,658 citations	94433 37 h-index	98798 67 g-index
96 all docs	96 docs citations	96 times ranked	7086 citing authors

#	Article	IF	Citations
1	Plasmon Line Shaping Using Nanocrosses for High Sensitivity Localized Surface Plasmon Resonance Sensing. Nano Letters, 2011, 11, 391-397.	9.1	432
2	Electrical detection of confined gap plasmons in metalâ€“insulatorâ€“metal waveguides. Nature Photonics, 2009, 3, 283-286.	31.4	346
3	Specific Cell Targeting with Nanobody Conjugated Branched Gold Nanoparticles for Photothermal Therapy. ACS Nano, 2011, 5, 4319-4328.	14.6	338
4	Boosting the Figure-Of-Merit of LSPR-Based Refractive Index Sensing by Phase-Sensitive Measurements. Nano Letters, 2012, 12, 1655-1659.	9.1	161
5	Gold nanoring as a sensitive plasmonic biosensor for on-chip DNA detection. Applied Physics Letters, 2012, 100, .	3.3	155
6	Unidirectional Side Scattering of Light by a Single-Element Nanoantenna. Nano Letters, 2013, 13, 3843-3849.	9.1	152
7	Nanoscale Origami for 3D Optics. Small, 2011, 7, 1943-1948.	10.0	145
8	High spatial resolution nanoslit SERS for single-molecule nucleobase sensing. Nature Communications, 2018, 9, 1733.	12.8	127
9	Excitation wavelength dependent surface enhanced Raman scattering of 4-aminothiophenol on gold nanorings. Nanoscale, 2012, 4, 1606.	5.6	117
10	Measuring the Electric Charge and Zeta Potential of Nanometer-Sized Objects Using Pyramidal-Shaped Nanopores. Analytical Chemistry, 2012, 84, 8490-8496.	6.5	112
11	Fluorescence Near Gold Nanoparticles for DNA Sensing. Analytical Chemistry, 2011, 83, 1307-1314.	6.5	111
12	Cell manipulation with magnetic particles toward microfluidic cytometry. Journal of Applied Physics, 2009, 105, .	2.5	106
13	All-Dielectric Antenna Wavelength Router with Bidirectional Scattering of Visible Light. Nano Letters, 2016, 16, 4396-4403.	9.1	93
14	Directional Fluorescence Emission by Individual V-Antennas Explained by Mode Expansion. ACS Nano, 2014, 8, 8232-8241.	14.6	84
15	Transverse magnetic mode nonreciprocal propagation in an amplifying AlGaInAsâˆ•InP optical waveguide isolator. Applied Physics Letters, 2006, 88, 071115.	3.3	83
16	Revisiting the Surface Sensitivity of Nanoplasmonic Biosensors. ACS Photonics, 2015, 2, 425-431.	6.6	83
17	Tuning plasmonic interaction between gold nanorings and a gold film for surface enhanced Raman scattering. Applied Physics Letters, 2010, 97, .	3.3	81
18	Localized surface plasmon resonance biosensor integrated with microfluidic chip. Biomedical Microdevices, 2009, 11, 893-901.	2.8	78

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19	Symmetry breaking induced optical properties of gold open shell nanostructures. Optics Express, 2009, 17, 23765.	3.4	75
20	Impact of spacers on the hybridization efficiency of mixed self-assembled DNA/alkanethiol films. Biosensors and Bioelectronics, 2008, 24, 72-77.	10.1	71
21	Observation of plasmonic dipolar anti-bonding mode in silver nanoring structures. Nanotechnology, 2009, 20, 465203.	2.6	67
22	Plasmonic Modes of Metallic Semishells in a Polymer Film. ACS Nano, 2010, 4, 1457-1464.	14.6	66
23	Tuning the Fano Resonance Between Localized and Propagating Surface Plasmon Resonances for Refractive Index Sensing Applications. Plasmonics, 2013, 8, 1379-1385.	3.4	66
24	Mode Parity-Controlled Fano- and Lorentz-like Line Shapes Arising in Plasmonic Nanorods. Nano Letters, 2014, 14, 2322-2329.	9.1	65
25	Three-part differential of unlabeled leukocytes with a compact lens-free imaging flow cytometer. Lab on A Chip, 2015, 15, 1123-1132.	6.0	65
26	300 mm Wafer-level, ultra-dense arrays of Au-capped nanopillars with sub-10 nm gaps as reliable SERS substrates. Nanoscale, 2014, 6, 12391-12396.	5.6	62
27	Experimental demonstration of nonreciprocal amplified spontaneous emission in a CoFe clad semiconductor optical amplifier for use as an integrated optical isolator. Applied Physics Letters, 2004, 85, 3980-3982.	3.3	59
28	Direct Evidence of High Spatial Localization of Hot Spots in Surfaceâ€Enhanced Raman Scattering. Angewandte Chemie - International Edition, 2009, 48, 9932-9935.	13.8	58
29	Manipulation of magnetic particles on chip by magnetophoretic actuation and dielectrophoretic levitation. Applied Physics Letters, 2007, 90, 184109.	3.3	57
30	Electrical Excitation of Confined Surface Plasmon Polaritons in Metallic Slot Waveguides. Nano Letters, 2010, 10, 1429-1432.	9.1	52
31	Biosensing Using Diffractively Coupled Plasmonic Crystals: the Figure of Merit Revisited. Advanced Optical Materials, 2015, 3, 176-181.	7.3	52
32	Magnetic Bead Sensing Platform for the Detection of Proteins. Analytical Chemistry, 2007, 79, 8669-8677.	6.5	48
33	On-chip separation of magnetic particles with different magnetophoretic mobilities. Journal of Applied Physics, 2007, 101, 024913.	2.5	47
34	Focusing Plasmons in Nanoslits for Surfaceâ€Enhanced Raman Scattering. Small, 2009, 5, 2876-2882.	10.0	44
35	Pixel super-resolution for lens-free holographic microscopy using deep learning neural networks. Optics Express, 2019, 27, 13581.	3.4	42
36	Strong location dependent surface enhanced Raman scattering on individual gold semishell and nanobowl particles. Physical Chemistry Chemical Physics, 2010, 12, 11222.	2.8	41

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37	Single Asymmetric Plasmonic Antenna as a Directional Coupler to a Dielectric Waveguide. ACS Photonics, 2017, 4, 1398-1402.	6.6	39
38	Photoresistance Switching of Plasmonic Nanopores. Nano Letters, 2015, 15, 776-782.	9.1	38
39	Shrinking solid-state nanopores using electron-beam-induced deposition. Nanotechnology, 2009, 20, 115302.	2.6	37
40	Sensitive inÂvivo cell detection using size-optimized superparamagnetic nanoparticles. Biomaterials, 2014, 35, 1627-1635.	11.4	37
41	Limiting the protein corona: A successful strategy for inÂvivo active targeting of anti-HER2 nanobody-functionalized nanostars. Biomaterials, 2017, 123, 15-23.	11.4	36
42	Nanoplasmonic Sensors with Various Photonic Coupling Effects for Detecting Different Targets. Journal of Physical Chemistry C, 2015, 119, 29116-29122.	3.1	36
43	Synthetic Antiferromagnetic Nanoparticles as Potential Contrast Agents in MRI. ACS Nano, 2014, 8, 2269-2278.	14.6	33
44	Local Electrical Detection of Single Nanoparticle Plasmon Resonance. Nano Letters, 2007, 7, 703-706.	9.1	32
45	Tuning the interaction between propagating and localized surface plasmons for surface enhanced Raman scattering in water for biomedical and environmental applications. Applied Physics Letters, 2014, 104, 243102.	3.3	31
46	Development of nanostars as a biocompatible tumor contrast agent: toward in vivo SERS imaging. International Journal of Nanomedicine, 2016, Volume 11, 3703-3714.	6.7	30
47	Time-lapse lens-free imaging of cell migration in diverse physical microenvironments. Lab on A Chip, 2016, 16, 3304-3316.	6.0	29
48	Raman fingerprinting of single dielectric nanoparticles in plasmonic nanopores. Nanoscale, 2015, 7, 18612-18618.	5.6	28
49	Measuring Mass of Nanoparticles and Viruses in Liquids with Nanometer-Scale Pores. Analytical Chemistry, 2014, 86, 4637-4641.	6.5	27
50	Micro vapor bubble jet flow for safe and high-rate fluorescence-activated cell sorting. Lab on A Chip, 2017, 17, 1287-1296.	6.0	25
51	Harnessing Plasmon-Induced Ionic Noise in Metallic Nanopores. Nano Letters, 2013, 13, 1724-1729.	9.1	23
52	Accurate label-free 3-part leukocyte recognition with single cell lens-free imaging flow cytometry. Computers in Biology and Medicine, 2018, 96, 147-156.	7.0	23
53	Method for flow measurement in microfluidic channels based on electrical impedance spectroscopy. Microfluidics and Nanofluidics, 2012, 12, 17-23.	2.2	22
54	Enhanced resolution of poly(methyl methacrylate) electron resist by thermal processing. Journal of Vacuum Science & Technology B, 2009, 27, 1915-1918.	1.3	19

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55	Vector separation of particles and cells using an array of slanted open cavities. Lab on A Chip, 2013, 13, 1086.	6.0	18
56	Biosensing with SiO2-covered SPR substrates in a commercial SPR-tool. Sensors and Actuators B: Chemical, 2014, 200, 167-172.	7.8	16
57	Ion Current Rectification, Limiting and Overlimiting Conductances in Nanopores. PLoS ONE, 2015, 10, e0124171.	2.5	15
58	Groove-gratings to optimize the electric field enhancement in a plasmonic nanoslit-cavity. Journal of Applied Physics, 2010, 108, 034319.	2.5	14
59	Label-free genosensor based on immobilized DNA hairpins on gold surface. Biosensors and Bioelectronics, 2011, 26, 3121-3126.	10.1	14
60	Multiplexed site-specific electrode functionalization for multitarget biosensors. Bioelectrochemistry, 2016, 112, 61-66.	4.6	13
61	Integrated Nanophotonic Excitation and Detection of Fluorescent Microparticles. ACS Photonics, 2017, 4, 1937-1944.	6.6	13
62	Detection of DNA Bases and Oligonucleotides in Plasmonic Nanoslits Using Fluidic SERS. IEEE Journal of Selected Topics in Quantum Electronics, 2013, 19, 4600707-4600707.	2.9	12
63	Highly confined surface plasmon polariton resonances in rectangular nanopore cavities. Physica Status Solidi - Rapid Research Letters, 2010, 4, 247-249.	2.4	11
64	Full wetting of plasmonic nanopores through two-component droplets. Chemical Science, 2015, 6, 6564-6571.	7.4	11
65	Probing Local Potentials inside Metallic Nanopores with SERS and Bipolar Electrochemistry. Advanced Optical Materials, 2017, 5, 1600907.	7.3	11
66	A versatile method to fabricate particle-in-cavity plasmonic nanostructures. Journal of Materials Chemistry, 2011, 21, 14394.	6.7	10
67	Assessment of the Theranostic Potential of Gold Nanostarsâ€"A Multimodal Imaging and Photothermal Treatment Study. Nanomaterials, 2020, 10, 2112.	4.1	10
68	Discrimination of specific and non-specific bindings by dielectrophoretic repulsion in on-chip magnetic bio-assays. Biosensors and Bioelectronics, 2009, 24, 2294-2297.	10.1	9
69	Synthesis of PEGylated Magnetic Nanoparticles With Different Core Sizes. IEEE Transactions on Magnetics, 2013, 49, 219-226.	2.1	9
70	Asymmetric plasmonic induced ionic noise in metallic nanopores. Nanoscale, 2016, 8, 12324-12329.	5.6	9
71	Raman scattered photon transmission through a single nanoslit. Applied Physics Letters, 2010, 96, .	3.3	8
72	Local solid-state modification of nanopore surface charges. Nanotechnology, 2010, 21, 335703.	2.6	8

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73	Fast compressive lens-free tomography for 3D biological cell culture imaging. Optics Express, 2020, 28, 26935.	3.4	8
74	Amplifying Waveguide Optical Isolator With an Integrated Electromagnet. IEEE Photonics Technology Letters, 2007, 19, 1949-1951.	2.5	6
75	Reflective lens-free imaging on high-density silicon microelectrode arrays for monitoring and evaluation of in vitro cardiac contractility. Biomedical Optics Express, 2018, 9, 1827.	2.9	5
76	Microscope-on-chip: combining lens-free microscopy with integrated photonics. , 2015, , .		4
77	Robustness of surface-enhanced Raman scattering substrate with a mercaptosilane adhesive layer for in vivo sensing applications. Japanese Journal of Applied Physics, 2015, 54, 067002.	1.5	4
78	Fast and robust Fourier domain-based classification for on-chip lens-free flow cytometry. Optics Express, 2018, 26, 14329.	3.4	4
79	Synthetic Antiferromagnetic Gold Nanoparticles as Bimodal Contrast Agents in MRI and CTâ€”An Experimental In Vitro and In Vivo Study. Pharmaceutics, 2021, 13, 1494.	4.5	4
80	Lab-on-a-chip for the isolation and characterization of circulating tumor cells. , 2010, 2010, 292-4.		3
81	Direct on-chip DNA synthesis using electrochemically modified gold electrodes as solid support. Japanese Journal of Applied Physics, 2018, 57, 04FM01.	1.5	3
82	Capillary stop valve actuation by thermo-pneumatic- pressure for lab-on-chip systems. Microsystem Technologies, 2021, 27, 681-692.	2.0	3
83	3D Nanofabrication: Nanoscale Origami for 3D Optics (Small 14/2011). Small, 2011, 7, 1850-1850.	10.0	1
84	Nano-Scale Electrical Transducers of Surface Plasmons for Integrated Biosensing. , 2012, , 369-384.		1
85	Plasmonic nanoslit for fluidic SERS: A strategy towards genome sequencing. , 2013, , .		1
86	Investigation of the correlation between the bulk and surface sensing performance in plasmonic crystals. , 2014, , .		1
87	Raman spectroscopy and optical trapping of 20 nm polystyrene particles in plasmonic nanopores. , 2014, , .		1
88	Integration of clinical point-of-care requirements in a DNA microarray genotyping test. Biosensors and Bioelectronics, 2014, 61, 605-611.	10.1	1
89	Density controlled nanophotonic waveguide gratings for efficient on-chip out-coupling in the near field (Conference Presentation). , 2016, , .		1
90	Microelectronics-Based Biosensors for the Detection of Proteins and Nucleic Acids. NATO Science for Peace and Security Series C: Environmental Security, 2009, , 319-332.	0.2	1

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91	Study on Localized SERS by Spatially Selective Deposition of Raman Analytes. , 2010, , .		0
92	High Q-factor plasmonic filters in nanoscale metal-insulator-metal waveguides. , 2013, , .		0
93	Unidirectional Scattering and Emission of Light Mediated by a Single-Element Nanoantenna. , 2014, , .		0
94	Nanopore fluidic SERS. , 2014, , .		0
95	Full-wafer in-situ fabrication and packaging of microfluidic flow cytometer with photo-patternable adhesive polymers. Biomedical Microdevices, 2018, 20, 2.	2.8	0