Michel Meunier

List of Publications by Year
in descending order

133 papers	7,258 citations	61945 43 h-index	58549 82 g-index
133 all docs	133 docs citations	133 times ranked	7806 citing authors

#	Article	IF	Citations
1	Porous Auâ€“Ag Nanoparticles from Galvanic Replacement Applied as Singleâ€Particle SERS Probe for Quantitative Monitoring. Small, 2022, 18, e2105209.	5.2	17
2	Nonlinear thermal lensing of high repetition rate ultrafast laser light in plasmonic nano-colloids. Nanophotonics, 2022, 11, 1051-1062.	2.9	3
3	Antibodyâ€Functionalized Gold Nanostarâ€Mediated Onâ€Resonance Picosecond Laser Optoporation for Targeted Delivery of RNA Therapeutics. Small, 2021, 17, e2007577.	5.2	21
4	Formation Pathways of Porous Alloy Nanoparticles through Selective Chemical and Electrochemical Etching. Small, 2021, 17, e2006953.	5.2	14
5	Optical power limiter in the femtosecond filamentation regime. Scientific Reports, 2021, 11, 14270.	1.6	4
6	Multiplexed Plasmonic Nano-Labeling for Bioimaging of Cytological Stained Samples. Cancers, 2021, 13, 3509.	1.7	4
7	Femtosecond nearly resonant self-focusing in gold nanorod colloids. Optics Express, 2021, 29, 39536.	1.7	3
8	Single point single-cell nanoparticle mediated pulsed laser optoporation. Analyst, The, 2020, 145, 523-529.	1.7	17
9	Optical Properties and Applications of Plasmonicâ€Metal Nanoparticles. Advanced Functional Materials, 2020, 30, 2005400.	7.8	265
10	Sensitive and Rapid Cancer Diagnosis with Immunoplasmonic Assay Based on Plasmonic Nanoparticles: Toward Fine-Needle Aspiration Cytology. ACS Applied Nano Materials, 2020, 3, 4171-4177.	2.4	8
11	Threshold conditions for resonant Kerr self-focusing in plasmonic nano-colloids. , 2020, , .		0
12	Multiperiodic nanohole array for high precision sensing. Nanophotonics, 2019, 8, 325-329.	2.9	11
13	Designable nanoplasmonic biomarkers for direct microscopy cytopathology diagnostics. Journal of Biophotonics, 2019, 12, e201900166.	1.1	8
14	Laserâ€induced plasmonâ€mediated treatment of retinoblastoma in viscous vitreous phantom. Journal of Biophotonics, 2019, 12, e201900193.	1.1	7
15	Cost-effective side-illumination darkfield nanoplasmonic marker microscopy. Analyst, The, 2019, 144, 1303-1308.	1.7	9
16	Neuropilin-1 expression in adipose tissue macrophages protects against obesity and metabolic syndrome. Science Immunology, 2018, 3, .	5.6	41
17	A needle-like optofluidic probe enables targeted intracellular delivery by confining light-nanoparticle interaction on single cell. Nanoscale, 2018, 10, 21871-21878.	2.8	3
18	In Vivo Laser-Mediated Retinal Ganglion Cell Optoporation Using K_V1.1 Conjugated Gold Nanoparticles. Nano Letters, 2018, 18, 6981-6988.	4.5	44

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19	Extreme IR absorption in group IV-SiGeSn core-shell nanowires. Journal of Applied Physics, 2018, 123, .	1.1	7
20	Multiscale modeling of plasmonic enhanced energy transfer and cavitation around laser-excited nanoparticles. Nanoscale, 2017, 9, 3023-3032.	2.8	35
21	Modeling ultrafast laser-induced nanocavitation around plasmonic nanoparticles (Conference) Tj ETQq1 1 0.784314 rgBT /Overlock 10		0
22	Optical transmission theory for metal-insulator-metal periodic nanostructures. Nanophotonics, 2017, 6, 349-355.	2.9	6
23	Fluorescence and Scattering Dual-Mode Multiplexed Imaging with Goldâ€“Silver Alloy Core Silica Shell Nanoparticles. Journal of Physical Chemistry C, 2017, 121, 8944-8951.	1.5	12
24	Sensing with periodic nanohole arrays. Advances in Optics and Photonics, 2017, 9, 891.	12.1	42
25	Rational Design of Plasmonic Nanoparticles for Enhanced Cavitation and Cell Perforation. Nano Letters, 2016, 16, 3187-3194.	4.5	41
26	Computational Design of Durable Spherical Nanoparticles with Optimal Material, Shape, and Size for Ultrafast Plasmon-Enhanced Nanocavitation. ACS Photonics, 2016, 3, 2158-2169.	3.2	21
27	Cell perforation mediated by plasmonic bubbles generated by a single near infrared femtosecond laser pulse. Journal of Biophotonics, 2016, 9, 26-31.	1.1	25
28	Photon-induced generation and spatial control of extreme pressure at the nanoscale with a gold bowtie nano-antenna platform. Nanoscale, 2016, 8, 17196-17203.	2.8	4
29	Gold nanoparticle-assisted all optical localized stimulation and monitoring of Ca2+ signaling in neurons. Scientific Reports, 2016, 6, 20619.	1.6	55
30	3D multiplexed immunoplasmonics microscopy. Nanoscale, 2016, 8, 13263-13272.	2.8	8
31	Computational characterization of plasma effects in ultrafast laser irradiation of spherical gold nanostructures for photothermal therapy. Journal Physics D: Applied Physics, 2016, 49, 105401.	1.3	5
32	Electrochemical surface plasmon resonance sensing with absorptive redox mediator film. Sensors and Actuators B: Chemical, 2016, 222, 71-77.	4.0	19
33	Electrochemical structureâ€switching sensing using nanoplasmonic devices. Annalen Der Physik, 2015, 527, 806-813.	0.9	4
34	Seeded Growth Synthesis of Composition and Size-Controlled Goldâ€“Silver Alloy Nanoparticles. Journal of Physical Chemistry C, 2015, 119, 13160-13168.	1.5	77
35	Reflected light microspectroscopy for single-nanoparticle biosensing. Journal of Biomedical Optics, 2015, 20, 097001.	1.4	5
36	Dynamic imaging of a single gold nanoparticle in liquid irradiated by off-resonance femtosecond laser. Nanoscale, 2015, 7, 11758-11765.	2.8	20

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37	Photothermal response of hollow gold nanoshell to laser irradiation: Continuous wave, short and ultrashort pulse. International Journal of Heat and Mass Transfer, 2015, 89, 866-871.	2.5	53
38	Electrochemical plasmonic sensing system for highly selective multiplexed detection of biomolecules based on redox nanoswitches. Biosensors and Bioelectronics, 2015, 71, 75-81.	5.3	26
39	Effect of the Composition on the Nonlinear Optical Response of Au_xAg_{1â€“x} Nano-Alloys. Journal of Physical Chemistry C, 2015, 119, 6861-6872.	1.5	39
40	Plasma-mediated photothermal effects in ultrafast laser irradiation of gold nanoparticle dimers in water. Optics Express, 2015, 23, 1967.	1.7	29
41	Analysis of Photoacoustic Response from Goldâ€“Silver Alloy Nanoparticles Irradiated by Short Pulsed Laser in Water. Journal of Physical Chemistry C, 2015, 119, 24075-24080.	1.5	53
42	Cell-specific optoporation with near-infrared ultrafast laser and functionalized gold nanoparticles. Nanoscale, 2015, 7, 17836-17847.	2.8	39
43	Wideâ€field hyperspectral 3D imaging of functionalized gold nanoparticles targeting cancer cells by reflected light microscopy. Journal of Biophotonics, 2015, 8, 401-407.	1.1	35
44	Hyperspectral darkfield microscopy of PEGylated gold nanoparticles targeting CD44â€expressing cancer cells. Journal of Biophotonics, 2015, 8, 162-167.	1.1	40
45	Leukemic marker detection using a spectro-polarimetric surface plasmon resonance platform. Biosensors and Bioelectronics, 2015, 63, 80-85.	5.3	19
46	Simulation of nanosecond laser-induced thermal dynamics of hollow gold nanoshells for hyperthermia therapy. AIP Conference Proceedings, 2014, , .	0.3	3
47	Self-referenced spectroscopy using plasmon waveguide resonance biosensor. Biomedical Optics Express, 2014, 5, 2481.	1.5	26
48	Dynamic imaging of transient bubbles generated by femtosecond irradiation of plasmonic nanoparticles in suspensions and cell environment. , 2014, , .		2
49	Ultrafast laser processing of drug particles in water for pharmaceutical discovery. Applied Physics A: Materials Science and Processing, 2014, 114, 267-276.	1.1	12
50	An Analytic Model for the Dielectric Function of Au, Ag, and their Alloys. Advanced Optical Materials, 2014, 2, 176-182.	3.6	218
51	Bacteriophages: biosensing tools for multi-drug resistant pathogens. Analyst, The, 2014, 139, 1224.	1.7	59
52	Hyperspectral reflected light microscopy of plasmonic Au/Ag alloy nanoparticles incubated as multiplex chromatic biomarkers with cancer cells. Analyst, The, 2014, 139, 5247-5253.	1.7	42
53	From Thermo- to Plasma-Mediated Ultrafast Laser-Induced Plasmonic Nanobubbles. ACS Photonics, 2014, 1, 331-336.	3.2	78
54	The differential detection of methicillin-resistant, methicillin-susceptible and borderline oxacillin-resistant Staphylococcus aureus by surface plasmon resonance. Biosensors and Bioelectronics, 2013, 49, 334-340.	5.3	35

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55	X-ray Photoelectron Spectroscopic and Transmission Electron Microscopic Characterizations of Bacteriophageâ€“Nanoparticle Complexes for Pathogen Detection. Journal of Physical Chemistry C, 2013, 117, 20656-20665.	1.5	45
56	Plasmonics for pulsed-laser cell nanosurgery: Fundamentals and applications. Journal of Photochemistry and Photobiology C: Photochemistry Reviews, 2013, 17, 26-49.	5.6	135
57	Plasma-Mediated Nanocavitation and Photothermal Effects in Ultrafast Laser Irradiation of Gold Nanorods in Water. Journal of Physical Chemistry C, 2013, 117, 9386-9396.	1.5	59
58	Effect of pulse duration on plasmonic enhanced ultrafast laser-induced bubble generation in water. Applied Physics A: Materials Science and Processing, 2013, 112, 119-122.	1.1	15
59	Strategies for the Immobilization of Bacteriophages on Gold Surfaces Monitored by Surface Plasmon Resonance and Surface Morphology. Journal of Physical Chemistry C, 2013, 117, 6686-6691.	1.5	31
60	An improved refractive index sensor based on genetic optimization of plasmon waveguide resonance. Optics Express, 2013, 21, 20863.	1.7	67
61	Mechanisms of plasmon-enhanced femtosecond laser nanoablation of silicon. Optics Express, 2013, 21, 9703.	1.7	15
62	Visible and near infrared resonance plasmonic enhanced nanosecond laser optoporation of cancer cells. Biomedical Optics Express, 2013, 4, 490.	1.5	33
63	Quantum detection and ranging using exciton-plasmon coupling in coherent nanoantennas. Applied Physics Letters, 2013, 102, .	1.5	14
64	Laser-Generated Auâ€“Ag Nanoparticles For Plasmonic Nucleic Acid Sensing. Journal of Physical Chemistry C, 2012, 116, 11370-11377.	1.5	35
65	Modeling Solvent Influence on Growth Mechanism of Nanoparticles (Au, Co) Synthesized by Surfactant Free Laser Processes. Journal of Physical Chemistry C, 2012, 116, 8014-8019.	1.5	43
66	Stability of sputter-deposited gold nanoparticles in imidazolium ionic liquids. Physical Chemistry Chemical Physics, 2012, 14, 5662.	1.3	62
67	Surface plasmon resonance detection of E. coli and methicillin-resistant S. aureus using bacteriophages. Biosensors and Bioelectronics, 2012, 37, 24-29.	5.3	186
68	Plasma Mediated off-Resonance Plasmonic Enhanced Ultrafast Laser-Induced Nanocavitation. Nano Letters, 2012, 12, 4763-4769.	4.5	156
69	Off-resonance plasmonic enhanced femtosecond laser optoporation and transfection of cancer cells. Biomaterials, 2012, 33, 2345-2350.	5.7	123
70	Integrated silicon-based nanoplasmonic sensor. Optics Express, 2011, 19, 9962.	1.7	33
71	Intensity based surface plasmon resonance sensor using a nanohole rectangular array. Optics Express, 2011, 19, 15041.	1.7	70
72	Surface plasmon resonance detection of oligonucleotide sequences of the rpoB genes of Mycobacterium tuberculosis. Talanta, 2011, 85, 2094-2099.	2.9	24

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73	Nanonization of megestrol acetate by laser fragmentation in aqueous milieu. Journal of Controlled Release, 2011, 149, 273-280.	4.8	64
74	A Laser-Trimmed Rail-to-Rail Precision CMOS Operational Amplifier. IEEE Transactions on Circuits and Systems II: Express Briefs, 2011, 58, 75-79.	2.2	12
75	Laser-Induced Resistance Fine Tuning of Integrated Polysilicon Thin-Film Resistors. IEEE Transactions on Electron Devices, 2011, 58, 572-575.	1.6	12
76	Fabrication of Paclitaxel Nanocrystals by Femtosecond Laser Ablation and Fragmentation. Journal of Pharmaceutical Sciences, 2011, 100, 1022-1030.	1.6	46
77	Catalytic activity of Ni-YSZ anodes in a single-chamber solid oxide fuel cell reactor. Journal of Power Sources, 2011, 196, 3713-3721.	4.0	13
78	Nanoclustered Coâ^'Au Particles Fabricated by Femtosecond Laser Fragmentation in Liquids. Journal of Physical Chemistry C, 2010, 114, 13497-13500.	1.5	42
79	Femtosecond Laser Synthesis of AuAg Nanoalloys: Photoinduced Oxidation and Ions Release. Journal of Physical Chemistry C, 2010, 114, 10403-10409.	1.5	85
80	Self-noise-filtering phase-sensitive surface plasmon resonance biosensing. Optics Express, 2010, 18, 14353.	1.7	35
81	Laser Synthesis of Nanomaterials. Springer Series in Materials Science, 2010, , 163-187.	0.4	16
82	Resonant frequency sensitive MEMS bandpass filter using capacitive sensing scheme. Microsystem Technologies, 2009, 15, 973-979.	1.2	2
83	Temperature and performance variations along single chamber solid oxide fuel cells. Journal of Power Sources, 2009, 186, 89-95.	4.0	31
84	Synthesis of Size-Tunable Polymer-Protected Gold Nanoparticles by Femtosecond Laser-Based Ablation and Seed Growth. Journal of Physical Chemistry C, 2009, 113, 9526-9531.	1.5	99
85	Ultrafast laser based â€œgreenâ€•synthesis of non-toxic nanoparticles in aqueous solutions. Applied Physics A: Materials Science and Processing, 2008, 93, 955-959.	1.1	106
86	Phase-sensitive spatially-modulated surface plasmon resonance polarimetry for detection of biomolecular interactions. Sensors and Actuators B: Chemical, 2008, 133, 628-631.	4.0	30
87	Modeling the influence of the porosity of laser-ablated silicon films on their photoluminescence properties. Applied Surface Science, 2008, 254, 2771-2775.	3.1	4
88	Numerical study of the thermal ablation of wet solids by ultrashort laser pulses. Physical Review B, 2008, 77, .	1.1	37
89	Mechanical modulation method for ultrasensitive phase measurements in photonics biosensing. Optics Express, 2008, 16, 21305.	1.7	31
90	Improved Method for Two-dimensional Determination of the Magnitude and Orientation of Weak Birefringence. , 2007, , .		0

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91	Coplanar Electrodes Design for a Single-Chamber SOFC. Journal of the Electrochemical Society, 2007, 154, B305.	1.3	28
92	Smoothing dry-etched microstructure sidewalls using focused ion beam milling for optical applications. Journal of Micromechanics and Microengineering, 2007, 17, 1593-1597.	1.5	35
93	Precision Resistor Laser Trimming for Analog Microelectronics. , 2007, , .		1
94	An Experimental Evaluation of the Temperature Gradient in Solid Oxide Fuel Cells. Electrochemical and Solid-State Letters, 2007, 10, B31.	2.2	27
95	Precision resistor laser trimming for analog microelectronics. , 2007, , .		1
96	Catalytic activity and performance of LSM cathode materials in single chamber SOFC. Applied Catalysis A: General, 2007, 323, 181-187.	2.2	52
97	Two-step femtosecond laser ablation-based method for the synthesis of stable and ultra-pure gold nanoparticles in water. Applied Physics A: Materials Science and Processing, 2007, 88, 269-272.	1.1	88
98	Fragmentation of colloidal nanoparticles by femtosecond laser-induced supercontinuum generation. Applied Physics Letters, 2006, 89, 233122.	1.5	107
99	Thermodynamic pathways to melting, ablation, and solidification in absorbing solids under pulsed laser irradiation. Physical Review B, 2006, 73, .	1.1	287
100	Laser ablation-based synthesis of functionalized colloidal nanomaterials in biocompatible solutions. Journal of Photochemistry and Photobiology A: Chemistry, 2006, 182, 330-334.	2.0	40
101	Performance and ageing of an anode-supported SOFC operated in single-chamber conditions. Journal of Power Sources, 2006, 153, 108-113.	4.0	68
102	Laser induced formation of periodic nanostructures in silicon covered by SiO2. Applied Physics A: Materials Science and Processing, 2006, 82, 679-682.	1.1	8
103	Direct-Write Microfabrication of Single-Chamber Solid Oxide Fuel Cells with Interdigitated Electrodes. Materials Research Society Symposia Proceedings, 2006, 972, 1.	0.1	1
104	Ablation of molecular solids under nanosecond laser pulses: The role of inertial confinement. Applied Physics Letters, 2006, 89, 141907.	1.5	26
105	Influence of ambient medium on femtosecond laser processing of silicon. Applied Surface Science, 2005, 247, 163-168.	3.1	64
106	Femtosecond laser ablation of gold in water: influence of the laser-produced plasma on the nanoparticle size distribution. Applied Physics A: Materials Science and Processing, 2005, 80, 753-758.	1.1	179
107	A mediatorless biosensor for putrescine using multiwalled carbon nanotubes. Analytical Biochemistry, 2005, 336, 305-311.	1.1	49
108	General Equation for Size Nanocharacterization of the Coreâ"Shell Nanoparticles by X-ray Photoelectron Spectroscopy. Journal of Physical Chemistry B, 2005, 109, 8733-8737.	1.2	33

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109	Thermodynamics of absorbing solids during short-pulse laser ablation. , 2004, , .		2
110	Laser ablation-based nanofabrication in aqueous solutions. Materials Research Society Symposia Proceedings, 2004, 850, 186.	0.1	2
111	Near-infrared surface plasmon resonance sensing on a silicon platform. Sensors and Actuators B: Chemical, 2004, 97, 409-414.	4.0	58
112	Operating Conditions of a Single-Chamber SOFC. Journal of the Electrochemical Society, 2004, 151, A2088.	1.3	80
113	Evaluation of the Actual Working Temperature of A Single-Chamber SOFC. Electrochemical and Solid-State Letters, 2004, 7, A60.	2.2	46
114	Stabilization and Size Control of Gold Nanoparticles during Laser Ablation in Aqueous Cyclodextrins. Journal of the American Chemical Society, 2004, 126, 7176-7177.	6.6	335
115	Surface Chemistry of Gold Nanoparticles Produced by Laser Ablation in Aqueous Media. Journal of Physical Chemistry B, 2004, 108, 16864-16869.	1.2	564
116	Laser-induced treatment of silicon in air and formation of Si/SiOx photoluminescent nanostructured layers. Materials Science and Engineering B: Solid-State Materials for Advanced Technology, 2003, 101, 60-64.	1.7	52
117	Fabrication and Characterization of Gold Nanoparticles by Femtosecond Laser Ablation in an Aqueous Solution of Cyclodextrins. Journal of Physical Chemistry B, 2003, 107, 4527-4531.	1.2	232
118	Multi-layer Si-Based Surface Plasmon Resonance Structure for Absorption Sensing. Analytical Letters, 2003, 36, 3261-3270.	1.0	6
119	Short-Pulse Laser Ablation of Solids: From Phase Explosion to Fragmentation. Physical Review Letters, 2003, 91, 225502.	2.9	260
120	Synthesis of colloidal nanoparticles during femtosecond laser ablation of gold in water. Journal of Applied Physics, 2003, 94, 7941.	1.1	464
121	Visible photoluminescence from nanostructured Si-based layers produced by air optical breakdown on silicon. Applied Physics Letters, 2003, 82, 1619-1621.	1.5	53
122	Correlation between photoluminescence properties and morphology of laser-ablated Si/SiOx nanostructured films. Journal of Applied Physics, 2002, 91, 3248-3254.	1.1	72
123	The estimation of the average dimensions of deposited clusters from XPS emission intensity ratios. Applied Surface Science, 2001, 173, 134-139.	3.1	39
124	The modeling of excimer laser particle removal from hydrophilic silicon surfaces. Journal of Applied Physics, 2000, 87, 3618-3627.	1.1	44
125	The effects of hydrogen bonds on the adhesion of inorganic oxide particles on hydrophilic silicon surfaces. Journal of Applied Physics, 1999, 86, 1744-1748.	1.1	56
126	CO2laserâ€assisted removal of submicron particles from solid surfaces. Journal of Applied Physics, 1996, 79, 2857-2862.	1.1	39

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127	Excimer laser-induced deposition of copper from Cu(hfac) (TMVS). Applied Surface Science, 1995, 86, 509-513.	3.1	23
128	Blueshift of the optical band gap: Implications for the quantum confinement effect ina-Si:H/a-SiNx:H multilayers. Physical Review B, 1993, 47, 2197-2202.	1.1	41
129	High field transport in disordered materials. Chemical Physics, 1990, 146, 389-408.	0.9	35
130	Resonant-tunneling lifetime comparison between double-barrier andÎ´-doped barrier structures. Physical Review B, 1989, 39, 8739-8742.	1.1	34
131	Simulation of the amorphous silicon static induction transistor. Solid-State Electronics, 1989, 32, 149-157.	0.8	41
132	Laserâ€induced chemical vapor deposition of hydrogenated amorphous silicon. I. Gasâ€phase process model. Journal of Applied Physics, 1987, 62, 2812-2821.	1.1	34
133	Hydrogenated amorphous silicon produced by laser induced chemical vapor deposition of silane. Applied Physics Letters, 1983, 43, 273-275.	1.5	68