

Michael Tg Canva

List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/136933/publications.pdf>

Version: 2024-02-01

121
papers

2,835
citations

126858

33
h-index

206029

48
g-index

121
all docs

121
docs citations

121
times ranked

2377
citing authors

#	ARTICLE	IF	CITATIONS
1	Perylene- and pyrromethene-doped xerogel for a pulsed laser. <i>Applied Optics</i> , 1995, 34, 428.	2.1	128
2	Photostability of dye molecules trapped in solid matrices. <i>Applied Optics</i> , 1996, 35, 3193.	2.1	122
3	Toward millions of laser pulses with pyrromethene- and perylene-doped xerogels. <i>Applied Optics</i> , 1997, 36, 6760.	2.1	116
4	Narrow groove plasmonic nano-gratings for surface plasmon resonance sensing. <i>Optics Express</i> , 2011, 19, 787.	1.7	98
5	Reverse saturable absorption in solid xerogel matrices. <i>Applied Physics Letters</i> , 1993, 62, 1721-1723.	1.5	82
6	One hundred spots parallel monitoring of DNA interactions by SPR imaging of polymer-functionalized surfaces applied to the detection of cystic fibrosis mutations. <i>Sensors and Actuators B: Chemical</i> , 2003, 94, 313-323.	4.0	70
7	Photodegradation of azobenzene nonlinear optical chromophores: the influence of structure and environment. <i>Journal of the Optical Society of America B: Optical Physics</i> , 2000, 17, 1992.	0.9	67
8	Hybrid Plasmonic Mode by Resonant Coupling of Localized Plasmons to Propagating Plasmons in a Kretschmann Configuration. <i>ACS Photonics</i> , 2015, 2, 237-245.	3.2	64
9	Metallic film optimization in a surface plasmon resonance biosensor by the extended Rouard method. <i>Applied Optics</i> , 2007, 46, 2361.	2.1	63
10	Magnetically textured Fe_3O_4 nanoparticles in a silica gel matrix: Structural and magnetic properties. <i>Journal of Applied Physics</i> , 1998, 83, 7776-7788.	1.1	62
11	Surface plasmon resonance spectro-imaging sensor for biomolecular surface interaction characterization. <i>Biosensors and Bioelectronics</i> , 2009, 24, 2100-2105.	5.3	61
12	Reverse saturable absorption in palladium and zinc tetraphenyltetraabenzoporphyrin doped xerogels. <i>Chemical Physics</i> , 1997, 218, 301-307.	0.9	57
13	Generalization of the Rouard method to an absorbing thin-film stack and application to surface plasmon resonance. <i>Applied Optics</i> , 2006, 45, 8419.	2.1	57
14	Hydrophilic Mechano-Bactericidal Nanopillars Require External Forces to Rapidly Kill Bacteria. <i>Nano Letters</i> , 2020, 20, 5720-5727.	4.5	57
15	New Nonlinear Sol-Gel Films Exhibiting Photorefractivity. <i>Chemistry of Materials</i> , 1996, 8, 312-314.	3.2	55
16	Wavelength dependence of 4-dimethylamino-4-nitrostilbene polymer thin film photodegradation. <i>Applied Physics Letters</i> , 1998, 73, 912-914.	1.5	53
17	Surface plasmon resonance imaging (SPRI) system and real-time monitoring of DNA biochip for human genetic mutation diagnosis of DNA amplified samples. <i>Sensors and Actuators B: Chemical</i> , 2006, 119, 583-591.	4.0	53
18	Effect of temperature and atmospheric environment on the photodegradation of some Disperse Red type polymers. <i>Optics Letters</i> , 1999, 24, 1741.	1.7	52

#	ARTICLE	IF	CITATIONS
19	Effect of chromophore-chromophore electrostatic interactions in the NLO response of functionalized organic-inorganic sol-gel materials. <i>Optics Communications</i> , 2001, 198, 207-215.	1.0	52
20	Stable doped hybrid sol-gel materials for solid-state dye laser. <i>Applied Optics</i> , 2003, 42, 2213.	2.1	51
21	Stable photorefractive memory effect in sol-gel materials. <i>Applied Physics Letters</i> , 1997, 70, 292-294.	1.5	50
22	Quadratic spatial soliton generation by seeded downconversion of a strong harmonic pump beam. <i>Optics Letters</i> , 1997, 22, 1683.	1.7	50
23	DNA immobilisation procedures for surface plasmon resonance imaging (SPRI) based microarray systems. <i>Biosensors and Bioelectronics</i> , 2007, 22, 803-809.	5.3	47
24	Photodegradation of selected π -conjugated electro-optic chromophores. <i>Journal of Applied Physics</i> , 2003, 94, 756-763.	1.1	44
25	Dye energy transfer in xerogel matrices and application to solid-state dye lasers. <i>Optics Communications</i> , 2004, 232, 343-351.	1.0	43
26	Versatile analysis of multiple macromolecular interactions by SPR imaging: application to p53 and DNA interaction. <i>Oncogene</i> , 2004, 23, 5543-5550.	2.6	42
27	Directional surface enhanced Raman scattering on gold nano-gratings. <i>Nanotechnology</i> , 2016, 27, 115202.	1.3	40
28	All-optical gel memory. <i>Optics Letters</i> , 1992, 17, 218.	1.7	39
29	Comparative study of nonlinear-optical polymers for guided-wave second-harmonic generation at telecommunication wavelengths. <i>Journal of the Optical Society of America B: Optical Physics</i> , 2000, 17, 1554.	0.9	38
30	Systematic behavior of electro-optic chromophore photostability. <i>Optics Letters</i> , 2000, 25, 332.	1.7	37
31	Density effect of gold nanodisks on the SERS intensity for a highly sensitive detection of chemical molecules. <i>Journal of Materials Science</i> , 2015, 50, 6601-6607.	1.7	36
32	Angle-dependent resonance of localized and propagating surface plasmons in microhole arrays for enhanced biosensing. <i>Analytical and Bioanalytical Chemistry</i> , 2012, 404, 2859-2868.	1.9	35
33	Surface enhanced Raman scattering improvement of gold triangular nanoprisms by a gold reflective underlayer for chemical sensing. <i>Sensors and Actuators B: Chemical</i> , 2016, 228, 31-35.	4.0	35
34	Plasmonic Enhancement by a Continuous Gold Underlayer: Application to SERS Sensing. <i>Plasmonics</i> , 2016, 11, 601-608.	1.8	34
35	Photostability of electro-optic polymers possessing chromophores with efficient amino donors and cyano-containing acceptors. <i>Journal of the Optical Society of America B: Optical Physics</i> , 2001, 18, 1846.	0.9	31
36	Deep UV nano-microstructuring of substrates for surface plasmon resonance imaging. <i>Nanotechnology</i> , 2011, 22, 165301.	1.3	30

#	ARTICLE	IF	CITATIONS
37	Early detection of bacteria using SPR imaging and event counting: experiments with <i>Listeria monocytogenes</i> and <i>Listeria innocua</i> . RSC Advances, 2019, 9, 15554-15560.	1.7	30
38	Impregnated SiO ₂ gels used as dye laser matrix hosts. Journal of Non-Crystalline Solids, 1992, 147-148, 636-640.	1.5	28
39	Enhanced photostability of dye molecules trapped in solid xerogel matrices. Synthetic Metals, 1996, 81, 305-308.	2.1	27
40	Large area nanopatterning by combined anodic aluminum oxide and soft UV-NIL technologies for applications in biology. Microelectronic Engineering, 2011, 88, 2444-2446.	1.1	27
41	High performance multi-spectral interrogation for surface plasmon resonance imaging sensors. Biosensors and Bioelectronics, 2014, 54, 175-180.	5.3	27
42	Perylene, pyromethene and grafted rhodamine-doped xerogels for tunable solid state laser. , 1994, , .		26
43	Properties of type-II quadratic solitons excited by imbalanced fundamental waves. Optics Letters, 1997, 22, 1748.	1.7	26
44	Time-resolved saturated absorption recovery in malachite green-doped xerogel. Chemical Physics Letters, 1991, 176, 495-498.	1.2	22
45	Temperature dependence of second-order nonlinear relaxation of a poled chromophore-doped sol-gel material. Journal of Applied Physics, 2001, 90, 6044-6047.	1.1	22
46	New cysteamine based functionalization for biochip applications. Sensors and Actuators B: Chemical, 2009, 143, 139-143.	4.0	22
47	Importance of dye host on absorption, propagation losses, and amplified spontaneous emission for dye-doped polymer thin films. Applied Optics, 2006, 45, 7736.	2.1	21
48	High Figure of Merit (FOM) of Bragg Modes in Au-Coated Nanodisk Arrays for Plasmonic Sensing. Small, 2017, 13, 1700908.	5.2	21
49	Photostability enhancement of an azobenzene photonic polymer. Applied Physics Letters, 2000, 77, 2083-2085.	1.5	20
50	Surface plasmon resonance imaging as a multidimensional surface characterization instrument—Application to biochip genotyping. Analytica Chimica Acta, 2006, 573-574, 333-340.	2.6	18
51	Plasmonic DNA: Towards Genetic Diagnosis Chips. Plasmonics, 2007, 2, 201-215.	1.8	18
52	Optical 3D-storage in sol-gel materials with a reading by optical coherence tomography-technique. Optics Communications, 2003, 220, 59-66.	1.0	17
53	Local and external factors affecting the photodegradation of 4N,N-dimethylamino-4-nitrostilbene polymer films. Applied Physics Letters, 1999, 75, 3306-3308.	1.5	16
54	Dye-doped sol-gel materials for two-photon absorption induced fluorescence. Optical Materials, 2002, 18, 391-396.	1.7	16

#	ARTICLE	IF	CITATIONS
55	Angulo-spectral surface plasmon resonance imaging of nanofabricated grating surfaces. Optics Letters, 2010, 35, 2209.	1.7	16
56	The reversible binding of immunoglobulins G modified with adamantyl-end-capped poly(ethylene) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50 molecules: A surface plasmon resonance investigation. Sensors and Actuators B: Chemical, 2006, 114, 869-880.	4.0	15
57	Immobilization of a functionalized poly(ethylene glycol) onto β -cyclodextrin-coated surfaces by formation of inclusion complexes: Application to the coupling of proteins. Journal of Applied Polymer Science, 2006, 100, 2362-2370.	1.3	15
58	Absorption and related optical dispersion effects on the spectral response of a surface plasmon resonance sensor. Applied Optics, 2008, 47, 6177.	2.1	15
59	Optically active doped xerogel. Journal of Non-Crystalline Solids, 1992, 147-148, 627-630.	1.5	14
60	Impregnated ORMOSIL matrices for efficient solid state optical gain media. Optics Communications, 1994, 110, 125-130.	1.0	14
61	Field enhancement and target localization impact on the biosensitivity of nanostructured plasmonic sensors. Journal of the Optical Society of America B: Optical Physics, 2014, 31, 1223.	0.9	14
62	Permanent birefringence of ferrofluid particles trapped in a silica matrix. Journal of Non-Crystalline Solids, 1993, 160, 177-179.	1.5	13
63	Title is missing!. Optical and Quantum Electronics, 1998, 30, 907-921.	1.5	13
64	Importance of chromophore environment on the near-infrared absorption of polymeric waveguides. Applied Optics, 2000, 39, 947.	2.1	13
65	Reverse-saturable absorption in aluminophthalocyanine-doped xerogels. Applied Physics B: Lasers and Optics, 1994, 58, 443-445.	1.1	12
66	Optical alignment of organic dopants in a solid gel matrix: dispersed and grafted rhodamine B molecules. Journal of Sol-Gel Science and Technology, 1997, 9, 33-39.	1.1	12
67	Quadratic spatial soliton generation by seeded downconversion of a strong harmonic pump beam: errata. Optics Letters, 2001, 26, 105.	1.7	11
68	Near-Field Enhancement Localization on Plasmonic Gratings. Journal of Physical Chemistry C, 2016, 120, 27562-27570.	1.5	11
69	Compact 5-LEDs illumination system for multi-spectral surface plasmon resonance sensing. Sensors and Actuators B: Chemical, 2015, 209, 208-211.	4.0	10
70	Label-free visualization and quantification of single cell signaling activity using metal-clad waveguide (MCWG)-based microscopy. Biosensors and Bioelectronics, 2018, 100, 429-436.	5.3	10
71	Spatial resolution versus contrast trade-off enhancement in high-resolution surface plasmon resonance imaging (SPRI) by metal surface nanostructure design. Optics Express, 2018, 26, 10616.	1.7	10
72	Doped Gels for Optical Limiting Applications.. Materials Research Society Symposia Proceedings, 1994, 374, 281.	0.1	9

#	ARTICLE	IF	CITATIONS
73	Enhanced SPR Sensitivity with Nano-Micro-Ribbon Gratingâ€”an Exhaustive Simulation Mapping. Plasmonics, 2014, 9, 79-92.	1.8	9
74	Introducing 2D confined propagating plasmons for surface plasmon resonance sensing using arrays of metallic ribbons. Sensors and Actuators B: Chemical, 2014, 191, 115-121.	4.0	9
75	Generalized analytical model based on harmonic coupling for hybrid plasmonic modes: comparison with numerical and experimental results. Optics Express, 2015, 23, 27376.	1.7	9
76	Metal clad waveguide (MCWG) based imaging using a high numerical aperture microscope objective. Optics Express, 2017, 25, 1666.	1.7	9
77	Second-harmonic generation in reactive-ion etched Nâ€™ ethyl N-ethanol-4-(nitrophenylazo)phenylamino polymer waveguides at telecommunication wavelengths. Journal of Applied Physics, 1999, 86, 2941-2944.	1.1	7
78	Relative electrical resistivities and poling of nonlinear optical polymeric waveguides. Applied Physics Letters, 2000, 76, 265-267.	1.5	7
79	Modeling of the second harmonic generation in SiO ₂ solâ€™gel films doped with nanoscopic DR1 molecules as function of the poling time. Optical Materials, 2006, 29, 6-11.	1.7	7
80	Bimodal behavior and isobestic transition pathway in surface plasmon resonance sensing. Optics Express, 2012, 20, 23630.	1.7	7
81	Optical probing of SiO ₂ gel characteristics. Journal of Materials Science Letters, 1991, 10, 615-618.	0.5	6
82	Polarimetric surface plasmon resonance imaging biosensor. Optics Letters, 2009, 34, 3634.	1.7	6
83	Monitoring individual cell-signaling activity using combined metal-clad waveguide and surface-enhanced fluorescence imaging. Analyst, The, 2018, 143, 5559-5567.	1.7	6
84	Dielectrophoretic cell trapping for improved surface plasmon resonance imaging sensing. Electrophoresis, 2019, 40, 1417-1425.	1.3	6
85	Mechanisms of a remanent optical alignment of dyes in a gel matrix. Journal of Applied Physics, 1996, 80, 4655-4659.	1.1	5
86	Ultrafast induced excited state absorption in organically doped xerogels. Chemical Physics, 1999, 246, 477-481.	0.9	5
87	Surface Conductivity of DR1-Functionalized Organic-Inorganic Sol-Gel Materials. Journal of Sol-Gel Science and Technology, 2003, 26, 1011-1016.	1.1	5
88	Nanoplasmonics-enhanced label-free imaging of endothelial cell monolayer integrity. Biosensors and Bioelectronics, 2019, 141, 111478.	5.3	5
89	Performance improvement of plasmonic sensors using a combination of AC electrokinetic effects for (bio)target capture. Electrophoresis, 2019, 40, 1426-1435.	1.3	5
90	Improved Sol-Gel Materials for Efficient Solid State Dye Lasers. Materials Research Society Symposia Proceedings, 1993, 329, 279.	0.1	5

#	ARTICLE	IF	CITATIONS
91	Title is missing!. Journal of Sol-Gel Science and Technology, 1997, 9, 33-39.	1.1	4
92	Disperse Red 1-doped solgel planar waveguides for nonlinear optical devices operating at telecommunications wavelengths. Journal of the Optical Society of America B: Optical Physics, 2001, 18, 1827.	0.9	4
93	Biochip data normalization using multifunctional probes. Analyst, The, 2012, 137, 3119.	1.7	4
94	Quadratic Parametric Interactions in Organic Waveguides. Advances in Polymer Science, 2002, , 87-121.	0.4	4
95	<title>Surface plasmon resonance imaging instrumentation and data handling for biochips: review and perspectives</title>. , 2006, 6254, 173.		3
96	Real-time monitoring of carbonarius DNA structured biochip by surface plasmon resonance imaging. Journal of Optics, 2008, 10, 064018.	1.5	3
97	Assembling, locating, grafting and actuating permanent filaments for validation of Polarimetric Surface Plasmon Resonance Imaging system. Procedia Engineering, 2011, 25, 872-875.	1.2	3
98	Surface plasmon resonance spectro-imaging sensor and associated data processing for biomolecular surface interaction characterization. , 2007, , .		2
99	ELABORATION AND GRAFTING OF MAGNETIC BEAD-CHAINS FOR DETECTION OF ANISOTROPY WITH POLARIMETRIC SURFACE PLASMON RESONANCE IMAGING SYSTEM. International Journal of Nanoscience, 2012, 11, 1240012.	0.4	2
100	Ring resonator designed for biosensing applications manufactured on 300 mm SOI in an industrial environment. Japanese Journal of Applied Physics, 2019, 58, SBBE02.	0.8	2
101	Photostability and residual red-tail absorption of different chromophore-doped polymers. , 2000, 4106, 104.		1
102	Fabrication and characterization of planar and channel waveguides in hybrid sol-gel systems. , 2000, 4106, 21.		1
103	Self-calibrated dynamical optical biochip system using surface plasmon resonance imaging: application to genotyping. , 2008, , .		1
104	Modeling and validation of multiplex proteo-nucleic self-assemblies monitored by surface plasmon resonance imagery. Sensors and Actuators B: Chemical, 2011, 160, 1309-1315.	4.0	1
105	Influence of matrix-dopant interactions for all-optical memorization in doped xerogels. , 1994, , .		0
106	Material optimization for electro-optic modulation and cascading. , 2000, , .		0
107	Material glass transition temperature, device thickness, and operational temperature effects on absorption of electro-optic polymer films. , 2000, , .		0
108	<title>Low- and high-index sol-gel films for planar and channel-doped waveguides</title>. , 2001, , .		0

#	ARTICLE	IF	CITATIONS
109	Experimental data and modeling of $\ddot{\Gamma}(2)$ temporal stability of poled chromophore-doped sol-gel materials. , 2001, 4461, 164.		0
110	Surface plasmon resonance imaging and versatile surface functionalization for real time comparisons of biochemical interactions. , 2004, , .		0
111	Spatio-temporal self-calibration of optical dynamical biochip. , 2007, , .		0
112	Multispectral imaging of a biochip based on surface plasmon resonance and integration of chromophores. , 2007, 6450, 88.		0
113	Optimization of nanostructured metal layers for DNA hybridization monitoring in a SPR-i experiment. , 2009, , .		0
114	Temperature impact on thermodynamical parameters of DNA:DNA hybridization kinetics as quantified by Surface Plasmon Resonance Imaging (SPRI) system. , 2009, , .		0
115	Extraction of complex refractive index dispersion from SPR data. , 2010, , .		0
116	Nanostructured substrates for surface plasmon resonance sensors. , 2011, , .		0
117	A new approach for real-time analysis of biomolecular interactions using surface plasmon resonance imaging SPRi. , 2012, , .		0
118	Dye Doped Xerogels for Tunable Lasers. , 2004, , .		0
119	CaractÃ©risations spatiale et spectrale d'un imageur Ã rÃ©sonance de plasmon. European Physical Journal Special Topics, 2004, 119, 223-224.	0.2	0
120	Resolution optimized prism-based SPR imaging for the study of individual bacteria interactions with surfaces. , 2019, , .		0
121	Surface micropatterning for the formation of an in vitro functional endothelial model for cell-based biosensors. Biosensors and Bioelectronics, 2022, , 114481.	5.3	0