Katarzyna Matczyszyn

List of Publications by Year
in descending order

105	1,892	236612	360668
papers	citations	25 h-index	35 g-index

110	110	110	2602
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Oneâ€Photon and Twoâ€Photon Photophysical Properties of Tetrafunctionalized 5,10,15,20â€tetrakis(mâ€hydroxyphenyl)chlorin (Temoporfin) Derivatives as Potential Twoâ€Photonâ€Induced Photodynamic Therapy Agents. ChemPhotoChem, 2022, 6, .	1.5	8
2	Nonlinear Optical Absorption in Nanoscale Films Revealed through Ultrafast Acoustics. Nano Letters, 2022, 22, 4362-4367.	4.5	4
3	Two-photon absorption of 28-hetero-2,7-naphthiporphyrins: expanded carbaporphyrinoid macrocycles. RSC Advances, 2022, 12, 19554-19560.	1.7	3
4	Self-assembled heterometallic complexes showing enhanced two-photon absorption and their distribution in living cells. New Journal of Chemistry, 2021, 45, 4994-5001.	1.4	1
5	Biogenic Gold Nanoparticles Decrease Methylene Blue Photobleaching and Enhance Antimicrobial Photodynamic Therapy. Molecules, 2021, 26, 623.	1.7	29
6	Heterogeneity induced dual luminescence properties of AgInS₂ and AgInS₂â€“ZnS alloyed nanocrystals. Inorganic Chemistry Frontiers, 2021, 8, 3450-3462.	3.0	8
7	1,1,4,4-Tetracyanobutadiene-Functionalized Anthracenes: Regioselectivity of Cycloadditions in the Synthesis of Small Near-IR Dyes. Organic Letters, 2021, 23, 2007-2012.	2.4	30
8	Gold Nanoclusters Display Low Immunogenic Effect in Microglia Cells. Nanomaterials, 2021, 11, 1066.	1.9	6
9	Circular Dichroism of Gold Bipyramid Dimers. Journal of Physical Chemistry Letters, 2021, 12, 5208-5213.	2.1	7
10	Light-Induced Modulation of Chiral Functions in G-Quadruplexâ€“Photochrome Systems. Journal of Physical Chemistry Letters, 2021, 12, 9436-9441.	2.1	11
11	Light-induced in situ transmission electron microscopy: Novel approach for antimicrobial photodynamic therapy imaging. Photodiagnosis and Photodynamic Therapy, 2021, 35, 102463.	1.3	3
12	Fiber-optic sample illuminator design for the observation of light induced phenomena with transmission electron microscopy in situ: Antimicrobial photodynamic therapy. Ultramicroscopy, 2021, 230, 113388.	0.8	3
13	Two-photon absorption properties of multipolar triarylamino/tosylamido 1,1,4,4-tetracyanobutadienes. Physical Chemistry Chemical Physics, 2021, 23, 22283-22297.	1.3	11
14	Light-inducedin situchemical activation of a fluorescent probe for monitoring intracellular G-quadruplex structures. Nanoscale, 2021, 13, 13795-13808.	2.8	11
15	Prospects for More Efficient Multi-Photon Absorption Photosensitizers Exhibiting Both Reactive Oxygen Species Generation and Luminescence. Molecules, 2021, 26, 6323.	1.7	10
16	Photo-Responsivity Improvement of Photo-Mobile Polymers Actuators Based on a Novel LCs/Azobenzene Copolymer and ZnO Nanoparticles Network. Nanomaterials, 2021, 11, 3320.	1.9	3
17	Two-photon absorption and two-photon-induced isomerization of azobenzene compounds. RSC Advances, 2020, 10, 40489-40507.	1.7	37
18	Porphyrin-Loaded Lignin Nanoparticles Against Bacteria: A Photodynamic Antimicrobial Chemotherapy Application. Frontiers in Microbiology, 2020, 11, 606185.	1.5	32

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19	Acetone-derived luminescent polymer dots: a facile and low-cost synthesis leads to remarkable photophysical properties. RSC Advances, 2020, 10, 38437-38445.	1.7	7
20	Dinuclear Rhenium Complexes with a Bridging Heliceneâ€bisâ€bipyridine Ligand: Synthesis, Structure, and Photophysical and Chiroptical Properties. ChemPlusChem, 2020, 85, 2446-2454.	1.3	7
21	Molecular design and structural characterization of photoresponsive azobenzene-based polyamide units. Dyes and Pigments, 2020, 180, 108501.	2.0	15
22	Adverse Role of Shape and Size in Second-Harmonic Scattering from Gold Nanoprisms. Journal of Physical Chemistry C, 2020, 124, 14797-14803.	1.5	6
23	Two-photon excited luminescence and second-harmonic generation in quinacridone microstructures. Dyes and Pigments, 2020, 177, 108268.	2.0	6
24	Triarylisocyanurateâ€Based Fluorescent Twoâ€Photon Absorbers. ChemPlusChem, 2020, 85, 411-425.	1.3	5
25	Cellulose as an Inert Scaffold in Plasmon-Assisted Photoregeneration of Cofactor Molecules. ACS Applied Materials & Interfaces, 2020, 12, 19377-19383.	4.0	11
26	An exocyclic Ï€-system extension of the phenanthriporphyrin framework: towards azaaceneporphyrinoids. Organic Chemistry Frontiers, 2020, 7, 1430-1436.	2.3	10
27	Morphology of Lyotropic Myelin Figures Stained with a Fluorescent Dye. Journal of Physical Chemistry B, 2020, 124, 11974-11979.	1.2	8
28	Real-Time Surface-Enhanced Raman Scattering Tracking of Adenineâ€“Gold Charge Transfer Complex Formation on Nanocavity-Shaped Plasmonic Crystals. Journal of Physical Chemistry C, 2019, 123, 17961-17967.	1.5	4
29	Synergistic effect of methylene blue and biogenic gold nanoparticles against Enterococcus faecalis. Photodiagnosis and Photodynamic Therapy, 2019, 27, 218-226.	1.3	16
30	Efficient Singlet Oxygen Photogeneration by Zinc Porphyrin Dimers upon One- and Two-Photon Excitation. Journal of Physical Chemistry B, 2019, 123, 4271-4277.	1.2	26
31	Popcorn-shaped gold nanoparticles: Plant extract-mediated synthesis, characterization and multiphoton-excited luminescence properties. Materials Chemistry and Physics, 2019, 229, 56-60.	2.0	27
32	All-Optical Poling and Two-Photon Absorption in Heterocyclic Azo Dyes with Different Side Groups. Journal of Physical Chemistry C, 2019, 123, 725-734.	1.5	37
33	DNA liquid crystals doped with AuAg nanoclusters: One-photon and two-photon imaging. Journal of Molecular Liquids, 2018, 259, 82-87.	2.3	11
34	pH-Induced transformation of ligated Au₂₅ to brighter Au₂₃ nanoclusters. Nanoscale, 2018, 10, 11335-11341.	2.8	39
35	Photochemical analysis of structural transitions in DNA liquid crystals reveals differences in spatial structure of DNA molecules organized in liquid crystalline form. Scientific Reports, 2018, 8, 4528.	1.6	8
36	Selective parallel G-quadruplex recognition by a NIR-to-NIR two-photon squaraine. Chemical Science, 2018, 9, 8375-8381.	3.7	44

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37	Reversible Photocontrol of DNA Melting by Visibleâ€Lightâ€Responsive F4â€Coordinated Azobenzene Compounds. Chemistry - A European Journal, 2018, 24, 18963-18970.	1.7	13
38	Light-driven chiroptical photoswitchable DNA assemblies mediated by bioinspired photoresponsive molecules. Nanoscale, 2018, 10, 11302-11306.	2.8	11
39	Probing the binding mechanism of photoresponsive azobenzene polyamine derivatives with human serum albumin. RSC Advances, 2017, 7, 5912-5919.	1.7	7
40	Enhancement of the Efficacy of Photodynamic Inactivation of Candida albicans with the Use of Biogenic Gold Nanoparticles. Photochemistry and Photobiology, 2017, 93, 1081-1090.	1.3	24
41	Effective control of the intrinsic DNA morphology by photosensitive polyamines. Journal of Materials Chemistry B, 2017, 5, 1028-1038.	2.9	13
42	Linear and Thirdâ€Order Nonlinear Optical Properties of Triazobenzeneâ€1,3,5â€triazinaneâ€2,4,6â€trione (Isocyanurate) Derivatives. ChemPlusChem, 2017, 82, 1372-1383.	1.3	13
43	Two-Photon Macromolecular Probe Based on a Quadrupolar Anthracenyl Scaffold for Sensitive Recognition of Serum Proteins under Simulated Physiological Conditions. ACS Omega, 2017, 2, 5715-5725.	1.6	10
44	Photothermal stability of biologically and chemically synthesized gold nanoprisms. Journal of Nanoparticle Research, 2017, 19, 327.	0.8	11
45	Remote-control of the enantiomeric supramolecular recognition mediated by chiral azobenzenes bound to human serum albumin. Physical Chemistry Chemical Physics, 2017, 19, 21272-21275.	1.3	10
46	Two- and three-photon absorption properties of fan-shaped dendrons derived from 2,3,8-trifunctionalized indenoquinoxaline units: synthesis and characterization. Journal of Materials Chemistry C, 2017, 5, 8219-8232.	2.7	12
47	Two-Photon Imaging of 3D Organization of Bimetallic AuAg Nanoclusters in DNA Matrix. Langmuir, 2017, 33, 8993-8999.	1.6	18
48	Specific Recognition of G-Quadruplexes Over Duplex-DNA by a Macromolecular NIR Two-Photon Fluorescent Probe. Journal of Physical Chemistry Letters, 2017, 8, 5915-5920.	2.1	21
49	Linear Optical and Thirdâ€Order Nonlinear Optical Properties of Some Fluorenylâ€and Triarylamineâ€Containing Tetracyanobutadiene Derivatives. Chemistry - A European Journal, 2016, 22, 10155-10167.	1.7	35
50	Unravelling the Binding Mechanism of a Poly(cationic) Anthracenyl Fluorescent Probe with High Affinity toward Double-Stranded DNA. Biomacromolecules, 2016, 17, 3609-3618.	2.6	22
51	Photochromic switching of the DNA helicity induced by azobenzene derivatives. Scientific Reports, 2016, 6, 28605.	1.6	42
52	A closer look at two-photon absorption, absorption saturation and nonlinear refraction in gold nanoclusters. RSC Advances, 2016, 6, 98748-98752.	1.7	38
53	Structureâ€“charge transfer property relationship in self-assembled discotic liquid-crystalline donorâ€“acceptor dyad and triad thin films. RSC Advances, 2016, 6, 57811-57819.	1.7	17
54	A Fluorescent Polymer Probe with High Selectivity toward Vascular Endothelial Cells for and beyond Noninvasive Two-Photon Intravital Imaging of Brain Vasculature. ACS Applied Materials & Interfaces, 2016, 8, 17047-17059.	4.0	20

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55	Stabilization of DNA liquid crystals on doping with gold nanorods. Physical Chemistry Chemical Physics, 2016, 18, 7278-7283.	1.3	8
56	Interactions of Isophorone Derivatives with DNA: Spectroscopic Studies. PLoS ONE, 2015, 10, e0129817.	1.1	25
57	DNA Base Pair Resolution Measurements Using Resonance Energy Transfer Efficiency in Lanthanide Doped Nanoparticles. PLoS ONE, 2015, 10, e0117277.	1.1	3
58	One- and Two-Photon Absorption of a Spiropyranâ€“Merocyanine System: Experimental and Theoretical Studies. Journal of Physical Chemistry B, 2015, 119, 1515-1522.	1.2	23
59	Applications of plasmonics: general discussion. Faraday Discussions, 2015, 178, 435-466.	1.6	17
60	Plasmonic and new plasmonic materials: general discussion. Faraday Discussions, 2015, 178, 123-149.	1.6	16
61	Surface plasmon enhanced spectroscopies and time and space resolved methods: general discussion. Faraday Discussions, 2015, 178, 253-279.	1.6	3
62	Bio-mediated synthesis, characterization and cytotoxicity of gold nanoparticles. Physical Chemistry Chemical Physics, 2015, 17, 29014-29019.	1.3	47
63	Interactions of a biocompatible water-soluble anthracenyl polymer derivative with double-stranded DNA. Physical Chemistry Chemical Physics, 2015, 17, 30318-30327.	1.3	24
64	Nonlinear absorption in nanosystems of biological significance.. Materials Research Society Symposia Proceedings, 2014, 1698, 7.	0.1	2
65	Comparison of third-order nonlinear optical properties of colloidal gold nanoshells and nanorods. , 2014, , .		1
66	Z-scan studies of nonlinear optical properties of colloidal gold nanorods and nanoshells. Journal of Nanophotonics, 2014, 9, 093797.	0.4	6
67	Surface plasmon influence on two-photon luminescence from single gold nanorods. , 2014, , .		1
68	Charge carrier mobility study of a mesogenic thienothiophene derivative in bulk and thin films. Organic Electronics, 2014, 15, 943-953.	1.4	24
69	Synthesis, optical and nonlinear optical properties of new pyrazoline derivatives. Dyes and Pigments, 2014, 102, 63-70.	2.0	36
70	Photophysical, amplified spontaneous emission and charge transport properties of oligofluorene derivatives in thin films. Physical Chemistry Chemical Physics, 2014, 16, 16941-16956.	1.3	48
71	Shell-thickness-dependent nonlinear optical properties of colloidal gold nanoshells. Journal of Materials Chemistry C, 2014, 2, 7239-7246.	2.7	25
72	A 5-(difluorenyl)-1,10-phenanthroline-based Ru(<scp>ii</scp>) complex as a coating agent for potential multifunctional gold nanoparticles. Physical Chemistry Chemical Physics, 2014, 16, 14826-14833.	1.3	14

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73	Biogenic gold nanoparticles enhance methylene blue-induced phototoxic effect on Staphylococcus epidermidis. Journal of Nanoparticle Research, 2014, 16, 1.	0.8	25
74	Post-synthesis reshaping of gold nanorods using a femtosecond laser. Physical Chemistry Chemical Physics, 2014, 16, 71-78.	1.3	61
75	Gold nanorods as multifunctional probes in a liquid crystalline DNA matrix. Nanoscale, 2013, 5, 10975.	2.8	22
76	Impact of the Synergistic Collaboration of Oligothiophene Bridges and Ruthenium Complexes on the Optical Properties of Dumbbellâ€Shaped Compounds. Chemistry - A European Journal, 2013, 19, 1476-1488.	1.7	9
77	Styryl dye possessing donor-Ï€-acceptor structure â€“ Synthesis, spectroscopic and computational studies. Dyes and Pigments, 2013, 99, 673-685.	2.0	33
78	Revealing Spectral Features in Two-Photon Absorption Spectrum of Hoechst 33342: A Combined Experimental and Quantum-Chemical Study. Journal of Physical Chemistry B, 2013, 117, 12013-12019.	1.2	22
79	Remarkable Effect of Iridium Cyclometalation on the Nonlinear Absorption Properties of a Quadrupolar Imine Ligand. Inorganic Chemistry, 2013, 52, 10705-10707.	1.9	28
80	Shape and size separation of gold nanoparticles using glucose gradient density. Proceedings of SPIE, 2012, , .	0.8	4
81	DNA as scaffolding for nanophotonic structures. Journal of Nanophotonics, 2012, 6, 064505-1.	0.4	21
82	Nonlinear absorption spectra of ethidium and ethidium homodimer. Chemical Physics, 2012, 404, 33-35.	0.9	12
83	Enhanced two-photon absorption cross-sections of zinc(II) tetraphenylporphyrins peripherally substituted with d6-metal alkynyl complexes. New Journal of Chemistry, 2012, 36, 2192.	1.4	22
84	Spectral dependence of nonlinear absorption and refraction in terthiophene-based organic semiconductors. Optical Materials, 2012, 34, 1682-1685.	1.7	10
85	Cubic nonlinear optical properties of new zinc tetraphenyl porphyrins peripherally functionalized with electron-rich Ru(II) alkynyl substituents. Tetrahedron, 2012, 68, 10351-10359.	1.0	31
86	Nonlinear absorption and nonlinear refraction: maximizing the merit factors. Proceedings of SPIE, 2012, , .	0.8	14
87	Third-Order Nonlinear Optical Properties of Colloidal Gold Nanorods. Journal of Physical Chemistry C, 2012, 116, 13731-13737.	1.5	83
88	Liquid crystal phases of DNA: Evaluation of DNA organization by twoâ€photon fluorescence microscopy and polarization analysis. Biopolymers, 2011, 95, 365-375.	1.2	15
89	Synthesis and optical properties of water-soluble fluoride nanophosphors co-doped with Eu3+ and Tb3+. Optical Materials, 2011, 33, 1419-1423.	1.7	13
90	Spontaneous formation of liquid crystalline phases and phase transitions in highly concentrated plasmid DNA. Liquid Crystals, 2011, 38, 461-468.	0.9	5

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91	Quadratic and Cubic Nonlinear Optical Properties of Salts of Diquat-Based Chromophores with Diphenylamino Substituents. Journal of Physical Chemistry A, 2010, 114, 12028-12041.	1.1	35
92	Nonlinear polarimetric analysis of DNA liquid crystalline domains. , 2009, , .		0
93	Linear and nonlinear optical properties of azobenzene derivatives. Journal of Molecular Modeling, 2009, 15, 581-590.	0.8	24
94	Polarization-Sensitive Two-Photon Microscopy Study of the Organization of Liquid-Crystalline DNA. Biophysical Journal, 2009, 97, 2348-2357.	0.2	25
95	Photochromic reaction-induced changes of ordering in liquid crystalline films. Thin Solid Films, 2008, 516, 8899-8904.	0.8	13
96	Investigation of the patterning efficiency in a new azo-dye copolymer under UV irradiation toward photonic applications. Proceedings of SPIE, 2008, , .	0.8	0
97	Experimental and theoretical investigations of spectroscopic properties of azobenzene derivatives in solution. Journal of Molecular Modeling, 2007, 13, 785-791.	0.8	17
98	Non-Exponential Decays in First-Order Kinetic Processes. The Case of"Squeezed Exponential". Acta Physica Polonica A, 2007, 112, S-153-S-159.	0.2	7
99	LC Alignment Controlled by Photoordering and Photorefraction in a Command Substrate. Molecular Crystals and Liquid Crystals, 2004, 412, 301-312.	0.4	4
100	Phase Change in Azobenzene Derivative-Doped Liquid Crystal Controlled by the Photochromic Reaction of the Dye. Journal of Physical Chemistry B, 2003, 107, 6039-6045.	1.2	26
101	A new holographic system: liquid crystal doped with photochromic molecules. Optical Materials, 2002, 20, 57-61.	1.7	18
102	Enhancement of third-order optical susceptibility of C60-TTF compounds using nematic liquid crystal. Chemical Physics Letters, 2002, 365, 327-332.	1.2	27
103	Influence of the environment on kinetics and electronic structure of asymmetric azobenzene derivatives â€" experiment and quantum-chemical calculations. Journal of Molecular Structure, 2001, 565-566, 53-57.	1.8	12
104	High gain of light in photoconducting polymerâ€"nematic liquid crystal hybrid structures. Optics Communications, 2001, 187, 257-261.	1.0	70
105	Kinetics of Photochromic Reactions of Substituted Azobenzenes in Solutions, and in Liquid Crystalline and Polymer Matrices. Molecular Crystals and Liquid Crystals, 2001, 361, 143-148.	0.3	15