Nikolay S Makarov

List of Publications by Year
in descending order

#	Article	IF	Citations
1	Two-photon absorption standards in the 550-1600 nm excitation wavelength range. Optics Express, 2008, 16, 4029.	3.4	805
2	Two-photon absorption properties of fluorescent proteins. Nature Methods, 2011, 8, 393-399.	19.0	589
3	Spectral and Dynamical Properties of Single Excitons, Biexcitons, and Trions in Cesiumâ€“Lead-Halide Perovskite Quantum Dots. Nano Letters, 2016, 16, 2349-2362.	9.1	533
4	Room Temperature Single-Photon Emission from Individual Perovskite Quantum Dots. ACS Nano, 2015, 9, 10386-10393.	14.6	459
5	Highly efficient large-area colourless luminescent solar concentrators using heavy-metal-free colloidal quantum dots. Nature Nanotechnology, 2015, 10, 878-885.	31.5	448
6	An integrated approach to realizing high-performance liquid-junction quantum dot sensitized solar cells. Nature Communications, 2013, 4, 2887.	12.8	255
7	High-Performance CuInS₂ Quantum Dot Laminated Glass Luminescent Solar Concentrators for Windows. ACS Energy Letters, 2018, 3, 520-525.	17.4	184
8	Thick-Shell CuInS₂/ZnS Quantum Dots with Suppressed â€œBlinkingâ€•and Narrow Single-Particle Emission Line Widths. Nano Letters, 2017, 17, 1787-1795.	9.1	179
9	Absolute Two-Photon Absorption Spectra and Two-Photon Brightness of Orange and Red Fluorescent Proteins. Journal of Physical Chemistry B, 2009, 113, 855-859.	2.6	163
10	Platinum Acetylide Two-Photon Chromophores. Inorganic Chemistry, 2007, 46, 6483-6494.	4.0	161
11	Enhanced carrier multiplication in engineered quasi-type-II quantum dots. Nature Communications, 2014, 5, 4148.	12.8	143
12	Photophysical properties and intracellular imaging of water-soluble porphyrin dimers for two-photon excited photodynamic therapy. Organic and Biomolecular Chemistry, 2009, 7, 889.	2.8	130
13	Light Emission Mechanisms in CuInS₂ Quantum Dots Evaluated by Spectral Electrochemistry. ACS Photonics, 2017, 4, 2425-2435.	6.6	115
14	Phase-Transfer Ligand Exchange of Lead Chalcogenide Quantum Dots for Direct Deposition of Thick, Highly Conductive Films. Journal of the American Chemical Society, 2017, 139, 6644-6653.	13.7	112
15	Impact of Electronic Coupling, Symmetry, and Planarization on One- and Two-Photon Properties of Triarylamines with One, Two, or Three Diarylboryl Acceptors. Journal of Physical Chemistry A, 2012, 116, 3781-3793.	2.5	88
16	Excited state absorption: a key phenomenon for the improvement of biphotonic based optical limiting at telecommunication wavelengths. Physical Chemistry Chemical Physics, 2012, 14, 15299.	2.8	81
17	Color Hues in Red Fluorescent Proteins Are Due to Internal Quadratic Stark Effect. Journal of Physical Chemistry B, 2009, 113, 12860-12864.	2.6	78
18	Simple yet Versatile Synthesis of CuInSe_{<i>x</i>}S_{2â€“<i>x</i>} Quantum Dots for Sunlight Harvesting. Journal of Physical Chemistry C, 2014, 118, 16987-16994.	3.1	75

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19	Effect of Interfacial Alloying versus â€œVolume Scalingâ€•on Auger Recombination in Compositionally Graded Semiconductor Quantum Dots. Nano Letters, 2017, 17, 5607-5613.	9.1	73
20	Symmetry Breaking in Platinum Acetylide Chromophores Studied by Femtosecond Two-Photon Absorption Spectroscopy. Journal of Physical Chemistry A, 2014, 118, 3749-3759.	2.5	71
21	Consensus statement: Standardized reporting of power-producing luminescent solar concentrator performance. Joule, 2022, 6, 8-15.	24.0	66
22	Resonance Enhancement of Two-Photon Absorption in Fluorescent Proteins. Journal of Physical Chemistry B, 2007, 111, 14051-14054.	2.6	63
23	Oneâ€•Photon Photophysics and Twoâ€•Photon Absorption of 4â€²[9,9â€•Di(2â€•ethylhexyl)â€•7â€•diphenylaminofluorenâ€•2â€•yl]â€•2,2â€²:6â€²,2â€²â€²â€•terpyridine and Their Platinum Chloride Complexes. Chemistry - A European Journal, 2011, 17, 2479-2491.	3.3	61
24	Describing Two-Photon Absorptivity of Fluorescent Proteins with a New Vibronic Coupling Mechanism. Journal of Physical Chemistry B, 2012, 116, 1736-1744.	2.6	59
25	Relation between Two-Photon Absorption and Dipolar Properties in a Series of Fluorenyl-Based Chromophores with Electron Donating or Electron Withdrawing Substituents. Journal of Physical Chemistry A, 2011, 115, 4255-4262.	2.5	53
26	Rapid, broadband two-photon-excited fluorescence spectroscopy and its application to red-emitting secondary reference compounds. Optical Materials Express, 2011, 1, 551.	3.0	49
27	Design and Synthesis of Heterostructured Quantum Dots with Dual Emission in the Visible and Infrared. ACS Nano, 2015, 9, 539-547.	14.6	49
28	Strong Two-Photon Absorption in Pushâˆ'Pull Phthalocyanines:â€‰ Role of Resonance Enhancement and Permanent Dipole Moment Change upon Excitation. Journal of Physical Chemistry C, 2008, 112, 848-859.	3.1	48
29	Quantitative Prediction of Two-Photon Absorption Cross Section Based on Linear Spectroscopic Properties. Journal of Physical Chemistry C, 2008, 112, 7997-8004.	3.1	45
30	Optimizing Simultaneous Two-Photon Absorption and Transient Tripletâˆ'Triplet Absorption in Platinum Acetylide Chromophores. Journal of Physical Chemistry A, 2010, 114, 7003-7013.	2.5	44
31	Effect of alicyclic ring size on the photophysical and photochemical properties of bis(arylidene)cycloalkanone compounds. Physical Chemistry Chemical Physics, 2012, 14, 11743.	2.8	42
32	Near-infrared two-photon absorption in phthalocyanines: Enhancement of lowest gerade-gerade transition by symmetrical electron-accepting substitution. Journal of Chemical Physics, 2006, 124, 224701.	3.0	41
33	Fluorenylethynylpyrene derivatives with strong two-photon absorption: influence of substituents on optical properties. Journal of Materials Chemistry C, 2015, 3, 3730-3744.	5.5	39
34	Unraveling the Two-Photon and Excited-State Absorptions of Aza-BODIPY Dyes for Optical Power Limiting in the SWIR Band. Journal of Physical Chemistry C, 2019, 123, 23661-23673.	3.1	37
35	Two-Photon Absorption in CdSe Colloidal Quantum Dots Compared to Organic Molecules. ACS Nano, 2014, 8, 12572-12586.	14.6	35
36	Combined experimental and theoretical study of one- and two-photon absorption properties of Dâ€“Ï€â€“Aâ€“Ï€â€“D type bis(carbazolylfluorenylethynyl) arene derivatives: Influence of aromatic acceptor bridge. Dyes and Pigments, 2015, 113, 682-691.	3.7	32

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37	Auger Up-Conversion of Low-Intensity Infrared Light in Engineered Quantum Dots. ACS Nano, 2016, 10, 10829-10841.	14.6	31
38	A new approach to dual-color two-photon microscopy with fluorescent proteins. BMC Biotechnology, 2010, 10, 6.	3.3	30
39	Photocharging Artifacts in Measurements of Electron Transfer in Quantum-Dot-Sensitized Mesoporous Titania Films. Journal of Physical Chemistry Letters, 2014, 5, 111-118.	4.6	29
40	Two-photon absorption properties of meso-substituted A3-corroles. Chemical Physics Letters, 2008, 462, 246-250.	2.6	28
41	Fiber-Coupled Luminescent Concentrators for Medical Diagnostics, Agriculture, and Telecommunications. ACS Nano, 2019, 13, 9112-9121.	14.6	28
42	Optimizing the Aesthetics of High-Performance CuInS₂/ZnS Quantum Dot Luminescent Solar Concentrator Windows. ACS Applied Energy Materials, 2020, 3, 8159-8163.	5.1	24
43	Tuning the Redox Coupling between Quantum Dots and Dopamine in Hybrid Nanoscale Assemblies. Journal of Physical Chemistry C, 2015, 119, 3388-3399.	3.1	22
44	Charge-Transport Mechanisms in CuInSe_{<i>x</i>}S_{2â€“<i>x</i>} Quantum-Dot Films. ACS Nano, 2018, 12, 12587-12596.	14.6	21
45	Quasi-phase matching generation of blue coherent radiation at stimulated Raman scattering. Optics Communications, 2002, 203, 413-420.	2.1	18
46	New all-optical method for measuring molecular permanent dipole moment difference using two-photon absorption spectroscopy. Journal of Luminescence, 2010, 130, 1619-1623.	3.1	17
47	Nonlinear Optical Pulse Suppression via Ultrafast Photoinduced Electron Transfer in an Aggregated Perylene Diimide/Oligothiophene Molecular Triad. Journal of Physical Chemistry A, 2014, 118, 110-121.	2.5	17
48	Practical Model for First Hyperpolarizability Dispersion Accounting for Both Homogeneous and Inhomogeneous Broadening Effects. Journal of Physical Chemistry Letters, 2012, 3, 2248-2252.	4.6	15
49	Alternative selection rules for one- and two-photon transitions in tribenzotetraazachlorin: Quasi-centrosymmetrical Ï€-conjugation pathway of formally non-centrosymmetrical molecule. Journal of Chemical Physics, 2013, 138, 214314.	3.0	14
50	Steady-state and time-resolved spectroscopic studies of green-to-red photoconversion of fluorescent protein Dendra2. Journal of Photochemistry and Photobiology A: Chemistry, 2014, 280, 5-13.	3.9	13
51	Justification of two-level approximation for description of two-photon absorption in oxazine dyes. , 2010, , .		12
52	Simultaneous multiple-excitation multiphoton microscopy yields increased imaging sensitivity and specificity. BMC Biotechnology, 2011, 11, 20.	3.3	12
53	Minimizing Scaling Losses in High-Performance Quantum Dot Luminescent Solar Concentrators for Large-Area Solar Windows. ACS Applied Materials & Interfaces, 2022, 14, 29679-29689.	8.0	12
54	Very efficient two-photon induced photo-tautomerization in non-symmetrical phthalocyanines. Journal of Luminescence, 2008, 128, 217-222.	3.1	10

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55	Exploring the Biocompatibility of Near-IR CuInSe_{<i>x</i>}S_{2â€“<i>x</i>}/ZnS Quantum Dots for Deep-Tissue Bioimaging. ACS Applied Bio Materials, 2020, 3, 8567-8574.	4.6	9
56	Highly sensitive detection of cancer cells using femtosecond dual-wavelength near-IR two-photon imaging. Biomedical Optics Express, 2012, 3, 1534.	2.9	7
57	Environment-sensitive two-photon dye. , 2008, , .		6
58	Modeling non-Lorentzian two-photon absorption line shape in dipolar chromophores. Journal of Luminescence, 2010, 130, 1055-1059.	3.1	6
59	Direct Synthesis of 2,5â€Bis(dodecanoxy)phenyleneethynyleneâ€Butadiynes by Sonogashira Coupling Reaction. European Journal of Organic Chemistry, 2013, 2013, 5341-5352.	2.4	6
60	Molybdenum(<scp>vi</scp>) tris(dithiolene) complexes as a new class of three-dimensional two-photon absorption chromophores at telecommunications wavelengths. Journal of Materials Chemistry C, 2014, 2, 614-617.	5.5	6
61	Quantum Dot Thin-Films as Rugged, High-Performance Photocathodes. Nano Letters, 2017, 17, 2319-2327.	9.1	6
62	Broad bandwidth near-IR two-photon absorption in conjugated porphyrin-core dendrimers. Proceedings of SPIE, 2007, , .	0.8	4
63	Heavyâ€Metalâ€Free Quantum Dotâ€Based Flexible Electronics. Information Display, 2021, 37, 24-32.	0.2	4
64	Multiwave stimulated raman scattering under quasi-phase-matching conditions. Optics and Spectroscopy (English Translation of Optika I Spektroskopiya), 2003, 95, 442-446.	0.6	3
65	Two-photon absorption spectroscopy of corroles. Proceedings of SPIE, 2009, , .	0.8	3
66	SRS generation of anti-Stokes radiation under phase quasi-matching conditions. Optics and Spectroscopy (English Translation of Optika I Spektroskopiya), 2001, 90, 938-941.	0.6	2
67	Hyperspectral two-photon near-infrared cancer imaging at depth. Proceedings of SPIE, 2009, , .	0.8	2
68	Maximizing two-photon absorption cross section within few essential state model. Proceedings of SPIE, 2010, , .	0.8	2
69	Synthesis, structure, and one- and two-photon absorption properties of N-substituted 3,5-bisarylidenepropenpiperidin-4-ones. Journal of Molecular Structure, 2013, 1037, 288-293.	3.6	2
70	PbSe/CdSe Core-Shell Colloidal Quantum Dots with Enhanced Optical Nonlinearities and Dual-Band Infrared/Visible Emission. , 2013, , .		2
71	Mobility of the Suzdal Opolye Settlers in 900-1150 AD. Archaeology, Ethnology and Anthropology of Eurasia, 2020, 48, 106-115.	0.2	2
72	Narrowing of the homogeneous two-photon absorption line width in two-level dipolar system. Proceedings of SPIE, 2008, , .	0.8	1

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73	Quantitative description of two-photon absorption with few essential states models. Proceedings of SPIE, 2008, , .	0.8	1
74	Absolute Two-photon Absorption Spectra Of Orange And Red Fluorescent Proteins. Biophysical Journal, 2009, 96, 400a-401a.	0.5	1
75	Hyperspectral two-photon near-infrared cancer imaging in vitro and in vivo. Proceedings of SPIE, 2009, , .	0.8	0
76	Modeling of non-Lorentzian two-photon absorption line shape in dipolar chromophore. Proceedings of SPIE, 2010, , .	0.8	0
77	Dispersion of the Third-Order Nonlinear Optical Response of Organics Using a Few State Model. , 2012, , .		0
78	Correlating one-photon, two-photon and excited state spectroscopy of CdSe quantum dots. , 2012, , .		0
79	Internal Quadratic Stark Effect Results in Color Hue Variations in Fluorescent Proteins with the Same Chromophore Structure. , 2010, , .		0
80	Mobility of the Suzdal Opolye Settlers in 900â€“1150 AD. Archaeology, Ethnology and Anthropology of Eurasia, 2020, 48, 106-115.	0.0	0