

Joseph S Melinger

List of Publications by Year in descending order

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117625

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#	ARTICLE	IF	CITATIONS
1	Mechanistic Understanding of DNA Denaturation in Nanoscale Thermal Gradients Created by Femtosecond Excitation of Gold Nanoparticles. <i>ACS Applied Materials & Interfaces</i> , 2022, 14, 3404-3417.	8.0	4
2	Synthesis of Substituted Cy5 Phosphoramidite Derivatives and Their Incorporation into Oligonucleotides Using Automated DNA Synthesis. <i>ACS Omega</i> , 2022, 7, 11002-11016.	3.5	11
3	Tuning between Quenching and Energy Transfer in DNA-Templated Heterodimer Aggregates. <i>Journal of Physical Chemistry Letters</i> , 2022, 13, 2782-2791.	4.6	15
4	Understanding Self-Assembled Pseudoisocyanine Dye Aggregates in DNA Nanostructures and Their Exciton Relay Transfer Capabilities. <i>Journal of Physical Chemistry B</i> , 2022, 126, 110-122.	2.6	11
5	Data-Driven and Multiscale Modeling of DNA-Templated Dye Aggregates. <i>Molecules</i> , 2022, 27, 3456.	3.8	6
6	Förster Resonance Energy Transfer in Linear DNA Multifluorophore Photonic Wires: Comparing Dual versus Split Rail Building Block Designs. <i>Advanced Optical Materials</i> , 2021, 9, 2100884.	7.3	5
7	Exploring the Holliday Junction in a DNA nanostructure for creating excitonic dimers. , 2021, , .		1
8	Can a DNA Origami Structure Constrain the Position and Orientation of an Attached Dye Molecule?. <i>Journal of Physical Chemistry C</i> , 2021, 125, 1509-1522.	3.1	26
9	Understanding Förster Resonance Energy Transfer in the Sheet Regime with DNA Brick-Based Dye Networks. <i>ACS Nano</i> , 2021, 15, 16452-16468.	14.6	14
10	Understanding Disorder, Vibronic Structure, and Delocalization in Electronically Coupled Dimers on DNA Duplexes. <i>Journal of Physical Chemistry A</i> , 2021, 125, 9632-9644.	2.5	11
11	Femtosecond Laser Pulse Excitation of DNA-Labeled Gold Nanoparticles: Establishing a Quantitative Local Nanothermometer for Biological Applications. <i>ACS Nano</i> , 2020, 14, 8570-8583.	14.6	33
12	Delocalized Two-Exciton States in DNA Scaffolded Cyanine Dimers. <i>Journal of Physical Chemistry B</i> , 2020, 124, 8042-8049.	2.6	25
13	Power of Aerogel Platforms to Explore Mesoscale Transport in Catalysis. <i>ACS Applied Materials & Interfaces</i> , 2020, 12, 41277-41287.	8.0	13
14	DNA scaffold supports long-lived vibronic coherence in an indodicarbocyanine (Cy5) dimer. <i>Chemical Science</i> , 2020, 11, 8546-8557.	7.4	28
15	Ultrafast Excitation Transfer in Cy5 DNA Photonic Wires Displays Dye Conjugation and Excitation Energy Dependency. <i>Journal of Physical Chemistry Letters</i> , 2020, 11, 4163-4172.	4.6	34
16	DNA Origami Chromophore Scaffold Exploiting HomoFRET Energy Transport to Create Molecular Photonic Wires. <i>ACS Applied Nano Materials</i> , 2020, 3, 3323-3336.	5.0	24
17	Resonance Energy Transfer: Utilizing HomoFRET to Extend DNA-scaffolded Photonic Networks and Increase Light-harvesting Capability (<i>Advanced Optical Materials</i> 1/2018). <i>Advanced Optical Materials</i> , 2018, 6, 1870005.	7.3	1
18	Optical Properties of Vibronically Coupled Cy3 Dimers on DNA Scaffolds. <i>Journal of Physical Chemistry B</i> , 2018, 122, 5020-5029.	2.6	58

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19	Utilizing HomoFRET to Extend DNA-scaffolded Photonic Networks and Increase Light-Harvesting Capability. <i>Advanced Optical Materials</i> , 2018, 6, 1700679.	7.3	44
20	Evaluating Dye-Labeled DNA Dendrimers for Potential Applications in Molecular Biosensing. <i>ACS Sensors</i> , 2017, 2, 401-410.	7.8	31
21	Bridging Lanthanide to Quantum Dot Energy Transfer with a Short-Lifetime Organic Dye. <i>Journal of Physical Chemistry Letters</i> , 2017, 8, 2182-2188.	4.6	34
22	Concurrent Modulation of Quantum Dot Photoluminescence Using a Combination of Charge Transfer and Förster Resonance Energy Transfer: Competitive Quenching and Multiplexed Biosensing Modality. <i>Journal of the American Chemical Society</i> , 2017, 139, 363-372.	13.7	64
23	Optical determination of the electronic coupling and intercalation geometry of thiazole orange homodimer in DNA. <i>Journal of Chemical Physics</i> , 2017, 147, 055101.	3.0	17
24	Transient Optical and Terahertz Spectroscopy of Nanoscale Films of RuO ₂ . <i>Plasmonics</i> , 2017, 12, 743-750.	3.4	6
25	Extending DNA-Based Molecular Photonic Wires with Homogeneous Förster Resonance Energy Transfer. <i>Advanced Optical Materials</i> , 2016, 4, 399-412.	7.3	43
26	Expanding molecular logic capabilities in DNA-scaffolded multiFRET triads. <i>RSC Advances</i> , 2016, 6, 97587-97598.	3.6	23
27	Fluorescence and Energy Transfer in Dye-Labeled DNA Crystals. <i>Journal of Physical Chemistry B</i> , 2016, 120, 12287-12292.	2.6	13
28	FRET from Multiple Pathways in Fluorophore-Labeled DNA. <i>ACS Photonics</i> , 2016, 3, 659-669.	6.6	63
29	Examining the Polyproline Nanoscopic Ruler in the Context of Quantum Dots. <i>Chemistry of Materials</i> , 2015, 27, 6222-6237.	6.7	30
30	A Dosimetry Methodology for Two-Photon Absorption Induced Single-Event Effects Measurements. <i>IEEE Transactions on Nuclear Science</i> , 2014, 61, 3416-3423.	2.0	30
31	Simulation of Light-Matter Interaction and Two-Photon Absorption Induced Charge Deposition by Ultrashort Optical Pulses in Silicon. <i>IEEE Transactions on Nuclear Science</i> , 2014, 61, 3504-3511.	2.0	15
32	Assembling programmable FRET-based photonic networks using designer DNA scaffolds. <i>Nature Communications</i> , 2014, 5, 5615.	12.8	142
33	An Investigation of Single-Event Transients in C-SiGe HBT on SOI Current Mirror Circuits. <i>IEEE Transactions on Nuclear Science</i> , 2014, 61, 3193-3200.	2.0	15
34	Resonance Energy Transfer in DNA Duplexes Labeled with Localized Dyes. <i>Journal of Physical Chemistry B</i> , 2014, 118, 14555-14565.	2.6	55
35	On the Transient Response of a Complementary (npn & Tj ETQq1 1 0.784314 rgBT /Overlo Transactions on Nuclear Science, 2014, 61, 3146-3153.	2.0	15
36	Design of Radiation-Hardened RF Low-Noise Amplifiers Using Inverse-Mode SiGe HBTs. <i>IEEE Transactions on Nuclear Science</i> , 2014, 61, 3218-3225.	2.0	34

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37	A triangular three-dye DNA switch capable of reconfigurable molecular logic. RSC Advances, 2014, 4, 48860-48871.	3.6	35
38	Single-Event Upsets in Substrate-Etched CMOS SOI SRAMs Using Ultraviolet Optical Pulses With Sub-Micrometer Spot Size. IEEE Transactions on Nuclear Science, 2013, 60, 4184-4191.	2.0	13
39	Investigation of Trap States in Mid-Wavelength Infrared Type-II Superlattices Using Time-Resolved Photoluminescence. Journal of Electronic Materials, 2013, 42, 3203-3210.	2.2	26
40	Remote THz Monitoring of an Evolving Gas-Phase Mixture. , 2013, , .		0
41	THz detection of small molecule vapors in the atmospheric transmission windows. Optics Express, 2012, 20, 6788.	3.4	51
42	Substrate independence of THz vibrational modes of polycrystalline thin films of molecular solids in waveguide THz-TDS. Journal of Applied Physics, 2012, 111, 023105.	2.5	11
43	Complex Förster Energy Transfer Interactions between Semiconductor Quantum Dots and a Redox-Active Osmium Assembly. ACS Nano, 2012, 6, 5330-5347.	14.6	55
44	Waveguide terahertz time-domain spectroscopy of ammonium nitrate polycrystalline films. Journal of Applied Physics, 2012, 111, 093103.	2.5	6
45	High resolution THz spectroscopy of ammonium nitrate and potassium nitrate crystalline films. , 2011, , .		0
46	Synthesis and Optical Properties of Triphenylene-Based Dendritic Donor Perylene Diimide Acceptor Systems. Journal of Physical Chemistry A, 2011, 115, 1579-1592.	2.5	32
47	Enhanced Multiple Exciton Generation in Quasi-One-Dimensional Semiconductors. Nano Letters, 2011, 11, 3476-3481.	9.1	132
48	High Resolution Waveguide Terahertz Time-Domain Spectroscopy. Journal of Infrared, Millimeter, and Terahertz Waves, 2011, 32, 1267-1284.	2.2	9
49	Comparison of Single and Two-Photon Absorption for Laser Characterization of Single-Event Upsets in SOI SRAMs. IEEE Transactions on Nuclear Science, 2011, 58, 2968-2975.	2.0	10
50	Quantum-dot/dopamine bioconjugates function as redox coupled assemblies for in vitro and intracellular pH sensing. Nature Materials, 2010, 9, 676-684.	27.5	433
51	Electronic Spectra of the Nanostar Dendrimer: Theory and Experiment. Journal of Physical Chemistry C, 2010, 114, 20702-20712.	3.1	35
52	Self-Assembled Quantum Dot-Sensitized Multivalent DNA Photonic Wires. Journal of the American Chemical Society, 2010, 132, 18177-18190.	13.7	128
53	Solid-State Density Functional Theory Investigation of the Terahertz Spectra of the Structural Isomers 1,2-Dicyanobenzene and 1,3-Dicyanobenzene. Journal of Physical Chemistry A, 2010, 114, 12513-12521.	2.5	44
54	Temperature dependent characterization of terahertz vibrations of explosives and related threat materials. Optics Express, 2010, 18, 27238.	3.4	27

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55	Fabrication of terahertz metamaterials by laser printing. <i>Optics Letters</i> , 2010, 35, 4039.	3.3	50
56	Synthesis and optical properties of triphenylene-based conjugated dendrons. <i>Tetrahedron</i> , 2009, 65, 1247-1256.	1.9	11
57	Relative Photon-to-Carrier Efficiencies of Alternating Nanolayers of Zinc Phthalocyanine and C60 Films Assessed by Time-Resolved Terahertz Spectroscopy. <i>Journal of Physical Chemistry C</i> , 2009, 113, 18842-18850.	3.1	23
58	Guided-wave terahertz spectroscopy of molecular solids [Invited]. <i>Journal of the Optical Society of America B: Optical Physics</i> , 2009, 26, A79.	2.1	37
59	Effect of Total Ionizing Dose on a Bulk 130 nm Ring Oscillator Operating at Ultra-Low Power. <i>IEEE Transactions on Nuclear Science</i> , 2009, 56, 3262-3266.	2.0	7
60	Resonance Energy Transfer Between Luminescent Quantum Dots and Diverse Fluorescent Protein Acceptors. <i>Journal of Physical Chemistry C</i> , 2009, 113, 18552-18561.	3.1	109
61	High-Resolution Waveguide THz Spectroscopy of Biological Molecules. <i>Biophysical Journal</i> , 2008, 94, 1010-1020.	0.5	143
62	A Probabilistic Analysis Technique Applied to a Radiation-Hardened-by-Design Voltage-Controlled Oscillator for Mixed-Signal Phase-Locked Loops. <i>IEEE Transactions on Nuclear Science</i> , 2008, 55, 3447-3455.	2.0	36
63	Pulsed Laser Single-Event Effects in Highly Scaled CMOS Technologies in the Presence of Dense Metal Coverage. <i>IEEE Transactions on Nuclear Science</i> , 2008, 55, 3401-3406.	2.0	11
64	7 GHz resolution waveguide THz spectroscopy of explosives related solids showing new features. <i>Optics Express</i> , 2008, 16, 4094.	3.4	90
65	Laser Verification of On-Chip Charge-Collection Measurement Circuit. <i>IEEE Transactions on Nuclear Science</i> , 2008, 55, 3309-3313.	2.0	4
66	Laser-Induced Current Transients in Silicon-Germanium HBTs. <i>IEEE Transactions on Nuclear Science</i> , 2008, 55, 2936-2942.	2.0	34
67	Supramolecular Device for Artificial Photosynthetic Mimics As Helix-Mediated Antenna/Reaction Center Ensemble. <i>Organic Letters</i> , 2008, 10, 1625-1628.	4.6	33
68	The underlying terahertz vibrational spectrum of explosives solids. <i>Applied Physics Letters</i> , 2008, 93, .	3.3	69
69	Terahertz mobility measurements on poly-3-hexylthiophene films: Device comparison, molecular weight, and film processing effects. <i>Journal of Applied Physics</i> , 2008, 103, .	2.5	37
70	High resolution THz spectroscopy of organic and bio-organic molecules. , 2007, , .		0
71	Photoconductivity of organic semiconductor polymers studied by time-resolved THz-TDS. , 2007, , .		0
72	Intrinsic Photoconductivity of P3HT films Measured by Time-Resolved THz spectroscopy. , 2007, , .		0

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73	Narrow-Line THz Absorption Spectra of Deoxycytidine and D-Glucose Films in Parallel Plate Waveguides. , 2007, , .		0
74	Transient Response of Semiconductor Electronics to Ionizing Radiation. Recent Developments in Charge-Collection Measurement. IEEE Transactions on Nuclear Science, 2007, 54, 1010-1017.	2.0	22
75	High-Resolution Waveguide Terahertz Spectroscopy of Partially Oriented Organic Polycrystalline Films. Journal of Physical Chemistry A, 2007, 111, 10977-10987.	2.5	45
76	Intrinsic photoconductivity of P3HT films measured by time-resolved THz spectroscopy. , 2007, , .		0
77	One-Dimensional Energy/Electron Transfer through a Helical Channel. Journal of the American Chemical Society, 2006, 128, 4532-4533.	13.7	44
78	Photophysical Properties of Dioxolane-Substituted Pentacene Derivatives Dispersed in Tris(quinolin-8-olato)aluminum(III). Journal of Physical Chemistry B, 2006, 110, 7928-7937.	2.6	55
79	Dynamics of Energy Transfer of a Dioxolane-Substituted Pentacene Dispersed in 4,4-Bis[N-1-naphthyl-N-phenylamino]biphenyl. Journal of Physical Chemistry B, 2006, 110, 10606-10611.	2.6	14
80	Light Harvesting Unsymmetrical Conjugated Dendrimers as Photosynthetic Mimics. Photosynthesis Research, 2006, 87, 115-131.	2.9	33
81	Line narrowing of terahertz vibrational modes for organic thin polycrystalline films within a parallel plate waveguide. Applied Physics Letters, 2006, 89, 251110.	3.3	75
82	Excitation Energy Transfer in Tris(8-hydroxyquinolino)aluminum Doped with a Pentacene Derivative. Journal of Physical Chemistry B, 2005, 109, 5456-5463.	2.6	29
83	Photoluminescence Properties of Conjugated Phenylacetylene Monodendrons in Thin Films. Journal of Fluorescence, 2004, 14, 105-112.	2.5	6
84	Aggregation effects on the optical properties of a light harvesting phenylacetylene dendrimer in non-polar solution. Journal of Luminescence, 2004, 106, 301-311.	3.1	12
85	Synthesis and optical properties of conjugated dendrimers with unsymmetrical branching. Tetrahedron, 2003, 59, 5495-5506.	1.9	12
86	Ultrafast Dynamics of Gold-Based Nanocomposite Materials. Journal of Physical Chemistry A, 2003, 107, 3424-3431.	2.5	31
87	Synthesis and Optical Properties of Unsymmetrical Conjugated Dendrimers Focally Anchored with Perylenes in Different Geometries. Journal of Organic Chemistry, 2003, 68, 6952-6958.	3.2	40
88	Synthesis of light-harvesting dendrimers focally anchored with crown ethers or terpyridine ligands. Organic and Biomolecular Chemistry, 2003, 1, 4465.	2.8	16
89	Optical and Photophysical Properties of Light-Harvesting Phenylacetylene Monodendrons Based on Unsymmetrical Branching. Journal of the American Chemical Society, 2002, 124, 12002-12012.	13.7	145
90	VIBRATIONAL POPULATION CONTROL IN LIQUID-PHASE METAL CARBONYLS. , 2002, , .		1

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91	Analysis of Intermolecular Coordinate Contributions to Third-Order Ultrafast Spectroscopy of Liquids in the Harmonic Oscillator Limit. <i>Journal of Physical Chemistry A</i> , 2001, 105, 7960-7972.	2.5	60
92	Ultrafast Dynamics of Electronic Excitations in a Light-Harvesting Phenylacetylene Dendrimer. <i>Journal of Physical Chemistry B</i> , 2001, 105, 5595-5598.	2.6	68
93	Pulsed laser-induced single event upset and charge collection measurements as a function of optical penetration depth. <i>Journal of Applied Physics</i> , 1998, 84, 690-703.	2.5	78
94	Backward second-harmonic generation in periodically poled bulk LiNbO ₃ . <i>Optics Letters</i> , 1997, 22, 862.	3.3	86
95	Intermolecular vibrational coherence in molecular liquids. <i>Journal of Raman Spectroscopy</i> , 1995, 26, 571-583.	2.5	179