Lewis J Rothberg

List of Publications by Year
in descending order

51 papers	3,310 citations	361045 20 h-index	264894 42 g-index
52 all docs	52 docs citations	52 times ranked	4057 citing authors

#	Article	IF	Citations
1	Label-Free Colorimetric Detection of Specific Sequences in Genomic DNA Amplified by the Polymerase Chain Reaction. Journal of the American Chemical Society, 2004, 126, 10958-10961.	6.6	635
2	Status of and prospects for organic electroluminescence. Journal of Materials Research, 1996, 11, 3174-3187.	1.2	390
3	Aggregation Quenching of Luminescence in Electroluminescent Conjugated Polymers. Journal of Physical Chemistry A, 1999, 103, 2394-2398.	1.1	358
4	DNA Sequence Detection Using Selective Fluorescence Quenching of Tagged Oligonucleotide Probes by Gold Nanoparticles. Analytical Chemistry, 2004, 76, 5414-5417.	3.2	260
5	Conformational Effects on the Photophysics of Conjugated Polymers:Â A Two Species Model for MEHâ^'PPV Spectroscopy and Dynamics. Macromolecules, 2001, 34, 2346-2352.	2.2	242
6	The structural basis for giant enhancement enabling single-molecule Raman scattering. Proceedings of the National Academy of Sciences of the United States of America, 2003, 100, 8638-8643.	3.3	209
7	Dendritic sidegroups as three-dimensional barriers to aggregation quenching of conjugated polymer fluorescence. Synthetic Metals, 2000, 114, 61-64.	2.1	138
8	Nanoscale silicon microcavities for biosensing. Materials Science and Engineering C, 2001, 15, 277-282.	3.8	125
9	Kinetics and Mechanism of Single-Stranded DNA Adsorption onto Citrate-Stabilized Gold Nanoparticles in Colloidal Solution. Langmuir, 2011, 27, 1770-1777.	1.6	120
10	Detection of Specific Sequences in RNA Using Differential Adsorption of Single-Stranded Oligonucleotides on Gold Nanoparticles. Analytical Chemistry, 2005, 77, 6229-6233.	3.2	89
11	Enhancement of Adsorbed Dye Monolayer Fluorescence by a Silver Nanoparticle Overlayer. Journal of Physical Chemistry B, 2006, 110, 17383-17387.	1.2	77
12	Fully Spiro-Configured Terfluorenes as Novel Amorphous Materials Emitting Blue Light. Chemistry of Materials, 2002, 14, 463-470.	3.2	75
13	Plasmon enhancement of bulk heterojunction organic photovoltaic devices by electrode modification. Applied Physics Letters, 2008, 93, 123302.	1.5	73
14	Interferometric Sensing of Biomolecular Binding Using Nanoporous Aluminum Oxide Templates. Nano Letters, 2003, 3, 811-814.	4.5	69
15	Determination of the Exciton Binding Energy in Single-Walled Carbon Nanotubes. Physical Review Letters, 2006, 96, 047403.	2.9	52
16	Structural basis for the spectroscopy and photophysics of solution-aggregated conjugated polymers. Synthetic Metals, 2004, 141, 197-202.	2.1	51
17	Surface-initiated growth of conjugated polymers for functionalization of electronically active nanoporous networks: synthesis, structure and optical properties. Journal of Materials Chemistry, 2006, 16, 3721.	6.7	38
18	Evaluation of propylene-, meta-, and para-linked triazine and tert-butyltriphenylamine as bipolar hosts for phosphorescent organic light-emitting diodes. Journal of Materials Chemistry C, 2013, 1, 2224.	2.7	33

#	Article	IF	Citations
19	Label-Free Sensing of Binding to Microarrays Using Brewster Angle Straddle Interferometry. Analytical Chemistry, 2007, 79, 7589-7595.	3.2	29
20	Synthesis, Optical, and Electrochemical Properties of a New Family of Dendritic Oligothiophenes. Journal of Organic Chemistry, 2006, 71, 9475-9483.	1.7	26
21	Photoluminescence decay dynamics of dendritically substituted conjugated polymers. Synthetic Metals, 2001, 116, 41-44.	2.1	20
22	Regulation of electronic behavior via confinement of PPV-based oligomers on peptide scaffolds. Journal of Materials Chemistry, 2008, 18, 3847.	6.7	20
23	Exciton dissociation in conjugated polymers. Macromolecular Symposia, 2004, 212, 13-24.	0.4	19
24	Permanent polarization and charge distribution in organic light-emitting diodes (OLEDs): Insights from near-infrared charge-modulation spectroscopy of an operating OLED. Journal of Applied Physics, 2014, 115, .	1.1	19
25	Selective quenching of fluorescence from unbound oligonucleotides by gold nanoparticles as a probe of RNA structure. Rna, 2007, 13, 2034-2041.	1.6	18
26	Assays Based on Differential Adsorption of Single-stranded and Double-stranded DNA on Unfunctionalized Gold Nanoparticles in a Colloidal Suspension. Plasmonics, 2007, 2, 165-171.	1.8	18
27	Structure and Dynamics of Single Conjugated Polymer Chromophores by Surface-Enhanced Raman Spectroscopy. ACS Nano, 2007, 1, 299-306.	7.3	17
28	Rigidity and Polarity Effects on the Electronic Properties of Two Deep Blue Delayed Fluorescence Emitters. Journal of Physical Chemistry C, 2018, 122, 11961-11972.	1.5	13
29	Effects of mixed host spatial distribution on the efficiency of blue phosphorescent organic light-emitting diodes. Applied Physics Letters, 2012, 101, 043303.	1.5	12
30	WangetÂal.Reply:. Physical Review Letters, 2007, 98, .	2.9	11
31	Role of Aggregates in the Luminescence Decay Dynamics of Conjugated Polymers. Journal of Physical Chemistry A, 2016, 120, 551-555.	1.1	11
32	Conformational Reorganization and Solvation Dynamics of Dendritic Oligothiophenes. Journal of Physical Chemistry B, 2007, 111, 13211-13216.	1.2	10
33	Watching polymers dance. Nature Chemistry, 2011, 3, 425-426.	6.6	6
34	Description and importance of interchain excited states in conjugated polymer photophysics. Israel Journal of Chemistry, 2000, 40, 153-157.	1.0	5
35	Label-Free Immunoassay Using Droplet-Based Brewsterâ€™s Angle Straddle Interferometry. Analytical Chemistry, 2021, 93, 4456-4462.	3.2	4
36	Low Onset Stimulated Emission in Electrically Pumped Organic Light-Emitting Diodes. ACS Photonics, 2022, 9, 511-517.	3.2	4

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37	Photoluminescent Enhancement of Ruthenium Complex Monolayers by Surface Plasmon Resonance of Silver Nanoparticles. Materials Research Society Symposia Proceedings, 2004, 818, 256.	0.1	3
38	Complications in the Interpretation of F8T2 Spectra in Terms of Morphology. Journal of Physical Chemistry B, 2021, 125, 5660-5666.	1.2	3
39	Improved fluorescence yields through selective photooxidation of conjugated polymer chromophores. Journal of Photonics for Energy, 2018, 8, 1.	0.8	3
40	23.1: Invited Paper: Luminescence Quenching by Charge Carriers in Organic Lightâ€Emitting Diodes. Digest of Technical Papers SID International Symposium, 2009, 40, 306-309.	0.1	1
41	P-207: Late-News Poster: Efficient Emitter Aggregation Management Using High-Entropy Non-crystallizable Hosts. Digest of Technical Papers SID International Symposium, 2018, 49, 1862-1864.	0.1	1
42	Reduction of non-specific adsorption in label-free assays via reversible surface blocking with amphiphilic sugars. Sensors and Actuators B: Chemical, 2022, 360, 131657.	4.0	1
43	Resonant Cavity Electroluminescent Backlights. Digest of Technical Papers SID International Symposium, 1998, 29, 231.	0.1	0
44	Conformations of single chains of conjugated polymers by plasmon-enhanced Raman scattering. , 2006, 6323, 200.		0
45	33.3: Distinguished Student Paper: Improved Blue Phosphorescent OLEDs with a Linearlyâ€Graded Mixed Host Architecture. Digest of Technical Papers SID International Symposium, 2012, 43, 441-444.	0.1	0
46	Effects of emitting layer host composition profile on the recombination zone of blue phosphorescent organic light emitting diodes. Journal of the Society for Information Display, 2013, 21, 55-59.	0.8	0
47	Role of Spin-Coupled Polaron Pairs in the Recombination of Charges in Electroluminescent Conjugated Polymers. Journal of Physical Chemistry C, 2018, 122, 7013-7019.	1.5	0
48	Noncrystallizable Chargeâ€Transporting Hosts for Phosphorescent Organic Light Emitting Diodes: Decreased Emitter Aggregation. Physica Status Solidi - Rapid Research Letters, 2020, 14, 1900713.	1.2	0
49	ENGINEERING OF SIDEGROUPS TO ENHANCE LUMINESCENCE EFFICIENCY OF CONJUGATED POLYMERS. , 2000, , .		0
50	Single Carbon Nanotube Photonics and the Role of Excitons. , 2006, , .		0
51	Effects of Local Plasmon Resonance Inhomogeneity on Surface Enhanced Molecular Fluorescence. , 2006, , .		0