

Robert M Metzger

List of Publications by Year in descending order

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docs citations

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citing authors

#	ARTICLE	IF	CITATIONS
1	Observation of current rectification by a new asymmetric iron(III) surfactant in a eutectic Galn LB monolayer Au sandwich. Dalton Transactions, 2018, 47, 6344-6350.	1.6	7
2	Quo vadis, unimolecular electronics?. Nanoscale, 2018, 10, 10316-10332.	2.8	25
3	Janus Reversal and Coulomb Blockade in Ferrocene-Perylenebisimide and N,N,N',N' -Tetramethyl- <i>para</i> -phenylenediamine-Perylenebisimide Diode Rectifiers. Langmuir, 2016, 32, 6851-6859.	1.6	11
4	Confirmation of the Rectifying Behavior in a Pentacoordinate $[N_2O_2]$ Iron(III) Surfactant Using a Eutectic Galn LB Monolayer Au Assembly. Journal of Physical Chemistry C, 2016, 120, 10578-10583.	1.5	17
5	Surprisingly Big Rectification Ratios for a Very Small Unimolecular Rectifier. ChemPlusChem, 2016, 81, 1152-1155.	1.3	10
6	Crystal structure of 4,4-dibromo-2,5-dimethoxy-[1,1-biphenyl]-2,5-dione (BrHBQBr). Acta Crystallographica Section E: Crystallographic Communications, 2015, 71, 1454-1456.	0.2	4
7	Unimolecular Electronics. Chemical Reviews, 2015, 115, 5056-5115.	23.0	416
8	Unimolecular amplifier: principles of a three-terminal device with power gain. Nanoscale, 2013, 5, 6975.	2.8	11
9	Unimolecular Electronic Devices. Topics in Current Chemistry, 2011, 313, 39-84.	4.0	23
10	Unimolecular electronics and rectifiers. Synthetic Metals, 2009, 159, 2277-2281.	2.1	20
11	Unimolecular electronics. Journal of Materials Chemistry, 2008, 18, 4364.	6.7	145
12	Unimolecular rectification of monolayers of $CH_3C(O)C_{14}H_{28}Q^+C_3NQ^-$ and $CH_3C(O)C_{16}H_{32}Q^+C_3NQ^-$ organized by self-assembly, Langmuir Blodgett, and Langmuir-Schaefer 1.3 techniques. Physical Chemistry Chemical Physics, 2007, 9, 4007-4017.		23
13	Elastic and Inelastic Electron Tunneling Spectroscopy of a New Rectifying Monolayer. Journal of the American Chemical Society, 2007, 129, 8310-8319.	6.6	55
14	Spectroscopy and Rectification of Three Donor-Sigma-Acceptor Compounds, Consisting of a One-Electron Donor (Pyrene or Ferrocene), a One-Electron Acceptor (Perylenebisimide), and a C19Swallowtail. Journal of Physical Chemistry B, 2006, 110, 11146-11159.	1.2	52
15	Polarization of Charge-Transfer Bands and Rectification in Hexadecylquinolinium 7,7,8-Tricyanoquinodimethanide and Its Tetrafluoro Analog. Journal of Physical Chemistry B, 2006, 110, 15085-15093.	1.2	27
16	Unimolecular rectifiers: Methods and challenges. Analytica Chimica Acta, 2006, 568, 146-155.	2.6	27
17	Current Rectification in a Langmuir-Schaefer Monolayer of Fullerene-bis-[4-diphenylamino-4-(N-ethyl-N-(2-ethylamino)-1,4-diphenyl-1,3-butadiene)] Malonate between Au Electrodes. Journal of Physical Chemistry B, 2005, 109, 857-871.	1.2	90
18	Unimolecular rectifiers and prospects for other unimolecular electronic devices. Chemical Record, 2004, 4, 291-304.	2.9	28

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19	Electrical rectification by monolayers of three molecules. <i>Macromolecular Symposia</i> , 2004, 212, 63-72.	0.4	8
20	Unimolecular Rectifiers and Proposed Unimolecular Amplifier. <i>Annals of the New York Academy of Sciences</i> , 2003, 1006, 252-276.	1.8	14
21	Electrical Rectification in a Langmuir-Blodgett Monolayer of Dimethylanilinoazafullerene Sandwiched between Gold Electrodes. <i>Journal of Physical Chemistry B</i> , 2003, 107, 1021-1027.	1.2	102
22	Unimolecular Electrical Rectifiers. <i>Chemical Reviews</i> , 2003, 103, 3803-3834.	23.0	504
23	A Spectroscopic Study of Hexadecylquinolinium Tricyanoquinodimethanide as a Monolayer and in Bulk. <i>Journal of Physical Chemistry B</i> , 2002, 106, 10374-10381.	1.2	25
24	Current-voltage characteristics of an LB monolayer of didecylammonium tricyanoquinodimethanide measured between macroscopic gold electrodes. <i>Journal of Materials Chemistry</i> , 2002, 12, 3167-3171.	6.7	12
25	Rectification and Nonlinear Optical Properties of a Langmuir-Blodgett Monolayer of a Pyridinium Dye. <i>Journal of Physical Chemistry B</i> , 2002, 106, 12158-12164.	1.2	81
26	Electrical Rectification by a Monolayer of Hexadecylquinolinium Tricyanoquinodimethanide Measured between Macroscopic Gold Electrodes. <i>Journal of Physical Chemistry B</i> , 2001, 105, 7280-7290.	1.2	222
27	Analytical Model for Molecular-Scale Charge Transport. <i>Journal of Physical Chemistry A</i> , 2001, 105, 4702-4707.	1.1	51
28	Unimolecular Rectification between 370 K and 105 K and Spectroscopic Properties of Hexadecylquinolinium Tricyanoquinodimethanide. <i>ACS Symposium Series</i> , 2001, , 50-65.	0.5	0
29	Rectification by a Monolayer of Hexadecylquinolinium Tricyanoquinodimethanide between Gold Electrodes. <i>Angewandte Chemie - International Edition</i> , 2001, 40, 1749-1752.	7.2	83
30	Electrical Rectification by a Monolayer of Hexadecylquinolinium Tricyanoquinodimethanide Sandwiched between Gold Electrodes. <i>Materials Research Society Symposia Proceedings</i> , 2000, 636, 781.	0.1	0
31	Light-Induced Enhancement of Rectification by Monolayer of Hexadecylquinolinium Tricyanoquinodimethanide Between Al Electrodes. <i>Materials Research Society Symposia Proceedings</i> , 2000, 660, .	0.1	0
32	Electrical Rectification by a Monolayer of Hexadecylquinolinium Tricyanoquinodimethanide Sandwiched Between Gold Electrodes. <i>Materials Research Society Symposia Proceedings</i> , 2000, 660, .	0.1	0
33	Light-Induced Enhancement of Rectification by Monolayer of Hexadecylquinolinium Tricyanoquinodimethanide Between Al Electrodes. <i>Materials Research Society Symposia Proceedings</i> , 2000, 660, 1.	0.1	0
34	All about (N-hexadecylquinolin-4-ium-1-yl)methylidenetricyanoquinodimethanide, a unimolecular rectifier of electrical current. <i>Journal of Materials Chemistry</i> , 2000, 10, 55-62.	6.7	82
35	Electrical Rectification by a Monolayer of Hexadecylquinolinium Tricyanoquinodimethanide Sandwiched Between Gold Electrodes. <i>Materials Research Society Symposia Proceedings</i> , 2000, 660, 1.	0.1	0
36	Unimolecular Electrical Rectification by Hexadecylquinolinium Tricyanoquinodimethanide. <i>Molecular Crystals and Liquid Crystals</i> , 1999, 337, 37-42.	0.3	11

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37	Hexadecylquinolinium tricyanoquinodimethanide, a unimolecular rectifier between 370 and 105 K and its spectroscopic properties. <i>Advanced Materials for Optics and Electronics</i> , 1999, 9, 253-263.	0.6	7
38	Electron Transfer through a Monolayer of Hexadecylquinolinium Tricyanoquinodimethanide. <i>Langmuir</i> , 1999, 15, 4011-4017.	1.6	94
39	Electrical Rectification by a Molecule: The Advent of Unimolecular Electronic Devices. <i>Accounts of Chemical Research</i> , 1999, 32, 950-957.	7.6	400
40	Design Strategies for Solid-State Supramolecular Arrays Containing Both Mixed-Metalated and Freebase Porphyrins. <i>Journal of the American Chemical Society</i> , 1999, 121, 1137-1144.	6.6	245
41	Synthesis and Langmuir-Blodgett Film Formation of Amphiphilic Zwitterions Based on Benzothiazolium Tricyanoquinodimethanide. <i>Langmuir</i> , 1999, 15, 6925-6930.	1.6	10
42	Rectification by a Single Molecule of Hexadecylquinolinium Tricyanoquinodimethanide. <i>Annals of the New York Academy of Sciences</i> , 1998, 852, 95-115.	1.8	19
43	Demonstration of unimolecular electrical rectification in hexadecylquinolinium tricyanoquinodimethanide. <i>Advanced Materials for Optics and Electronics</i> , 1998, 8, 229-245.	0.6	16
44	Studies in the Dithienylbenzo[c]thiophene Series. <i>Journal of Organic Chemistry</i> , 1998, 63, 3105-3112.	1.7	66
45	Activation volume of \pm -Fe particles in alumite films. <i>Journal of Applied Physics</i> , 1997, 81, 3806-3808.	1.1	57
46	Langmuir-Blodgett Films of a Thermally Labile 1:1 Adduct of C60 Fullerene and 8-(9-Anthryl)-7-oxaoctanoic Acid. <i>Langmuir</i> , 1997, 13, 5627-5633.	1.6	27
47	Unimolecular Electrical Rectification in Hexadecylquinolinium Tricyanoquinodimethanide. <i>Journal of the American Chemical Society</i> , 1997, 119, 10455-10466.	6.6	617
48	Synthesis and Properties of Two Regular Thienylpyrrole Polymers. <i>Macromolecules</i> , 1996, 29, 1928-1933.	2.2	18
49	Superconductivity of C60 Langmuir-Blodgett Films Doped with Potassium: Low-Field Signal and Electron Spin Resonance Study. <i>Langmuir</i> , 1996, 12, 3932-3937.	1.6	31
50	The Quest for D- π -A Unimolecular Rectifiers and Related Topics in Molecular Electronics. <i>Advances in Chemistry Series</i> , 1994, , 81-129.	0.6	27
51	Ground state optical properties of charge transfer crystals close to the neutral-ionic interface: Tetrathiafulvalene-2,5-dichloro- ϵ -benzoquinone. <i>Journal of Chemical Physics</i> , 1993, 98, 7692-7698.	1.2	21
52	Langmuir-Blodgett Films of Potential Unidimensional Organic Rectifiers. <i>Materials Research Society Symposia Proceedings</i> , 1989, 173, 531.	0.1	5
53	Preparative Purification of 2-(2-Hydroxyethoxy)terephthalic Acid with Countercurrent Chromatography. <i>Journal of Liquid Chromatography and Related Technologies</i> , 1988, 11, 245-250.	0.9	13
54	Hydrogen bonding and cation radical formation of methyl 4-(N,N-dimethylamino)phenyl carbamate, DMAPCMe. <i>Journal of Chemical Physics</i> , 1987, 87, 4967-4971.	1.2	12

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55	Effect of Oxidizing Atmosphere on Superconductivity in $R\text{Ba}_2\text{Cu}_3\hat{a}^x\text{MxO}_z$. Materials Research Society Symposia Proceedings, 1987, 99, 587.	0.1	0
56	Ferrocenes as One-Electron Donors in Unimolecular Rectifiers. , 0, , .		0