Robert M Metzger

List of Publications by Year
in descending order

56 papers	3,877 citations	236925 25 h-index	197818 49 g-index
58 all docs	58 docs citations	58 times ranked	2985 citing authors

#	Article	IF	Citations
1	Unimolecular Electrical Rectification in Hexadecylquinolinium Tricyanoquinodimethanide. Journal of the American Chemical Society, 1997, 119, 10455-10466.	13.7	617
2	Unimolecular Electrical Rectifiers. Chemical Reviews, 2003, 103, 3803-3834.	47.7	504
3	Unimolecular Electronics. Chemical Reviews, 2015, 115, 5056-5115.	47.7	416
4	Electrical Rectification by a Molecule:â€‰ The Advent of Unimolecular Electronic Devices. Accounts of Chemical Research, 1999, 32, 950-957.	15.6	400
5	Design Strategies for Solid-State Supramolecular Arrays Containing Both Mixed-Metalated and Freebase Porphyrins. Journal of the American Chemical Society, 1999, 121, 1137-1144.	13.7	245
6	Electrical Rectification by a Monolayer of Hexadecylquinolinium Tricyanoquinodimethanide Measured between Macroscopic Gold Electrodes. Journal of Physical Chemistry B, 2001, 105, 7280-7290.	2.6	222
7	Unimolecular electronics. Journal of Materials Chemistry, 2008, 18, 4364.	6.7	145
8	Electrical Rectification in a Langmuirâ€'Blodgett Monolayer of Dimethyanilinoazafullerene Sandwiched between Gold Electrodes. Journal of Physical Chemistry B, 2003, 107, 1021-1027.	2.6	102
9	Electron Transfer through a Monolayer of Hexadecylquinolinium Tricyanoquinodimethanide. Langmuir, 1999, 15, 4011-4017.	3.5	94
10	ÂCurrent Rectification in a Langmuirâ€'Schaefer Monolayer of Fullerene-bis-[4-diphenylamino-4â€˜Ââ€˜-(N-ethyl-N-2â€˜Ââ€˜â€˜-ethyl)amino-1,4-diphenyl-1,3-butadiene] Malonate between Au Electrodes. Journal of Physical Chemistry B, 2005, 109, 857-871.	2.6	90
11	Rectification by a Monolayer of Hexadecylquinolinium Tricyanoquinodimethanide between Gold Electrodes. Angewandte Chemie - International Edition, 2001, 40, 1749-1752.	13.8	83
12	All about (N-hexadecylquinolin-4-ium-1-yl)methylidenetricyanoquinodimethanide, a unimolecular rectifier of electrical current. Journal of Materials Chemistry, 2000, 10, 55-62.	6.7	82
13	Rectification and Nonlinear Optical Properties of a Langmuirâ€'Blodgett Monolayer of a Pyridinium Dye. Journal of Physical Chemistry B, 2002, 106, 12158-12164.	2.6	81
14	Studies in the Dithienylbenzo[c]thiophene Series. Journal of Organic Chemistry, 1998, 63, 3105-3112.	3.2	66
15	Activation volume of Î±-Fe particles in alumite films. Journal of Applied Physics, 1997, 81, 3806-3808.	2.5	57
16	Elastic and Inelastic Electron Tunneling Spectroscopy of a New Rectifying Monolayer. Journal of the American Chemical Society, 2007, 129, 8310-8319.	13.7	55
17	Spectroscopy and Rectification of Three Donorâ€'Sigmaâ€'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.	2.6	52
18	Analytical Model for Molecular-Scale Charge Transportâ€. Journal of Physical Chemistry A, 2001, 105, 4702-4707.	2.5	51

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19	Superconductivity of C60 Langmuirâ^'Blodgett Films Doped with Potassium:â€‰ Low-Field Signal and Electron Spin Resonance Study. Langmuir, 1996, 12, 3932-3937.	3.5	31
20	Unimolecular rectifiers and prospects for other unimolecular electronic devices. Chemical Record, 2004, 4, 291-304.	5.8	28
21	The Quest for D-Ïƒ-A Unimolecular Rectifiers and Related Topics in Molecular Electronics. Advances in Chemistry Series, 1994, , 81-129.	0.6	27
22	Langmuirâ^'Blodgett Films of a Thermally Labile 1:1 Adduct of C60 Fullerene and 8-(9-Anthryl)-7-oxaoctanoic Acid. Langmuir, 1997, 13, 5627-5633.	3.5	27
23	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.	2.6	27
24	Unimolecular rectifiers: Methods and challenges. Analytica Chimica Acta, 2006, 568, 146-155.	5.4	27
25	A Spectroscopic Study of Hexadecylquinolinium Tricyanoquinodimethanide as a Monolayer and in Bulk. Journal of Physical Chemistry B, 2002, 106, 10374-10381.	2.6	25
26	Quo vadis, unimolecular electronics?. Nanoscale, 2018, 10, 10316-10332.	5.6	25
27	Unimolecular rectification of monolayers of CH3C(O)Sâ€“C14H28Q+â€“3CNQâ^'and CH3C(O)Sâ€“C16H32Q+â€“3CNQâ^'organized by self-assembly, Langmuirâ€“Blodgett, and Langmuirâ€“Schaefer techniques. Physical Chemistry Chemical Physics, 2007, 9, 4007-4017.	2.8	23
28	Unimolecular Electronic Devices. Topics in Current Chemistry, 2011, 313, 39-84.	4.0	23
29	Ground state optical properties of charge transfer crystals close to the neutralâ€ionic interface: Tetrathiafulvaleneâ€2,5â€dichloroâ€pâ€benzoquinone. Journal of Chemical Physics, 1993, 98, 7692-7698.	3.0	21
30	Unimolecular electronics and rectifiers. Synthetic Metals, 2009, 159, 2277-2281.	3.9	20
31	Rectification by a Single Molecule of Hexadecylquinolinium Tricyanoquinodimethanide. Annals of the New York Academy of Sciences, 1998, 852, 95-115.	3.8	19
32	Synthesis and Properties of Two Regular Thienylpyrrole Polymers. Macromolecules, 1996, 29, 1928-1933.	4.8	18
33	Confirmation of the Rectifying Behavior in a Pentacoordinate [N₂O₂] Iron(III) Surfactant Using a â€œEutectic GaIn | LB Monolayer | Auâ€•Assembly. Journal of Physical Chemistry C, 2016, 120, 10578-10583.	3.1	17
34	Demonstration of unimolecular electrical rectification in hexadecylquinolinium tricyanoquinodimethanide. Advanced Materials for Optics and Electronics, 1998, 8, 229-245.	0.4	16
35	Unimolecular Rectifiers and Proposed Unimolecular Amplifier. Annals of the New York Academy of Sciences, 2003, 1006, 252-276.	3.8	14
36	Preparative Purification of 2-(2â€²-Hydroxyethoxy)terephthalic Acid with Countercurrent Chromatography. Journal of Liquid Chromatography and Related Technologies, 1988, 11, 245-250.	1.0	13

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37	Hydrogen bonding and cation radical formation of methyl 4â€(N,Nâ€dimethylamino)phenyl carbamate, DMAPCMe. Journal of Chemical Physics, 1987, 87, 4967-4971.	3.0	12
38	Currentâ€“voltage characteristics of an LB monolayer of didecylammonium tricyanoquinodimethanide measured between macroscopic gold electrodes. Journal of Materials Chemistry, 2002, 12, 3167-3171.	6.7	12
39	Unimolecular Electrical Rectification by Hexadecylquinolinium Tricyanoquinodimethanide. Molecular Crystals and Liquid Crystals, 1999, 337, 37-42.	0.3	11
40	Unimolecular amplifier: principles of a three-terminal device with power gain. Nanoscale, 2013, 5, 6975.	5.6	11
41	Janus Reversal and Coulomb Blockade in Ferrocene-Perylenebisimide and N,N,Nâ€²,Nâ€²-Tetramethyl-para-phenylenediamine-Perylenebisimide D-Ïƒ-A Rectifiers. Langmuir, 2016, 32, 6851-6859.	3.5	11
42	Synthesis and Langmuirâ^'Blodgett Film Formation of Amphiphilic Zwitterions Based on Benzothiazolium Tricyanoquinodimethanide. Langmuir, 1999, 15, 6925-6930.	3.5	10
43	Surprisingly Big Rectification Ratios for a Very Small Unimolecular Rectifier. ChemPlusChem, 2016, 81, 1152-1155.	2.8	10
44	Electrical rectification by monolayers of three molecules. Macromolecular Symposia, 2004, 212, 63-72.	0.7	8
45	Hexadecylquinolinium tricyanoquinodimethanide, a unimolecular rectifier between 370 and 105 K and its spectroscopic properties. Advanced Materials for Optics and Electronics, 1999, 9, 253-263.	0.4	7
46	Observation of current rectification by a new asymmetric iron(<scp>iii</scp>) surfactant in a eutectic GaIn|LB monolayer|Au sandwich. Dalton Transactions, 2018, 47, 6344-6350.	3.3	7
47	Langmuir-Blodgett Films of Potential Unidimensional Organic Rectifiers. Materials Research Society Symposia Proceedings, 1989, 173, 531.	0.1	5
48	Crystal structure of 4,4â€²-dibromo-2â€²,5â€²-dimethoxy-[1,1â€²-biphenyl]-2,5-dione (BrHBQBr). Acta Crystallographica Section E: Crystallographic Communications, 2015, 71, 1454-1456.	0.5	4
49	Effect of Oxidizing Atmosphere on Superconductivity in RBa2Cu3â^'xMxOz. Materials Research Society Symposia Proceedings, 1987, 99, 587.	0.1	0
50	Electrical Rectification by a Monolayer of Hexadecylquinolinium Tricyanoquinodimethanide Sandwiched between Gold Electrodes. Materials Research Society Symposia Proceedings, 2000, 636, 781.	0.1	0
51	Light-Induced Enhancement of Rectification by Monolayer of Hexadecylquinolinium Tricyanoquinodimethanide Between Al Electrodes. Materials Research Society Symposia Proceedings, 2000, 660, .	0.1	0
52	Electrical Rectification by a Monolayer of Hexadecylquinolinium Tricyanoquinodimethanide Sandwiched Between Gold Electrodes. Materials Research Society Symposia Proceedings, 2000, 660, .	0.1	0
53	Light-Induced Enhancement of Rectification by Monolayer of Hexadecylquinolinium Tricyanoquinodimethanide Between Al Electrodes. Materials Research Society Symposia Proceedings, 2000, 660, 1.	0.1	0
54	Unimolecular Rectification between 370 K and 105 K and Spectroscopic Properties of Hexadecylquinolinium Tricyanoquinodimethanide. ACS Symposium Series, 2001, , 50-65.	0.5	0

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55	Ferrocenes as One-Electron Donors in Unimolecular Rectifiers. , 0, , .		0
56	Electrical Rectification by a Monolayer of Hexadecylquinolinium Tricyanoquinodimethanide Sandwiched Between Gold Electrodes. Materials Research Society Symposia Proceedings, 2000, 660, 1.	0.1	0