Mark R Waterland

List of Publications by Year
in descending order

77	2,124	236925 25	233421 45
papers	citations	h-index	g-index

78	78	78	3033
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Opal and inverse opal photonic crystals: Fabrication and characterization. Polyhedron, 2007, 26, 356-368.	2.2	260
2	Symmetry breaking effects in NO3â˜: Raman spectra of nitrate salts and ab initio resonance Raman spectra of nitrateâ€“water complexes. Journal of Chemical Physics, 2001, 114, 6249-6258.	3.0	144
3	Exciton coupling in coordination compounds. Dalton Transactions, 2011, 40, 3097.	3.3	136
4	Determining the degree of methylesterification of pectin by ATR/FT-IR: Methodology optimisation and comparison with theoretical calculations. Carbohydrate Polymers, 2009, 78, 847-853.	10.2	121
5	Far-ultraviolet resonance Raman spectroscopy of nitrate ion in solution. Journal of Chemical Physics, 2000, 113, 6760-6773.	3.0	93
6	Chromophoric dipyrrin complexes capable of binding to TiO2: Synthesis, structure and spectroscopy. Dalton Transactions, 2010, 39, 437-445.	3.3	77
7	Heteroleptic Dipyrrin/Bipyridine Complexes of Ruthenium(II). Inorganic Chemistry, 2009, 48, 13-15.	4.0	74
8	Spectroscopic and electrochemical studies of a series of copper(I) and rhenium(I) complexes with substituted dipyrido[3,2-a:2â€²,3â€²-c]phenazine ligandsâ€Šâ€. Journal of the Chemical Society Dalton Transactions, 1998, , 609-616.	1.1	73
9	Photocatalytic titania coatings. Current Applied Physics, 2004, 4, 189-192.	2.4	71
10	Luminescent Rhenium(I)-Dipyrrinato Complexes. Inorganic Chemistry, 2012, 51, 446-455.	4.0	64
11	Spectroelectrochemical studies and excited-state resonance-Raman spectroscopy of some mononuclear rhenium(I) polypyridyl bridging ligand complexes. Crystal structure determination of tricarbonylchloro[2,3-di(2-pyridyl)quinoxaline]rhenium(I). Journal of the Chemical Society Dalton Transactions, 1998, , 185-192.	1.1	50
12	Resonance Raman Intensity Analysis of the Carbazole/Tetracyanoethylene Charge-Transfer Complex:Â Mode-Specific Reorganization Energies for a Hole-Transport Moleculeâ€. Journal of Physical Chemistry B, 2000, 104, 10727-10737.	2.6	47
13	Ultrafast dynamics in Cu(I)bisdiimine complexes from resonance Raman intensities. Journal of Raman Spectroscopy, 2008, 39, 1556-1567.	2.5	45
14	Metalâ˜Metal Communication in Copper(II) Complexes of Cyclotetraphosphazene Ligands. Inorganic Chemistry, 2008, 47, 9182-9192.	4.0	44
15	Unprecedented Oxo-Titanium Citrate Complex Precipitated from Aqueous Citrate Solutions, Exhibiting a Novel Bilayered Ti8O10Structural Core. Inorganic Chemistry, 2004, 43, 6300-6306.	4.0	43
16	The Nature of the Phosphazene Nitrogenâ€“Metal Bond: DFT Calculations on 2â€(Pyridyloxy)cyclophosphazene Complexes. European Journal of Inorganic Chemistry, 2010, 2010, 1619-1625.	2.0	42
17	Electronic absorption, resonance Raman and excited-state resonance Raman spectroscopy of rhenium(I) and copper(I) complexes, with substituted dipyrido[3,2-a : 2â€²,3â€²-c]phenazine ligands, and their electron reduced products. Journal of Raman Spectroscopy, 2000, 31, 243-253.	2.5	40
18	Development of novel polymer coating for FBG based relative humidity sensing. Sensors and Actuators A: Physical, 2016, 249, 217-224.	4.1	38

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19	Optical Detection of CoV-SARS-2 Viral Proteins to Sub-Picomolar Concentrations. ACS Omega, 2021, 6, 6404-6413.	3.5	38
20	Structural Changes upon Photoexcitation into the Metal-to-Ligand Charge-Transfer State of [Cu(pqx)(PPh3)2]+Probed by Resonance Raman Spectroscopy and Density Functional Theory. Journal of Physical Chemistry A, 2005, 109, 8826-8833.	2.5	32
21	Toward an Iron(II) Spin-Crossover Grafted Phosphazene Polymer. Inorganic Chemistry, 2012, 51, 8307-8316.	4.0	29
22	RAMAN AND ATR-FTIR SPECTROSCOPY TOWARDS CLASSIFICATION OF WET BLUE BOVINE LEATHER USING RATIOMETRIC AND CHEMOMETRIC ANALYSIS. Journal of Leather Science and Engineering, 2020, 2, .	6.0	29
23	Electron Injection Dynamics of RuII(dcbpy)2(SCN)2on Zirconia. Journal of Physical Chemistry B, 2002, 106, 6211-6219.	2.6	28
24	Effect of blending conditions on nano-clay bitumen nanocomposite properties. Road Materials and Pavement Design, 2019, 20, 1735-1756.	4.0	27
25	Strongly Absorbing Ï€â€“Ï€* States in Heteroleptic Dipyrrin/2,2â€²â€Bipyridine Ruthenium Complexes: Excitedâ€State Dynamics from Resonance Raman Spectroscopy. Chemistry - an Asian Journal, 2010, 5, 2036-2046.	3.3	26
26	Quantum Capacitance of Aryldiazonium Modified Large Area Few-Layer Graphene Electrodes. Journal of Physical Chemistry C, 2015, 119, 25778-25785.	3.1	25
27	Resonance Raman Excitation Profile of a Ruthenium(II) Complex of Dipyrido[2,3-a:3â€˜,2â€˜-c]phenazine. Journal of Physical Chemistry A, 2006, 110, 11194-11199.	2.5	24
28	Using Internal Coordinates to Describe Photoinduced Geometry Changes in MLCT Excited States. Journal of Physical Chemistry A, 2007, 111, 4604-4611.	2.5	24
29	Investigation of polyimide coated fibre Bragg gratings for relative humidity sensing. Measurement Science and Technology, 2015, 26, 125101.	2.6	24
30	Using in vivo nickel to direct the pyrolysis of hyperaccumulator plant biomass. Green Chemistry, 2019, 21, 1236-1240.	9.0	22
31	Structural characterisation of difluoro-boron chelates of quino[7,8-h]quinoline. Inorganica Chimica Acta, 2012, 380, 278-283.	2.4	19
32	Resonance Raman and ab Initio Studies of the Electronic Transitions of Aqueous Azide Anion. Journal of Physical Chemistry A, 2001, 105, 8385-8392.	2.5	18
33	Water-soluble Carbon Nanotube Chain-transfer Agents (CNT-CTAs). Chemistry Letters, 2007, 36, 1172-1173.	1.3	17
34	Determination of Estriol 16-glucuronide in human urine with surface plasmon resonance and lateral flow immunoassays. Analytical Methods, 2010, 2, 368.	2.7	17
35	Mechanically interlocked gold and silver nanoparticles using metallosupramolecular catenane chemistry. Nanoscale, 2011, 3, 941.	5.6	17
36	Spontaneous Modification of Free-Floating Few-Layer Graphene by Aryldiazonium Ions: Electrochemistry, Atomic Force Microscopy, and Infrared Spectroscopy from Grafted Films. Journal of Physical Chemistry C, 2016, 120, 7543-7552.	3.1	17

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37	Terpyridine and 2,6-di(1H-pyrazol-1-yl)pyridine substituted cyclotri- and polyphosphazene ruthenium(II) complexes: Chemical and physical behaviour. Polyhedron, 2015, 85, 429-436.	2.2	16
38	Relaxation and electron transfer dynamics in bare and DTDCI sensitized MoS[sub 2] nanoclusters. Journal of Chemical Physics, 2000, 113, 5448.	3.0	15
39	Sensitive determination of estriol-16-glucuronide using surface plasmon resonance sensing. Steroids, 2009, 74, 819-824.	1.8	15
40	Metal-to-ligand charge-transfer excited-states in binuclear copper(I) complexes. Tuning MLCT excited-states through structural modification of bridging ligands. A resonance Raman study. Dalton Transactions RSC, 2000, , 121-127.	2.3	13
41	Chemical Solution Route to Conformal Phosphor Coatings on Nanostructures. Advanced Materials, 2008, 20, 4704-4707.	21.0	13
42	The Binary Iodineâ€Chlorine Octahalide Series [I_nCl_{8â^'n}]^{2â^'} (n=3, 3.6, 4). Chemistry - A European Journal, 2019, 25, 11650-11658.	3.3	12
43	An iron(II) spin crossover grafted cyclotriphosphazene. Polyhedron, 2013, 55, 37-44.	2.2	10
44	Mid-infrared reflectance spectroscopy as a tool for forage feed composition prediction. Animal Feed Science and Technology, 2018, 241, 102-111.	2.2	10
45	Rational Synthesis, Structures and Properties of the Ionic Liquid Binary Iodineâ€Bromine Octahalide Series [I_nBr_{8â^'n}]^{2â^'} (n=0, 2, 3, 4). Chemistry - A European Journal, 2019, 25, 11659-11669.	3.3	10
46	Synthesis, Structural and Nonlinear Optical Properties of 2-(3-Cyano-4-{5-[1-(2-Hydroxyethyl)-) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50 38	0.9	9
47	Raman spectroscopy of dipyrrins: nonresonant, resonant and surfaceâ€enhanced crossâ€sections and enhancement factors. Journal of Raman Spectroscopy, 2011, 42, 2154-2164.	2.5	8
48	Dielsâ€“Alder Reaction of Anthranilic Acids: A Versatile Route to Dense Monolayers on Flat Edge and Basal Plane Graphitic Carbon Substrates. ACS Applied Materials & Interfaces, 2016, 8, 23389-23395.	8.0	8
49	Importance of intact secondary protein structures of cell envelopes and glass transition temperature of the stabilization matrix on the storage stability of probiotics. Food Research International, 2019, 123, 198-207.	6.2	8
50	Innovative Approach to Investigating the Microstructure of Calcified Tissues Using Specular Reflectance Fourier Transform-Infrared Microspectroscopy and Discriminant Analysis. Analytical Chemistry, 2012, 84, 3369-3375.	6.5	7
51	A behavioural difference between an iron(II) grafted polyphosphazene and its small molecule cyclophosphazene analogue. Inorganic Chemistry Communication, 2013, 37, 158-161.	3.9	7
52	Raman spectroscopic detection of carotenoids in cattle skin. RSC Advances, 2020, 10, 22758-22765.	3.6	7
53	Influence of Doping on Hybrid Organicâ€“Inorganic WO3(4,4â€²-bipyridyl)0.5 Materials. Journal of Physical Chemistry C, 2012, 116, 3787-3792.	3.1	6
54	Molecular excitons in a copper azadipyrrin complex. Dalton Transactions, 2014, 43, 17746-17753.	3.3	5

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55	Validating the use of a carbon dioxide laser for assessing nociceptive thresholds in adult domestic cats (Felis catus). Applied Animal Behaviour Science, 2013, 143, 104-109.	1.9	4
56	Avoiding cross-linking in iron-polyphosphazene metallo-polymers. Inorganic Chemistry Communication, 2015, 51, 1-3.	3.9	4
57	A spectroelectrochemical investigation of nanoparticle and molecular resonances in surface enhanced Raman scattering from crystal violet and malachite green. Journal of Raman Spectroscopy, 2017, 48, 405-412.	2.5	4
58	The Bromineâ€Chlorine Interhalides [Br₃Cl₅]²^{â€“}, [Br₄Cl₄]²^{â€“} and [Br_{6.56}Cl_{1.44}]²^{â€“}. European Journal of Inorganic Chemistry, 2020, 2020, 3302-3310.	2.0	4
59	Effect on cell membrane structural integrity of xylitolâ€coated probiotics when stabilised with milk solids â€“ A FTIR study. International Journal of Dairy Technology, 2021, 74, 128-138.	2.8	4
60	Chemical and physical behaviour of heteroleptic 2,6-bis(1 H -benzimidazol-2-yl)pyridine and 2,2â€²:6â€²,2â€³-terpyridine substituted tricyclophosphazene ruthenium(II) complexes. Polyhedron, 2016, 103, 217-226.	2.2	3
61	The structure of tris(chloromethyl)amine in the gas phase using quantum chemical calculations and gas electron diffraction and as a solid and melt using Raman spectroscopy. Structural Chemistry, 2018, 29, 803-813.	2.0	3
62	Ultrasensitive surface-enhanced Raman scattering detection of biological pollutants by controlled evaporation on omniphobic substrates. Heliyon, 2020, 6, e04317.	3.2	3
63	Monitoring the mode of action of synthetic and natural biocides against Aeromonas hydrophila by Raman spectroscopy and chemometrics. Journal of Leather Science and Engineering, 2021, 3, .	6.0	3
64	Cholesterol-phospholipid interactions resist the detergent effect of bovine bile. Colloids and Surfaces B: Biointerfaces, 2021, 205, 111842.	5.0	3
65	Controlled Hydrolysis of TiO₂ from HCl Digestion Liquors of Ilmenite. Industrial & Engineering Chemistry Research, 2022, 61, 6333-6342.	3.7	3
66	Hydrophobic chemical treatment of aggregate surfaces to re-engineer the mineral/bitumen interface and improve bitumen adhesion. Road Materials and Pavement Design, 2020, , 1-22.	4.0	2
67	A new class of ferromagnetic semiconductor: Copper molybdate organic-inorganic compound with phenanthroline organic linkers. Journal of Magnetism and Magnetic Materials, 2020, 508, 166881.	2.3	2
68	Validity and reliability of Raman spectroscopy for carotenoid assessment in cattle skin. Biochemistry and Biophysics Reports, 2021, 27, 101036.	1.3	2
69	Determination of the Lowest Excited State of Metal Complexes of Dipyrido[3, 2-a:2â€²,3â€²-c]Phenazine. Laser Chemistry, 1999, 19, 287-289.	0.5	1
70	Resonance Raman intensity analysis of an intramolecular charge-transfer process. Current Applied Physics, 2006, 6, 296-298.	2.4	1
71	Stereoselective aggregation of chiral complexes with threefold-symmetric pendant carboxyl groups: an example of â€œperfectâ€•self-assembly not seen in the crystalline state?. RSC Advances, 2013, 3, 12648.	3.6	1
72	Development of polymer coated fibre Bragg gratings for relative humidity sensing. , 2013, , .		1

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73	Evidence of reduced species in molybdenum oxide-phenanthroline layered hybrids from structural, magnetic and X-ray photoelectron spectroscopy studies. Materials Letters, 2018, 231, 187-189.	2.6	1
74	Characterization of the Degradation of Sheepskin by Monitoring Cytochrome c of Bacteria by Raman Spectroscopy. Analytical Letters, 2021, 54, 1005-1022.	1.8	1
75	Polyimide coated fibre Bragg grating based moisture sensor development. , 2015, , .		0
76	Frontispiece: Rational Synthesis, Structures and Properties of the Ionic Liquid Binary Iodineâ€Bromine Octahalide Series [I_nBr_{8â^'n}]^{2â^'} (n=0, 2, 3, 4). Chemistry - A European Journal, 2019, 25, .	3.3	0
77	Highly sensitive surface-enhanced Raman scattering detection of brodifacoum and 1080 rodenticide in milk. , 2018, , .		0