Vanderlei Gageiro Machado

List of Publications by Year in descending order

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84 papers 1,876 citations

218677 26 h-index 289244 40 g-index

85 all docs

85 docs citations

85 times ranked 1861 citing authors

| # | Article | IF | Citations |
|----|---|------|-----------|
| 1 | Pyridinium <i>N</i> -Phenolate Betaine Dyes. Chemical Reviews, 2014, 114, 10429-10475. | 47.7 | 244 |
| 2 | Solute-solvent and solvent-solvent interactions in the preferential solvation of Brooker's merocyanine in binary solvent mixtures. Journal of Physical Organic Chemistry, 2002, 15, 420-427. | 1.9 | 76 |
| 3 | Self-assembly in self-organized inorganic systems: a view of programmed metallosupramolecular architectures. Journal of the Brazilian Chemical Society, 2001, 12, 431. | 0.6 | 63 |
| 4 | Solute–solvent and solvent–solvent interactions in the preferential solvation of 4-[4-(dimethylamino)styryl]-1-methylpyridinium iodide in 24 binary solvent mixtures. Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy, 2006, 65, 535-542. | 3.9 | 59 |
| 5 | Optical Chemosensor for the Detection of Cyanide in Water Based On Ethyl(hydroxyethyl)cellulose Functionalized with Brooker's Merocyanine. Analytical Chemistry, 2014, 86, 4653-4656. | 6.5 | 57 |
| 6 | Preferential Solvation of a Hydrophobic Probe in Binary Mixtures Comprised of a Nonprotic and a Hydroxylic Solvent:Â A View of Soluteâ^'Solvent and Solventâ^'Solvent Interactions. Journal of Physical Chemistry A, 2002, 106, 8820-8826. | 2.5 | 56 |
| 7 | An anionic chromogenic sensor based on the competition between the anion and a merocyanine solvatochromic dye for calix[4]pyrrole as a receptor site. Tetrahedron Letters, 2007, 48, 4547-4551. | 1.4 | 55 |
| 8 | Nitro-Substituted 4-[(Phenylmethylene)imino]phenolates: Solvatochromism and Their Use as Solvatochromic Switches and as Probes for the Investigation of Preferential Solvation in Solvent Mixtures. Journal of Organic Chemistry, 2012, 77, 10668-10679. | 3.2 | 52 |
| 9 | The Fluorosolvatochromism of Brooker's Merocyanine in Pure and in Mixed Solvents. Journal of Fluorescence, 2006, 16, 77-86. | 2.5 | 49 |
| 10 | Propriedades e aplicações recentes das ciclodextrinas. Quimica Nova, 2008, 31, 360-368. | 0.3 | 45 |
| 11 | Preferential solvation of Brooker's merocyanine in binary solvent mixtures composed of formamides and hydroxylic solvents. Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy, 2004, 60, 951-958. | 3.9 | 43 |
| 12 | Chromogenic Chemodosimeter for Highly Selective Detection of Cyanide in Water and Blood Plasma Based on Si–O Cleavage in the Micellar System. Analytical Chemistry, 2015, 87, 362-366. | 6.5 | 42 |
| 13 | Chromogenic anionic chemosensors based on protonated merocyanine solvatochromic dyes: Influence of the medium on the quantitative and naked-eye selective detection of anionic species. Dyes and Pigments, 2009, 82, 187-195. | 3.7 | 41 |
| 14 | Anionic chromogenic chemosensors highly selective for fluoride or cyanide based on 4-(4-Nitrobenzylideneamine)phenol. Journal of the Brazilian Chemical Society, 2012, 23, 1488-1500. | 0.6 | 40 |
| 15 | Merocyanine solvatochromic dyes in the study of synergistic effects in mixtures of chloroform with hydrogen-bond accepting solvents. Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy, 2009, 71, 1704-1711. | 3.9 | 37 |
| 16 | Synthesis and Solvatochromism of Substituted 4-(Nitrostyryl)phenolate Dyes. Journal of Organic Chemistry, 2015, 80, 7971-7983. | 3.2 | 37 |
| 17 | Interpretation of the halochromism of pyridiniophenoxide dyes. Journal of the Chemical Society, Faraday Transactions, 1992, 88, 201. | 1.7 | 36 |
| 18 | An Easy and Versatile Experiment to Demonstrate Solvent Polarity Using Solvatochromic Dyes. Journal of Chemical Education, 2001, 78, 649. | 2.3 | 34 |

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| 19 | Solvent effects in the interaction of methyl- \hat{l}^2 -cyclodextrin with solvatochromic merocyanine dyes. Organic and Biomolecular Chemistry, 2005, 3, 1751. | 2.8 | 32 |
| 20 | Chromogenic anionic chemosensors based on protonated merocyanine solvatochromic dyes in trichloromethane and in trichloromethane–water biphasic system. Tetrahedron, 2009, 65, 4239-4248. | 1.9 | 30 |
| 21 | Characterization of Brazilian oil shale byproducts planned for use as soil conditioners for food and agro-energy production. Journal of Analytical and Applied Pyrolysis, 2011, 90, 112-117. | 5.5 | 29 |
| 22 | Quimiossensores cromogênicos e fluorogênicos para a detecção de analitos aniônicos. Quimica Nova, 2008, 31, 2134-2146. | 0.3 | 29 |
| 23 | Ion-Dipole SN2 Reaction in Acetoneâ^'Water Mixtures. Electrostatic and Specific Soluteâ^'Solvent Interactions. Journal of Organic Chemistry, 2001, 66, 1163-1170. | 3.2 | 28 |
| 24 | Anionic optical devices based on 4-(nitrostyryl)phenols for the selective detection of fluoride in acetonitrile and cyanide in water. Sensors and Actuators B: Chemical, 2017, 240, 1036-1048. | 7.8 | 28 |
| 25 | Spectroscopic investigation of hard and soft metal binding sites in synthetic melanin. Inorganica Chimica Acta, 2003, 356, 243-248. | 2.4 | 27 |
| 26 | Solvatochromic behavior of dyes with dimethylamino electron-donor and nitro electron-acceptor groups in their molecular structure. Journal of Physical Organic Chemistry, 2015, 28, 250-260. | 1.9 | 27 |
| 27 | Use of the interaction of a boronic acid with a merocyanine to develop an anionic colorimetric assay. Tetrahedron Letters, 2007, 48, 3467-3470. | 1.4 | 26 |
| 28 | Properties of aqueous solutions of hydrophobically modified polyethylene imines in the absence and presence of sodium dodecylsulfate. Journal of Colloid and Interface Science, 2012, 370, 94-101. | 9.4 | 24 |
| 29 | Quality analysis of automotive fuel using solvatochromic probes. Fuel, 2006, 85, 1494-1497. | 6.4 | 23 |
| 30 | Criterious Preparation and Characterization of Earthworm-composts in View of Animal Waste Recycling: Part II. A Synergistic Utilization of EPR and \hat{A}^1H NMR Spectroscopies on the Characterization of Humic Acids from Vermicomposts. Journal of the Brazilian Chemical Society, 2001, 12, 734. | 0.6 | 21 |
| 31 | An anionic chromogenic sensor based on protonated Reichardt's pyridiniophenolate. Tetrahedron Letters, 2006, 47, 9339-9342. | 1.4 | 21 |
| 32 | Solvatochromic behavior of 1-(p-dimethylaminophenyl)-2-nitroethylene in 24 binary solvent mixtures composed of amides and hydroxylic solvents. Journal of Molecular Liquids, 2009, 150, 9-15. | 4.9 | 21 |
| 33 | Solvatochronism and preferential solvation of aryliminomethylpyridinium iodines in binary mixtures. Journal of Physical Organic Chemistry, 1997, 10, 731-736. | 1.9 | 19 |
| 34 | A quÃmica dos ésteres de fosfato. Quimica Nova, 2003, 26, 745-753. | 0.3 | 17 |
| 35 | Optical devices for the detection of cyanide in water based on ethyl(hydroxyethyl)cellulose functionalized with perichromic dyes. Carbohydrate Polymers, 2017, 157, 1548-1556. | 10.2 | 17 |
| 36 | Solvatochromic behavior of substituted 4-(nitrostyryl)phenolate dyes in pure solvents and in binary solvent mixtures composed of water and alcohols. Journal of Molecular Liquids, 2018, 264, 327-336. | 4.9 | 17 |

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| 37 | Reverse solvatochromism in solvent binary mixtures: a case study using a 4-(nitrostyryl)phenolate as a probe. Physical Chemistry Chemical Physics, 2016, 18, 20266-20269. | 2.8 | 16 |
| 38 | Anionic chromogenic chemosensors highly selective for cyanide based on the interaction of phenyl boronic acid and solvatochromic dyes. Sensors and Actuators B: Chemical, 2015, 221, 644-652. | 7.8 | 15 |
| 39 | Interaction of Cyclodextrins with Brooker's Merocyanine in Aqueous Solution. Spectroscopy Letters, 2009, 42, 35-41. | 1.0 | 14 |
| 40 | A simple and efficient anionic chromogenic chemosensor based on 2,4-dinitrodiphenylamine in dimethyl sulfoxide and in dimethyl sulfoxide–water mixtures. Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy, 2010, 75, 799-806. | 3.9 | 14 |
| 41 | Ascorbic acid-based quinoxaline derivative as a chromogenic chemosensor for Cu 2+. Inorganic Chemistry Communication, 2016, 70, 71-74. | 3.9 | 14 |
| 42 | An anionic chromogenic chemosensor based on 4–(4–nitrobenzylideneamine)–2,6–diphenylphenol for selective detection of cyanide in acetonitrile–water mixtures. Arkivoc, 2011, 2010, 146-162. | 0.5 | 14 |
| 43 | Interaction of protonated merocyanine dyes with amines in organic solvents. Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy, 2011, 81, 745-753. | 3.9 | 13 |
| 44 | Structure–behavior study of a family of "hybrid cyanine―dyes which exhibit inverted solvatochromism. Physical Chemistry Chemical Physics, 2016, 18, 32256-32265. | 2.8 | 13 |
| 45 | Quinoxaline-based chromogenic and fluorogenic chemosensors for the detection of metal cations. Chemical Papers, 2021, 75, 1775-1793. | 2.2 | 13 |
| 46 | Preferential solvation index as a tool in the analysis of the behavior of solvatochromic probes in binary solvent mixtures. Journal of Molecular Liquids, 2021, 328, 115450. | 4.9 | 13 |
| 47 | Properties of aqueous solutions of lentinan in the absence and presence of zwitterionic surfactants. Carbohydrate Polymers, 2013, 98, 1-7. | 10.2 | 12 |
| 48 | A novel strategy for chromogenic chemosensors highly selective toward cyanide based on its reaction with 4-(2,4-dinitrobenzylideneamino)benzenes or 2,4-dinitrostilbenes. Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy, 2015, 136, 1491-1499. | 3.9 | 12 |
| 49 | Understanding Solvation: Comparison of Reichardt's Solvatochromic Probe and Related Molecular "Core―Structures. Journal of Chemical & Engineering Data, 2019, 64, 2213-2220. | 1.9 | 12 |
| 50 | Preferential solvation of a \hat{I}^2 -sensitive dye in binary mixtures of a non-protic and a hydroxylic solvent. Journal of the Chemical Society, Faraday Transactions, 1994, 90, 865-868. | 1.7 | 11 |
| 51 | Optical Chemosensors and Chemodosimeters for Anion Detection Based on Merrifield Resin Functionalized with Brooker's Merocyanine Derivatives. ACS Applied Polymer Materials, 2019, 1, 1757-1768. | 4.4 | 11 |
| 52 | Electrospun blends comprised of poly(methyl methacrylate) and ethyl(hydroxyethyl)cellulose functionalized with perichromic dyes. Carbohydrate Polymers, 2020, 236, 115991. | 10.2 | 11 |
| 53 | The Halochromism of the 1-Methyl-8-Oxyquinolinium Dye. Spectroscopy Letters, 1998, 31, 359-367. | 1.0 | 10 |
| 54 | Malononitrile–derivative chromogenic devices for the detection of cyanide in water. Journal of Molecular Liquids, 2016, 223, 811-818. | 4.9 | 10 |

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| 55 | Reverse Solvatochromism of Imine Dyes Comprised of 5â€Nitrofuranâ€2â€yl or 5â€Nitrothiophenâ€2â€yl as Electron Acceptor and Phenolate as Electron Donor. Chemistry - A European Journal, 2018, 24, 9364-9376. | 3.3 | 10 |
| 56 | Synthesis of anionic chemodosimeters based on silylated pyridinium N-phenolate betaine dyes. Tetrahedron Letters, 2015, 56, 4733-4736. | 1.4 | 9 |
| 57 | Thermohalochromism of phenolate dyes conjugated with nitro-substituted aryl groups. Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy, 2017, 173, 556-561. | 3.9 | 9 |
| 58 | Chromogenic and fluorogenic chemodosimeter derived from Meldrum's acid detects cyanide and sulfide in aqueous medium. Journal of Molecular Liquids, 2019, 282, 142-153. | 4.9 | 9 |
| 59 | Desolvated phosphate ions as acyl acceptors in dipolar aprotic media. A non-enzymatic model for formation of "energy-rich―acyl phosphates. Perkin Transactions II RSC, 2000, , 169-173. | 1.1 | 8 |
| 60 | Applications of a preferential–solvation index (PSI) for the comparison of binary mixtures with ionic liquids. Journal of Molecular Liquids, 2021, 343, 117644. | 4.9 | 8 |
| 61 | Synthesis of 1,8–Naphthyridines and Their Application in the Development of Anionic Fluorogenic Chemosensors. Journal of Fluorescence, 2012, 22, 1033-1046. | 2.5 | 7 |
| 62 | Solvatochromism of new substituted 4-[(E)-(4-nitrophenyl)diazenyl]phenolate dyes. Journal of Molecular Liquids, 2020, 301, 112330. | 4.9 | 7 |
| 63 | Use of Nonideality Parameters for the Analysis of the Thermodynamic Properties of Binary Mixtures. ACS Omega, 2021, 6, 16553-16564. | 3.5 | 7 |
| 64 | Compostos fosfatados ricos em energia. Quimica Nova, 1999, 22, 351-357. | 0.3 | 6 |
| 65 | Solvatochromism of dyes inspired in Effenberger's probe. Dyes and Pigments, 2021, 184, 108757. | 3.7 | 6 |
| 66 | Acyl transfer reactions in dipolar aprotic medium: desolvated phosphate ion as acyl acceptor in the formation of energy-rich phosphate compounds. Chemical Communications, 1997, , 1917. | 4.1 | 5 |
| 67 | A simple protocol for the visual discrimination of natural cyclodextrins in aqueous solution using perichromic probes. Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy, 2015, 136, 1600-1606. | 3.9 | 5 |
| 68 | Properties of polyplexes formed through interaction between hydrophobically-modified poly(ethylene) Tj ETQq0 | 0 0 rgBT / | Ovgrlock 10 T |
| 69 | Design of Hybrid Electrospun Nanofibers Comprising a Xerogel Functionalized with a Fluorescent Dye for Application as Optical Detection Device. Journal of Physical Chemistry C, 2019, 123, 10586-10597. | 3.1 | 5 |
| 70 | Electrospun Nanofibers of Immiscible Blends Containing a Fluorescence Dye: Direct Investigation of Polymer Domains. ACS Applied Polymer Materials, 2020, 2, 4647-4657. | 4.4 | 5 |
| 71 | The use of a preferential–solvation index (PSI) for the comparison of halochromic systems. Journal of Molecular Liquids, 2021, 334, 115944. | 4.9 | 5 |
| 72 | Reverse solvatochromism in a family of probes having 2,6–di–tert–butylphenolate as electron–donor and 4–nitrophenyl as electron–acceptor groups. Dyes and Pigments, 2022, 203, 110376. | 3.7 | 5 |

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| 73 | Inorganic self-assembly through sequential complexation in the formation of bimetallic and trimetallic architectures from multisite ligands based on 5,5'-disubstituted 2,2'-bipyridines. Journal of the Brazilian Chemical Society, 2003, 14, 777-789. | 0.6 | 4 |
| 74 | Chromogenic chemodosimeter based on a silylated azo compound detects cyanide in water and cassava. Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy, 2021, 260, 119950. | 3.9 | 4 |
| 75 | ASSOCIATION OF BRANCHED POLYETHYLENE IMINE WITH SURFACTANTS IN AQUEOUS SOLUTION. Quimica Nova, 2015, , . | 0.3 | 4 |
| 76 | BIODEGRADABLE NANOPARTICLES OBTAINED FROM ZEIN AS A DRUG DELIVERY SYSTEM FOR TERPINEN-4-OL. Quimica Nova, 2014, , . | 0.3 | 3 |
| 77 | One-pot synthesis and structural elucidation of polyfunctionalized quinoxalines and their use as chromogenic chemosensors for ionic species. Journal of Molecular Structure, 2019, 1195, 936-943. | 3.6 | 3 |
| 78 | Binary mixtures with deep eutectic Solvents: Comparing properties with a Non–Ideality approach. Journal of Molecular Liquids, 2022, 359, 119259. | 4.9 | 3 |
| 79 | Spectrometric and kinetics studies involving anionic chromogenic chemodosimeters based on silylated imines in acetonitrile or acetonitrile–water mixtures. RSC Advances, 2016, 6, 101853-101861. | 3.6 | 2 |
| 80 | 4-(Pyren-1-ylimino)methylphenol and its Silylated Derivative as Chromogenic Chemosensors Highly Selective for Fluoride or Cyanide. Journal of the Brazilian Chemical Society, 2015, , . | 0.6 | 1 |
| 81 | SELECTIVE DETECTION OF FLUORIDE BASED ON A PYRIDINIUMN-PHENOLATE-CALIX[4]PYRROLE DISPLACEMENT ASSAY: AN UNDERGRADUATE LABORATORY EXPERIMENT. Quimica Nova, 2014, , . | 0.3 | 1 |
| 82 | A nonâ€enzymatic model based on an acyl transfer reaction for the formation of energyâ€rich acetyl phosphate in organic solvents and in a biphasic system. Journal of Physical Organic Chemistry, 2010, 23, 735-742. | 1.9 | 0 |
| 83 | A Kinetic Investigation of Regioselective Solvation of a Solvatochromic Dye in Aqueous Alcohols. International Journal of Chemical Kinetics, 2015, 47, 803-810. | 1.6 | 0 |
| 84 | Chromogenic Chemosensors Based on Phenolic Imines for the Detection of Alkylamines and Lidocaine in Water and in the Vapor Phase. Journal of the Brazilian Chemical Society, 0, , . | 0.6 | O |