Amilra Prasanna De Silva

List of Publications by Year in descending order

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| # | Article | IF | CITATIONS |
|----|--|------|-----------|
| 1 | Taming Tris(bipyridine)ruthenium(II) and Its Reactions in Water by Capture/Release with Shape-Switchable Symmetry-Matched Cyclophanes. Journal of the American Chemical Society, 2022, 144, 4977-4988. | 13.7 | 12 |
| 2 | Crossing the divide: Experiences of taking fluorescent PET (photoinduced electron transfer) sensing/switching systems from solution to solid. Dyes and Pigments, 2022, 204, 110453. | 3.7 | 9 |
| 3 | Recent developments in CO2 capture/storage/utilization with aromatic macrocycles. Carbon Capture Science & Technology, 2022, 4, 100058. | 10.4 | 5 |
| 4 | Fluorescent Molecular Logic Gates Driven by Temperature and by Protons in Solution and on Solid. Chemistry - A European Journal, 2021, 27, 13268-13274. | 3.3 | 12 |
| 5 | Supra-molecular agents running tasks intelligently (SMARTI): recent developments in molecular logic-based computation. Molecular Systems Design and Engineering, 2020, 5, 1325-1353. | 3.4 | 31 |
| 6 | Fluorescent molecular logic gates based on photoinduced electron transfer (PET) driven by a combination of atomic and biomolecular inputs. Chemical Communications, 2020, 56, 6838-6841. | 4.1 | 20 |
| 7 | A Personal Journey across Fluorescent Sensing and Logic Associated with Polymers of Various Kinds. Polymers, 2019, 11, 1351. | 4.5 | 8 |
| 8 | Molecular memory with downstream logic processing exemplified by switchable and self-indicating guest capture and release. Nature Communications, 2019, 10, 49. | 12.8 | 45 |
| 9 | Population analysis to increase the robustness of molecular computational identification and its extension into the near-infrared for substantial numbers of small objects. Chemical Science, 2019, 10, 2272-2279. | 7.4 | 19 |
| 10 | Precise Proton Mapping near Ionic Micellar Membranes with Fluorescent Photoinducedâ€Electronâ€Transfer Sensors. Chemistry - A European Journal, 2019, 25, 8522-8527. | 3.3 | 7 |
| 11 | Lighting-up protein–ligand interactions with fluorescent PET (photoinduced electron transfer) sensor designs. Chemical Communications, 2018, 54, 1319-1322. | 4.1 | 19 |
| 12 | Consolidating Molecular Logic with New Solidâ€Bound YES and PASSâ€1 Gates and Their Combinations. ChemPhysChem, 2017, 18, 1760-1766. | 2.1 | 23 |
| 13 | Measurement of Local Sodium Ion Levels near Micelle Surfaces with Fluorescent Photoinducedâ€Electronâ€Transfer Sensors. Angewandte Chemie - International Edition, 2016, 55, 768-771. | 13.8 | 37 |
| 14 | What has supramolecular chemistry done for us?. Supramolecular Chemistry, 2016, 28, 201-203. | 1.2 | 5 |
| 15 | Sterically Hindered Diaryl Benzobis(thiadiazole)s as Effective Photochromic Switches. Angewandte Chemie - International Edition, 2015, 54, 9754-9756. | 13.8 | 30 |
| 16 | Bright molecules for sensing, computing and imaging: a tale of two once-troubled cities. Beilstein Journal of Organic Chemistry, 2015, 11, 2774-2784. | 2.2 | 8 |
| 17 | Small molecular logic systems can draw the outlines of objects via edge visualization. Chemical Science, 2015, 6, 4472-4478. | 7.4 | 31 |
| 18 | Fluorescent logic systems for sensing and molecular computation: structure–activity relationships in edge-detection. Faraday Discussions, 2015, 185, 337-346. | 3.2 | 7 |

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|----|---|------|-----------|
| 19 | Current developments in fluorescent PET (photoinduced electron transfer) sensors and switches. Chemical Society Reviews, 2015, 44, 4203-4211. | 38.1 | 462 |
| 20 | Building pH Sensors into Paper-Based Small-Molecular Logic Systems for Very Simple Detection of Edges of Objects. Journal of the American Chemical Society, 2015, 137, 3763-3766. | 13.7 | 67 |
| 21 | Taking baby steps in molecular logic-based computation. Chemical Communications, 2015, 51, 8403-8409. | 4.1 | 95 |
| 22 | Modification of Fluorescent Photoinduced Electron Transfer (PET) Sensors/Switches To Produce Molecular Photoâ€lonic Triode Action. Angewandte Chemie - International Edition, 2014, 53, 3622-3625. | 13.8 | 29 |
| 23 | Information gathering and processing with fluorescent molecules. Frontiers of Chemical Science and Engineering, 2014, 8, 240-251. | 4.4 | 11 |
| 24 | Bright ideas. Nature Chemistry, 2012, 4, 440-441. | 13.6 | 21 |
| 25 | Path-selective photoinduced electron transfer (PET) in a membrane-associated system studied by pH-dependent fluorescence. Inorganica Chimica Acta, 2012, 381, 243-246. | 2.4 | 22 |
| 26 | Luminescent Photoinduced Electron Transfer (PET) Molecules for Sensing and Logic Operations. Journal of Physical Chemistry Letters, 2011, 2, 2865-2871. | 4.6 | 69 |
| 27 | 2010: A Small Space Odyssey with Luminescent Molecules. Israel Journal of Chemistry, 2011, 51, 16-22. | 2.3 | 7 |
| 28 | Molecular Logic Gate Arrays. Chemistry - an Asian Journal, 2011, 6, 750-766. | 3.3 | 160 |
| 29 | Molecular Logic Gates and Luminescent Sensors Based on Photoinduced Electron Transfer. Topics in Current Chemistry, 2010, 300, 1-28. | 4.0 | 38 |
| 30 | From PASS 1 to YES to AND logic: building parallel processing into molecular logic gates by sequential addition of receptors. New Journal of Chemistry, 2010, 34, 476. | 2.8 | 37 |
| 31 | Quantitative mapping of aqueous microfluidic temperature with sub-degree resolution using fluorescence lifetime imaging microscopy. Lab on A Chip, 2010, 10, 1267. | 6.0 | 74 |
| 32 | Fluorescent PET (Photoinduced Electron Transfer) sensors as potent analytical tools. Analyst, The, 2009, 134, 2385. | 3.5 | 507 |
| 33 | Multiply reconfigurable â€~plug and play' molecular logic via self-assembly. Chemical Communications, 2009, , 1386. | 4.1 | 51 |
| 34 | Molecular logic and computing. , 2009, , 90-101. | | 1 |
| 35 | Multiplexing Sensory Molecules Map Protons Near Micellar Membranes. Angewandte Chemie - International Edition, 2008, 47, 4667-4669. | 13.8 | 79 |
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Solid-bound, proton-driven, fluorescent $\hat{a} \in \hat{o} ff \hat{a} \in \hat{$

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|----|---|------|-----------|
| 37 | A layer of logic. Nature, 2008, 454, 417-418. | 27.8 | 86 |
| 38 | Bright molecules with sense, logic, numeracy and utility. Organic and Biomolecular Chemistry, 2008, 6, 2468. | 2.8 | 164 |
| 39 | Analog Parallel Processing of Molecular Sensory Information. Journal of the American Chemical Society, 2007, 129, 3050-3051. | 13.7 | 66 |
| 40 | From complexation to computation: Recent progress in molecular logic. Inorganica Chimica Acta, 2007, 360, 751-764. | 2.4 | 65 |
| 41 | Sense and versatility. Nature, 2007, 445, 718-719. | 27.8 | 31 |
| 42 | Molecular logic and computing. Nature Nanotechnology, 2007, 2, 399-410. | 31.5 | 812 |
| 43 | A supramolecular chemistry basis for molecular logic and computation. Coordination Chemistry Reviews, 2007, 251, 1623-1632. | 18.8 | 163 |
| 44 | Communicating Chemical Congregation:Â A Molecular AND Logic Gate with Three Chemical Inputs as a "Lab-on-a-Molecule―Prototype. Journal of the American Chemical Society, 2006, 128, 4950-4951. | 13.7 | 312 |
| 45 | Luminescent Molecular Thermometers. Journal of Chemical Education, 2006, 83, 720. | 2.3 | 100 |
| 46 | Molecular computational elements encode large populations of small objects. Nature Materials, 2006, 5, 787-789. | 27.5 | 228 |
| 47 | Consolidating molecular AND logic with two chemical inputs. Analytica Chimica Acta, 2006, 568, 156-160. | 5.4 | 26 |
| 48 | Chemical approaches to nanometre-scale logic gates. Journal of Physics Condensed Matter, 2006, 18, S1847-S1872. | 1.8 | 52 |
| 49 | Luminescent Logic and Sensing. , 2005, , 307-315. | | 3 |
| 50 | Luminescent sensors and switches in the early 21st century. Tetrahedron, 2005, 61, 8551-8588. | 1.9 | 1,074 |
| 51 | The Anthracen-9-ylmethyloxy Unit: An Underperforming Motif Within the Fluorescent PET (Photoinduced Electron Transfer) Sensing Framework. Journal of Fluorescence, 2005, 15, 769-775. | 2.5 | 37 |
| 52 | Development of fluorescent microgel thermometers based on thermo-responsive polymers and their modulation of sensitivity range. Journal of Materials Chemistry, 2005, 15, 2796. | 6.7 | 132 |
| 53 | Membrane Media Create Small Nanospaces for Molecular Computation. Journal of the American Chemical Society, 2005, 127, 8920-8921. | 13.7 | 113 |
| 54 | Molecular-Scale Logic Gates. Chemistry - A European Journal, 2004, 10, 574-586. | 3.3 | 591 |

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|----|--|------|-----------|
| 55 | Switching between molecular switch types by module rearrangement: Ca2+-enabled, H+-driven â€~Off–On–Off', H+-driven YES and PASS 0 as well as H+, Ca2+-driven AND logic operations. Chemical Communications, 2004, , 2048-2049. | 4.1 | 78 |
| 56 | Modulation of the Sensitive Temperature Range of Fluorescent Molecular Thermometers Based on Thermoresponsive Polymers. Analytical Chemistry, 2004, 76, 1793-1798. | 6.5 | 107 |
| 57 | Fluorescent Polymeric AND Logic Gate with Temperature and pH as Inputs. Journal of the American Chemical Society, 2004, 126, 3032-3033. | 13.7 | 340 |
| 58 | Newer optical-based molecular devices from older coordination chemistry. Dalton Transactions, 2003, , 1902-1913. | 3.3 | 172 |
| 59 | Fluorescent Molecular Thermometers Based on Polymers Showing Temperature-Induced Phase Transitions and Labeled with Polarity-Responsive Benzofurazans. Analytical Chemistry, 2003, 75, 5926-5935. | 6.5 | 295 |
| 60 | Direct detection of ion pairs by fluorescence enhancement. Chemical Communications, 2003, , 2010. | 4.1 | 83 |
| 61 | The pH-dependent fluorescence of pyridylmethyl-4-amino-1,8-naphthalimides. Arkivoc, 2003, 2003, 2023, 229-243. | 0.5 | 40 |
| 62 | Simultaneously Multiply-Configurable or Superposed Molecular Logic Systems Composed of ICT (Internal Charge Transfer) Chromophores and Fluorophores Integrated with One- or Two-Ion Receptors. Chemistry - A European Journal, 2002, 8, 4935-4945. | 3.3 | 216 |
| 63 | Logische Schaltungen mit leuchtenden Molekülen. Nachrichten Aus Der Chemie, 2001, 49, 602-606. | 0.0 | 20 |
| 64 | Luminescent sensors and photonic switches. Pure and Applied Chemistry, 2001, 73, 503-511. | 1.9 | 77 |
| 65 | Proof-of-Principle of Molecular-Scale Arithmetic. Journal of the American Chemical Society, 2000, 122, 3965-3966. | 13.7 | 323 |
| 66 | Integration of Logic Functions and Sequential Operation of Gates at the Molecular-Scale. Journal of the American Chemical Society, 1999, 121, 1393-1394. | 13.7 | 352 |
| 67 | Arenedicarboximide Building Blocks for Fluorescent Photoinduced Electron Transfer pH Sensors Applicable with Different Media and Communication Wavelengths. Chemistry - A European Journal, 1998, 4, 1810-1815. | 3.3 | 133 |
| 68 | Fluorescent PET(Photoinduced Electron Transfer) reagents for thiols. Tetrahedron Letters, 1998, 39, 5077-5080. | 1.4 | 92 |
| 69 | Molecular Photoionic AND Logic Gates with Bright Fluorescence and "Offâ^'On―Digital Action. Journal of the American Chemical Society, 1997, 119, 7891-7892. | 13.7 | 330 |
| 70 | Switching â€~on' the luminescence of one metal ion with another: selectivity characteristics with respect to the emitting and triggering metal. Chemical Communications, 1997, , 1891. | 4.1 | 60 |
| 71 | Signaling Recognition Events with Fluorescent Sensors and Switches. Chemical Reviews, 1997, 97, 1515-1566. | 47.7 | 6,736 |
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Direct visual indication of pH windows: $\hat{a} \in \hat{o} ff \hat{a} \in \hat$

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|----|---|-----------|--------------|
| 73 | Photoionic devices with receptor-functionalized fluorophores. Pure and Applied Chemistry, 1996, 68, 1443-1448. | 1.9 | 69 |
| 74 | Proton-Controlled Switching of Luminescence in Lanthanide Complexes in Aqueous Solution: pH Sensors Based on Long-Lived Emission. Angewandte Chemie International Edition in English, 1996, 35, 2116-2118. | 4.4 | 129 |
| 75 | Neue fluoreszierende Modellverbindungen für das Studium des lichtinduzierten Elektronentransfers: der Einfluß eines molekularen elektrischen Feldes im angeregten Zustand. Angewandte Chemie, 1995, 107, 1889-1891. | 2.0 | 38 |
| 76 | New Fluorescent Model Compounds for the Study of Photoinduced Electron Transfer: The Influence of a Molecular Electric Field in the Excited State. Angewandte Chemie International Edition in English, 1995, 34, 1728-1731. | 4.4 | 313 |
| 77 | Bright spies for chiral molecules. Nature, 1995, 374, 310-311. | 27.8 | 13 |
| 78 | Fluorescent PET (photoinduced electron transfer) sensors with targeting/anchoring modules as molecular versions of submarine periscopes for mapping membrane-bounded protons. Journal of the Chemical Society Chemical Communications, 1994, , 405. | 2.0 | 57 |
| 79 | â€~Off–on' fluorescent sensors for physiological levels of magnesium ions based on photoinduced electron transfer (PET), which also behave as photoionic OR logic gates. Journal of the Chemical Society Chemical Communications, 1994. | 2.0 | 127 |
| | Luminescence and charge transfer. Part 3. The use of chromophores with ICT (internal charge) Tj ETQq0 0 0 rgBT | /Overlock | 10 Tf 50 472 |
| 80 | sensors and related absorption pH sensors with aminoalkyl side chains. Journal of the Chemical Society Perkin Transactions II, 1993, , 1611. | 0.9 | 72 |
| 81 | Fluorescent Photoinduced Electron-Transfer Sensors. ACS Symposium Series, 1993, , 45-58. | 0.5 | 9 |
| 82 | Luminescence and charge transfer. Part 2. Aminomethyl anthracene derivatives as fluorescent PET (photoinduced electron transfer) sensors for protons. Journal of the Chemical Society Perkin Transactions II, 1992, , 1559. | 0.9 | 90 |
| 83 | Molecular fluorescent signalling with â€~fluor–spacer–receptor' systems: approaches to sensing and switching devices via supramolecular photophysics. Chemical Society Reviews, 1992, 21, 187-195. | 38.1 | 573 |
| 84 | Phosphorescent PET (photoinduced electron transfer) sensors: prototypical examples for proton monitoring and a â€~message in a bottle' enhancement strategy with cyclodextrins. Journal of the Chemical Society Chemical Communications, 1991, , 1148-1150. | 2.0 | 40 |
| 85 | Fluorescence"Off–On―Signalling upon Linear Recognition and Binding ofα,ï‰-Alkanediyldiammonium Ions by 9,10-Bis{(1-aza-4,7,10,13,16-pentaoxacyclooctadecyl)methyl}anthracene. Angewandte Chemie International Edition in English, 1990, 29, 1173-1175. | 4.4 | 101 |
| 86 | Fluoreszenzveräderungen durch Bindung von α,ï‰â€Alkandiyldiammoniumâ€ŀonen an 9,10â€Bis{(1â€azaâ€4,7,10,13,16â€pentaoxacyclooctadecyl)methyl}anthracen: ein System zur molekularen Lägenerkennung. Angewandte Chemie, 1990, 102, 1159-1161. | 2.0 | 14 |
| 87 | Fluorescent PET (photoinduced electron transfer) sensors selective for submicromolar calcium with quantitatively predictable spectral and ion-binding properties. Journal of the Chemical Society Chemical Communications, 1990, , 186. | 2.0 | 72 |
| 88 | Fluorescent PET (photo-induced electron transfer) sensors for alkali metal ions with improved selectivity against protons and with predictable binding constants. Journal of the Chemical Society Chemical Communications, 1989, , 1183. | 2.0 | 65 |
| 89 | Compartmental fluorescent pH indicators with nearly complete predictability of indicator parameters; molecular engineering of pH sensors. Journal of the Chemical Society Chemical Communications, 1989, , 1054. | 2.0 | 51 |
| 90 | AN INEXPENSIVE STIRRING DEVICE FOR THE â€ [~] MERRY-GO-ROUND' PHOTOREACTOR FOR THE DETERMINATI OF REACTION QUANTUM YIELDS. Photochemistry and Photobiology, 1987, 46, 1021-1022. | ON 2.5 | 0 |

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| 91 | Fluorescent signalling crown ethers; †switching on' of fluorescence by alkali metal ion recognition and binding in situ. Journal of the Chemical Society Chemical Communications, 1986, , 1709-1710. | 2.0 | 233 |
| 92 | A new class of fluorescent pH indicators based on photo-induced electron transfer. Journal of the Chemical Society Chemical Communications, 1985, , 1669. | 2.0 | 167 |