## Edward T Samulski

List of Publications by Year in descending order

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83 papers 6,131 citations

34 h-index 79541 73 g-index

85 all docs

85 docs citations

85 times ranked 7878 citing authors

| #  | Article   | IF  | CITATIONS |
|----|---|-----|-----------|
| 1  | Continuous liquid interface production of 3D objects. Science, 2015, 347, 1349-1352.  | 6.0 | 1,617     |
| 2  | Exfoliated Graphene Separated by Platinum Nanoparticles. Chemistry of Materials, 2008, 20, 6792-6797.   | 3.2 | 1,070     |
| 3  | Short-range nematic-like orientational order in strained elastomers: a deuterium magnetic resonance study. Macromolecules, 1981, 14, 575-581.                   | 2.2 | 214       |
| 4  | Superhydrophobic Behavior of a Perfluoropolyether Lotus-Leaf-like Topography. Langmuir, 2006, 22, 8576-8580.  | 1.6 | 206       |
| 5  | Fabrication and characterization of nanotubular semiconductor oxides In2O3 and Ga2O3. Journal of Materials Chemistry, 2001, 11, 2901-2902.                      | 6.7 | 171       |
| 6  | Non-linear boomerang-shaped liquid crystals derived from 2,5-bis(p-hydroxyphenyl)-1,3,4-oxadiazole. Liquid Crystals, 2000, 27, 131-136.                         | 0.9 | 154       |
| 7  | Javelin-, Hockey Stick-, and Boomerang-Shaped Liquid Crystals. Structural Variations on p-Quinquephenyl. Journal of Physical Chemistry B, 2001, 105, 8845-8860. | 1.2 | 151       |
| 8  | Insights into the cybotactic nematic phase of bent-core molecules. Soft Matter, 2010, 6, 2413.  | 1.2 | 149       |
| 9  | Biomimetic microlens array with antireflective "moth-eye―surface. Soft Matter, 2011, 7, 6404.   | 1.2 | 127       |
| 10 | Alignment of nematic liquid crystals using carbon nanotube films. Thin Solid Films, 2006, 509, 53-57.   | 0.8 | 118       |
| 11 | New thermotropic liquid crystals derived from thiophenes. Liquid Crystals, 1991, 9, 617-634.  | 0.9 | 102       |
| 12 | Cybotaxis dominates the nematic phase of bent-core mesogens: a small-angle diffuse X-ray diffraction study. Soft Matter, 2011, 7, 895-901.                      | 1.2 | 100       |
| 13 | Alkyl chains in a nematic field. 1. A treatment of conformer shape. The Journal of Physical Chemistry, 1990, 94, 4688-4694.                                     | 2.9 | 91        |
| 14 | The elusive thermotropic biaxial nematic phase in rigid bent-core molecules. Pramana - Journal of Physics, 2003, 61, 231-237.                                   | 0.9 | 90        |
| 15 | Light-trapping nano-structures in organic photovoltaic cells. Journal of Materials Chemistry, 2011, 21, 16293.  | 6.7 | 88        |
| 16 | Electrophotonic enhancement of bulk heterojunction organic solar cells through photonic crystal photoactive layer. Applied Physics Letters, 2009, 94, .         | 1.5 | 73        |
| 17 | Efficient Two-Step Synthesis of Biodiesel from Greases. Energy & Samp; Fuels, 2008, 22, 626-634.  | 2.5 | 72        |
| 18 | A comparative study of poly(methyl methacrylate) and polystyrene/clay nanocomposites prepared in supercritical carbon dioxide. Polymer, 2006, 47, 663-671.      | 1.8 | 70        |

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|----|---|------|-----------|
| 19 | Minority carrier transport length of electrodeposited Cu2O in ZnO/Cu2O heterojunction solar cells. Applied Physics Letters, 2011, 98, .   | 1.5  | 64        |
| 20 | The cybotactic nematic phase of bent-core mesogens: state of the art and future developments. Soft Matter, 2014, 10, 7685-7691.   | 1.2  | 64        |
| 21 | <i>meta-</i> Cybotaxis and nematic biaxiality. Liquid Crystals, 2010, 37, 669-678.  | 0.9  | 62        |
| 22 | Extraordinary Magnetic Field Effect in Bent-Core Liquid Crystals. Physical Review Letters, 2011, 107, 207801.   | 2.9  | 62        |
| 23 | Uniaxial to biaxial nematic phase transition in a bent-core thermotropic liquid crystal by polarising microscopy. Liquid Crystals, 2012, 39, 19-23.   | 0.9  | 60        |
| 24 | In Situ Polymerization of Poly(methyl methacrylate)/Clay Nanocomposites in Supercritical Carbon Dioxide. Macromolecules, 2005, 38, 7967-7971.   | 2.2  | 58        |
| 25 | Shape-Dominated Ordering in Nematic Solvents. A Deuterium NMR Study of Cycloalkane Solutes.<br>Journal of the American Chemical Society, 1996, 118, 2226-2234.  | 6.6  | 51        |
| 26 | New mesogens with cubic phases: hydrogen-bonded bipyridines and siloxane-containing benzoic acids II. Structural studies. Liquid Crystals, 2000, 27, 1463-1471.   | 0.9  | 49        |
| 27 | Low nematic onset temperatures and room temperature cybotactic behavior in 1,3,4-oxadiazole-based bent-core mesogens possessing lateral methyl groups. Journal of Materials Chemistry, 2012, 22, 22558. | 6.7  | 49        |
| 28 | Alkyl chains in a nematic field. 2. Temperature and chain length dependence of orientational ordering. The Journal of Physical Chemistry, 1990, 94, 4694-4700.  | 2.9  | 48        |
| 29 | Molecular flexibility and orientational ordering of nematic liquid crystals. Journal of Chemical Physics, 1991, 94, 2758-2772.  | 1.2  | 46        |
| 30 | Behavior of rigid macromolecules in selfâ€assembly at an interface. Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 1992, 10, 2775-2782.  | 0.9  | 46        |
| 31 | New All-Aromatic Liquid Crystal Architectures. Chemistry of Materials, 2008, 20, 3821-3831.   | 3.2  | 43        |
| 32 | Minimizing interfacial losses in inverted organic solar cells comprising Al-doped ZnO. Applied Physics Letters, 2012, 100, .  | 1.5  | 41        |
| 33 | In situ fabrication of dispersed, crystalline platinum nanoparticles embedded in carbon nanofibers.<br>Chemical Physics Letters, 2004, 398, 505-510.  | 1.2  | 37        |
| 34 | Evidence of Biaxial Order in the Cybotactic Nematic Phase of Bent-Core Mesogens. Chemistry of Materials, 2014, 26, 4671-4674.   | 3.2  | 37        |
| 35 | Interplay between Bimolecular Recombination and Carrier Transport Distances in Bulk Heterojunction<br>Organic Solar Cells. Advanced Energy Materials, 2012, 2, 477-486.                                 | 10.2 | 36        |
| 36 | The biaxial nematic phase of oxadiazole biphenol mesogens. Liquid Crystals, 2013, 40, 1655-1677.  | 0.9  | 36        |

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|----|---|-----|-----------|
| 37 | SWCNT Induced Crystallization in an Amorphous All-Aromatic Poly(ether imide). Macromolecules, 2013, 46, 1492-1503.  | 2.2 | 34        |
| 38 | Molecular flexibility in nematics: from alkanes to dimer mesogens. Journal of the Chemical Society, Faraday Transactions, 1992, 88, 1875.   | 1.7 | 33        |
| 39 | New mesogens with cubic phases: hydrogen-bonded bipyridines and siloxane-containing benzoic acids I. Preparation and phase behaviour. Liquid Crystals, 2000, 27, 1457-1462.       | 0.9 | 33        |
| 40 | Search for microscopic and macroscopic biaxiality in the cybotactic nematic phase of new oxadiazole bent-core mesogens. Physical Review E, 2016, 93, 062701.                      | 0.8 | 32        |
| 41 | Self-Assembled α-Helical Polypeptide Films. Materials Research Society Symposia Proceedings, 1991, 255, 423.  | 0.1 | 29        |
| 42 | Electric field effect on the phase diagram of a bent-core liquid crystal. Soft Matter, 2013, 9, 6475.   | 1.2 | 29        |
| 43 | Photoinduced graft polymerization of styrene onto polypropylene substrates. Journal of Applied Polymer Science, 1997, 64, 883-889.  | 1.3 | 27        |
| 44 | Nonideal parasitic resistance effects in bulk heterojunction organic solar cells. Journal of Applied Physics, 2010, 108, 084514.  | 1.1 | 25        |
| 45 | The twist bend nematic: a case of mistaken identity. Liquid Crystals, 2020, 47, 2092-2097.  | 0.9 | 24        |
| 46 | Tilt, polarity, and spontaneous symmetry breaking in liquid crystals. Physical Review E, 1998, 57, R4875-R4878.   | 0.8 | 22        |
| 47 | The effects of lateral halogen substituents on the low-temperature cybotactic nematic phase in oxadiazole based bent-core liquid crystals. Liquid Crystals, 2015, 42, 1754-1764.  | 0.9 | 21        |
| 48 | Towards Room Temperature Biaxial Nematics. Molecular Crystals and Liquid Crystals, 2009, 511, 203/[1673]-217/[1687].  | 0.4 | 20        |
| 49 | An achiral, anticlinic-promoting, smectic liquid crystal architecture. Journal of Materials Chemistry, 2004, 14, 1554.  | 6.7 | 19        |
| 50 | Quantitative calculation of spontaneous polarization in ferroelectric liquid crystals. Journal of Chemical Physics, 1997, 107, 4061-4069.   | 1.2 | 17        |
| 51 | Synthesis and Characterization of Poly(p-phenylene)s with Nonlinear Optical Side Chains.<br>Macromolecules, 2000, 33, 2355-2358.  | 2.2 | 17        |
| 52 | Probing molecular ordering in the nematic phases of para-linked bimesogen dimers through NMR studies of flexible prochiral solutes. Liquid Crystals, 2020, 47, 2058-2073.         | 0.9 | 17        |
| 53 | Mesoporous Silicaâ€Supported Diarylammonium Catalysts for Esterification of Free Fatty Acids in Greases. JAOCS, Journal of the American Oil Chemists' Society, 2010, 87, 445-452. | 0.8 | 16        |
| 54 | Analyzing local exciton generation profiles as a means to extract transport lengths in organic solar cells. Physical Review B, $2010,82,.$  | 1.1 | 16        |

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| 55 | Study of a thermotropic liquid-crystalline polyester at elevated pressures. Journal of Polymer Science, Part B: Polymer Physics, 1990, 28, 189-202.   | 2.4  | 14        |
| 56 | Thermally stable nonlinear optical activity in a smectic-A liquid crystal. Nature, 1996, 384, 244-247.  | 13.7 | 14        |
| 57 | Addressing nonâ€idealities in NMR experiments on rotating liquid crystals. Liquid Crystals, 2005, 32, 1419-1425.  | 0.9  | 14        |
| 58 | Multilayered crystalline structures and liquid crystalline phases in a mesogen with siloxane tails.<br>Liquid Crystals, 1995, 19, 557-563.  | 0.9  | 12        |
| 59 | Diffusion realigned. Nature Materials, 2011, 10, 486-487.   | 13.3 | 12        |
| 60 | Molecular engineering room-temperature bent-core nematics. Liquid Crystals, 0, , 1-11.  | 0.9  | 10        |
| 61 | Molecular ordering in the high-temperature nematic phase of an all-aromatic liquid crystal. Soft Matter, 2016, 12, 2309-2314.   | 1.2  | 10        |
| 62 | New Mesogenes Forming Nanophase Separated Liquid Crystalline Structure - Cubic Phase Molecular Crystals and Liquid Crystals, 2001, 364, 605-610.  | 0.3  | 8         |
| 63 | Biaxial ordering in the supercooled nematic phase of bent-core mesogens: effects of molecular symmetry and outer wing lateral groups. Liquid Crystals, 2020, 47, 1986-1998.                                 | 0.9  | 8         |
| 64 | All Structures Great and Small: Nanoscale Modulations in Nematic Liquid Crystals. Nanomaterials, 2022, 12, 93.  | 1.9  | 8         |
| 65 | Suppression of bimolecular recombination by UV-sensitive electron transport layers in organic solar cells. Journal of Applied Physics, 2010, 108, 083101.   | 1.1  | 7         |
| 66 | Chain orientation in deformed networks via NMR. Makromolekulare Chemie Macromolecular Symposia, 1990, 40, 109-120.  | 0.6  | 5         |
| 67 | Spontaneous Polarization in Tilted Smectics. Molecular Crystals and Liquid Crystals, 1997, 292, 265-276.  | 0.3  | 4         |
| 68 | Balance between light trapping and charge carrier collection: Electro-photonic optimization of organic photovoltaics with ridge-patterned back electrodes. Journal of Applied Physics, 2013, 113, 244503.   | 1.1  | 4         |
| 69 | Liquid-State Structure via Very High-Field Nuclear Magnetic Resonance Discriminates among Force Fields. Journal of Physical Chemistry Letters, 2015, 6, 3626-3631.  | 2.1  | 4         |
| 70 | Orientation Behavior of Thermoplastic Elastomers Studied by <sup>2</sup> H-NMR Spectroscopy. ACS Symposium Series, 1995, , 190-203.   | 0.5  | 2         |
| 71 | Synthesis, Thermal and Luminescence Properties of Ortho-Terphenyl Derivatives with 1,3,4-Oxadiazole Moiety. Molecular Crystals and Liquid Crystals, 2011, 550, 189-204.                                     | 0.4  | 2         |
| 72 | Direct Measurement of the Angular Pair Correlation Coefficients in Molecular Liquids Using NMR. Benchmarking Force Fields for Atomistic Simulations. Journal of Physical Chemistry B, 2017, 121, 4174-4183. | 1.2  | 2         |

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|------------|--|-----|-----------|
| <b>7</b> 3 | The mesomorphic state. , 2004, , 316-380.  |     | 2         |
| 74         | Professor Walter Kauzmann in the late 1960s: how a chance conversation resulted in a thesis chapter, and his simple perspective on polywater. Biophysical Chemistry, 2003, 105, 173-174. | 1.5 | 1         |
| 75         | Uniform Alignment of Liquid Crystals Induced by Perfluoropolyether Film Exposed to Linearly Polarized Ultraviolet Light. Molecular Crystals and Liquid Crystals, 2010, 516, 38-44.       | 0.4 | 1         |
| 76         | The meaning of collaboration. Journal of Magnetic Resonance, 2012, 218, 164-166.   | 1.2 | 1         |
| 77         | Photoinduced graft polymerization of styrene onto polypropylene substrates., 1997, 64, 883.  |     | 1         |
| 78         | Thermodynamics of Melting in Colloids and Helium. Journal of Low Temperature Physics, 0, , 1.  | 0.6 | 1         |
| 79         | Sol-gel Template Synthesis and Liquid CO2 Developed TiO2/CdS Composite Nanowire Arrays. Materials Research Society Symposia Proceedings, 2002, 737, 421.                                 | 0.1 | О         |
| 80         | News of MRS Members/Materials Researchers. MRS Bulletin, 2007, 32, 689-689.  | 1.7 | 0         |
| 81         | Electro-optical model of photonic crystal bulk heterojunction organic solar cells. , 2010, , .   |     | О         |
| 82         | The night I danced with Al Saupe. A reflection. Liquid Crystals, 2010, 37, 625-626.  | 0.9 | 0         |
| 83         | Meeting George Gray. Liquid Crystals, 0, , $1$ -3.   | 0.9 | О         |