Timothy V Duncan

List of Publications by Year
in descending order

41 papers	3,441 citations	257357 24 h-index	276775 41 g-index
41 all docs	41 docs citations	41 times ranked	5103 citing authors

#	Article	IF	Citations
1	Food and Beverage Ingredients Induce the Formation of Silver Nanoparticles in Products Stored within Nanotechnology-Enabled Packaging. ACS Applied Materials & Interfaces, 2021, 13, 1398-1412.	4.0	25
2	Challenges and potential solutions for nanosensors intended for use with foods. Nature Nanotechnology, 2021, 16, 251-265.	15.6	79
3	Leveraging Extraction Testing to Predict Patient Exposure to Polymeric Medical Device Leachables Using Physics-based Models. Toxicological Sciences, 2020, 178, 201-211.	1.4	14
4	A Quantum Dot Nanobiosensor for Rapid Detection of Botulinum Neurotoxin Serotype E. ACS Sensors, 2020, 5, 2118-2127.	4.0	12
5	Migration of Quaternary Ammonium Cations from Exfoliated Clay/Low-Density Polyethylene Nanocomposites into Food Simulants. ACS Omega, 2019, 4, 13349-13359.	1.6	6
6	Improving risk assessment of color additives in medical device polymers. Journal of Biomedical Materials Research - Part B Applied Biomaterials, 2018, 106, 310-319.	1.6	10
7	Conservative Exposure Predictions for Rapid Risk Assessment of Phase-Separated Additives in Medical Device Polymers. Annals of Biomedical Engineering, 2018, 46, 14-24.	1.3	9
8	High Throughput Quantification of Quaternary Ammonium Cations in Food Simulants by Flow-Injection Mass Spectrometry. Journal of AOAC INTERNATIONAL, 2018, 101, 1873-1880.	0.7	7
9	Assessment of Mass Transfer from Poly(ethylene) Nanocomposites Containing Noble-Metal Nanoparticles: A Systematic Study of Embedded Particle Stability. ACS Applied Nano Materials, 2018, 1, 5188-5196.	2.4	17
10	Influence of Different Acids on the Transport of CdSe Quantum Dots from Polymer Nanocomposites to Food Simulants. Environmental Science & Technology, 2018, 52, 9468-9477.	4.6	10
11	Nanoscale sensors for assuring the safety of food products. Current Opinion in Biotechnology, 2017, 44, 74-86.	3.3	97
12	Detection and Quantification of Biologically Active Botulinum Neurotoxin Serotypes A and B Using a FÃ¶rster Resonance Energy Transfer-Based Quantum Dot Nanobiosensor. ACS Applied Materials & Interfaces, 2017, 9, 31446-31457.	4.0	22
13	CHAPTER 8. Nanomaterials in Food Products: A New Analytical Challenge. RSC Nanoscience and Nanotechnology, 2017, , 143-177.	0.2	2
14	Large Hyperpolarizabilities at Telecommunication-Relevant Wavelengths in Donorâ€“Acceptorâ€“Donor Nonlinear Optical Chromophores. ACS Central Science, 2016, 2, 954-966.	5.3	48
15	Environmental release of coreâ€“shell semiconductor nanocrystals from free-standing polymer nanocomposite films. Environmental Science: Nano, 2016, 3, 657-669.	2.2	29
16	Release of Engineered Nanomaterials from Polymer Nanocomposites: Diffusion, Dissolution, and Desorption. ACS Applied Materials & Interfaces, 2015, 7, 2-19.	4.0	117
17	Release of Engineered Nanomaterials from Polymer Nanocomposites: the Effect of Matrix Degradation. ACS Applied Materials & Interfaces, 2015, 7, 20-39.	4.0	86
18	Nanoparticles in Polymer Nanocomposite Food Contact Materials: Uses, Potential Release, and Emerging Toxicological Concerns. Molecular and Integrative Toxicology, 2014, , 95-123.	0.5	3

#	Article	IF	Citations
19	Measurement Methods to Evaluate Engineered Nanomaterial Release from Food Contact Materials. Comprehensive Reviews in Food Science and Food Safety, 2014, 13, 679-692.	5.9	70
20	Measurement Methods for the Oral Uptake of Engineered Nanomaterials from Human Dietary Sources: Summary and Outlook. Comprehensive Reviews in Food Science and Food Safety, 2014, 13, 669-678.	5.9	24
21	Measurement Methods to Detect, Characterize, and Quantify Engineered Nanomaterials in Foods. Comprehensive Reviews in Food Science and Food Safety, 2014, 13, 693-704.	5.9	82
22	Methods to Evaluate Uptake of Engineered Nanomaterials by the Alimentary Tract. Comprehensive Reviews in Food Science and Food Safety, 2014, 13, 705-729.	5.9	24
23	Engineered Nanoscale Food Ingredients: Evaluation of Current Knowledge on Material Characteristics Relevant to Uptake from the Gastrointestinal Tract. Comprehensive Reviews in Food Science and Food Safety, 2014, 13, 730-744.	5.9	85
24	The communication challenges presented by nanofoods. Nature Nanotechnology, 2011, 6, 683-688.	15.6	84
25	Near IR nonlinear absorption of an organic supermolecule [Invited]. Optical Materials Express, 2011, 1, 1383.	1.6	16
26	Applications of nanotechnology in food packaging and food safety: Barrier materials, antimicrobials and sensors. Journal of Colloid and Interface Science, 2011, 363, 1-24.	5.0	1,588
27	Excitation of Highly Conjugated (Porphinato)palladium(II) and (Porphinato)platinum(II) Oligomers Produces Long-Lived, Triplet States at Unit Quantum Yield That Absorb Strongly over Broad Spectral Domains of the NIR. Journal of Physical Chemistry B, 2010, 114, 14696-14702.	1.2	44
28	Improving the Quantum Yields of Semiconductor Quantum Dots through Photoenhancement Assisted by Reducing Agents. Journal of Physical Chemistry C, 2009, 113, 7561-7566.	1.5	33
29	A New Family of Color-Tunable Light-Emitting Polymers with High Quantum Yields via the Controlled Oxidation of MEHâ^'PPV. Journal of Physical Chemistry B, 2009, 113, 13216-13221.	1.2	16
30	Molecular Symmetry and Solutionâ€Phase Structure Interrogated by Hyperâ€Rayleigh Depolarization Measurements: Elaborating Highly Hyperpolarizable D₂â€Symmetric Chromophores. Angewandte Chemie - International Edition, 2008, 47, 2978-2981.	7.2	59
31	Bifunctional Nanostructures Composed of Fluorescent Core and Metal Shell Subdomains with Controllable Geometry. Journal of Physical Chemistry C, 2008, 112, 11205-11210.	1.5	13
32	Ultrafast Excited-State Dynamics of Nanoscale Near-Infrared Emissive Polymersomes. Journal of the American Chemical Society, 2008, 130, 9773-9784.	6.6	45
33	Temperature-Dependent Mechanistic Transition for Photoinduced Electron Transfer Modulated by Excited-State Vibrational Relaxation Dynamicsâ€. Journal of Physical Chemistry B, 2007, 111, 6829-6838.	1.2	26
34	Molecular Engineering of Intensely Near-Infrared Absorbing Excited States in Highly Conjugated Oligo(porphinato)zincâ^'(Polypyridyl)metal(II) Supermolecules. Journal of the American Chemical Society, 2007, 129, 9691-9703.	6.6	57
35	Interfacial Assembly of Nanoparticles in Discrete Blockâ€Copolymer Aggregates. Angewandte Chemie - International Edition, 2007, 46, 9235-9238.	7.2	77
36	Exceptional Near-Infrared Fluorescence Quantum Yields and Excited-State Absorptivity of Highly Conjugated Porphyrin Arrays. Journal of the American Chemical Society, 2006, 128, 9000-9001.	6.6	165

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37	Ethyne-Bridged (Porphinato)Zinc(II)â^'(Porphinato)Iron(III) Complexes:Â Phenomenological Dependence of Excited-State Dynamics upon (Porphinato)Iron Electronic Structure. Journal of the American Chemical Society, 2006, 128, 10423-10435.	6.6	39
38	Potentiometric, Electronic Structural, and Ground- and Excited-State Optical Properties of Conjugated Bis[(Porphinato)zinc(II)] Compounds Featuring Proquinoidal Spacer Units. Journal of the American Chemical Society, 2005, 127, 5186-5195.	6.6	114
39	Impact of Electronic Asymmetry on Photoexcited Triplet-State Spin Distributions in Conjugated Porphyrin Oligomers Probed via EPR Spectroscopy. Journal of Physical Chemistry B, 2004, 108, 11893-11903.	1.2	47
40	Highly Conjugated (Polypyridyl)metalâ^'(Porphinato)zinc(II) Compounds:Â Long-Lived, High Oscillator Strength, Excited-State Absorbers Having Exceptional Spectral Coverage of the Near-Infrared. Journal of the American Chemical Society, 2004, 126, 9474-9475.	6.6	69
41	The HCO[sub 2] potential energy surface: Stationary point energetics and the HOCO heat of formation. Journal of Chemical Physics, 2000, 113, 5138.	1.2	71