Dianne J Luning Prak

List of Publications by Year
in descending order

76 papers	1,483 citations	331259 21 h-index	377514 34 g-index
78 all docs	78 docs citations	78 times ranked	908 citing authors

#	Article	IF	Citations
1	Solubilization of polycyclic aromatic hydrocarbon mixtures in micellar nonionic surfactant solutions. Water Research, 2002, 36, 3463-3472.	5.3	122
2	Physical and Chemical Analysis of Alcohol-to-Jet (ATJ) Fuel and Development of Surrogate Fuel Mixtures. Energy & Fuels, 2015, 29, 3760-3769.	2.5	70
3	Density, Viscosity, Speed of Sound, Surface Tension, and Flash Point of Binary Mixtures of n-Hexadecane and 2,2,4,4,6,8,8-Heptamethylnonane and of Algal-Based Hydrotreated Renewable Diesel. Journal of Chemical & Engineering Data, 2013, 58, 920-926.	1.0	60
4	Density, Viscosity, Speed of Sound, Bulk Modulus, Surface Tension, and Flash Point of Binary Mixtures of n-Hexadecane + Ethylbenzene or + Toluene at (293.15 to 373.15) K and 0.1 MPa. Journal of Chemical & Engineering Data, 2014, 59, 3571-3585.	1.0	58
5	Density, Viscosity, Speed of Sound, Bulk Modulus, Surface Tension, and Flash Point of Binary Mixtures of Butylbenzene + Linear Alkanes (n-Decane, n-Dodecane, n-Tetradecane,) Tj ETQq1 1 0.784314 rgBT /Overlock 10 2017, 62, 169-187.	1.0	55
6	Solubilization Rates ofn-Alkanes in Micellar Solutions of Nonionic Surfactants. Environmental Science & Technology, 2000, 34, 476-482.	4.6	54
7	Development of a Surrogate Mixture for Algal-Based Hydrotreated Renewable Diesel. Energy & Fuels, 2013, 27, 954-961.	2.5	54
8	Density, Viscosity, Speed of Sound, Bulk Modulus, Surface Tension, and Flash Point of Direct Sugar to Hydrocarbon Diesel (DSH-76) and Binary Mixtures of N-Hexadecane and 2,2,4,6,6-Pentamethylheptane. Journal of Chemical & Engineering Data, 2013, 58, 3536-3544.	1.0	53
9	Density, Viscosity, Speed of Sound, Bulk Modulus, Surface Tension, and Flash Point of Binary Mixtures of n-Dodecane with 2,2,4,6,6-Pentamethylheptane or 2,2,4,4,6,8,8-Heptamethylnonane. Journal of Chemical & Engineering Data, 2014, 59, 1334-1346.	1.0	48
10	Density, Viscosity, Speed of Sound, Bulk Modulus, and Surface Tension of Binary Mixtures of n-Heptane + 2,2,4-Trimethylpentane at (293.15 to 338.15) K and 0.1 MPa. Journal of Chemical & Engineering Data, 2014, 59, 3842-3851.	1.0	42
11	Solubility of 2,4-Dinitrotoluene and 2,4,6-Trinitrotoluene in Seawater. Journal of Chemical & Engineering Data, 2006, 51, 448-450.	1.0	37
12	Density, Viscosity, Speed of Sound, Bulk Modulus, Surface Tension, and Flash Point of Binary Mixtures of Butylcyclohexane with Toluene or n-Hexadecane. Journal of Chemical & Engineering Data, 2016, 61, 3595-3606.	1.0	37
13	Analysis of Catalytic Hydrothermal Conversion Jet Fuel and Surrogate Mixture Formulation: Components, Properties, and Combustion. Energy & Fuels, 2017, 31, 13802-13814.	2.5	35
14	Degradation of polycyclic aromatic hydrocarbons dissolved in Tween 80 surfactant solutions bySphingomonas paucimobilisEPA 505. Canadian Journal of Microbiology, 2002, 48, 151-158.	0.8	34
15	Solubilization of nitrotoluenes in micellar nonionic surfactant solutions. Chemosphere, 2007, 68, 1961-1967.	4.2	30
16	Binary Mixtures of Branched and Aromatic Pure Component Fuels as Surrogates for Future Diesel Fuels. SAE International Journal of Fuels and Lubricants, 0, 3, 794-809.	0.2	29
17	Solubility of 4-Nitrotoluene, 2,6-Dinitrotoluene, 2,3-Dinitrotoluene, and 1,3,5-Trinitrobenzene in Pure Water and Seawater. Journal of Chemical & Engineering Data, 2007, 52, 2446-2450.	1.0	28
18	Densities and Viscosities at 293.15â€“373.15 K, Speeds of Sound and Bulk Moduli at 293.15â€“333.15 K, Surface Tensions, and Flash Points of Binary Mixtures of n-Hexadecane and Alkylbenzenes at 0.1 MPa. Journal of Chemical & Engineering Data, 2017, 62, 1673-1688.	1.0	27

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19	Densities, Viscosities, Speeds of Sound, Bulk Moduli, Surface Tensions, and Flash Points of Quaternary Mixtures of n-Dodecane (1), n-Butylcyclohexane (2), n-Butylbenzene (3), and 2,2,4,4,6,8,8-Heptamethylnonane (4) at 0.1 MPa as Potential Surrogate Mixtures for Military Jet Fuel, JP-5. Journal of Chemical & Engineering Data, 2019, 64, 1725-1745.	1.0	27
20	Density, Viscosity, Speed of Sound, Bulk Modulus, Surface Tension, and Flash Point of Selected Ternary Mixtures of n-Butylcyclohexane + a Linear Alkane (n-Hexadcane or) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50 702 Td (	1.0	24
21	Densities, Viscosities, Speeds of Sound, Bulk Moduli, Surface Tensions, and Flash Points of Binary Mixtures of Ethylcyclohexane or Methylcyclohexane with n-Dodecane or n-Hexadecane at 0.1 MPa. Journal of Chemical & Engineering Data, 2018, 63, 1642-1656.	1.0	24
22	An 1H NMR investigation into the loci of solubilization of 4-nitrotoluene, 2,6-dinitrotoluene, and 2,4,6-trinitrotoluene in nonionic surfactant micelles. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 2011, 375, 12-22.	2.3	23
23	The capability of organic compounds to swell acrylonitrile butadiene O-rings and their effects on O-ring mechanical properties. Fuel, 2019, 238, 483-492.	3.4	22
24	Density and Viscosity from 293.15 to 373.15 K, Speed of Sound and Bulk Modulus from 293.15 to 343.15 K, Surface Tension, and Flash Point of Binary Mixtures of Bicyclohexyl and 1,2,3,4-Tetrahydronaphthalene or Trans-decahydronaphthalene at 0.1 MPa. Journal of Chemical & Engineering Data, 2016, 61, 650-661.	1.0	21
25	Density, Viscosity, Speed of Sound, Bulk Modulus, Surface Tension, and Flash Point of Binary Mixtures of n-Hexylbenzene (1) or n-Butylbenzene (1) in 2,2,4,6,6-Pentamethylheptane (2) or 2,2,4,4,6,8,8-Heptamethylnonane (2) at 0.1 MPa. Journal of Chemical & Engineering Data, 2018, 63, 3503-3519.	1.0	21
26	Thermophysical Properties of Binary Mixtures of n-Dodecane with n-Alkylcyclohexanes: Experimental Measurements and Molecular Dynamics Simulations. Journal of Chemical & Engineering Data, 2019, 64, 1550-1568.	1.0	21
27	Photolysis of 2,4-Dinitrotoluene and 2,6-Dinitrotoluene in Seawater. Aquatic Geochemistry, 2010, 16, 491-505.	1.5	20
28	Density, Viscosity, Speed of Sound, Bulk Modulus, Surface Tension, and Flash Point of Binary Mixtures of 2,2,4,6,6-Pentamethylheptane and 2,2,4,4,6,8,8-Heptamethylnonane at (293.15 to 373.15) K and 0.1 MPa and Comparisons with Alcohol-to-Jet Fuel. Journal of Chemical & Engineering Data, 2015, 60, 1157-1165.	1.0	19
29	Formulation of Surrogate Fuel Mixtures Based on Physical and Chemical Analysis of Hydrodepolymerized Cellulosic Diesel Fuel. Energy & Fuels, 2016, 30, 7331-7341.	2.5	19
30	Impact of Molecular Structure on Properties of n-Hexadecane and Alkylbenzene Binary Mixtures. Journal of Physical Chemistry B, 2018, 122, 6595-6603.	1.2	18
31	The development and testing of Navy jet fuel (JP-5) surrogates. Fuel, 2019, 249, 80-88.	3.4	18
32	Systematic examination of the links between composition and physical properties in surrogate fuel mixtures using molecular dynamics. Fuel, 2020, 261, 116247.	3.4	18
33	Density, Viscosity, Speed of Sound, and Bulk Modulus of Methyl Alkanes, Dimethyl Alkanes, and Hydrotreated Renewable Fuels. Journal of Chemical & Engineering Data, 2013, 58, 2065-2075.	1.0	17
34	An Experimental and Modeling Study Into Using Normal and Isocetane Fuel Blends as a Surrogate for a Hydroprocessed Renewable Diesel Fuel. Journal of Energy Resources Technology, Transactions of the ASME, 2014, 136, .	1.4	16
35	The Effects of Fuel Injection Pressure and Fuel Type on the Combustion Characteristics of a Diesel Engine. Journal of Engineering for Gas Turbines and Power, 2015, 137, .	0.5	16
36	Elucidating the Properties of Surrogate Fuel Mixtures Using Molecular Dynamics. Energy & Fuels, 2016, 30, 784-795.	2.5	16

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37	Photolysis of 2,4,6-trinitrotoluene in seawater and estuary water: Impact of pH, temperature, salinity, and dissolved organic matter. Marine Pollution Bulletin, 2017, 114, 977-986.	2.3	16
38	Biobased Diesel Fuel Analysis and Formulation and Testing of Surrogate Fuel Mixtures. Industrial & Engineering Chemistry Research, 2018, 57, 600-610.	1.8	15
39	Direct Sugar to Hydrocarbon (DSH) Fuel Performance Evaluation in Multiple Diesel Engines. SAE International Journal of Fuels and Lubricants, 0, 7, 270-282.	0.2	14
40	Influence of pH, temperature, salinity, and dissolved organic matter on the photolysis of 2,4-dinitrotoluene and 2,6-dinitrotoluene in seawater. Marine Chemistry, 2013, 157, 233-241.	0.9	13
41	Densities, Speeds of Sound, and Viscosities of Binary Mixtures of ann-Alkylcyclohexane (n-Propyl-,n-Pentyl-,n-Hexyl-,n-Heptyl,n-Octyl-,n-Nonyl-,n-Decyl-,) Tj ETQq1 1 0.784314 r	1.0	13
42	Binary Mixtures of Aromatic Compounds (n-Propylbenzene, 1,3,5-Trimethylbenzene, and) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50 5 Moduli, Surface Tensions, and Flash Points at 0.1 MPa. Journal of Chemical & Engineering Data, 2020, 65, 2625-2641.	1.0	13
43	Physical Properties of Binary Mixtures of n-Dodecane and Various Ten-Carbon Aromatic Compounds (2-Methyl-1-phenylpropane, 2-Methyl-2-phenylpropane, 2-Phenylbutane, and) Tj ETQq1 1 0.784314 rgBT /Overlock 10 Tf 50 Points at T = (293.15â€“333.15) K and 0.1 MPa. Journal of Chemical & Engineering Data, 2020, 65, 3941-3954.	1.0	11
44	Cetane number, derived cetane number, and cetane index: When correlations fail to predict combustibility. Fuel, 2021, 289, 119963.	3.4	11
45	Impact of low flash point compounds (hydrocarbons containing eight carbon atoms) on the flash point of jet fuel and n-dodecane. Fuel, 2021, 286, 119389.	3.4	10
46	Assessing the Salting-Out Behavior of Nitrobenzene, 2-Nitrotoluene, and 3-Nitrotoluene from Solubility Values in Pure Water and Seawater at Temperatures between (277 and 314) K. Journal of Chemical & Engineering Data, 2009, 54, 1231-1235.	1.0	9
47	Density, Viscosity, Speed of Sound, Bulk Modulus, Surface Tension, and Flash Point of Binary Mixtures of 1,2,3,4-Tetrahydronaphthalene and Trans-decahydronaphthalene. Journal of Chemical & Engineering Data, 2016, 61, 2371-2379.	1.0	9
48	Binary Mixtures of Benzene and Cyclohexane with n-Alkyl Functional Groups up to 12 Carbons Long: Densities, Viscosities, and Speeds of Sound within the Temperature Range (288.15â€“333.15) K. Journal of Chemical & Engineering Data, 2022, 67, 1378-1396.	1.0	9
49	High Cetane Fuel Combustion Performance in a Conventional Military Diesel Engine. SAE International Journal of Fuels and Lubricants, 0, 4, 34-47.	0.2	8
50	Formulation of 7-Component Surrogate Mixtures for Military Jet Fuel and Testing in Diesel Engine. ACS Omega, 2022, 7, 2275-2285.	1.6	8
51	Predicting the Physical and Chemical Ignition Delays in a Military Diesel Engine Running n-Hexadecane Fuel. Journal of Engineering for Gas Turbines and Power, 2014, 136, .	0.5	7
52	Startup and Steady-State Performance of a New Renewable Hydroprocessed Depolymerized Cellulosic Diesel Fuel in Multiple Diesel Engines. Journal of Engineering for Gas Turbines and Power, 2016, 138, .	0.5	6
53	Assessing the Salting-Out Behavior of 2,4-Dinitrobenzaldehyde and 2,6-Dinitrobenzaldehyde from Solubility Values in Pure Water and Seawater at Temperatures between (280 and 313) K. Journal of Chemical & Engineering Data, 2011, 56, 2630-2633.	1.0	5
54	Reference and Pure Component Fuel Characterization in an Ignition Quality Tester Derived Cetane Rating Unit. SAE International Journal of Engines, 0, 10, 1163-1173.	0.4	5

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55	Combustion and physical properties of blends of military jet fuel JP-5 with fifteen different methyl ester biodiesels synthesized from edible and nonedible oils. Fuel, 2021, 311, 122503.	3.4	5
56	Rate-limited mass transfer of octane, decane, and dodecane into nonionic surfactants solutions under laminar flow conditions. Chemosphere, 2008, 72, 133-140.	4.2	4
57	Solubility of 3,4-Dinitrotoluene in Pure Water and Seawater. Journal of Chemical & Engineering Data, 2008, 53, 586-587.	1.0	4
58	Photolysis of 2,4,6-Trinitrotoluene in Seawater: Effect of Salinity and Nitrate Concentration. ACS Symposium Series, 2011, , 157-169.	0.5	4
59	Swelling behavior and tensile strength of additively manufactured and commercial O-rings in the presence of linear, branched, cyclic, and aromatic compounds and alcohols. Journal of Elastomers and Plastics, 2022, 54, 937-958.	0.7	4
60	A Chemistry Minute: Recognizing Chemistry in Our Daily Lives. Journal of Chemical Education, 2008, 85, 1368.	1.1	3
61	Solubilization of Nitroaromatic Compounds from Multi-Component Mixtures into Nonionic Surfactant Micellar Solutions. Separation Science and Technology, 2010, 45, 732-739.	1.3	3
62	An Experimental and Modeling Study Into Using Normal and ISO Cetane Fuel Blends as a Surrogate for a Hydro-Processed Renewable Diesel (HRD) Fuel. , 2013, , .		3
63	Thermophysical Properties of Two-Component Mixtures of n-Nonylbenzene or 1,3,5-Triisopropylbenzene with n-Hexadecane or n-Dodecane at 0.1 MPa: Experimentally Measured Densities, Viscosities, and Speeds of Sound and Molecular Packing Modeled Using Molecular Dynamics Simulations. Journal of Chemical & Engineering Data, 2021, 66, 1442-1456.	1.0	3
64	Properties of Two-Component Mixtures of Isobutylcyclohexane (1) or tert-Butylcyclohexane (1) with n-Dodecane (2) or n-Hexadecane (2): Densities, Surface Tensions, Viscosities, and Speeds of Sound at 0.1 MPa and Various Temperatures. Journal of Chemical & Engineering Data, 2021, 66, 3165-3177.	1.0	3
65	Start-Up and Steady-State Performance of a New Renewable Hydroprocessed Depolymerized Cellulosic Diesel (HDCD) Fuel in Multiple Diesel Engines. , 2015, , .		3
66	Density, viscosity, speed of sound, flash point, bulk modulus, and surface tension of mixtures of military jet fuel JP-5 and biodiesels dataset. Data in Brief, 2022, 41, 107849.	0.5	3
67	Photolysis of dinitrobenzyl alcohols, dinitrobenzaldehydes, and nitrobenzoic acids in seawater, estuary water, and pure water. Marine Chemistry, 2012, 145-147, 29-36.	0.9	2
68	Predicting the Physical and Chemical Ignition Delays in a Military Diesel Engine Running n-Hexadecane Fuel. , 2013, , .		2
69	Partially Premixed Combustion Application for Diesel Power Improvement. Journal of Engineering for Gas Turbines and Power, 2018, 140, .	0.5	2
70	A Program-Level Assessment of Student Understanding of Bonding in the Chemistry Major. Journal of Chemical Education, 2021, 98, 3739-3748.	1.1	2
71	The Effects of Fuel Injection Pressure and Fuel Type on the Combustion Characteristics of a Diesel Engine. , 2014, , .		1
72	A Comparative Study of Alternative and Conventional Diesel Combustion Modes in a Single Cylinder Engine With a Single Injection Event. , 2016, , .		1

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73	Partially Premixed Combustion Application for Diesel Power Improvement. , 2017, , .		1
74	Diesel Engine Acoustic Emission Airflow Clogging Diagnostics With Machine Learning. Journal of Engineering for Gas Turbines and Power, 2019, 141, .	0.5	1
75	Determining the Thermal Properties of Military Jet Fuel JP-5 and Surrogate Mixtures Using Differential Scanning Calorimetry/Thermogravimetric Analysis and Differential Scanning Calorimetry Methods. Energy & Fuels, 2020, 34, 4046-4054.	2.5	1
76	Properties of Binary Mixtures of 2,2,4,6,6-Pentamethylheptane (iso-Dodecane) with iso-Butylbenzene, sec-Butylbenzene, tert-Butylbenzene, or 1,3-Diethylbenzene: Densities, Viscosities, Speeds of Sound, and Isentropic Bulk Moduli in the Temperature Range of 288.15â€“333.15 K, Surface Tensions at 295 K, and Flash Points at 0.1 MPa. Journal of Chemical & Engineering Data, 2020, 65, 4699-4711.	1.0	0