## Chien M Wai

## List of Publications by Year in descending order

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94433 98798 4,970 120 37 67 citations h-index g-index papers 125 125 125 4982 docs citations times ranked citing authors all docs

#	Article	IF	CITATIONS
1	Supercritical fluid extraction in herbal and natural product studies â€Â" a practical review. Talanta, 2001, 53, 771-782.	5.5	573
2	Synthesizing and Dispersing Silver Nanoparticles in a Water-in-Supercritical Carbon Dioxide Microemulsion. Journal of the American Chemical Society, 1999, 121, 2631-2632.	13.7	292
3	Supercritical fluid synthesis and characterization of catalytic metal nanoparticles on carbon nanotubes. Journal of Materials Chemistry, 2004, 14, 908.	6.7	246
4	Synthesis of Silver and Copper Nanoparticles in a Water-in-Supercritical-Carbon Dioxide Microemulsion. Chemistry of Materials, 2001, 13, 4130-4135.	6.7	241
5	Chemical Fluid Deposition of Pt-Based Bimetallic Nanoparticles on Multiwalled Carbon Nanotubes for Direct Methanol Fuel Cell Application. Energy & Samp; Fuels, 2007, 21, 2268-2271.	5.1	152
6	Decorating catalytic palladium nanoparticles on carbon nanotubes in supercritical carbon dioxide. Chemical Communications, 2003, , 642-643.	4.1	145
7	Relative Catalytic Activities of Carbon Nanotube-Supported Metallic Nanoparticles for Room-Temperature Hydrogenation of Benzene. Journal of Physical Chemistry C, 2009, 113, 1520-1525.	3.1	125
8	Extraction of Toxic Heavy Metals Using Supercritical Fluid Carbon Dioxide Containing Organophosphorus Reagents. Industrial & Engineering Chemistry Research, 1997, 36, 1819-1826.	3.7	108
9	The Uranium from Seawater Program at the Pacific Northwest National Laboratory: Overview of Marine Testing, Adsorbent Characterization, Adsorbent Durability, Adsorbent Toxicity, and Deployment Studies. Industrial & Engineering Chemistry Research, 2016, 55, 4264-4277.	3.7	107
10	One-pot synthesis of B-doped three-dimensional reduced graphene oxide via supercritical fluid for oxygen reduction reaction. Green Chemistry, 2015, 17, 3552-3560.	9.0	105
11	Origin of Iron Meteorite Groups IAB and IIICD. Zeitschrift Fur Naturforschung - Section A Journal of Physical Sciences, 1980, 35, 781-795.	1.5	98
12	Water-in-CO2 Microemulsions as Nanoreactors for Synthesizing CdS and ZnS Nanoparticles in Supercritical CO2. Nano Letters, 2002, 2, 721-724.	9.1	96
13	Reductive Dechlorination of Polychlorinated Biphenyls by Zerovalent Iron in Subcritical Water. Environmental Science & Technology, 1999, 33, 1307-1310.	10.0	91
14	Arsenic in Drinking Water—A Global Environmental Problem. Journal of Chemical Education, 2004, 81, 207.	2.3	81
15	Synthesizing silver halide nanoparticles in supercritical carbon dioxide utilizing a water-in-CO2 microemulsion. Chemical Communications, 2000, , 2353-2354.	4.1	80
16	Ultrasonic-assisted synthesis of Pd–Pt/carbon nanotubes nanocomposites for enhanced electro-oxidation of ethanol and methanol in alkaline medium. Ultrasonics Sonochemistry, 2016, 28, 192-198.	8.2	78
17	Carbonate–H <sub>2</sub> O <sub>2</sub> leaching for sequestering uranium from seawater. Dalton Transactions, 2014, 43, 10713-10718.	3.3	74
18	Nebular condensation of Ga, Ge and Sb and the chemical classification of iron meteorites. Nature, 1979, 282, 790-793.	27.8	70

#	Article	IF	CITATIONS
19	Extraction of Lanthanides from Aqueous Solution by Using Room-Temperature Ionic Liquid and Supercritical Carbon Dioxide in Conjunction. Chemistry - A European Journal, 2006, 12, 1760-1766.	3.3	70
20	Relative Resistance of Positional Isomers of Polychlorinated Biphenyls toward Reductive Dechlorination by Zerovalent Iron in Subcritical Water. Environmental Science & Enviro	10.0	66
21	Elution of Uranium and Transition Metals from Amidoxime-Based Polymer Adsorbents for Sequestering Uranium from Seawater. Industrial & Engineering Chemistry Research, 2016, 55, 4313-4320.	3.7	65
22	Sonochemical One-Pot Synthesis of Carbon Nanotube-Supported Rhodium Nanoparticles for Room-Temperature Hydrogenation of Arenes. Journal of Physical Chemistry C, 2009, 113, 19782-19788.	3.1	64
23	Ultrasonic-assisted synthesis of carbon nanotube supported bimetallic Pt–Ru nanoparticles for effective methanol oxidation. Journal of Materials Chemistry A, 2015, 3, 8459-8465.	10.3	63
24	Superheated water extraction, steam distillation and SFE of peppermint oil. Fresenius' Journal of Analytical Chemistry, 1999, 364, 650-653.	1.5	61
25	Facile sonochemical synthesis of carbon nanotube-supported bimetallic Pt–Rh nanoparticles for room temperature hydrogenation of arenes. New Journal of Chemistry, 2011, 35, 1649.	2.8	60
26	Extraction of Uranium from Aqueous Solutions by Using Ionic Liquid and Supercritical Carbon Dioxide in Conjunction. Chemistry - A European Journal, 2009, 15, 4458-4463.	3.3	59
27	Characterization of a Tri-n-butyl Phosphateâ^'Nitric Acid Complex:Â a CO2-Soluble Extractant for Dissolution of Uranium Dioxide. Industrial & Engineering Chemistry Research, 2003, 42, 5037-5041.	3.7	56
28	Fine-Tuning Size of Gold Nanoparticles by Cooling during Reverse Micelle Synthesis. Langmuir, 2007, 23, 10429-10432.	3.5	55
29	Ultrasound-Enhanced Dissolution of UO2in Supercritical CO2Containing a CO2-Philic Complexant of Tri-n-butylphosphate and Nitric Acid. Industrial & Engineering Chemistry Research, 2002, 41, 2282-2286.	3.7	53
30	Dissolution of Metal Species in Supercritical FluidsPrinciples and Applications. Industrial & Engineering Chemistry Research, 2000, 39, 4837-4841.	3.7	52
31	Recyclable and Ligandless Suzuki Coupling Catalyzed by Carbon Nanotubeâ€Supported Palladium Nanoparticles Synthesized in Supercritical Fluid. Synthetic Communications, 2006, 36, 3473-3478.	2.1	50
32	Newly Designed Graphene Cellular Monolith Functionalized with Hollow Pt-M (M = Ni, Co) Nanoparticles as the Electrocatalyst for Oxygen Reduction Reaction. ACS Applied Materials & Discrete Reduction Reaction. ACS Applied Materials & Discrete Reduction Reaction. ACS Applied Materials & Discrete Reduction Reaction.	8.0	46
33	High solubility of UO2(NO3)2·2TBP complex in supercritical CO2. Chemical Communications, 1998, , 373-374.	4.1	44
34	Complexation and Transport of Uranyl Nitrate in Supercritical Carbon Dioxide with Organophosphorus Reagents. Radiochimica Acta, 1996, 75, 179-184.	1.2	43
35	Supercritical Fluid Extraction of Toxic Heavy Metals and Uranium from Acidic Solutions with Sulfur-Containing Organophosphorus Reagents. Industrial & Engineering Chemistry Research, 2003, 42, 1400-1405.	3.7	42
36	Immersion Deposition of Metal Films on Silicon and Germanium Substrates in Supercritical Carbon Dioxide. Chemistry of Materials, 2003, 15, 83-91.	6.7	39

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37	Investigations into the Reusability of Amidoxime-Based Polymeric Adsorbents for Seawater Uranium Extraction. Industrial & Extraction.	3.7	38
38	Chemical Reactions in Supercritical Carbon Dioxide. Journal of Chemical Education, 1998, 75, 1641.	2.3	36
39	One-Step Synthesis of Size-Tunable Rhodium Nanoparticles on Carbon Nanotubes: A Study of Particle Size Effect on Hydrogenation of Xylene. Journal of Physical Chemistry C, 2010, 114, 11364-11369.	3.1	36
40	Pressurized water extraction (PWE) of terpene trilactones from Ginkgo biloba leaves. Green Chemistry, 2003, 5, 415.	9.0	33
41	Cu(ii) extraction by supercritical fluid carbon dioxide from a room temperature ionic liquid using fluorinated $\hat{l}^2$ -diketones. Green Chemistry, 2005, 7, 421.	9.0	33
42	Effect of Water on the Heck Reactions Catalyzed by Recyclable Palladium Chloride in Ionic Liquids Coupled with Supercritical CO2Extraction. Industrial & Engineering Chemistry Research, 2006, 45, 4433-4435.	3.7	33
43	Towards understanding KOH conditioning of amidoxime-based polymer adsorbents for sequestering uranium from seawater. RSC Advances, 2015, 5, 100715-100721.	3.6	32
44	Temperature Dependence of Uranium and Vanadium Adsorption on Amidoximeâ€Based Adsorbents in Natural Seawater. ChemistrySelect, 2018, 3, 843-848.	1.5	32
45	Supercritical fluid extraction of polycyclic aromatic hydrocarbons from white pine (Pinus strobus) needles and its implications. Journal of Environmental Monitoring, 2000, 2, 639-644.	2.1	31
46	Uranium dioxide in ionic liquid with a tri-n-butylphosphate–HNO3 complex—dissolution and coordination environment. Dalton Transactions, 2011, 40, 5039.	3.3	31
47	Nuclear Laundry Using Supercritical Fluid Solutions. Industrial & Engineering Chemistry Research, 2004, 43, 1580-1585.	3.7	30
48	Making ultrafine and highly-dispersive multimetallic nanoparticles in three-dimensional graphene with supercritical fluid as excellent electrocatalyst for oxygen reduction reaction. Journal of Materials Chemistry A, 2016, 4, 18628-18638.	10.3	29
49	A highly efficient uranium grabber derived from acrylic fiber for extracting uranium from seawater. Dalton Transactions, 2020, 49, 2803-2810.	3.3	29
50	Dissolution of Precious Metals in Supercritical Carbon Dioxide. Industrial & Engineering Chemistry Research, 2005, 44, 922-926.	3.7	28
51	Deposition of Ordered Arrays of Gold and Platinum Nanoparticles with an Adjustable Particle Size and Interparticle Spacing Using Supercritical CO <sub>2</sub> . Journal of Physical Chemistry C, 2008, 112, 2294-2297.	3.1	27
52	Bicarbonate Elution of Uranium from Amidoximeâ€Based Polymer Adsorbents for Sequestering Uranium from Seawater. ChemistrySelect, 2017, 2, 3769-3774.	1.5	27
53	Visualization of endogenous hydrogen sulfide in living cells based on Au nanorods@silica enhanced fluorescence. Analytica Chimica Acta, 2019, 1053, 81-88.	5.4	27
54	Voltammetric Measurement in Supercritical CO2Utilizing a Water-in-CO2Microemulsion. Analytical Chemistry, 2000, 72, 4738-4741.	6.5	26

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55	Determination of Solubilities of Uranium Complexes in Supercritical CO2by On-Line Laser-Induced Fluorescence. Analytical Chemistry, 2000, 72, 4015-4021.	6.5	25
56	Nanoparticle film deposition using a simple and fast centrifuge sedimentation method. Applied Nanoscience (Switzerland), 2015, 5, 457-468.	3.1	25
57	Supercritical fluid extraction and separation of uranium from other actinides. Journal of Hazardous Materials, 2014, 274, 360-366.	12.4	23
58	Optimization of supercritical fluid extraction for the separation of hyperforin and adhyperforin in St. John's wort (Hypericum perforatum L.). Green Chemistry, 2002, 4, 331-336.	9.0	22
59	Characterization of Uranyl(VI) Nitrate Complexes in a Room Temperature Ionic Liquid Using Attenuated Total Reflection-Fourier Transform Infrared Spectrometry. Inorganic Chemistry, 2010, 49, 8568-8572.	4.0	22
60	Depositing Ordered Arrays of Metal Sulfide Nanoparticles in Nanostructures Using Supercritical Fluid Carbon Dioxide. Langmuir, 2010, 26, 1117-1123.	3.5	22
61	Continuous Tuning of Silver Nanoparticle Size in a Water-in-Supercritical Carbon Dioxide Microemulsion. Small, 2006, 2, 1266-1269.	10.0	21
62	Continuous Tuning of Cadmium Sulfide and Zinc Sulfide Nanoparticle Size in a Water-in-Supercritical Carbon Dioxide Microemulsion. Chemistry - A European Journal, 2007, 13, 5838-5844.	3.3	21
63	A simple high pressure flow cell for on-line absorption, Raman, and time resolved laser induced fluorescence spectroscopy in supercritical fluids. Review of Scientific Instruments, 1998, 69, 3127-3131.	1.3	20
64	Supercritical Fluid Extraction of Toxic Heavy Metals from Solid and Aqueous Matrices. Separation Science and Technology, 2003, 38, 2279-2289.	2.5	20
65	New lariat ether carboxylic and hydroxamic acids: Synthesis and lanthanide ion complexation. Journal of Heterocyclic Chemistry, 1998, 35, 875-885.	2.6	19
66	Selective extraction of strontium with supercritical fluid carbon dioxide. Chemical Communications, 1999, , 2533-2534.	4.1	19
67	APPLICATION OF SUPERCRITICAL FLUIDS TO THE REACTIVE EXTRACTION AND ANALYSIS OF TOXIC HEAVY METALS FROM ENVIRONMENTAL MATRICES–SYSTEM OPTIMISATION. Separation Science and Technology, 2001, 36, 1197-1210.	2.5	19
68	On-Line Speciation of Uranyl Chelates in Supercritical CO2by Time-Resolved Laser-Induced Fluorescence Spectroscopy. Analytical Chemistry, 2001, 73, 1112-1119.	6.5	19
69	Pressurized water extraction of naphtodianthrones in St. John's wort (Hypericum perforatum L.). Green Chemistry, 2003, 5, 387.	9.0	17
70	Ultrasonic enhanced synthesis of multi-walled carbon nanotube supported Pt–Co bimetallic nanoparticles as catalysts for the oxygen reduction reaction. RSC Advances, 2015, 5, 32685-32689.	3.6	17
71	STUDIES ONIN-SITUCHELATION/SUPERCRITICAL FLUID EXTRACTION OF LANTHANIDES AND ACTINIDES USING A RADIOTRACER TECHNIQUE. Separation Science and Technology, 2001, 36, 1149-1162.	2.5	16
72	Selective dissolution and one step separation of terpene trilactones in ginkgo leaf extracts for GC-FID determination. Talanta, 2001, 54, 673-680.	5 <b>.</b> 5	15

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73	Extraction of Uranium and Lanthanides from Their Oxides with a High-Pressure Mixture of TBP-HNO <sub>3</sub> -H <sub>2</sub> O-CO <sub>2</sub> . ACS Symposium Series, 2003, , 10-22.	0.5	15
74	Sample Preparation and Determination of Ginkgo Terpene Trilactones in Selected Beverage, Snack, and Dietary Supplement Products by Liquid Chromatography with Evaporative Light-Scattering Detection. Journal of AOAC INTERNATIONAL, 2004, 87, 815-826.	1.5	15
75	Aromatic Electron Acceptors Change the Chirality Dependence of Single-Walled Carbon Nanotube Oxidation. Langmuir, 2009, 25, 10417-10421.	3.5	14
76	Two-Dimensional Nanoparticle Cluster Formation in Supercritical Fluid CO <sub>2</sub> . Langmuir, 2016, 32, 4635-4642.	3.5	14
77	Kinetic Study of Hydrodechlorination of Chlorobiphenyl with Polymer-Stabilized Palladium Nanoparticles in Supercritical Carbon Dioxide. Journal of Physical Chemistry A, 2009, 113, 9772-9778.	2.5	13
78	Ultrasound-assisted synthesis of PbS quantum dots stabilized by 1,2-benzenedimethanethiol and attachment to single-walled carbon nanotubes. Ultrasonics Sonochemistry, 2014, 21, 892-900.	8.2	13
79	On-Line Time-Resolved Laser-Induced Fluorescence of UO2(NO3)2·2TBP in Supercritical Fluid CO2. Analytical Chemistry, 2000, 72, 2109-2116.	6.5	12
80	Supercritical fluid immersion deposition: a new process for selective deposition of metal films on silicon substrates. Surface and Coatings Technology, 2005, 190, 25-31.	4.8	12
81	Remediation of a nonachloro biphenyl congener with zeroâ€valent iron in subcritical water. Journal of Environmental Monitoring, 2000, 2, 45-48.	2.1	11
82	Supercritical fluid extraction of mixed wastes. Green Chemistry, 2004, 6, 502.	9.0	11
83	Rapid and One-Step Synthesis of Single-Walled Carbon Nanotube-Supported Platinum (Pt/SWNT) Using As-Grown SWNTs through Reduction by Methanol. Energy & Energy & 2009, 23, 1662-1667.	5.1	10
84	Modelling of the Extraction of Uranium with Supercritical Carbon Dioxide. Journal of Nuclear Science and Technology, 2001, 38, 433-438.	1.3	9
85	Supercritical Fluid Deposition of Uniform PbS Nanoparticle Films for Energyâ€Transfer Studies. ChemPhysChem, 2012, 13, 2068-2073.	2.1	9
86	Noncovalent Attachment of PbS Quantum Dots to Single- and Multiwalled Carbon Nanotubes. Journal of Nanotechnology, 2014, 2014, 1-7.	3.4	9
87	Uranium Recovery from Seawater Using Amidoxime-Based Braided Polymers Synthesized from Acrylic Fibers. Industrial & Samp; Engineering Chemistry Research, 2020, 59, 13988-13996.	3.7	9
88	Modelling of the Extraction of Uranium with Supercritical Carbon Dioxide Journal of Nuclear Science and Technology, 2001, 38, 433-438.	1.3	9
89	Supercritical Fluid Extraction and High-Performance Liquid Chromatography-Diode Array-Electrochemical Detection of Signature Redox Compounds from Sand and Soil Samples. Analytical Biochemistry, 2002, 301, 225-234.	2.4	8
90	An Introduction to Separations and Processes Using Supercritical Carbon Dioxide. ACS Symposium Series, 2003, , 2-8.	0.5	8

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91	Partition Coefficients and Equilibrium Constants of Crown Ethers between Water and Organic Solvents Determined by Proton Nuclear Magnetic Resonance. Journal of Chemical & Engineering Data, 2004, 49, 594-598.	1.9	8
92	Assessment of Impacts of Dissolved Organic Matter and Dissolved Iron on the Performance of Amidoxime-Based Adsorbents for Seawater Uranium Extraction. Industrial & Engineering Chemistry Research, 2019, 58, 8536-8543.	3.7	8
93	Arsenic Contamination of Groundwater, Blackfoot Disease, and Other Related Health Problems. ACS Symposium Series, 2002, , 210-231.	0.5	6
94	Reprocessing Spent Nuclear Fuel with Supercritical Carbon Dioxide. ACS Symposium Series, 2006, , 57-67.	0.5	6
95	Insulating oxide film formation with acid catalyzed hydrolysis of alkoxide precursors in supercritical fluid carbon dioxide. RSC Advances, 2015, 5, 74753-74763.	3.6	6
96	Luminescence studies for energy transfer of lead sulfide QD films. RSC Advances, 2016, 6, 48651-48660.	3.6	6
97	Synthesis of new protonâ€ionizable and neutral macrocyclic, macrobicyclic and macrotricyclic crown compounds containing dibenzoâ€16â€crownâ€5 units. Journal of Heterocyclic Chemistry, 1998, 35, 1381-1387.	2.6	5
98	Extraction and Separation of Uranium and Lanthanides with Supercritical Fluids. ACS Symposium Series, 1999, , 390-400.	0.5	5
99	Supercritical Fluid Extraction of Radionuclides: A Green Technology for Nuclear Waste Management. ACS Symposium Series, 2006, , 161-170.	0.5	5
100	Interaction of Aromatic Derivatives with Singleâ€Walled Carbon Nanotubes. ChemPhysChem, 2010, 11, 3439-3446.	2.1	5
101	Stereoselective Hydrogenation of Dibenzo-18-crown-6 Catalyzed by Carbon Nanotube–Supported Rhodium Nanoparticles. Synthetic Communications, 2011, 41, 2624-2630.	2.1	5
102	Energy transfer between lead sulfide quantum dots in the liquid phase. Materials Chemistry and Physics, 2014, 147, 514-520.	4.0	5
103	Selective Extraction and Separation of Actinides with Ionizable Crown Ethers. Analytical Sciences, 1991, 7, 41-44.	1.6	4
104	Green Separation Techniques for Nuclear Waste Management. ACS Symposium Series, 2010, , 53-63.	0.5	4
105	Group Contribution Method for Estimating the Solubility of Selected Hydrocarbon Solutes in Supercritical Carbon Dioxide. ACS Symposium Series, 1992, , 66-73.	0.5	3
106	Synthesis of macrocyclic polyethers with partially fluorinated side arms. Journal of Heterocyclic Chemistry, 2003, 40, 451-458.	2.6	3
107	Supercritical Fluid Extraction of Bioactive Components from St. John's Wort (Hypericum perforatum) Tj ETQq $1\ 1\ C$	).784314 i 0.5	rgBT  Overlo
108	Reduction of Selected Metal Oxides in a Thermal Plasma Produced by a Nontransferred ARC Torch. Materials Research Society Symposia Proceedings, 1987, 98, 359.	0.1	2

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109	Hydrogenation Reactions in Supercritical CO2 Catalyzed by Metal Nanoparticles in a Water-in-Carbon Dioxide Microemulsion. ACS Symposium Series, 2003, , 419-429.	0.5	2
110	Synthesis of proton-ionizable acyclic, macrocyclic and macrobicyclic compounds containing one or two triazole groups. Journal of Heterocyclic Chemistry, 2005, 42, 621-629.	2.6	2
111	Fluorescence of Nafion Dispersed Single-Walled Carbon Nanotubes in Water and in Silica Composite. Journal of Physical Chemistry C, 2011, 115, 10561-10568.	3.1	2
112	Characteristics of an oxa-diamide–HNO3 extractant in the supercritical fluid extraction of uranium. Journal of Radioanalytical and Nuclear Chemistry, 2014, 299, 1693-1700.	1.5	2
113	Correction to Chemical Reactions in Supercritical Carbon Dioxide. Journal of Chemical Education, 1999, 76, 166.	2.3	1
114	Influence of the characteristics of a water-in-CO <sub>2</sub> microemulsion on the separation of metal species. Separation Science and Technology, 2016, 51, 1940-1946.	2.5	1
115	Supercritical Fluid Extraction of Metal Ions. Journal of Chemical Technology and Biotechnology, 1996, 65, 295-295.	3.2	0
116	Time-Resolved Laser-Induced Fluorescence Characterization of Uranium Complexes and Processes in ScF CO2. ACS Symposium Series, 2003, , 188-206.	0.5	0
117	Challenges in Assessing Bioactive Botanical Ingredients in Functional Beverages. ACS Symposium Series, 2006, , 55-72.	0.5	0
118	Deposition of Ordered Arrays of Metal Sulfide Nanoparticles in Nanostructures Using Supercritical Carbon Dioxide. Materials Research Society Symposia Proceedings, 2009, 1196, 71.	0.1	0
119	Formation of Insulating Oxide Films with Hydrolysis Reactions of Alkoxide Precursors in Supercritical Fluid CO2: Chemistry, Morphology, Characterization and Film Thickness. MRS Advances, 2016, 1, 2591-2596.	0.9	0
120	Sequestering Rare Earth Elements and Precious Metals from Seawater Using a Highly Efficient Polymer Adsorbent Derived from Acrylic Fiber. Metals, 2022, 12, 849.	2.3	0