

# Tanapon Phenrat

## List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/8224264/publications.pdf>

Version: 2024-02-01

71  
papers

6,682  
citations

172207

29  
h-index

138251

58  
g-index

72  
all docs

72  
docs citations

72  
times ranked

5747  
citing authors

| #  | ARTICLE   | IF  | CITATIONS |
|----|---|-----|-----------|
| 1  | Constructed sediment microbial fuel cell for treatment of fat, oil, grease (FOG) trap effluent: Role of anode and cathode chamber amendment, electrode selection, and scalability. <i>Chemosphere</i> , 2022, 286, 131619.  | 4.2 | 17        |
| 2  | Assessing Potential Health Impacts of Cyanide-Contaminated Seepage in Paddy Field Near a Gold Mine in Thailand: Cyanide Speciation and Vapor Intrusion Modeling. <i>Exposure and Health</i> , 2022, 14, 459-473.  | 2.8 | 3         |
| 3  | Technological and policy innovations toward cleaner development. <i>Clean Technologies and Environmental Policy</i> , 2022, 24, 1009-1011.  | 2.1 | 3         |
| 4  | Using sequential H <sub>2</sub> O <sub>2</sub> addition to sustain 1,2-dichloroethane detoxification by a nanoscale zerovalent iron-induced Fenton's system at a natural pH. <i>Chemosphere</i> , 2022, 305, 135376.  | 4.2 | 4         |
| 5  | Assessment of Lead (Pb) Leakage From Abandoned Mine Tailing Ponds to Klity Creek, Kanchanaburi Province, Thailand. <i>GeoHealth</i> , 2021, 5, e2020GH000252.   | 1.9 | 5         |
| 6  | An examination of natural rubber modified asphalt: Effects of rubber latex contents based on macro- and micro-observation analyses. <i>Construction and Building Materials</i> , 2021, 289, 123158.   | 3.2 | 24        |
| 7  | Legal obstacles for the circular economy in Thailand: Illegal dumping of recyclable hazardous industrial waste. <i>Journal of Cleaner Production</i> , 2021, 302, 126969.   | 4.6 | 17        |
| 8  | Electrical resistivity tomography as a tool for community citizen science: A case study of community-driven investigation outside of the fence line. , 2021, , .  |     | 0         |
| 9  | Three lines of evidence: Using geophysical approaches, geochemical approaches, and visual observation to assess potential leakage of mine water from tailing storage facility of a gold mine in Thailand. , 2021, , .   |     | 0         |
| 10 | Physiologically based pharmacokinetic modeling of hydrogen cyanide in humans following the oral administration of potassium cyanide and cyanogenic glycosides from food. <i>Human and Ecological Risk Assessment (HERA)</i> , 2020, 26, 1496-1511.  | 1.7 | 8         |
| 11 | Human continuous hydrogen cyanide inhalation predictor with a physiologically based pharmacokinetic (PBPK) model. <i>Environmental Science and Pollution Research</i> , 2020, 27, 24650-24658.  | 2.7 | 4         |
| 12 | Combining biochar and zerovalent iron (BZVI) as a paddy field soil amendment for heavy cadmium (Cd) contamination decreases Cd but increases zinc and iron concentrations in rice grains: a field-scale evaluation. <i>Chemical Engineering Research and Design</i> , 2020, 141, 222-233. | 2.7 | 28        |
| 13 | Community Citizen Science for Risk Management of a Spontaneously Combusting Coal Mine Waste Heap in Ban Chaung, Dawei District, Myanmar. <i>GeoHealth</i> , 2020, 4, e2020GH000249.   | 1.9 | 12        |
| 14 | Nanoscale Zero-Valent Iron Particles for Water Treatment: From Basic Principles to Field-Scale Applications. <i>Applied Environmental Science and Engineering for A Sustainable Future</i> , 2020, , 19-52.   | 0.2 | 4         |
| 15 | Assessing potential hydrogen cyanide exposure from cyanide-contaminated mine tailing management practices in Thailand's gold mining. <i>Journal of Environmental Management</i> , 2019, 249, 109357.  | 3.8 | 23        |
| 16 | Comparison of a new mass-concentration, chain-reaction model with the population-balance model for early- and late-stage aggregation of shattered graphene oxide nanoparticles. <i>Colloids and Surfaces A: Physicochemical and Engineering Aspects</i> , 2019, 582, 123862.              | 2.3 | 8         |
| 17 | Nanoscale Zerovalent Iron (NZVI) for Environmental Decontamination: A Brief History of 20 Years of Research and Field-Scale Application. , 2019, , 1-43.  |     | 6         |
| 18 | Enhanced degradation of methylene blue by a solution plasma process catalyzed by incidentally co-generated copper nanoparticles. <i>Water Science and Technology</i> , 2019, 79, 967-974.   | 1.2 | 6         |

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|----|--|-----|-----------|
| 19 | Vadose Zone Remediation of Dense Nonaqueous Phase Liquid Residuals Using Foam-Based Nanoscale Zerovalent Iron Particles with Low-Frequency Electromagnetic Field. , 2019, , 471-494.   |     | 0         |
| 20 | State of Knowledge and Future Needs for NZVI Applications in Subsurface Remediation. , 2019, , 563-579.  |     | 1         |
| 21 | Chemical Reduction and Oxidation of Organic Contaminants by Nanoscale Zerovalent Iron. , 2019, , 97-155.   |     | 4         |
| 22 | Colloidal and Surface Science and Engineering for Bare and Polymer-Modified NZVI Applications: Dispersion Stability, Mobility in Porous Media, and Contaminant Specificity. , 2019, , 201-233.   |     | 1         |
| 23 | Mechanistic, Mechanistic-Based Empirical, and Continuum-Based Concepts and Models for the Transport of Polyelectrolyte-Modified Nanoscale Zerovalent Iron (NZVI) in Saturated Porous Media. , 2019, , 235-291.                         |     | 1         |
| 24 | Acid-Assisted Recycling of Iron Hydroxide Sludge as a Coagulant for Metalworking Fluid Wastewater Treatment. Waste and Biomass Valorization, 2019, 10, 3635-3645.  | 1.8 | 4         |
| 25 | Editorial: frontier technology for water treatment and pollutant removal is key for securing the present, correcting the past, and sustaining the future. Water Science and Technology, 2019, 79, iii-v.                               | 1.2 | 1         |
| 26 | <i>In situ</i> remediation of subsurface contamination: opportunities and challenges for nanotechnology and advanced materials. Environmental Science: Nano, 2019, 6, 1283-1302.   | 2.2 | 65        |
| 27 | Electromagnetic Induction of Nanoscale Zerovalent Iron for Enhanced Thermal Dissolution/Desorption and Dechlorination of Chlorinated Volatile Organic Compounds. , 2019, , 415-434.  |     | 1         |
| 28 | Nanoscale zerovalent iron particles for magnet-assisted soil washing of cadmium-contaminated paddy soil: proof of concept. Environmental Chemistry, 2019, 16, 446.   | 0.7 | 14        |
| 29 | Investigation of magnetic silica with thermoresponsive chitosan coating for drug controlled release and magnetic hyperthermia application. Materials Science and Engineering C, 2019, 97, 23-30.                                       | 3.8 | 39        |
| 30 | USING ELECTRICAL RESISTIVITY IMAGING TO ASSESS SOIL AND GROUNDWATER CONTAMINATION FROM ACCIDENTAL SPILL OF CHROME PROCESS WATER THROUGH REINFORCED CONCRETE FLOOR. , 2019, ,   |     | 0         |
| 31 | Adsorbed poly(aspartate) coating limits the adverse effects of dissolved groundwater solutes on Fe <sub>0</sub> nanoparticle reactivity with trichloroethylene. Environmental Science and Pollution Research, 2018, 25, 7157-7169.     | 2.7 | 28        |
| 32 | Modified MODFLOW-based model for simulating the agglomeration and transport of polymer-modified Fe <sub>0</sub> nanoparticles in saturated porous media. Environmental Science and Pollution Research, 2018, 25, 7180-7199.            | 2.7 | 29        |
| 33 | Arsenic residue in residential area after cleanup of pesticide illegal dumping sources in Thanh Hoa province, Central Vietnam. Environmental Forensics, 2018, 19, 66-78.   | 1.3 | 6         |
| 34 | Aggregation and sedimentation of shattered graphene oxide nanoparticles in dynamic environments: a solid-body rotational approach. Environmental Science: Nano, 2018, 5, 1859-1872.  | 2.2 | 7         |
| 35 | Parameterization and prediction of nanoparticle transport in porous media: A reanalysis using artificial neural network. Water Resources Research, 2017, 53, 4564-4585.  | 1.7 | 34        |
| 36 | Electromagnetic induction of foam-based nanoscale zerovalent iron (NZVI) particles to thermally enhance non-aqueous phase liquid (NAPL) volatilization in unsaturated porous media: Proof of concept. Chemosphere, 2017, 183, 323-331. | 4.2 | 31        |

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|----|--|-----|-----------|
| 37 | Continuum-based models and concepts for the transport of nanoparticles in saturated porous media: A state-of-the-science review. <i>Advances in Colloid and Interface Science</i> , 2017, 246, 75-104.   | 7.0 | 119       |
| 38 | Comparative analysis of public participation in the EIA process for Thai overseas investment projects: Krabi coal terminal, Hongsa coal power plant, and Dawei special economic zone. <i>Impact Assessment and Project Appraisal</i> , 2017, 35, 325-339.                        | 1.0 | 8         |
| 39 | Vetiver plantlets in aerated system degrade phenol in illegally dumped industrial wastewater by phytochemical and rhizomicrobial degradation. <i>Environmental Science and Pollution Research</i> , 2017, 24, 13235-13246.   | 2.7 | 25        |
| 40 | Ten-Year Monitored Natural Recovery of Lead-Contaminated Mine Tailing in Klity Creek, Kanchanaburi Province, Thailand. <i>Environmental Health Perspectives</i> , 2016, 124, 1511-1520.  | 2.8 | 13        |
| 41 | Electromagnetic induction of nanoscale zerovalent iron particles accelerates the degradation of chlorinated dense non-aqueous phase liquid: Proof of concept. <i>Water Research</i> , 2016, 107, 19-28.  | 5.3 | 36        |
| 42 | Electromagnetic Induction of Zerovalent Iron (ZVI) Powder and Nanoscale Zerovalent Iron (NZVI) Particles Enhances Dechlorination of Trichloroethylene in Contaminated Groundwater and Soil: Proof of Concept. <i>Environmental Science &amp; Technology</i> , 2016, 50, 872-880. | 4.6 | 80        |
| 43 | Recycled Concrete Aggregates in Roadways: Laboratory Examination of Self-Cementing Characteristics. <i>Journal of Materials in Civil Engineering</i> , 2015, 27, .   | 1.3 | 38        |
| 44 | Physicochemistry of Polyelectrolyte Coatings that Increase Stability, Mobility, and Contaminant Specificity of Reactive Nanoparticles Used for Groundwater Remediation. , 2014, , 473-490.   |     | 1         |
| 45 | Characteristics and Performance of Cement Modified Base Course Material in Western Australia. <i>Journal of Materials in Civil Engineering</i> , 2014, 26, 04014056.   | 1.3 | 4         |
| 46 | Parameter Identifiability in Application of Soft Particle Electrokinetic Theory To Determine Polymer and Polyelectrolyte Coating Thicknesses on Colloids. <i>Langmuir</i> , 2012, 28, 10334-10347.   | 1.6 | 45        |
| 47 | Effect of kaolinite, silica fines and pH on transport of polymer-modified zero valent iron nano-particles in heterogeneous porous media. <i>Journal of Colloid and Interface Science</i> , 2012, 370, 1-10.  | 5.0 | 181       |
| 48 | PCE dissolution and simultaneous dechlorination by nanoscale zero-valent iron particles in a DNAPL source zone. <i>Journal of Contaminant Hydrology</i> , 2012, 131, 9-28.   | 1.6 | 42        |
| 49 | Polymer-Modified Fe <sup>0</sup> Nanoparticles Target Entrapped NAPL in Two Dimensional Porous Media: Effect of Particle Concentration, NAPL Saturation, and Injection Strategy. <i>Environmental Science &amp; Technology</i> , 2011, 45, 6102-6109.                            | 4.6 | 86        |
| 50 | Hydrophobic Interactions Increase Attachment of Gum Arabic- and PVP-Coated Ag Nanoparticles to Hydrophobic Surfaces. <i>Environmental Science &amp; Technology</i> , 2011, 45, 5988-5995.  | 4.6 | 134       |
| 51 | Nanoparticle Aggregation: Challenges to Understanding Transport and Reactivity in the Environment. <i>Journal of Environmental Quality</i> , 2010, 39, 1909-1924.  | 1.0 | 983       |
| 52 | Treatability Study for a TCE Contaminated Area using Nanoscale- and Microscale-Zerovalent Iron Particles: Reactivity and Reactive Life Time. <i>ACS Symposium Series</i> , 2010, , 183-202.  | 0.5 | 6         |
| 53 | Empirical correlations to estimate agglomerate size and deposition during injection of a polyelectrolyte-modified FeO nanoparticle at high particle concentration in saturated sand. <i>Journal of Contaminant Hydrology</i> , 2010, 118, 152-164.                               | 1.6 | 98        |
| 54 | Transport and Deposition of Polymer-Modified Fe <sup>0</sup> Nanoparticles in 2-D Heterogeneous Porous Media: Effects of Particle Concentration, Fe <sup>0</sup> Content, and Coatings. <i>Environmental Science &amp; Technology</i> , 2010, 44, 9086-9093.                     | 4.6 | 142       |

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|----|--|-----|-----------|
| 55 | Estimating Attachment of Nano- and Submicrometer-particles Coated with Organic Macromolecules in Porous Media: Development of an Empirical Model. <i>Environmental Science &amp; Technology</i> , 2010, 44, 4531-4538.   | 4.6 | 146       |
| 56 | Physicochemistry of Polyelectrolyte Coatings that Increase Stability, Mobility, and Contaminant Specificity of Reactive Nanoparticles Used for Groundwater Remediation. , 2009, , 249-267.   |     | 11        |
| 57 | Adsorbed Polyelectrolyte Coatings Decrease Fe <sup>0</sup> Nanoparticle Reactivity with TCE in Water: Conceptual Model and Mechanisms. <i>Environmental Science &amp; Technology</i> , 2009, 43, 1507-1514.  | 4.6 | 211       |
| 58 | Fe <sup>0</sup> Nanoparticles Remain Mobile in Porous Media after Aging Due to Slow Desorption of Polymeric Surface Modifiers. <i>Environmental Science &amp; Technology</i> , 2009, 43, 3824-3830.  | 4.6 | 148       |
| 59 | Partial Oxidation (â€œAgingâ€) and Surface Modification Decrease the Toxicity of Nanosized Zerovalent Iron. <i>Environmental Science &amp; Technology</i> , 2009, 43, 195-200.   | 4.6 | 270       |
| 60 | Effect of Adsorbed Polyelectrolytes on Nanoscale Zero Valent Iron Particle Attachment to Soil Surface Models. <i>Environmental Science &amp; Technology</i> , 2009, 43, 3803-3808.   | 4.6 | 123       |
| 61 | Particle Size Distribution, Concentration, and Magnetic Attraction Affect Transport of Polymer-Modified Fe <sup>0</sup> Nanoparticles in Sand Columns. <i>Environmental Science &amp; Technology</i> , 2009, 43, 5079-5085.  | 4.6 | 292       |
| 62 | Stabilization of aqueous nanoscale zerovalent iron dispersions by anionic polyelectrolytes: adsorbed anionic polyelectrolyte layer properties and their effect on aggregation and sedimentation. <i>Journal of Nanoparticle Research</i> , 2008, 10, 795-814.                | 0.8 | 467       |
| 63 | Ionic Strength and Composition Affect the Mobility of Surface-Modified Fe <sup>0</sup> Nanoparticles in Water-Saturated Sand Columns. <i>Environmental Science &amp; Technology</i> , 2008, 42, 3349-3355.   | 4.6 | 478       |
| 64 | Leaching Behaviors of Arsenic from Arsenic-Iron Hydroxide Sludge during TCLP. <i>Journal of Environmental Engineering, ASCE</i> , 2008, 134, 671-682.  | 0.7 | 25        |
| 65 | XRD and Unconfined Compressive Strength Study for a Qualitative Examination of Calciumâ€“Arsenic Compounds Retardation of Cement Hydration in Solidified/Stabilized Arsenicâ€“Iron Hydroxide Sludge. <i>Journal of Environmental Engineering, ASCE</i> , 2007, 133, 595-607. | 0.7 | 17        |
| 66 | Aggregation and Sedimentation of Aqueous Nanoscale Zerovalent Iron Dispersions. <i>Environmental Science &amp; Technology</i> , 2007, 41, 284-290.   | 4.6 | 917       |
| 67 | Surface Modifications Enhance Nanoiron Transport and NAPL Targeting in Saturated Porous Media. <i>Environmental Engineering Science</i> , 2007, 24, 45-57.   | 0.8 | 403       |
| 68 | Effect of TCE Concentration and Dissolved Groundwater Solutes on NZVI-Promoted TCE Dechlorination and H <sub>2</sub> Evolution. <i>Environmental Science &amp; Technology</i> , 2007, 41, 7881-7887.   | 4.6 | 317       |
| 69 | A SEM and X-ray study for investigation of solidified/stabilized arsenicâ€“iron hydroxide sludge. <i>Journal of Hazardous Materials</i> , 2005, 118, 185-195.  | 6.5 | 71        |
| 70 | Adsorbed Triblock Copolymers Deliver Reactive Iron Nanoparticles to the Oil/Water Interface. <i>Nano Letters</i> , 2005, 5, 2489-2494.   | 4.5 | 302       |
| 71 | Rhizomicrobial-augmented mature vetiver root system rapidly degrades phenol in illegally dumped industrial wastewater. , 0, 159, 40-52.  |     | 3         |