

# Cheng Heng Pang

## List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/7954996/publications.pdf>

Version: 2024-02-01

59  
papers

2,036  
citations

236833

25  
h-index

254106

43  
g-index

60  
all docs

60  
docs citations

60  
times ranked

2343  
citing authors

| #  | ARTICLE  | IF   | CITATIONS |
|----|--|------|-----------|
| 1  | Co-regulation of dispersion, exposure and defect sites on CeO <sub>2</sub> (111) surface for catalytic oxidation of Hg <sup>0</sup> . <i>Journal of Hazardous Materials</i> , 2022, 424, 126566.   | 6.5  | 15        |
| 2  | Mn doped CeO <sub>2</sub> -MoO <sub>3</sub> /β-Al <sub>2</sub> O <sub>3</sub> catalysts for the enhanced adsorption and catalytic oxidation of Hg <sup>0</sup> in oxygen atmosphere. <i>Applied Surface Science</i> , 2022, 581, 152327. | 3.1  | 5         |
| 3  | Biomass to nanoparticles: Recent advances in the process and processing towards sustainability. <i>Chemical Engineering and Processing: Process Intensification</i> , 2022, 175, 108908.   | 1.8  | 4         |
| 4  | Data-Driven Materials Innovation and Applications. <i>Advanced Materials</i> , 2022, 34, e2104113.   | 11.1 | 51        |
| 5  | The synthesis of carbon-based quantum dots: A supercritical fluid approach and perspective. <i>Materials Today Physics</i> , 2022, 27, 100752.   | 2.9  | 4         |
| 6  | A recent trend: application of graphene in catalysis. <i>Carbon Letters</i> , 2021, 31, 177-199.   | 3.3  | 56        |
| 7  | The influence of lignocellulose on biomass pyrolysis product distribution and economics via steady state process simulation. <i>Journal of Analytical and Applied Pyrolysis</i> , 2021, 158, 104968.                                     | 2.6  | 20        |
| 8  | Influence of co-processing of coal and oil shale on combustion characteristics, kinetics and ash fusion behaviour. <i>Energy</i> , 2021, 216, 119229.  | 4.5  | 16        |
| 9  | A Note for the Extended P-Graph Model for the Synthesis of Batch Water Network. <i>Process Integration and Optimization for Sustainability</i> , 2021, 5, 675-686.   | 1.4  | 5         |
| 10 | Sustainability and life cycle cost analysis of biomass pyrolysis. <i>IOP Conference Series: Materials Science and Engineering</i> , 2021, 1117, 012016.  | 0.3  | 0         |
| 11 | Analysis of environmental impacts and energy derivation potential of biomass pyrolysis via Piper diagram. <i>Journal of Analytical and Applied Pyrolysis</i> , 2021, 154, 104995.  | 2.6  | 8         |
| 12 | The COVID-19 Vaccines: Recent Development, Challenges and Prospects. <i>Vaccines</i> , 2021, 9, 349.   | 2.1  | 60        |
| 13 | An advanced ash fusion study on the melting behaviour of coal, oil shale and blends under gasification conditions using picture analysis and graphing method. <i>Chinese Journal of Chemical Engineering</i> , 2021, 32, 393-407.        | 1.7  | 6         |
| 14 | Recent Advances in Transition Metal Nitride-Based Materials for Photocatalytic Applications. <i>Advanced Functional Materials</i> , 2021, 31, 2100553.   | 7.8  | 80        |
| 15 | Synthesis of graphene oxide and graphene quantum dots from miscanthus via ultrasound-assisted mechano-chemical cracking method. <i>Ultrasonics Sonochemistry</i> , 2021, 73, 105519.   | 3.8  | 55        |
| 16 | Polygenic Scores and Parental Predictors: An Adult Height Study Based on the United Kingdom Biobank and the Framingham Heart Study. <i>Frontiers in Genetics</i> , 2021, 12, 669441.   | 1.1  | 8         |
| 17 | Miscanthus as a carbon precursor for graphene oxide: A possibility influenced by pyrolysis temperature. <i>Bioresource Technology</i> , 2021, 331, 124934.   | 4.8  | 14        |
| 18 | Fish pond water treatment using ultrasonic cavitation and advanced oxidation processes. <i>Chemosphere</i> , 2021, 274, 129702.  | 4.2  | 15        |

| #  | ARTICLE  | IF   | CITATIONS |
|----|--|------|-----------|
| 19 | The integration of hydrogenation and carbon capture utilisation and storage technology: A potential low-carbon approach to chemical synthesis in China. <i>International Journal of Energy Research</i> , 2021, 45, 19789-19818.               | 2.2  | 14        |
| 20 | The data-intensive scientific revolution occurring where two-dimensional materials meet machine learning. <i>Cell Reports Physical Science</i> , 2021, 2, 100482.  | 2.8  | 26        |
| 21 | Application of Machine Learning in Industrial Boilers: Fault Detection, Diagnosis, and Prognosis. <i>ChemBioEng Reviews</i> , 2021, 8, 535-544.  | 2.6  | 7         |
| 22 | Application of supercritical fluid in the synthesis of graphene materials: a review. <i>Journal of Nanoparticle Research</i> , 2021, 23, 1.  | 0.8  | 5         |
| 23 | Catalytic pyrolysis of linear low-density polyethylene using recycled coal ash: Kinetic study and environmental evaluation. <i>Korean Journal of Chemical Engineering</i> , 2021, 38, 2235-2246.   | 1.2  | 22        |
| 24 | Synthesis of Sodium Alginate-Silver Nanocomposites Using Plasma Activated Water and Cold Atmospheric Plasma Treatment. <i>Nanomaterials</i> , 2021, 11, 2306.  | 1.9  | 12        |
| 25 | DFT simulation-based screening of single transition metals supported on g-C <sub>3</sub> N <sub>4</sub> for the catalytic oxidation of Hg <sup>0</sup> . <i>Fuel</i> , 2021, 305, 121456.  | 3.4  | 8         |
| 26 | Theoretical insights of catalytic oxidation of Hg <sup>0</sup> on g-C <sub>3</sub> N <sub>4</sub> -supported Fe/Co/Ni-based bi-metallic catalysts using O <sub>2</sub> in coal-fired flue gas as the oxidant. <i>Fuel</i> , 2021, 306, 121593. | 3.4  | 13        |
| 27 | Physical stability and rheological behavior of Pickering emulsions stabilized by protein-polysaccharide hybrid nanoconjugates. <i>Nanotechnology Reviews</i> , 2021, 10, 1293-1305.  | 2.6  | 15        |
| 28 | In vitro Digestion and Swelling Kinetics of Thymoquinone-Loaded Pickering Emulsions Incorporated in Alginate-Chitosan Hydrogel Beads. <i>Frontiers in Nutrition</i> , 2021, 8, 752207.   | 1.6  | 9         |
| 29 | Insights into the Role of Graphene/Graphene-hybrid Nanocomposites in Antiviral Therapy. <i>ChemBioEng Reviews</i> , 2021, 8, 549.  | 2.6  | 1         |
| 30 | MoO <sub>3</sub> -adjusted $\gamma$ -MnO <sub>2</sub> nanosheet for catalytic oxidation of Hg <sup>0</sup> to Hg <sup>2+</sup> . <i>Applied Catalysis B: Environmental</i> , 2020, 263, 117829.  | 10.8 | 59        |
| 31 | Investigations on the generation of oil-in-water (O/W) nanoemulsions through the combination of ultrasound and microchannel. <i>Ultrasonics Sonochemistry</i> , 2020, 69, 105258.  | 3.8  | 35        |
| 32 | Estimation of the time-varying reproduction number of COVID-19 outbreak in China. <i>International Journal of Hygiene and Environmental Health</i> , 2020, 228, 113555.  | 2.1  | 201       |
| 33 | Synthesis and functionalization of cauliflower-like mesoporous siliceous foam materials from oil shale waste for post-combustion carbon capture. <i>Journal of CO<sub>2</sub> Utilization</i> , 2020, 40, 101199.                              | 3.3  | 6         |
| 34 | Physico-chemical, thermal, and mechanical properties of PLA/nHA nanocomposites: Effect of glass fiber reinforcement. <i>Journal of Applied Polymer Science</i> , 2020, 137, 49286.   | 1.3  | 10        |
| 35 | In-situ monitoring of the transformation of ash upon heating and the prediction of ash fusion behaviour of coal/biomass blends. <i>Energy</i> , 2020, 199, 117330.   | 4.5  | 40        |
| 36 | The First 75 Days of Novel Coronavirus (SARS-CoV-2) Outbreak: Recent Advances, Prevention, and Treatment. <i>International Journal of Environmental Research and Public Health</i> , 2020, 17, 2323.   | 1.2  | 178       |

| #  | ARTICLE   | IF   | CITATIONS |
|----|---|------|-----------|
| 37 | Synthesis of graphene: Potential carbon precursors and approaches. <i>Nanotechnology Reviews</i> , 2020, 9, 1284-1314.  | 2.6  | 72        |
| 38 | Investigation on Co <sup>2+</sup> -Modified Ni <sub>x</sub> Mg <sub>y</sub> O Solid Solutions for Hydrogen Production from Steam Reforming of Acetic Acid and a Model Blend. <i>ChemistrySelect</i> , 2019, 4, 9829-9835.   | 0.7  | 4         |
| 39 | The Kinetics Studies and Thermal Characterisation of Biomass. <i>Energy Procedia</i> , 2019, 158, 357-363.  | 1.8  | 3         |
| 40 | CO <sub>2</sub> gasification and pyrolysis reactivity evaluation of oil shale. <i>Energy Procedia</i> , 2019, 158, 1694-1699.   | 1.8  | 14        |
| 41 | Effects of Microwave-enhanced Pretreatment on Oil Shale Milling Performance. <i>Energy Procedia</i> , 2019, 158, 1712-1717.   | 1.8  | 9         |
| 42 | Integration of machine learning approaches for accelerated discovery of transition-metal dichalcogenides as Hg <sub>0</sub> sensing materials. <i>Applied Energy</i> , 2019, 254, 113651.                                   | 5.1  | 21        |
| 43 | Ignition and Kinetic Studies: The Influence of Lignin on Biomass Combustion. <i>Energy &amp; Fuels</i> , 2019, 33, 6463-6472.   | 2.5  | 34        |
| 44 | The impact of ash pellet characteristics and pellet processing parameters on ash fusion behaviour. <i>Fuel</i> , 2019, 251, 779-788.  | 3.4  | 30        |
| 45 | Effect of dissolution rate and subsequent ion release on cytocompatibility properties of borophosphate glasses. <i>Biomedical Glasses</i> , 2019, 5, 85-97.   | 2.4  | 7         |
| 46 | Influence of lignocellulose and plant cell walls on biomass char morphology and combustion reactivity. <i>Biomass and Bioenergy</i> , 2018, 119, 480-491.   | 2.9  | 30        |
| 47 | A proposed biomass char classification system. <i>Fuel</i> , 2018, 232, 845-854.  | 3.4  | 31        |
| 48 | Microwave-enhanced pyrolysis of macroalgae and microalgae for syngas production. <i>Bioresource Technology</i> , 2017, 237, 47-56.  | 4.8  | 129       |
| 49 | A novel index for the study of synergistic effects during the co-processing of coal and biomass. <i>Applied Energy</i> , 2017, 188, 215-225.  | 5.1  | 80        |
| 50 | Hg <sub>0</sub> -temperature-programmed surface reaction and its application on the investigation of metal oxides for Hg <sub>0</sub> capture. <i>Fuel</i> , 2016, 181, 1089-1094.  | 3.4  | 30        |
| 51 | Effect of the addition of different waste carbonaceous materials on coal gasification in CO <sub>2</sub> atmosphere. <i>Fuel Processing Technology</i> , 2016, 149, 231-238.  | 3.7  | 26        |
| 52 | Influence of minerals on the thermal processing of bamboo with a suite of carbonaceous materials. <i>Fuel</i> , 2016, 180, 256-262.   | 3.4  | 25        |
| 53 | Development of nano Ni <sub>x</sub> Mg <sub>y</sub> O solid solutions with outstanding anti-carbon deposition capability for the steam reforming of methanol. <i>Applied Catalysis B: Environmental</i> , 2016, 194, 84-97. | 10.8 | 59        |
| 54 | Hg <sup>0</sup> Capture over CoMoS <sub>2</sub> -Al <sub>2</sub> O <sub>3</sub> with MoS <sub>2</sub> Nanosheets at Low Temperatures. <i>Environmental Science &amp; Technology</i> , 2016, 50, 1056-1064.                  | 4.6  | 157       |

| #  | ARTICLE   | IF  | CITATIONS |
|----|---|-----|-----------|
| 55 | Screening of Metal Oxides for HgO Capture. Energy Procedia, 2015, 75, 2421-2426.  | 1.8 | 21        |
| 56 | Relationship between thermal behaviour of lignocellulosic components and properties of biomass. Bioresource Technology, 2014, 172, 312-320.                                 | 4.8 | 57        |
| 57 | An automated ash fusion test for characterisation of the behaviour of ashes from biomass and coal at elevated temperatures. Fuel, 2013, 103, 454-466.                       | 3.4 | 68        |
| 58 | Morphology and reactivity characteristics of char biomass particles. Bioresource Technology, 2011, 102, 5237-5243.  | 4.8 | 43        |
| 59 | Screening of Metal Oxides to Promote CO <sub>2</sub> Adsorption Performance over Polyethyleneimine Incorporated Solid Adsorbents. Materials Science Forum, 0, 1005, 93-100. | 0.3 | 3         |