

Huanming Xia

List of Publications by Year in descending order

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43
papers

1,043
citations

430754

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414303

32
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44
all docs

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docs citations

44
times ranked

1161
citing authors

| # | ARTICLE | IF | CITATIONS |
|----|---|-----|-----------|
| 1 | Microfluidic strategy for coating and modification of polymer-bonded nano-HNS explosives. Chemical Engineering Journal, 2022, 428, 131096. | 6.6 | 15 |
| 2 | Nonlinear microfluidics: device physics, functions, and applications. Lab on A Chip, 2021, 21, 1241-1268. | 3.1 | 32 |
| 3 | Design and Fabrication of the Vertical-Flow Bioreactor for Compaction Hepatocyte Culture in Drug Testing Application. Biosensors, 2021, 11, 160. | 2.3 | 2 |
| 4 | Continuous spheroidization strategy for explosives with micro/nano hierarchical structure by coupling microfluidics and spray drying. Chemical Engineering Journal, 2021, 412, 128613. | 6.6 | 21 |
| 5 | Reducing the membrane fouling in cross-flow filtration using a facile fluidic oscillator. Separation and Purification Technology, 2021, 272, 118854. | 3.9 | 10 |
| 6 | A facile method for microfluidic metering and transport. Microfluidics and Nanofluidics, 2021, 25, 1. | 1.0 | 1 |
| 7 | Improvement of silver azide crystal morphology and detonation behavior by fast mixing using a microreaction system with an integrated static micromixer. Reaction Chemistry and Engineering, 2020, 5, 154-162. | 1.9 | 16 |
| 8 | A droplet platform capable of handling dissimilar liquids and its application for separation of bacteria from blood. Biomicrofluidics, 2020, 14, 034102. | 1.2 | 7 |
| 9 | Microfluidic strategy for rapid and high-quality control of crystal morphology of explosives. Reaction Chemistry and Engineering, 2020, 5, 1093-1103. | 1.9 | 19 |
| 10 | Microreaction system combining chaotic micromixing with fast mixing and particle growth in liquid-segmented flow for the synthesis of hazardous ionic materials. Energetic Materials Frontiers, 2020, 1, 186-194. | 1.3 | 9 |
| 11 | Passive Micromixer Platform for Size- and Shape-Controllable Preparation of Ultrafine HNS. Industrial & Engineering Chemistry Research, 2019, 58, 16709-16718. | 1.8 | 42 |
| 12 | Synchronized generation and coalescence of largely dissimilar microdroplets governed by pulsating continuous-phase flow. Applied Physics Letters, 2019, 114, . | 1.5 | 9 |
| 13 | An efficient micromixer combining oscillatory flow and divergent circular chambers. Microsystem Technologies, 2019, 25, 2741-2750. | 1.2 | 25 |
| 14 | Digital microfluidic platform for automated detection of human chorionic gonadotropin. Microfluidics and Nanofluidics, 2019, 23, 1. | 1.0 | 28 |
| 15 | Tunable particle separation in a hybrid dielectrophoresis (DEP)-inertial microfluidic device. Sensors and Actuators B: Chemical, 2018, 267, 14-25. | 4.0 | 99 |
| 16 | Integrated aeroelastic vibrator for fluid mixing in open microwells. Journal of Micromechanics and Microengineering, 2018, 28, 017001. | 1.5 | 4 |
| 17 | Micro-segmented Flow Technology Applied for Synthesis and Shape Control of Lead Styphnate Micro-particles. Propellants, Explosives, Pyrotechnics, 2018, 43, 286-293. | 1.0 | 9 |
| 18 | A comparative discussion of different designs of passive micromixers: specific sensitivities of mixing efficiency on Reynolds numbers and fluid properties. Microsystem Technologies, 2018, 24, 1253-1263. | 1.2 | 15 |

| # | ARTICLE | IF | CITATIONS |
|----|--|-----|-----------|
| 19 | Optimization Synthesis of Morphologically Homogeneous and Rod-Like Structure Barium Trinitroresorcinate Produced by Segmented Flow. <i>Journal of Chemical Engineering of Japan</i> , 2018, 51, 524-529. | 0.3 | 1 |
| 20 | Microfluidic Platform for Preparation and Screening of Narrow Size-Distributed Nanoscale Explosives and Supermixed Composite Explosives. <i>Industrial & Engineering Chemistry Research</i> , 2018, 57, 13191-13204. | 1.8 | 30 |
| 21 | Microfluidic mixing through oscillatory transverse perturbations. <i>Modern Physics Letters B</i> , 2018, 32, 1840030. | 1.0 | 5 |
| 22 | The negative-differential-resistance (NDR) mechanism of a hydroelastic microfluidic oscillator. <i>Journal of Micromechanics and Microengineering</i> , 2017, 27, 075001. | 1.5 | 15 |
| 23 | High-Throughput Separation of White Blood Cells From Whole Blood Using Inertial Microfluidics. <i>IEEE Transactions on Biomedical Circuits and Systems</i> , 2017, 11, 1422-1430. | 2.7 | 47 |
| 24 | Microfluidic Synthesis of Size-Controlled and Morphologically Homogeneous Lead Trinitroresorcinate Produced by Segmented Flow. <i>Propellants, Explosives, Pyrotechnics</i> , 2016, 41, 899-905. | 1.0 | 12 |
| 25 | A vertical-flow bioreactor array compacts hepatocytes for enhanced polarity and functions. <i>Lab on A Chip</i> , 2016, 16, 3898-3908. | 3.1 | 15 |
| 26 | Characterization of an acoustically coupled multilayered microfluidic platform on SAW substrate using mixing phenomena. <i>Sensors and Actuators A: Physical</i> , 2015, 233, 360-367. | 2.0 | 7 |
| 27 | Numerical analysis and characterization of a Wankel pump as a miniaturized mixer. <i>Journal of Micromechanics and Microengineering</i> , 2015, 25, 084001. | 1.5 | 5 |
| 28 | Anti-solvent precipitation of solid lipid nanoparticles using a microfluidic oscillator mixer. <i>Microfluidics and Nanofluidics</i> , 2015, 19, 283-290. | 1.0 | 25 |
| 29 | Analyzing the transition pressure and viscosity limit of a hydroelastic microfluidic oscillator. <i>Applied Physics Letters</i> , 2014, 104, 024101. | 1.5 | 20 |
| 30 | Live human nasal epithelial cells (hNECs) on chip for in vitro testing of gaseous formaldehyde toxicity via airway delivery. <i>Lab on A Chip</i> , 2014, 14, 677-680. | 3.1 | 37 |
| 31 | Aeroelasticity-based fluid agitation for lab-on-chips. <i>Lab on A Chip</i> , 2013, 13, 1619. | 3.1 | 6 |
| 32 | Numerical study on microstructured reactor with chaotic heat and mass transfer and its potential application for exothermic process. <i>Chemical Engineering Research and Design</i> , 2012, 90, 1719-1726. | 2.7 | 5 |
| 33 | Converting steady laminar flow to oscillatory flow through a hydroelasticity approach at microscales. <i>Lab on A Chip</i> , 2012, 12, 60-64. | 3.1 | 34 |
| 34 | Femtosecond laser-induced modification of surface wettability of PMMA for fluid separation in microchannels. <i>Microfluidics and Nanofluidics</i> , 2011, 10, 225-229. | 1.0 | 47 |
| 35 | Approximate mapping method for prediction of chaotic mixing in spatial-periodic microchannel. <i>Chemical Engineering Research and Design</i> , 2010, 88, 1419-1426. | 2.7 | 2 |
| 36 | A microfluidic mixer with self-excited "turbulent" fluid motion for wide viscosity ratio applications. <i>Lab on A Chip</i> , 2010, 10, 1712. | 3.1 | 46 |

| # | ARTICLE | IF | CITATIONS |
|----|--|-----|-----------|
| 37 | Investigation of hot roller embossing for microfluidic devices. Journal of Micromechanics and Microengineering, 2010, 20, 015017. | 1.5 | 46 |
| 38 | Fluid Micromixing Technology and Its Applications for Biological and Chemical Processes. IFMBE Proceedings, 2007, , 16-20. | 0.2 | 5 |
| 39 | Influence of the Reynolds number on chaotic mixing in a spatially periodic micromixer and its characterization using dynamical system techniques. Journal of Micromechanics and Microengineering, 2006, 16, 53-61. | 1.5 | 43 |
| 40 | Numerical and experimental observation of chaotic mixing in microfluidic mixer. Journal of Visualization, 2005, 8, 291-291. | 1.1 | 0 |
| 41 | TECHNIQUES TO ENHANCE FLUID MICRO-MIXING AND CHAOTIC MICROMIXERS. Modern Physics Letters B, 2005, 19, 1567-1570. | 1.0 | 13 |
| 42 | Chaotic micromixers using two-layer crossing channels to exhibit fast mixing at low Reynolds numbers. Lab on A Chip, 2005, 5, 748. | 3.1 | 211 |
| 43 | Parallel vortex shedding at $Re \approx 10^4$ a transverse control cylinder technique approach. Journal of Fluid Mechanics, 2005, 541, 143. | 1.4 | 3 |