

# Natan Padoin

## List of Publications by Year in descending order

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Version: 2024-02-01

58  
papers

900  
citations

567281

15  
h-index

526287

27  
g-index

58  
all docs

58  
docs citations

58  
times ranked

892  
citing authors

| #  | ARTICLE   | IF   | CITATIONS |
|----|---|------|-----------|
| 1  | A critical review on microplastics, interaction with organic and inorganic pollutants, impacts and effectiveness of advanced oxidation processes applied for their removal from aqueous matrices. <i>Chemical Engineering Journal</i> , 2021, 424, 130282.                    | 12.7 | 106       |
| 2  | Mechanical, Thermal and Antimicrobial Properties of Chitosan-Based-Nanocomposite with Potential Applications for Food Packaging. <i>Journal of Polymers and the Environment</i> , 2020, 28, 1216-1236.  | 5.0  | 69        |
| 3  | Lanthanum doped titania decorated with silver plasmonic nanoparticles with enhanced photocatalytic activity under UV-visible light. <i>Applied Surface Science</i> , 2018, 441, 1057-1071.  | 6.1  | 63        |
| 4  | Green synthesis of zirconia nanoparticles based on <i>Euclea natalensis</i> plant extract: Optimization of reaction conditions and evaluation of adsorptive properties. <i>Colloids and Surfaces A: Physicochemical and Engineering Aspects</i> , 2019, 583, 123915.          | 4.7  | 51        |
| 5  | Computational fluid dynamics (CFD), artificial neural network (ANN) and genetic algorithm (GA) as a hybrid method for the analysis and optimization of micro-photocatalytic reactors: NOx abatement as a case study. <i>Chemical Engineering Journal</i> , 2022, 431, 133771. | 12.7 | 47        |
| 6  | An explicit correlation for optimal TiO <sub>2</sub> film thickness in immobilized photocatalytic reaction systems. <i>Chemical Engineering Journal</i> , 2017, 310, 381-388.   | 12.7 | 46        |
| 7  | Heat and mass transfer modeling for multicomponent multiphase flow with CFD. <i>International Journal of Heat and Mass Transfer</i> , 2014, 73, 239-249.  | 4.8  | 32        |
| 8  | Gas bubbles have controversial effects on Taylor flow electrochemistry. <i>Chemical Engineering Journal</i> , 2021, 406, 126811.  | 12.7 | 29        |
| 9  | Intensification of photocatalytic pollutant abatement in microchannel reactor using TiO <sub>2</sub> and TiO <sub>2</sub> @graphene. <i>AIChE Journal</i> , 2016, 62, 2794-2802.  | 3.6  | 28        |
| 10 | Humic acids adsorption and decomposition on Mn <sub>2</sub> O <sub>3</sub> and $\gamma$ -Al <sub>2</sub> O <sub>3</sub> nanoparticles in aqueous suspensions in the presence of ozone. <i>Journal of Environmental Chemical Engineering</i> , 2020, 8, 102780.                | 6.7  | 22        |
| 11 | CFD + DoE optimization of a flat plate photocatalytic reactor applied to NOx abatement. <i>Chemical Engineering and Processing: Process Intensification</i> , 2020, 154, 107998.  | 3.6  | 22        |
| 12 | Are carbon dots effective for ion sensing and antiviral applications? A state-of-the-art description from synthesis methods to cost evaluation. <i>Journal of Materials Research and Technology</i> , 2021, 12, 688-716.  | 5.8  | 22        |
| 13 | Photocatalytic NOx abatement: Mathematical modeling, CFD validation and reactor analysis. <i>Journal of Hazardous Materials</i> , 2019, 372, 145-153.   | 12.4 | 21        |
| 14 | Polymeric Blends of Carboxymethyl Cellulose and Sodium Alginate Containing Functionalized Carbon Dots Result in Stable and Efficient Fluorescent Films for Silver and Iron (III) Sensing. <i>Journal of Environmental Chemical Engineering</i> , 2021, 9, 105728.             | 6.7  | 18        |
| 15 | CFD analysis of a luminescent solar concentrator-based photomicroreactor (LSC-PM) with feedforward control applied to the synthesis of chemicals under fluctuating light intensity. <i>Chemical Engineering Research and Design</i> , 2020, 153, 626-634.                     | 5.6  | 16        |
| 16 | An Overview of Photoreactors and Computational Modeling for the Intensification of Photocatalytic Processes in the Gas-Phase: State-of-Art. <i>Journal of Environmental Chemical Engineering</i> , 2021, 9, 105068.   | 6.7  | 16        |
| 17 | Modeling ketoprofen release from PHB/chitosan composite microparticles. <i>Polymer Bulletin</i> , 2016, 73, 1515-1529.  | 3.3  | 15        |
| 18 | Influence of acoustic waves on the solids dispersion in a gas-solid CFB riser: Numerical analysis. <i>Powder Technology</i> , 2020, 359, 292-304.   | 4.2  | 14        |

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|----|---|------|-----------|
| 19 | Mass transfer modeling and simulation of a transient homogeneous bubbly flow in a bubble column. <i>Chemical Engineering Science</i> , 2020, 218, 115531.   | 3.8  | 13        |
| 20 | Novel carbon dots for zinc sensing from <i>Campomanesia phaea</i> . <i>Materials Letters</i> , 2021, 283, 128813.   | 2.6  | 13        |
| 21 | Green Synthesis of Nano Hydroxyapatite: morphology variation and its effect on cytotoxicity against fibroblast. <i>Materials Letters</i> , 2021, 284, 129013.   | 2.6  | 13        |
| 22 | Synthesis of geranyl acetate by esterification of geraniol with acetic anhydride through heterogeneous catalysis using ion exchange resin. <i>Chemical Engineering Research and Design</i> , 2021, 168, 156-168.                                  | 5.6  | 13        |
| 23 | Drinking water decontamination by biological denitrification using fresh bamboo as inoculum source. <i>Bioprocess and Biosystems Engineering</i> , 2014, 37, 2009-2017.   | 3.4  | 12        |
| 24 | Cross diffusion effects in the interfacial mass and heat transfer of multicomponent droplets. <i>International Journal of Heat and Mass Transfer</i> , 2015, 85, 830-840.   | 4.8  | 12        |
| 25 | Numerical simulation of isothermal gas-liquid flow patterns in microchannels with varying wettability. <i>Chemical Engineering Research and Design</i> , 2016, 109, 698-706.  | 5.6  | 11        |
| 26 | Stability of immobilized <i>Rhizomucor miehei</i> lipase for the synthesis of pentyl octanoate in a continuous packed bed bioreactor. <i>Brazilian Journal of Chemical Engineering</i> , 2014, 31, 633-641.                                       | 1.3  | 10        |
| 27 | A Novel Application of Bentonite Modified with Copper Ions in the Tetracycline Adsorption: an experimental design study. <i>Materials Letters</i> , 2021, 291, 129552.  | 2.6  | 10        |
| 28 | Influence of ultrasonic waves on the gas-solid flow and the solids dispersion in a CFB riser: Numerical and experimental study. <i>Powder Technology</i> , 2021, 389, 430-449.  | 4.2  | 10        |
| 29 | Radiation field modeling of the NETmix milli-photocatalytic reactor: Effect of LEDs position over the reactor window. <i>Chemical Engineering Journal</i> , 2022, 429, 131670.  | 12.7 | 10        |
| 30 | Influence of different parameters on the tube-to-bed heat transfer coefficient in a gas-solid fluidized bed heat exchanger. <i>Chemical Engineering and Processing: Process Intensification</i> , 2020, 147, 107693.                              | 3.6  | 9         |
| 31 | Ultra-High-Molecular-Weight polyethylene-based nanocomposite for removal of tetracycline in aqueous systems. <i>Journal of Environmental Chemical Engineering</i> , 2020, 8, 103630.  | 6.7  | 9         |
| 32 | Sonoelectrochemistry: Ultrasound-assisted Organic Electrosynthesis. <i>ACS Sustainable Chemistry and Engineering</i> , 2021, 9, 9590-9603.  | 6.7  | 9         |
| 33 | Immobilisation of phosphonium-based ionic liquid in polysulfone capsules for the removal of phenolic compounds, with an emphasis on 2,4-dichlorophenol, in aqueous solution. <i>Journal of Environmental Management</i> , 2021, 291, 112670.      | 7.8  | 9         |
| 34 | Green synthesis of manganese based nanoparticles mediated by <i>Eucalyptus robusta</i> and <i>Corymbia citriodora</i> for agricultural applications. <i>Colloids and Surfaces A: Physicochemical and Engineering Aspects</i> , 2022, 636, 128180. | 4.7  | 9         |
| 35 | Novel porous geopolymeric formulation as green material applied to the recovery of contaminated effluent aiming environmental protection. <i>Journal of Cleaner Production</i> , 2019, 231, 395-405.  | 9.3  | 8         |
| 36 | A novel ultrahigh-molecular-weight polyethylene-based nanocomposite for contaminants adsorption in aqueous systems. <i>Materials Letters</i> , 2019, 240, 197-200.  | 2.6  | 8         |

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|----|--|------|-----------|
| 37 | Eco-friendly ceramic tiles: development based on technical and market demands. <i>Journal of Materials Research and Technology</i> , 2021, 11, 121-134.  | 5.8  | 8         |
| 38 | On the performance of liquid-liquid Taylor flow electrochemistry in a microreactor – A CFD study. <i>Chemical Engineering Journal</i> , 2022, 427, 131443.   | 12.7 | 8         |
| 39 | CFD and radiation field modeling of the NETmix milli-photocatalytic reactor for n-decane oxidation at gas phase: Effect of LEDs number and arrangement. <i>Chemical Engineering Journal</i> , 2022, 444, 136577.           | 12.7 | 8         |
| 40 | Synthesis of aluminum hydroxide nanoparticles from the residue of aluminum anodization for application in polymer materials as antifiame agents. <i>Journal of Materials Research and Technology</i> , 2020, 9, 8937-8952. | 5.8  | 7         |
| 41 | Evaluation of resistances to fluid flow in fibrous ceramic medium. <i>Applied Mathematical Modelling</i> , 2015, 39, 7197-7210.  | 4.2  | 6         |
| 42 | Lanthanides Effects on TiO2 Photocatalysts. , 0, , .   |      | 5         |
| 43 | Lumped analysis criteria for heat transfer in a diluted co – current moving bed heat exchanger with isothermal walls. <i>Powder Technology</i> , 2020, 361, 1038-1059.   | 4.2  | 5         |
| 44 | Propranolol hydrochloride degradation using La@TiO2 functionalized with CMCD. <i>Journal of Rare Earths</i> , 2022, 40, 579-585.   | 4.8  | 5         |
| 45 | Microstructural characteristics of geopolymer materials with twenty eight days of curing and after eight years stored at room temperature. <i>Journal of Cleaner Production</i> , 2021, 278, 123437.                       | 9.3  | 4         |
| 46 | CFD analysis of a H2O2/UVC water treatment process in the annular FluHelik reactor. <i>Environmental Science and Pollution Research</i> , 2021, 28, 41224-41232.   | 5.3  | 4         |
| 47 | RHEOLOGICAL BEHAVIOR OF A SILVER AQUEOUS NANOFUID STABILIZED WITH AMINOSILANE-BASED SURFACTANT UNDER CONFINED FLOW. <i>Brazilian Journal of Chemical Engineering</i> , 2019, 36, 229-237.                                  | 1.3  | 3         |
| 48 | Biomorphic microchanneled electrodes for enhanced water desalination through capacitive deionization. <i>Water Science and Technology: Water Supply</i> , 2019, 19, 1221-1228.   | 2.1  | 3         |
| 49 | CO2 adsorption in a zeolite-based bench scale moving bed prototype: Experimental and theoretical investigation. <i>Chemical Engineering Research and Design</i> , 2021, 171, 225-236.                                      | 5.6  | 3         |
| 50 | Neryl acetate synthesis from nerol esterification with acetic anhydride by heterogeneous catalysis using ion exchange resin. <i>Journal of Industrial and Engineering Chemistry</i> , 2022, 105, 121-131.                  | 5.8  | 2         |
| 51 | An investigation of scale effect and applicability of compact light sources in microchannel reactors applied to pollutant abatement. <i>Environmental Science and Pollution Research</i> , 2021, 28, 22957-22968.          | 5.3  | 1         |
| 52 | CFD MODELING OF STEAM CONDENSATION IN INDUSTRIAL PIPES. , 0, , .   |      | 1         |
| 53 | Modeling and Simulation of Reaction Environment in Photoredox Catalysis: A Critical Review. <i>Frontiers in Chemical Engineering</i> , 2022, 3, .  | 2.7  | 1         |
| 54 | Nanosilica:Polycaprolactone ratio and heat treatment modify the wettability of nanosilica/polycaprolactone coatings for application in aqueous systems. <i>Surfaces and Interfaces</i> , 2022, 31, 101997.                 | 3.0  | 1         |

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|----|---|-----|-----------|
| 55 | Computational Modeling of Isothermal Flow Patterns: Effect of Surface Wettability at Different Scales. Anais Do ... Congresso Ibero-Latino-Americano De MÃ©todos Computacionais Em Engenharia, 0, , . | 0.0 | 0         |
| 56 | CARACTERÍSTICAS MORFOLÓGICAS DE MATERIAIS GEOPOLIMÉRICOS APÓS A IMOBILIZAÇÃO DE RESÍDUOS CONTAMINADOS COM METAIS PESADOS. , 0, , .  |     | 0         |
| 57 | EFEITO DO ULTRASSOM SOBRE O ESCOAMENTO GÁS-SÓLIDO NA REGIÃO DE ENTRADA DE UM RISER DE CFB. , 0, , .   |     | 0         |
| 58 | COMPUTATIONAL SIMULATION OF ABDOMINAL AORTIC ANEURISM AND ITS ASSESSMENT TO MEDICAL TREATMENT. , 0, , .   |     | 0         |