In this issue

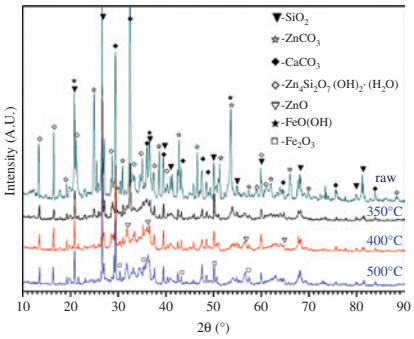
Weiheng Chen, Libo Zhang, Jinhui Peng, Shaohua Yin, Aiyuan Ma, Kun Yang, Shiwei Li and Feng Xie

Effects of roasting pretreatment on zinc leaching from complicated zinc ores

DOI 10.1515/gps-2015-0046
Green Process Synth 2016; 5: 41–47

Original article: The effects of roasting temperatures on the zinc recovery from the complicated zinc ores were studied, and the mineral phase transformation during roasting was analyzed.

Keywords: ammonia leaching; complicated zinc ores; mineral phase transformation; roasting.



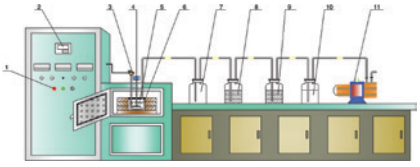
Aiyuan Ma, Xuemei Zheng, Shixing Wang, Jinhui Peng, Libo Zhang and Zhiqiang Li

Study on dechlorination kinetics from zinc oxide dust by clean metallurgy technology

DOI 10.1515/gps-2015-0041
Green Process Synth 2016; 5: 49–58

Original article: The dielectric property and dechlorination kinetics of zinc oxide dust by microwave roasting were studied.

Keywords: dechlorination; dielectric property; kinetics; microwave roasting; zinc oxide dust.



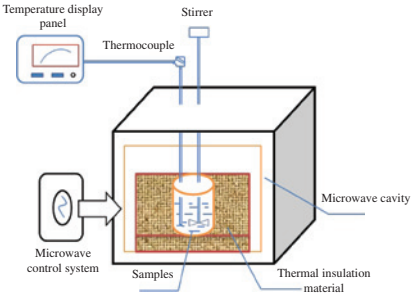
Guo Lin, Libo Zhang, Li Yang, Tu Hu and Jinhui Peng

Microwave roasting of agglomerated flux for submerged-arc welding

DOI 10.1515/gps-2015-0050
Green Process Synth 2016; 5: 59–63

Original article: Compared with conventional roasting methods, microwave roasting has the advantage of lower temperature and shorter time.

Keywords: agglomerated flux; microwave roasting; submerged-arc welding.



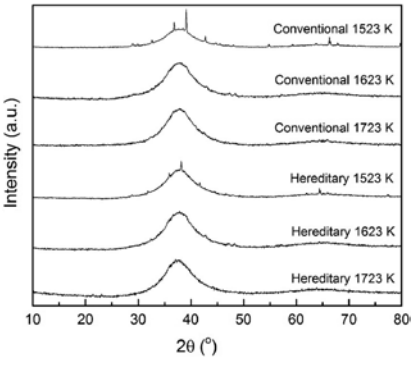
Shuaidan Lu, Shuchen Sun, Xiaoxiao Huang, Xiaoping Zhu, Ganfeng Tu and Kuanhe Li

Glass-forming ability and mechanical properties of a $Zr_{52.8}Cu_{29.1}Ni_{7.3}Al_{9.8}Y_1$ bulk metallic glass prepared by hereditary process

DOI 10.1515/gps-2015-0039
Green Process Synth 2016; 5: 65–70

Original article: An attempt was made to find the effect of a hereditary structure on the glass-forming ability and mechanical properties of a solid $Zr_{52.8}Cu_{29.1}Ni_{7.3}Al_{9.8}Y_1$ bulk metallic glass in order to evaluate a novel process of using binary alloys as precursors, which have a hereditary relation to the aim metallic glass.

Keywords: bulk metallic glass; compressive strength; hereditary process; precursors; Zr-based.



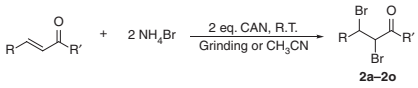
Balaji B. Totawar, Pramod S. Kulkarni and Zubaidha K. Pudukulathan

An improved and sustainable approach for the synthesis of α,β-dibromo ketones using ceric ammonium nitrate and ammonium bromide

DOI 10.1515/gps-2015-0097
Green Process Synth 2016; 5: 71–77

Original article: Ceric ammonium nitrate and ammonium bromide were found to be an effective reagent system for bromination of chalcones.

Keywords: α,β-unsaturated ketone; ammonium bromide; bromination; CAN; dibromo ketone; grinding; sustainable approach.



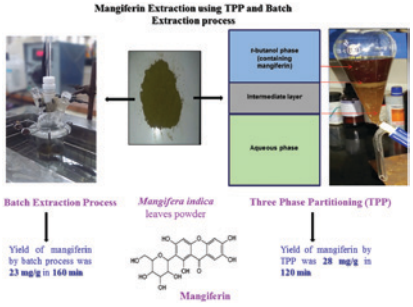
Vrushali M. Kulkarni and Virendra K. Rathod

Utilization of waste dried *Mangifera indica* leaves for extraction of mangiferin by conventional batch extraction and advance three-phase partitioning

DOI 10.1515/gps-2015-0090
Green Process Synth 2016; 5: 79–85

Original article: Three-phase partitioning and batch extraction were evaluated to get an optimum yield of mangiferin from waste dried *Mangifera indica* (mango) leaves.

Keywords: batch extraction; dried mango leaves; solvent extraction; three-phase partitioning.



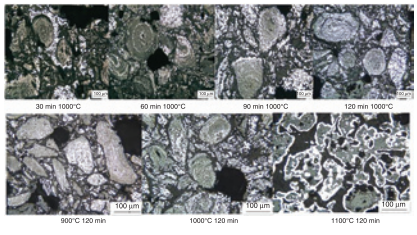
Huang Run, Shanshan Bi, Pengsheng Liu, Benjun Xu and Jinzhu Zhang

Research on the reduction of Guizhou oolitic hematite by hydrogen

DOI 10.1515/gps-2015-0057
Green Process Synth 2016; 5: 87–91

Original article: The mass loss ratio and metallization ratio of the reduced sample had the same change tendency with the variation of time, during which the phases of fayalite and spinel could be formed during the reduction that would cause a lower reaction speed.

Keywords: direct reduction; H_2; metallization ratio; oolitic hematite.



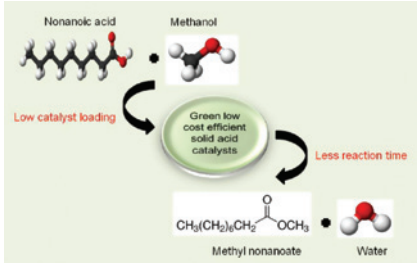
Kamalpreet Kaur, Pranjal Jain, Amit Sobti and Amrit Pal Toor

Sulfated metal oxides: eco-friendly green catalysts for esterification of nonanoic acid with methanol

DOI 10.1515/gps-2015-0087
Green Process Synth 2016; 5: 93–100

Original article: Esterification of nonanoic acid with methanol using solid acid catalysts (synthesized by the green method) was performed to obtain the maximum acid conversion using low catalyst loading in less reaction time.

Keywords: esterification; green chemistry; methanol; nonanoic acid; sulfated iron oxide.



Hira Munir, Muhammad Shahid, Fozia Anjum, Muhammad Nadeem Akhtar, Sayed M. Badawy and Ahmed El-Ghorab

Application of *Acacia modesta* and *Dalbergia sissoo* gums as green matrix for silver nanoparticle binding

DOI 10.1515/gps-2015-0064
Green Process Synth 2016; 5: 101–106

Original article: A low-cost, efficient, and ecofriendly method for the synthesis of silver nanoparticles (AgNPs) using gums as reducing agent was performed, and the characterization of AgNPs, such as antibacterial activity, *in vitro* toxicity, and mutagenic activity, was evaluated.

Keywords: *Acacia modesta*; *Dalbergia sissoo*; green matrix; gums; silver nanoparticles.