



所属学院 资源与环境工程学院

学科领域 环境工程，化学工程，材料科学与工程

邮箱 xiuchenqiao@ecust.edu.cn

个人简介

乔秀臣，华东理工大学教授，博士生导师。获英国皇家科学院海外人才引进计划、上海浦江人才、湖北楚天人才等人才资助，承担二十余项国家863、国基金、博士点基金、上海市重大、江苏重点社发等国家、省部级和企业项目研发。长期从事煤系固废资源化、重金属污染治理、绿色建材制造等研究。发表论文70余篇，申请授权发明专利20余项。担任中国硅酸盐协会固废分会理事、中国循环经济协会专家委员，上海市化学化工学会会员，全国化工矿山设计技术中心站技术委员会委员。

研究方向

- 固体废物资源化利用
- 沙漠化治理
- 高温微波在废物处理过程中的应用
- 等离子体降解高分子有机污染物
- 绿色功能建筑材料
- 含重金属污泥的处理与处置

研究成果及主要发表文章

英文期刊论文

1. C.C. Li, X. C. Qiao. A new approach to prepare mesoporous silica using coal fly ash. Chemical Engineering Journal, 2016, 302:388-394.
2. C.C. Li, X. C. Qiao, J. G. Yu. Large surface area MCM-41 prepared from acid leaching residue of coal gasification slag. Materials Letters, 2016, 167:246-249.
3. M. X. Yuan, X. C. Qiao, J. G. Yu. Phase equilibria of $\text{AlCl}_3 + \text{FeCl}_3 + \text{H}_2\text{O}$, $\text{AlCl}_3 + \text{CaCl}_2 + \text{H}_2\text{O}$, and $\text{FeCl}_3 + \text{CaCl}_2 + \text{H}_2\text{O}$ at 298.15 K. Journal of Chemical & Engineering Data, 2016, 61 (5):1749-1755.
4. X. C. Qiao, X. Y. Xie. The effect of electric field intensification at interparticle contacts in microwave sintering. Scientific Reports, 2016, 6:32163.
5. Z. Y. Zhang, X. C. Qiao. Aluminum release from microwave-assisted reaction of coal fly ash with calcium carbonate, Fuel Processing Technology 2015 134: 303-309.
6. Z. Y. Zhang, X. C. Qiao, J. G. Yu. Microwave selective heating-enhanced reaction rates for mullite preparation from kaolinite. Rsc Advances, 2014, 4(6):2640-2647.
7. H. M. Zhou, X. C. Qiao, J. G. Yu. Influences of quartz and muscovite on the formation of mullite from kaolinite. Applied Clay Science, 2013, 80–81(8):176-181.
8. P. Si, QIAO, X. C. Qiao, J. G. Yu et al. Alumina Recovery from Kaolin with Mineral Impurities[J]. Journal of Wuhan University of Technology-Mater. Sci. Ed. 2012, 27(6):1139-1143.
9. X. C. Qiao, C.R. Cheeseman, C.S. Poon. Influences of chemical activators on incinerator bottom ash. Waste Management, 2009, 29(2), 544-549.
10. X. C. Qiao, P. Si, J. G. Yu. A Systematic Investigation into the Extraction of Aluminum from Coal Spoil through Kaolinite [J]. Environmental Science and Technology, 2008, 42 (22), 8541–8546.
11. X.C. Qiao, M. Tyrer, C.S. Poon, C.R. Cheeseman. Characterization of alkali-activated thermally treated incinerator bottom ash [J]. Waste Management, 2008, 28(10), 1955-1962.
12. X. C. Qiao, B.R. Ng, M. Tyrer, C.S. Poon and C.R. Cheeseman. Novel Cementitious Materials Produced from Incinerator Bottom Ash [J]. Resources, Conservation & Recycling, 2008, 52(3): 496-510.
13. X. C. Qiao, B.R. Ng, M. Tyrer, C.S. Poon and C.R. Cheeseman. Production of lightweight concrete using incinerator bottom ash [J], Construction and Building Materials, 2008, 22(4): 473-480.
14. X. C. Qiao, C.S. Poon, C.R. Cheeseman. Investigation into the stabilization/solidification performance of Portland cement through cement clinker phases, Journal of hazardous Materials, 2007, 139(2): 238-243.
15. X. C. Qiao, C.S. Poon, E. Chung. Comparative studies of three methods for activating rejected fly ash, Advances in Cement Research, 2006, 18(4): 165-170.
16. X. C. Qiao, C.S. Poon and C.R. Cheeseman. Transfer mechanisms of contaminants in cement-based stabilized/solidified wastes, Journal of Hazardous Materials, 2006, 129 (1-3): 290-296.
17. X. C. Qiao, C.S. Poon and C.R. Cheeseman. Use of flue gas desulphurisation (FGD) waste and rejected fly ash in waste stabilization/solidification systems [J], Waste Management, 2006, 26 (2): 141-149.
18. C.S Poon, X. C. Qiao and D. Chan. The cause and influence of self-cementing properties of fine recycled concrete aggregates on the properties of unbound sub-base [J], Waste Management, 2006, 26 (10): 1166-1172.
19. C.S Poon, X. C. Qiao, C.R. Cheesema et al. Feasibility of using reject fly ash in cement-based stabilization/solidification processes [J], Environmental Engineering Science, 2006, 23: 14-23.
20. C.S. Poon, X.C. Qiao and Z.S. Lin. Effects of flue gas desulphurization sludge on the pozzolanic reaction of reject-fly-ash-blended cement pastes [J], Cement and Concrete Research, 2004, 34 (10): 1907-1918.
21. C.S. Poon, X.C. Qiao and Z.S. Lin. Pozzolanic properties of reject fly ash in blended cement pastes, Cement and Concrete Research, 2003, 33 (11): 1857-1865.
22. X. C. Qiao, C.S. Poon and Z.S. Lin. Activation of rejected fly ash using flue gas desulphurization (FGD) sludge, Journal of Wuhan University of Technology-Materials Science Edition, 2003, 18 (4): 84-88.
23. Q. Luo, G. I. Chen, Y. Z. Sun, Y. M. Ye, X. C. Qiao, J. G. Yu. Dissolution Kinetics of Aluminum, Calcium, and Iron from Circulating Fluidized Bed Combustion Fly Ash with Hydrochloric Acid. Industrial & Engineering Chemistry Research, 2013, 52(51):18184–18191.

部分中文期刊论文

1. 谢晓影，乔秀臣．微波烧结的“热点”形成机制．微波学报，2016, 32 (5) :84–88.
2. 张孜渊，乔秀臣，于建国，．微波快速活化粉煤灰提铝．中国科技论文，2014 (9) :981–984.
3. 周华梅，乔秀臣．粉煤灰提铝协同制备硼酸探索．武汉理工大学学报，2013, 35 (8) :120–123.
4. 王金磊，乔秀臣．碳酸钠－粉煤灰烧结样中铝、铁、硅的酸浸规律．华东理工大学学报：自然科学版，2013, 39 (6) :685–688.
5. 司鹏，乔秀臣，于建国．煅烧气氛对煤系高岭岩热活化的影响．华东理工大学学报：自然科学版，2011, 37 (5) :571–576.
6. 周华梅，乔秀臣，于建国．F型粉煤灰氧化铝提取潜力．华东理工大学学报：自然科学版，2011, 37 (5) :577–581.
7. 司鹏，乔秀臣，于建国．机械力化学效应对高岭石铝氧多面体的影响．武汉理工大学学报，2011, 33 (5) :22–26.
8. 周华梅，乔秀臣，于建国．低品位高岭土制备莫来石的研究．武汉理工大学学报，2011, 33 (3) :121–125.
9. 周波，乔秀臣，宋兴福，汪谨，刘够生，于建国．基于遗传神经网络的高强高掺粉煤灰材料设计．华东理工大学学报：自然科学版，2009, 35 (5) :684–687.
10. 乔秀臣，林宗寿，寇世聪，潘智生．重金属在废弃粉煤灰－水泥固化体系内的迁移．武汉理工大学学报，2005, 27 (10) :11–14.
11. 乔秀臣，林宗寿，寇世聪，潘智生．废弃粗粉煤灰－水泥系统固化重金属废弃物的探讨．武汉理工大学学报，2005, 27 (3) :23–26.
12. 乔秀臣，林宗寿，寇世聪，潘智生．用碱式硫酸盐激发废弃粗粉煤灰的研究．武汉理工大学学报，2004, 26 (6) :8–10.
13. 乔秀臣，林宗寿，寇世聪，潘智生．化学激发剂对废弃粗粉煤灰火山灰活性的影响．武汉理工大学学报，2004, 26 (4) :42–44.
14. 乔秀臣，林宗寿，寇世聪，潘智生．废弃粉煤灰火山灰活性的研究．武汉理工大学学报，2003, 25 (8) :22–25.

部分授权专利：

1. 乔秀臣，王金磊．活化煤气化灰渣实现铝铁钙分离的方法，CN103305686B，2016
2. 乔秀臣．一种有机物细粒污泥的干化方法与移动式干化系统，CN104150738B，2016
3. 乔秀臣，柳成亮．一种循环流化床锅炉底渣矿物的分离方法，CN104198655B，2016
4. 乔秀臣．一种无机物细粒污泥的干化方法与移动式干化系统，CN104150739B，2015
5. 乔秀臣，司鹏．提高煤矸石活性的节能煅烧方法，CN102553882B，2014
6. 乔秀臣．聚合氯化铝铁钙的制备方法，CN102765788B，2014
7. 乔秀臣，司鹏．免煅烧活化煤矸石的方法，CN102527692B，2014
8. 乔秀臣，金鑫．聚合氯化铝钙的制备方法，CN102765789B，2014