

表面与界面工程

磨光花岗岩表面化学改性与摩擦力改变的相依性

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摘要 为了在不改变花岗岩磨光表面外观的同时, 提高见水就滑的花岗岩表面摩擦力, 增加光滑硬表面的防滑能力, 利用无色无味水溶性的复合有机硅与主要成分是硅酸盐的花岗岩磨光表面反应, 使花岗岩的表面润湿性、抗冻融性、表面电性质、微观形貌发生变化的同时, 其磨光表面的摩擦力也随之变化。

关键词 [复合有机硅](#); [表面性质](#); [电负性](#); [摩擦系数](#)

分类号

Relationship of change in friction and chemical reactions of polished granite surface

Abstract

The polished surfaces of granite would become slipper in contact with water. The reaction between a colorless, odorless, water-soluble composite organic-silicon compound and the polished surface of granite would improve the anti-skid property and increase friction without changing the polished surface of granite. Because of its low surface tension and surface energy, various waterproof agents can be made from the composite organic-silicon compound. Composite organic-silicon waterproof agents can form a waterproof film by reacting with the granite surface. With the change of granite surface property such as wetting, counter freezing, electrical property and micro-appearance, the friction force of granite surface also changed.

Key words [composite organic-silicon](#); [properties of granite surface](#); [electrical property](#); [friction factor](#)

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