## The 12 Foundation Stones in New Jerusalem

https://www.christianevidence.net/2018/09/the-12-foundation-stones-in-new.html
"The wall of the city was built on foundation stones inlaid with twelve precious stones the first was jasper, the second sapphire, the third agate, the fourth emerald, the fifth onyx, the sixth carnelian, the seventh chrysolite, the eighth beryl, the ninth topaz, the tenth chrysoprase, the eleventh jacinth, the twelfth amethyst." (Revelation 21:19)

## Anisotropic vs. Isotropic Gems

In the past century, scientists have discovered that gems can be classified as either anisotropic or isotropic. Only recently have they discovered cross-polarized light, which can be used to identify whether a gem is anisotropic or isotropic. Anisotropic stones produce a colorful array when viewed in crossed-polarized light (similar to "pure" light), reflecting all the colors of the rainbow, whereas isotropic stones lose all of their color and appear black.

## Anisotropic Gems in Revelation 21

An intriguing observation regarding Revelation chapter 21 is that all 12 of the gems mentioned for adorning the New Jerusalem are anisotropic gems, i.e., gems that can show colorful patterns under pure light... These gemstones show beautiful colours under cross-polarized light.


Chalcedony


Emerald


Chrysolyte (Peridot)

(Zircon)

Interestingly, diamond, rubies, and garnets are not mentioned, despite the fact that these groups of gems are very, very common. For instance, the precious stones are generally considered to be diamond, ruby, sapphire, and emerald, with all other gemstones being semiprecious. It turns out that they are isotropic, and when pure light passes through them, there is no beauty at all...we only see black, brown or grey.


Diamond


Spinal


Pyrope Alamandine

## What Are the Odds?

Of the 28 stones that are normally regarded as gemstones, only 16 are anisotropic. Considering that anisotropic behavior was discovered only in the last century, and John wrote Revelation almost 2,000 years ago, the odds of randomly selecting 12 stones from this group are approximately 1 in 16,715!

In fact, this analysis assumes that all gems have an equal chance of being included, which is not the case as some are more precious than others. Therefore, the actual probability of naming all 12 anisotropic gems in the book of Revelation is much lower than 1 in 16,715.

## Conclusion

It is important to keep in mind that some assumptions are being made, such as the stones being a literal representation of heaven (which I believe they are) and the light in heaven being similar to "pure" light that passes through the gems.

Nevertheless, could it be that God intentionally chose stones that disperse light and produce stunning rainbow effects, while avoiding those that would lose their color, when selecting the foundation stones for the new temple?
"...and there was a rainbow round about the throne, in sight like unto an emerald." (Rev. 4:3)

