## The real issues with rare earths

To the Editor — The editorial in the January 2011 issue of *Nature Photonics* on the topic of rare-earth elements is an excellent summary of the state of affairs as they have been reported. However, what is missed in much of the coverage is that the Molycorp mine in California, USA, is of questionable long-term commercial value because the cost of extraction is so much more than mining Chinese deposits. Furthermore, there has been plenty of global effort to locate sources as readily recoverable as the deposits in China, but to no avail. Those saying it is simply a timing issue to develop the mining operations are wrong. Unless a presently unknown deposit is found, which is highly unlikely, China has an absolute monopoly on commercially viable lanthanide production. The real issues involve global trade rules and politics/ foreign policy. There is no doubt that China intends to use its rare-earth elements to both give its manufacturers a cost advantage and encourage non-Chinese companies to build their production facilities in China.

## Michael N. Silver

CEO, American Elements, 1093 Broxton Ave. Suite 2000, Los Angeles, California 90024, USA. e-mail: info@americanelements.com