**From:** Maxwell Jingo [mailto:mjingo@gmail.com]   
**Sent:** Monday, 23 April 2018 2:40 PM  
**To:** John Carter  
**Subject:** Re: Virtual gamma production - Bertulani eikonal average over angle - 10 keV step

Dear Prof

Thank you for the functions. I will do as suggested in your earlier email. Attached herewith are corresponding (p,p') absolute cross-sections after background subtraction.

Kind regards,

Max

On Sat, Apr 21, 2018 at 9:47 PM, John Carter <[John.Carter@wits.ac.za](mailto:John.Carter@wits.ac.za)> wrote:

Hi Max,

In the meantime, here are all of the virtual gamma production functions. As an independent check, could you send all of the corresponding (p,p’) absolute cross-sections after background subtraction. Thanks!

Best wishes, John.

**From:** John Carter   
**Sent:** Saturday, 21 April 2018 5:00 PM  
**To:** 'Maxwell Jingo'  
**Subject:** RE: 208Pb Virtual gamma production - Bertulani eikonal average over angle - 10 keV step  
**Importance:** High

Hi Max,

I re-did Lindsay’s analysis for 144Nd and got the same result as she did as in her thesis for 144Nd.

Then modified Bertulani code for 10 keV steps and recalculated for 208Pb, giving gamma yield about 50% lower than 144Nd. Attached are the results for 208Pb, first column E\_x and second angle-averaged eikonal gamma yield.

Need to divide gamma yield into background subtracted 208Pb(p,p’) and multiply by E\_x then normalise to (gamma,ABS).

Could you send to me your background subtracted 208Pb(p,p’) absolute cross-section for an independent check, please?

When 208Pb looks consistent with 144Nd will calculate gamma yield for all of the other nuclei in your thesis.

Would you also check that the CWT scales for 208Pb remain the same.

Let’s do this as quickly as possible.

Best wishes, John.