

Gain With Vcsel Pulses to find gain up to max. used.

SNW-Sept,6 2013



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In[68]:= SetDirectory["~seb/Desktop/gainave"];
        Namelist = FileNames[]
        Namelist // Length;
        nfiles = %

Out[69]:= {.DS_Store, gain1.csv, gain2.csv, gain3.csv, gain4.csv, gain5.csv}

Out[71]:= 6

In[72]:= scopedata = Import["gain1.csv", "csv"];
        v11 = Table[Take[scopedata, {1, 502}][[i, 1]], {i, 502}];
        v21 = Table[Take[scopedata, {503, 1004}][[i, 1]], {i, 502}];

In[75]:= scopedata = Import["gain2.csv", "csv"];
        v12 = Table[Take[scopedata, {1, 502}][[i, 1]], {i, 502}];
        v22 = Table[Take[scopedata, {503, 1004}][[i, 1]], {i, 502}];

In[78]:= scopedata = Import["gain3.csv", "csv"];
        v13 = Table[Take[scopedata, {1, 502}][[i, 1]], {i, 502}];
        v23 = Table[Take[scopedata, {503, 1004}][[i, 1]], {i, 502}];

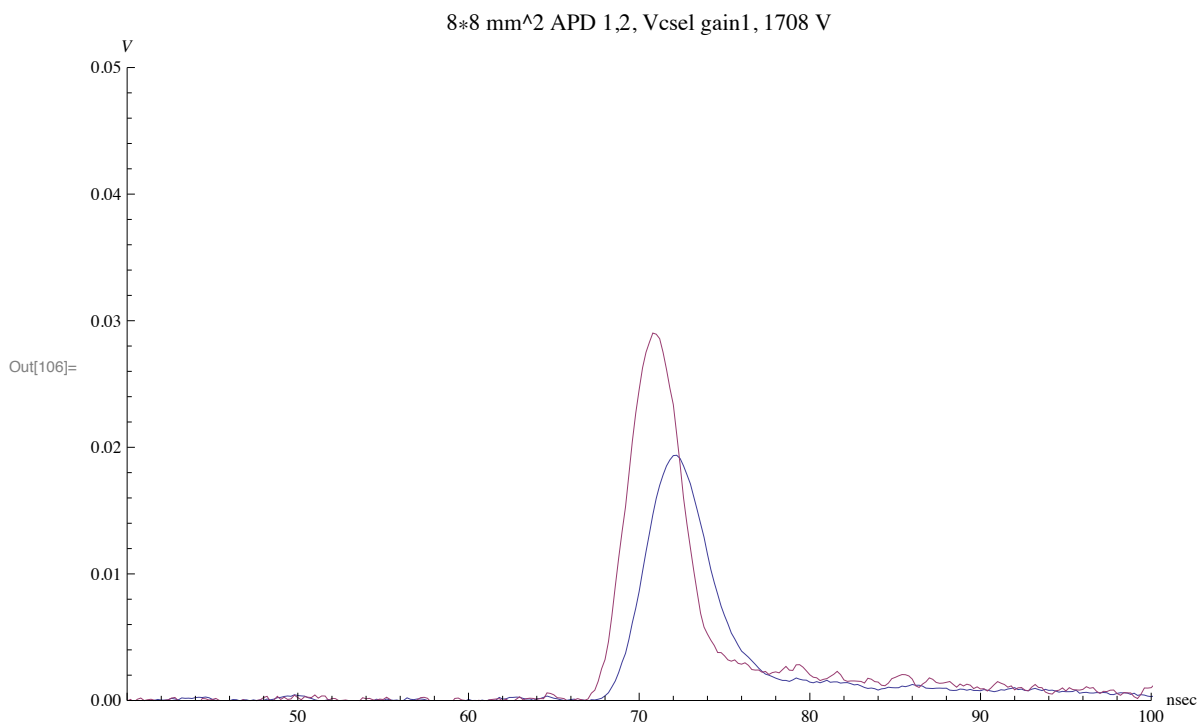
In[81]:= scopedata = Import["gain4.csv", "csv"];
        v14 = Table[Take[scopedata, {1, 502}][[i, 1]], {i, 502}];
        v24 = Table[Take[scopedata, {503, 1004}][[i, 1]], {i, 502}];

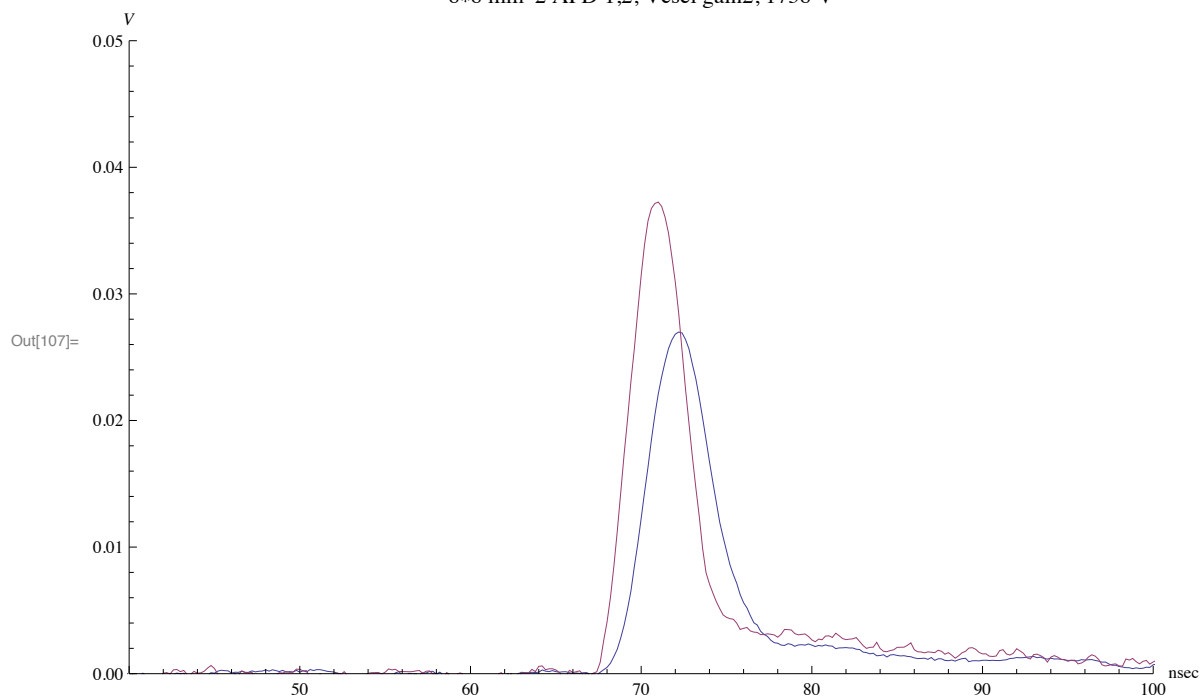
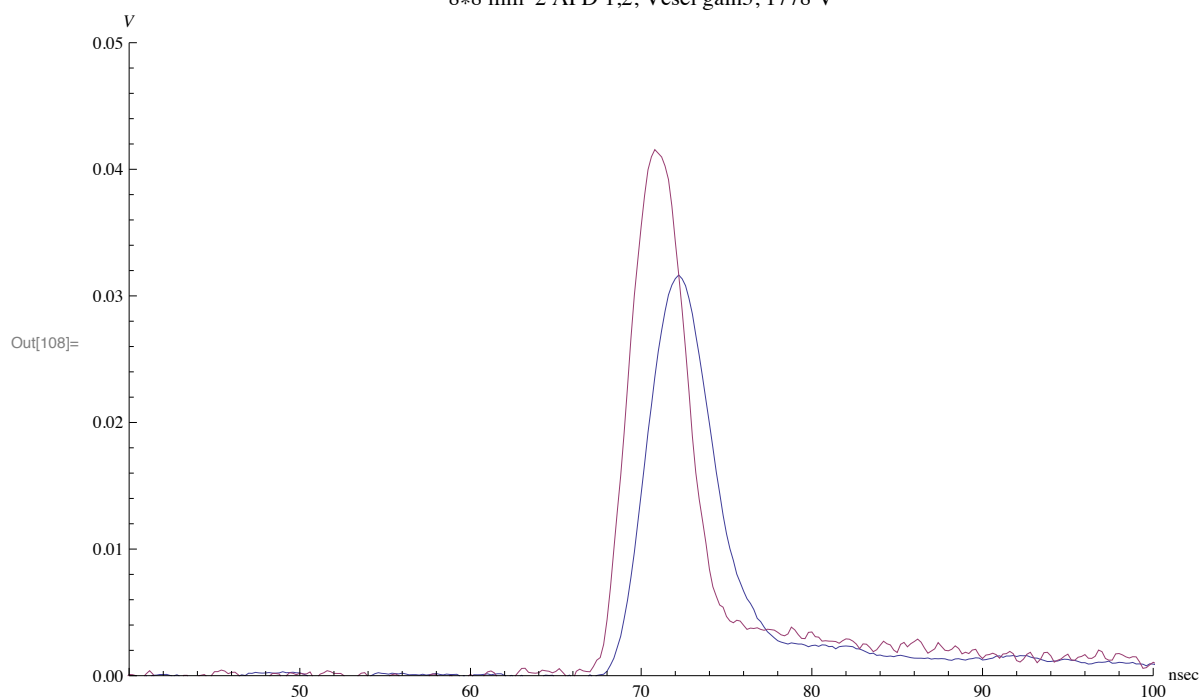
In[84]:= scopedata = Import["gain5.csv", "csv"];
        v15 = Table[Take[scopedata, {1, 502}][[i, 1]], {i, 502}];
        v25 = Table[Take[scopedata, {503, 1004}][[i, 1]], {i, 502}];
```

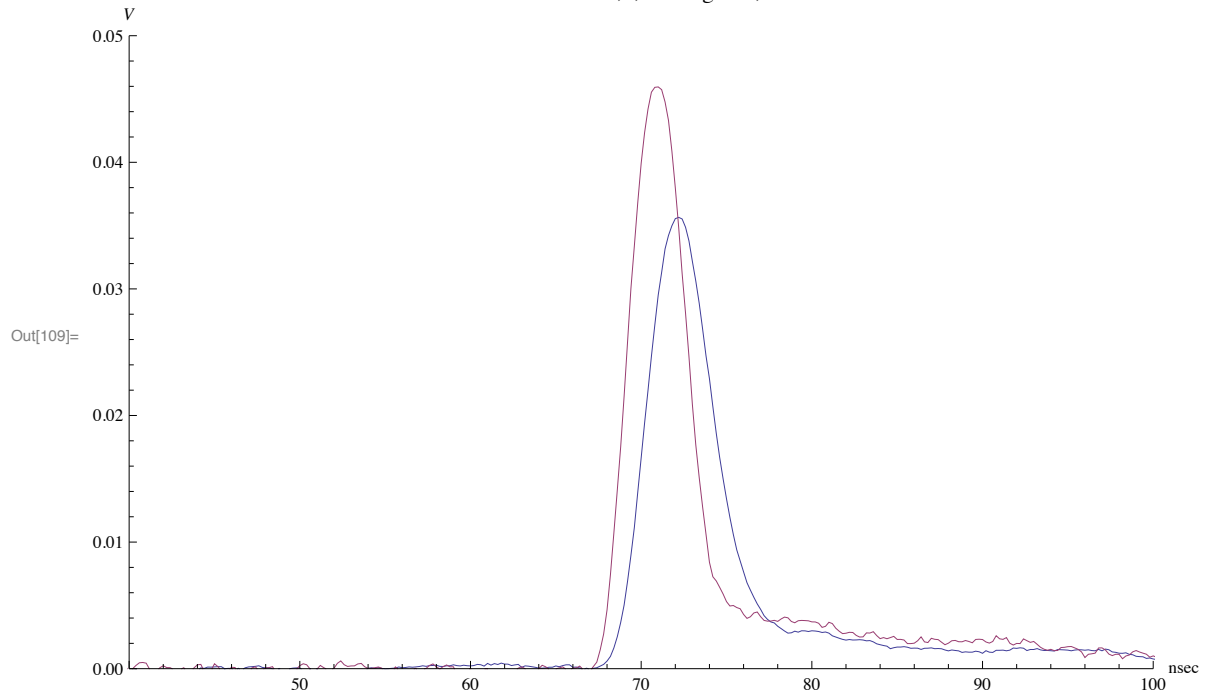
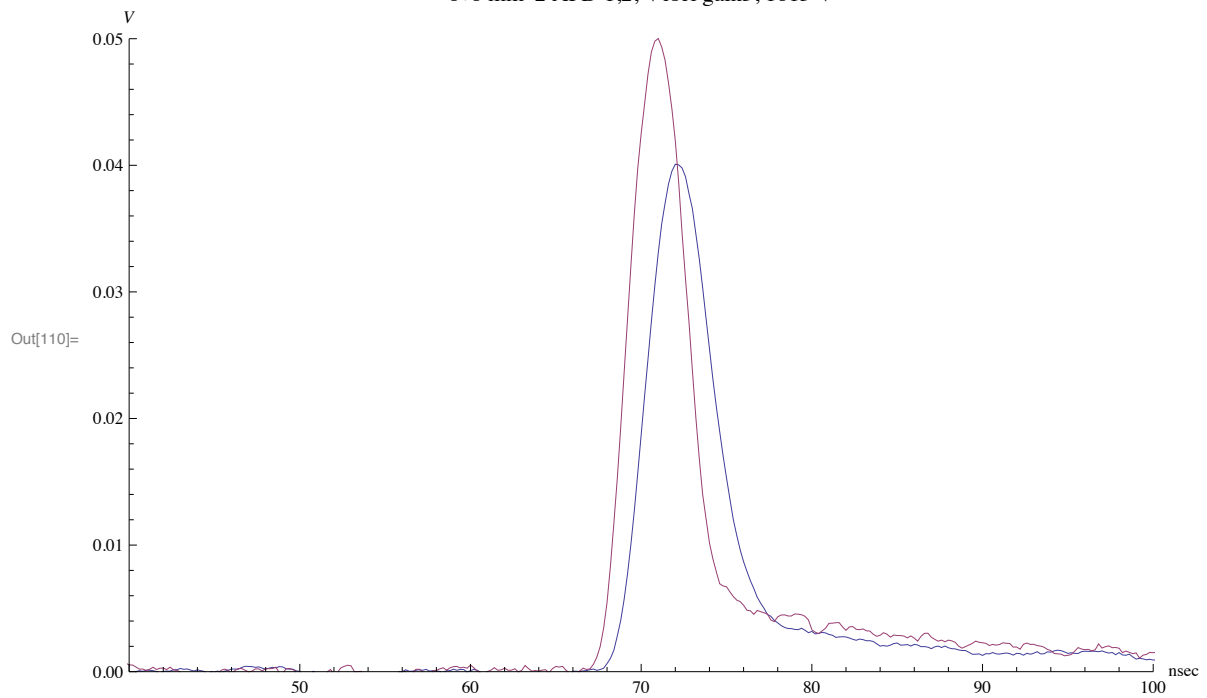
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In[105]:= time = Table[(i - 1) * .2, {i, 502}];
ListPlot[{Transpose[{time, v11}], Transpose[{time, v21}]}],
  Joined → True, AxesLabel → {nsec, V}, PlotRange → {{40, 100}, {0, .05}},
  PlotLabel → "8*8 mm^2 APD 1,2, Vcsl gain1, 1708 V", ImageSize → Large]
ListPlot[{Transpose[{time, v12}], Transpose[{time, v22}]}],
  Joined → True, AxesLabel → {nsec, V}, PlotRange → {{40, 100}, {0, .05}},
  PlotLabel → "8*8 mm^2 APD 1,2, Vcsl gain2, 1758 V", ImageSize → Large]
ListPlot[{Transpose[{time, v13}], Transpose[{time, v23}]}],
  Joined → True, AxesLabel → {nsec, V}, PlotRange → {{40, 100}, {0, .05}},
  PlotLabel → "8*8 mm^2 APD 1,2, Vcsl gain3, 1778 V", ImageSize → Large]
ListPlot[{Transpose[{time, v14}], Transpose[{time, v24}]}],
  Joined → True, AxesLabel → {nsec, V}, PlotRange → {{40, 100}, {0, .05}},
  PlotLabel → "8*8 mm^2 APD 1,2, Vcsl gain4, 1798 V", ImageSize → Large]
ListPlot[{Transpose[{time, v15}], Transpose[{time, v25}]}],
  Joined → True, AxesLabel → {nsec, V}, PlotRange → {{40, 100}, {0, .05}},
  PlotLabel → "8*8 mm^2 APD 1,2, Vcsl gain5, 1815 V", ImageSize → Large]

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8*8 mm² APD 1,2, Vcsel gain2, 1758 V8*8 mm² APD 1,2, Vcsel gain3, 1778 V

8*8 mm² APD 1,2, Vcsel gain4, 1798 V8*8 mm² APD 1,2, Vcsel gain5, 1815 V

End of Notebook so far