

```
1 <html>
2   <head>
3     <meta content="text/html; charset=windows-1252" http-equiv="content-type">
4     <title>Carlos Oscar S. Sorzano</title>
5     <!--[if gte mso 9]><xml>
6     <o:DocumentProperties> <o:Author>COSS</o:Author> <o:Template>Normal</o:Template>
7     <o:LastAuthor>.</o:LastAuthor> <o:Revision>4</o:Revision>
8     <o:TotalTime>5</o:TotalTime> <o:Created>2006-10-30T22:50:00Z</o:Created>
9     <o:LastSaved>2007-06-11T13:01:00Z</o:LastSaved> <o:Pages>1</o:Pages>
10    <o:Words>3214</o:Words> <o:Characters>17682</o:Characters>
11    <o:Company>CEU</o:Company> <o:Lines>147</o:Lines> <o:Paragraphs>41</o:Paragraphs>
12    <o:CharactersWithSpaces>20855</o:CharactersWithSpaces> <o:Version>11.5606</o:Version>
13  </o:DocumentProperties></xml><![endif]--><!--[if gte mso 9]><xml>
14  </xml><![endif]--><!--[if gte mso 9]><xml>
15  <w:LatentStyles DefLockedState="false" LatentStyleCount="156">
16  </w:LatentStyles></xml><![endif]-->
17    <link rel="Stylesheet" type="text/css" media="all" href="estilos.css">
18    <style>
19  <!--
20  /* Font Definitions */
21  @font-face
22    {font-family:Georgia;
23    panose-1:2 4 5 2 5 4 5 2 3 3;
24    mso-font-charset:0;
25    mso-generic-font-family:roman;
26    mso-font-pitch:variable;
27    mso-font-signature:647 0 0 0 159 0;}
28  @font-face
29    {font-family:Verdana;
30    panose-1:2 11 6 4 3 5 4 4 2 4;
31    mso-font-charset:0;
32    mso-generic-font-family:swiss;
33    mso-font-pitch:variable;
34    mso-font-signature:536871559 0 0 0 415 0;}
35  /* Style Definitions */
36  p.MsoNormal, li.MsoNormal, div.MsoNormal
37    {mso-style-parent:"";
38    margin:0pt;
39    margin-bottom:.0001pt;
40    mso-pagination:widow-orphan;
41    font-size:12.0pt;
42    font-family:"Times New Roman";
43    mso-fareast-font-family:"Times New Roman";}
44  a:link, span.MsoHyperlink
45    {color:blue;
46    text-decoration:underline;
47    text-underline:single;}
48  a:visited, span.MsoHyperlinkFollowed
49    {color:blue;
50    text-decoration:underline;
51    text-underline:single;}
52  p
53    {font-size:12.0pt;
54    font-family:"Times New Roman";
55    mso-fareast-font-family:"Times New Roman";}
56  p.text, li.text, div.text
57    {mso-style-name:text;
58    mso-margin-top-alt:auto;
59    margin-right:0pt;
60    mso-margin-bottom-alt:auto;
61    margin-left:0pt;
62    mso-pagination:widow-orphan;
63    font-size:12.0pt;
64    mso-fareast-font-family:"Times New Roman";
65    mso-bidi-font-family:"Times New Roman";}
66  p.textwhite, li.textwhite, div.textwhite
67    {mso-style-name:text_white;
```

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60     font-size:12.0pt;
61     font-family:Georgia;
62     mso-fareast-font-family:"Times New Roman";
63     mso-bidi-font-family:"Times New Roman";}
64 p.link, li.link, div.link
65     {mso-style-name:link;
66     mso-margin-top-alt:auto;
67     margin-right:0pt;
68     mso-margin-bottom-alt:auto;
69     margin-left:0pt;
70     mso-pagination:widow-orphan;
71     font-size:13.0pt;
72     mso-fareast-font-family:"Times New Roman";
73     mso-bidi-font-family:"Times New Roman";
74     font-weight:bold;}
75 p.header, li.header, div.header
76     {mso-style-name:header;
77     mso-margin-top-alt:auto;
78     margin-right:0pt;
79     mso-margin-bottom-alt:auto;
80     margin-left:0pt;
81     text-align:center;
82     mso-pagination:widow-orphan;
83     font-size:7.0pt;
84     mso-fareast-font-family:"Times New Roman";
85     mso-bidi-font-family:"Times New Roman";}
86 p.celda, li.celda, div.celda
87     {mso-style-name:celda;
88     mso-margin-top-alt:auto;
89     margin-right:0pt;
90     mso-margin-bottom-alt:auto;
91     margin-left:0pt;
92     mso-pagination:widow-orphan;
93     border:none;
94     mso-border-alt:solid #CCCCCC .75pt;
95     padding:0pt;
96     mso-padding-alt:0pt 0pt 0pt 0pt;
97     font-size:12.0pt;
98     font-family:"Times New Roman";
99     mso-fareast-font-family:"Times New Roman";}
100 @page Section1
101     {size:612.0pt 792.0pt;
102     margin:72.0pt 90.0pt 72.0pt 90.0pt;
103     mso-header-margin:36.0pt;
104     mso-footer-margin:36.0pt;
105     mso-paper-source:0;}
106 div.Section1
107     {page:Section1;}
108 /* List Definitions */
109 @list l0
110     {mso-list-id:90779000;
111     mso-list-template-ids:610558076;}
112 @list l0:level1
113     {mso-level-tab-stop:36.0pt;
114     mso-level-number-position:left;
115     text-indent:-18.0pt;}
116 @list l0:level2
117     {mso-level-tab-stop:72.0pt;
118     mso-level-number-position:left;
119     text-indent:-18.0pt;}
120 @list l0:level3
121     {mso-level-tab-stop:108.0pt;
122     mso-level-number-position:left;
123     text-indent:-18.0pt;}
124 @list l0:level4
125     {mso-level-tab-stop:144.0pt;
126     mso-level-number-position:left;

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127     text-indent:-18.0pt;}
128 @list 10:level5
129     {mso-level-tab-stop:180.0pt;
130     mso-level-number-position:left;
131     text-indent:-18.0pt;}
132 @list 10:level6
133     {mso-level-tab-stop:216.0pt;
134     mso-level-number-position:left;
135     text-indent:-18.0pt;}
136 @list 10:level7
137     {mso-level-tab-stop:252.0pt;
138     mso-level-number-position:left;
139     text-indent:-18.0pt;}
140 @list 10:level8
141     {mso-level-tab-stop:288.0pt;
142     mso-level-number-position:left;
143     text-indent:-18.0pt;}
144 @list 10:level9
145     {mso-level-tab-stop:324.0pt;
146     mso-level-number-position:left;
147     text-indent:-18.0pt;}
148 @list 11
149     {mso-list-id:250160599;
150     mso-list-template-ids:1747855000;}
151 @list 11:level1
152     {mso-level-tab-stop:36.0pt;
153     mso-level-number-position:left;
154     text-indent:-18.0pt;}
155 @list 11:level2
156     {mso-level-tab-stop:72.0pt;
157     mso-level-number-position:left;
158     text-indent:-18.0pt;}
159 @list 11:level3
160     {mso-level-tab-stop:108.0pt;
161     mso-level-number-position:left;
162     text-indent:-18.0pt;}
163 @list 11:level4
164     {mso-level-tab-stop:144.0pt;
165     mso-level-number-position:left;
166     text-indent:-18.0pt;}
167 @list 11:level5
168     {mso-level-tab-stop:180.0pt;
169     mso-level-number-position:left;
170     text-indent:-18.0pt;}
171 @list 11:level6
172     {mso-level-tab-stop:216.0pt;
173     mso-level-number-position:left;
174     text-indent:-18.0pt;}
175 @list 11:level7
176     {mso-level-tab-stop:252.0pt;
177     mso-level-number-position:left;
178     text-indent:-18.0pt;}
179 @list 11:level8
180     {mso-level-tab-stop:288.0pt;
181     mso-level-number-position:left;
182     text-indent:-18.0pt;}
183 @list 11:level9
184     {mso-level-tab-stop:324.0pt;
185     mso-level-number-position:left;
186     text-indent:-18.0pt;}
187 @list 12
188     {mso-list-id:623273755;
189     mso-list-template-ids:750018192;}
190 @list 13
191     {mso-list-id:1205679643;
192     mso-list-template-ids:750018192;}
193 @list 14
```

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194     {mso-list-id:1507937275;
195     mso-list-template-ids:750018192;}
196 @list 15
197     {mso-list-id:1869567463;
198     mso-list-template-ids:-1435882072;}
199 @list 15:level1
200     {mso-level-tab-stop:36.0pt;
201     mso-level-number-position:left;
202     text-indent:-18.0pt;}
203 @list 15:level2
204     {mso-level-tab-stop:72.0pt;
205     mso-level-number-position:left;
206     text-indent:-18.0pt;}
207 @list 15:level3
208     {mso-level-tab-stop:108.0pt;
209     mso-level-number-position:left;
210     text-indent:-18.0pt;}
211 @list 15:level4
212     {mso-level-tab-stop:144.0pt;
213     mso-level-number-position:left;
214     text-indent:-18.0pt;}
215 @list 15:level5
216     {mso-level-tab-stop:180.0pt;
217     mso-level-number-position:left;
218     text-indent:-18.0pt;}
219 @list 15:level6
220     {mso-level-tab-stop:216.0pt;
221     mso-level-number-position:left;
222     text-indent:-18.0pt;}
223 @list 15:level7
224     {mso-level-tab-stop:252.0pt;
225     mso-level-number-position:left;
226     text-indent:-18.0pt;}
227 @list 15:level8
228     {mso-level-tab-stop:288.0pt;
229     mso-level-number-position:left;
230     text-indent:-18.0pt;}
231 @list 15:level9
232     {mso-level-tab-stop:324.0pt;
233     mso-level-number-position:left;
234     text-indent:-18.0pt;}
235 @list 16
236     {mso-list-id:1952197811;
237     mso-list-template-ids:750018192;}
238 ol
239     {margin-bottom:0pt;}
240 ul
241     {margin-bottom:0pt;}
242 -->
243 </style><!--[if gte mso 10]>
244 <style> /* Style Definitions */ table.MsoNormalTable {mso-style-name:"Tabla normal";
mso-tstyle-rowband-size:0; mso-tstyle-colband-size:0; mso-style-noshow:yes;
mso-style-parent:""; mso-padding-alt:0pt 5.4pt 0pt 5.4pt; mso-para-margin:0pt;
mso-para-margin-bottom:.0001pt; mso-pagination:widow-orphan; font-size:10.0pt;
font-family:"Times New Roman"; mso-ansi-language:#0400; mso-fareast-language:#0400;
mso-bidi-language:#0400;}table.TableNormal {mso-style-name:"Table Normal";
mso-tstyle-rowband-size:0; mso-tstyle-colband-size:0; mso-style-noshow:yes;
mso-style-parent:""; mso-padding-alt:0pt 5.4pt 0pt 5.4pt; mso-para-margin:0pt;
mso-para-margin-bottom:.0001pt; mso-pagination:widow-orphan; font-size:10.0pt;
font-family:"Times New Roman"; mso-ansi-language:#0400; mso-fareast-language:#0400;
mso-bidi-language:#0400;}</style><![endif]-->
245     <meta http-equiv="Content-Language" content="es">
246     <!--[if gte mso 9]><xml>
247     <o:shapelayout v:ext="edit"> <o:idmap v:ext="edit" data="1"/>
248     </head>
249     <body style="
                tab-interval:36.0pt" lang="ES" link="blue" vlink="blue">

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250 <div class="Section1">
251 <table class="TableNormal" style="mso-cellspacing:
252 Opt;mso-padding-alt:Opt Opt Opt Opt" border="0" cellpadding="0" cellspacing="0">
253 <tbody>
254 <tr style="mso-yfti-irow:0;mso-yfti-firstrow:yes;mso-yfti-lastrow:yes">
255 <td style="width:10.0%;padding:0pt Opt Opt Opt" width="10%">
256 <p class="MsoNormal"><span style="font-family:Georgia;color:#515151">
257 &nbsp;</span></p></td>
258 <td style="padding:0pt Opt Opt Opt Opt">
259 <table class="TableNormal" style="mso-cellspacing:0pt;mso-padding-alt:0pt
260 Opt Opt Opt"
261 border="0" cellpadding="0" cellspacing="0">
262 <tbody>
263 <tr style="mso-yfti-irow:0;mso-yfti-firstrow:yes">
264 <td colspan="4" style="padding:0pt Opt Opt Opt Opt">
265 <table class="TableNormal" style=
266 "mso-cellspacing:4.5pt;mso-padding-alt:0pt Opt Opt Opt"
267 border="0" cellpadding="0" cellspacing="6">
268 <tbody>
269 <tr style=
270 "mso-yfti-irow:0;mso-yfti-firstrow:yes;mso-yfti-lastrow:yes">
271 <td style="padding:0pt Opt Opt Opt Opt">
272 <p class="MsoNormal"><img id="_x0000_i1025" src=
273 "cabecera_1.jpg"
274 height="80" width="760"></p>
275 </td>
276 </tr>
277 </tbody>
278 </table>
279 <p class="MsoNormal"><span style=
280 "font-family:Georgia;color:#515151"></span></p>
281 </td>
282 </tr>
283 <tr>
284 <td style="padding:0pt Opt Opt Opt Opt" valign="top">
285 <table class="TableNormal" style=
286 "mso-cellspacing:4.5pt;mso-padding-alt:0pt Opt Opt Opt Opt"
287 border="0" cellpadding="0" cellspacing="6">
288 <tbody>
289 <tr style="mso-yfti-irow:0;mso-yfti-firstrow:yes">
290 <td style="width:112.5pt;padding:0pt Opt Opt Opt Opt" width=
291 "150">
292 <p class="MsoNormal"><a href="index.htm"><span style=
293 "text-decoration:none;
294 text-decoration:none"></span></a></p>
297 </td>
298 </tr>
299 <tr style="mso-yfti-irow:1">
300 <td style="width:112.5pt;padding:0pt Opt Opt Opt Opt" width=
301 "150">
302 <p class="MsoNormal"><a href="academics.htm"><span
303 style="text-decoration:
304 none;text-decoration:none"></span></a></p>
306 </td>
307 </tr>
308 </tbody>
309 </table>
310 </td>
311 </tr>
312 </tbody>
313 </table>
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306         <td style="width:112.5pt;padding:0pt 0pt 0pt 0pt" width=
307         "150">
308         <p class="MsoNormal"><a href="work.htm"><span style=
309         "text-decoration:none;
310         text-decoration:none"></span></a></p>
312     </td>
313 </tr>
314 <tr style="mso-yfti-irow:3">
315     <td style="width:112.5pt;padding:0pt 0pt 0pt 0pt" width=
316     "150">
317     <p class="MsoNormal"><a href="publications.htm"><span
318     style="text-decoration:
319     none;text-decoration:none"></span></a></p>
321 </td>
322 </tr>
323 <tr style="mso-yfti-irow:4">
324     <td style="width:112.5pt;padding:0pt 0pt 0pt 0pt" width=
325     "150">
326     <p class="MsoNormal"><a href="participated_projects.htm"
327     ><span
328     style="text-decoration:none;text-decoration:none"></span></a></p>
331 </td>
332 </tr>
333 <tr style="mso-yfti-irow:5">
334     <td style="width:112.5pt;padding:0pt 0pt 0pt 0pt" width=
335     "150">
336     <p class="MsoNormal"><a href="supervised_works.htm"><span
337     style="text-decoration:
338     none;text-decoration:none"></span></a></p>
340 </td>
341 </tr>
342 <tr style="mso-yfti-irow:6">
343     <td style="width:112.5pt;padding:0pt 0pt 0pt 0pt" width=
344     "150">
345     <p class="MsoNormal"><a href="teaching.htm"><span
346     style="text-decoration:
347     none;text-decoration:none"></span></a></p>
349 </td>
350 </tr>
351 <tr style="mso-yfti-irow:7">
352     <td style="width:112.5pt;padding:0pt 0pt 0pt 0pt" width=
353     "150">
354     <p class="MsoNormal"><a href="professional_activities.htm"
355     ><span
356     style="text-decoration:none;text-decoration:none"></span></a></p>
359 </td>

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364 </tr>
365 <tr style="mso-yfti-irow:8">
366 <td style="width:112.5pt;padding:0pt 0pt 0pt 0pt" width=
"150">
367 <p class="MsoNormal"><a href="software.htm"><span
368 style="text-decoration:
369 none;text-underline:none"></span></a></p>
371
372 </td>
373 </tr>
374 <tr style="mso-yfti-irow:9;mso-yfti-lastrow:yes">
375 <td style="width:112.5pt;padding:0pt 0pt 0pt 0pt" width=
376 "150">
377 <p class="MsoNormal"><a href="personal.htm"><span
378 style="text-decoration:
379 none;text-underline:none"></span></a></p>
381
382 </td>
383 </tr>
384 </tbody>
385 </table>
386 <p class="MsoNormal"><span style=
387 "font-family:Georgia;color:#515151"><o:p></o:p></span></p>
388 <td style="background:#A3A3A3;padding:0pt 0pt 0pt 0pt">
389 <p class="MsoNormal"><span style=
390 "font-family:Georgia;color:#515151"><o:p>&nbsp;</o:p></span></p>
391 </td>
392 <td style="padding:0pt 0pt 0pt 0pt" valign="top">
393 <table class="TableNormal" border="0" cellpadding="0" cellspacing=
"6">
394 <tbody>
395 <tr style="mso-yfti-irow:0;mso-yfti-firstrow:yes">
396 <td style="padding:0pt 0pt 0pt 0pt">
397 <p class="MsoNormal"><span style=
398 "font-family:Georgia;color:#515151"><o:p></o:p>
401 </span></p>
402 </td>
403 </tr>
404 <tr style="mso-yfti-irow:1">
405 <td style="padding:0pt 0pt 0pt 0pt">
406 <ol start="1" type="1">
407 <li class="MsoNormal" style=
408 "color:#515151;mso-margin-top-alt:auto;
mso-margin-bottom-alt:auto;mso-list:l1 levell1 lfo3;tab-stops:list 36.0pt"
><strong><span
409 style="font-family:Georgia">C.O.S. Sorzano
410 </span></strong><span
411 style="font-family:Georgia">. <em><span style=
412 "font-family:Georgia"><a
413 href="Articulos/Sorzano1997.pdf">Analisis
414 Espectral de Peliculas Mamograficas
415 </a></span></em>.
416 Univ. Malaga (1997) <o:p></o:p></span></li>
417 <li class="MsoNormal" style=
"color:#515151;mso-margin-top-alt:auto;

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418 mso-margin-bottom-alt:auto;mso-list:l1 level1 lfo3;tab-stops:list 36.0pt"
419 ><span
420 style="font-family:Georgia">J.M.Carazo, <strong><span
421 style="font-family:Georgia">C.O.S.
422 Sorzano</span></strong>, E. Rietzel,
423 R.R. Schroder, R. Marabini. <em><span style="
424 font-family:
425 Georgia"><a href="Articulos/Carazo1999c.pdf"><span style="
426 mso-ansi-language:EN-GB"
427 lang="EN-GB">Discrete Tomography in
428 Electron Microscopy
429 </span></a></span></em></span><em><span
430 style="font-family:
431 Georgia;mso-ansi-language:EN-GB"> </span></em><span style="
432 font-family:Georgia;mso-ansi-language:EN-GB"
433 lang="EN-GB">. Discrete Tomography:
434 Foundations, Algorithms and Applications,
435 405-416. </span><span style="font-family:Georgia">Ed.
436 Birkhauser (1999). <o:p></o:p></span></li>
437 <li class="MsoNormal" style="
438 color:#515151;mso-margin-top-alt:auto;
439 mso-margin-bottom-alt:auto;mso-list:l1 level1 lfo3;tab-stops:list 36.0pt"
440 ><strong><span
441 style="font-family:Georgia">C.O.S. Sorzano
442 </span></strong><span
443 style="font-family:Georgia">. <em><span style="
444 font-family:Georgia"><a
445 href="Articulos/Sorzano2000.pdf">Generador
446 automatico de interfaces graficos de
447 usuario</a></span></em>. Univ. Malaga
448 (2000) <o:p></o:p></span></li>
449 <li class="MsoNormal" style="
450 color:#515151;mso-margin-top-alt:auto;
451 mso-margin-bottom-alt:auto;mso-list:l1 level1 lfo3;tab-stops:list 36.0pt"
452 ><strong><span
453 style="font-family:Georgia">C.O.S. Sorzano
454 </span></strong><span
455 style="font-family:Georgia">. <em><span style="
456 font-family:Georgia"><a
457 href="Articulos/Sorzano2002c.pdf">Algoritmos
458 iterativos de tomografia
459 tridimensional en microscopia
460 electronica de transmision </a></span></em>.
461 Univ. Politecnica de Madrid (2002) <o:p></o:p>
462 </span></li>
463 <li class="MsoNormal" style="
464 color:#515151;mso-margin-top-alt:auto;
465 mso-margin-bottom-alt:auto;mso-list:l1 level1 lfo3;tab-stops:list 36.0pt"
466 ><strong><span
467 style="font-family:Georgia">S. Jonic, P.
468 Thevenaz, <strong><span style="font-family:Georgia">
469 C.O.S.
470 Sorzano</span></strong>, M. Unser. <i><a
471 href="Articulos/Jonic2005b.pdf"><span style="

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468 "mso-ansi-language:EN-GB"
469     lang="EN-GB">Spline-based 3D-to-2D
470     image registration for image-guided
471     surgery and 3D electron microscopy
         </span></a></i></span><span
472
473     style="font-family:Georgia;mso-ansi-language:EN-GB"
474
475     lang="EN-GB">. Biophotonics for life
476     sciences and medicine. Eds. M. Faupel, P.
477     Smiegielski, A. Brandenburg, J. Fontaine.
         </span><span
478
479     style="font-family:Georgia">Fontis Media,
480     2005.<o:p></o:p></span></li>
481 <li class="MsoNormal" style=
482     "color:#515151;mso-margin-top-alt:auto;
mso-margin-bottom-alt:auto;mso-list:l1 levell lfo3;tab-stops:list 36.0pt"
><span
483
484     style="font-family:Georgia;mso-ansi-language:IT"
485
486     lang="IT">J.M. Carazo, G.T. Herman, <strong><span
487
488     style="font-family:Georgia">C.O.S.
489     Sorzano</span></strong>, R. Marabini.
         </span><i><span
490
491     style="font-family:Georgia;mso-ansi-language:EN-GB"
492
493     lang="EN-GB"> <a href="Articulos/Carazo2006.pdf">
494     Algorithms
495     for three-dimensional reconstruction
496     from imperfect projection data provided
497     by electron microscopy</a></span></i><span
498
499     style="font-family:Georgia;mso-ansi-language:EN-GB"
500
501     lang="EN-GB">. Electron Tomography: methods
502     for three-dimensional visualization of
503     structures in the cell. </span><span style=
504     "font-family:Georgia">Ed.
505     J. Frank. Springer, 2nd edition, 2006.</span></li>
506 <li class="MsoNormal" style=
507     "color:#515151;mso-margin-top-alt:auto;
mso-margin-bottom-alt:auto;mso-list:l1 levell lfo3;tab-stops:list 36.0pt">
508 <span style="font-family: Georgia">A. Otero
509     Quintana, <b>C.O.S. Sorzano</b>, R. Garcia
510     Garcia. <i>Aprenda a programar en C
511     mediante ejemplos</i>. Ed. Torculo, 2008.
512     </span></li>
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515 <span style="font-family: Georgia">S. Jonic, <b>C.O.S.
516     Sorzano</b>. <i> <a href="Articulos/Jonic2011.pdf"
517     >Splines
518     for bioimaging</a></i>. Optical and
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520     Applications. Eds. G. Cristobal, P.
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523     "Articulos/Jonic2011_original.pdf">
524     Original full chapter</a></span></li>
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522 **<font face="Georgia"><b>C.O.S. Sorzano</b>, J.**  
523 **M. de la Rosa Trevin, J. Oton, J. J. Vega,**  
524 **J. Cuenca, A. Zaldivar-Peraza, J.**  
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528 **high-throughput, high-resolution**  
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539 **<font face="Georgia">Z. Devaux, <b>C.O.S.**  
540 **Sorzano</b>, S. Jonic. <i><a href=**  
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542 **of Transmission Electron Microscopy**  
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546 **Biology (pp. 295\96310). Elsevier Inc. (2012)**  
547 **</font></li>**  
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553 **Sorzano</b>, R. Marabini, J. Vargas, J.**  
554 **Oton, J. Cuenca-Alba, A. Quintana, J.M. de**  
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556 **geometry information in electron**  
557 **microscopy single particle analysis:**  
558 **mathematical context for the development**  
559 **of a standard</i>. Computational Methods**  
560 **for Three-Dimensional Microscopy**  
561 **Reconstruction: 7-42 (2014)</font></span>**  
562 **(<a href="Articulos/Sorzano2013c.pdf">preprint</a>)**  
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568 **"Georgia">J.**  
569 **Oton, <b>C.O.S. Sorzano</b>, F.J.**  
570 **Chichon, J.L. Carrascosa, J.M. Carazo, R.**  
571 **Marabini. <i>Soft X-ray Tomography**  
572 **Imaging for Biological Samples</i>.**  
573 **Computational Methods for**  
574 **Three-Dimensional Microscopy**  
575 **Reconstruction: 187-220 (2014)</font></span>**  
576 **(<a href="Articulos/Oton2013.pdf">preprint</a></li>**  
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578 style="font-family: Georgia"></span></em>  
579 <a href="Articulos/Sorzano2014d.pdf">A  
580 signal processing approach to  
581 pharmacokinetics, pharmacodynamics and  
582 biopharmaceutics data analysis</a>. Univ.  
583 San Pablo CEU (2015) </span></li>  
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588 <i><a href="Articulos/Sorzano2015e.pdf">Panorama de  
investigacion en Ingenieria Biomedica 2015</a></i>  
(2015)</font></span>  
589 <a href=  
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593 <b>C.O.S. Sorzano</b>, S. Marco. <i><a href=  
"Articulos/Verguet2018.pdf">Alignment of tilt  
series</a></i>. Cellular Imaging: Electron  
Tomography and Related Techniques: 183–207 (2018)  
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"Articulos/Sorzano2018d.pdf">Statistical design  
for animal research</a></i>. (2018)  
598 </font></span></li>  
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Losada, R. Marabini, J.M. Carazo. <i><a href=  
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Cryo-Electron Microscopy of Single Particles: the  
power of combining methods</a></i>. Methods in  
Molecular Biology 2305: Structural Proteomics, 3rd  
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606 <i><a href="Articulos/Sorzano2020b.pdf">Panorama de  
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607 <a href=
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610 M. Parkinson, <span style="font-family: Georgia">
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611 <i>Why do we need a statistical experiment design?</i>
Experimental Design and Reproducibility in
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616 <i>Statistical tests and Sample size calculations</i>
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621 <i>Design of experiments</i> Experimental Design and
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J.M. Sánchez-Morgado, A. Bronstad (2021)</font></span>
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642 N.Boisset, E.Rietzel, R.Schroder,
643 G.T.Herman, J.M.Carazo. <em><span style="font-family:
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647         lang="EN-GB">The effect of
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654         of Structural Biology, 133 (2,3), 108-118
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666         line interfaces can be efficiently
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702 </span></strong>,  
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705 EN-GB" lang="EN-GB">Three-dimensional reconstruction by Chahine's  
706 method from electron microscopic  
707 projections corrupted by instrumental  
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714 Gomez-Lorenzo, M. Valle, J. Frank, C. Gruss,  
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716 C.O.S.Sorzano</span></strong>,  
717 X. S. Chen, L.E. Donate, J.M. Carazo. <a href=  
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722 simian virus 40 origin of replication:  
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731 <strong><span  
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733 </span></strong>,  
734 S. Matej, J.J. Fernandez, J.M. Carazo, G.T.  
735 Herman. <a href="Articulos/Marabini2002b.pdf"  
736 ><em><span  
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739 lang="EN-GB">3D reconstruction of 2D  
740 crystals</span></em></a></span><span style=  
741 "font-family:Georgia;mso-ansi-language:EN-GB"  
742 lang="EN-GB">. IEEE Trans. on Image  
743 Processing 13: 549-561 (2004) <o:p></o:p></span></li>  
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749 lang="IT">, R. Marabini, G.T. Herman, Y.  
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754 Censor, J.M. Carazo. [Censor, J.M. Carazo.](#)

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767 [&amp; Biology 49: 509-522 \(2004\)<o:p></o:p>](#)

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775 [Carazo, S. De Carlo, P. Thevenaz, M. Unser.](#)

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777 ["Articulos/Sorzano2003c.pdf">em>span](#)

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782 [approach to orientation assignment in](#)

783 [3-D electron microscopy of single](#)

784 [particles</span></em></a></span><span](#)

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787 [lang="EN-GB">. </span><span style=](#)

788 ["font-family:Georgia">Journal](#)

789 [of Structural Biology 146\(3\): 381-392 \(2004,](#)

790 [<a href="Articulos/cover2004.jpg">cover</a>](#)

791 [article\) <o:p></o:p></span></li>](#)

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796 [L.G.](#)

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798 [Fraga</st1:personname>, R. Clackdoyle,](#)

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814         </span></strong>,
815 <st1:place w:st="on">I.</st1:place> Garcia,
816 J.J. Fernandez. <a href="Articulos/Bilbao2004.pdf"
817 ><em><span
818         style=
819         "font-family:Georgia;mso-ansi-language:EN-GB"
820         lang="EN-GB">Phan3D: Design of
821         biological phantoms in 3D electron
822         microscopy</span></em></a></span><span
823         style="font-family:Georgia;mso-ansi-language:EN-GB"
824         lang="EN-GB">. Bioinformatics 20: 3286-3288
825         (2004) <o:p></o:p></span></li>
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828         style="font-family:Georgia;mso-ansi-language:EN-GB"
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830         style="font-family:Georgia;
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832         Velazquez-Muriel, J.R. Bilbao-Castro, S.H.W.
833         Scheres, J.M. Carazo, A. Pascual-Montano.
834         </span><span
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836         "Articulos/Sorzano2004d.pdf"><em><span
837         style="font-family:Georgia;mso-ansi-language:EN-GB"
838         lang="EN-GB">XMIPP: a new generation
839         of an open-source image processing
840         package for Electron Microscopy
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865  
866 `lang="EN-GB">. IEEE Trans. on Biomedical`  
867 `Engineering, 52: 652-663 (2005) <o:p></o:p>`  
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873 `"font-family:Georgia">C.O.S.Sorzano</span></strong>,`  
874 `P. Thevenaz, S. Jonic, C. El-Bez, S. De`  
875 `Carlo, J. Conway, B. L. Trus. </span><span`  
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882 `Ratio and resolution assessment of 3D`  
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2925 Sorzano</span></strong>, J.J. Fernandez,  
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2931 models and parameter adjustment to  
2932 estimate the CTF of the electron  
2933 microscope</span></em></span></a></span><span  
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2937 lang="EN-GB">. Proc. of the 15th  
2938 International Congress on Electron  
2939 Microscopy (2002), Vol. 3, 433-434. <o:p></o:p>  
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2946 L.E. Donate, C. Gruss, M. Barcena, <strong><span  
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2948 style="font-family:Georgia">C.O.S.  
2949 Sorzano</span></strong>, J. Frank, J.M.  
2950 Carazo. </span><em><span style="font-family:Georgia"  
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2955 origin of replication  
2956 </span></a></span></em></span>  
2957 style="font-family:  
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2959 International Congress on Electron  
2960 Microscopy (2002), Vol. 2. <o:p></o:p></span></li>  
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2971 constraints in 3D tomography applied  
2972 to electron microscopy  
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2984 O. S. Sorzano</span></strong>, J.J.  
2985 Fernandez, S. Matej, J.M. Carazo, G.T.  
2986 Herman. </span><em><span style="font-family:Georgia"  
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3035
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3037
3038                         style="mso-ansi-language:
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3050                 lang="IT">G.T.Herman, R. Marabini, <strong><span
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3057 "Articulos/Sorzano2003b.pdf"><span  
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3078 lang="EN-GB">Volumetric Spectral  
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3081 style="font-family:Georgia;mso-ansi-language:EN-GB"  
3082  
3083 lang="EN-GB">. Proc. of the 13th European  
3084 Microscopy Congress, Vol. </span><span style=  
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3085 427-428 (2004) <o:p></o:p></span></li>  
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3120         Sorzano</span></strong>. </span><i><span
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3123         "Articulos/Cagnadas2004.pdf">Framework
3124         for automatic generation of ontology
3125         mappings</a></span></i><span style=
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3127         Jornadas Iberoamericanas de Ingenieria del
3128         Software e Ingenieria del Conocimiento Vol
3129         I: 293-304 (2004) <o:p></o:p></span></li>
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3138         Sorzano</span></strong>, P. Thevenaz, M.
3139         Unser, N. Boisset. <a href="Articulos/Jonic2005.pdf"
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3142         style="mso-ansi-language:EN-GB" lang="EN-GB">
3143         Spline-Based
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3145         three-dimensional electron microscopy
3146         </span></i></a></span><span
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3148         style="font-family:Georgia;mso-ansi-language:EN-GB"
3149         lang="EN-GB">. Proc. of Imaging for medical
3150         and life sciences Symposium (Imvie2) Vol I:
3151         40-42 (2005) <o:p></o:p></span></li>
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3162         Sorzano</span></strong>, J.M. Carazo.
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3166         "Articulos/Scheres2005.pdf"><span
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3170 Sorzano</span></strong>, P.
3171 Carmona-Saez, J.M. Carazo, A.
3172 Pascual-Montano. <i> <a href=
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3173 discrete annotation schemes in the
3174 functional space through literature
3175 analysis</a></i>. Proc. of the 13th
3176 Annual Intl. Conference on Intelligent
3177 Systems in Molecular Biology (2005) <o:p></o:p>
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Maximum-likelihood
3192 refinement of electron microscopy
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3196 (2005) <o:p></o:p></span></li>
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3215 of the Intl. Conference on Biomedical
3216 Visualization, MediViz (2005) <o:p></o:p></span></li>
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3221 Sanchez-Alberca, R. Garcia-Garcia, <strong><span
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3224 Sorzano</span></strong>, C.
3225 Gutierrez-Cossio, M. Chagoyen, M.
3226 Fernandez-Lopez. <i><a href=
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3227
3228 style="mso-ansi-language:
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3230 of Ontology Mappings</span></a></i></span><span
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3234 Building and Applying Ontologies for the
3235 Sematic Web (BAOSW'05) &nbsp; (2005) <o:p></o:p>
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3245 Lopez. </span><i><span style="font-family:Georgia"><a
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3247 href="Articulos/Sorzano2004f.pdf">Note
3248 on "Wavelets, Gaussian mixtures and
3249 Wiener filtering"</a></span></i><span style=
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3253 de Ingenieria Biomedica, CASEIB2005, (2005)
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3260 Hernando Perez, <strong><span style=
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3261 Sorzano</span></strong>, E.J. Gomez
3262 Aguilera, F. del Pozo Guerrero. <i><a href=
"Articulos/Perez2005.pdf">Metodologia

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3263 de evaluacion de modelos de prediccion  
3264 de glucemia en pacientes diabeticos  
3265 basados en redes neuronales</a></i>.  
3266 Congreso Anual de <st1:personname productid="la  
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3274 M.J. Ledesma-Carbayo, J.A. Velazquez-Muriel,  
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3276 Sorzano, </span></strong>J.M. Carazo,  
3277 A. Santos. <i><a href="Articulos/Telenczuk2006.pdf"  
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3278  
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Molecular  
3280 image registration using mutual  
3281 information and differential evolution  
3282 optimization</span></a></i></span><span  
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3286 lang="EN-GB">. Proc. of the Third Intl.  
3287 Syposium on Biomedical Imaging, ISBI2006  
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3297 Sorzano</span></strong>, R. Marabini,  
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3299 Kybic. </span><i><span style="font-family:  
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3302 lang="EN-GB">Consistent and elastic  
3303 registration of histological sections  
3304 using vector-spline regularization  
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3305  
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3308 lang="EN-GB">. 2nd Intl. Workshop on  
3309 Computer Vision Approaches to Medical Image  
3310 Analysis, CVAMIA2006<o:p></o:p></span></li>  
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3320 Beloso, M. Unser. </span><i><span style=  
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3321 href="Articulos/Sorzano2006c.pdf"><span  
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3324 EN-GB" lang="EN-GB">Elastic image registration with applications to  
3325 Proteomics</span></a></span></i><span  
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3331 Information Optics: 300-309 (2006)<o:p></o:p>  
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3339 Sorzano</span></strong>, T. Boudier.  
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3342 "Articulos/Messaoudi2006.pdf"><span  
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3345 Evaluation  
3346 of multiple-axis tomography in Tomo-J,  
3347 a freeware plugin for the Java based  
3348 public software ImageJ  
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3382 style="mso-ansi-language:EN-GB" lang="EN-GB">  
Improvement  
3383 of visibility of diffraction rings for  
3384 classification of micrographs and  
3385 their local areas</span></a></span></i><span  
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3388 Georgia;mso-ansi-language:EN-GB" lang="EN-GB">. </span><span style=  
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3389 Georgia">Gordon Research Conference (2006)<o:p></o:p></span></li>  
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3402 visualisation et tri des  
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3430 Perez-Gandia, A. Otero. </span><i><span style=  
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3455 mso-ansi-language:EN-GB" lang="EN-GB"><a href=  
"Articulos/Cottevieille2007b.pdf">3D  
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improvement of robustness and accuracy
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kinase</a></span></i><span style=
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Conference (2007)</span><o:p></o:p></li>
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3851                   face="Georgia">A. Muniategui, I.  
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3881                   J.M. Delarosa-Trevin, J.R. Bilbao-Castro, R.  
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3893                   de la Rosa-Trevin, A. Zaldivar-Peraza, J.M.  
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3904             Sorzano</span>, J. Vargas, </font><font
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3906             face="Georgia"><font face="Georgia">J.M.
3907             de la Rosa-Trevin, A. Zaldivar-Peraza, </font>J.
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3943             face="Georgia"><font face="Georgia">C.
3944             Messaoudi, N. Aschman N, M. Cunha, T.
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3966 face="Georgia"><span style="font-weight: bold;">  
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3967 Sorzano</span>, J. Vargas, J. Oton, V.  
3968 Abrishami, J.M. de la Rosa-Trevin, S. del  
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3977 face="Georgia">Q. Jin, <span style="font-weight:  
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4009 face="Georgia">C. Messaoudi, N. Aschman, M.

4010 Cunha, T. Oikawa, <span style="font-weight: bold;">C.O.S.

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4074 face="Georgia"><span style="font-weight: bold;">  
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4164 face="Georgia">R. Sanchez-Garcia, J. Segura, D.  
Maluenda, <span style="font-weight: bold;">C.O.S.  
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4171 face="Georgia">J. Segura, R. Sanchez-Garcia, <span  
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4179 face="Georgia">M.Q. Marin, P. Perez, <span style=  
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4187 face="Georgia">P. Perez, M.Q. Marin, A.  
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C.O.S. Sorzano</span>, J.L. Vilas, P. Conesa, R.  
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</a>.</span> Congress of the European Biophysical  
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"font-weight: bold;">C.O.S. Sorzano</span>, J.M.  
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4220 <span style="font-style: italic;">3DBIONOTES: a set  
of analysis tools and integrated viewers to find  
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4222 face="Georgia">J.R. Macías, R. Sánchez García, P.  
4223 Conesa, E. Ramírez-Aportela, M. Martínez,  
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4243 face="Georgia"><span style="font-weight: bold;">  
4244 C.O.S. Sorzano</span>, J.M. Carazo.  
4245 <span style="font-style: italic;"><a href=  
4246 "Articulos/Sorzano2021b.pdf">Bias and variance in  
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4247 Frontiers in Cryo-Electron Microscopy (2021) <a href  
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4249 face="Georgia">D. Herreros, R.R Lederman, J.  
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4252 Krieger, A. Jiménez-Moreno, M.Martínez, D. Myska,  
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4258 face="Georgia">J. Krieger, Y. Zhang, K.  
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4265 D. Strelak, J. Filipovic, I. Bahar,  
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</span> Microscopy and microanalysis (2021)<br>  
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4270 face="Georgia">J. Jiménez, F. de Isidro, E.  
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4288 face="Georgia">J.R. Macias, R. Sanchez-Garcia, P.  
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C. Wert-Carvajal, A.M. Parra-Perez, J. Segura Mora,  
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4293 face="Georgia">A. Méndez-Pérez, C. Wert-Carvajal,  
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R. Alemany, <span style="font-weight: bold;">C.O.S.  
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C.O.S. Sorzano</span>, A. Jiménez-Moreno, E.  
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Conesa, Y.C. Fonseca, J. Jiménez-de la Morena, D.  
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4303 face="Georgia">A. Cuervo, P. Losana, J.J. Conesa,  
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4318 face="Georgia">M.A. Cuesta-Geijo, I. García  
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4322 face="Georgia">D. Herreros, R.R Lederman, J.  
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4329 L. del Caño,  
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4338 <li class="MsoNormal" style="color:#515151;mso-margin-top-alt:auto;mso-margin-bottom-alt:auto;mso-list:l0 level1 lfo9;tab-stops:list 36.0pt"><font face="Georgia">D. Herreros, J. Krieger, <span style="font-weight: bold;">C.O.S. Sorzano</span>, J.M. Carazo.

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