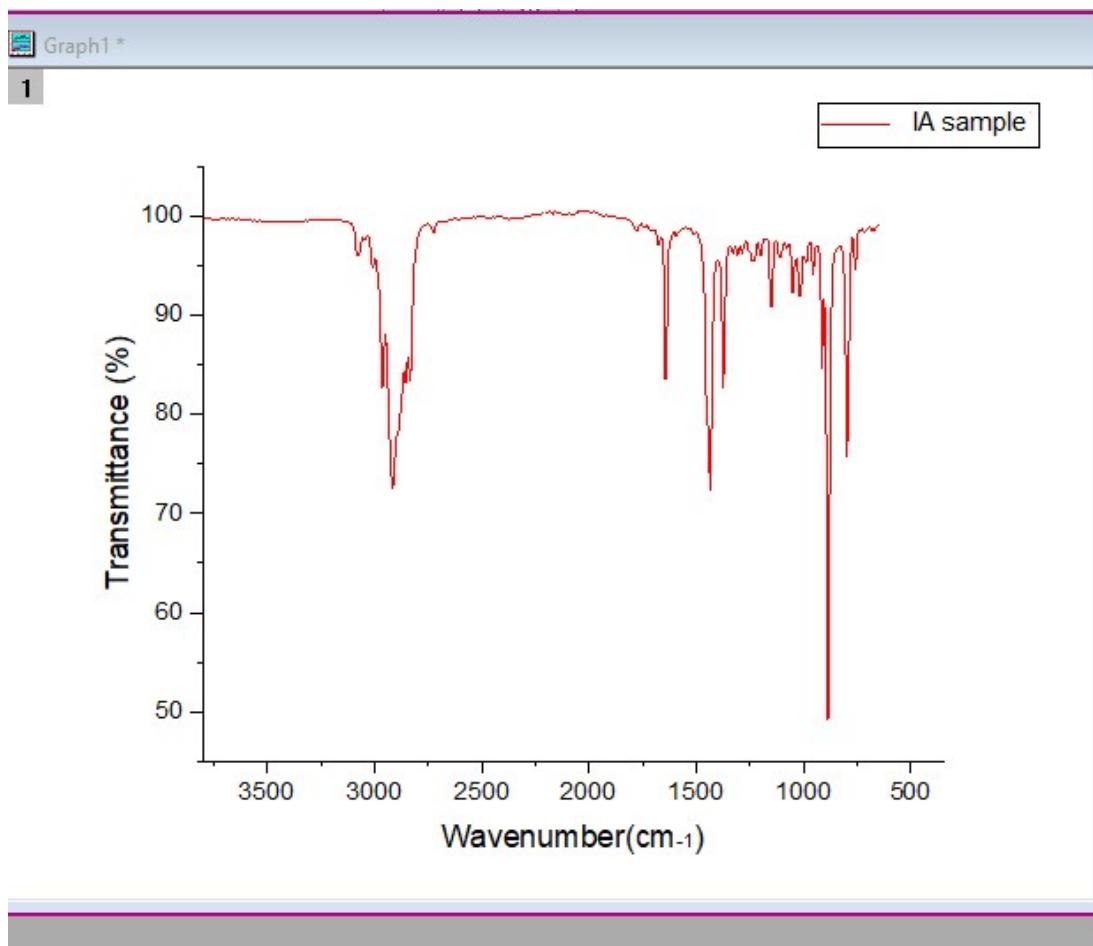


## **Supporting supplementary data**

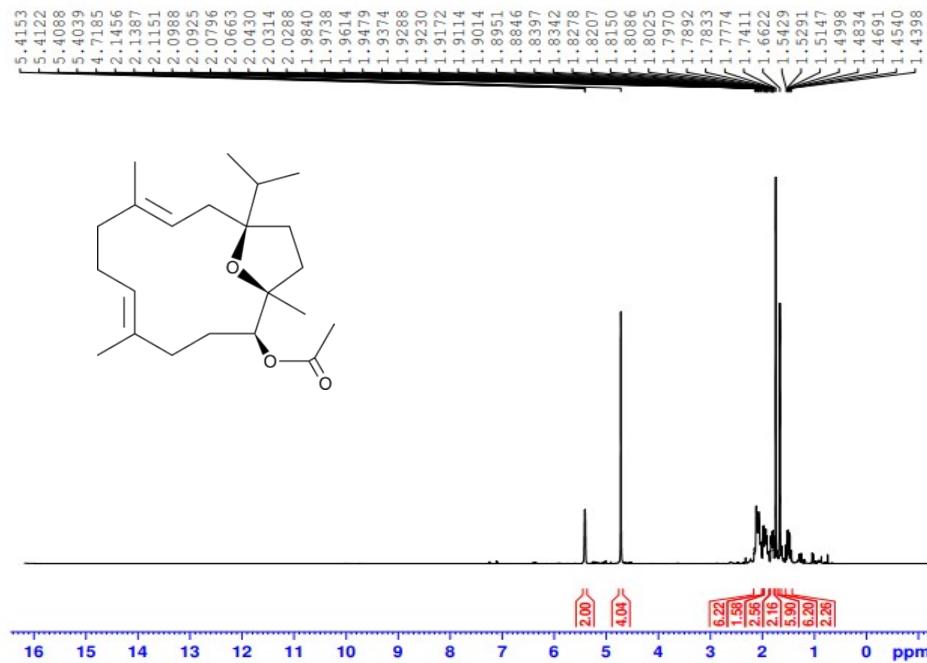
**Supplementary Table T1; Chemical composition and percentage of phytochemicals identified by GC-MS analysis of *C. roseus* essential oil**

SR. No	Area %	RT (minutes)	Compound Name	Mol. wt.	Mol. formula
				(g/mol)	)
1	0.14	4.178	1,2,4,4-Tetramethylcyclopentene	124.22	C <sub>9</sub> H <sub>16</sub>
2	0.40	6.577	beta-Pinene	136.23	C <sub>10</sub> H <sub>16</sub>
3	1.19	6.660	Gamma terpinene	136	C <sub>10</sub> H <sub>18</sub> O
4	36.03	6.898	alpha-Pinene	136.23	C <sub>10</sub> H <sub>16</sub>
5	2.16	7.299	Camphene	136.23	C <sub>10</sub> H <sub>16</sub>
6	1.53	7.363	Terpinolene	136.23	C <sub>10</sub> H <sub>16</sub>
7	0.09	7.683	Cyclopropane	42.08	C <sub>3</sub> H <sub>6</sub>
8	0.09	7.691	2-Aminoresorcinol	125.13	C <sub>6</sub> H <sub>7</sub> NO <sub>2</sub>
9	0.13	8.08	beta-Myrcene	136.23	C <sub>10</sub> H <sub>16</sub>
10	0.04	8.293	3,5-Octadiene	110.2	C <sub>8</sub> H <sub>14</sub>
11	0.28	8.561	o-Isopropenyltoluene	132.2	C <sub>10</sub> H <sub>12</sub>
12	0.09	8.805	p-Cymene	134.22	C <sub>10</sub> H <sub>14</sub>
13	1.85	8.948	o-Cymene	134.22	C <sub>10</sub> H <sub>14</sub>
14	1.47	9.049	D-Limonene	136.23	C <sub>10</sub> H <sub>16</sub>
15	1.47	9.051	Limonene	136.24	C <sub>10</sub> H <sub>16</sub>
16	0.81	9.141	Eucalyptol	154.25	C <sub>10</sub> H <sub>16</sub> O
17	0.11	9.730	Pinocarvone	150.22	C <sub>10</sub> H <sub>14</sub> O
18	0.04	9.995	Cyclohexanol	100.15	C <sub>6</sub> H <sub>12</sub> O
19	0.26	10.333	Methoxy(methyl)chlorosilane	324.9	C <sub>19</sub> H <sub>17</sub> ClOSi
20	0.33	10.371	Cyclopentanol	86.13	C <sub>5</sub> H <sub>10</sub> O
21	0.39	10.374	Artemiseole	152.23	C <sub>10</sub> H <sub>16</sub> O
22	0.17	10.980	1-Phenylpropanol	136.19	C <sub>9</sub> H <sub>12</sub> O

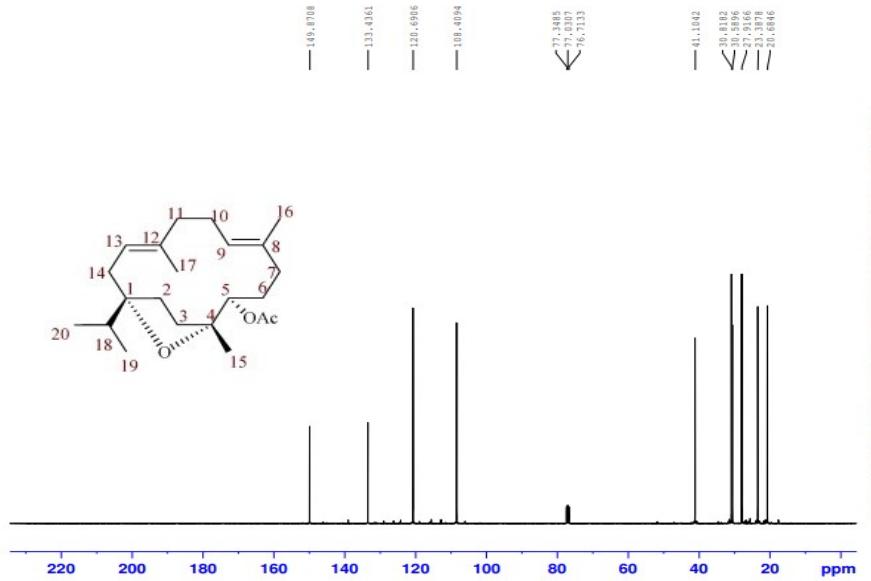
<b>23</b>	0.19	11.065	Thujone	152.23	C <sub>10</sub> H <sub>16</sub> O
<b>24</b>	0.36	11.135	Camphepane	136.23	C <sub>12</sub> H <sub>16</sub>
<b>25</b>	2.93	11.300	alpha- Campholenal	152.23	C <sub>10</sub> H <sub>16</sub> O
<b>26</b>	2.93	11.311	Fumaric acid	116.07	C <sub>4</sub> H <sub>4</sub> O <sub>4</sub>
<b>27</b>	3.37	11.660	1,4,9-Decatriene	136.23	C <sub>10</sub> H <sub>16</sub>
<b>28</b>	5.66	11.816	Trans-verbenol	152.237	C <sub>10</sub> H <sub>16</sub> O
<b>29</b>	0.24	12.455	Terpinen-4-ol	154.25	C <sub>10</sub> H <sub>16</sub> O
<b>30</b>	0.09	12.547	Ethanone	43.04	C <sub>2</sub> H <sub>3</sub> O
<b>31</b>	0.65	12.630	m-Cymen-8-ol	192.25	C <sub>12</sub> H <sub>16</sub> O <sub>2</sub>
<b>32</b>	0.17	12.981	Acetic acid	60.052	CH <sub>3</sub> COOH
<b>33</b>	0.63	13.276	trans-Carveol	152.23	C <sub>10</sub> H <sub>16</sub> O
<b>34</b>	0.21	13.777	Carvone	150.22	C <sub>10</sub> H <sub>14</sub> O
<b>35</b>	0.38	13.891	Isobutyric acid	136.23	C <sub>10</sub> H <sub>16</sub>
<b>36</b>	2.96	14.966	Camphenone	150.22	C <sub>10</sub> H <sub>14</sub> O
<b>37</b>	0.22	15.579	alpha-Campholenal	152.23	C <sub>10</sub> H <sub>16</sub> O
<b>38</b>	1.18	15.772	2-Carene	136.23	C <sub>10</sub> H <sub>16</sub>
<b>39</b>	0.17	16.364	Copaene	204.35	C <sub>15</sub> H <sub>24</sub>
<b>40</b>	0.49	16.863	Octanoic acid	144.21	C <sub>8</sub> H <sub>16</sub> O <sub>2</sub>
<b>41</b>	0.12	17.354	alpha-Campholenal	152.23	C <sub>10</sub> H <sub>16</sub> O
<b>42</b>	0.20	19.651	Nerolidol	222	C <sub>15</sub> H <sub>26</sub> O
<b>43</b>	0.11	25.832	n-Hexadecanoic acid	256.42	C <sub>16</sub> H <sub>32</sub> O
<b>44</b>	1.12	28.693	Incensole, acetate	334.49	C <sub>21</sub> H <sub>34</sub> O
<b>45</b>	0.19	36.284	Hexasiloxane	248.51	O <sub>5</sub> Si <sub>6</sub>



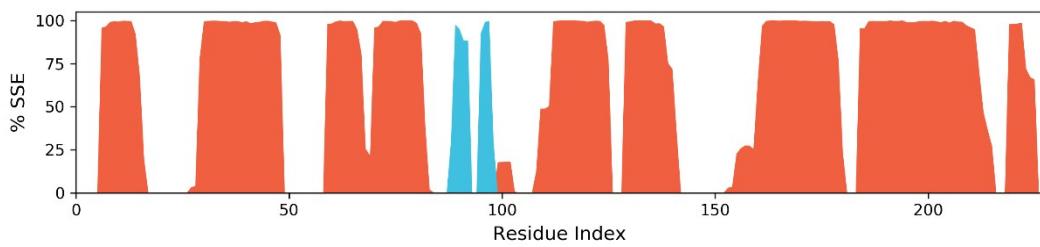
Supplementary figure S1; IR spectrum of incensole acetate.



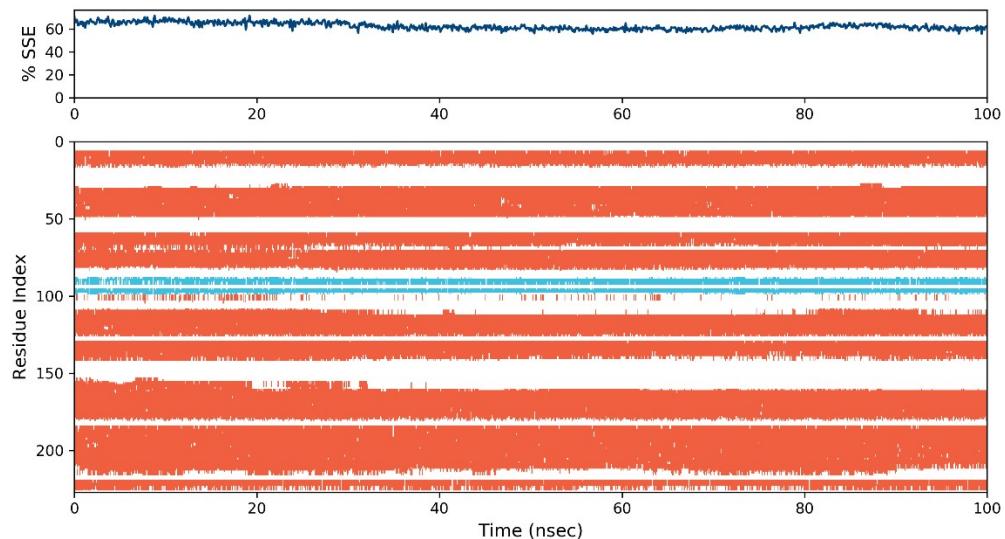
**Supplementary figure S2; <sup>1</sup>H-NMR of incensole acetate**



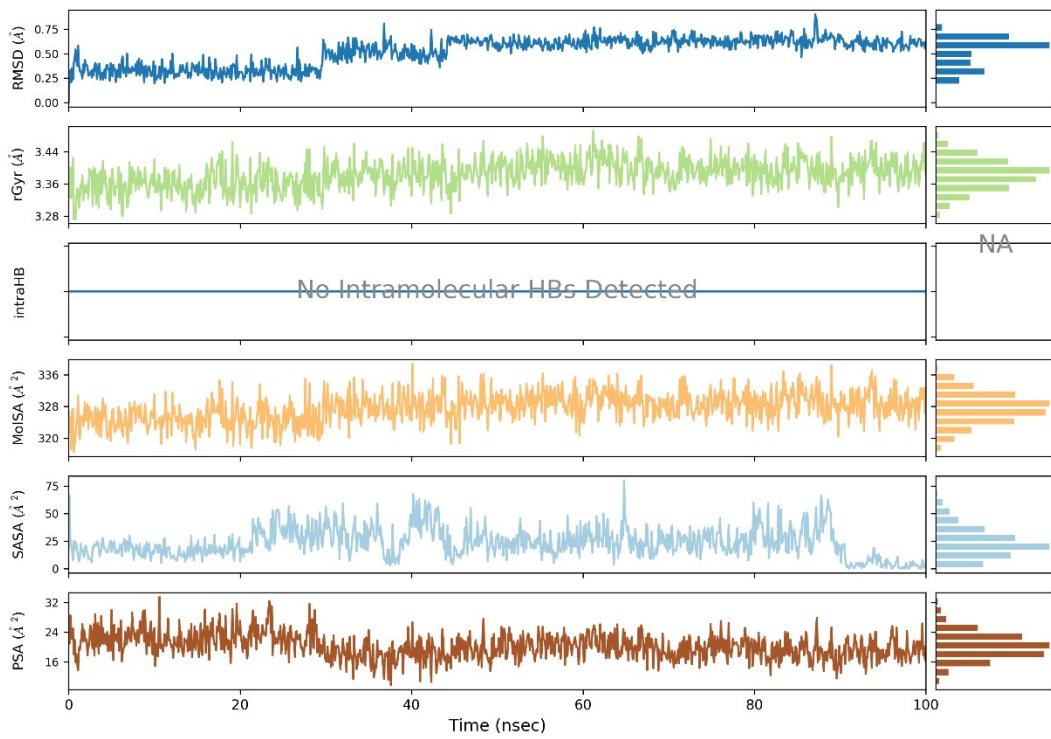
**Supplementary figure S3; <sup>13</sup>C-NMR of incensole acetate**



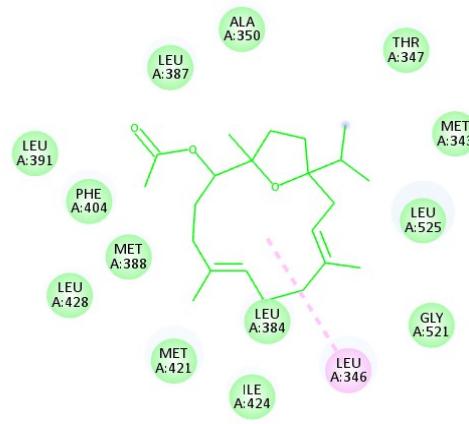
**Supplementary figure S4; MD simulation supporting figure**



**Supplementary figure S5; Protein secondary structure elements (SSE) such as alpha-helices marked by orange and the beta-strands were labeled by cyan.**



**Supplementary figure S6; MD simulation Ligand properties**

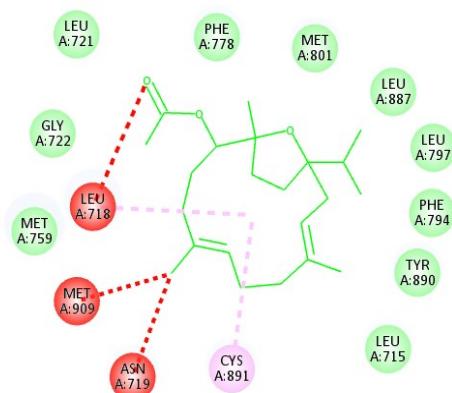


**Interactions**

[green square] van der Waals

[pink square] Alkyl

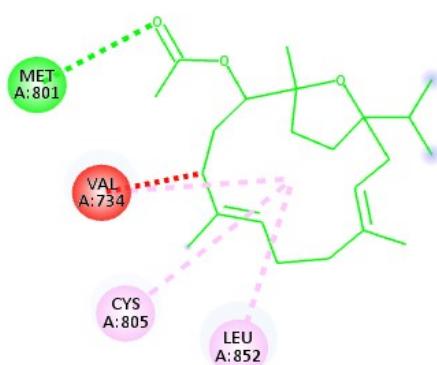
**A**



**Interactions**

- van der Waals
- Unfavorable Acceptor-Acceptor
- Unfavorable Bump
- Alkyl

**B**

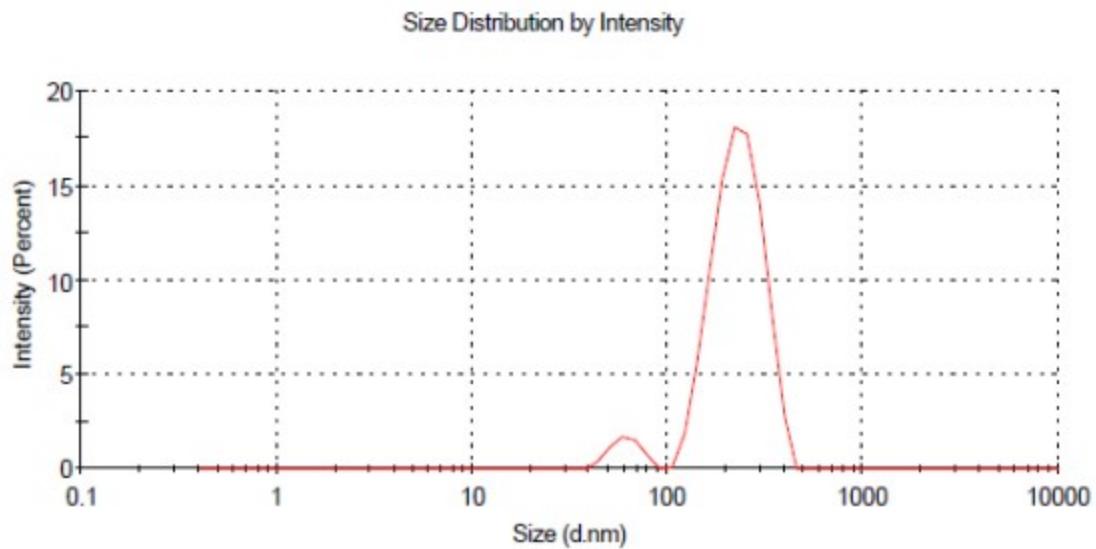


**Interactions**

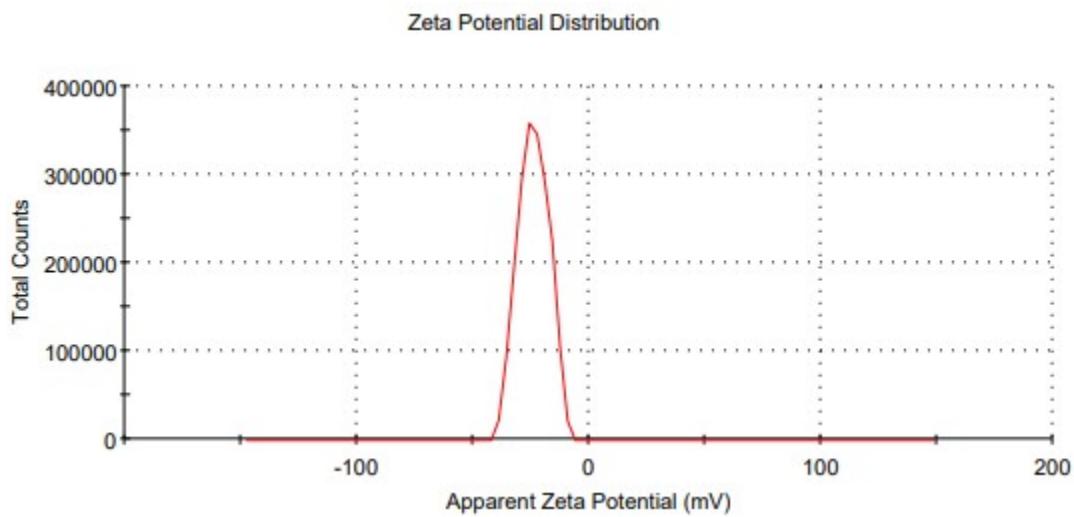
- Unfavorable Bump
- Conventional Hydrogen Bond
- Alkyl

**C**

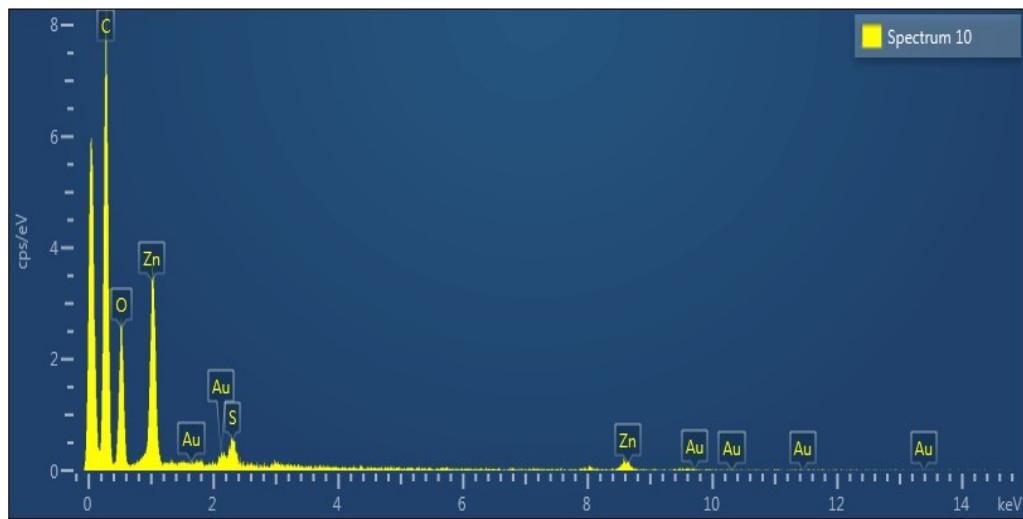
**Supplementary figure S7; 2D diagram of incensole acetate interactions with (A) Estrogen receptor (B) Progesterone receptor (C) HER2 receptor.**



**Supplementary figure S8; Size-distribution analysis of NE**



**Supplementary figure S9; Zeta potential analysis of NE**



**Supplementary figure S10; EDX of Terpene I Nanoemulsion**