

Supporting Materials

The effect of AgInS₂, SnS, CuS₂, Bi₂S₃ quantum dots on the surface properties and photocatalytic activity of QDs-sensitized TiO₂ composite

Anna Malankowska^{a*}, Daria Kulesza^a, Jakub Sowik^a, Onur Cavdar^a, Tomasz Klimczuk^b, Grzegorz Trykowski^c and Adriana Zaleska-Medynska^a

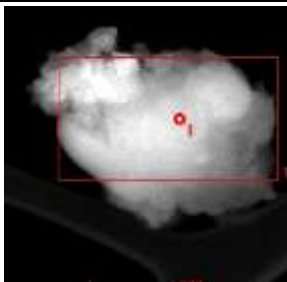
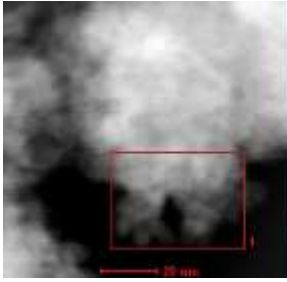
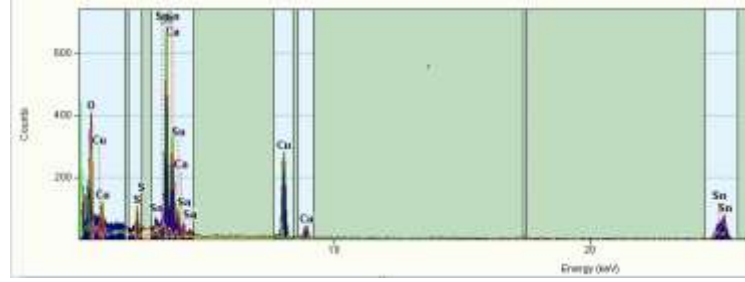
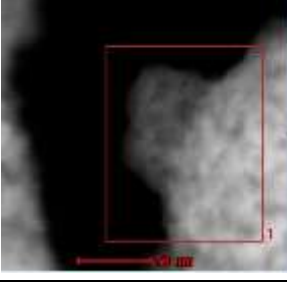
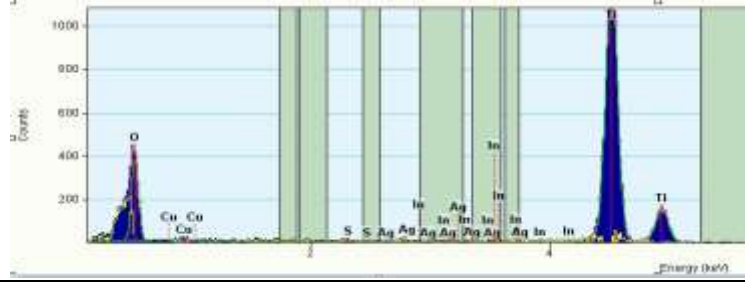
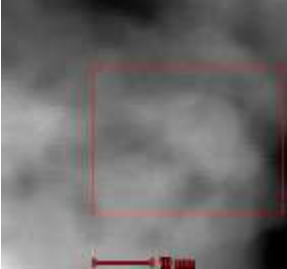
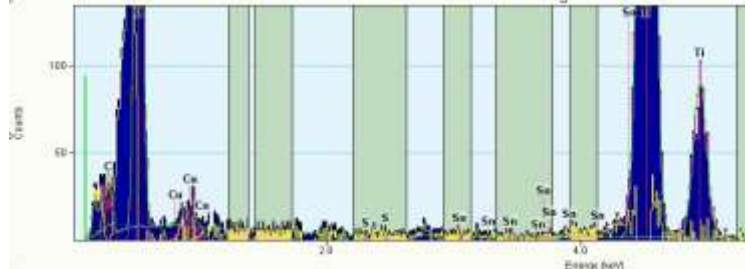
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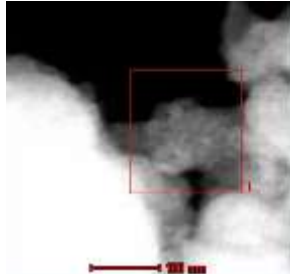
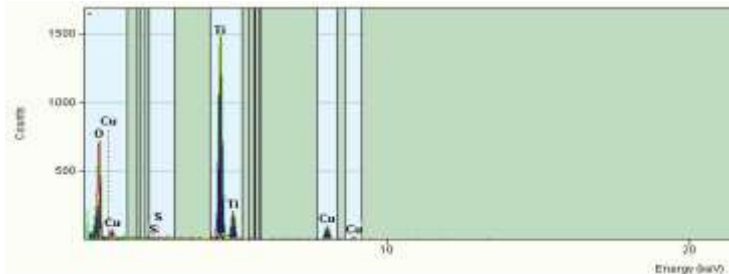
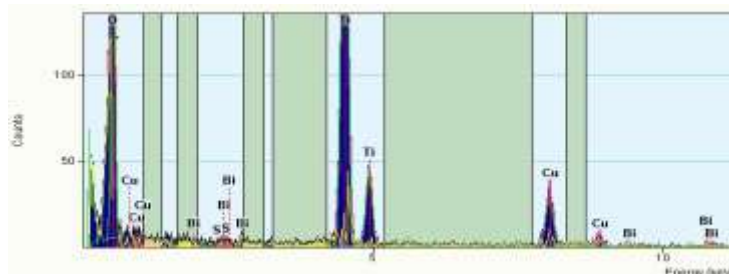
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Table S1. TEM-EDX analysis for (a) AgInS₂ QDs, (b) SnS QDs, (c) TiO₂/AgInS₂_15, (d) TiO₂/SnS_15, (e) TiO₂/CuS_15, (f) TiO₂/Bi₂S₃_15

(a) AgInS ₂ QDs			<table><tr><th>Element</th><th>Weight %</th></tr><tr><td>C(K)</td><td>25.38</td></tr><tr><td>O(K)</td><td>9.72</td></tr><tr><td>Na(K)</td><td>3.39</td></tr><tr><td>Al(K)</td><td>5.75</td></tr><tr><td>S(K)</td><td>13.03</td></tr><tr><td>Ag(K)</td><td>9.82</td></tr><tr><td>In(K)</td><td>32.88</td></tr></table>	Element	Weight %	C(K)	25.38	O(K)	9.72	Na(K)	3.39	Al(K)	5.75	S(K)	13.03	Ag(K)	9.82	In(K)	32.88
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(b) SnS QDs			<table><tr><th>Element</th><th>Weight %</th></tr><tr><td>O(K)</td><td>16.52</td></tr><tr><td>S(K)</td><td>3.42</td></tr><tr><td>Ca(K)</td><td>1.93</td></tr><tr><td>Sn(K)</td><td>78.10</td></tr></table>	Element	Weight %	O(K)	16.52	S(K)	3.42	Ca(K)	1.93	Sn(K)	78.10						
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(c) TiO ₂ /AgInS ₂ _15			<table><tr><th>Element</th><th>Weight %</th></tr><tr><td>O(K)</td><td>22.60</td></tr><tr><td>S(K)</td><td>0.34</td></tr><tr><td>Ti(K)</td><td>76.40</td></tr><tr><td>Ag(K)</td><td>0.35</td></tr><tr><td>In(K)</td><td>0.28</td></tr></table>	Element	Weight %	O(K)	22.60	S(K)	0.34	Ti(K)	76.40	Ag(K)	0.35	In(K)	0.28				
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In(K)	0.28																		
(d) TiO ₂ /SnS_15			<table><tr><th>Element</th><th>Weight %</th></tr><tr><td>C(K)</td><td>4.24</td></tr><tr><td>O(K)</td><td>36.91</td></tr><tr><td>S(K)</td><td>0.03</td></tr><tr><td>Ti(K)</td><td>58.53</td></tr><tr><td>Sn(K)</td><td>0.28</td></tr></table>	Element	Weight %	C(K)	4.24	O(K)	36.91	S(K)	0.03	Ti(K)	58.53	Sn(K)	0.28				
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(e) TiO ₂ /CuS_15			<table><tr><th>Element</th><th>Weight %</th></tr><tr><td>O (K)</td><td>28.50</td></tr><tr><td>S (K)</td><td>0.24</td></tr><tr><td>Ti (K)</td><td>71.24</td></tr></table>	Element	Weight %	O (K)	28.50	S (K)	0.24	Ti (K)	71.24		
Element	Weight %												
O (K)	28.50												
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Ti (K)	71.24												
(f) TiO ₂ /Bi ₂ S ₃ _15			<table><tr><th>Element</th><th>Weight %</th></tr><tr><td>O (K)</td><td>40.34</td></tr><tr><td>S (K)</td><td>0.00</td></tr><tr><td>Ti (K)</td><td>58.45</td></tr><tr><td>Bi (L)</td><td>1.20</td></tr></table>	Element	Weight %	O (K)	40.34	S (K)	0.00	Ti (K)	58.45	Bi (L)	1.20
Element	Weight %												
O (K)	40.34												
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