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LAMPIRAN

Lampiran 1. Dokumentasi Penelitian



Gambar 1. Sintesis CoFe_2O_4 dengan metode *sol-gel*

Lampiran 2. Analisis Data

Tabel 1. Analisis data XRD untuk kristal CoFe_2O_4

2θ ($^\circ$)	θ ($^\circ$)	θ (rad)	$\cos \theta$ (rad)	FWHM ($^\circ$)	FWHM (rad)	D (nm)
30,1251	15,06255	0,262891	0,965643	0,3632	0,006339036	22,65128
31,9441	15,97205	0,278765	0,961396	0,3959	0,006909759	20,87215
35,4873	17,74365	0,309685	0,95243	0,374	0,006527531	22,30235
37,095	18,5475	0,323715	0,94806	0,31	0,005410521	27,03071
43,10	21,5477	0,376078	0,930112	0,4092	0,007141887	20,87296
53,56	26,7816	0,467427	0,892731	0,3565	0,006222099	24,96175
57,03	28,51585	0,497695	0,878685	0,3814	0,006656686	23,70506
Rata-rata						23,19947

Tabel 2. Analisis data XRD untuk kristal komposit $\text{CoFe}_2\text{O}_4/\text{Mg}$ (2:1)

2θ ($^\circ$)	θ ($^\circ$)	θ (rad)	$\cos \theta$ (rad)	FWHM ($^\circ$)	FWHM (rad)	D (nm)
18,13	9,065	0,158214	0,98751	0,33	0,005759587	24,37808

29,944	14,972	0,261311	0,966052	0,3005	0,005244714	27,36591
34,2425	17,12125	0,298822	0,955684	0,285	0,004974188	29,16728
35,2957	17,64785	0,308013	0,952938	0,2632	0,004593707	31,67412
36,4455	18,22275	0,318047	0,949848	0,299	0,005218534	27,9724
36,9216	18,4608	0,322202	0,948541	0,2167	0,003782128	38,64918
42,9383	21,46915	0,374707	0,930615	0,2267	0,003956661	37,65595
47,66	23,83	0,415912	0,914748	0,2	0,003490659	43,42336
53,3109	26,65545	0,465225	0,89372	0,2068	0,003609341	42,9836
56,8433	28,42165	0,496051	0,879469	0,2285	0,003988077	39,53196
Rata-rata						34,28018

Tabel 3. Analisis data XRD untuk kristal komposit CoFe₂O₄/Mg (1:1)

2θ (°)	θ (°)	θ (rad)	cos θ (rad)	FWHM (°)	FWHM (rad)	D (nm)
18,66	9,33	0,162839	0,986771	0,1667	0,002909	48,2951
30,4065	15,20325	0,265347	0,965002	0,403	0,007034	20,42782
32,476	16,238	0,283407	0,960108	0,392	0,006842	21,10808
34,6963	17,34815	0,302782	0,954511	0,4007	0,006994	20,77088
35,7792	17,8896	0,312232	0,95165	0,3766	0,006573	22,16651
36,9144	18,4572	0,322139	0,94856	0,3569	0,006229	23,46624
37,4366	18,7183	0,326696	0,947108	0,1667	0,002909	50,31761
43,425	21,7125	0,378955	0,929052	0,37	0,006458	23,11071
48,124	24,062	0,419961	0,913105	0,328	0,005725	26,52532
53,775	26,8875	0,469275	0,891896	0,41	0,007156	21,72485
57,3666	28,6833	0,500618	0,877286	0,4533	0,007912	19,9769
Rata-rata						27,08091

Tabel 4. Analisis data UV-Vis untuk prosentase degradasi

Polutan	Sampel (CoFe ₂ O ₄ /Mg)	Co	Ct				persen Degradasi (%)			
			15	30	45	60	15	30	45	60
<i>congo red</i>	1:1	1,07157	0,03868	0,04676	0,0459	0,02361	95,63631	95,71657	96,39034	97,79669
	2:1	0,08166	0,07751	0,04503	0,02976	0,02962	92,40841	92,79411	95,81431	97,23382
metilen biru	1:1	1,16784	0,24637	0,23194	-	-	78,90379	80,1394	-	-
	2:1	1,16784	0,26426	0,24898	-	-	77,3719	78,6803	-	-