Electronic Supplementary Material (ESI) for RSC Advances
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First-order reversal curve analysis of magnetoactive elastomers

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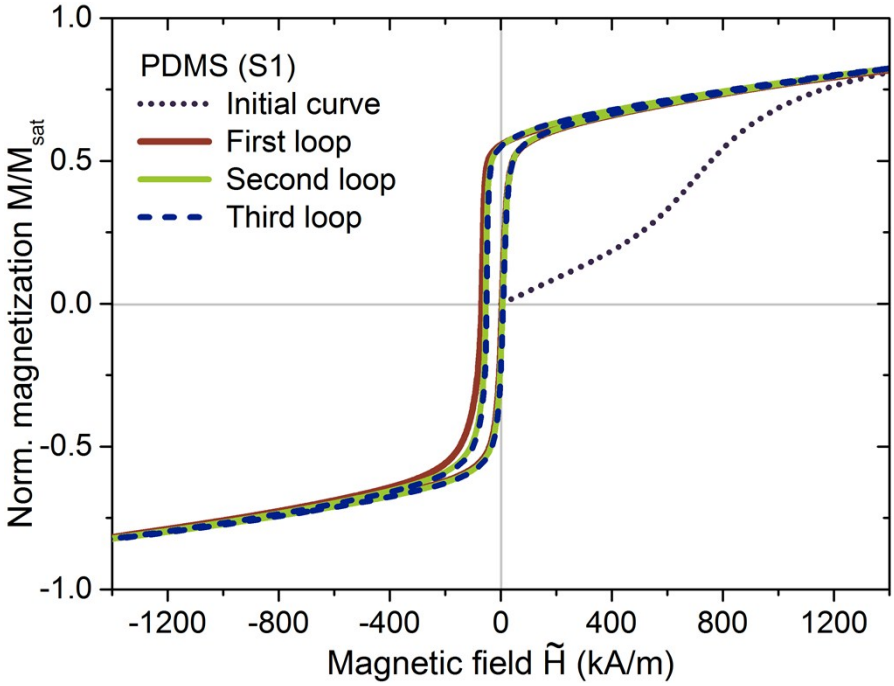
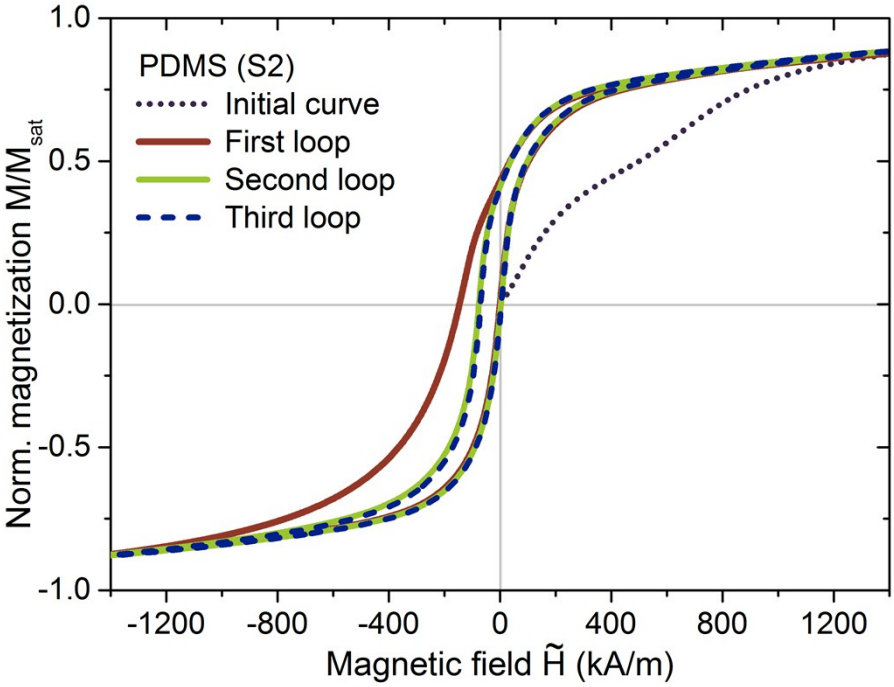
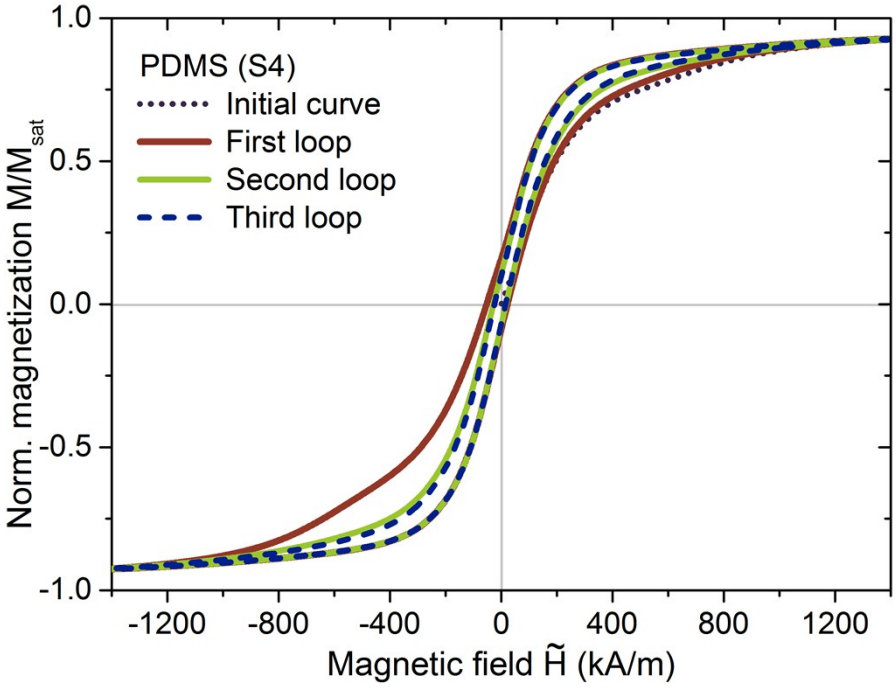
1. Initial and repeated magnetization loops of magnetoactive elastomers with polydimethylsiloxane (PDMS) matrix and different filler compositions and tensile moduli E

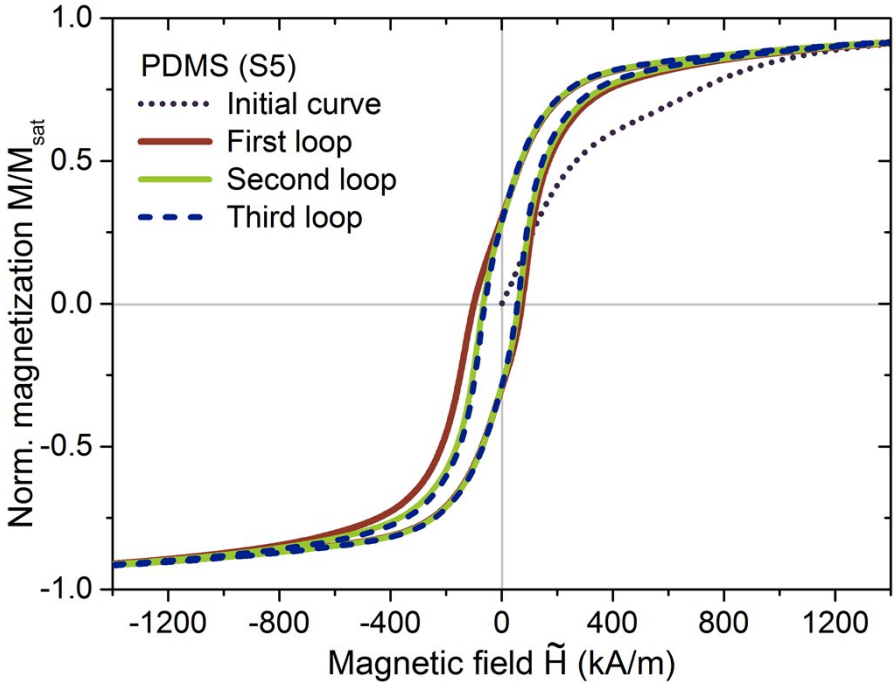
   Sample S1 with Fe:NdFeB 0:100 and E≈41 kPa, sample S2 with Fe:NdFeB 24:76 and E≈36 kPa:



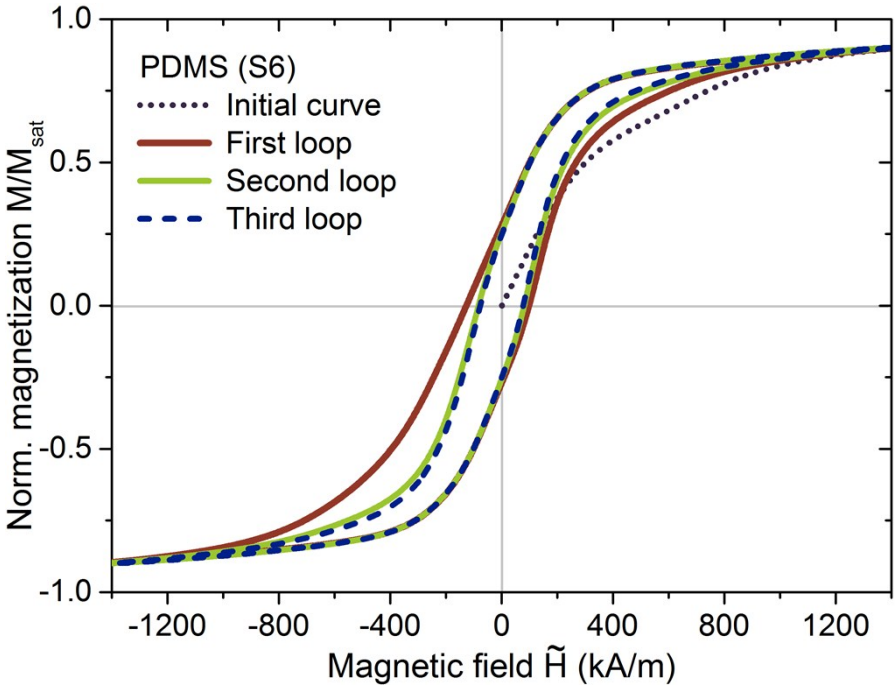


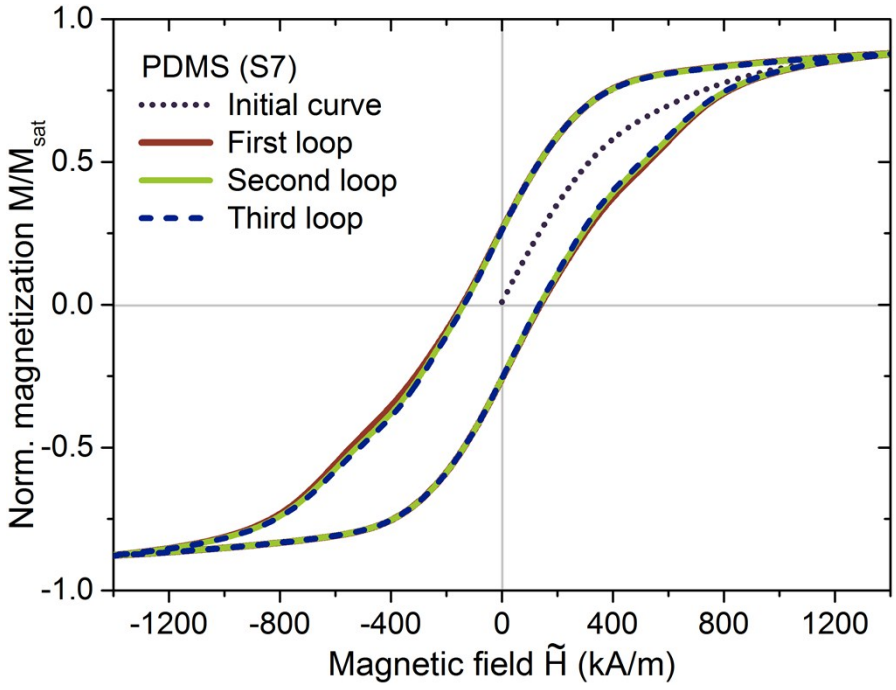
Sample S4 with Fe:NdFeB 64:36 and E≈28 kPa, sample S5 with Fe:NdFeB 45:55 and E≈50 kPa:





Sample S6 with Fe:NdFeB 45:55 and E≈120 kPa, sample S5 with Fe:NdFeB 45:55 and E≈440 kPa:





2. Cube helix colour table:

Red	Green	Blue
1.0000	1.0000	1.0000
0.9936	0.9913	0.9954
0.9893	0.9847	0.9931
0.9854	0.9788	0.9913
0.9818	0.9733	0.9900
0.9782	0.9681	0.9889
0.9748	0.9632	0.9881
0.9714	0.9584	0.9874
0.9679	0.9538	0.9869
0.9645	0.9494	0.9865
0.9610	0.9452	0.9862
0.9575	0.9410	0.9860
0.9539	0.9370	0.9859
0.9503	0.9331	0.9858
0.9466	0.9294	0.9858
0.9428	0.9257	0.9858
0.9390	0.9222	0.9859
0.9351	0.9187	0.9861
0.9311	0.9154	0.9862
0.9271	0.9122	0.9864
0.9229	0.9090	0.9866
0.9187	0.9060	0.9868
0.9144	0.9031	0.9870
0.9100	0.9002	0.9871
0.9056	0.8974	0.9873
0.9010	0.8948	0.9875
0.8964	0.8922	0.9876
0.8917	0.8897	0.9877
0.8869	0.8873	0.9878
0.8821	0.8850	0.9879
0.8771	0.8827	0.9879
0.8721	0.8806	0.9879
0.8670	0.8785	0.9878
0.8619	0.8765	0.9877
0.8566	0.8746	0.9875
0.8513	0.8727	0.9872
0.8459	0.8710	0.9869
0.8405	0.8693	0.9866
0.8350	0.8677	0.9861
0.8294	0.8661	0.9856
0.8237	0.8646	0.9850
0.8180	0.8632	0.9843
0.8123	0.8619	0.9836
0.8065	0.8606	0.9828
0.8006	0.8594	0.9818
0.7947	0.8583	0.9808
0.7887	0.8572	0.9797
0.7827	0.8562	0.9785
0.7767	0.8552	0.9772
0.7706	0.8543	0.9758
0.7645	0.8535	0.9742
0.7583	0.8527	0.9726
0.7521	0.8520	0.9709

0.7459	0.8513	0.9690
0.7396	0.8507	0.9671
0.7334	0.8501	0.9650
0.7271	0.8495	0.9628
0.7208	0.8491	0.9605
0.7145	0.8486	0.9581
0.7082	0.8482	0.9556
0.7019	0.8479	0.9529
0.6955	0.8475	0.9501
0.6892	0.8472	0.9472
0.6829	0.8470	0.9442
0.6766	0.8468	0.9410
0.6703	0.8466	0.9377
0.6640	0.8464	0.9343
0.6578	0.8463	0.9308
0.6515	0.8462	0.9271
0.6453	0.8461	0.9233
0.6391	0.8461	0.9194
0.6329	0.8461	0.9154
0.6268	0.8460	0.9112
0.6207	0.8460	0.9069
0.6147	0.8460	0.9024
0.6087	0.8461	0.8979
0.6027	0.8461	0.8932
0.5968	0.8462	0.8884
0.5910	0.8462	0.8835
0.5852	0.8463	0.8784
0.5794	0.8463	0.8732
0.5738	0.8464	0.8679
0.5682	0.8465	0.8625
0.5627	0.8465	0.8570
0.5572	0.8466	0.8513
0.5518	0.8466	0.8455
0.5465	0.8466	0.8396
0.5413	0.8467	0.8336
0.5362	0.8467	0.8275
0.5311	0.8467	0.8213
0.5261	0.8467	0.8150
0.5213	0.8466	0.8085
0.5165	0.8466	0.8020
0.5118	0.8465	0.7953
0.5073	0.8464	0.7886
0.5028	0.8463	0.7817
0.4984	0.8461	0.7748
0.4942	0.8459	0.7678
0.4900	0.8457	0.7607
0.4860	0.8454	0.7534
0.4821	0.8452	0.7462
0.4783	0.8448	0.7388
0.4746	0.8445	0.7313
0.4711	0.8441	0.7238
0.4676	0.8436	0.7162
0.4643	0.8432	0.7085
0.4611	0.8426	0.7008
0.4581	0.8421	0.6930
0.4551	0.8414	0.6852

0.4523	0.8408	0.6772
0.4497	0.8401	0.6693
0.4471	0.8393	0.6613
0.4447	0.8385	0.6532
0.4425	0.8376	0.6451
0.4404	0.8367	0.6370
0.4384	0.8357	0.6288
0.4365	0.8346	0.6206
0.4348	0.8335	0.6123
0.4332	0.8323	0.6041
0.4318	0.8311	0.5958
0.4305	0.8298	0.5875
0.4294	0.8285	0.5792
0.4284	0.8271	0.5709
0.4275	0.8256	0.5626
0.4268	0.8240	0.5542
0.4262	0.8224	0.5459
0.4258	0.8207	0.5376
0.4255	0.8190	0.5293
0.4253	0.8172	0.5210
0.4253	0.8153	0.5127
0.4255	0.8133	0.5045
0.4257	0.8113	0.4963
0.4261	0.8092	0.4881
0.4267	0.8070	0.4799
0.4274	0.8048	0.4718
0.4282	0.8025	0.4637
0.4291	0.8001	0.4557
0.4302	0.7976	0.4477
0.4315	0.7951	0.4398
0.4328	0.7925	0.4319
0.4343	0.7898	0.4241
0.4359	0.7870	0.4164
0.4377	0.7842	0.4087
0.4396	0.7813	0.4011
0.4416	0.7783	0.3936
0.4437	0.7753	0.3862
0.4459	0.7722	0.3788
0.4483	0.7690	0.3716
0.4508	0.7657	0.3644
0.4534	0.7624	0.3573
0.4561	0.7590	0.3503
0.4589	0.7556	0.3434
0.4619	0.7520	0.3367
0.4649	0.7484	0.3300
0.4680	0.7447	0.3234
0.4713	0.7410	0.3170
0.4746	0.7372	0.3107
0.4780	0.7333	0.3044
0.4816	0.7293	0.2984
0.4852	0.7253	0.2924
0.4889	0.7213	0.2866
0.4926	0.7171	0.2809
0.4965	0.7129	0.2753
0.5005	0.7087	0.2699
0.5045	0.7044	0.2646

0.5086	0.7000	0.2595
0.5127	0.6956	0.2545
0.5169	0.6911	0.2496
0.5212	0.6865	0.2449
0.5255	0.6820	0.2404
0.5299	0.6773	0.2360
0.5344	0.6726	0.2317
0.5389	0.6679	0.2276
0.5434	0.6631	0.2237
0.5480	0.6582	0.2199
0.5526	0.6534	0.2163
0.5572	0.6484	0.2129
0.5619	0.6435	0.2096
0.5666	0.6385	0.2065
0.5713	0.6334	0.2035
0.5760	0.6283	0.2007
0.5808	0.6232	0.1981
0.5855	0.6181	0.1956
0.5903	0.6129	0.1934
0.5950	0.6077	0.1913
0.5998	0.6025	0.1893
0.6046	0.5972	0.1875
0.6093	0.5919	0.1859
0.6140	0.5866	0.1845
0.6188	0.5813	0.1833
0.6234	0.5760	0.1822
0.6281	0.5706	0.1812
0.6328	0.5652	0.1805
0.6374	0.5599	0.1799
0.6419	0.5545	0.1795
0.6465	0.5491	0.1793
0.6510	0.5437	0.1792
0.6554	0.5383	0.1793
0.6598	0.5329	0.1796
0.6641	0.5275	0.1800
0.6684	0.5221	0.1806
0.6726	0.5167	0.1813
0.6768	0.5113	0.1822
0.6808	0.5059	0.1833
0.6849	0.5005	0.1845
0.6888	0.4952	0.1859
0.6926	0.4898	0.1875
0.6964	0.4845	0.1892
0.7001	0.4792	0.1910
0.7037	0.4739	0.1930
0.7072	0.4686	0.1951
0.7106	0.4634	0.1974
0.7139	0.4582	0.1998
0.7171	0.4530	0.2024
0.7202	0.4479	0.2051
0.7231	0.4427	0.2079
0.7260	0.4377	0.2108
0.7288	0.4326	0.2139
0.7314	0.4276	0.2171
0.7339	0.4227	0.2205
0.7363	0.4177	0.2239

0.7386	0.4129	0.2275
0.7408	0.4080	0.2311
0.7428	0.4033	0.2349
0.7447	0.3985	0.2388
0.7464	0.3939	0.2428
0.7481	0.3892	0.2468
0.7495	0.3847	0.2510
0.7509	0.3802	0.2553
0.7521	0.3757	0.2596
0.7532	0.3713	0.2640
0.7541	0.3670	0.2685
0.7548	0.3627	0.2731
0.7555	0.3585	0.2778
0.7559	0.3544	0.2825
0.7563	0.3503	0.2872
0.7564	0.3463	0.2921
0.7565	0.3424	0.2970
0.7563	0.3386	0.3019
0.7561	0.3348	0.3068
0.7556	0.3311	0.3119
0.7550	0.3274	0.3169
0.7543	0.3239	0.3220
0.7534	0.3204	0.3271
0.7523	0.3170	0.3322
0.7511	0.3137	0.3373
0.7497	0.3104	0.3425
0.7482	0.3073	0.3476
0.7465	0.3042	0.3527
0.7447	0.3012	0.3579
0.7427	0.2983	0.3630
0.7406	0.2955	0.3682
0.7383	0.2927	0.3733
0.7358	0.2901	0.3783
0.7332	0.2875	0.3834
0.7304	0.2850	0.3884