

Supporting Information for

NASICON-Structured $\text{NaTi}_2(\text{PO}_4)_3$ for Sustainable Energy Storage

Mingguang Wu¹, Wei Ni^{2,3,*}, Jin Hu^{1,*}, Jianmin Ma^{1,4,*}

¹School of Physics and Electronics, Hunan University, Changsha 410082, People's Republic of China

²Faculty of Technology, University of Oulu, Oulu 90014, Finland

³Panzhuhua University, Panzhuhua 617000, People's Republic of China

⁴Key Laboratory of Materials Processing and Mold (Zhengzhou University), Ministry of Education, Zhengzhou University, Zhengzhou 450002, People's Republic of China

*Corresponding authors. E-mail: wei.ni@oulu.fi (W. Ni); hujin@hnu.edu.cn (J. Hu); nanoelechem@hnu.edu.cn (J. Ma)

Table S1 Summary of the Na-storage performance of typical $\text{NaTi}_2(\text{PO}_4)_3$ in organic electrolytes. The theoretical capacity of $\text{NaTi}_2(\text{PO}_4)_3$ (NTP) as SIB anode is 133 mAh g^{-1} [S1]. EC: ethylene carbonate, DEC: diethyl carbonate, DMC: diethyl carbonate, PC: propylene carbonate; FEC: fluoroethylene carbonate. $1\text{C} = 133 \text{ mA g}^{-1}$ [S2]. The value of rate C may vary in some references

Type of materials	Methods/Electrolytes	Current density (mA g^{-1})	Cycle number	Cut-off voltage (V)	Specific capacity (mAh g^{-1})	CE (%)	ICE (%)	Initial capacity Discharge/Charge	Rate capacity (Current density) (mAh g^{-1})	Mass loading (mg cm^{-2})	Year/Refs.
Porous $\text{NaTi}_2(\text{PO}_4)_3$ nanocubes	one-pot solvothermal 1 M NaClO_4 in EC/DMC (2% FEC)	10C	10000	1.5-2.8	87	99.96			110 (0.2C) 107 (0.5C) 106 (1C) 105 (2C) 104 (5C)	2.8-3.5 (1.6-2.1, active material)	2015/[S3]
NTP-C (acetylene black) [NTP-C/$\text{Na}_2\text{FeP}_2\text{O}_7$]	ball-milling, carbothermal treatment 1 M NaClO_4 in PC	2 mA cm^{-2}	30	0-1.4	[47]		[95]	[50/47]			2016/[S4]
Carbon-coated $\text{NaTi}_2(\text{PO}_4)_3$ composite (NTP@C)	evaporation, annealing 1 M NaClO_4 in EC/DMC	0.2C/5C	20	1.0-3.0	111/86			113@0.2C	109 (0.5C) 105 (1C) 99 (2C) 87 (5C)		2018/[S5]
Porous $\text{NaTi}_2(\text{PO}_4)_3$ nanoparticles coated with thin carbon layer (mesoporous NTP@C)	hydrothermal, PDA coating, annealing	1C/10C	500/200 0	1.5-3.0	78/61		87.5	96/84@1C	109 (0.2C) 102 (0.5C) 98 (1C) 92 (2C) 84 (5C) 73 (10C) 55 (20C)		2018/[S6]
$\text{NaTi}_2(\text{PO}_4)_3$/N-doped C composite		10C (0.2C)	200 (30)	1.5-3.2	76 (126)			82@10C	124 (0.5C) 119 (1C) 113 (2C) 105 (4C) 95 (6C)		2018/[S7]
$\text{NaTi}_2(\text{PO}_4)_3$/C porous plates	solvothermal, in-situ carbon coating, calcination 1 M NaClO_4 in PC	10C (1/2/5C)	120	1.5-3.3	70 (105/100/82)	99 (~100 @1C/2C)		125@0.1C 110@1C 106@2C 95@5C 85@10C		2.3-2.9	2016/[S8]
$\text{NaTi}_2(\text{PO}_4)_3$ nanoparticles embedded in interconnected nanocarbon networks (NTP/C)	soft-template (CTAB), calcination 1 M NaClO_4 in EC/DMC	50C (1C/5C/10C/20C)	6000 (800/2000/3000/1000)	1.5-2.8	83 (119/~113/118/118)	~100 (~100 @5C)	~98 @1C	132@iC 126@5C 122@10C	132 (1C) 125 (5C) 124 (10C) 123 (20C) 120 (40C) 114 (60C)	~0.6	2016/[S9]

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								109 (80C) 108 (100C)		
Nanostructured NaTi₂(PO₄)₃/C	pyro-synthesis, annealing 1 M NaClO ₄ in EC/DEC (3% FEC)	5C (0.5C)	250 (70)	0.01-2.8	~150 (179)	~100	316@0.5C	225 (0.2C) 181 (5C)		2016/[S10]
NTP@C nanocomposite	sol-gel, grinding, sintering 1 M NaClO ₄ in EC/PC	20C	10000	0.01-3.0	56	48	455	170 (1C) 115 (10C) 66 (50C) 50 (100C)	1.6-2.4	2016/[S11]
NTP/C [full cell with ternary-metal PBAs cathode]	hydrothermal, heating (glucose-derived C) 1 M NaClO ₄ in EC/DEC (2% FEC)	[150]	[300]	[0.5-2.2]	[~110]	[~100]	[78.2] [161/126@15 mA g ⁻¹] [based on PBAs]	[90@750 60@1500 mA g ⁻¹]		2018/[S12]
NTP/C nanocomposites (NPs size 20-40 nm, C shell thickness ~4nm, C content 3.82%) [full cell NTP/C-U//Na ₃ V ₂ (PO ₄) ₂ F ₃]	solvothermal, in-situ carbon coating (calcination) 1 M NaClO ₄ in DMC/EC/EMC (5% FEC)	1C/3C [1C]	1500 [200]	1.5-3.0	97/~97 [-92]		107	109@0.5C 92@20C 86@30C 66@50C [111@0.5C 93@10C 69@20C]	~1.5	2018/[S13]
NaTi₂(PO₄)₃ nanoparticles	polyol-assisted pyro-synthesis, annealing 1 M NaClO ₄ in EC/DEC (3% FEC)	0.1C	30	1.2-2.8	208			110 (0.2C) 98 (0.5C) 86 (1C) 79 (2C) 65 (5C) 56 (10C) 42 (20C)		2016/[S14]
3D NaTi₂(PO₄)₃@C microspheres	spray-drying, calcination 1 M NaClO ₄ in EC/DMC	10C (0.1C)	500 (30)	1.5-2.8	97 (124)		127@0.1C	124 (0.5C) 120 (1C) 116 (2C) 107 (5C)	2.6	2018/[S15]
Open holey-structured NaTi₂(PO₄)₃/C nanocomposite	solvothermal, annealing 1 M NaClO ₄ in EC/DMC	50C (0.5C)	10000 (200)	1.5-3.0	103 (123)		129@0.5C	124 (0.5C) 120 (50C)		2018/[S16]
Nanosized porous carbon-coated NaTi₂(PO₄)₃ particles	hydrothermal, annealing	10C (0.5C)	1000 (350)	1.5-3.0	106 (108)	95.2	/115@0.1C /115@0.5C	114 (0.5/1/2C) 113 (5/10C) 112 (20C) 111@30C	1.35	2018/[S17]

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(mesoporous NTP@C nanocubes)	1 M NaClO ₄ in EC/DMC (1% FEC)								[-20°C: 98@10C 61@20C]		
NaTi₂(PO₄)₃/C composite nanofibers	electrospinning, calcination 1 M NaClO ₄ in EC/PC (5% FEC)	5C	500	15-3.3	97	~100		129@0.1C 105@5C	130 (0.1C) 123 (0.2C) 122 (0.5C) 119 (1C) 114 (2C) 103 (5C) 87 (10C) 63 (20C)	~1.7	2017/[S18]
Porous NaTi₂(PO₄)₃/C hierarchical nanofibers [full cell NTP/CNFs//NiHCF]	electrospinning, annealing 1 M NaClO ₄ in EC/DEC (2% FEC)	2C	700	1.5-3.0	~110	~100			120 (0.2C) 118 (1C/2C) 111 (5C) 98 (10C) 71 (20C)		2018/[S19]
Ultrafine NaTi₂(PO₄)₃ NPs encapsulated in N-doped CNFs (NTP-NCNFs)	electrospinning, calcination 1 M NaClO ₄ in EC/PC	10C	2000/20 000	0-3.0	121/105				176 (0.1C) 163 (0.2C) 149 (0.5C) 138 (1C) 127 (2C) 110 (5C) 95 (10C) 71 (20C)	0.64	2018/[S20]
NaTi₂(PO₄)₃/C nanocomposite (NPT/C-CNTs)	solvothermal, hydrothermal, annealing 1 M NaClO ₄ in EC/PC	1C/50C	200/100 0	1.5-3.0	109/94	~100@ 50C		112@1C 96@50C	117 (1C) 113 (10C) 103 (50C) [0.5C, 118@0°C, 117@-10°C, 113@-20°C] [65 (10C) at - 20°C]	~2	2016/[S21]
Hierarchical porous nanocomposite of MWCNT-threaded mesoporous NaTi₂(PO₄)₃ nanocrystals	hydrothermal, calcination, hetero-assembly, freeze-drying 1 M NaClO ₄ in EC/PC	1C/10C	200/200 0	1.5-3.0	106/74	99	99	121/120@1C	102 (0.5C) 95 (2C) 90 (5C) 84 (20C) 82 (30C) 74 (50C)	0.9-1.76	2016/[S22]
3D NaTi₂(PO₄)₃@CNT microspheres	spray-drying, calcination 1 M NaClO ₄ in EC/DEC	10C	20	1.5-3.0	88			127@0.1C	125 (0.2C) 123 (0.5C) 120 (1C) 116 (2C) 111 (4C) 105 (6C)	1.9	2017/[S23]

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									97 (8C)		
									88 (10C)		
Porous NaTi₂(PO₄)₃ nanocubes anchored on porous carbon nanosheets	calcination 1 M NaClO ₄ in EC/DEC (5% FEC)	100/4000	100/200 0	0.01-3.0	172/98		46.8	485/227	280 (20) 164 (200)		2018/[S24]
Mesoporous NaTi₂(PO₄)₃/CMK-3 nanohybrid	solvothermal, calcination 1 M NaClO ₄ in EC/PC	0.5C	1000	1.0-3.0	63	~100	98	102/100@0.2C	101 (0.2C) 76 (0.5C) 58 (1C) 39 (2C)	~2	2014/[S25]
1D mesoporous NaTi₂(PO₄)₃/carbon nanofiber	electrospinning, two-step calcination (Ar, air) 1 M NaClO ₄ in EC/DEC	0.5C/10C	20	1.5-3.2	124/93		99.2 @0.2 C	127/126@0.2C	127 (0.2C) 124 (0.5C) 121 (1C) 116 (2C) 105 (5C) 93 (10C)		2018/[S26]
Porous NaTi₂(PO₄)₃@C nanocubes	hydrothermal, annealing 1 M NaClO ₄ in EC/DMC (5% FEC)	100/1000	100/100 0	0.01-3.0	201/140				225 (50) 203 (100) 190 (200) 166 (1000) 158 (2000) 149 (4000) 135 (8000)		2018/[S27]
Carbon-coated NTP in porous carbon matrix (double carbon coating, NTP@C@PC)	soft-chemical method, calcination 1 M NaClO ₄ in EC/DMC	1C/5C/10C/20 C	1000/50 00/6000/ 9000	1.5-2.8	113/103/76/ 70	~100@ 20C	95@ 1C	133@0.5C 127@1C 110@10C	121 (1C) 118 (2C) 116 (5C) 112 (10C) 104 (20C) 94 (30C) 64 (50C)		2015/[S28]
Rutile TiO₂ and carbon coated NaTi₂(PO₄)₃ nanocubes (C/NTP-RT)	hydrothermal, vaporization, annealing 1 M NaClO ₄ in EC/DMC	5C/10C	2000/10 000	1.2-2.8	78/72	100			131 (0.1C) 113 (0.2C) 96 (0.5C) 92 (1C) 89 (2C) 86 (5C) 84 (10C) 77 (20C)	2-3	2015/[S29]
Carbon-coated hierarchical NaTi₂(PO₄)₃ mesoporous mcicroflowers	solvothermal, annealing 1 M NaClO ₄ in EC/DEC (5% FEC)	20C (1/5/10C)	10000 (200/500 /3000)	1.5-3.0	85 (117/110/10 1)	~100@ 10C		125@1C 116@5C 114@10C	124 (1C) 120 (2C) 115 (5C) 111 (10C) 107 (20C)	~1.8	2016/[S30]

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									100 (50C) 95 (100C)		
NTP/graphene composite	sol-gel, post heat-treatment 1 M NaClO ₄ in EC/DEC	100	700	1.5-3.8	102			121		2-4	2014/[S31]
NTP/rGO nanocomposite (nanocrystalline, ~60 nm)	Pechini method, calcination 1 M NaClO ₄ in PC (5% FEC)	(5 mV s ⁻¹)	1000	1.5-3.0	82	>99				0.5-1.0	2017/[S32]
NTP@C nanoparticles embedded in 2D S-doped graphene sheets	sol-gel, sintering 1 M NaClO ₄ in EC/PC	10C/20C (0.1C)	100/500 (40)	1.5-3.0	113/96 (129)			102@20C	130 (0.1C) 129 (0.5C) 127 (1C) 125 (2C) 120 (5C)	~2.8	2018/[S33]
Porous NaTi₂(PO₄)₃ nanoparticles@3D graphene networks	hydrothermal, annealing 1 M NaClO ₄ in EC/DEC (5% FEC)	1C/10C	200/100 0	1.5-3.0	101/77	98/99	79/9 0	138/109@1C 107/96@10C	117 (0.5C) 112 (1C) 105 (5C) 96 (10C) 85 (20C) 67 (50C)	~1.5	2015/[S1]
NTP/rGO nanocomposite	microwave-assisted solvothermal, freeze-drying, calcination 1 M NaClO ₄ in EC/DEC	10C	1000 (640)	1.5-3.0	~111 (120 at 55 °C)	99.8		129@0.1C (123@10C, 55 °C)	94 (50C)	2-3	2016/[S34]
3D NaTi₂(PO₄)₃@graphene (NTP@rGO) microspheres [full cell NTP@rGO//Na₃V₂(PO₄)₃/C]	spray-drying, calcination 1 M NaClO ₄ in EC/DEC	20C [10C]	1000 [1000]	1.4-3.0 [0.4-2.0, full cell]	~80 [~81]	>99.5	98	130/128@0.2C [132/128@0.1C]	130 (0.1C) 130 (1C) 124 (10C) 122 (20C) 103 (50C) 75 (100C) 38 (200C) [88@50C]	1.5	2016/[S2]
NaTi₂(PO₄)₃/rGO composite (NPs: 20-30 nm)	polyol-assisted pyro-synthesis, calcination 1 M NaClO ₄ in PC	20C	1000	1.0-3.0	62	100		132@0.07C 91@20C	100 (2.3C) 95 (9.2C) 78 (36.8C)		2016/[S35]
NaTi₂(PO₄)₃@N-rGO composite	calcination 1 M NaClO ₄ in EC/DEC	20C	200	1.5-3.0	74			129@0.1C 84@20C	126 (0.5C) 123 (1C) 117 (2C) 108 (5C)		2017/[S36]

Nano-Micro Letters

									96 (10C)		
Hollow NaTi₂(PO₄)₃ nanocubes/rGO	hydrothermal, calcination 1 M NaClO ₄ in EC/DEC	3/20C (1/3/5/10C)	500 (100)	1.2-2.8	103/60 (124/118/104/100)	99.8		128@1C	128 (0.1C) 125 (1C) 118 (3C) 116 (5C) 106 (10C) 90 (20C) 63 (50C)	1.5-1.8	2017/[S37]
NaTi₂(PO₄)₃/rGO microspheres [full cell with cathode Na₃V₂(PO₄)₃/rGO]	spray-drying, annealing 0.8 M NaClO ₄ in TMP (trimethyl phosphate) (10% FEC)	0.5C [10C]	1000 [1000]	1.4-3.0 [0.4-2.0 full cell]	91 [56]	99.5 [99.7]	[87.7]	[104@0.2C]	128 (0.2C) 123 (0.5C) 118 (1C) 112 (2C) 104 (5C) 96 (10C) 87 (20C) 81 (30C) [100 (0.5C) 89 (1C) 82 (2C) 75 (5C) 61 (10C) 38 (20C)]		2017/[S38]
NTP@C nanocrystals/graphene sheets (rGO-NTP@C)	hydrothermal, calcination 1 M NaClO ₄ in EC/DEC	0.1C	40	1.5-3.0	127			129@0.1C	125 (0.5) 120 (1C) 112 (2C) 99 (5C) 81 (10C)		2017/[S39]
MXene@NTP-C nanohybrid	solvothermal, calcination (together with phenolic resin) 1 M NaClO ₄ in EC/DEC (5% FEC)	100 (1000/5000)	100 (2k/10k)	0.1-3.0	197 (143/109)	~100			208 (100) 198 (200) 182 (500) 166 (1000) 142 (2000) 113 (5000) 102 (10000)	0.8-1.0	2018/[S40]
Hierarchical layered NTP/Mxene	solvothermal, calcination 1 M NaClO ₄ in EC/DEC	200/2000	500/200 0	0.01-3.0	121/~62		76.3	198/151	145 (200) 67 (2000)	~1.0	2019/[S41]
Flexible and binder-free NaTi₂(PO₄)₃/graphene film electrode [full cell with cathode Na_{0.44}MnO₂]	hydrothermal, annealing, vacuum drying (glass culture dish)	100/500	100/100 0	1.0-3.0 [2.0-4.0]	121/~90		86 [82.3 % ful cell]	137/118@100 mA g ⁻¹	137 (100) 108 (300) 99 (500) 93 (1000)		2018/[S42]

Nano-Micro Letters

	1 M NaClO ₄ in EC/DMC (5% FEC)										
Free-standing 3D mesoporous NTP/rGO nanocomposite [full cell with cathode Na₃V₂(PO₄)₃]	electrostatic self-assembly, freeze-drying, mechanical pressing, thermal treatment 1 M NaClO ₄ in EC/PC	1C/5C [1C]	200/100 0 [100]	1.5-3.0 [0.4-2.0]	101/~68 [58]	99@5 C [99@1C]	98.8	114/113@1C [59@1C]	122 (0.5C) 114 (1C) 106 (2C) 94 (5C) 85 (10C) 76 (20C) 68 (30C) 52 (50C) [58@1C]		2018/[S43]
NTP/C composite (PVP derived C) [full cell NaTi ₂ (PO ₄) ₃ /Na ₃ V ₂ (PO ₄) ₃]	sol-gel, sintering 1 M NaPF ₆ in PC (2% FEC)	50C [20C]	1000 [5000]	1.4-3.0 [0.5-1.5]	~82 [80]	~100 [~100]	98.3 [95]	102/100@0.5C [107@0.5C] [based on NVP; Cu current collector]	[107@0.5C] 99@5C 85@20C]	3.5	2018/[S44]
CNTs-NTP@C particles composite	sol-gel, annealing 1 M NaClO ₄ in EC/PC	2C	200		113		97.3	128/125@0.2C	125 (0.5C) 122 (1C) 116 (2C) 106 (5C) 94 (10C)	2.7	2018/[S45]
Self-supported mesoporous NTP nanocrystals/MWCNTs film	electrostatic assembling, vacuum filtration, annealing 1 M NaClO ₄ in EC/PC	1C/10C	200/300 0	1.5-3.0	123/100	99	99	141/140	133 (1C) 127 (2C) 118 (5C) 105 (10C) 91 (20C) 81 (30C) 64 (50C)		2018/[S46]
Flexible mesoporous NTP/rGO-CNTs	solvothermal, hetero-assembly, vacuum filtration, annealing 1 M NaClO ₄ in EC/PC	1C (10C)	200 (5000)	1.5-3.0	126 (88)	~99 (98)	90	146/132	132 (0.5C) 128 (1C) 123 (2C) 116 (5C) 107 (10C) 90 (20C) 73 (30C)		2017/[S47]
NTP powder	ceramic electrolyte	100	50	1.5-2.5	~100	100	91	133/121	130 (0.1C) 110 (0.2C) 60 (0.5C)	0.4	2016/[S48]
All-solid-state SIBs (NTP, carbon black)	ceramic NASICON electrolyte (performance at 65 °C)	0.2C	70	1.5-2.8	102	99.7			110 (0.2C) 94 (0.5C) 75 (1C)	~2	2017/[S49]

Table S2 Summary of the Na-storage performance of typical $\text{NaTi}_2(\text{PO}_4)_3$ (NTP) in aqueous electrolytes

Type of materials	Methods	Current density (mA g ⁻¹)	Cycle number	Cut-off voltage (V)	Specific capacity (mAh g ⁻¹)	CE (%)	ICE (%)	Initial capacity Discharge/Charge	Rate capacity/ Current density (mAh g ⁻¹)	Mass loading (mg cm ⁻²)	Year/Refs.
NaTi₂(PO₄)₃ powder [NTP//Zn] [Ag/AgCl reference electrode]	Pechini method 1 M Na ₂ SO ₄	2.0 mA cm ⁻²	30	-0.4 to -0.9	~70	~100		123			2011/[S50]
NTP/C [NTP/graphite] (Ag/AgCl reference electrode)	Pechini method, pyrolysis (carbon source: citric acid) [ball-milling, annealing] 1 M Na ₂ SO ₄	2C	50	-0.9 to -0.3	117 [80]			129@2C [118@2C]	128 (2C) 66 (20C) [100 (2C) 34 (20C)]		2016/[S51]
NTP@C (Ag/AgCl reference electrode)	sol-gel, calcination, thermal decomposition vapor deposition (TVD), heat-treatment 1 M Na ₂ SO ₄ {1 M Li ₂ SO ₄ /Na ₂ SO ₄ }	200	50		~80 {~71}	~98				~3	2016/[S52]
NTP/C-U nanocomposites (NPs size 20-40 nm, C shell thickness ~4nm, C content 3.82%) [full cell NTP/C-U//Na ₄ Fe(CN) ₆]	solvothermal (urea), in-situ carbon coating (calcination) 1 M Na ₂ SO ₄	1C [1C]	300 [500]	[0.0-2.0]	79 [~71]	>98		84	[84@0.5C 70@20C]	2-3	2018/[S13]
Carbon-coated NTP nanoparticles (~100 nm) [NTP@C//Na _{0.44} MnO ₂]	hydrothermal, calcination 1 M Na ₂ SO ₄	1C	300	[0.7-1.3]	~74	[>99. 5% @ 1C]	[~92@0.2C]	[131/121@0.2C] [0.1-1.3 V]	[121 (0.2C) 114 (0.5C) 103 (2C) 68 (5C)]	42/60	2016/[S53]
Polypyrrole coated NTP particles (NTP@PPy)	solution polymerization 1 M Na ₂ SO ₄	0.2C	50		39		65	104/68			2015/[S54]
NTP@C/Ag particles (C/Ag coating layer)	sol-gel, grinding, calcination, sintering	2C/5C	100/400		108/70	>95		127@2C 98@5C	128 (1C) 111 (2C) 85 (5C) 65 (10C)		2018/[S55]

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	1 M Na ₂ SO ₄										
NTP/C (carbon black, expanded graphite) [NTP/C//activated carbon] (Ag/AgCl reference electrode)	solid-state method (ball-milling, sintering) 1 M Na ₂ SO ₄	2C [2C]	100 [500]		78 [62]	~100 [~100]	89@1C	110/98@1C	98 (1C) ~5 86 (2C) 67 (5C) 52 (10C) [100 (1C) 90 (2C) 67 (5C) 55 (10C)]		2018/[S56]
NTP/CNTs-graphite (Hg/Hg2SO4 reference electrode) [full cell NTP/Na_{0.44}MnO₂]	ball-milling, sintering 1 M Na ₂ SO ₄	1C	100	0.1-1.4	82	>99.7		130@0.1C	75 (2C)	6.4	2014/[S57]
NTP-C// Na_{0.44}MnO₂ [Hg/Hg2SO4 reference electrode]	rapid microwave-assisted method, ball milling (graphite) 1 M Na ₂ SO ₄	15.7	20	-1.8 to -0.5 V [1.25-0.6]	56			72 [85]		30	2013/[S58]
Wafer-like 3D porous NTP/C composite (Ag/AgCl reference electrode) [full cell NTP/Na_{0.44}MnO₂]	self-assembly synthesis, annealing 1 M Na ₂ SO ₄	2C	300		92	~100	75@2C	~130/119@1C 114@2C	63 (50C) [114@1C]		2015/[S59]
Frogspawn-like hierarchical porous NTP/C array (core-shell structure)	template (hollow carbon sphere), impregnation, annealing	1C/20C	400/2000		~113/~87	~100		127@1C		2-3	2015/[S60]
NTP/graphene nanocomposite [calomel reference electrode (SCE)]	solvothermal, calcination 1 M Na ₂ SO ₄	2C	100	-1.0 to -0.5	100	~90		104	110 (2C) 85 (5C) 65 (10C) 40 (20C)		2014/[S61]
NTP/graphene composite (Ag/AgCl reference electrode)	sol-gel, post heat-treatment 1 M Na ₂ SO ₄	5C/10C/20C	400/100/2000	-1.0 to -0.5	70/60/46				129 (1C) 125 (2C) 100 (5C) 88 (10C) 64 (20C) 56 (40C)	2-4	2014/[S31]
NaTi₂(PO₄)₃/Na_{0.44}MnO₂ (NTP-C nanoparticles) [full cell]	ball-milling, calcination	25C	450	0.5-1.4	~55			~100@9C	~105@3C ~100@15C (0.1-1.4 V)	up to 17.6/43.7	2013/[S62]

Nano-Micro Letters

	(pyrolysis, glucose) 1 M Na ₂ SO ₄ in DI water										
NaTi₂(PO₄)₃/Na₃V₂(PO₄)₃ (carbon-coated NTP//NVP)	solid state method (ball-milling, sintering, heat treatment) 1 M Na ₂ SO ₄	10 A g ⁻¹	50	0.5-1.6	~25	76	71@2 A g ⁻¹ [0.5-1.5 V]	[71@5C 58@10C]			2016/[S63]
TiN modified NaTi₂(PO₄)₃ particles (NTP@TiN)	solvothermal, calcination (NH ₃ ; nitriding) 1 M Na ₂ SO ₄	2C	100		92	89	74	132	5		2018/[S64]
NTP-C particles NaTi₂(PO₄)₃/Na₂NiFe(CN)₆ [full cell NTP//Na₂PB]	stoichiometric, solid-state reaction 1 M Na ₂ SO ₄	5C [5C]	100 [250]	[1.6-0.2]	95 [79]	~100	85	101@5C	~10		2013/[S65]
NTP/C NPs composite NaTi₂(PO₄)₃/NaMnO₂ [full cell]	2 M CH ₃ COONa aqueous solution	5C [5C]	500 [500]	[1.8-0.5]	86 [28]	~100		127@1C 117@5C [33@1C 23@10C 20@20C]	100 (20C)	2-2.5	2015/[S66]
NTP-C particles NaTi₂(PO₄)₃/Na₂CuFe(CN)₆ [full cell NTP//NaCuHCF]	stoichiometric, solid-state reaction 1 M Na ₂ SO ₄	[2C/10C]	[100/100 0]	[1.8-0.0]	[97/74]	[75.6]		[104@2C]	[104 (2C) 93 (5C) 86 (10C) 83 (20C) 70 (50C) 60 (80C) 50 (100C)]	~10	2014/[S67]
NTP/MWCNTs composite NTP/MWCNTs//Na_{0.44}MnO₂	solvothermal, 1 M Na ₂ SO ₄	2C [2C0]	200 [10/60/24 0]	[1.4-0.2]	92 [128/60/50]		84	122/103	120 (2C) 90 (5C) 80 (10C) 60 (20C) [68 (5C) 45 (10C) 23 (20C)]		2014/[S68]
NTP-C (acetylene black) [NTP-C//Na₂FeP₂O₇]	ball-milling, carbothermal treatment	2 mA cm ⁻²	30	1.4-0	[38 3 42]		[95 (2M Na ₂ SO ₄) 82 (4 M NaNO ₃) 96 (4M NaClO ₄) at 2 mA cm ⁻²]				2016/[S4]

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