

Technology Trend Name	Units	Original Article Type	Number Data Points	First Year	Last Year	Domain (for Patents)
AcrylicFiber	1966 USD/lbs	Farmer_Lafond Price	13	1960	1972	
Acrylonitrile	1966 USD/lbs	Farmer_Lafond Price	14	1959	1972	
Aluminum	1966 USD/lbs	Farmer_Lafond Price	17	1956	1972	
Ammonia	1966 USD/lbs	Farmer_Lafond Price	13	1960	1972	
Aniline	1966 USD/lbs	Farmer_Lafond Price	12	1961	1972	
Automotive (US)	Gallons/Mile	Farmer_Lafond Performance_Questionable	21	1985	2005	COMB_ENGINE
Beer (Japan)	1955 Yen	Farmer_Lafond Price	18	1951	1968	
Benzene	1958 USD	Farmer_Lafond Price	17	1952	1968	
BisphenolA	1966 USD/lbs	Farmer_Lafond Price	14	1959	1972	
Caprolactam	1966 USD/lbs	Farmer_Lafond Price	11	1962	1972	
CarbonBlack	1966 USD/lbs	Farmer_Lafond Price	9	1964	1972	
CarbonDisulfide	1966 USD/lbs	Farmer_Lafond Price	10	1963	1972	
CCGT Power	1990 USD/kW	Farmer_Lafond Price	10	1987	1996	
Concentrating Solar	US cents/kWh	Farmer_Lafond Price	26	1980	2005	
Corn (US)	acres/1000 bushels	Farmer_Lafond Price	34	1975	2008	HYBRID_CORN
Crude Oil	1958 USD	Farmer_Lafond Price	23	1946	1968	
Cyclohexane	1966 USD/lbs	Farmer_Lafond Price	17	1956	1972	
DNA Sequencing	2013 USD/human-size genome	Farmer_Lafond Price	13	2001	2013	GENOME
DRAM	2005 USD/thousand bits	Farmer_Lafond Price	37	1971	2007	MAGNETIC_INFO_STORAGE
Electric Range	1958 USD	Farmer_Lafond Price	22	1946	1967	
Ethanol (Brazil)	2002 USD/GJ	Farmer_Lafond Price	25	1980	2004	
Ethanolamine	1966 USD/lbs	Farmer_Lafond Price	18	1955	1972	
Ethylene	1966 USD/lbs	Farmer_Lafond Price	13	1960	1972	
Formaldehyde	1966 USD/lbs	Farmer_Lafond Price	11	1962	1972	
Free Standing Gas Range	1958 USD	Farmer_Lafond Price	22	1946	1967	
Geothermal Electricity	2005 US cents/kWh	Farmer_Lafond Price	26	1980	2005	
Hard Disk Drive	2005 USD/megabyte	Farmer_Lafond Price	20	1988	2007	MAGNETIC_INFO_STORAGE
HydrofluoricAcid	1966 USD/lbs	Farmer_Lafond Price	11	1962	1972	
IsopropylAlcohol	1966 USD/lbs	Farmer_Lafond Price	9	1964	1972	
Laser Diode	Yen	Farmer_Lafond Price	13	1982	1994	
Low Density Polyethylene	1958 USD/pound	Farmer_Lafond Price	17	1952	1968	
Magnesium	1966 USD/lbs	Farmer_Lafond Price	19	1954	1972	
MaleicAnhydride	1966 USD/lbs	Farmer_Lafond Price	14	1959	1972	
Methanol	1966 USD/lbs	Farmer_Lafond Price	16	1957	1972	
Milk (US)	Heads/Mil.lbs	Farmer_Lafond Performance	65	1930	2008	
Monochrome Television	1958 USD per unit	Farmer_Lafond Price	22	1947	1968	
Motor Gasoline	1958 USD/Gallon	Farmer_Lafond Price	23	1946	1968	
NeopreneRubber	1966 USD/lbs	Farmer_Lafond Price	13	1960	1972	
Nuclear Electricity	2004 USD/Watt	Farmer_Lafond Price	20	1970	1989	
Onshore Gas Pipeline	dollar/mile-inch	Farmer_Lafond Price	14	1979	1992	
Paraxylene	1958 USD	Farmer_Lafond Price	12	1957	1968	
Pentaerythritol	1966 USD/lbs	Farmer_Lafond Price	21	1952	1972	
Phenol	1966 USD/lbs	Farmer_Lafond Price	14	1959	1972	
Photovoltaics	2013 USD/Wp	Farmer_Lafond Price	34	1980	2013	SOLAR_PV
PhthalicAnhydride	1966 USD/lbs	Farmer_Lafond Price	18	1955	1972	
PolyesterFiber	1966 USD/lbs	Farmer_Lafond Price	13	1960	1972	
PolyethyleneHD	1966 USD/lbs	Farmer_Lafond Price	15	1958	1972	
PolyethyleneLD	1966 USD/lbs	Farmer_Lafond Price	15	1958	1972	
Polypropylene	1958 USD/pound	Farmer_Lafond Price	10	1959	1968	
Polystyrene	1958 USD/pound	Farmer_Lafond Price	26	1943	1968	
Polyvinylchloride	1958 USD/pound	Farmer_Lafond Price	23	1946	1968	
Primary Aluminum	1958 USD/pound	Farmer_Lafond Price	40	1929	1968	
Primary Magnesium	1958 USD/pound	Farmer_Lafond Price	40	1929	1968	
Refined Cane Sugar	1958 USD	Farmer_Lafond Price	34	1935	1968	
Sodium	1966 USD/lbs	Farmer_Lafond Price	16	1957	1972	

SodiumChlorate	1966 USD/lbs	Farmer_Lafond Price	15	1958	1972
SodiumHydrosulfite	1966 USD/lbs	Farmer_Lafond Price	9	1964	1972
Sorbitol	1966 USD/lbs	Farmer_Lafond Price	8	1965	1972
Styrene	1966 USD/lbs	Farmer_Lafond Price	15	1958	1972
Titanium Sponge	1958 USD/lbs	Farmer_Lafond Price	19	1950	1968
Titanium Dioxide	1966 USD/lbs	Farmer_Lafond Price	9	1964	1972
Transistor	2005 USD	Farmer_Lafond Price	38	1968	2005 ELECTRIC_COMPUTATION
Urea	1966 USD/lbs	Farmer_Lafond Price	12	1961	1972
VinylAcetate	1966 USD/lbs	Farmer_Lafond Price	13	1960	1972
VinylChloride	1966 USD/lbs	Farmer_Lafond Price	11	1962	1972
Wind Turbine (Denmark)	DKK/kW	Farmer_Lafond Price	20	1981	2000 WIND
integrated_circuit_memory_transistors_per_die	#/die	Magee_et_al Performance	20	1959	2007 IC
integrated_circuit_microprocessor_transistors_per_die	#/die	Magee_et_al Performance	12	1972	2006 IC
02A_magnetic_memory_tape_mbits_per_\$	tape mbits/\$	Magee_et_al Price	14	1952	2004 MAGNETIC_INFO_STORAGE
02A_magnetic_memory_tape_mbits_per_cc	mbits/cc	Magee_et_al Performance	13	1952	2004 MAGNETIC_INFO_STORAGE
02B_magnetic_memory_harddisk_mbits_per_\$	mbits/\$	Magee_et_al Price	19	1956	2004 MAGNETIC_INFO_STORAGE
02B_magnetic_memory_harddisk_mbits_per_cc	mbit/cc	Magee_et_al Performance	24	1956	2003 MAGNETIC_INFO_STORAGE
02C_magnetic_memory_tape_harddisk_mbits_per_\$	tape & harddisk mbits/\$	Magee_et_al Price	27	1952	2004 MAGNETIC_INFO_STORAGE
02C_magnetic_memory_tape_harddisk_mbits_per_cc	tape & hard disk combined mbits/cc	Magee_et_al Performance	25	1952	2004 MAGNETIC_INFO_STORAGE
optical_memory_per_\$	optical mbits/\$	Magee_et_al Price	4	1998	2004 OPTICAL_INFO_STORAGE
optical_memory_per_cc	Mbits/cc	Magee_et_al Performance	11	1981	2004 OPTICAL_INFO_STORAGE
electrical_info_transmission_kbps_per_\$	band per cost per length (kbps / Million \$ / Km)	Magee_et_al Price	10	1858	1983 ELECTRIC_TELECOM
electrical_info_transmission_kbps	bandwidth kbps	Magee_et_al Performance_Questionable	12	1858	1983 ELECTRIC_TELECOM
optical_telcom_bandwidth_kbps_per_\$_km	Band per cost per length (kbps / Million \$ / Km)	Magee_et_al Price	12	1988	2002 OPTICAL_TELECOM
optical_telcom_bandwidth_kbps	Bandwidth kbps	Magee_et_al Performance_Questionable	12	1988	2002 OPTICAL_TELECOM
Wireless_Telecommunication_coverage_bps_per_m2	Coverage Density (bps per Sqmts, Bandwith = 10 Mhz)	Magee_et_al Performance	9	1901	2009 WIRELESS_TELECOM
Wireless_Telecommunication_spectral_efficiency_bps_per_hz	Spectral Efficiency (bps/Hz)	Magee_et_al Performance	15	1901	2009 WIRELESS_TELECOM
Wireless_Telecommunication_throughput_kbps	Throughput (Kbps)	Magee_et_al Performance	13	1895	2009 WIRELESS_TELECOM
computation_electronic_CPS	CPS	Magee_et_al Performance	17	1943	2007 ELECTRIC_COMPUTATION
electronic_computation_mips_per_\$	MIPS/Cost	Magee_et_al Price	51	1943	2004 ELECTRIC_COMPUTATION
electronic_computation_mips	MIPS	Magee_et_al Performance_Questionable	55	1943	2004 ELECTRIC_COMPUTATION
camera_sensitivity_mv_micro_sqm	mv/?m^2	Magee_et_al Performance	11	1987	2008 CAMERA
MRI_mm_sec_\$_resolution_cost	1/(res.sec.\$)	Magee_et_al Price_Questionable	6	1980	2006 MRI
MRI_mm_sec_resolution	1/(resol*scan time)	Magee_et_al Performance	10	1949	2006 MRI
CTscan_mm_scantime_resolution	1/(resol*scan time)	Magee_et_al Performance	13	1971	2006 CT
Genome_sequencing_base_pairs	BP/\$	Magee_et_al Price	8	1970	2004 GENOME
batteries_wh_\$	Wh/\$	Magee_et_al Price	22	1950	2005 BATTERIES
batteries_wh_kg_energy_density	wh/kg	Magee_et_al Performance	19	1884	2004 BATTERIES
batteries_wh_lit_energy_density	wh/lit	Magee_et_al Performance	21	1884	2003 BATTERIES
capacitors_kwhr_\$	Wh/\$	Magee_et_al Price	7	1985	2005 CAPACITOR
capacitors_kwhr_kg	Wh/kg	Magee_et_al Performance	11	1962	2005 CAPACITOR
capacitors_kwhr_lit	Wh/Liter	Magee_et_al Performance	7	1941	2000 CAPACITOR
Flywheel_kwh_kg	kwh/kg	Magee_et_al Performance	7	1975	2003 FLYWHEEL
AC_electricity_transmission_powered_distance_per_cost_wkm_\$	W?Km/\$, Powered distance per cost	Magee_et_al Price	9	1889	1983 ELECTRO_POWERTRANS
AC_electricity_transmission_powered_distance_wkm	W?Km, Powered distance	Magee_et_al Performance_Questionable	9	1889	1983 ELECTRO_POWERTRANS
DC_electricity_transmission_powered_distance_per_cost_wkm_\$	W?Km/\$, Powered distance per cost	Magee_et_al Price	13	1962	2000 ELECTRO_POWERTRANS
DC_electricity_transmission_powered_distance_wkm	W?Km, Powered distance	Magee_et_al Performance_Questionable	15	1962	2000 ELECTRO_POWERTRANS
combustion_air_piston_engine_w_per_\$	W/\$	Magee_et_al Price	13	1919	1945 COMB_ENGINE
combustion_air_piston_engine_w_per_kg	W/kg	Magee_et_al Performance	8	1919	1945 COMB_ENGINE
combustion_air_piston_engine_w_per_lit	w/lit	Magee_et_al Performance	13	1888	1945 COMB_ENGINE
combustion_air_turbine_engine_w_per_\$	W/\$	Magee_et_al Price	10	1963	2002 COMB_ENGINE
combustion_air_turbine_engine_w_per_kg	W/kg	Magee_et_al Performance	10	1963	2002 COMB_ENGINE
combustion_air_turbine_engine_w_per_lit	W/lit	Magee_et_al Performance	11	1955	2002 COMB_ENGINE
combustion_pass_car_engine_w_per_\$	W/\$	Magee_et_al Price	56	1896	1994 COMB_ENGINE
combustion_pass_car_engine_w_per_kg	W/kg	Magee_et_al Performance	17	1896	1994 COMB_ENGINE
combustion_pass_car_piston_engine_w_per_lit	W/Liter	Magee_et_al Performance	27	1931	2001 COMB_ENGINE

electricmotor_w_per_kg_11.14.2013	W/kg	Magee_et_al	Performance	11	1881	1993 ELECTRIC_MOTOR
electricmotor_w_per_lit_11.14.2013	W/Liter	Magee_et_al	Performance	9	1890	1995 ELECTRIC_MOTOR
solar_PV_Wpeak_\$	Watts per dollar	Magee_et_al	Price	35	1968	2009 SOLAR_PV
solar_PV_kwh_module\$2011	module kwhr/2011\$	Magee_et_al	Price	34	1977	2010 SOLAR_PV
wind_turbine_W_\$	W/\$	Magee_et_al	Price	22	1947	2011 WIND
FuelCell_kW_\$	kW/\$	Magee_et_al	Price	9	1963	1996 FUELCELL
Artificial_Illumination_Incandescent_1000lumenhrs_per_\$	1000 lumenhour/\$	Magee_et_al	Price	11	1883	1990 INCANDESCENT
Artificial_Illumination_LED_lumen_\$	lumen/\$	Magee_et_al	Price_Questionable	13	1972	2009 LED
Artificial_Illumination_LED_lumen_lamp	lumen/lamp	Magee_et_al	Performance_Questionable	17	1967	2010 LED
aeroplane_transport_pass_mile_hr	Pass-miles/hr	Magee_et_al	Performance_Questionable	12	1926	1975 AIRCRAFT
Milling_yearlyaverage_hp.accuracy	average HP/total averge accuracy	Magee_et_al	Performance	5	1939	2012 MILLING
3dprintingSLA_speed_buildvolume_layerthickness_cost	Speed * build volume/(layer thickness *cost)	Magee_et_al	Price	5	1991	2006 TRID_PRINTING
3dprintingSLA_speed_buildvolume_layerthickness_machinesize_cost	Speed * build volume/(layer thickness *machine size*cost)	Magee_et_al	Price	5	1991	2006 TRID_PRINTING
3dprintingSLA_speed_layerthickness_cost	Speed/(layer thickness*cost)	Magee_et_al	Price	5	1991	2006 TRID_PRINTING
3dprintingSLA_speed_layerthickness	Speed/layer thickness	Magee_et_al	Performance	3	1991	2006 TRID_PRINTING
photolithography_arealthroughput_accuracy_cost	areal Throughput/(resolution*cost)	Magee_et_al	Price	4	1969	1986 PHOTOLITHOGRAPHY
photolithography_arealthroughput_accuracy	areal Throughput/accuracy	Magee_et_al	Performance	7	1962	1986 PHOTOLITHOGRAPHY
photolithography_arealthroughput_cost	areal throughput/cost	Magee_et_al	Price	4	1969	1986 PHOTOLITHOGRAPHY
superconductivity_critical_temperature	deg K	Magee_et_al	Performance	13	1911	1995 SUPERCONDUCTOR