Abstract	Impact factor	سنة النشر	الدولة المنشور فيها البحث	اسم المجلة المجلد، العدد، رقم الصفحة	اسم الباحث/ الباحثين	اسم البحث	ت
Flat plate solar collector radiation from the sun and transfer the received energy to a fluid which passing through pipes or channels which are integrating with the collector absorber plate that has a physical properties characterized by high absorptive solar radiation and low emission called the absorption surface, typically a metal plate, usually copper, aluminum alloy and steel materials with tubing of copper in thermal contact with the plates. In this paper simple and efficient thermal system has been designed to utilize the available sun light by simple design of flat plate solar collector under different conditions which includes different climatic conditions and different types of plate materials. For each case of above it was found outlet fluid temperature, instantaneous efficiency and modifier angle factor	1.6714	2013	India	Paripex- Indian Journal of research, ISSN: 2250-1991, issue. 9 Vol. 2, P.P 71-77.	1- د. قصي عبد الجبار جواد 2- م.م ضياء نجم عبد الامير	Effect of plate materials and ambient conditions on the design of flat plate solar collector	1

This research examines the impact of factors engineering dimensions of the anodes in different soils on solar energy system design as a major source of impressed current required for cathodic protection of 100 m oil pipeline steel. This paper deals with various resistance of the soils starting from (50 Ohms.Cm) in the north to (5000 Ohms. Cm) in the south of the land of Iraq. The results showed that the anodes of lengths (48, 24.9 and 6.02 cm) in low-resistivity soils (50 Ω.cm) require low potentials (2.77, 2.82 and 3.08 V) respectively. One solar panel (13 W) is fair enough in the low soil resistivity (50 Ω.cm).	1.5408	2013	India	Global Research analysis, ISSN: 2277-8160, Issue: 11, Vol. 2, P.P: 36-40	م.م ضياء نجم عبد الامير	Effect of soil resistivities for different geometrical anodes on design photovoltaic for cathodic protection system	2