Materials science Vocabulary crossword

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| **Across**  **1.** A substance that can dissolve another substance.  **5.** This refers to the physical properties of a substance, like shape, size, composition and phase distribution. noun  **10.** In thermodynamics, it is the quantity of energy transferred from one system to another without an accompanying transfer of entropy.  **11.** engineering that involves manipulating atoms and molecules  **12.** A mixture of a metal with other elements  **13.** A container that can withstand very high temperatures and is used for metal, glass, and pigment production as well as a number of modern laboratory processes.  **14.** A phenomenological description of equilibrium properties of macroscopic systems | **Down**  **2.** the percentage increase in original length (strain) of a rubber specimen as a result of tensile force (stress) being applied to the specimen  **3.** The resistance of a material to flow.  **4.** A phenomenon of exactly zero electrical resistance and expulsion of magnetic fields occurring in certain materials when cooled below a characteristic critical temperature.  **6.** Refers to a substance’s ability to absorb energy without suffering structural damage or fracturing.  **7.** The process of breaking chemical bonds using water.  **8.** A process of heat treating, which is used to increase the toughness of iron-based alloys.  **9.** The allowable deviation from a standard |